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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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Introduction

The present document is part 2 of a multi-parts TS:

3GPP TS 36.521-1 [1]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing.

3GPP TS 36.521-2: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part :2 Implementation Conformance Statement (ICS).

3GPP TS 36.521-3 [2]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management (RRM) Conformance Testing.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for 3G Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

The present document specifies the recommended applicability statement for the test cases included in 3GPP TS 36.521-1 [1] and 3GPP TS 36.521-3 [2]. These applicability statements are based on the features implemented in the UE.

Special conformance testing functions can be found in 3GPP TS 36.509 [5] and the common test environments are included in 3GPP TS 36.508 [6].

The present document is valid for UE implemented according to 3GPP releases starting from Release 8 up to the Release indicated on the cover page of the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document unless the context in which the reference is made suggests a different Release is relevant (information on the applicable release in a particular context can be found in e.g. test case title, description or applicability, message description or content).

[1] 3GPP TS 36.521-1: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing ".

[2] 3GPP TS 36.521-3: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management Conformance Testing ".

[3] ISO/IEC 9646-1: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[4] ISO/IEC 9646-7: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[5] 3GPP TS 36.509: " Evolved Universal Terrestrial Radio Access (E-UTRA); Special conformance testing functions for User Equipment ".

[6] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA); Common Test Environments for User Equipment (UE) Conformance Testing".

[7] Void

[8] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[9] 3GPP TS 36.201: " LTE Physical Layer - General Description"

[10] 3GPP TS 36.302: " Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer for E-UTRA".

[11] 3GPP TS 36.321: "Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification".

[12] 3GPP TS 36.322: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification".

[13] 3GPP TS 36.323: "Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification".

[14] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) Protocol Specification".

[15] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3"

[16] 3GPP TS 36.307: "Requirements on User Equipments (UEs) Supporting a release-independent frequency band".

[17] 3GPP TS 36.306: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities".

[18] 3GPP TS 36.133: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management".

[19] 3GPP TS 36.101: "E-UTRA UE radio transmission and reception".

3 Definitions, symbols and abbreviations

For the purposes of the present document, the following terms, definitions, symbols and abbreviations apply:

- such given in TR 21.905 [8]
- such given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

NOTE: Some terms and abbreviations defined in [3] and [4] are explicitly included below with small modification to reflect the terminology used in 3GPP.

3.1 Definitions

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

ICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

Implementation eXtra Information for Testing (IXIT): A statement made by a supplier or implementer of an UEUT which contains or references all of the information (in addition to that given in the ICS) related to the UEUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the UEUT

IXIT proforma: A document, in the form of a questionnaire, which when completed for an UEUT becomes an IXIT

Protocol Implementation Conformance Statement (PICS): An ICS for an implementation or system claimed to conform to a given protocol specification

Protocol Implementation eXtra Information for Testing (PIXIT): An IXIT related to testing for conformance to a given protocol specification

static conformance review: A review of the extent to which the static conformance requirements are claimed to be supported by the UEUT, by comparing the answers in the ICS(s) with the static conformance requirements expressed in the relevant specification(s)

3.2 Symbols

No specific symbols have been identified so far.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [8].

For the purposes of the present document, the following abbreviations apply:

ICS	Implementation Conformance Statement
IXIT	Implementation eXtra Information for Testing
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
RRM	Radio Resource Management
SCS	System Conformance Statement
TC	Test Case
UEUT	User Equipment Under Test

4 Recommended test case applicability

The applicability of each individual test is identified in the tables 4.1-1 or 4.2-1. This is just a recommendation based on the purpose for which the test case was written.

The applicability of every test is formally expressed by the use of Boolean expression that are based on parameters (ICS) included in annex A of the present document.

Selection criteria of tested bands / CA-Configurations for each applicable test is formally expressed using group theory based on parameters (ICS) included in annex A of the present document.

Additional information related to the Test Case (TC), e.g. affecting its dynamic behaviour or its execution may be provided as well

The columns in tables 4.1-1 / 4.2-1 have the following meaning:

Clause

The clause column indicates the clause number in TS 36.521-1 [1] or respectively TS 36.521-3 [2] that contains the test body.

Title

The title column describes the name of the test and contains the clause title of the clause in TS 36.521-1 [1] or TS 36.521-3 [2] that contains the test body.

Release

The release column indicates the earliest release from which each test case is applicable. It may also indicate a range of releases or a single release to which a test case is applicable.

Applicability - Condition

The following notations are used for the applicability column:

R	recommended - the test case is recommended to all terminals supporting E-UTRA
O	optional - the test case is optional

N/A not applicable - in the given context, the test case is not recommended.

Ci conditional - the test is recommended ("R") or not ("N/A") depending on the support of other items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." is used to avoid ambiguities.

Applicability - Comments

This comments column contains a verbal description of the condition included in the applicability column.

Tested Bands / CA-Configurations Selection

This column defines a set of bands / CA Configurations the test is to be run for, if the test is applicable. If the set is empty, the test is considered as not applicable.

The following notations are used in the tested bands selection column:

Di Derive the set based on Band Selection Criteria Di defined in table 4.1-1b.

Ei Derive the set based on CA Configurations Selection Criteria Ei defined in table 4.1-1c.

TBD Band selection not defined at this time, in the meantime test all Bands / CA Configurations

Text For more complex selection criteria, or if the criteria are already specified somewhere else in the spec, text reference to the section is given.

Branch

This column contains indication if the test case may perform differently depending on the UE capabilities.

NOTE 1: To meet the validation requirements from certification bodies then there is a need to uniquely reference the FDD and TDD branch (i.e. different behaviour within one and the same TC) of common FDD and TDD RF test cases in table 4.1-1. The FDD and TDD branches of common FDD and TDD test cases can be referenced by amending a "FDD" or "TDD" suffix to the test case clause number. For example for test case 6.2.2 the FDD and TDD branches can be identified by "6.2.2 FDD" and "6.2.2 TDD".

NOTE 2: To meet the validation requirements from certification bodies then there is a need to uniquely reference the 2Rx (UE supports 2 Rx antenna ports in the tested band) and 4Rx (UE supports 4 Rx antenna ports in the tested band) branch of common 2Rx and 4Rx RRM test cases in table 4.2-1. The 2Rx and 4Rx branches of common 2Rx and 4Rx test cases can be referenced by amending a "2Rx" or "4Rx" suffix to the test case clause number. For example for test case 4.2.1 the 2Rx and 4Rx branches can be identified by "4.2.1_2Rx" and "4.2.1_4Rx". When the branch is “2RX, 4RX” or “xxx_2RX, xxx_4RX”, requirements of 2RX are tested for 2RX capability UE and requirements of 4RX are tested for 4RX capability UE.

NOTE 3: To meet the validation requirements from certification bodies then there is a need to uniquely reference the PC3 (UE supports Power Class 3 in the tested band) and HPUE (UE supports Power Class 1 or Power Class 2 in the tested band) branch of common PC3 and HPUE test cases in Table 4.1-1. The PC3 and HPUE branches of common PC3 and HPUE test cases can be referenced by amending a "PC3" or "HPUE" suffix to the test case clause number. For example for test case 6.6.2.1 the PC3 and HPUE branches can be identified by "6.6.2.11_PC3" and "6.6.2.1_HPUE". When the branch is "PC3, HPUE" or "xxx_PC3, xxx_HPUE", requirements of PC3 are tested for PC3 capability UE and requirements of HPUE are tested for HPUE capability UE.

Additional Information

This column contains additional information

4.1 RF conformance test cases

NOTE: To determine applicability of a test case, FGI support in combined or fdd-Add-UE-EUTRA-Capabilities or tdd-Add-UE-EUTRA-Capabilities is taken into account.

Table 4.1-1: Applicability of RF conformance test cases, ref. TS 36.521-1 [1]

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
Transmitter Characteristics							
6.2.2	UE Maximum Output Power	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	Not required to be tested in Band 41 for Power Class 2 UE
6.2.2_1	UE Maximum Output Power for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class 1	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		
6.2.2A.1	UE Maximum Output Power for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	Not required to be tested in Band 41 for Power Class 2 UE
6.2.2A.1_3	UE Maximum Output Power for CA and HPUE (intra-band contiguous DL CA and UL CA)	Rel-10	C39b	UE supporting intraband contiguous CA and Power Class 2	E01	TDD	
6.2.2A.2	UE Maximum Output Power for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.2.2A.3	UE Maximum Output Power for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.2.2A.4	UE Maximum Output Power for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.2.2B	UE Maximum Output Power for UL-MIMO	Rel-10	C07	UE supporting E-UTRA Power Class 3 and UL-MIMO	D05	FDD, TDD	
6.2.2B_1	HPUE Maximum Output Power for UL-MIMO	Rel-10	C202	UE supporting E-UTRA Power Class 2 and UL-MIMO	D05	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.2.2E	UE Maximum Output Power for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
6.2.2EA	UE Maximum Output Power for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.2.2EB	UE Maximum Output Power for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.2.2EC	UE Maximum Output Power for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.2.2F	UE Maximum Output Power for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D11, D18	HD-FDD, TDD	
6.2.2FA	UE Maximum Output Power for category NB1 and NB2/Power Class 6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D11, D18	HD-FDD, TDD	
6.2.2G.2	UE Maximum Output Power for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmission	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.2.2_s	UE Maximum Output Power for subslot/slot TTI	Rel-15	C352	UE supporting E-UTRA FDD and Power Class 3 and subslot/slot TTI	D02	FDD	Not required to be tested in Band 41 for Power Class 2 UE
		Rel-15	C352a	UE supporting E-UTRA TDD and Power Class 3 and slot TTI	D03	TDD	
6.2.3EB	Maximum Power Reduction (MPR) for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.2.4EB	Additional Maximum Power Reduction (A-MPR) for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.2.5	Configured UE transmitted Output Power	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	Not required to be tested in Band 41 for Power Class 2 UE
6.2.5_s	Configured UE transmitted Output Power for subslot/slot TTI	Rel-15	C352	UE supporting E-UTRA FDD and Power Class 3 and subslot/slot TTI	D02	FDD	
		Rel-15	C352a	UE supporting E-UTRA TDD and Power Class 3 and slot TTI	D03	TDD	Not required to be tested in Band 41 for Power Class 2 UE
6.2.5_1	Configured UE transmitted Output Power for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class 1	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		
6.2.5A.1	Configured UE transmitted Output Power for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.2.5A.3	Configured UE transmitted Output Power for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.2.5A.4	Configured UE transmitted Output Power for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.2.5A.5	Configured UE transmitted Output Power for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.2.5B	Configured transmitted power for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.2.5E	Configured transmitted power for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
6.2.5EA	Configured UE transmitted Power for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.2.5EB	Configured UE transmitted Power for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.2.5EC	Configured UE transmitted Power for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.2.5F	Configured UE transmitted Output Power for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.2.5FA	Configured UE transmitted Output Power for category NB1 and NB2/Power Class 6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D11, D18	HD-FDD, TDD	
6.2.5G.1	Configured UE transmitted Output Power for V2X Communication / Non-concurrent with E-UTRA uplink transmission	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.2.5G.2	Configured UE transmitted Output Power for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmission	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.2.5G.3	Configured UE transmitted Output Power for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.3.1	Void						
6.3.2	Minimum Output Power	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.3.2A.1	Minimum Output Power for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.3.2A.2	Minimum Output Power for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.3.2A.3	Minimum Output Power for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and inter-band DL CA and UL CA	E02	FDD	
6.3.2A.4	Minimum Output Power for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.3.2B	Minimum Output Power for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.2E	Minimum Output Power for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.2EA	Minimum Output Power for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.2EB	Minimum Output Power for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.2EC	Minimum Output Power for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.2F	Minimum Output Power for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.3.2G.1	Minimum output power for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.3.2G.2	Minimum output power for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.3.2G.3	Minimum output power for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.3.3	Transmit OFF Power	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.3.3A.1	Transmit OFF Power for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.3A.2	UE Transmit OFF power for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.3.3A.3	Transmit OFF Power for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.3.3B	UE Transmit OFF power for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.3.3E	UE Transmit OFF power for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.3EA	UE Transmit OFF power for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.3EB	UE Transmit OFF power for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.3EC	UE Transmit OFF power for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.3F	Transmit OFF power for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.3.3G.1	UE Transmit OFF power for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.3.3G.2	UE Transmit OFF power for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.3G.3	UE Transmit OFF power for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.3.4.1	General ON/OFF time mask	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.3.4.1_s	General ON/OFF time mask for subslot/slot TTI	Rel-15	C353	UE supporting E-UTRA FDD and subslot/slot TTI	D02	FDD	
		Rel-15	C353a	UE supporting E-UTRA TDD and slot TTI	D03	TDD	
6.3.4.2.1	PRACH time mask	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.3.4.2.2	SRS time mask	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.3.4A.1.1	General ON/OFF time mask for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.3.4A.1.2	General ON/OFF time mask for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.3.4A.1.3	General ON/OFF time mask for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.3.4A.1.4	General ON/OFF time mask for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.3.4A.1.5	General ON/OFF time mask for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.4B.1	ON/OFF time mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.3.4C.1	General ON/OFF time mask for Dual Connectivity	Rel-12	C224	UE supporting Dual Connectivity	E03	FDD, TDD	
6.3.4C.1_1	General ON/OFF time mask for asynchronous Dual Connectivity	Rel-12	C225	UE supporting asynchronous Dual Connectivity	E03	FDD, TDD	
6.3.4E.1	General ON/OFF time mask for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.4E.2	Prach and SRC ON/OFF time mask for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.4EA.1	General ON/OFF time mask for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.4EA.2.1	PRACH time mask for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.4EA.2.2	SRS time mask for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.4EB.1	General ON/OFF time mask for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.4EB.2.1	PRACH time mask for UE category 1bis	Rel13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.4EB.2.2	SRS time mask for UE category 1bis	Rel13	C112c	UE supporting E-UTRA and UE category 1bis			
6.3.4EC.1	General ON/OFF time mask for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.4EC.2.1	PRACH time mask for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.4EC.2.2	SRS time mask for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.4F.1	General ON/OFF time mask for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.4F.2	NPRACH time mask for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.3.4G.1	General ON/OFF time mask for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.3.4G.2	General ON/OFF time mask for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.3.4G.3	General ON/OFF time mask for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.3.4G.4	PSSS/SSSS time mask for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.3.5.1	Power Control Absolute Power Tolerance	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	
6.3.5.2	Power Control Relative Power Tolerance	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	
6.3.5.3	Aggregate Power Control Tolerance	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	Not required to be tested in Band 41 for Power Class 2 UE

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5A.1.1	Power Control Absolute Power Tolerance for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.3.5A.1.2	Power Control Absolute Power Tolerance for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	6.3.5A.1.2
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.3.5A.1.3	Power Control Absolute Power Tolerance for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.3.5A.1.4	Power Control Absolute power tolerance for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
6.3.5A.1.6	Power control absolute power tolerance for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and intra-band contiguous 4DL CA and 4UL CA	E20	FDD, TDD	
			C336	UE supporting E-UTRA and inter-band 4DL CA and 4UL CA			
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.3.5A.2.1	Power Control Relative Power Tolerance for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5A.2.2	Power Control Relative Power Tolerance for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.3.5A.2.3	Power Control Relative Power Tolerance for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.3.5A.2.4	Power Control Relative power tolerance for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.3.5A.3.1	Aggregate Power Control Tolerance for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.3.5A.3.2	Aggregate Power Control Tolerance for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.3.5A.3.3	Aggregate Power Control Tolerance for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.3.5A.3.4	Aggregate Power Control Tolerance for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5A.3.5	Aggregate power control tolerance for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and intra-band contiguous 4DL CA and 4UL CA	E20	FDD, TDD	
			C336	UE supporting E-UTRA and inter-band 4DL CA and 4UL CA			
6.3.5B.1	Power Control Absolute power tolerance for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.3.5B.2	Power Control Relative power tolerance for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.3.5B.3	Aggregate power control tolerance for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.3.5C.2	Power Control Relative power tolerance for Dual Connectivity	Rel-12	C224	UE supporting Dual Connectivity	E03	FDD, TDD	
6.3.5C.2_1	Power Control Relative power tolerance for asynchronous Dual Connectivity	Rel-12	C225	UE supporting asynchronous Dual Connectivity	E03	FDD, TDD	
6.3.5E.1	Power Control Absolute power tolerance for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.5E.2	Power Control Relative power tolerance for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.5E.3	Aggregate power control tolerance for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.3.5EA.1	Power control for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.5EA.2	Power Control Relative power tolerance for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5EA.3	Aggregate power control tolerance for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.3.5EA.3_1	Aggregate power control tolerance for UE category M1 (CE Mode B)	Rel-13	C156c	UE supporting E-UTRA and (UE category M1 and CEModeB)	D02	HD-FDD	
6.3.5EB.1	Power Control Absolute power tolerance for UE category 1bis	Rel13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.5EB.2	Power Control Relative power tolerance for UE category 1bis	Rel13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.5EB.3	Aggregate power control tolerance for UE category 1bis	Rel13	C112c	UE supporting E-UTRA and UE category 1bis	D01		
6.3.5EC.1	Power Control Absolute power tolerance for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.5EC.2	Power Control Relative power tolerance for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.5EC.3	Aggregate power control tolerance for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.3.5EC.3_1	Aggregate power control tolerance for UE category M2 (CE Mode B)	Rel-14	C156j	UE supporting E-UTRA FDD and (UE category M2 and CEModeB)	D02	HD-FDD	
6.3.5F.1	Power Control Absolute power tolerance for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5F.2	Power Control Relative power tolerance for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.3.5F.3	Aggregate power control tolerance for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.3.5FA.1	Power Control Absolute power tolerance for category NB1 and NB2/Power Class6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D12, D13, D18	HD-FDD, TDD	
6.3.5FA.2	Power Control Relative power tolerance for category NB1 and NB2/Power Class 6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D12, D13, D18	HD-FDD, TDD	
6.3.5FA.3	Aggregate power control tolerance for category NB1 and NB2/Power Class 6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D12, D13, D18	HD-FDD, TDD	
6.3.5_1.1	Power Control Absolute Power Tolerance for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class 1	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		
6.3.5_1.2	Power Control Relative Power Tolerance for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class 1	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		
6.3.5_1.3	Aggregate Power Control Tolerance for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.3.5G.1	Power Control Absolute power tolerance for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.3.5G.2	Power Control Absolute power tolerance for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.3.5G.3	Power Control Absolute power tolerance for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.5.1	Frequency Error	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.1A.1	Frequency Error for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.5.1A.2	Frequency error for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.5.1A.3	Frequency Error for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.5.1A.4	Frequency error for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.5.1A.5	Frequency error for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	FDD, TDD	
6.5.1B	Frequency Error for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.5.1D.1	Frequency error for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
6.5.1D.2	Frequency error for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
6.5.1E	Frequency Error for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.1EA	Frequency Error for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.1EA_1	Frequency Error for UE category M1 (CEmodeB)	Rel-13	C156c	UE supporting E-UTRA FDD and (UE category M1 and CEModeB)	D02	FDD, HD-FDD, TDD	
6.5.1EB	Frequency Error for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
6.5.1EC	Frequency Error for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.5.1EC_1	Frequency Error for UE category M2 (CEmodeB)	Rel-14	C156j	UE supporting E-UTRA FDD and (UE category M2 and CEModeB)	D02	HD-FDD	
6.5.1F	Frequency Error for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.5.1G.1	Frequency Error for V2X Communication / Non-concurrent with E-UTRA uplink transmission	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.1G.2	Frequency error for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.5.2.1	Error Vector Magnitude (EVM)	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.2.1_1	Error Vector Magnitude (EVM) for UL 64QAM	Rel-13	C147	UE supporting E-UTRA and UL 64QAM	D01	FDD, TDD	Note 1
6.5.2.1_2	Error Vector Magnitude (EVM) for UL 256QAM	Rel-14	C301	UE supporting E-UTRA and UL 256QAM	D01	FDD, TDD	
6.5.2.1A	PUSCH-EVM with exclusion period	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.2.1E.1	Error Vector Magnitude for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.2.1E.2	PUSCH-EVM with exclusion period for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.2.1EA.1	Error Vector Magnitude (EVM) for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.2.1EA.2	PUSCH-EVM with exclusion period for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.2.1EB	Error Vector Magnitude (EVM) for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
6.5.2.1EC.1	Error Vector Magnitude (EVM) for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.5.2.1EC.2	PUSCH-EVMwith exclusion period for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.5.2.1F.1	Error Vector Magnitude (EVM) for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2.1G.1	Error Vector Magnitude (EVM) for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.5.2.1G.2	Error Vector Magnitude (EVM) for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.5.2.1G.3	Error Vector Magnitude (EVM) for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.5.2.1_s	Error Vector Magnitude for subslot/slot TTI	Rel-15	C353	UE supporting E-UTRA FDD and subslot/slot TTI	D02	FDD	
		Rel-15	C353a	UE supporting E-UTRA TDD and slot TTI	D03	TDD	
6.5.2.2	Carrier leakage	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.2.2E	Carrier leakage for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.2.2EA	Carrier leakage for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.2.2EB	Carrier leakage for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
6.5.2.2EC	Carrier leakage for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2.2F	Carrier leakage for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.5.2.2G.1	Carrier leakage for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.5.2.2G.2	Carrier leakage for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmission	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.5.2.2G.3	Carrier leakage for V2X Communication / Intra-band contiguous MCC operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.5.2.3	In-band emissions for non allocated RB	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.2.3E	In-band emissions for non allocated RB for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.2.3EA	In-band emissions for non allocated RB for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.2.3EB	In-band emissions for non allocated RB for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
6.5.2.3EC	In-band emissions for non allocated RB for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2.3F	In-band emissions for non allocated RB for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.5.2.3G.1	In-band emissions for non-allocated RB for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.5.2.3G.2	Introduction of In-band emissions for non-allocated RB for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.5.2.3G.3	In-band emissions for non-allocated RB for V2X Communication / Intra-band contiguous MCC operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.5.2.4	EVM equalizer spectrum flatness	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.5.2.4E	EVM equalizer spectrum flatness for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.5.2.4EA	EVM equalizer spectrum flatness for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.5.2.4EB	EVM equalizer spectrum flatness for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2.4EC	EVM equalizer spectrum flatness for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.5.2.4G.1	Spectrum Emission Mask for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.5.2.4G.3	EVM equalizer spectrum flatness for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.5.2A.1.1	Error Vector Magnitude (EVM) for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.5.2A.1.1_1	EVM for CA (intra-band contiguous DL CA and UL CA) with UL 64QAM	Rel-13	C148	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 64QAM.	E01	FDD, TDD	Note 1
6.5.2A.1.1_2	EVM for CA (intra-band contiguous DL CA and UL CA) with UL 256QAM	Rel-14	C302	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 256QAM.	E01	FDD, TDD	
6.5.2A.1.2	Error Vector Magnitude (EVM) for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.5.2A.1.2_1	Error Vector Magnitude (EVM) for CA (inter-band DL CA and UL CA) for UL 64QAM	Rel-13	C160	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 64QAM	E03	FDD, TDD	Note 1

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2A.1.2_2	Error Vector Magnitude (EVM) for CA (inter-band DL CA and UL CA) for UL 256QAM	Rel-14	C303	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 256QAM.	E03	FDD, TDD	
6.5.2A.1.3	Error Vector Magnitude (EVM) for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.5.2A.1.3_1	Error Vector Magnitude (EVM) for CA (intra-band non-contiguous DL CA and UL CA) for UL 64QAM	Rel-13	C185	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA and UL 64QAM	E02	FDD, TDD	
6.5.2A.1.3_2	Error Vector Magnitude (EVM) for CA (intra-band non-contiguous DL CA and UL CA) for UL 256QAM	Rel-14	C304	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA and UL 256QAM	E02	FDD, TDD	
6.5.2A.1.4	Error Vector Magnitude (EVM) for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.5.2A.1.5	Error Vector Magnitude (EVM) for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	FDD, TDD	
6.5.2A.2.1	Carrier leakage for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.5.2A.2.2	Carrier leakage for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2A.2.4	Carrier leakage for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.5.2A.2.5	Carrier leakage for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	FDD, TDD	
6.5.2A.2.3	Carrier leakage for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.5.2A.3.1	In-band emissions for non allocated RB for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.5.2A.3.2	In-band emissions for non allocated RB for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.5.2A.3.4	In-band emissions for non allocated RB for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.5.2A.3.3	In-band emissions for non allocated RB for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.5.2A.3.5	In-band emissions for non allocated RB for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.5.2B.1	Error Vector Magnitude for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.5.2B.2	Carrier leakage for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.5.2B.3	In-band emissions for non allocated RB for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.5.2B.4	EVM equalizer spectrum flatness for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.6.1	Occupied bandwidth	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.6.1A.1	Occupied bandwidth for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.6.1A.2	6.6.1A.2 Occupied bandwidth for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.6.1A.3	Occupied bandwidth for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.1A.4	Occupied bandwidth for CA (3DL CA and 3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.6.1A.5	Occupied bandwidth for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and 4DL CA and 4UL CA	E20	FDD, TDD	
6.6.1B	Occupied bandwidth for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.1E	Occupied bandwidth for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.1EA	Occupied bandwidth for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.1EB	Occupied bandwidth for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.1EC	Occupied bandwidth for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, TDD	
6.6.1F	Occupied bandwidth for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.6.1G.1	Occupied bandwidth for V2X Communication / Non-concurrent with E-UTRA uplink transmission	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.1G.2	Occupied bandwidth for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.6.1G.3	Occupied bandwidth for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.6.2.1	Spectrum Emission Mask	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD_PC3, TDD_PC3	Not required to be tested in Band 41 for Power Class 2 UE
		Rel-10	C39c	UE supporting E-UTRA Power Class 1 or Power Class 2	D17a	FDD_HPUE, TDD_HPUE	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.1_1	Spectrum Emission Mask for Multi-cluster PUSCH	Rel-10	C100	UE supporting E-UTRA and Multi-Cluster PUSCH	D07	FDD, TDD	
6.6.2.1A.1	Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.6.2.1A.2	Spectrum Emission Mask for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.6.2.1A.3	Spectrum Emission Mask for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.2.1A.4	Spectrum Emission Mask for CA (3UL)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.6.2.1B	Spectrum Emission Mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.6.2.1E	Spectrum Emission Mask for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.2.1EA	Spectrum Emission Mask for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.2.1EB	Spectrum Emission Mask for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.2.1EC	Spectrum Emission Mask for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.6.2.1F	Spectrum Emission Mask for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.1G.1	Spectrum Emission Mask for V2X Communication Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.2.1G.2	Introduction of Spectrum Emission Mask for V2X Communication /Sidelink simultaneous with E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.6.2.1G.3	Spectrum Emission Mask for V2X Communication / Intra-band contiguous MCC operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.6.2.2	Additional Spectrum Emission Mask	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD_PC3, TDD_PC3	Not required to be tested in Band 41 for Power Class 2 UE
		Rel-10	C39c	UE supporting E-UTRA Power Class 1 or Power Class 2	D17a	FDD_HPUE, TDD_HPUE	
6.6.2.2_1	Additional Spectrum Emission Mask for UL 64QAM	Rel-13	C147	UE supporting E-UTRA and UL 64QAM	D01	FDD, TDD	Note 1
6.6.2.2_2	Additional Spectrum Emission Mask for UL 256QAM	Rel-14	C301	UE supporting E-UTRA and UL 256QAM	D01	FDD, TDD	
6.6.2.2A.1	Additional Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C319	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.2A.1_1	Additional Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA) for UL 64QAM	Rel-13	C326	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 64QAM.	E01	FDD, TDD	Note 1, Note 4
6.6.2.2A.1_2	Additional Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA) for UL 256QAM	Rel-14	C302	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 256QAM.	E01	FDD, TDD	
6.6.2.2A.2	Additional Spectrum Emission Mask for CA (inter-band DL CA and UL CA)	Rel-11	C116b	UE supporting E-UTRA and inter-band DL CA and UL CA but do not support UL 64QAM or UL 256QAM	E03	FDD, TDD	
6.6.2.2A.2_1	Additional Spectrum Emission Mask for CA (inter-band DL CA and UL CA) for UL 64QAM	Rel-13	C327	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 64QAM	E03	FDD, TDD	Note 1, Note 4
6.6.2.2A.2_2	Additional Spectrum Emission Mask for CA (inter-band DL CA and UL CA) for UL 256QAM	Rel-14	C303	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 256QAM	E03	FDD, TDD	
6.6.2.2A.3	Additional Spectrum Emission Mask for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.2.2A.4	Additional Spectrum Emission Mask for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.2B	Additional Spectrum Emission Mask for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.6.2.2E	Additional Spectrum Emission Mask for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.2.2EA	Additional Spectrum Emission Mask for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.2.2EB	Additional Spectrum Emission Mask for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.2.2EC	Additional Spectrum Emission Mask for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD	
6.6.2.2G.1	Additional Spectrum Emission Mask for V2X Communication / Non-concurrent with E-UTRA uplink transmission	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.2.2G.2	Additional Spectrum Emission Mask for V2X Communication / Sidelink simultaneous with E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.6.2.3	Adjacent Channel Leakage power Ratio	Rel-8	C186	UE supporting E-UTRA Power Class 3	D01	FDD, TDD	Not required to be tested in Band 41 for Power Class 2 UE
6.6.2.3_1	Adjacent Channel Leakage power Ratio for HPUE	Rel-10	C39a	UE supporting E-UTRA Power Class 1	D16		
			C39b	UE supporting E-UTRA Power Class 2	D17		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.3_2	Adjacent Channel Leakage power Ratio for Multi-Cluster PUSCH	Rel-10	C159 (Note 2)	UE supporting E-UTRA and Multi-Cluster PUSCH	D07	FDD, TDD	
6.6.2.3_3	Adjacent Channel Leakage power Ratio for UL 64QAM	Rel-13	C147	UE supporting E-UTRA and UL 64QAM	D01	FDD, TDD	Note 1
6.6.2.3_4	Adjacent Channel Leakage power Ratio for Multi-Cluster PUSCH with UL 64QAM	Rel-13	C149	UE supporting E-UTRA and Multi-Cluster PUSCH and UL 64QAM	D07	FDD, TDD	Note 1, Note 4
6.6.2.3_5	Adjacent Channel Leakage power Ratio for UL 256QAM	Rel-14	C301	UE supporting E-UTRA and UL 64QAM	D01	FDD, TDD	
6.6.2.3_6	Adjacent Channel Leakage power Ratio for Multi-Cluster PUSCH with UL 256QAM	Rel-14	C318	UE supporting E-UTRA and Multi-Cluster PUSCH and UL 256QAM	D07	FDD, TDD	
6.6.2.3A.1	Adjacent Channel Leakage power Ratio for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.6.2.3A.1_1	Adjacent Channel Leakage power Ratio for CA (intra-band contiguous DL CA and UL CA) for UL 64QAM	Rel-13	C148	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 64QAM	E01	FDD, TDD	Note 1

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.3A.1_2	Adjacent Channel Leakage power Ratio for CA (intra-band contiguous DL CA and UL CA) for UL 256QAM	Rel-14	C302	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 256QAM	E01	FDD, TDD	
6.6.2.3A.1_3	Adjacent Channel Leakage power Ratio for CA (intra-band contiguous DL CA and UL CA) for HPUE	Rel-10	C39b	UE supporting intraband contiguous CA and Power Class 2	E01	TDD	
6.6.2.3A.2	Adjacent Channel Leakage power Ratio for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.6.2.3A.2_1	Adjacent Channel Leakage power Ratio for CA (inter-band DL CA and UL CA) for UL 64QAM	Rel-13	C160	UE supporting E-UTRA and inter band DL CA and UL CA and UL 64QAM	E03	FDD, TDD	Note 1
6.6.2.3A.2_2	Adjacent Channel Leakage power Ratio for CA (inter-band DL CA and UL CA) for UL 256QAM	Rel-13	C303	UE supporting E-UTRA and inter band DL CA and UL CA and UL 256QAM	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.6.2.3A.3	Adjacent Channel Leakage power Ratio for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.3A.3_1	Adjacent Channel Leakage power Ratio for CA (intra-band non-contiguous DL CA and UL CA) for UL 64QAM	Rel-13	C161	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA and UL 64QAM	E02	FDD, TDD	Note 1
6.6.2.3A.3_2	Adjacent Channel Leakage power Ratio for CA (intra-band non-contiguous DL CA and UL CA) for UL 256QAM	Rel-14	C304	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA and UL 256QAM	E02	FDD, TDD	
6.6.2.3A.4	Adjacent Channel Leakage power Ratio for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.6.2.3B	Adjacent Channel Leakage power Ratio for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.6.2.3E	Adjacent Channel Leakage power Ratio for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.2.3EA	Adjacent Channel Leakage power Ratio for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.2.3EB	Adjacent Channel Leakage power Ratio for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.2.3EC	Adjacent Channel Leakage power Ratio for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.6.2.3F	Adjacent Channel Leakage power Ratio for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.6.2.3FA	Adjacent Channel Leakage power Ratio for category NB1 and NB2/Power Class 6	Rel-14	C325	UE supporting NB-IoT and Power Class 6	D12, D13, D18	HD-FDD, TDD	
6.6.2.3G.1	Adjacent Channel Leakage power Ratio for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.2.3G.2	Adjacent Channel Leakage power Ratio for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.6.2.3G.3	Adjacent Channel Leakage power Ratio for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.6.2.4	Void						
6.6.3.1	Transmitter Spurious emissions	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3.1_1	Transmitter Spurious emissions for Multi-Cluster PUSCH	Rel-10	C100	UE supporting E-UTRA and Multi-Cluster PUSCH	D07	FDD, TDD	
6.6.3.1A.1	Transmitter Spurious emissions for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.6.3.1A.2	Transmitter Spurious emissions for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.6.3.1A.3	Transmitter Spurious emissions for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.3.1A.4	Transmitter Spurious emissions for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.6.3F.1	Transmitter Spurious emissions for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.6.3F.2	Spurious emission band UE co-existence for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.6.3.2	Spurious emission band UE co-existence	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3.2A.1	Spurious emission band UE co-existence for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.6.3.2A.2	Spurious emission band UE co-existence for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.6.3.2A.3	Spurious emission band UE co-existence for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.3.2A.4	Spurious emission band UE co-existence for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.6.3.3	Additional spurious emissions	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.6.3.3_1	Additional spurious emissions for UL 64QAM	Rel-13	C147	UE supporting E-UTRA and UL 64QAM	D01	FDD, TDD	Note 1
6.6.3.3_2	Additional spurious emissions for UL 256QAM	Rel-14	C301	UE supporting E-UTRA and UL 256QAM	D01	FDD, TDD	
6.6.3.3A.1	Additional spurious emissions for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C319	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3.3A.1_1	Additional spurious emissions for CA (intra-band contiguous DL CA and UL CA) for UL 64QAM	Rel-13	C326	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 64QAM	E01	FDD, TDD	Note 1, Note 4
6.6.3.3A.1_2	Additional spurious emissions for CA (intra-band contiguous DL CA and UL CA) for UL 256QAM	Rel-14	C302	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and UL 256QAM.	E01	FDD, TDD	
6.6.3.3A.2	Additional spurious emissions for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
		Rel-14	C305	UE supporting E-UTRA and eLAA			
6.6.3.3A.2_1	Additional spurious emissions for CA (inter-band DL CA and UL CA) for UL 64QAM	Rel-13	C327	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 64QAM	E03	FDD, TDD	Note 1, Note 4
6.6.3.3A.2_2	Additional spurious emissions for CA (inter-band DL CA and UL CA) for UL 256QAM	Rel-14	C303	UE supporting E-UTRA and inter-band DL CA and UL CA and UL 256QAM	E03	FDD, TDD	
6.6.3.3A.3	Additional spurious emissions for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD, TDD	
6.6.3.3A.4	Additional spurious emissions for CA (3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3B.2	Spurious emission band UE co-existence for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
6.6.3E.1	Transmitter Spurious emissions for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.3E.2	Transmitter Spurious Band UE co-existence for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.3E.3	Additional spurious emissions for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.6.3EA.1	Transmitter Spurious emissions for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.3EA.2	Spurious emission band UE co-existence for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.3EA.3	Additional spurious emissions for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.6.3EB.1	Transmitter Spurious emissions for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.3EB.2	Spurious emission band UE co-existence for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.3EB.3	Additional spurious emissions for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.6.3EC.1	Transmitter Spurious emissions for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3EC.2	Spurious emission band UE co-existence for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.6.3EC.3	Additional spurious emissions for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD	
6.6.3G.1	Transmitter Spurious emissions for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.3G.1_1	Spurious emission band UE co-existence for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.6.3G.2	Spurious emission for V2X Communication / Sidelink simultaneous with E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.6.3G.2_1	Spurious emission band UE co-existence for V2X Communication / Sidelink simultaneous with E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.6.3G.3	Spurious emission for V2X Communication / Intra-band contiguous MCC operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.6.3G.3_1	Spurious emission band UE co-existence for V2X Communication / Intra-band contiguous MCC operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.7	Transmit intermodulation	Rel-8	C113	UE supporting E-UTRA	D01	FDD, TDD	
6.7A.1	Transmit intermodulation for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD, TDD	
6.7A.2	Transmit intermodulation for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD, TDD	
6.7A.4	Transmit intermodulation for CA (3DL CA and 3UL CA)	Rel-13	C19a	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E18	TDD	
			C116a	UE supporting E-UTRA and inter-band DL CA and UL CA	E18	FDD, TDD	
6.7A.5	Transmit intermodulation for CA (4UL CA)	Rel-11	C334	UE supporting E-UTRA and intra-band contiguous 4DL CA and 4UL CA	E20	FDD, TDD	
			C336	UE supporting E-UTRA and inter-band 4DL CA and 4UL CA			
6.7B	Transmit intermodulation for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
6.7E	Transmit intermodulation for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0	D01	FDD, HD-FDD, TDD	
6.7EA	Transmit intermodulation for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
6.7EB	Transmit intermodulation for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
6.7EC	Transmit intermodulation for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
6.7F	Transmit intermodulation for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
6.7G.1	Transmit intermodulation for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
6.7G.2	Transmit intermodulation for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
6.7G.3	Transmit intermodulation for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
6.8B	Time alignment between transmitter branches for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
Receiver Characteristics							
7.3	Reference sensitivity level	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.3_1	Reference sensitivity level with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.3A.1	Reference sensitivity level for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.3A.2	Reference sensitivity level for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.3A.3	Reference sensitivity level for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E10	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3			
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD-TDD inter-band CA under FS3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.3A.4	Reference sensitivity level for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.3A.5	Reference sensitivity level for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E19	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.3A.6	Reference sensitivity level for CA (inter-band DL CA and UL CA)	Rel-11	C116	UE supporting E-UTRA and inter-band DL CA and UL CA	E03	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.3A.7	Reference sensitivity level for CA (intra-band non-contiguous DL CA and UL CA)	Rel-11	C115	UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA	E02	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.3A.9	Reference sensitivity level for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E21	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.3A.10	Reference sensitivity level for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
			C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.3E	Reference sensitivity level for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.3EA	Reference sensitivity level for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.3EB	Reference sensitivity level for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, HD-FDD, TDD	
7.3EC	Reference sensitivity level for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.3B	Reference sensitivity level for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.3F.1	Reference sensitivity level without repetitions for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.3G.1	Reference sensitivity level for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.3G.2	Reference sensitivity level for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.3G.3	Reference sensitivity level for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.4	Maximum input level	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.4_1	Maximum input level with 4 Rx antenna ports	Rel-10	C168	UE supporting E-UTRA with 4Rx antenna ports but not 256QAM in DL	D09	FDD, TDD	
7.4_H	7.4_H Maximum input level for 256QAM in DL	Rel-12	C113h	UE supporting E-UTRA and 256QAM in DL	D01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.4A.1	Maximum input level for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.4A.1_H	Maximum input level for CA (intra-band contiguous DL CA and UL CA) for 256QAM in DL	Rel-12	C19h	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and 256QAM in DL	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	
7.4A.2	Maximum input level for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.4A.2_H	Maximum input level for CA (intra-band contiguous DL CA without UL CA) for 256QAM in DL	Rel-12	C20h	UE supporting E-UTRA and intra-band contiguous DL CA and 256QAM in DL	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.4A.3	Maximum input level for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E10	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3			
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD-TDD inter-band CA under FS3			
7.4A.3_H	Maximum input level for CA (inter-band DL CA without UL CA) for 256QAM in DL	Rel-12	C21h	UE supporting E-UTRA and inter-band DL CA and 256QAM in DL	E10	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.4A.4	Maximum input level for CA (intra band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.4A.4_H	Maximum input level for CA (intra band non-contiguous DL CA without UL CA) for 256QAM in DL	Rel-12	C43h	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA and 256QAM in DL	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.4A.5	Maximum input level for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E22	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.4A.5_H	Maximum input level for 3DL CA for 256QAM in DL	Rel-12	C122h	UE supporting E-UTRA and 3DL CA and 256QAM in DL	E22	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with FDD-TDD CA under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with TDD-TDD CA under FS3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.4A.7	Maximum input level for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E23	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.4A.7_H	Maximum input level for 4DL CA for 256QAM in DL	Rel-13	C187h	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4 and 256QAM in DL	E23	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.4A.8	Maximum input level for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.4A.8_H	Maximum input level for 5DL CA for 256QAM in DL	Rel-13	C221h	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5 and 256QAM in DL	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.4B	Maximum input level for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.4D.1	Maximum input level for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.4D.2	Maximum input level for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.4E	Maximum input level for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.4EA	Maximum input level for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.4EB	Maximum input level for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01	FDD, TDD	
7.4EC	Maximum input level for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.4F	Maximum input level for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.4G.1	Maximum input level for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.4G.2	Maximum input level for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.4G.3	Maximum input level for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.5	Adjacent Channel Selectivity (ACS)	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.5_1	Adjacent Channel Selectivity (ACS) with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.5A.1	Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.5A.2	Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E11	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.5A.3	Adjacent Channel Selectivity (ACS) for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E12	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3			
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD-TDD inter-band CA under FS3			
7.5A.4	Adjacent Channel Selectivity (ACS) for CA (intra band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.5A.5	Adjacent Channel Selectivity (ACS) for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E24	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.5A.7	Adjacent Channel Selectivity (ACS) for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E25	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.5A.8	Adjacent Channel Selectivity (ACS) for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.5A.9	Adjacent Channel Selectivity (ACS) for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.5B	Adjacent Channel Selectivity (ACS)for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.5D.1	Adjacent Channel Selectivity (ACS) for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.5D.2	Adjacent Channel Selectivity (ACS) for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.5E	Adjacent Channel Selectivity (ACS) for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.5EA	Adjacent Channel Selectivity (ACS) for category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.5EB	Adjacent Channel Selectivity (ACS) for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
7.5EC	Adjacent Channel Selectivity (ACS)for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.5F	Adjacent Channel Selectivity (ACS) for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.5G.1	Adjacent channel selectivity (ACS) for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.5G.2	Adjacent channel selectivity (ACS) for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.5G.3	Adjacent channel selectivity (ACS) for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.6.1	In-band blocking	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.6.1_1	In-band blocking with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.6.1A.1	In-band blocking for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.1A.2	In-band blocking for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E11	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.1A.3	In-band blocking for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E12	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3			
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD-TDD inter-band CA under FS3			
7.6.1A.4	In-band blocking for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.1A.5	In-band blocking for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E24	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3under FS3			
7.6.1A.7	In-band blocking for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E25	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.6.1A.8	In-band blocking for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.6.1A.9	In-band blocking for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 6DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.1A.10	In-band blocking for 7DL CA	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.1B	In-band blocking for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.6.1D.1	In-band blocking for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.6.1D.2	In-band blocking for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.6.1E	In-band blocking for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.6.1EA	In-band blocking for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.6.1EB	In-band blocking for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.1EC	In-band blocking for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.6.1F	In-band blocking for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.6.1G.1	In-band blocking for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.6.1G.2	In-band blocking for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.6.1G.3	In-band blocking for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.6.2	Out of-band blocking	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.6.2_1	Out of-band blocking with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.6.2A.1	Out of-band blocking for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.2A.2	Out of-band blocking for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.2A.3	Out of-band blocking for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E10	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3	E12		
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD inter-band CA under FS3			
7.6.2A.4	Out of-band blocking for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.2A.5	Out-of-band blocking for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E19	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.6.2A.7	Out-of-band blocking for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E21	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.6.2A.8	Out-of-band blocking for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.6.2A.9	Out-of-band blocking for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 6DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.2A.10	Out-of-band blocking for 7DL CA	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.2B	Out-of-band blocking for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.6.2D.1	Out-of-band blocking for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.6.2D.2	Out-of-band blocking for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.6.2E	Out of-band blocking for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.6.2EA	Out of-band blocking for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.6.2EB	Out-of-band blocking for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.2EC	Out of-band blocking for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01		FDD, HD-FDD, TDD
7.6.2F	Out-of-band blocking for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.6.2G.1	Out-of-band blocking for V2X Communication/ Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.6.2G.2	Out-of-band blocking for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.6.2G.3	Out-of-band blocking for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.6.3	Narrow band blocking	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.6.3_1	Out of-band blocking with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.6.3A.1	Narrow band blocking for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.3A.2	Narrow band blocking for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.3A.3	Narrow band blocking for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E10	FDD_2 Rx. FDD_4 Rx. TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band DL CA			
7.6.3A.4	Narrow band blocking for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.6.3A.5	Narrow band blocking for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E19	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.3A.7	Narrow band blocking for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E21	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	TBD	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			
7.6.3A.8	Narrow band blocking for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.6.3A.9	Narrow band blocking for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 6DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.3A.10	Narrow band blocking for 7DL CA	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.6.3B	Narrow band blocking for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.6.3D.1	Narrow band blocking for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.6.3D.2	Narrow band blocking for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.6.3E	Narrow band blocking for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.6.3EA	Narrow band blocking for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.6.3EB	Narrow band blocking for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
7.6.3EC	Narrow band blocking for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.7	Spurious response	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.7_1	Spurious response with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.7A.1	Spurious response for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.7A.2	Spurious response for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E08	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.7A.3	Spurious response for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E10	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3	E12		
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD inter-band CA under FS3			
7.7A.4	Spurious response for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.7A.5	Spurious response for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E19	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.7A.7	Spurious response for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E21	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.7A.8	Spurious response for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.7A.9	Spurious response for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 6DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.7A.10	Spurious response for 7DL CA	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.7B	Spurious response for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.7D.1	Spurious response for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.7D.2	Spurious response for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.7E	Spurious response for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.7EA	Spurious response for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.7EB	Spurious response for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
7.7EC	Spurious response for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.7F	Spurious response for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.7G.1	Spurious response for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.7G.2	Spurious response for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.7G.3	Spurious response for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.8.1	Wide band Intermodulation	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.8.1_1	Wide band Intermodulation with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.8.1A.1	Wide band Intermodulation for CA (intra-band contiguous DL CA and UL CA)	Rel-10	C19	UE supporting E-UTRA and intra-band contiguous DL CA and UL CA	E01	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.8.1A.2	Wide band Intermodulation for CA (intra-band contiguous DL CA without UL CA)	Rel-10	C20	UE supporting E-UTRA and intra-band contiguous DL CA	E11	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7
7.8.1A.3	Wide band Intermodulation for CA (inter-band DL CA without UL CA)	Rel-10	C21	UE supporting E-UTRA and inter-band DL CA	E12	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C146	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA			
		Rel-13	C207	UE supporting E-UTRA and 2DL CA with FDD-TDD inter-band CA under FS3			
		Rel-13	C208	UE supporting E-UTRA and 2DL CA with TDD-TDD inter-band CA under FS3			
7.8.1A.4	Wide band Intermodulation for CA (intra-band non-contiguous DL CA without UL CA)	Rel-11	C43	UE supporting E-UTRA and intra-band non-contiguous DL CA but no UL CA	E09	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.8.1A.5	Wideband intermodulation for 3DL CA	Rel-10	C121	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3	E24	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C122	UE supporting E-UTRA and 3DL with CA configurations in Table 4.1-3			
		Rel-12	C123	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3			
		Rel-13	C268	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
		Rel-13	C269	UE supporting E-UTRA and 3DL CA with CA configurations in Table 4.1-3 under FS3			
7.8.1A.7	Wideband intermodulation for 4DL CA	Rel-11	C187	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4	E25	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-11	C211	UE supporting E-UTRA and 4DL with CA configurations in Table 4.1-4			
		Rel-12	C188	UE supporting E-UTRA and 4DL CA with CA configurations in Table 4.1-4			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.8.1A.8	Wideband intermodulation for 5DL CA	Rel-11	C221	UE supporting E-UTRA and 5DL with CA configurations in Table 4.1-5	E15	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
		Rel-12	C222	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
		Rel-12	C223	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-5			
7.8.1A.9	Wideband intermodulation for 6DL CA	Rel-14	C342	UE supporting E-UTRA and 5DL CA with CA configurations in Table 4.1-6	TBD	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx, FDD-TDD_2 Rx, FDD-TDD_4 Rx	Note 7
7.8.1B	Wide band intermodulation for UL-MIMO	Rel-10	C07	UE supporting E-UTRA and UL_MIMO	D05	FDD, TDD	
7.8.1D.1	Wide band Intermodulation for ProSe Direct Discovery	Rel-12	C163	UE supporting E-UTRA and ProSe direct discovery	D10	FDD, TDD	
7.8.1D.2	Wide band Intermodulation for ProSe Direct Communication	Rel-12	C162	UE supporting E-UTRA and ProSe direct communication	D10	FDD, TDD	
7.8.1E	Wide band Intermodulation for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.8.1EA	Wide band Intermodulation for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.8.1EB	Wide band Intermodulation for UE category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
7.8.1EC	Wide band intermodulation for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.8.1F	Wide band Intermodulation for category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.8.1G.1	Wide band Intermodulation for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
7.8.1G.2	Wide band Intermodulation for V2X Communication / Simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
7.8.1G.3	Wide band Intermodulation for V2X Communication / Intra-band contiguous multi-carrier operation	Rel-14	C333	UE supporting V2X Sidelink communication and multi-carrier configurations	E17	TDD	
7.9	Spurious emissions	Rel-8	C113	UE supporting E-UTRA	D15	FDD, TDD	
7.9_1	Spurious emissions with 4 Rx antenna ports	Rel-10	C113a	UE supporting E-UTRA with 4Rx antenna ports	D09	FDD, TDD	
7.9A	Spurious emissions for CA	Rel-10	C120	UE supporting E-UTRA and inter-band DL CA with a DL-only band	E13	FDD_2 Rx, FDD_4 Rx, TDD_2 Rx, TDD_4 Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
7.9E	Spurious emissions for UE category 0	Rel-12	C112	UE supporting E-UTRA (UE category 0)	D01	FDD, HD-FDD, TDD	
7.9EA	Spurious emissions for UE category M1	Rel-13	C112a	UE supporting E-UTRA and UE category M1	D01	FDD, HD-FDD, TDD	
7.9EB	Spurious emissions for UE Category 1bis	Rel-13	C112c	UE supporting E-UTRA and UE category 1bis	D01		FDD, TDD
7.9EC	Spurious emissions for UE category M2	Rel-14	C112d	UE supporting E-UTRA and UE category M2	D01	FDD, HD-FDD, TDD	
7.9F	Spurious emissions for Category NB1 and NB2	Rel-13	C112b	UE supporting NB-IoT	D12, D13, D18	HD-FDD, TDD	
7.9G.1	Spurious emissions for V2X Communication / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
	Performance Requirement						
8.2.1.1.1	FDD PDSCH Single Antenna Port Performance	Rel-8	C01	UE supporting E-UTRA FDD	Each ""Test Number"" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Test execution not necessary if 8.2.1.1.1_A.1 or 8.2.1.1.1_A.2 is executed. Note 7
8.2.1.1.1_1	FDD PDSCH Single Antenna Port Performance (Release 9 and forward)	Rel-9	C31	UE supporting E-UTRA FDD (UE categories 1, 2)	Each ""Test Number"" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.1.1.1_A.1 or 8.2.1.1.1_A.2 is executed.
8.2.1.1.1_A.1	FDD PDSCH Single Antenna Port Performance for CA (2 DL CA)	Rel-10	C102	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 2)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.1.1_A.2 or 8.2.1.1.1_A.4 or 8.2.1.1.1_A.5 or 8.13.1.2.2 or 8.13.1.2.3 or 8.13.1.2.4 or 8.13.1.2.5 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C103	UE supporting E-UTRA FDD and Downlink Intra-band non-contiguous CA (UE Category >= 2)			
8.2.1.1.1_A.2	FDD PDSCH Single Antenna Port Performance for CA (3DL CA)	Rel-10	C124	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.1.1_A.4 or 8.2.1.1.1_A.5 or 8.13.1.2.3 or 8.13.1.2.4 or 8.13.1.2.5 is executed.
		Rel-11	C125	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			Note 7
8.2.1.1.1_A.4	FDD PDSCH Single Antenna Port Performance for CA (4DL CA)	Rel-11	C214	UE supporting E-UTRA FDD and 4DL CA configurations in Table 4.1-4 (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.1.1_A.5 or 8.13.1.2.4 or 8.13.1.2.5 is executed. Note 7
8.2.1.1.1_A.5	FDD PDSCH Single Antenna Port Performance for CA (5DL CA)	Rel-11	C215	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.13.1.2.5 is executed. Note 7
		Rel-12	C216	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)			
8.2.1.1.1_A.6	FDD PDSCH Single Antenna Port Performance for CA (6DL CA)	Rel-14	C349	UE supporting E-UTRA FDD and 6DL with CA configurations in Table 4.1-6 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.1.1.2	FDD PDSCH Single Antenna Port Performance with 1 PRB in presence of MBSFN	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.2.1	FDD PDSCH Transmit Diversity 2x2	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.1_1	FDD PDSCH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C15	UE supporting E-UTRA FDD (UE category 1)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.2	FDD PDSCH Transmit Diversity 4x2	Rel-8	C09	UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.2_1	FDD PDSCH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.3_C.1	FDD PDSCH Transmit diversity 2x2 for eICIC (non-MBFSN ABS)	Rel-10	C29	UEs supporting E-UTRA FDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.3_E.1	FDD PDSCH Transmit diversity 2x2 for feICIC (non-MBFSN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.4	FDD PDSCH Transmit Diversity 2x2 with TM3 Interference Model -- Enhanced Performance Requirement Type A	Rel-11	C44	UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.2.5	FDD PDSCH Transmit Diversity 2x2 with TM2 Interference Model -- Enhanced Performance Requirement Type B	Rel-12	C150	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.2.6	FDD PDSCH Transmit Diversity 2x2 with TM9 Interference Model -- Enhanced Performance Requirement Type B	Rel-12	C150	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.3.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2	Rel-8	C13b	UE supporting E-UTRA FDD (UE categories >=2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.1.3.1_A.1 or 8.2.1.3.1_A.2 is executed.
8.2.1.3.1_1	FDD PDSCH Open Loop Spatial Multiplexing 2x2 (Release 11 and forward)	Rel-11	C13b	UE supporting E-UTRA FDD (UE categories >=2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.1.3.1_A.1 or 8.2.1.3.1_A.2 is executed.
8.2.1.3.1_A.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (2 DL CA)	Rel-10	C101	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >=2)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	If 8.2.1.3.1_A.2 is executed for a CA capability, test execution is not necessary for that CA capability. Note 7
		Rel-11	C103	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA (UE Category >= 2)			
8.2.1.3.1_A.2	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (3DL CA)	Rel-10	C124	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	If 8.2.1.3.1_A.3 is executed for a CA capability, test execution is not necessary for that CA capability. Note 7
		Rel-11	C125	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.3.1_A.3	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (4DL CA)	Rel-11	C214	UE supporting E-UTRA FDD and 4DL CA configurations in Table 4.1-4 (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	If 8.2.1.3.1_A.4 is executed for a CA capability, test execution is not necessary for that CA capability. Note 7
8.2.1.3.1_A.4	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (5DL CA)	Rel-11	C215	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	If 8.2.1.3.1_A.5 is executed for a CA capability, test execution is not necessary for that CA capability. Note 7
		Rel-12	C216	UE supporting E-UTRA FDD and 5DL CA configurations in Table 4.1-5 (UE Category 8, >= 11)			
8.2.1.3.1_A.5	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (6DL CA)	Rel-14	C349	UE supporting E-UTRA FDD and 6DL CA configurations in Table 4.1-6 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.1.3.1A_A.1	FDD Soft buffer management test for CA (2 DL CA)	Rel-10	C104	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE category 3 and 4)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
		Rel-11	C106	UE supporting E-UTRA FDD and Downlink Intra-band non-contiguous CA (UE categories 3 and 4)			
8.2.1.3.1B	FDD PDSCH Open Loop Spatial Multiplexing 2x2 -- Enhanced Performance Requirement Type C	Rel-12	C142	UE supporting E-UTRA FDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each ""Test Number"" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.3.1C	FDD PDSCH Open Loop Spatial Multiplexing 2x2 with TM1 Interference -- Enhanced Performance Requirement Type C	Rel-12	C142	UE supporting E-UTRA FDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each ""Test Number"" to be performed once, in a chosen band supporting tested BW		
8.2.1.3.2	FDD PDSCH Open Loop Spatial Multiplexing 4x2	Rel-8	C13 b	UE supporting E-UTRA FDD (UE categories >=2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.3.3_C.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C29	UEs supporting E-UTRA FDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.3.3_C.2	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (MBSFN ABS)	Rel-10	C29	UEs supporting E-UTRA FDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.3.3_E.1	FDD PDSCH Open Loop Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.4.1	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2	Rel-8 only	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.4.1_1	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.4.1_E.1	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.4.1_H	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 for 256QAM in DL	Rel-12	C01h	UE supporting E-UTRA FDD and 256QAM in DL			
8.2.1.4.2	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2	Rel-8 only	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.1.4.2_A.1 or 8.2.1.4.2_A.2 is executed.
8.2.1.4.2_1	FDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.1.4.2_A.1 or 8.2.1.4.2_A.2 is executed.
8.2.1.4.2_A.1	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (2 DL CA)	Rel-10	C102	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 2)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.4.2_A.2 or 8.2.1.4.2_A.3 or 8.2.1.4.2_A.4 or 8.13.1.1.1.2 or 8.13.1.1.1.3 or 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed. Note 7
		Rel-11	C103	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA (UE Category >= 2)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.4.2_A.2	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (3DL CA)	Rel-10	C124	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.4.2_A.3 or 8.2.1.4.2_A.4 or 8.13.1.1.1.2 or 8.13.1.1.1.3 or 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed. Note 7
		Rel-11	C125	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			
8.2.1.4.2_A.3	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (4DL CA)	Rel-11	C212	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.1.4.2_A.4 or 8.13.1.1.1.2 or 8.13.1.1.1.3 or 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed. Note 7
8.2.1.4.2_A.4	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (5DL CA)	Rel-11	C212a	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.13.1.1.1.2 or 8.13.1.1.1.3 or 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed. Note 7
		Rel-12	C212b	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.4.2_A.5	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (6DL CA)	Rel-14	C349	UE supporting E-UTRA FDD and 6DL with CA configurations in Table 4.1-6 (UE Category 8, >= ≥ 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.1.4.2A	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 - Enhanced Performance Requirement Type C	Rel-12	C142	UE supporting E-UTRA FDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		8.2.1.4.2A
8.2.1.4.3	FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference model - Enhanced Performance Requirement Type A	Rel-11	C44	UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.4.3A	FDD PDCSH Closed Loop Multi-Layer Spatial Multiplexing 4X2 for Dual Connectivity	Rel-12	C169	UE supporting E-UTRA FDD and Dual Connectivity (UE Category >= 3)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.2.1.4.4	FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference Model - Enhanced Performance Requirement Type B	Rel-12	C150	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.1.7_A.1	FDD Carrier aggregation with power imbalance (intra-band contiguous DL CA)	Rel-10	C22	UE supporting E-UTRA FDD and intra-band contiguous DL CA	TBD	2Rx, 4Rx	Note 7
8.2.1.9	FDD PDSCH in HST-SFN scenario	Rel-14	C299	UEs supporting E-UTRA FDD and high speed enhancement for measurement			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.1.10	FDD PDSCH minimum channel spacing for intra-band contiguous CA	Rel-15	C125a	UE supporting E-UTRA FDD and intra-band contiguous DL CA (UE Category >= 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.2.2.1	Void						
8.2.2.1.1	TDD PDSCH Single Antenna Port Performance	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.1.1_A.1 or 8.2.2.1.1_A.2 is executed.
8.2.2.1.1_1	TDD PDSCH Single Antenna Port Performance (Release 9 and forward)	Rel-9	C54	UE supporting E-UTRA TDD (UE categories 1, 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.1.1_A.1 or 8.2.2.1.1_A.2 is executed.
8.2.2.1.1_A.1	TDD PDSCH Single Antenna Port Performance for CA (2DL CA)	Rel-10	C110	UE supporting E-UTRA TDD and intra-band contiguous DL CA or interband DL CA (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.2.1.1_A.2 is executed.
		Rel-11	C109	UE supporting E-UTRA TDD and Intra-band non-contiguous DL CA(UE Category >= 5)			Note 7
8.2.2.1.1_A.2	TDD PDSCH Single Antenna Port Performance for CA (3DL CA)	Rel-10	C128	UE supporting E-UTRA TDD and 3DL with i CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
		Rel-11	C129	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			
8.2.2.1.1_A.3	TDD PDSCH Single Antenna Port Performance for CA (4DL CA)	Rel-11	C194	CA configurations in Table 4.1-4 (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.2.1.1_A.4	TDD PDSCH Single Antenna Port Performance for CA (5DL CA)	Rel-11	C194a	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C194b	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)			
8.2.2.1.2	TDD PDSCH Single Antenna Port Performance with 1PRB in the presence of MBSFN	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2	Void						
8.2.2.2.1	TDD PDSCH Transmit Diversity 2x2	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.1_1	TDD PDSCH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C16	UE supporting E-UTRA TDD (UE category 1)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.2	TDD PDSCH Transmit Diversity 4x2	Rel-8	C10	UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.2_1	TDD PDSCH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.3_C.1	TDD PDSCH Transmit diversity 2x2 for eICIC (non-MBFSN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.3_E.1	TDD PDSCH Transmit diversity 2x2 for feICIC (non-MBFSN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.2.2.4	TDD PDSCH Transmit Diversity 2x2 with TM3 Interference Model - Enhanced Performance Requirement Type A	Rel-11	C45	UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.5	TDD PDSCH Transmit Diversity 2x2 for eIMTA (when EIMTA-MainConfigServCell-r12 is configured)	Rel-12	C274	UE supporting E-UTRA TDD and eIMTA TDD UL-DL reconfiguration			
8.2.2.2.6	TDD PDSCH Transmit Diversity 2x2 with TM2 Interference Model - Enhanced Performance Requirement Type B	Rel-12	C151	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.2.7	TDD PDSCH Transmit Diversity 2x2 with TM9 Interference Model - Enhanced Performance Requirement Type B	Rel-12	C151	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3	Void						
8.2.2.3.1	TDD PDSCH Open Loop Spatial Multiplexing 2x2	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.3.1_A.1 or .2 is executed.
8.2.2.3.1_1	TDD PDSCH Open Loop Spatial Multiplexing 2x2 (Release 11 and forward)	Rel-11	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.3.1_A.1 or .2 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.2.3.1_A.1	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (2DL CA)	Rel-10	C110	UE supporting E-UTRA TDD and intra-band contiguous DL CA or interband DL CA (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	If 8.2.2.3.1_A.2 is executed for a CA capability, test execution is not necessary for that CA capability Note 7
		Rel-11	C109	UE supporting E-UTRA TDD and intra-band non-contiguous DL CA (UE Category >= 5)			
8.2.2.3.1_A.2	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (**3**DL CA)	Rel-10	C128	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
		Rel-11	C129	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			
8.2.2.3.1_A.3	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA(4DL CA)	Rel-11	C194	UE supporting 4DL CA configurations in Table 4.1-4.(UE category >=8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.2.3.1_A.4	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (5DL CA)	Rel-11	C194a	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
		Rel-12	C194b	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)			
8.2.2.3.1 A_A.1	TDD Soft buffer management for CA (2 DL CA)	Rel-10	C105	UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA (UE category 3 and 4)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	TBD

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C72	UE supporting E-UTRA TDD and intra-band non-contiguous DL CA (UE category 3 and 4)			Note 7
8.2.2.3.1B	TDD PDSCH Open Loop Spatial Multiplexing 2x2 - Enhanced Performance Requirement Type C	Rel-12	C143	UE supporting E-UTRA TDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3.1C	TDD PDSCH Open Loop Spatial Multiplexing 2x2 with TM1 Interference - Enhanced Performance Requirement Type C	Rel-12	C143	UE supporting E-UTRA TDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3.2	TDD PDSCH Open Loop Spatial Multiplexing 4x2	Rel-8	C02	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3.3_C.1	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3.3_C.2	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for eICIC (MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.3.3_E.1	TDD PDSCH Open Loop Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 (UE Category >= 2)	TBD		
8.2.2.4	Void						

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.2.4.1	TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2	Rel-8 only	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.4.1_1	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.4.1_E.1	TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.4.1_H	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 for 256QAM in DL	Rel-12	C02h	UE supporting E-UTRA TDD and 256QAM in DL			
8.2.2.4.2	TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2	Rel-8 only	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.4.2_A.1 or 8.2.2.4.2_A.2 is executed.
8.2.2.4.2_1	TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 4x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		Test execution not necessary if 8.2.2.4.2_A.1 or 8.2.2.4.2_A.2 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.2.4.2_A.1	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (2DL CA)	Rel-10	C110	UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.2.4.2_A.2 or 8.2.2.4.2_A.3 or 8.13.2.1.1.2 or 8.13.2.1.1.3 or 8.13.2.1.1.4 or 8.13.2.1.1.5 is executed. Note 7
		Rel-11	C109	UE supporting E-UTRA TDD and Intra-band non-contiguous DL CA(UE Category >= 5)			
8.2.2.4.2_A.2	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (3DL CA)	Rel-10	C128	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.2.2.4.2_A.3 or 8.13.2.1.1.2 or 8.13.2.1.1.3 or 8.13.2.1.1.4 or 8.13.2.1.1.5 is executed. Note 7
		Rel-11	C129	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5)			
8.2.2.4.2_A.3	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (4DL CA)	Rel-11	C194	UE supporting E-UTRA TDD and 4DL CA configurations in Table 4.1-4 (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.13.2.1.1.2 or 8.13.2.1.1.3 or 8.13.2.1.1.4 or 8.13.2.1.1.5 is executed. Note 7
8.2.2.4.2_A.4	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (5DL CA)	Rel-11	C194a	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C194b	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11)			
8.2.2.4.2A	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 2x2 - Enhanced Performance Requirement Type C	Rel-12	C143	UE supporting E-UTRA TDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.4.3	TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference Model - Enhanced Performance Requirement Type A	Rel-11	C45	UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.4.4	TDD PDSCH Closed Loop Multi-Layer Spatial Multiplexing 4x2 for Dual Connectivity	Rel-12	C170	UE supporting E-UTRA TDD and Dual Connectivity (UE Category >= 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.2.2.4.5	TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x2 with TM4 Interference Model - Enhanced Performance Requirement Type B	Rel-12	C151	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.2.2.7_A.1	TDD Carrier aggregation with power imbalance (intra-band contiguous DL CA)	Rel-10	C24	UE supporting E-UTRA TDD and intra-band contiguous DL CA	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.2.8.1	Intra-band contiguous carrier aggregation with minimum channel spacing (2DL CA)	Rel-12	C24	UE supporting E-UTRA TDD and intra-band contiguous DL CA	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.2.8.2	Intra-band contiguous carrier aggregation with minimum channel spacing (3DL CA)	Rel-12	C24	UE supporting E-UTRA TDD and intra-band contiguous DL CA	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.2.9	TDD PDSCH in HST-SFN scenario	Rel-14	C300	UEs supporting E-UTRA TDD and high speed enhancement for measurement			
8.2.3.1.1.1	TDD FDD CA PDSCH Single Antenna Port Performance for FDD Pcell (2DL CA)	Rel-12	C154	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 8.13.3.2.3 or 8.13.3.2.4 or 8.13.3.2.5 or 8.13.3.2.6 is executed. Note 7
8.2.3.1.1.2	TDD FDD CA PDSCH Single Antenna Port Performance for FDD PCell (3DL CA)	Rel-12	C133	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 8.13.3.2.3 or 8.13.3.2.4 or 8.13.3.2.5 or 8.13.3.2.6 is executed. Note 7
8.2.3.1.1.3	TDD FDD CA PDSCH Single Antenna Port Performance for FDD PCell (4DL CA)	Rel-12	C133a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8)	TBD		Test execution not necessary if 8.13.3.2.3 or 8.13.3.2.4 or 8.13.3.2.5 or 8.13.3.2.6 is executed.
8.2.3.1.1.4	TDD FDD CA PDSCH Single Antenna Port Performance for FDD PCell (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.3 or 8.13.3.2.4 or 8.13.3.2.5 or 8.13.3.2.6 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.3.1.1.5	TDD FDD CA PDSCH Single Antenna Port Performance for FDD PCell (6DL CA)	Rel-14	C350	UE supporting E-UTRA FDD and TDD and 6DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.1.1.6	TDD FDD CA PDSCH Single Antenna Port Performance for FDD PCell (7DL CA)	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.1.2.1	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell(2DL CA)	Rel-12	C155	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 8.13.3.2.7 or 8.13.3.2.8 or 8.13.3.2.9 or 8.13.3.2.10 is executed. Note 7
8.2.3.1.2.2	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell (3DL CA)	Rel-12	C135	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 8.13.3.2.7 or 8.13.3.2.8 or 8.13.3.2.9 or 8.13.3.2.10 is executed. Note 7
8.2.3.1.2.3	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell (4DL CA)	Rel-12	C135a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	TBD		Test execution not necessary if 8.13.3.2.7 or 8.13.3.2.8 or 8.13.3.2.9 or 8.13.3.2.10 is executed.
8.2.3.1.2.4	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell (5DL CA)	Rel-12	C135b	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell (UE Category 8, and Category11 and onwards)	TBD		Test execution not necessary if 8.13.3.2.7 or 8.13.3.2.8 or 8.13.3.2.9 or 8.13.3.2.10 is executed.
8.2.3.1.2.5	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell (6DL CA)	Rel-14	C351	UE supporting E-UTRA FDD and TDD and 6DL CA with TDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.3.1.2.6	TDD FDD CA PDSCH Single Antenna Port Performance for TDD PCell (7DL CA)	Rel-14	C359	UE supporting E-UTRA FDD and TDD and 7DL CA with TDD as PCell (UE Category8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.2.1.1	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (2DL CA)	Rel-12	C154	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Note 7
8.2.3.2.1.2	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (3DL CA)	Rel-12	C133	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Note 7
8.2.3.2.1.3	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (4DL CA)	Rel-12	C133a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		
8.2.3.2.1.4	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		
8.2.3.2.1.5	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (6DL CA)	Rel-14	C350	UE supporting E-UTRA FDD and TDD and 6DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.2.1.6	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for FDD PCell (7DL CA)	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.2.1A	TDD FDD CA PDSCH Soft buffer management test for FDD PCell (2DL CA)	Rel-12	C136	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE categories 3 and 4)	TBD	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.3.2.2.1	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell (2DL CA)	Rel-12	C155	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Note 7
8.2.3.2.2.2	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell (3DL CA)	Rel-12	C135	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD PCell (UE Category >= 5)	TBD	2Rx, 4Rx	
8.2.3.2.2.3	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell(4DL CA)	Rel-12	C135a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		
8.2.3.2.2.4	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell(5DL CA)	Rel-12	C135b	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell (UE Category 8, and Category11 and onwards)	Refer to 36.521-1 8.1.2.3		
8.2.3.2.2.5	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell(6DL CA)	Rel-14	C351	UE supporting E-UTRA FDD and TDD and 6DL CA with TDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.2.2.6	TDD FDD CA PDSCH Open Loop Spatial Multiplexing 2x2 for TDD PCell(7DL CA)	Rel-14	C359	UE supporting E-UTRA FDD and TDD and 7DL CA with TDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.2.2A	TDD FDD CA PDSCH Soft buffer management test for TDD PCell (2DL CA)	Rel-12	C137	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD PCell (UE categories 3 and 4)	TBD	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.3.3.1.1	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (2DL CA)	Rel-12	C154	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Note 7
8.2.3.3.1.2	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (3DL CA)	Rel-12	C133	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5)	TBD		
8.2.3.3.1.3	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (4DL CA)	Rel-12	C133a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.1.4	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.1.5	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (6DL CA)	Rel-14	C350	UE supporting E-UTRA FDD and TDD and 6DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.1.6	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for FDD PCell (7DL CA)	Rel-14	C358	UE supporting E-UTRA FDD and TDD and 7DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.3.3.2.1	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (2DL CA)	Rel-12	C155	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >=5)	TBD	2Rx, 4Rx	Note 7
8.2.3.3.2.2	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (3DL CA)	Rel-12	C135	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Note 7
8.2.3.3.2.3	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (4DL CA)	Rel-12	C135a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.2.4	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (5DL CA)	Rel-12	C135b	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell (UE Category 8, and Category11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.2.5	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (6DL CA)	Rel-14	C351	UE supporting E-UTRA FDD and TDD and 6DL CA with TDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7
8.2.3.3.2.6	TDD FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for TDD PCell (7DL CA)	Rel-14	C359	UE supporting E-UTRA FDD and TDD and 7DL CA with TDD as PCell (UE Category 8, and Category 11 and onwards)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.2.4.1.1	LAA PDSCH CA Closed Loop Spatial Multiplexing Performance-4 Tx Antenna port with FDD as Pcell	Rel-13	C209	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell	Each “Test Number” to be performed once, in a chosen band supporting tested BW		
8.2.4.1.2	LAA PDSCH CA Closed Loop Spatial Multiplexing Performance-4 Tx Antenna port with TDD as Pcell	Rel-13	C210	UE supporting E-UTRA TDD and downlink LAA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.1	Void						
8.3.1.1.1_D	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO	Rel-10 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.1.1_H	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO for 256QAM in DL	Rel-12 to Rel-14	C25h	UE supporting E-UTRA FDD and eDL-MIMO and 256QAM in DL and Feature Group Indicator 103			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C25hm	UE supporting E-UTRA FDD and eDL-MIMO and 256QAM in DL and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and eDL-MIMO and 256QAM in DL and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.1.2_D	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with a simultaneous transmission for eDL-MIMO	Rel-10 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.1.1.3	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A	Rel-11 to Rel-14	C40	UE supporting E-UTRA FDD and Feature Group Indictor 103 and supporting the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C40m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and supporting the enhanced performance requirements type A for LTE and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and supporting the enhanced performance requirements type A for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.1.4	FDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type B	Rel-12 to Rel-14	C262	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C262m	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.1.6	FDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM3 interference model - Enhanced Performance Requirement Type B	Rel-12	C150	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.1.1.7	FDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM10 serving cell configuration and TM9 interference model - Enhanced Performance Requirement Type B	Rel-12	C175	UE supporting E-UTRA FDD, enhanced performance requirements type B and PDSCH Transmission mode 10 for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.1.1.9	FDD PDSCH Single-layer Spatial Multiplexing for FD-MIMO	Rel-13 to Rel-14	C323	UE supporting E-UTRA FDD and Feature Group Indicator 103 and dmrs-Enhancements-r13			
		Rel-15	C323m	UE supporting E-UTRA FDD and Feature Group Indictor 103 and dmrs-Enhancements-r13 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and dmrs-Enhancements-r13 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.2.1_D	FDD PDSCH Dual-layer Spatial Multiplexing for eDL-MIMO	Rel-10	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.1.2.1_D_1	FDD PDSCH Dual-layer Spatial Multiplexing for eDL-MIMO (Release 11 and forward)	Rel-11 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.2.2	FDD PDSCH Dual-layer Spatial Multiplexing - Enhanced Performance Requirement Type C	Rel-12 to Rel-14	C144	UE supporting E-UTRA FDD and Feature Group Indicator 103 and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C144m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and Enhanced Performance Requirement TypeC for LTE and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and Enhanced Performance Requirement TypeC for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.1.3.1_F	FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and single NZP CSI-RS resource for CoMP	Rel-11	C50	UE supporting E-UTRA FDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.1.3.2_F	FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and multiple NZP CSI-RS resources for CoMP	Rel-11	C52	UE supporting E-UTRA FDD and Maximum CSI processes of Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.1.3.3_F	FDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Different Cell ID, Colliding CRS and single NZP CSI-RS resource for CoMP	Rel-11	C117	UE supporting E-UTRA FDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.1	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 5 (Release 8 and forward)	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.1_1	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 5 (Release 9 and forward)	Rel-9	C16	UE supporting E-UTRA TDD (UE category 1)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.2	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 without a simultaneous transmission	Rel-9 only	C34	UE supporting E-UTRA TDD and supporting enhanced dual layer TDD.	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-10	C02	UE supporting E-UTRA TDD.	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.2_D	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO	Rel-10 to Rel-14	C26	UE supporting E-UTRA TDD and Feature Group Indicator 104	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C26m	UE supporting E-UTRA TDD and Feature Group Indicator 104 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.2.1.2_H	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 without a simultaneous transmission for eDL-MIMO for 256QAM in DL	Rel-12 to Rel-14	C26h	UE supporting E-UTRA TDD and 256QAM in DL and Feature Group Indicator 104			
		Rel-15	C26hm	UE supporting E-UTRA TDD and 256QAM in DL and Feature Group Indicator 104 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and 256QAM in DL and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.2.1.3	TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 with a simultaneous transmission	Rel-9 only	C34	UE supporting E-UTRA TDD and supporting enhanced dual layer TDD.	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-10	C02	UE supporting E-UTRA TDD.	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.3_D	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with a simultaneous transmission for eDL-MIMO	Rel-10 to Rel-14	C26	UE supporting E-UTRA TDD and Feature Group Indicator 104	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C26m	UE supporting E-UTRA TDD and Feature Group Indicator 104 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.2.1.4	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A	Rel-11 to Rel-14	C41	UE supporting E-UTRA TDD and Feature Group Indictor 103 and supporting the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C41m	UE supporting E-UTRA TDD and Feature Group Indicator 103 and supporting the enhanced performance requirements type A for LTE and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and supporting the enhanced performance requirements type A for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.2.1.5	TDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type B	Rel-12 to Rel-14	C263	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C263m	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.2.1.7	TDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM3 interference model - Enhanced Performance Requirement Type B	Rel-12	C151	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.2.1.8	TDD PDSCH Closed Loop Single-layer Spatial Multiplexing on antenna ports 7 or 8 with TM10 serving cell configuration and TM9 interference model - Enhanced Performance Requirement Type B	Rel-12	C176	UE supporting E-UTRA TDD, enhanced performance requirements type B and PDSCH Transmission mode 10 for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.1.10	TDD PDSCH Single-layer Spatial Multiplexing for FD-MIMO	Rel-13 to Rel-14	C324	UE supporting E-UTRA TDD and Feature Group Indicator 103 and dmrs-Enhancements-r13			
		Rel-15	C324m	UE supporting E-UTRA TDD and Feature Group Indictor 103 and dmrs-Enhancements-r13 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and dmrs-Enhancements-r13 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.3.2.2.1	TDD PDSCH Dual-layer Spatial Multiplexing	Rel-9 only	C34	UE supporting E-UTRA TDD and supporting enhanced dual layer TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-10	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.2.1_D	TDD PDSCH Dual-layer Spatial Multiplexing for eDL-MIMO	Rel-10	C25a	UE supporting E-UTRA TDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.2.1_D_1	TDD PDSCH Dual-layer Spatial Multiplexing for eDL-MIMO (Release 11 and forward)	Rel-11 to Rel-14	C25a	UE supporting E-UTRA TDD and Feature Group Indicator 103	TBD		Note 6
		Rel-15	C25am	UE supporting E-UTRA TDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			
8.3.2.2.2	TDD PDSCH Dual-layer Spatial Multiplexing - Enhanced Performance Requirement Type C	Rel-12	C143	UE supporting E-UTRA TDD and Enhanced Performance Requirement TypeC for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.3.2.4.1_F	TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and single NZP CSI-RS resource for CoMP	Rel-11	C51	UE supporting E-UTRA TDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.4.2_F	TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Same Cell ID and multiple NZP CSI-RS resources for CoMP	Rel-11	C53	UE supporting E-UTRA TDD and Maximum CSI processes of Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.2.4.3_F	TDD PDSCH Performance with DCI format 2D, non Quasi Co-located Antenna Ports, Different Cell ID, Colliding CRS and single NZP CSI-RS resource for CoMP	Rel-11	C118	UE supporting E-UTRA TDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.3.1.1	LAA Dual-Layer Spatial Multiplexing with DM-RS with FDD as PCell	Rel-13	C264	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and TM9 on LAA cells	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.3.3.1.2	LAA Dual-Layer Spatial Multiplexing with DM-RS with TDD as Pcell	Rel-13	C265	UE supporting E-UTRA TDD and downlink LAA and TM9 on LAA cells	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.1	FDD PCFICH/PDCCH Single-antenna Port Performance	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.4.1.2	Void						
8.4.1.2.1	FDD PCFICH/PDCCH Transmit Diversity 2x2	Rel-8 only	C09	UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.1_1	FDD PCFICH/PDCCH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.2	FDD PCFICH/PDCCH Transmit Diversity 4x2	Rel-8 only	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.3_E.1	FDD PCFICH/PDCCH Transmit Diversity 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.3_E.2	FDD PCFICH/PDCCH Transmit Diversity 2x2 for feICIC (MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.2_1	FDD PCFICH/PDCCH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.3_C.1	FDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C29	UE supporting E-UTRA FDD and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.1.2.3_C.2	FDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (MBSFN ABS)	Rel-10	C29	UEs supporting E-UTRA FDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.4.1.2.5	FDD Enhanced Downlink Control Channel Performance Type A for PCFICH/PDCCH, 2 Tx Antenna Port under Asynchronous Network	Rel-13	C285	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.4.1.2.6	FDD Enhanced Downlink Control Channel Performance Type A for PCFICH/PDCCH, 2 Tx Antenna Port with Non-Colliding CRS Dominant Interferer	Rel-13	C285	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.4.1.2.7	FDD Enhanced Downlink Control Channel Performance Type B for PCFICH/PDCCH, 2 Tx Antenna Port with Colliding CRS Dominant Interferer	Rel-13	C286	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type B			
8.4.1.2.8	FDD Enhanced Downlink Control Channel Performance Type B for PCFICH/PDCCH, 2 Tx Antenna Port with Non-Colliding CRS Dominant Interferer	Rel-13	C286	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type B			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.4.2.1	TDD PCFICH/PDCCH Single-antenna Port Performance	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2	Void						
8.4.2.2.1	TDD PCFICH/PDCCH Transmit Diversity 2x2	Rel-8 only	C10	UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.1_1	TDD PCFICH/PDCCH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.2	TDD PCFICH/PDCCH Transmit Diversity 4x2	Rel-8 only	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.2_1	TDD PCFICH/PDCCH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.3_C.1	TDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.3_C.2	TDD PCFICH/PDCCH Transmit Diversity 2x2 for eICIC (MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.3_E.1	TDD PCFICH/PDCCH Transmit Diversity 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115(UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.4.2.2.3_E.2	TDD PCFICH/PDCCH Transmit Diversity 2x2 for feICIC (MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115(UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.2.2.5	TDD Enhanced Downlink Control Channel Performance Type A for PCFICH/PDCCH, 2 Tx Antenna Port with Colliding CRS Dominant Interferer	Rel-13	C287	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.4.2.2.6	DD Enhanced Downlink Control Channel Performance Type A for PCFICH/PDCCH, 2 Tx Antenna Port with Non-Colliding CRS Dominant Interferer	Rel-13	C287	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.4.2.2.7	TDD Enhanced Downlink Control Channel Performance Type B for PCFICH/PDCCH, 2 Tx Antenna Port with Colliding CRS Dominant Interferer	Rel-13	C288	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type B			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.4.2.2.8	TDD Enhanced Downlink Control Channel Performance Type B for PCFICH/PDCCH, 2 Tx Antenna Port with Non-Colliding CRS Dominant Interferer	Rel-13	C288	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type B			
8.4.3.1.1	LAA PCFICH/PDCCH Transmit Diversity 2x2 with FDD as Pcell	Rel-13	C209	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.4.3.1.2	LAA PCFICH/PDCCH Transmit Diversity 2x2 with TDD as Pcell	Rel-13	C217	UE supporting E-UTRA TDD and downlink LAA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.1	FDD PHICH Single-antenna Port Performance	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2	Void						
8.5.1.2.1	FDD PHICH Transmit Diversity 2x2	Rel-8 only	C09	UE supporting E-UTRA FDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2.1_1	FDD PHICH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2.2	FDD PHICH Transmit Diversity 4x2	Rel-8 only	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2.2_1	FDD PHICH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.5.1.2.3_C.1	FDD PHICH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C29	UE supporting E-UTRA FDD and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2.3_E.1	FDD PHICH Transmit Diversity 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.1.2.5	FDD Enhanced Downlink Control Channel Performance Requirement Type A for PHICH- 2 Tx Antenna Ports under Asynchronous Network	Rel-13	C285	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.5.1.2.6	FDD Enhanced Downlink Control Channel Performance Requirement Type A for PHICH - 2 Tx Antenna Ports with Non-Colliding CRS Dominant Interferer	Rel-13	C285	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.5.1.2.7	FDD Enhanced Downlink Control Channel Performance Requirement Type B for PHICH - 2 Tx Antenna Ports with Colliding CRS Dominant Interferer	Rel-13	C286	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type B			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.5.1.2.8	FDD Enhanced Downlink Control Channel Performance Requirement Type B for PHICH - 2 Tx Antenna Ports with Non-Colliding CRS Dominant Interferer	Rel-13	C286	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type B			
8.5.2.1	TDD PHICH Single-antenna Port Performance	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2	Void						
8.5.2.2.1	TDD PHICH Transmit Diversity 2x2	Rel-8 only	C10	UE supporting E-UTRA TDD and operating bands supporting 1,4 MHz Bandwidth	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2.1_1	TDD PHICH Transmit Diversity 2x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2.2	TDD PHICH Transmit Diversity 4x2	Rel-8 only	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2.2_1	TDD PHICH Transmit Diversity 4x2 (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2.3_C.1	TDD PHICH Transmit Diversity 2x2 for eICIC (non-MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.5.2.2.3_E.1	TDD PHICH Transmit Diversity 2x2 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115(UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.5.2.2.5	TDD Enhanced Downlink Control Channel Performance Requirement Type A for PHICH- 2 Tx Antenna Ports with Colliding CRS Dominant Interfere	Rel-13	C287	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.5.2.2.6	TDD Enhanced Downlink Control Channel Performance Requirement Type A for PHICH - 2 Tx Antenna Ports with Non-Colliding CRS Dominant Interferer	Rel-13	C287	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.5.2.2.7	TDD Enhanced Downlink Control Channel Performance Requirement Type B for PHICH- 2 Tx Antenna Ports with Colliding CRS Dominant Interferer	Rel-13	C288	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type B			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.5.2.2.8	TDD Enhanced Downlink Control Channel Performance Requirement Type B for PHICH- 2 Tx Antenna Ports with Non-Colliding CRS Dominant Interferer	Rel-13	C288	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type B			
8.7.1.1	FDD sustained data rate performance (Rel-9 and forward)	Rel-9	C76	UE supporting E-UTRA FDD and not supporting 256QAM in DL (UE categories from1 to 4)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.1.1_A.1 or 8.7.3.1 is executed.
8.7.1.1_1	FDD sustained data rate performance (Rel-10 and forward)	Rel-10	C42	UE supporting E-UTRA FDD and not supporting 256QAM in DL (UE categories 6, 7)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.1.1_A.1or 8.7.3.1 is executed.
8.7.1.1_2	FDD sustained data rate performance for UE category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.7.1.1_A.1	FDD Sustained data rate performance for CA (2 DL CA)	Rel-10	C107	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA and not supporting 256QAM in DL (UE category 3, 4, 6, 7, 9 and 10)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.1.1_A.2 is executed.
		Rel-11	C93	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA and not supporting 256QAM in DL (UE category 3, 4, 6, 7, 9 and 10)			Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.1.1_A.2	FDD Sustained data rate performance for CA (3DL CA)	Rel-10	C126	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.1.1_A.4 is executed
		Rel-10	C126a	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 and supporting at most 40MHz aggregated bandwidth and not supporting 256QAM in DL (UE category 6 and 7)	Refer to 36.521-1 8.1.2.3		Note 7
		Rel-11	C127	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)	TBD		
		Rel-11	C127a	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 and supporting at most 40MHz aggregated bandwidth and not supporting 256QAM in DL (UE category 6 and 7)	TBD		
8.7.1.1_A.4	FDD Sustained data rate performance for CA (4DL CA)	Rel-11	C189	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 and not supporting 256QAM in DL (UE category 11 and 12)		2Rx, 4Rx	Test execution not necessary if 8.7.1.1_A.5 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C189a	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 and supporting at most 60MHz aggregated bandwidth and not supporting 256QAM in DL (UE category 9 and 10)			
8.7.1.1_A.5	FDD Sustained data rate performance for CA (5DL CA)	Rel-11	C266	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 and not supporting 256QAM in DL (UE DL category 11,12)		2Rx, 4Rx	Test execution not necessary if 8.7.1.1_A.6 is executed. Note 7
		Rel-12	C267	UE supporting E-UTRA FDD and 5DL CA configurations in Table 4.1-5 and not supporting 256QAM in DL (UE DL category 11,12,15)			
8.7.1.1_A.6	FDD Sustained data rate performance for CA (6DL CA)	Rel-11	C330	UE supporting E-UTRA FDD and 6DL with CA configurations in Table 4.1-6 and not supporting 256QAM in DL (UE DL category 11,12)		2Rx, 4Rx	Test execution not necessary if 8.7.1.1_A.7 is executed. Note 7
		Rel-12	C331	UE supporting E-UTRA FDD and 6DL CA configurations in Table 4.1-6 and not supporting 256QAM in DL (UE DL category 11,12,15)			
8.7.1.1_A.7	FDD Sustained data rate performance for CA (7DL CA)	Rel-15	C343	UE supporting E-UTRA FDD and 7DL CA and not supporting 256QAM in DL (UE DL category 11,12,15)		2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
-8.7.1.1_H.1	FDD sustained data rate performance (Single Carrier) for 256QAM in DL	Rel-12	C42h	UE supporting E-UTRA FDD and 256QAM and UE DL category 13			Test execution not necessary if 8.7.1.1_H.2 is executed
8.7.1.1_H.2	FDD Sustained data rate performance for CA (2DL CA) for 256QAM in DL	Rel-12	C107h	UE supporting E-UTRA FDD and 2DL CA and 256QAM in DL (UE DL category 11, 12 and 13)		2Rx, 4Rx	Test execution not necessary if 8.7.1.1_H.3 is executed Note 7
8.7.1.1_H.3	FDD Sustained data rate performance for CA (3DL CA) for 256QAM in DL	Rel-12	C126h	UE supporting E-UTRA FDD and 3DL CA ,and supporting 256QAM in DL (UE DL category 11, 12 and 15)		2Rx, 4Rx	Test execution not necessary if 8.7.1.1_H.4 is executed Note 7
		Rel-12	C126ha	UE supporting E-UTRA FDD and 3DL CA ,and supporting 256QAM in DL and supporting at most 40MHz aggregated bandwidth (UE DL category 13)			Test execution not necessary if 8.7.1.1_H.4 is executed
8.7.1.1_H.4	FDD Sustained data rate performance for CA (4DL CA) for 256QAM in DL	Rel-13	C189h	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 and supporting 256QAM in DL			Test execution not necessary if 8.7.1.1_H.5 is executed.
8.7.1.1_H.5	FDD Sustained data rate performance for CA (5DL CA) for 256QAM in DL	Rel-13	C266h	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 and supporting 256QAM in DL			
8.7.1.1_H.6	FDD Sustained data rate performance for CA (6DL CA) for 256QAM in DL	Rel-13	C331h	UE supporting E-UTRA FDD and 6DL with CA configurations in Table 4.1-6 and supporting 256QAM in DL			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.1.1_H.7	FDD Sustained data rate performance for CA (7DL CA) for 256QAM in DL	Rel-15	C344	UE supporting E-UTRA FDD and 7DL and supporting 256QAM in DL			Test execution not necessary if 8.7.1.1_H.8 is executed
8.7.2.1	TDD sustained data rate performance (Rel-9 and forward)	Rel-9	C111	UE supporting E-UTRA TDD and not supporting 256QAM in DL (UE categories from 1 to 4)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.2.1_A.1 or 8.7.4.1 is executed.
8.7.2.1_1	TDD sustained data rate performance (Rel-10 and forward)	Rel-10	C73	UE supporting E-UTRA TDD and not supporting 256QAM in DL (UE category 6 and 7)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.2.1_A.1or 8.7.4.1 is executed.
8.7.2.1_2	TDD sustained data rate performance for UE category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.7.2.1_A.1	TDD sustained data rate performance for CA (2DL CA)	Rel-10	C74	UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA and not supporting 256QAM in DL (UE category 6, 7, 9 and 10)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.2 is executed.
		Rel-11	C75	UE supporting E-UTRA TDD and intra-band non-contiguous DL CA and not supporting 256QAM in DL (UE category 6, 7, 9 and 10)			Note 7
8.7.2.1_A.2	TDD Sustained data rate performance for CA (3DL CA)	Rel-10	C130	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.3 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C131	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)			Note 7
8.7.2.1_A.3	TDD Sustained data rate performance for CA (4DL CA)	Rel-11	C213	UE supporting E-UTRA TDD and 4DL CA configurations in Table 4.1-3 (UE DL category 11, 12 and 15)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.4 is executed. Note 7
8.7.2.1_A.5	TDD Sustained data rate performance for CA (5DL CA)	Rel-11	C360	UE supporting E-UTRA TDD and 5DL CA configurations in Table 4.1-3 (UE DL category 11, 12 and 15)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.6 is executed. Note 7
8.7.2.1_A.6	TDD Sustained data rate performance for CA (6DL CA)	Rel-15	C331a	UE supporting E-UTRA TDD and 6DL CA configurations in Table 4.1-3 (UE DL category 11, 12 and 15)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.7 is executed. Note 7
8.7.2.1_A.7	TDD Sustained data rate performance for CA (7DL CA)	Rel-15	C345	UE supporting E-UTRA TDD and 7DL CA (UE DL category 11, 12 and 15)	Refer to 36.521-1 8.1.2.3	2Rx, 4Rx	Test execution not necessary if 8.7.2.1_A.8 is executed. Note 7
8.7.2.1_H.1	TDD sustained data rate performance (Single Carrier) for 256QAM in DL	Rel-12	C73h	UE supporting E-UTRA TDD and 256QAM in DL and UE DL category 13			Test execution not necessary if 8.7.2.1_H.2 is executed.
8.7.2.1_H.2	TDD sustained data rate performance for CA (2DL CA) for 256QAM in DL	Rel-12	C74h	UE supporting E-UTRA TDD and 2DL CA, and supporting 256QAM in DL (UE DL category 11, 12 and 13)		2Rx, 4Rx	Test execution not necessary if 8.7.2.1_H.3 is executed. Note 7
8.7.2.1_H.3	TDD Sustained data rate performance for CA (3DL CA) for 256QAM in DL	Rel-12	C130h	UE supporting E-UTRA TDD and 3DL CA and supporting 256QAM in DL (UE DL Category 11, 12 and 15)		2Rx, 4Rx	Test execution not necessary if 8.7.2.1_H.4 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.2.1_H.4	TDD Sustained data rate performance for CA (4DL CA) for 256QAM in DL	Rel-13	C213h	UE supporting E-UTRA TDD and 4DL CA and supporting 256QAM in DL (UE DL Category 11, 12,15 and 16)		2Rx, 4Rx	Test execution not necessary if 8.7.2.1_H.5 is executed. Note 7
8.7.2.1_H.5	TDD Sustained data rate performance for CA (5DL CA) for 256QAM in DL	Rel-14	C332	UE supporting E-UTRA TDD and 5DL CA and supporting 256QAM in DL (UE DL Category 16)		2Rx, 4Rx	Note 7
8.7.2.1_H.6	TDD Sustained data rate performance for CA (6DL CA) for 256QAM in DL	Rel-15	C331ha	UE supporting E-UTRA TDD and 6DL CA and supporting 256QAM in DL (UE DL Category 16)		2Rx, 4Rx	Test execution not necessary if 8.7.2.1_H.7 is executed. Note 7
8.7.2.1_H.7	TDD Sustained data rate performance for CA (7DL CA) for 256QAM in DL	Rel-15	C346	UE supporting E-UTRA TDD and 7DL CA and supporting 256QAM in DL (UE DL Category 16)		2Rx, 4Rx	Test execution not necessary if 8.7.2.1_H.8 is executed. Note 7
8.7.3.1	FDD sustained data rate performance for EPDCCH scheduling	Rel-11	C55	UE supporting E-UTRA FDD and EPDCCH	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.7.4.1	TDD sustained data rate performance for EPDCCH scheduling	Rel-11	C56	UE supporting E-UTRA TDD and EPDCCH	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.7.5.1.1	TDD FDD CA Sustained data rate performance for FDD PCell (2DL CA)	Rel-12	C138	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell and not supporting 256QAM in DL (UE category 3, 4, 6, 7, 9 and 10)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.1.2 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.5.1.2	TDD FDD CA Sustained data rate performance for FDD PCell (3DL CA)	Rel-12	C139	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.1.3 is executed. Note 7
8.7.5.1.3	TDD FDD CA Sustained data rate performance for FDD PCell (4DL CA)	Rel-12	C139a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell and not supporting 256QAM in DL (UE category 11 and 12)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.1.4 is executed. Note 7
8.7.5.1.4	TDD FDD CA Sustained data rate performance for FDD PCell (5DL CA)	Rel-12	C139b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell and not supporting 256QAM in DL (UE DL category 15)	TBD	2Rx, 4Rx	Note 7
8.7.5.1.5	TDD FDD CA Sustained data rate performance for FDD PCell (6DL CA)	Rel-12	C139c	UE supporting E-UTRA FDD and TDD and 6DL CA with FDD as PCell and not supporting 256QAM in DL (UE DL category 15)	TBD	2Rx, 4Rx	Note 7
8.7.5.1_H.1	TDD FDD CA Sustained data rate performance for FDD PCell (2DL CA) for 256QAM in DL	Rel-12	C138h	UE supporting E-UTRA FDD and TDD and 2DL TDD-FDD CA with FDD as PCell and supporting 256QAM in DL (UE DL category 11, 12 and 13)		2Rx, 4Rx	Test execution not necessary if 8.7.5.1_H.2 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.5.1_H.2	TDD FDD CA Sustained data rate performance for FDD PCell (3DL CA) for 256QAM in DL	Rel-12	C139h	UE supporting E-UTRA FDD and TDD and 3DL TDD-FDD CA with FDD as PCell and supporting 256QAM in DL (UE DL Category 11, 12 and 15)		2Rx, 4Rx	Test execution not necessary if 8.7.5.1_H.3 is executed. Note 7
8.7.5.1_H.3	TDD FDD CA Sustained data rate performance for FDD PCell (4DL CA) for 256QAM in DL	Rel-12	C139ha	UE supporting E-UTRA FDD and TDD and 4DL TDD-FDD CA with FDD as PCell and supporting 256QAM in DL			Test execution not necessary if 8.7.5.1_H.4 is executed.
8.7.5.1_H.4	TDD FDD CA Sustained data rate performance for FDD PCell (5DL CA) for 256QAM in DL	Rel-12	C139hb	UE supporting E-UTRA FDD and TDD and 5DL TDD-FDD CA with FDD as PCell and supporting 256QAM in DL			
8.7.5.1_H.5	TDD FDD CA Sustained data rate performance for FDD PCell (6DL CA) for 256QAM in DL	Rel-12	C139hc	UE supporting E-UTRA FDD and TDD and 6DL TDD-FDD CA with FDD as PCell and supporting 256QAM in DL			
8.7.5.2.1	TDD FDD CA Sustained data rate performance for TDD PCell (2DL CA)	Rel-12	C140	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell and not supporting 256QAM in DL (UE category 3, 4, 6, 7, 9 and 10)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.2.2 is executed. Note 7
8.7.5.2.2	TDD FDD CA Sustained data rate performance for TDD PCell (3DL CA)	Rel-12	C141	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell and not supporting 256QAM in DL (UE category 9, 10, 11 and 12)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.2.3 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.5.2.3	TDD FDD CA Sustained data rate performance for TDD PCell (4DL CA)	Rel-12	C141a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell and not supporting 256QAM in DL (UE category 11 and 12)	TBD	2Rx, 4Rx	Test execution not necessary if 8.7.5.2.4 is executed. Note 7
8.7.5.2.4	TDD FDD CA Sustained data rate performance for TDD PCell (5DL CA)	Rel-12	C141b	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell and not supporting 256QAM in DL (UE category 15)	TBD	2Rx, 4Rx	Note 7
8.7.5.2.5	TDD FDD CA Sustained data rate performance for TDD PCell (6DL CA)	Rel-12	C141c	UE supporting E-UTRA FDD and TDD and 6DL CA with TDD as PCell and not supporting 256QAM in DL (UE category 15)	TBD	2Rx, 4Rx	Note 7
8.7.5.2_H.1	TDD FDD CA Sustained data rate performance for TDD PCell (2DL CA) for 256QAM in DL	Rel-12	C140h	UE supporting E-UTRA FDD and TDD and 2DL TDD-FDD CA with TDD as PCell and supporting 256QAM in DL (UE DL Category 11, 12 and 13)		2Rx, 4Rx	Test execution not necessary if 8.7.5.2_H.2 is executed. Note 7
8.7.5.2_H.2	TDD FDD CA Sustained data rate performance for TDD PCell (3DL CA) for 256QAM in DL	Rel-12	C141h	UE supporting E-UTRA FDD and TDD and 3DL TDD-FDD CA with TDD as PCell and supporting 256QAM in DL (UE DL Category 11, 12 and 15)		2Rx, 4Rx	Test execution not necessary if 8.7.5.2_H.3 is executed. Note 7
8.7.5.2_H.4	TDD FDD CA Sustained data rate performance for TDD PCell (5DL CA) for 256QAM in DL	Rel-12	C141hb	UE supporting E-UTRA FDD and TDD and 5DL TDD-FDD CA with TDD as PCell and supporting 256QAM in DL (UE DL Category 16)		2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.5.2_H.5	TDD FDD CA Sustained data rate performance for TDD PCell (6DL CA) for 256QAM in DL	Rel-12	C142h	UE supporting E-UTRA FDD and TDD and 6DL TDD-FDD CA with TDD as PCell and supporting 256QAM in DL (UE DL Category 16)		2Rx, 4Rx	Note 7
8.7.6.1	FDD sustained data rate performance for Dual Connectivity 64QAM	Rel-12	C171	UE supporting E-UTRA FDD and Dual Connectivity and not supporting 256QAM in DL (UE Category 3, 4, 6, 7, 9, and 10)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.7.6.2	FDD sustained data rate performance for Dual Connectivity 256QAM	Rel-12	C173	UE supporting E-UTRA FDD and Dual Connectivity and supporting 256QAM in DL	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.7.7.1	TDD sustained data rate performance for Dual Connectivity 64QAM	Rel-12	C172	UE supporting E-UTRA TDD and Dual Connectivity and not supporting 256QAM in DL (UE Category 6, 7, 9, and 10)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.7.7.2	TDD sustained data rate performance for Dual Connectivity 256QAM	Rel-12	C174	UE supporting E-UTRA TDD and Dual Connectivity and supporting 256QAM in DL	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
8.7.9.2	FDD sustained data rate performance for 4 layer MIMO (single carrier)	Rel-10	C226	UE supporting E-UTRA FDD with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category 6 and 7 and UE DL category 13)	One "Test Number" to be performed. The selected band shall lead to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.9 is executed, where larger equivalent aggregated bandwidth can be achieved.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.9.3	FDD sustained data rate performance for 4 layer MIMO (2DL CA)	Rel-10	C227	UE supporting 2DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and intra-band contiguous DL CA or inter-band DL CA (UE Category 9, 10, 11 and 12 and UE DL category 9, 10, 11, 12 and 15)	One "Test Number" to be performed. The selected CA configuration shall lead to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.9 is executed, where larger equivalent aggregated bandwidth can be achieved.
		Rel-11	C228	UE supporting 2DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and intra-band non-contiguous DL CA (UE Category 9, 10, 11 and 12 and UE DL category 9, 10, 11, 12 and 15)			
8.7.9.4	FDD sustained data rate performance for 4 layer MIMO (3DL CA)	Rel-10	C229	UE supporting 3DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 3DL with CA configurations in Table 4.1-3 (UE Category 11 and 12 and UE DL category 11, 12, 15, 16 and 18)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.9 is executed, where larger equivalent aggregated bandwidth can be achieved.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C230	UE supporting 3DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 3DL with CA configurations in Table 4.1-3 and 4Rx antenna ports and 4-layer spatial multiplexing (UE Category 11 and 12 and UE DL category 11, 12, 15, 16 and 18)			
8.7.9.5	FDD sustained data rate performance for 4 layer MIMO (4DL CA)	Rel-11	C236	UE supporting 4DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 4DL with CA configurations in Table 4.1-4 (UE DL category 15, 16, 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.9 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.9.6	FDD sustained data rate performance for 4 layer MIMO (5DL CA)	Rel-11	C237	UE supporting 5DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 5DL with CA configurations in Table 4.1-5 (UE DL category 15, 16, 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.9 is executed, where larger equivalent aggregated bandwidth can be achieved.
		Rel-12	C238	UE supporting 5DL FDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 5DL with CA configurations in Table 4.1-5 (UE DL category 15, 16, 18 and 19)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.10.2	TDD sustained data rate performance for 4 layer MIMO (single carrier)	Rel-10	C239	UE supporting E-UTRA TDD with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category 6 and 7 and UE DL category 13)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.10 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.10.3	TDD sustained data rate performance for 4 layer MIMO (2DL CA)	Rel-10	C240	UE supporting 2DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and intra-band contiguous DL CA or inter-band DL CA (UE Category 9, 10, 11 and 12 and UE DL category 9, 10, 11, 12 and 15)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.10 is executed, where larger equivalent aggregated bandwidth can be achieved.
		Rel-11	C241	UE supporting 2DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and intra-band non-contiguous DL CA (UE Category 9, 10, 11 and 12 and UE DL category 9, 10, 11, 12 and 15)			
8.7.10.4	TDD sustained data rate performance for 4 layer MIMO (3DL CA)	Rel-10	C242	UE supporting 3DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 3DL with CA configurations in Table 4.1-3 (UE Category 11 and 12 and UE DL category 11, 12, 15, 16 and 18)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.10 is executed, where larger equivalent aggregated bandwidth can be achieved.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C243	UE supporting 3DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 3DL with CA configurations in Table 4.1-3 (UE Category 11 and 12 and UE DL category 11, 12, 15, 16 and 18)			
8.7.10.5	TDD sustained data rate performance for 4 layer MIMO (4DL CA)	Rel-11	C244	UE supporting 4DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 4DL with CA configurations in Table 4.1-4 (UE DL category 16, 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.10 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.10.6	TDD sustained data rate performance for 4 layer MIMO (5DL CA)	Rel-11	C245	UE supporting 5DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 5DL with CA configurations in Table 4.1-5 (UE DL category 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.10 is executed, where larger equivalent aggregated bandwidth can be achieved.
		Rel-12	C246	UE supporting 5DL TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing and 5DL with CA configurations in Table 4.1-5 (UE DL category 18 and 19)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.11.2	TDD FDD CA sustained data rate performance for 4 layer MIMO (2DL CA)	Rel-12	C247	UE supporting 2DL FDD-TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category 9, 10, 11 and 12 and UE DL category 9, 10, 11, 12 and 15)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.11 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.11.3	TDD FDD CA sustained data rate performance for 4 layer MIMO (3DL CA)	Rel-12	C248	UE supporting 3DL FDD-TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category 11 and 12 and UE DL category 11, 12, 15, 16 and 18)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.11 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.11.4	TDD FDD CA sustained data rate performance for 4 layer MIMO (4DL CA)	Rel-12	C249	UE supporting 4DL FDD-TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing (UE DL category 15, 16, 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.11 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.11.5	TDD FDD CA sustained data rate performance for 4 layer MIMO (5DL CA)	Rel-12	C250	UE supporting 5DL FDD-TDD CA with 4Rx antenna ports and 4-layer spatial multiplexing (UE DL category 16, 18 and 19)	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest equivalent aggregated bandwidth Note 3 supported by UE.		Test execution not necessary if another test case in clause 8.7.11 is executed, where larger equivalent aggregated bandwidth can be achieved.
8.7.12.1.2.1	LAA sustained data rate performance with FDD PCell with 2DL CA (2Rx)	Rel-13	C209	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.7.12.1.2.2	LAA sustained data rate performance with FDD PCell for 4 Layer MIMO (2DL CA)	Rel-13	C328	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell abd 4-layer spatial multiplexing	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest		
8.7.12.2.2.1	LAA sustained data rate performance with TDD PCell with 2DL CA (2Rx)	Rel-13	C210	UE supporting E-UTRA TDD and downlink LAA	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest		
8.7.12.2.2.2	LAA sustained data rate performance with TDD PCell for 4 Layer MIMO (2DL CA)	Rel-13	C329	UE supporting E-UTRA TDD and downlink LAA with FDD as Pcell abd 4-layer spatial multiplexing	One "Test Number" to be performed, in a chosen CA configuration, which leads to the largest		
8.8.1.1	FDD distributed EPDCCH performance	Rel-11	C55	UE supporting E-UTRA FDD and EPDCCH	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.8.1.2	TDD distributed EPDCCH performance	Rel-11	C56	UE supporting E-UTRA TDD and EPDCCH	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.8.2.1	FDD localized EPDCCH performance with TM9	Rel-11 to Rel-14	C91	UE supporting E-UTRA FDD and EPDCCH and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C91m	UE supporting E-UTRA FDD and EPDCCH and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and EPDCCH and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.8.2.2	TDD localized EPDCCH performance with TM9	Rel-11 to Rel-14	C92	UE supporting E-UTRA TDD and EPDCCH and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C92m	UE supporting E-UTRA TDD and EPDCCH and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and EPDCCH and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.8.3.1	FDD localized EPDCCH transmission with TM10 Type B quasi co-location type	Rel-11	C57	UE supporting E-UTRA FDD and EPDCCH and Multiple CSI processes on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.8.3.2	TDD localized EPDCCH transmission with TM10 Type B quasi co-location type	Rel-11	C58	UE supporting E-UTRA TDD and EPDCCH and Multiple CSI processes on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.8.4.1	FDD Enhanced Downlink Control Channel Performance Requirements Type A for EDPCCH - Localized Transmission with CRS Interference Model	Rel-13	C289	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.8.4.2	TDD Enhanced Downlink Control Channel Performance Requirements Type A for EDPCCH - Localized Transmission with CRS Interference Model	Rel-13	C290	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.8.5.1	TDD Enhanced Downlink Control Channel Performance Requirements Type A for EDPCCH - Distributed Transmission with TM9 Interference Model	Rel-13	C290	E-UTRA TDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.8.6.1	FDD Enhanced Downlink Control Channel Performance Type A for EDPCCH-Distributed Transmission with TM3 Interference Model	Rel-13	C289	E-UTRA FDD UEs supporting Enhanced downlink control channel performance requirements type A			
8.9.1.1.1	Transmit diversity performance for UE category 0 (Cell-Specific Reference Symbols)	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.1.1_1	FDD PDSCH Transmit Diversity 4x1 for UE category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.1.2	FDD closed-loop spatial multiplexing performance (Cell-Specific Reference Symbols)	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.1.2_1	FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 4x1 for UE Category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.9.1.1.3	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for UE category 0	Rel-12	C157	UE supporting E-UTRA FDD (UE category 0) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.1.3_1	FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for UE category 1bis	Rel-13	C157a	UE supporting E-UTRA FDD (UE category 1bis) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.1	TDD PDSCH Transmit Diversity for UE category 0	Rel-12	C156	UE supporting E-UTRA TDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.1_1	TDD PDSCH Transmit Diversity for UE category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.2	TDD closed-loop spatial multiplexing performance (Cell-Specific Reference Symbols)	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.2_1	TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x1 for UE Category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.3	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for UE category 0	Rel-12	C158	UE supporting E-UTRA TDD (UE category 0) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.1.2.3_1	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for UE category 1bis	Rel-13	C158a	UE supporting E-UTRA TDD (UE category 1bis) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.9.2.1.1	FDD PHICH Transmit Diversity for UE category 0	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.2.1.1_1	FDD PHICH Transmit Diversity for UE category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.2.2.1	TDD PHICH Transmit Diversity for UE category 0	Rel-12	C156	UE supporting E-UTRA TDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.9.2.2.1_1	TDD PHICH Transmit Diversity for UE category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.10.1.1.1	FDD PDSCH Transmit Diversity 2x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.1.2	FDD PDSCH Open Loop Spatial Multiplexing 2x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.1.3	FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model – Enhanced Performance Requirement Type A	Rel-11	C113d	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.1.4	FDD PDSCH Closed Loop Spatial Multiplexing 4x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.10.1.1.5	FDD PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 interference model – Enhanced Performance Requirement Type A	Rel-11 to Rel-14	C113e	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
		Rel-15	C113em	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and Feature Group Indicator 103 and (UE Category < 8 and 8 < UE Category < 11 and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.10.1.1.6	FDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols)	Rel-10 to Rel-14	C113c	UE supporting E-UTRA FDD and Feature Group Indicator 103 and 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C113cm	UE supporting E-UTRA FDD and Feature Group Indicator 103 and 4Rx antenna ports and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and 4Rx antenna ports (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.10.1.1.7	FDD Open-loop spatial multiplexing, 3 Layer Multiplexing with 4 Tx Antenna Ports	Rel-10	C220	UE supporting E-UTRA FDD with 4Rx antenna ports and 3-layer spatial multiplexing	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.1.8	FDD Closed-loop spatial multiplexing performance, 4 Layers spatial multiplexing 4 Tx antennas	Rel-10	C220	UE supporting E-UTRA FDD with 4Rx antenna ports and 4-layer spatial multiplexing	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.1.9	FDD 4 Layer Spatial Multiplexing (User-Specific Reference Symbols)	Rel-10 to Rel-14	C113c	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 and 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C113cm	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 and 4Rx antenna ports and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and eDL-MIMO and 4Rx antenna ports (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.10.1.2.1	TDD PDSCH Transmit Diversity 2x4	Rel-10	C198	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.2	TDD PDSCH Open Loop Spatial Multiplexing 2x4	Rel-10	C198	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.3	TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model – Enhanced Performance Requirement Type A	Rel-11	C198 a	UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.10.1.2.4	TDD PDSCH Closed Loop Spatial Multiplexing 4x4	Rel-10	C198	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.5	TDD PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 interference model – Enhanced Performance Requirement Type A	Rel-11	C198c	UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.6	TDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols)	Rel-10	C198b	UE supporting E-UTRA TDD with 4Rx antenna ports and UE Category 2 or higher and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.7	TDD Open-loop spatial multiplexing, 3 Layer Multiplexing with 4 Tx Antenna Ports	Rel-10	C235	UE supporting E-UTRA TDD with 4Rx antenna ports and 3-layer spatial multiplexing	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.8	TDD Closed-loop spatial multiplexing performance, 4 Layers spatial multiplexing 4 Tx antennas	Rel-10	C235	UE supporting E-UTRA TDD with 4Rx antenna ports and 4-layer spatial multiplexing	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.1.2.9	TDD 4 Layer Spatial Multiplexing (User-Specific Reference Symbols)	Rel-10 to Rel-14	C183	UE supporting E-UTRA TDD and UE Category ≥ 5 and Feature Group Indicator 103 and 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C183m	UE supporting E-UTRA TDD and Feature Group Indicator 103 with 4Rx antenna ports and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.10.2.1.1	FDD PCFICH/PDCCH Single-antenna Port Performance 1x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.2.1.2	FDD PCFICH/PDCCH Transmit Diversity Performance 2x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.2.1.3	FDD PCFICH/PDCCH Transmit Diversity Performance 4x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.2.2.1	TDD PCFICH/PDCCH Single-antenna Port Performance 1x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.10.2.2.2	TDD PCFICH/PDCCH Transmit Diversity Performance 2x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.2.2.3	TDD PCFICH/PDCCH Transmit Diversity Performance 4x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.3.1.1	FDD PHICH Single-antenna Port Performance 1x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.3.1.2	FDD PHICH Transmit Diversity Performance 2x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.3.1.3	FDD PHICH Transmit Diversity Performance 4x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.3.2.1	TDD PHICH Single-antenna Port Performance 1x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.3.2.2	TDD PHICH Transmit Diversity Performance 2x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.10.3.2.3	TDD PHICH Transmit Diversity Performance 4x4	Rel-10	C184	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.4.1.1	FDD distributed EPDCCH performance 2x4	Rel-10	C164	UE supporting E-UTRA FDD and EPDCCH with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.4.1.2	TDD distributed EPDCCH performance 2x4	Rel-10	C165	UE supporting E-UTRA TDD and EPDCCH with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
8.10.4.2.1	FDD localized EPDCCH performance with TM9 2x4	Rel-10 to Rel-14	C166	UE supporting E-UTRA FDD and EPDCCH and Feature Group Indicator 103 with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
		Rel-15	C166m	UE supporting E-UTRA FDD and EPDCCH and Feature Group Indicator 103 with 4Rx antenna ports and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and EPDCCH with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.10.4.2.2	TDD localized EPDCCH performance with TM9 2x4	Rel-10 to Rel-14	C167	UE supporting E-UTRA TDD and EPDCCH and Feature Group Indicator 103 with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
		Rel-15	C167m	UE supporting E-UTRA TDD and EPDCCH and Feature Group Indicator 103 with 4Rx antenna ports and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and EPDCCH with 4Rx antenna ports (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.11.1.1.1	FDD and half-duplex FDD Closed-loop spatial multiplexing performance for UE supporting CE	Rel-13	C145e	UE supporting E-UTRA FDD and UE category M1 and TM6 in CEModeA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C145f	UE supporting E-UTRA FDD and UE category M2 and TM6 in CEModeA			
8.11.1.1.2	FDD and half-duplex FDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for UE supporting CE	Rel-13	C145g	UE supporting E-UTRA FDD and UE category M1 and TM9 in CEModeA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C145h	UE supporting E-UTRA FDD and UE category M2 and TM9 in CEModeA			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.11.1.1.3.1	FDD and half-duplex FDD PDSCH Transmit Diversity 2x1 for UE category M1	Rel-13	C145a	UE supporting E-UTRA FDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.11.1.1.3.1_1	FDD and half-duplex FDD PDSCH Transmit Diversity 2x1 for UE category M1 (CEmodeB)	Rel-13	C156c	UE supporting E-UTRA FDD and (UE category M1 and CEModeB)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.11.1.2.1	TDD Closed-loop spatial multiplexing performance for CE UE in CE Mode A (Cell-Specific Reference Symbols)	Rel-13	C156q	UE supporting E-UTRA TDD and UE category M1 and TM6 in CEModeA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C156h	UE supporting E-UTRA TDD and UE category M2 and TM6 in CEModeA			
8.11.1.2.2	TDD PDSCH Single-layer Spatial Multiplexing on antenna ports 7 or 8 for CE UE in CE Mode A	Rel-13	C156e	UE supporting E-UTRA TDD and UE category M1 and TM9 in CEModeA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C156i	UE supporting E-UTRA TDD and UE category M2 and TM9 in CEModeA			
8.11.1.2.3.1	TDD PDSCH Transmit Diversity for UE category M1	Rel-13	C156b	UE supporting E-UTRA TDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.11.1.2.3.1_1	TDD PDSCH Transmit Diversity for UE category M1 (CEModeB)	Rel-13	C156d	UE supporting E-UTRA TDD and UE category M1 and CEModeB	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.11.1.2.3.2	TDD PDSCH 2 Tx Antenna Port supporting wideband transmission for UE category M2	Rel-14	C316a	UE supporting E-UTRA TDD and UE category M2 and CEModeA	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.11.1.2.3.2_1,	TDD PDSCH 2 Tx Antenna Port supporting wideband transmission for UE category M2 (CEModeB)	Rel-14	C316b	UE supporting E-UTRA TDD and UE category M2 and CEModeB	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.11.2.1.1	FDD demodulation of MPDCCH in CE Mode A	Rel-13	C145b	UE supporting E-UTRA FDD and (UE category M1 or CEModeA)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C314	UE supporting E-UTRA FDD and (UE category M2 or CEModeA)			
8.11.2.1.2	FDD and half-duplex FDD demodulation of MPDCCH in CE Mode B	Rel-13	C156c	UE supporting E-UTRA FDD and (UE category M1 and CEModeB)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C315	UE supporting E-UTRA FDD and (UE category M1 and CEModeB)			
8.11.2.2.1	TDD demodulation of MPDCCH in CE Mode A	Rel-13	C156b	UE supporting E-UTRA TDD and (UE category M1 or UE category M2 or CEModeA)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C316	UE supporting E-UTRA TDD and (UE category M2 or CEModeA)			
8.11.2.2.2	TDD demodulation of MPDCCH in CE Mode B	Rel-13	C156d	UE supporting E-UTRA TDD and (UE category M1 or UE category M2 and CEModeB)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-14	C317	UE supporting E-UTRA TDD and (UE category M1 and CEModeB)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.12.1.1.1	Demodulation of NPDSCH (Cell-Specific Reference Symbols) in In-band mode for Category NB1 and NB2	Rel-13	C347	UE supporting NB-IoT FDD	Each "Test Number" to be performed once, in a chosen band		
8.12.1.1.2	Demodulation of NPDSCH (Cell-Specific Reference Symbols) in standalone and Guard-band mode for category NB1 and NB2	Rel-13	C347	UE supporting NB-IoT FDD	Each "Test Number" to be performed once, in a chosen band		
8.12.1.1.3	Demodulation of NPDSCH (Cell-Specific Reference Symbols) in standalone for NB2	Rel-14	C298	UE supporting E-UTRA FDD and category NB2	Each “Test Number” to be performed once, in a chosen band		
8.12.2.1.1	Demodulation of NPDCCH single-antenna performance for category NB1 and NB2	Rel-13	C347	UE supporting NB-IoT FDD	Each "Test Number" to be performed once, in a chosen band		
8.12.2.1.2	Demodulation of NPDCCH in In-band mode Transmit Diversity performance for Category NB1 and NB2	Rel-13	C347	UE supporting NB-IoT FDD	Each "Test Number" to be performed once, in a chosen band		
8.13.1.1.3	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 with 256QAM (2DL CA)	Rel-10	C278	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA and 4 Rx antenna ports and 256QAM in DL (UE Category >= 5)			
		Rel-11	C279	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA and 4 Rx antenna ports and 256QAM in DL (UE Category >= 5)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.13.1.1.4	FDD PDSCH Closed Loop Four-Layer Spatial Multiplexing for CA (2DL CA)	Rel-11	C280	UE supporting E-UTRA FDD and 2DL CA with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category >= 5)			
8.13.1.1.1.2	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (2DL CA)	Rel-10	C253	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.1.1.1.3 or 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed.
		Rel-11	C254	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA (UE Category >= 5) and 4Rx antenna ports			
8.13.1.1.1.3	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (3DL CA)	Rel-10	C255	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.1.1.1.4 or 8.13.1.1.1.5 is executed.
		Rel-11	C256	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports			
8.13.1.1.1.4	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (4DL CA)	Rel-11	C257	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.1.1.1.5 is executed.
8.13.1.1.1.5	FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (5DL CA)	Rel-11	C258	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C259	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports			
8.13.1.2.2	FDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (2DL CA)	Rel-10	C253	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.1.2.3 or 8.13.1.2.4 or 8.13.1.2.5 is executed.
		Rel-11	C254	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA (UE Category >= 5) and 4Rx antenna ports			
8.13.1.2.3	FDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (3DL CA)	Rel-10	C255	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.1.2.4 or 8.13.1.2.5 is executed.
		Rel-11	C256	UE supporting E-UTRA FDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports			
8.13.1.2.4	FDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (4DL CA)	Rel-11	C257	UE supporting E-UTRA FDD and 4DL with CA configurations in Table 4.1-4 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.1.2.5 is executed.
8.13.1.2.5	FDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (5DL CA)	Rel-11	C258	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-12	C259	UE supporting E-UTRA FDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports			
8.13.1.3.1	FDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model – Enhanced Performance Requirement Type A (2DL CA)	Rel-11	C281	UE supporting E-UTRA FDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A (UE Category >= 5)			
8.13.1.4.1	FDD PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A (2DL CA)	Rel-11to Rel-14	C282	UE supporting E-UTRA FDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and Feature Group Indictor 103 (UE Category >= 5)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C282m	UE supporting E-UTRA FDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and Feature Group Indictor 103 and ((5 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.13.2.1.1.2	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (2DL CA)	Rel-10	C291	UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.2.1.1.3 or 8.13.2.1.1.4 or 8.13.2.1.1.5 is executed.
		Rel-11	C292	UE supporting E-UTRA TDD and intra-band non-contiguous DL CA (UE Category >= 5) and 4Rx antenna ports			
8.13.2.1.1.3	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (3DL CA)	Rel-10	C293	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.2.1.1.4 or 8.13.2.1.1.5 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C294	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports			
8.13.2.1.1.4	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (4DL CA)	Rel-11	C295	UE supporting E-UTRA TDD and 4DL with CA configurations in Table 4.1-4 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.2.1.1.5 is executed.
8.13.2.1.1.5	TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 (5DL CA)	Rel-11	C296	UE supporting E-UTRA TDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		
		Rel-12	C297	UE supporting E-UTRA TDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports			
8.13.2.2.2	TDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (2DL CA)	Rel-10	C291	UE supporting E-UTRA TDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.2.2.3 or 8.13.2.2.4 or 8.13.2.2.5 is executed.
		Rel-11	C292	UE supporting E-UTRA TDD and intra-band non-contiguous DL CA (UE Category >= 5) and 4Rx antenna ports			
8.13.2.2.3	TDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (3DL CA)	Rel-10	C293	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.2.2.4 or 8.13.2.2.5 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C294	UE supporting E-UTRA TDD and 3DL with CA configurations in Table 4.1-3 (UE Category >= 5) and 4Rx antenna ports			
8.13.2.2.4	TDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (4DL CA)	Rel-11	C295	UE supporting E-UTRA TDD and 4DL with CA configurations in Table 4.1-4 (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		Test execution not necessary if 8.13.2.2.5 is executed.
8.13.2.2.5	TDD Dual-Layer Spatial Multiplexing 2x4 (User-Specific Reference Symbols) (5DL CA)	Rel-11	C296	UE supporting E-UTRA TDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.6.5		
		Rel-12	C297	UE supporting E-UTRA TDD and 5DL with CA configurations in Table 4.1-5 (UE Category 8, >= 11) and 4Rx antenna ports			
8.13.2.3.1	TDD PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model – Enhanced Performance Requirement Type A (2DL CA)	Rel-11	C283	UE supporting E-UTRA TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A (UE Category >= 5)			
8.13.2.4.1	TDD PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A (2DL CA)	Rel-11 to Rel-14	C284	UE supporting E-UTRA TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and Feature Group Indictor 103 (UE Category >= 5)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C284m	UE supporting E-UTRA TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and Feature Group Indictor 103 and ((5 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.13.3.1.1.2	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for FDD PCell (2DL CA)	Rel-12 to Rel-14	C306	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.1.3 or 8.13.3.1.1.4 or 8.13.3.1.1.5 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C234m	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and Feature Group Indicator 103 and the enhanced performance requirements type A for LTE and TDD as PCell and ((5 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A for LTE and TDD as PCell and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
8.13.3.1.1.3	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for FDD PCell (3DL CA)	Rel-12	C307	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.1.4 or 8.13.3.1.1.5 is executed.
8.13.3.1.1.4	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for FDD PCell (4DL CA)	Rel-12	C308	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.1.5 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.13.3.1.1.5	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for FDD PCell (5DL CA)	Rel-12	C309	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category >= 8) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		
8.13.3.1.2.2	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for TDD PCell (2DL CA)	Rel-12	C310	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >=5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.2.3 or 8.13.3.1.2.4 or 8.13.3.1.2.5 is executed.
8.13.3.1.2.3	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for TDD PCell (3DL CA)	Rel-12	C311	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell (UE Category >= 5) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.2.4 or 8.13.3.1.2.5 is executed.
8.13.3.1.2.4	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for TDD PCell (4DL CA)	Rel-12	C312	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.1.2.5 is executed.
8.13.3.1.2.5	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 for TDD PCell (5DL CA)	Rel-12	C322	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell (UE Category 8, and Category11 and onwards) and 4Rx antenna ports	Refer to 36.521-1 8.1.2.3		
8.13.3.2.3	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for FDD PCell (User-Specific Reference Symbols) (2DL CA)	Rel-12	C154	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 5)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.4 or 8.13.3.2.5 or 8.13.3.2.6 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.13.3.2.4	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for FDD PCell (User-Specific Reference Symbols) (3DL CA)	Rel-12	C133	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.5 or 8.13.3.2.6 is executed.
8.13.3.2.5	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for FDD PCell (User-Specific Reference Symbols) (4DL CA)	Rel-12	C133a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.6 is executed.
8.13.3.2.6	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for FDD PCell (User-Specific Reference Symbols) (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		
8.13.3.2.7	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for TDD PCell (User-Specific Reference Symbols) (2DL CA)		C155	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >=5)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.8 or 8.13.3.2.9 or 8.13.3.2.10 is executed.
8.13.3.2.8	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for TDD PCell (User-Specific Reference Symbols) (3DL CA)		C135	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell (UE Category >= 5)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.9 or 8.13.3.2.10 is executed.
8.13.3.2.9	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for TDD PCell (User-Specific Reference Symbols) (4DL CA)		C135a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	Refer to 36.521-1 8.1.2.3		Test execution not necessary if 8.13.3.2.10 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.13.3.2.10	TDD-FDD CA Dual-Layer Spatial Multiplexing 2x4 for TDD PCell (User-Specific Reference Symbols) (5DL CA)		C135b	UE supporting E-UTRA FDD and TDD and 5DL CA with TDD as PCell (UE Category 8, and Category11 and onwards)	Refer to 36.521-1 8.1.2.3		
8.13.3.3.1	TDD-FDD CA PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model-Enhanced Performance Requirement Type A for FDD Pcell (2DL CA)	Rel-12	C231	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A for LTE and FDD as PCell (UE Category >=5)			
8.13.3.3.2	TDD-FDD CA PDSCH Closed Loop Single Layer Spatial Multiplexing 2x4 with TM4 Interference Model-Enhanced Performance Requirement Type A for TDD Pcell (2DL CA)	Rel-12	C232	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and the enhanced performance requirements type A for LTE and TDD as PCell (UE Category >=5)			
8.13.3.4.1	TDD-FDD CA PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A for FDD PCell (2DL CA)	Rel-12	C233	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and Feature Group Indictor 103 and the enhanced performance requirements type A for LTE and FDD as PCell (UE Category >=5)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.13.3.4.2	TDD-FDD CA PDSCH Single-layer Spatial Multiplexing 2x4 on antenna ports 7 or 8 with TM9 Interference Model - Enhanced Performance Requirement Type A for TDD PCell (2DL CA)	Rel-12	C234	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and Feature Group Indictor 103 and the enhanced performance requirements type A for LTE and TDD as PCell (UE Category >=5)			
8.13.3.6.1	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 with 256QAM for FDD PCell (2DL CA)	Rel-12	C251	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and 256QAM in DL and FDD as Pcell(UE Category >=5)			
8.13.3.6.2	TDD-FDD CA PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x4 with 256QAM for TDD PCell (2DL CA)	Rel-12	C252	UE supporting E-UTRA FDD and TDD and 2DL CA with 4Rx antenna ports and 256QAM in DL and TDD as Pcell(UE Category >=5)			
8.14.1.1.1	FDD slot/subslot-PDSCH Open Loop Spatial Multiplexing Performance (Cell-Specific Reference Symbols)	Rel-15	C354	UE supporting E-UTRA FDD and slot/subslot TTI (UE categories >=2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.14.1.1.2	FDD slot/subslot-PDSCH Closed Loop Spatial Multiplexing Performance (User-Specific Reference Signals)	Rel-15	C355	UE supporting E-UTRA FDD and Feature Group Indicator 103 and slot/subslot TTI	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
8.14.1.2.1	TDD slot-PDSCH Open Loop Spatial Multiplexing Performance (Cell-Specific Reference Symbols)	Rel-15	C356	UE supporting E-UTRA TDD and slot TTI	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.14.1.2.2	TDD slot-PDSCH Closed Loop Spatial Multiplexing Performance (User-Specific Reference Signals)	Rel-15	C355a	UE supporting E-UTRA TDD and Feature Group Indicator 103 and slot TTI	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.14.2.1	FDD SPDCCH Transmit diversity performance	Rel-15	C355	UE supporting E-UTRA FDD and Feature Group Indicator 103 and slot/subslot TTI	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
8.14.2.2	TDD SPDCCH Transmit diversity performance	Rel-15	C355a	UE supporting E-UTRA TDD and Feature Group Indicator 103 and slot TTI	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
Reporting of Channel State Information							
9.2.1.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-0	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.1.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-0	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.1.3_C.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for eICIC (non-MBSFN ABS)	Rel-10	C29	UE supporting E-UTRA FDD and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.1.4_C.1	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for eICIC (non-MBSFN ABS)	Rel-10	C30	UEs supporting E-UTRA TDD and Feature Group Indictor 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.2.1.5_E.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.1.6_E.1	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115(UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.1.7	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for 256QAM in DL	Rel-12	C01h	UE supporting E-UTRA FDD and 256QAM in DL(UE category 11-12 and UE DL category >=11)		2Rx, 4Rx	Note 7
9.2.1.8	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for 256QAM in DL	Rel-12	C02h	UE supporting E-UTRA TDD and 256QAM in DL(UE category 11-12 and UE DL category >=11)		2Rx, 4Rx	Note 7
9.2.2.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-1	Rel-8	C13 b	UE supporting E-UTRA FDD (UE categories >=2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.2.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-1	Rel-8 to Rel-14	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6 Note 7
9.2.3.1A	FDD CQI Reporting under AWGN conditions – PUCCH 1-1 for FD-MIMO (With channelMeasRestriction configured)	Rel-13	C337	UE supporting E-UTRA FDD and Feature Group Indicator 103 and channeleMeasRestriction-r13 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.3.1_D	FDD CQI Reporting under AWGN conditions - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C25a	UE supporting E-UTRA FDD and Feature Group Indicators 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.2.3.2A	TDD CQI Reporting under AWGN conditions – PUCCH 1-1 for FD-MIMO (With channelMeasRestriction configured)	Rel-13	C338	UE supporting E-UTRA TDD and Feature Group Indicator 103 and channeleMeasRestriction-r13 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.3.2_D	TDD CQI Reporting under AWGN conditions - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C26a	UE supporting E-UTRA TDD and Feature Group Indicators 104 and 110	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C26am	UE supporting E-UTRA TDD and Feature Group Indicators 104 and 110 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and Feature Group Indicator 110 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.2.4.1A	FDD CQI Reporting under AWGN conditions - Single CSI Process With interferenceMeasRestriction configured	Rel-13	C339	UE supporting E-UTRA FDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 and interferenceMeasRestriction-13 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.2.4.1_F	FDD CQI Reporting under AWGN conditions - Single CSI Process for CoMP	Rel-11	C117	UE supporting E-UTRA FDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.4.2A	TDD CQI Reporting under AWGN conditions - Single CSI Process With interferenceMeasRestriction configured	Rel-13	C340	UE supporting E-UTRA TDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 and interferenceMeasRestriction-13 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.4.2_F	TDD CQI Reporting under AWGN conditions - Single CSI Process for CoMP	Rel-11	C118	UE supporting E-UTRA TDD and Maximum CSI processes of One, Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.2.5	TDD CQI Reporting under AWGN conditions – PUCCH 1-1 (when csi-SubframeSet –r12 and EIMTA-MainConfigServCell-r12 are configured)	Rel-12	C275	UE supporting E-UTRA TDD and eIMTA TDD UL-DL reconfiguration and Rel-12 CSI subframe sets (UE Category >= 2)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.2.6.1	LAA CQI Reporting under AWGN Conditions with Frame Structure Type 3 with FDD as Pcell (PUSCH 3-0)	Rel-13	C209	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.6.2	LAA CQI Reporting under AWGN Conditions with Frame Structure Type 3 with TDD as Pcell (PUSCH 3-0)	Rel-13	C217	UE supporting E-UTRA TDD and downlink LAA with TDD as Pcell	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.7.1	LAA CQI Reporting under AWGN Conditions with Frame Structure Type 3 with FDD as Pcell (PUSCH 3-1)	Rel-13	C218	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and TM9 on LAA cells	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.2.7.2	LAA CQI Reporting under AWGN Conditions with Frame Structure Type 3 with TDD as Pcell (PUSCH 3-1)	Rel-13	C219	UE supporting E-UTRA TDD and downlink LAA and TM9 on LAA cells	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.1.1.1	FDD CQI Reporting under fading conditions - PUSCH 3-0	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.1.1.2	TDD CQI Reporting under fading conditions - PUSCH 3-0	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.1.1.5	TDD CQI Reporting under fading conditions – PUCCH 3-0 (when csi-SubframeSet –r12 is configured)	Rel-12	C276	UE supporting E-UTRA TDD and Rel-12 CSI subframe sets (UE category >= 1)			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.1.2.1_D	FDD CQI Reporting under fading conditions - PUSCH 3-1 for eDL-MIMO	Rel-10 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6 Note 7
9.3.1.2.2_D	TDD CQI Reporting under fading conditions - PUSCH 3-1 for eDL-MIMO	Rel-10 to Rel-14	C25a	UE supporting E-UTRA TDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	
		Rel-15	C25am	UE supporting E-UTRA TDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6 Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.1.2.3	FDD CQI Reporting under fading conditions - PUSCH 3-1 for 256QAM in DL	Rel-12 to Rel-14	C260	UE supporting E-UTRA FDD and 256QAM in DL(UE category 11-12 and UE DL category >=11) and Feature Group Indicator 103		2Rx, 4Rx	
		Rel-15	C260m	UE supporting E-UTRA FDD and 256QAM in DL and Feature Group Indicator 103 and UE DL Category = 13, or UE supporting E-UTRA FDD and 256QAM in DL and (UE category 11-12 and UE DL category 11, 12, 14 or higher)			Note 6 Note 7
9.3.1.2.4	TDD CQI Reporting under fading conditions - PUSCH 3-1 for 256QAM in DL	Rel-12 to Rel-14	C261	UE supporting E-UTRA TDD and 256QAM in DL(UE category 11-12 and UE DL category >=11) and Feature Group Indicator 103		2Rx, 4Rx	
		Rel-15	C261m	UE supporting E-UTRA TDD and 256QAM in DL and Feature Group Indicator 103 and UE DL Category = 13, or UE supporting E-UTRA TDD and 256QAM in DL and (UE category 11-12 and UE DL category 11, 12, 14 or higher)			Note 6 Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.1.2.6	TDD CQI Reporting under fading conditions – PUCCH 3-1 (when csi-SubframeSet –r12 is configured with one CSI process)	Rel-12	C277	UE supporting E-UTRA TDD and Rel-12 CSI subframe sets and TM10 (UE Category >= 1).		2Rx	
9.3.1.3.1_E.1	FDD CQI Reporting under fading conditions - PUSCH 3-0 for feICIC (non-MBSFN ABS)	Rel-11	C79	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.1.3.2_E.1	TDD CQI Reporting under fading conditions - PUSCH 3-0 for feICIC (non-MBSFN ABS)	Rel-11	C80	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.2.1.1	FDD CQI Reporting under fading conditions - PUCCH 1-0	Rel-8	C13 b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.2.1.1_1	FDD CQI Reporting under fading conditions - PUCCH 1-0 (Release 9 and forward)	Rel-9	C15	UE supporting E-UTRA FDD (UE category 1)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.2.1.2	TDD CQI Reporting under fading conditions - PUCCH 1-0	Rel-8	C14	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.2.1.2_1	TDD CQI Reporting under fading conditions - PUCCH 1-0 (Release 9 and forward)	Rel-9	C16	UE supporting E-UTRA TDD (UE category 1)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.2.2.1_D	FDD CQI Reporting under fading conditions - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C25x	UE supporting E-UTRA FDD and Feature Group Indicator 103 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C25xm	UTRA FDD and Feature Group Indicator 103 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.3.2.2.2_D	TDD CQI Reporting under fading conditions - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C28y	UE supporting E-UTRA TDD and Feature Group Indicators 104 and 110 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C28ym	UE supporting E-UTRA TDD and Feature Group Indicators 104 and 110 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and Feature Group Indicator 110 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.3.1.1	FDD CQI Reporting under fading conditions and frequency-selective interference - PUSCH 3-0	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.3.1.2	TDD CQI Reporting under fading conditions and frequency-selective interference - PUSCH 3-0	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.4.1.1	FDD CQI Reporting under fading conditions - PUSCH 2-0	Rel-9	C32	UE supporting E-UTRA FDD and Feature Group Indicator 1	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.4.1.2	TDD CQI Reporting under fading conditions - PUSCH 2-0	Rel-9	C37	UE supporting E-UTRA TDD and Feature Group Indicator 1	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.4.2.1	FDD CQI Reporting under fading conditions - PUCCH 2-0	Rel-9	C36	UE supporting E-UTRA FDD and Feature Group Indicator 2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.4.2.2	TDD CQI Reporting under fading conditions - PUCCH 2-0	Rel-9	C38	UE supporting E-UTRA TDD and Feature Group Indicator 2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.5.1.1	FDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A	Rel-11	C44	UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.5.1.2	TDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A	Rel-11	C45	UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.5.2.1	FDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A	Rel-11	C44z	UE supporting E-UTRA FDD and the enhanced performance requirements type A for LTE (UE Category >= 2) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.5.2.2	TDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A	Rel-11	C45i	UE supporting E-UTRA TDD and the enhanced performance requirements type A for LTE (UE Category >= 2) and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.6.1_F.1	FDD CQI Reporting under fading conditions with Single CSI process for CoMP	Rel-11	C50a	UE supporting E-UTRA FDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.6.1_F.2	FDD CQI Reporting under fading conditions with Three CSI processes for CoMP	Rel-11	C96	UE supporting E-UTRA FDD and Maximum CSI processes of Three on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.6.1_F.3	FDD CQI Reporting under fading conditions with Four CSI processes for CoMP	Rel-11	C97	UE supporting E-UTRA FDD and Maximum CSI processes of Four on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.6.2_F.1	TDD CQI Reporting under fading conditions with Single CSI process for CoMP	Rel-11	C51a	UE supporting E-UTRA TDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.6.2_F.2	TDD CQI Reporting under fading conditions with Three CSI processes for CoMP	Rel-11	C98	UE supporting E-UTRA TDD and Maximum CSI processes of Three on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.3.6.2_F.3	TDD CQI Reporting under fading conditions with Four CSI processes for CoMP	Rel-11	C99	UE supporting E-UTRA TDD and Maximum CSI processes of Four on a component carrier within a band with PDSCH transmission mode 10	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.7.1	FDD CQI Reporting under fading conditions - PUSCH 3-2 for eDL MIMO Enhancement	Rel-12 to Rel-14	C25b	UE supporting E-UTRA FDD and Feature Group Indicator 103 and PUSCH feedback mode 3-2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	9.3.7.1 Note 7
		Rel-15	C25bm	UE supporting E-UTRA FDD and Feature Group Indicator 103 and PUSCH feedback mode 3-2 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and PUSCH feedback mode 3-2 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.3.7.2	TDD CQI Reporting under fading conditions - PUSCH 3-2 for eDL MIMO Enhancement	Rel-12 to Rel-14	C25c	UE supporting E-UTRA TDD and Feature Group Indicator 103 and PUSCH feedback mode 3-2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C25cm	UE supporting E-UTRA TDD and Feature Group Indicator 103 and PUSCH feedback mode 3-2 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and PUSCH feedback mode 3-2 and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.3.8.1.1	FDD CQI Reporting under fading conditions - PUCCH 1-1 (Cell-Specific Reference Symbols) TM4 - Enhanced Receiver Type B	Rel-12	C152	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.8.1.2	TDD CQI Reporting under fading conditions - PUCCH 1-1 (Cell-Specific Reference Symbols) TM4 - Enhanced Receiver Type B	Rel-12	C153	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.8.2.1	FDD CQI Reporting under fading conditions - PUCCH 1-1 (CSI Reference Symbol) TM9 - Enhanced Receiver Type B	Rel-12	C152	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.3.8.2.2	TDD CQI Reporting under fading conditions - PUCCH 1-1 (CSI Reference Symbol) TM9 - Enhanced Receiver Type B	Rel-12	C153	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.8.3.1	FDD CQI Reporting under fading conditions - PUCCH 1-1 (CSI Reference Symbol) TM10 with TM9 interference - Enhanced Receiver Type B	Rel-12	C152	UE supporting E-UTRA FDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.3.8.3.2	TDD CQI Reporting under fading conditions - PUCCH 1-1 (CSI Reference Symbol) TM10 with TM9 interference - Enhanced Receiver Type B	Rel-12	C153	UE supporting E-UTRA TDD and the enhanced performance requirements type B for LTE (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.4.1.1.1	FDD PMI Reporting - PUSCH 3-1 (Single PMI)	Rel-8	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.1.2	TDD PMI Reporting - PUSCH 3-1 (Single PMI)	Rel-8	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.2.1	FDD PMI Reporting - PUCCH 2-1 (Single PMI)	Rel-9	C36	UE supporting E-UTRA FDD and Feature Group Indicator 2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.4.1.2.2	TDD PMI Reporting - PUCCH 2-1 (Single PMI)	Rel-9	C38	UE supporting E-UTRA TDD and Feature Group Indicator 2	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.3.1_D	FDD PMI Reporting - PUSCH 3-1 (Single PMI) for eDL-MIMO	Rel-10 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.1.3.2_D	TDD PMI Reporting - PUSCH 3-1 (Single PMI) for eDL-MIMO	Rel-10 to Rel-14	C26	UE supporting E-UTRA TDD and Feature Group Indicator 104	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C26m	UE supporting E-UTRA TDD and Feature Group Indicator 104 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.4.1.3.3	FDD PMI Reporting with 12Tx Class A codebook – PUSCH 3-1 (Single PMI) for FD-MIMO	Rel-13	C13b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.3.4	TDD PMI Reporting with 12Tx Class A codebook – PUSCH 3-1 (Single PMI) for FD-MIMO	Rel-13	C14b	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.4.1	FDD PMI Reporting with 4Tx enhanced codebook - PUCCH 1-1 (Single PMI) for eDL MIMO Enhancement	Rel-12 to Rel-14	C25d	UE supporting E-UTRA FDD and Feature Group Indicator 103 and enhanced 4Tx codebook	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.1.4.2	TDD PMI Reporting with 4Tx enhanced codebook - PUCCH 1-1 (Single PMI) for eDL MIMO Enhancement	Rel-12 to Rel-14	C25e	UE supporting E-UTRA TDD and Feature Group Indicator 103 and enhanced 4Tx codebook	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C25em	UE supporting E-UTRA TDD and Feature Group Indicator 103 and enhanced 4Tx codebook and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and enhanced 4Tx codebook and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.1.4.3	FDD PMI Reporting with Class B alternative codebook – PUCCH 1-1 for FD-MIMO	Rel-13	C13b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.1.4.4	TDD PMI Reporting with Class B alternative codebook – PUCCH 1-1 for FD-MIMO	Rel-13	C14b	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.1.1	FDD PMI Reporting - PUSCH 1-2 (Multiple PMI)	Rel-8 only	C11	UE supporting E-UTRA FDD and operating bands supporting 20 MHz Bandwidth (UE categories 2, 3, 4, 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.1.1_1	FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) (Release 9 and forward)	Rel-9	C01	UE supporting E-UTRA FDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.4.2.1.2	TDD PMI Reporting - PUSCH 1-2 (Multiple PMI)	Rel-8 only	C12	UE supporting E-UTRA TDD and operating bands supporting 20 MHz Bandwidth (UE categories 2, 3, 4, 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.1.2_1	TDD PMI Reporting - PUSCH 1-2 (Multiple PMI) (Release 9 and forward)	Rel-9	C02	UE supporting E-UTRA TDD	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.2.1	FDD PMI Reporting - PUSCH 2-2 (Multiple PMI)	Rel-9	C32	UE supporting E-UTRA FDD and Feature Group Indicators 1	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.2.2	TDD PMI Reporting - PUSCH 2-2 (Multiple PMI)	Rel-9	C33	UE supporting E-UTRA TDD and Feature Group Indicators 1	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.3.1_D	FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) for eDL-MIMO	Rel-10 to Rel-14	C25	UE supporting E-UTRA FDD and Feature Group Indicator 103	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C25m	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.2.3.2_D	TDD PMI Reporting - PUSCH 1-2 (Multiple PMI) for eDL-MIMO	Rel-10 to Rel-14	C26	UE supporting E-UTRA TDD and Feature Group Indicator 104	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C26m	UE supporting E-UTRA TDD and Feature Group Indicator 104 and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.2.3.3	FDD PMI Reporting with 4Tx enhanced codebook - PUSCH 1-2 (Multiple PMI) for eDL-MIMO Enhancement	Rel-12 to Rel-14	C25d	UE supporting E-UTRA FDD and Feature Group Indicator 103 and enhanced 4Tx codebook	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
		Rel-15	C25dm	UE supporting E-UTRA FDD and Feature Group Indicator 103 and enhanced 4Tx codebook and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and enhanced 4Tx codebook and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.4.2.3.4	TDD PMI Reporting with 4Tx enhanced codebook - PUSCH 1-2 (Multiple PMI) for eDL-MIMO Enhancement	Rel-12 to Rel-14	C25e	UE supporting E-UTRA TDD and eDL-MIMO Enhancement and Feature Group Indicator 103 and enhanced 4Tx codebook	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	
		Rel-15	C25em	UE supporting E-UTRA TDD and Feature Group Indicator 103 and enhanced 4Tx codebook and ((UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and enhanced 4Tx codebook and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.4.2.3.5	FDD PMI Reporting with Class A 16Tx codebook - PUSCH 1-2 (Multiple PMI) for FD-MIMO	Rel-13	C13b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.4.2.3.6	TDD PMI Reporting with Class A 16Tx codebook - PUSCH 1-2 (Multiple PMI) for FD-MIMO	Rel-13	C14b	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.5.1.1	FDD RI Reporting - PUCCH 1-1	Rel-8 and Rel-9 only	C13a	UE supporting E-UTRA FDD (UE Category 2-5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.5.1.1_1	FDD RI Reporting - PUCCH 1-1 (Release 10)	Rel-10 only	C13	UE supporting E-UTRA FDD (UE Category 2-8)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.1.1_2	FDD RI Reporting- PUCCH 1-1 (Release 11)	Rel-11	C13b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.1.2	TDD RI Reporting - PUSCH 3-1	Rel-8 and Rel-9 only	C14a	UE supporting E-UTRA TDD (UE Category 2-5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.1.2_1	TDD RI Reporting - PUSCH 3-1 (Release 10)	Rel-10 only	C14	UE supporting E-UTRA TDD (UE Category 2-8)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.1.2_2	TDD RI Reporting- PUSCH 3-1 (Release 11)	Rel-11	C14b	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.2.1_D	FDD RI Reporting - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C25x	UE supporting E-UTRA FDD and Feature Group Indicators 103 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25xm	UE supporting E-UTRA FDD and Feature Group Indicator 103 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.5.2.2_D	TDD RI Reporting - PUCCH 1-1 for eDL-MIMO	Rel-10 to Rel-14	C25y	UE supporting E-UTRA TDD and Feature Group Indicator 103 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C25ym	UE supporting E-UTRA TDD and Feature Group Indicator 103 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.5.3.1_C.1	FDD RI Reporting - PUCCH 1-0 for eICIC (non-MBSFN ABS)	Rel-10	C29	UE supporting E-UTRA FDD and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.3.2_C.1	TDD RI Reporting - PUCCH 1-0 for eICIC (non-MBSFN ABS)	Rel-10	C30	UE supporting E-UTRA TDD and Feature Group Indicator 115	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.4.1_E.1	FDD RI Reporting - PUCCH 1-0 for feICIC (non-MBSFN ABS)	Rel-11	C77	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.5.4.2_E.1	TDD RI Reporting - PUCCH 1-0 for feICIC (non-MBSFN ABS)	Rel-11	C78	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115(UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.5.5.1_F.1	FDD RI Reporting with Single CSI processes for CoMP	Rel-11	C50	UE supporting E-UTRA FDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.5.5.1_F.2	FDD RI Reporting with Multiple CSI processes for CoMP	Rel-11	C52	UE supporting E-UTRA FDD and Maximum CSI processes of Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.5.5.2_F.1	TDD RI Reporting with Single CSI process for CoMP	Rel-11	C51	UE supporting E-UTRA TDD and Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.5.5.2_F.2	TDD RI Reporting with Multiple CSI processes for CoMP	Rel-11	C53	UE supporting E-UTRA TDD and Maximum CSI processes of Three or Four on a component carrier within a band with PDSCH transmission mode 10 (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.6.1.1_A.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (2 DL CA)	Rel-10	C108	UE supporting E-UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category >= 3)	Refer to 36.521-1 9.1.1.2	2Rx, 4Rx	Test execution not necessary if 9.6.1.1_A.2 is executed. Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-11	C103	UE supporting E-UTRA FDD and intra-band non-contiguous DL CA(UE Category >= 3)			
9.6.1.1_A.2	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (3 DL CA)	Rel-10	C124	UE supporting E-UTRA FDD and 3DL with intra-band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA (UE Category >= 5)	Refer to 36.521-1 9.1.1.2	2Rx, 4Rx	Test execution not necessary if 9.6.1.1_A.3 is executed. Note 7
		Rel-11	C125	UE supporting E-UTRA FDD and 3DL with intra-band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.1_A.3 is executed. Note 7
9.6.1.1_A.3	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (4DL CA)	Rel-11	C192	UE supporting E-UTRA FDD and 4DL with intra-band contiguous CA, or 4DL with inter-band CA, or 4DL with intra-band contiguous and inter-band CA (UE Category >= 8)		2Rx, 4Rx	Test execution not necessary if 9.6.1.1_A.4 is executed. Note 7
		Rel-11	C193	UE supporting E-UTRA FDD and 4DL with intra-band non-contiguous and inter-band CA, or 4DL with intra-band non-contiguous and intra-band contiguous CA (UE Category >= 8)			Test execution not necessary if 9.6.1.1_A.4 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.6.1.1_A.4	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (5DL CA)	Rel-11	C192a	UE supporting E-UTRA FDD and 5DL with Intra-band contiguous and Inter-band CA or 5DL with Intra-band non-contiguous and Inter-band CA or 5DL with Intra-band non-contiguous and Intra-band contiguous CA (UE Category 8 and >= 11)		2Rx, 4Rx	Note 7
		Rel-12	C193a	UE supporting E-UTRA FDD and 5DL Inter-band CA (UE Category 8 and>= 11)			
9.6.1.2_A.1	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (2DL CA)	Rel-10	C114	UE supporting E-UTRA TDD and intra-band contiguous DL CA (UE Category >= 3)	Refer to 36.521-1 9.1.1.2	2Rx, 4Rx	Test execution not necessary if 9.6.1.2_A.2 is executed. Note 7
9.6.1.2_A.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (3 DL CA)	Rel-10	C128	UE supporting E-UTRA TDD and 3DL with intra-band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA (UE Category >= 5)	Refer to 36.521-1 9.1.1.2	2Rx, 4Rx	Test execution not necessary if 9.6.1.2_A.3 is executed. Note 7
		Rel-11	C129	UE supporting E-UTRA TDD and 3DL with intra-band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA (UE Category >= 5)			Test execution not necessary if 9.6.1.2_A.3 is executed.

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information	
			Condition	Comments				
9.6.1.2_A.3	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (4 DL CA)	Rel-11	C270	UE supporting E-UTRA TDD and 4DL with intra-band contiguous CA, or 4DL with inter-band CA, or 4DL with intra-band contiguous and inter-band CA (UE Category >= 8)				Test execution not necessary if 9.6.1.2_A.4 is executed.
		Rel-11	C271	UE supporting E-UTRA TDD and 4DL with intra-band non-contiguous and inter-band CA, or 4DL with intra-band non-contiguous and intra-band contiguous CA (UE Category >= 8)				Test execution not necessary if 9.6.1.2_A.4 is executed.
9.6.1.2_A.4	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 for CA (5 DL CA)	Rel-11	C272	UE supporting E-UTRA TDD and 5DL with intra-band contiguous CA, or 5DL with inter-band CA, or 5DL with intra-band contiguous and inter-band CA (UE Category 8 and >=11)				
		Rel-11	C273	UE supporting E-UTRA TDD and 5DL with intra-band non-contiguous and inter-band CA, or 5DL with intra-band non-contiguous and intra-band contiguous CA (UE Category 8 and >=11)				
9.6.1.3.1	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for FDD PCell (2DL CA)	Rel-12	C132	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell (UE Category >= 3)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.3.2 is executed. Note 7	

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.6.1.3.2	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for FDD PCell (3DL CA)	Rel-12	C133	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.3.3 is executed. Note 7
9.6.1.3.3	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for FDD PCell (4DL CA)	Rel-12	C133a	UE supporting E-UTRA FDD and TDD and 4DL CA with FDD as PCell (UE Category >= 8)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.3.4 is executed. Note 7
9.6.1.3.4	TDD FDD CQI Reporting under AWGN conditions – PUCCH 1-0 for FDD PCell (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	TBD	2Rx, 4Rx	Note 7
9.6.1.4.1	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for TDD PCell (2DL CA)	Rel-12	C134	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell (UE Category >= 3)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.4.2 is executed. Note 7
9.6.1.4.2	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for TDD PCell (3DL CA)	Rel-12	C135	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell (UE Category >= 5)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.4.3 is executed. Note 7
9.6.1.4.3	TDD FDD CA CQI Reporting under AWGN conditions - PUCCH 1-0 for TDD PCell (4DL CA)	Rel-12	C135a	UE supporting E-UTRA FDD and TDD and 4DL CA with TDD as PCell (UE Category >= 8)	TBD	2Rx, 4Rx	Test execution not necessary if 9.6.1.4.4 is executed. Note 7
9.6.1.4.4	TDD FDD CQI Reporting under AWGN conditions – PUCCH 1-0 for TDD PCell (5DL CA)	Rel-12	C133b	UE supporting E-UTRA FDD and TDD and 5DL CA with FDD as PCell (UE Category 8, and Category 11 and onwards)	TBD	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.7.1.1	FDD and Half duplex FDD CQI reporting definition under AWGN conditions for UE category 0	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.7_1.1.1	FDD CQI reporting under AWGN conditions – PUCCH 1-0 for UE category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting		
9.7_1.1.2	TDD CQI reporting under AWGN conditions - PUCCH 1-0 for UE category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting		
9.7_1.1.3	FDD CQI reporting under fading conditions - PUSCH 3-0 for UE category 1bis	Rel-13	C145d	UE supporting E-UTRA FDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting		
9.7_1.1.4	TDD CQI reporting under fading conditions - PUSCH 3-0 for UE category 1bis	Rel-13	C156f	UE supporting E-UTRA TDD (UE category 1bis)	Each "Test Number" to be performed once, in a chosen band supporting		
9.7.1.2	TDD CQI reporting definition under AWGN conditions for UE category 0	Rel-12	C119	UE supporting E-UTRA TDD (UE category 0)			
9.7.2.1	FDD and Half duplex FDD CQI reporting definition under fading conditions for UE category 0	Rel-12	C145	UE supporting E-UTRA FDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.7.2.2	TDD CQI reporting definition under fading conditions for UE category 0	Rel-12	C156	UE supporting E-UTRA TDD (UE category 0)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.8.1.1	FDD and Half duplex FDD CQI reporting definition under AWGN conditions for UE supporting coverage enhancement	Rel-13	C145a	UE supporting E-UTRA FDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.1.2	TDD CQI reporting definition under AWGN conditions for UE supporting coverage enhancement	Rel-13	C156a	UE supporting E-UTRA TDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.2.1	FDD and Half-duplex FDD UE-selected subband CQI for UE supporting coverage enhancement	Rel-13	C145a	UE supporting E-UTRA FDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.2.2	TDD UE-selected subband CQI for UE supporting coverage enhancement	Rel-13	C156a	UE supporting E-UTRA TDD and UE category M1	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.3.1	FDD and half duplex FDD CQI reporting under AWGN conditions for UE supporting coverage enhancement and 64QAM	Rel-15	C145i	UE supporting E-UTRA FDD and CEModeA and 64QAM	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.3.2	TDD CQI reporting under AWGN conditions for UE supporting coverage enhancement and 64QAM	Rel-15	C156k	UE supporting E-UTRA TDD and CEModeA and 64QAM	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.8.4.1	FDD and half duplex FDD CQI reporting under AWGN conditions for UE supporting coverage enhancement alternative table	Rel-15	C145j	UE supporting E-UTRA FDD and CEModeA and alternative table	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.8.4.2	TDD CQI reporting under AWGN conditions for UE supporting coverage enhancement alternative table	Rel-15	C156l	UE supporting E-UTRA TDD and CEModeA and alternative table	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.9.1.1.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-0 with Rank 1 1x4	Rel-10	C113b	UE supporting E-UTRA FDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.9.1.1.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-0 with Rank 1 1x4	Rel-10	C177	UE supporting E-UTRA TDD with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.9.1.2.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 2 4x4	Rel-10 to Rel-14	C178	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C178m	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.9.1.2.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 2 8x4	Rel-10 to Rel-14	C179	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C179m	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 with 4Rx antenna ports and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.1.3.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 4 4x4	Rel-10	C180	UE supporting E-UTRA FDD with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category >= 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.9.1.3.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 4 4x4	Rel-10	C181	UE supporting E-UTRA TDD with 4Rx antenna ports and 4-layer spatial multiplexing (UE Category >= 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
9.9.1.4.1	FDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 3 4x4	Rel-10 to Rel-14	C182	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports (UE Category >= 5)	Each "Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C182m	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports and ((5 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.1.4.2	TDD CQI Reporting under AWGN conditions - PUCCH 1-1 with rank 3 4x4	Rel-10 to Rel-14	C183	UE supporting E-UTRA TDD andUE Category ≥ 5 and Feature Group Indicator 103 with 4Rx antenna ports	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
		Rel-15	C183m	UE supporting E-UTRA TDD and Feature Group Indicator 103 with 4Rx antenna ports and ((5 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.9.2.1.1	FDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A 1x4	Rel-11	C197	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE	Each" Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
9.9.2.1.2	TDD CQI Reporting under fading conditions - PUCCH 1-0 - Enhanced Performance Requirement Type A 1x4	Rel-11	C198	UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE	Each" Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
9.9.2.2.1	FDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A2 x4	Rel-11 to Rel-14	C199	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE (UE Category >= 2) and Feature Group Indicator 103	Each" Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C199m	UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and Feature Group Indicator 103 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.2.2.2	TDD CQI Reporting under fading conditions - PUCCH 1-1 - Enhanced Performance Requirement Type A2 x4	Rel-11 to Rel-14	C200	UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE (UE Category >= 2) and Feature Group Indicator 103	Each" Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C200m	UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and Feature Group Indicator 103 and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and the enhanced performance requirements type A for LTE and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.3.1.1	TDD PMI Reporting - PUSCH 3-1 (Single PMI) 8x4	Rel-10 to Rel-14	C179	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 with 4Rx antenna ports (UE Category >= 2)	Each" Test Number" to be performed once, in a chosen band supporting tested BW		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C179m	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 104 with 4Rx antenna ports and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and (UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.4.1.1	FDD RI Reporting-PUCCH 1-1 4x4	Rel-10	C203	UE supporting E-UTRA FDD with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
9.9.4.1.2	TDD RI Reporting-PUSCH 3-1 4x4	Rel-10	C204	UE supporting E-UTRA TDD with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		
9.9.4.2.1	FDD RI Reporting-PUCCH 1-1 for eDL-MIMO 4x4	Rel-10 to Rel-14	C205	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C205m	UE supporting E-UTRA FDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA FDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.9.4.2.2	TDD RI Reporting-PUCCH 1-1 for eDL-MIMO 4x4	Rel-10 to Rel-14	C206	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW and 4Rx antenna ports		

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
		Rel-15	C206m	UE supporting E-UTRA TDD and eDL-MIMO and Feature Group Indicator 103 with 4Rx antenna ports and ((2 <= UE Category < 8 or 8 < UE Category < 11) and (UE DL Category < 11 or UE DL Category = 13)), or UE supporting E-UTRA TDD with 4Rx antenna ports and (UE Category = 8 or UE Category >= 11 or UE DL Category = 11 or UE DL Category = 12 or UE DL Category >=14)			Note 6
9.10.1.1	FDD CSI-RS Resource Indicator Reporting – PUSCH 3-1	Rel-13	C13b	UE supporting E-UTRA FDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.10.1.2	TDD CSI-RS Resource Indicator Reporting – PUSCH 3-1	Rel-13	C341	UE supporting E-UTRA TDD (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.12.1.1	FDD CQI reporting under fading conditions for slot/subslot TTI (Cell-Specific Reference Symbol)	Rel-15	C354	UE supporting E-UTRA FDD and slot/subslot TTI (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.12.1.2	TDD CQI reporting under fading conditions for slot/subslot TTI (Cell-Specific Reference Symbol)	Rel-15	C354a	UE supporting E-UTRA TDD and slot TTI (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
9.12.2.1	FDD CQI reporting under fading conditions for slot/subslot TTI (CSI Reference Symbol)	Rel-15	C357	UE supporting E-UTRA FDD and Feature Group Indicators 103 and slot/subslot TTI (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
9.12.2.2	TDD CQI reporting under fading conditions for slot/subslot TTI (CSI Reference Symbol)	Rel-15	C357a	UE supporting E-UTRA TDD and Feature Group Indicators 103 slot TTI (UE Category >= 2)	Each "Test Number" to be performed once, in a chosen band supporting tested BW	2Rx, 4Rx	Note 7
MBMS Performance Testing							
10.1	FDD MBMS performance (Fixed Reference Channel)	Rel-9	C03	UE supporting E-UTRA FDD and MBMS	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
10.1_1	FDD MBMS performance (Fixed Reference Channel) (Release 13 and forward)	Rel-13	C03	UE supporting E-UTRA FDD and MBMS	Performed once		
10.2	TDD MBMS performance (Fixed Reference Channel)	Rel-9	C04	UE supporting E-UTRA TDD and MBMS	Each "Test Number" to be performed once, in a chosen band supporting tested BW		
10.2_1	TDD MBMS performance (Fixed Reference Channel) (Release 13 and forward)	Rel-13	C04	UE supporting E-UTRA TDD and MBMS	Performed once		
V2X Sidelink Performance Testing							
14.2	Demodulation of PSSCH / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication			
14.3	Demodulation of PSCCH / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication			

Clause	Title	Release	Applicability		Tested Bands / CA-Configurations Selection	Branch	Additional Information
			Condition	Comments			
14.4	Power imbalance performance with two links / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C313	UE supporting V2X Sidelink communication			
14.6	Demodulation of PSSCH with eNB based synchronization	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	
14.7	Soft buffer test	Rel-14	C313	UE supporting V2X Sidelink communication	D14	TDD	
14.8	PSCCH/PSSCH decoding capability test / Non-concurrent with E-UTRA uplink transmissions	Rel-14	C321	UE supporting V2X Sidelink communication			
14.9	Sustained downlink data rate with active sidelink	Rel-14	C320	UE supporting E-UTRA and V2X Sidelink communication	E16	FDD,TDD	

Note 1: Due to UE capability signalling for UL 64QAM is introduced from Rel-12, this test case can optionally be executed with a Rel-12 UE.

Note 2: For a transition period until RAN5#72, this condition in version 13.0.0 of 36.521-2 shall be used. This is to ensure no test coverage is lost before the UL 64QAM test case becomes available.

Note 3: Equivalent aggregated bandwidth is defined as: $B_{agg} = \sum_{i=0}^{N-1} R_i B_i$. Where N is number of CCs, $R_i \in \{2,4\}$ and $B_i \in \{5,10,15,20\}$ is MIMO layer and bandwidth of CC i . The number of MIMO layer for CC i in each CA configuration is according to Table A.4.6.1-3, Table A.4.6.2-3, Table A.4.6.3-3, Table A.4.6.3-4 or Table A.4.6.3-5.

Note 4: For a transition period until RAN5#83, this condition in version 15.3.1 of 36.521-2 shall be used. This is to ensure no test coverage is lost before the UL 256QAM test cases become available.

Note 5: Void.

Note 6: The categories for which FGI 103/104 are mandated are (UE category >=11 OR UE DL Category = 11 OR UE DL Category = 12 OR UE DL Category >= 14) according to TS 36.331. The UE DL Categories higher than 14 are not explicitly listed in the corresponding expression in Table 4.1-1a because in this version of core specification UE DL Category > 14 requires supporting of UE Category 11 or 12.

Note 7: Skipping 2RX testing if UE is verified with four RX antenna ports in operating bands where it is equipped with four RX antenna port.

Table 4.1-1a: Applicability of RF conformance test cases Conditions

C01	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 THEN R ELSE N/A
C01h	IF (A.4.1-1/1 AND A.4.5-1/18) THEN R ELSE N/A
C02	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 THEN R ELSE N/A
C02h	IF (A.4.1-1/2 AND A.4.5-1/18) THEN R ELSE N/A
C03	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.2-1/1) THEN R ELSE N/A
C04	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/1) THEN R ELSE N/A
C05	Void
C06	Void
C07	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3b/2 AND A.4.2-1/3) THEN R ELSE N/A
C08	Void
C09	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-3a/1) THEN R ELSE N/A
C10	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-3a/1) THEN R ELSE N/A
C11	IF A.4.1-1/1 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A
C12	IF A.4.1-1/2 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A
C13	IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C13a	IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5)) THEN R ELSE N/A
C13b	IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C14	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C14a	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5)) THEN R ELSE N/A
C14b	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C15	IF (A.4.1-1/1 AND A.4.3-4/1) THEN R ELSE N/A
C16	IF (A.4.1-1/2 AND A.4.3-4/1) THEN R ELSE N/A
C17	Void
C18	Void
C19	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2) THEN R ELSE N/A
C19a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/3 AND A.4.6.1-2/3) THEN R ELSE N/A
C19h	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2 AND A.4.5-1/18) THEN R ELSE N/A
C20	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2) AND NOT A.4.6.1-2/2) THEN R ELSE N/A
C20h	IF ((A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2) AND (NOT (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.5-1/18) THEN R ELSE N/A
C21	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1) THEN R ELSE N/A
C21h	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1) AND A.4.5-1/18 THEN R ELSE N/A
C22	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.6.1-1/2) THEN R ELSE N/A
C23	Void
C24	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.6.1-1/2) THEN R ELSE N/A
C25	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.4-3a/103) THEN R ELSE N/A
C25m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.4-3b/103) THEN R ELSE N/A
C25am	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.5-1/81 AND A.4.4-3a/103) THEN R ELSE N/A
C25bm	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.5-1/81 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25c	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.5-1/81 AND A.4.4-3b/103) THEN R ELSE N/A
C25cm	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.5-1/81 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25d	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.5-1/80 AND A.4.4-3a/103) THEN R ELSE N/A

C25dm	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.5-1/80 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.5-1/80 AND A.4.4-3b/103) THEN R ELSE N/A
C25em	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.5-1/80 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25h	IF (A.4.1-1/1 AND A.4.4-3a/103 AND A.4.5-1/18) THEN R ELSE N/A
C25hm	IF (A.4.1-1/1 AND A.4.5-1/18 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C25x	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.4-3a/103) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C25xm	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND ((A.4.4-3a/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C25y	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3b/103) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C25ym	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND ((A.4.4-3b/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C26	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3b/104)) THEN R ELSE N/A
C26m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND ((A.4.4-3b/104 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C26a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-3b/104 AND A.4.4-3b/110) THEN R ELSE N/A
C26am	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-3b/110 AND ((A.4.4-3b/104 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C26h	IF (((A.4.1-1/1 AND A.4.4-3a/104) OR (A.4.1-1/2 AND A.4.4-3b/104)) AND A.4.5-1/18) THEN R ELSE N/A
C26hm	IF ((((A.4.1-1/1 AND A.4.4-3a/104) OR (A.4.1-1/2 AND A.4.4-3b/104)) AND A.4.5-1/18 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/18 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C27	Void
C28	Void
C28y	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3a/104 AND A.4.4-3a/110) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C28ym	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3a/110) AND ((A.4.4-3a/104 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C29	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.4-3a/115) THEN R ELSE N/A
C30	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-3b/115) THEN R ELSE N/A
C31	IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A
C32	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.4-1a/1) THEN R ELSE N/A
C33	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-1b/1) THEN R ELSE N/A
C34	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A
C35	Void
C36	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.4-1a/2 THEN R ELSE N/A
C37	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-1b/1 THEN R ELSE N/A
C38	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-1b/2 THEN R ELSE N/A
C39	IF(NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-3b/1 OR A.4.3-3b/4)) THEN R ELSE N/A
C39a	IF(NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3b/1) THEN R ELSE N/A
C39b	IF(NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3b/4) THEN R ELSE N/A
C39c	IF(NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.3-3b/1 OR A.4.3-3b/4) THEN R ELSE N/A
C40	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.4-3a/103 AND A.4.3-7/1) THEN R ELSE N/A

C40m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/1 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C41	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.4-3b/103 AND A.4.3-7/1) THEN R ELSE N/A
C41m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/1 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C42	IF ((A.4.1-1/1) AND (NOT A.4.5-1/18) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A
C42h	IF ((A.4.1-1/1) AND (A.4.3-4/6 OR A.4.3-4/7) AND A.4.5-1/18 AND A.4.3-4a/8) THEN R ELSE N/A
C43	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND NOT A.4.6.2-2/1) THEN R ELSE N/A
C43h	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND NOT A.4.6.2-2/1 AND A.4.5-1/18) THEN R ELSE N/A
C44	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/1) THEN R ELSE N/A
C44z	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND A.4.4-3a/103) THEN R ELSE N/A
C45	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/1) THEN R ELSE N/A
C45i	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND A.4.4-3b/103) THEN R ELSE N/A
C46	Void
C47	Void
C48	Void
C49	Void
C50	IF (A.4.1-1/1 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C50a	IF (A.4.1-1/1 AND A.4.5-1/8) THEN R ELSE N/A
C51	IF (A.4.1-1/2 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C51a	IF (A.4.1-1/2 AND A.4.5-1/8) THEN R ELSE N/A
C52	IF (A.4.1-1/1 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C53	IF (A.4.1-1/2 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C54	IF (A.4.1-1/2 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A
C55	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.2-1/6) THEN R ELSE N/A
C56	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/6) THEN R ELSE N/A
C57	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.2-1/6 AND (A.4.5-1/11 OR A.4.5-1/12)) THEN R ELSE N/A
C58	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/6 AND (A.4.5-1/11 OR A.4.5-1/12)) THEN R ELSE N/A
C59	Void
C60	Void
C61	Void
C62	void
C63	void
C64	Void
C65	Void
C66	Void
C67	Void
C68	Void
C69	void
C70	void
C71	Void
C72	IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C73	IF ((A.4.1-1/2) AND (NOT A.4.5-1/18) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A
C73h	IF ((A.4.1-1/2) AND A.4.5-1/18 AND A.4.3-4a/8) THEN R ELSE N/A
C74	IF ((A.4.1-1/2) AND (NOT A.4.5-1/18) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A
C74h	IF ((A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/8)) THEN R ELSE N/A
C75	IF ((A.4.1-1/2) AND (NOT A.4.5-1/18) AND (A.4.6.2-1/1) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A
C76	IF A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4) THEN R ELSE N/A

C77	IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3a/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C78	IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3b/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C79	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3a/115) THEN R ELSE N/A
C80	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3b/115) THEN R ELSE N/A
C81	void
C82	void
C83	IF ((A.4.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7) AND (A.4.6.3-1/1)) THEN R ELSE N/A
C84	void
C85	Void
C86	Void
C87	void
C88	Void
C89	Void
C90	IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C91	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.2-1/6 AND A.4.4-3a/103) THEN R ELSE N/A
C91m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.2-1/6 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C92	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/6 AND A.4.4-3b/103) THEN R ELSE N/A
C92m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.2-1/6 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C93	IF ((A.4.1-1/1) AND (NOT A.4.5-1/18) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A
C94	Void
C95	void
C96	IF (A.4.1-1/1 AND A.4.5-1/11) THEN R ELSE N/A
C97	IF (A.4.1-1/1 AND A.4.5-1/12) THEN R ELSE N/A
C98	IF (A.4.1-1/2 AND A.4.5-1/11) THEN R ELSE N/A
C99	IF (A.4.1-1/2 AND A.4.5-1/12) THEN R ELSE N/A
C100	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/13) THEN R ELSE N/A
C101	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C102	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C103	IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C104	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C105	IF ((A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C106	IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C107	IF ((A.4.1-1/1) AND (NOT A.4.5-1/18) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A
C107h	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/8)) THEN R ELSE N/A
C108	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C109	IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND (A.4.6.2-1/1 OR A.4.6.3-1/1)) THEN R ELSE N/A
C110	IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND (A.4.6.1-1/1 OR A.4.6.1-1/2)) THEN R ELSE N/A
C111	IF A.4.1-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4) THEN R ELSE N/A
C112	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-4a/1) THEN R ELSE N/A
C112a	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-4aa/1) THEN R ELSE N/A

C112b	IF (A.4.1-1/8 OR A.4.1-1/8a) THEN R ELSE N/A
C112c	IF ((A.4.1-1/1 OR A.4.1-1/2) AND(A.4.3-4a/1a OR A.4.3-4b/1a)) THEN R ELSE N/A
C112d	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-4aa/1 AND A.4.3-4aa/2) THEN R ELSE N/A
C113	IF (A.4.1-1/1 OR A.4.1-1/2) AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) THEN R ELSE N/A
C113a	IF (A.4.5-1/22) THEN R ELSE N/A
C113b	IF (A.4.1-1/1 AND A.4.5-1/37) THEN R ELSE N/A
C113c	IF (A.4.1-1/1 AND A.4.5-1/37 AND A.4.4-3a/103) THEN R ELSE N/A
C113cm	IF (A.4.1-1/1 AND A.4.5-1/37 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C113d	IF (A.4.1-1/1 AND A.4.5-1/37 AND A.4.3-7/1) THEN R ELSE N/A
C113e	IF (A.4.1-1/1 AND A.4.5-1/37 AND A.4.3-7/1 AND A.4.4-3a/103) THEN R ELSE N/A
C113em	IF (A.4.1-1/1 AND A.4.5-1/37 AND A.4.3-7/1 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C113h	IF (A.4.5-1/18) THEN R ELSE N/A
C114	IF (A.4.1-1/2 AND A.4.6.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10) THEN R ELSE N/A
C115	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND A.4.6.2-2/1) THEN R ELSE N/A
C116	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1) THEN R ELSE N/A
C116a	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/3 AND A.4.6.3-2/2) THEN R ELSE N/A
C116b	IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1 AND NOT (A.4.5-1/17 OR A.4.5-1/58) THEN R ELSE N/A
C117	IF (A.4.1-1/1 AND (A.4.5-1/8 OR A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C118	IF (A.4.1-1/2 AND (A.4.5-1/8 OR A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A
C119	IF A.4.1-1/2 AND A.4.3-4a/1 THEN R ELSE N/A
C120	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/5) THEN R ELSE N/A
C121	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A
C122	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A
C122h	IF ((A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4 OR A.4.6.3-1/2 OR A.4.6.2-1/2)) AND A.4.5-1/18 THEN R ELSE N/A
C123	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2) THEN R ELSE N/A
C124	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C125	IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C125a	IF (A.4.1-1/1 AND (A.4.6-1/2 OR A.4.6-1/3 OR A.4.6-1/4 OR A.4.6-1/5 OR A.4.6-1/6) AND A.4.6.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C126	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C126a	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/6 OR A.4.3-4/7) AND A.4.3-3a/9) THEN R ELSE N/A
C126h	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C126ha	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/18 AND (A.4.3-4a/8) AND A.4.3-3a/9) THEN R ELSE N/A
C127	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C127a	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/6 OR A.4.3-4/7) AND A.4.3-3a/9) THEN R ELSE N/A
C128	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C129	IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C130	IF (A.4.1-1/2 AND (NOT A.4.5-1/18) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C130h	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C131	IF (A.4.1-1/2 AND (NOT A.4.5-1/18) AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A

C132	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C133	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C133a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C133b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C134	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C135	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C135a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14 AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C135b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/14 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C136	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C137	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A
C138	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (NOT A.4.5-1/18) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) THEN R ELSE N/A
C138h	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C139	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (NOT A.4.5-1/18) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) THEN R ELSE N/A
C139a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C139b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15 AND (NOT A.4.5-1/18) AND A.4.3-4a/10) THEN R ELSE N/A
C139c	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.5-1/15 AND (NOT A.4.5-1/18) AND A.4.3-4a/10 AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) THEN R ELSE N/A
C139hc	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.3-4a/11) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) THEN R ELSE N/A
C139h	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C139ha	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C139hb	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.3-4a/11)) THEN R ELSE N/A
C140	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (NOT A.4.5-1/18) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) THEN R ELSE N/A
C140h	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/8)) THEN R ELSE N/A
C141	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (NOT A.4.5-1/18) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) THEN R ELSE N/A
C141a	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12) THEN R ELSE N/A
C141b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/14 AND (NOT A.4.5-1/18) AND A.4.3-4a/10 THEN R ELSE N/A)
C141c	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.5-1/14 AND (NOT A.4.5-1/18) AND A.4.3-4a/10 AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) THEN R ELSE N/A)
C141h	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND A.4.5-1/18 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/10)) THEN R ELSE N/A
C141hb	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND A.4.5-1/18 AND A.4.3-4a/11) THEN R ELSE N/A
C142	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/3) THEN R ELSE N/A
C142h	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.5-1/14 AND A.4.5-1/18 AND A.4.3-4a/11 AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) THEN R ELSE N/A
C143	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/3) THEN R ELSE N/A
C144	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/3 AND A.4.4-3a/103) THEN R ELSE N/A
C144m	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/3 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A

C145	IF A.4.1-1/1 AND A.4.3-4a/1 THEN R ELSE N/A
C145a	IF A.4.1-1/1 AND A.4.3-4aa/1 THEN R ELSE N/A
C145b	IF A.4.1-1/1 AND (A.4.3-4aa/1 OR A.4.5-1/25) THEN R ELSE N/A
C145c	Void
C145d	IF A.4.1-1/1 AND A.4.3-4a/1a THEN R ELSE N/A
C145e	IF A.4.1-1/1 AND A.4.3-4aa/1 AND A.4.5-1/63 THEN R ELSE N/A
C145f	IF A.4.1-1/1 AND A.4.3-4aa/2 AND A.4.5-1/63 THEN R ELSE N/A
C145g	IF A.4.1-1/1 AND A.4.3-4aa/1 AND A.4.5-1/51 THEN R ELSE N/A
C145h	IF A.4.1-1/1 AND A.4.3-4aa/2 AND A.4.5-1/51 THEN R ELSE N/A
C145i	IF A.4.1-1/1 AND A.4.5-1/25 AND A.4.5-1/84 THEN R ELSE N/A
C145j	IF A.4.1-1/1 AND A.4.5-1/25 AND A.4.5-1/85 THEN R ELSE N/A
C146	IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6.3-1/1 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C147	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/17) THEN R ELSE N/A
C148	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2 AND A.4.5-1/17) THEN R ELSE N/A
C149	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1 OR A.4.5-1/58) AND A.4.1-1/1 AND A.4.5-1/13 AND A.4.5-1/17) THEN R ELSE N/A
C150	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/4) THEN R ELSE N/A
C151	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/4) THEN R ELSE N/A
C152	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/1 AND A.4.3-7/4) THEN R ELSE N/A
C153	IF (NOT(A.4.3-4/1 OR A.4.3-4a/1 OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.3-7/4) THEN R ELSE N/A
C154	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C155	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C156	IF A.4.1-1/2 AND A.4.3-4a/1 THEN R ELSE N/A
C156a	IF A.4.1-1/2 AND A.4.3-4aa/1 THEN R ELSE N/A
C156b	IF A.4.1-1/2 AND (A.4.3-4aa/1 OR A.4.5-1/25) THEN R ELSE N/A
C156c	IF A.4.1-1/1 AND (A.4.3-4aa/1 AND A.4.5-1/26 THEN R ELSE N/A
C156d	IF A.4.1-1/2 AND (A.4.3-4aa/1 AND A.4.5-1/26 THEN R ELSE N/A
C156e	IF A.4.1-1/2 AND (A.4.3-4aa/1 OR A.4.5-1/25) AND A.4.5-1/51 THEN R ELSE N/A
C156f	IF A.4.1-1/2 AND A.4.3-4a/1a THEN R ELSE N/A
C156q	IF A.4.1-1/2 AND (A.4.3-4aa/1 OR A.4.5-1/25) AND A.4.5-1/63 THEN R ELSE N/A
C156h	IF A.4.1-1/2 AND A.4.3-4aa/2 AND A.4.5.1/63 THEN R ELSE N/A
C156i	IF A.4.1-1/2 AND A.4.3-4aa/2 AND A.4.5.1/51 THEN R ELSE N/A
C156j	IF A.4.1-1/1 AND (A.4.3-4aa/1 AND A.4.3-4aa/2) AND A.4.5-1/26 THEN R ELSE N/A
C156k	IF A.4.1-1/2 AND A.4.5-1/25 AND A.4.5-1/84 THEN R ELSE N/A
C156l	IF A.4.1-1/2 AND A.4.5-1/25 AND A.4.5-1/85 THEN R ELSE N/A
C157	IF A.4.1-1/1 AND A.4.3-4a/1 AND A.4.4-3a/103 THEN R ELSE N/A
C157a	IF A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-3a/103 THEN R ELSE N/A
C158	IF A.4.1-1/2 AND A.4.3-4a/1 AND A.4.4-3b/103 THEN R ELSE N/A
C158a	IF A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-3b/103 THEN R ELSE N/A
C159	IF (NOT(A.4.3-4a/1 OR A.4.5-1/17 OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/13) THEN R ELSE N/A
C160	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1 AND A.4.5-1/17) THEN R ELSE N/A
C161	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND A.4.6.2-2/1 AND A.4.5-1/17) THEN R ELSE N/A
C162	IF A.4.5-1/23 THEN R ELSE N/A
C163	IF A.4.5-1/24 THEN R ELSE N/A
C164	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.5-1/37) THEN R ELSE N/A
C165	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.5-1/38) THEN R ELSE N/A
C166	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.4-3a/103 AND A.4.5-1/37) THEN R ELSE N/A
C166m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.5-1/37 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C167	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.4-3a/103 AND A.4.5-1/38) THEN R ELSE N/A
C167m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.2-1/6 AND A.4.5-1/38 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C168	IF (A.4.5-1/22 AND NOT A.4.5-1/18) THEN R ELSE N/A
C169	IF A.4.1-1/1 AND A.4.2-1/8 AND NOT (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4a/1) THEN R ELSE N/A

C170	IF A.4.1-1/2 AND A.4.2-1/8 AND NOT (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4a/1) THEN R ELSE N/A
C171	IF A.4.1-1/1 AND A.4.2-1/8 AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) AND (NOT A.4.5-1/18) THEN R ELSE N/A
C172	IF A.4.1-1/2 AND A.4.2-1/8 AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) AND (NOT A.4.5-1/18) THEN R ELSE N/A
C173	IF A.4.1-1/1 AND A.4.2-1/8 AND A.4.5-1/18 THEN R ELSE N/A
C174	IF A.4.1-1/2 AND A.4.2-1/8 AND A.4.5-1/18 THEN R ELSE N/A
C175	IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.5-1/12 AND A.4.3-7/4) THEN R ELSE N/A
C176	IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.5-1/12 AND A.4.3-7/4) THEN R ELSE N
C177	IF (A.4.5-1/38) THEN R ELSE N/A
C178	IF (A.4.4-3a/103 AND A.4.5-1/37 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C178m	IF (A.4.5-1/37 AND ((A.4.4-3a/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C179	IF (A.4.4-3a/104 AND A.4.5-1/38 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C179m	IF (A.4.5-1/38 AND ((A.4.4-3a/104 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C180	IF (A.4.5-1/37 AND A.4.5-1/46 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C181	IF (A.4.5-1/38 AND A A.4.5-1/46 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C182	IF (A.4.4-3a/103 AND A.4.5-1/37 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C182m	IF (A.4.5-1/37 AND ((A.4.4-3a/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C183	IF (A.4.4-3b/103 AND A.4.5-1/38 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C183m	IF (A.4.5-1/38 AND ((A.4.4-3b/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C184	IF (A.4.5-1/38) THEN R ELSE N/A
C185	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND A.4.6.2-2/1 AND A.4.5-1/17) THEN R ELSE N/A
C186	IF A.4.3-3b/2 AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) THEN R ELSE N/A
C187	IF ((A.4.1-1/1 OR A.4.1-1/2) AND ((A.4.1-1/2 AND A.4.6.1-1/4) OR A.4.6.3-1/6 OR A.4.6.3-1/7)) THEN R ELSE N/A
C187h	IF (A.4.1-1/1 OR A.4.1-1/2) AND ((A.4.1-1/2 AND A.4.6.1-1/4) OR ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3) OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND A.4.5-1/18 THEN R ELSE N/A
C188	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 THEN R ELSE N/A
C189	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6-1/3) AND (A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C189a	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6-1/3) AND (A.4.3-4/9 OR A.4.3-4/10) AND A.4.3-3a/10) THEN R ELSE N/A
C189a2	Void
C189b	Void
C189h	IF A.4.1-1/1 AND A.4.5-1/18 AND (A.4.3-4a/10 OR A.4.3-4a/11) AND A.4.6-1/3 AND A.4.3-3a/10 AND (A.4.6.1-1/4 OR A.4.6.2-1/4 OR A.4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7) THEN R ELSE N/A
C190	Void
C191	Void
C192	IF (A.4.1-1/1 AND (A.4.6.1-1/4 OR A.4.6.3-1/6 OR A.4.6.3-1/7) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C192a	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND (A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17) AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C193	IF (A.4.1-1/1 AND (A.4.6.3-1/10 OR A4.6.3-1/11 OR A.4.6.3-1/12) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C193a	IF (A.4.1-1/1 AND (NOT A.4.5-1/18) AND A.4.6.3-1/14 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C194	IF (A.4.1-1/2 AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.1-1/4 OR A.4.6.2-1/4 OR 4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12)) THEN R ELSE N/A
C194a	IF (A.4.1-1/2 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.2-1/6 OR 4.6.2-1/7 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18)) THEN R ELSE N/A

C194b	IF (A.4.1-1/2 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.1-1/5 OR A.4.6.3-1/14)) THEN R ELSE N/A
C195	Void
C196	Void
C197	IF (A.4.5-1/37 AND A.4.3-7/1) THEN R ELSE N/A
C198	IF (A.4.5-1/38 AND A.4.3-7/1) THEN R ELSE N/A
C198a	IF A.4.1-1/2 AND A.4.5-1/38 AND A.4.3-7/1 THEN R ELSE N/A
C198b	IF (A.4.4-3b/103 AND A.4.5-1/38 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C198c	IF A.4.1-1/2 AND A.4.5-1/38 AND A.4.3-7/1 AND A.4.4-3b/103 THEN R ELSE N/A
C199	IF A.4.5-1/37 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.4-3a/103 THEN R ELSE N/A
C199m	IF A.4.5-1/37 AND A.4.3-7/1 AND ((A.4.4-3a/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C200	IF A.4.5-1/38 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.4-3b/103 THEN R ELSE N/A
C200m	IF A.4.5-1/38 AND A.4.3-7/1 AND ((A.4.4-3b/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C201	Void
C202	IF ((NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-3b/4 AND A.4.2-1/3) THEN R ELSE N/A
C203	IF ((A.4.5-1/37) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C204	IF ((A.4.5-1/38) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C205	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.4-3a/103 AND A.4.5-1/37) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C205m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.5-1/37) AND ((A.4.4-3a/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C206	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3b/103 AND A.4.5-1/38) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C206m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.5-1/38) AND ((A.4.4-3b/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C207	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6.3-1/1 AND (A.4.5-1/14 OR A.4.5-1/15) AND A.4.5-1/32) THEN R ELSE N/A
C208	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.5-1/32) THEN R ELSE N/A
C209	IF A.4.1-1/1 AND A.4.5-1/15 AND A.4.5-1/32 THEN R ELSE N/A
C210	IF A.4.1-1/2 AND A.4.5-1/14 AND A.4.5-1/32 THEN R ELSE N/A
C211	IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) THEN R ELSE N/A
C212	IF (A.4.1-1/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12)) THEN R ELSE N/A
C212a	IF (A.4.1-1/1 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8)) THEN R ELSE N/A
C212b	IF (A.4.1-1/1 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/14)) THEN R ELSE N/A
C213	IF (A.4.1-1/2 AND (NOT A.4.5-1/18) AND (A.4.6-1/3 OR A.4.6.1-1/4 OR A.4.6.2-1/4 OR A.4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND (A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10)) THEN R ELSE N/A
C213h	IF (A.4.1-1/2 AND A.4.5-1/18 AND (A.4.6-1/3 OR A.4.6.1-1/4 OR A.4.6.2-1/4 OR A.4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND (A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11)) THEN R ELSE N/A
C214	IF (A.4.1-1/1 AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/10 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C215	IF (A.4.1-1/1 AND (A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/15) AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C216	IF (A.4.1-1/1 AND A.4.6.3-1/14 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C217	IF A.4.1-1/2 AND A.4.5-1/15 AND A.4.5-1/32 THEN R ELSE N/A

C218	IF A.4.1-1/1 AND A.4.5-1/15 AND A.4.5-1/32 AND A.4.5-1/56 THEN R ELSE N/A
C219	IF A.4.1-1/2 AND A.4.5-1/32 AND A.4.5-1/56 THEN R ELSE N/A
C220	IF A.4.1-1/1 AND (A.4.5-1/37 AND A.4.5-1/46) THEN R ELSE N/A
C221	IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8) THEN R ELSE N/A
C221h	IF (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR (A.4.1-1/2 AND A.4.6.1-1/5) OR ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4)) AND A.4.5-1/18 THEN R ELSE N/A
C222	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/14) OR (A.4.1-1/2 AND A.4.6.1-1/5) THEN R ELSE N/A
C223	IF (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 THEN R ELSE N/A
C224	IF A.4.2-1/8 THEN R ELSE N/A
C225	IF (A.4.2-1/8 AND A.4.5-1/27) THEN R ELSE N/A
C226	IF (A.4.1-1/1 AND A.4.5-1/37 AND A.4.5-1/46 AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4a/8)) THEN R ELSE N/A
C227	IF (A.4.5-8/1 AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/4 OR A.4.3-4a/5 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10)) THEN R ELSE N/A
C228	IF (A.4.5-8/1 AND A.4.6.2-1/1 AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/4 OR A.4.3-4a/5 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10)) THEN R ELSE N/A
C229	IF (A.4.5-8/4 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13)) THEN R ELSE N/A
C230	IF (A.4.5-8/4 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13)) THEN R ELSE N/A
C231	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C232	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C233	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.4-3a/103 AND A.4.4-3b/103) AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C233m	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (((A.4.4-3a/103 AND A.4.4-3b/103) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C234	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.4-3a/103 AND A.4.4-3b/103) AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C234m	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND A.4.3-7/1 AND (((A.4.4-3a/103 AND A.4.4-3b/103) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C235	IF A.4.1-1/2 AND (A.4.5-1/38 AND A.4.5-1/46) THEN R ELSE N/A
C236	IF (A.4.5-8/7 AND (A.4.6.1-1/4 OR A.4.6.2-1/4 OR A.4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND (A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C237	IF (A.4.5-8/10 AND (A.4.6.1-1/5 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17) AND (A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C238	IF (A.4.5-8/10 AND A.4.6.3-1/14 AND (A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C239	IF (A.4.1-1/2 AND A.4.5-1/38 AND A.4.5-1/46 AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4a/8)) THEN R ELSE N/A
C240	IF (A.4.5-8/2 AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1 OR A.4.6.3-1/5) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4a/8)) THEN R ELSE N/A
C241	IF (A.4.5-8/2 AND A.4.6.1-2/1 AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4a/8)) THEN R ELSE N/A
C242	IF (A.4.5-8/5 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13)) THEN R ELSE N/A
C243	IF (A.4.5-8/5 AND (A.4.6. 2-1/2 OR A.4.6.3-1/2) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13)) THEN R ELSE N/A
C244	IF (A.4.5-8/8 AND (A.4.6.1-1/4 OR A.4.6.2-1/4 OR A.4.6.2-1/5 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND (A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C245	IF (A.4.5-8/11 AND (A.4.6.1-1/5 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17) AND (A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C246	IF (A.4.5-8/11 AND A.4.6.3-1/14 AND (A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A

C247	IF (A.4.5-8/3 AND (A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/4 OR A.4.3-4a/5 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10)) THEN R ELSE N/A
C248	IF (A.4.5-8/6 AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13)) THEN R ELSE N/A
C249	IF (A.4.5-8/9 AND (A.4.3-4a/10 OR A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C250	IF (A.4.5-8/12 AND (A.4.3-4a/11 OR A.4.3-4a/13 OR A.4.3-4a/14)) THEN R ELSE N/A
C251	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND A.4.5-1/18 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C252	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND A.4.5-1/18 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C253	IF ((A.4.1-1/1) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C254	IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C255	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C256	IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C257	IF (A.4.1-1/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12) AND A.4.5-1/39) THEN R ELSE N/A
C258	IF (A.4.1-1/1 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) AND A.4.5-1/39) THEN R ELSE N/A
C259	IF (A.4.1-1/1 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/14) AND A.4.5-1/39) THEN R ELSE N/A
C260	IF (A.4.1-1/1 AND A.4.5-1/18 AND A.4.4-3a/103) THEN R ELSE N/A
C260m	IF (A.4.1-1/1 AND A.4.5-1/18 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C261	IF (A.4.1-1/2 AND A.4.5-1/18 AND A.4.4-3b/103) THEN R ELSE N/A
C261m	IF (A.4.1-1/2 AND A.4.5-1/18 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C262	IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/4 AND A.4.4-3a/103) THEN R ELSE N/A
C262m	IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/4 AND ((A.4.4-3a/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C263	IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/4 AND A.4.4-3b/103) THEN R ELSE N/A
C263m	IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/4 AND ((A.4.4-3b/103 AND NOT(A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/9))) THEN R ELSE N/A
C264	IF A.4.1-1/1 AND A.4.5-1/15 AND A.4.5-1/32 AND A.4.5-1/56 THEN R ELSE N/A
C265	IF A.4.1-1/2 AND A.4.5-1/14 AND A.4.5-1/32 AND A.4.5-1/56 THEN R ELSE N/A
C266	IF (A.4.1-1/1 AND A.4.2-1/2 AND NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.1-1/5 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) THEN R ELSE N/A
C267	IF A.4.1-1/1 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND (A.4.6.1-1/5 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) THEN R ELSE N/A
C267h	IF A.4.1-1/1 AND A.4.2-1/2 AND (A.4.3-4a/10 OR A.4.3-4a/11) AND A.4.6-1/4 AND (A.4.6.1-1/5 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) AND A.4.5-1/18 THEN R ELSE N/A
C268	IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND (A.4.6.3-1/2 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/32) THEN R ELSE N/A
C269	IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/32) THEN R ELSE N/A
C270	IF (A.4.1-1/2 AND (A.4.6.1-1/4 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C271	IF (A.4.1-1/2 AND (A.4.6.3-1/10 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A

C272	IF (A.4.1-1/2 AND (A.4.6.1-1/5 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16) AND (A.4.3-4/8 AND (A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C273	IF (A.4.1-1/2 AND (A.4.6.3-1/17 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8) AND (A.4.3-4/8 AND (A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C274	IF A.4.1-1/2 AND A.4.5-1/54 THEN R ELSE N/A
C275	IF A.4.1-1/2 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) AND A.4.5-1/54 AND A.4.5-1/55 THEN R ELSE N/A
C276	IF A.4.1-1/2 AND A.4.5-1/55 THEN R ELSE N/A
C277	IF A.4.1-1/2 AND A.4.5-1/8 AND A.4.5-1/55 THEN R ELSE N/A
C278	IF (A.4.1-1/1 AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND A.4.5-1/18 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C279	IF (A.4.1-1/1 AND A.4.6.2-1/1 AND A.4.5-1/18 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C280	IF (A.4.1-1/1 AND A.4.6-1/1 AND A.4.5-1/37 AND A.4.5-1/46 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C281	IF (A.4.1-1/1 AND A.4.6-1/1 AND A.4.5-1/37 AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C282	IF (A.4.1-1/1 AND A.4.6-1/1 AND A.4.5-1/37 AND A.4.3-7/1 AND A.4.4-3a/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C282m	IF (A.4.1-1/1 AND A.4.6-1/1 AND A.4.5-1/37 AND A.4.3-7/1 AND ((A.4.4-3a/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C283	IF (A.4.1-1/2 AND A.4.6-1/1 AND A.4.5-1/38 AND A.4.3-7/1 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C284	IF (A.4.1-1/2 AND A.4.6-1/1 AND A.4.5-1/38 AND A.4.3-7/1 AND A.4.4-3b/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C284m	IF (A.4.1-1/2 AND A.4.6-1/1 AND A.4.5-1/38 AND A.4.3-7/1 AND ((A.4.4-3b/103 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C285	IF ((A.4.1-1/1) AND (A.4.3-7/6)) THEN R ELSE N/A
C286	IF ((A.4.1-1/1) AND (A.4.3-7/7)) THEN R ELSE N/A
C287	IF ((A.4.1-1/2) AND (A.4.3-7/6)) THEN R ELSE N/A
C288	IF ((A.4.1-1/2) AND (A.4.3-7/7)) THEN R ELSE N/A
C289	IF ((A.4.1-1/1) AND (A.4.3-7/6) AND (A.4.2-1/6)) THEN R ELSE N/A
C290	IF ((A.4.1-1/2) AND (A.4.3-7/6) AND (A.4.2-1/6)) THEN R ELSE N/A
C291	IF ((A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C292	IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C293	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C294	IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/39) THEN R ELSE N/A
C295	IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/12 OR A.4.6.2-1/3 OR A.4.6.3-1/11) AND A.4.5-1/39) THEN R ELSE N/A
C296	IF (A.4.1-1/2 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18 AND A.4.5-1/39) THEN R ELSE N/A
C297	IF (A.4.1-1/2 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/14) AND A.4.5-1/39) THEN R ELSE N/A
C298	IF A.4.1-1/8 AND A.4.3-4c/2 THEN R ELSE N/A
C299	IF (A.4.1-1/1 AND A.4.3-7/5) THEN R ELSE N/A
C300	IF (A.4.1-1/2 AND A.4.3-7/5) THEN R ELSE N/A
C301	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/58) THEN R ELSE N/A
C302	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2 AND A.4.5-1/58) THEN R ELSE N/A
C303	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1 AND A.4.5-1/58) THEN R ELSE N/A
C304	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND A.4.6.2-2/1 AND A.4.5-1/58) THEN R ELSE N/A
C305	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1 AND A.4.5-1/62) THEN R ELSE N/A

C306	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C307	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C308	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C309	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/14 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C310	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C311	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C312	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C313	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1) THEN R ELSE N/A
C314	IF A.4.1-1/1 AND (A.4.3-4aa/2 OR A.4.5-1/25) THEN R ELSE N/A
C315	IF A.4.1-1/1 AND (A.4.3-4aa/2 AND A.4.5-1/26 THEN R ELSE N/A
C316	IF A.4.1-1/2 AND (A.4.3-4aa/2 OR A.4.5-1/25) THEN R ELSE N/A
C316a	IF A.4.1-1/2 AND A.4.3-4aa/2 AND A.4.5-1/25 THEN R ELSE N/A
C316b	IF A.4.1-1/2 AND A.4.3-4aa/2 AND A.4.5-1/26 THEN R ELSE N/A
C317	IF A.4.1-1/2 AND (A.4.3-4aa/2 AND A.4.5-1/26 THEN R ELSE N/A
C318	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.5-1/13 AND A.4.5-1/58) THEN R ELSE N/A
C319	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2 AND NOT(A.4.5-1/17)) THEN R ELSE N/A
C320	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.1-1/10 AND A.4.5-1/66 AND A.4.5-1/67) THEN R ELSE N/A
C321	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1 AND A.4.5-1/70) THEN R ELSE N/A
C322	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15 AND (A.4.5-1/37 OR A.4.5-1/38) AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C323	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.4-3a/103 AND A.4.3-7/8) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C323m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.3-7/8) AND ((A.4.4-3a/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C324	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3b/103 AND A.4.3-7/8) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C324m	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.3-7/8) AND ((A.4.4-3b/103 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) OR (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12))) THEN R ELSE N/A
C325	IF (A.4.1-1/8 OR A.4.1-1/8a) AND A.4.3-3b/5 THEN R ELSE N/A
C326	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1 OR A.4.5-1/58) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2 AND A.4.5-1/17) THEN R ELSE N/A
C327	IF (NOT(A.4.3-4a/1 OR A.4.3-4aa/1 OR A.4.5-1/58) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1 AND A.4.5-1/17) THEN R ELSE N/A
C328	IF A.4.1-1/1 AND A.4.5-1/15 AND A.4.5-1/32 AND A.4.5-8/1 THEN R ELSE N/A
C329	IF A.4.1-1/2 AND A.4.5-1/14 AND A.4.5-1/32 AND A.4.5-8/2 THEN R ELSE N/A
C330	IF (A.4.1-1/1 AND A.4.2-1/2 AND NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23) THEN R ELSE N/A
C331	IF A.4.1-1/1 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23) THEN R ELSE N/A
C331a	IF A.4.1-1/2 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23) THEN R ELSE N/A
C331h	IF A.4.1-1/1 AND A.4.2-1/2 AND A.4.3-4a/11 AND A.4.6-1/4 AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23) AND A.4.5-1/18 THEN R ELSE N/A
C331ha	IF A.4.1-1/2 AND A.4.2-1/2 AND A.4.3-4a/11 AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23) AND A.4.5-1/18 THEN R ELSE N/A
C332	IF A.4.1-1/2 AND A.4.2-1/2 AND A.4.3-4a/11 AND A.4.6-1/4 AND (A.4.6.1-1/5 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8 OR A.4.6.3-1/8 OR A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) AND A.4.5-1/18 THEN R ELSE N/A
C333	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7b) THEN R ELSE N/A

C334	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/3 AND A.4.6-2/3) THEN R ELSE N/A
C335	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1 AND A.4.3-3b/4) THEN R ELSE N/A
C336	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/6 AND A.4.6-2/3) THEN R ELSE N/A
C337	IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.4-3a/103 AND A.4.5-1/82) THEN R ELSE N/A
C338	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.4-3a/103 AND A.4.5-1/83) THEN R ELSE N/A
C339	IF (NOT((A.4.3-4a/1) or (A.4.3-4/1)) AND A.4.1-1/1 AND (A.4.5-1/8 or A.5.-1/11 or A.4.5-1/12) AND A.4.5-1/83) THEN R ELSE N/A
C340	IF (NOT((A.4.3-4a/1) or (A.4.3-4/1)) AND A.4.1-1/2 AND (A.4.5-1/8 or A.5.-1/11 or A.4.5-1/12) AND A.4.5-1/83) THEN R ELSE N/A
C341	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C342	IF((A.4.1-1/1 AND A.4.2-1/2) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) OR ((A.4.1-1/2 AND A.4.2-1/2) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) OR ((A.4.1-1/1 AND A.4.1-1/2 AND A.4.2-1/7) AND (A.4.6.3-1/19 OR A.4.6.3-1/20 OR A.4.6.3-1/21 OR A.4.6.3-1/22 OR A.4.6.3-1/23)) THEN R ELSE N/A
C343	IF A.4.1-1/1 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND A.4.6-1/6 THEN R ELSE N/A
C344	IF A.4.1-1/1 AND A.4.2-1/2 AND A.4.5-1/18 AND A.4.3-4a/11 AND A.4.6-1/6 THEN R ELSE N/A
C345	IF A.4.1-1/2 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND A.4.6-1/6 THEN R ELSE N/A
C346	IF A.4.1-1/2 AND A.4.2-1/2 AND A.4.5-1/18 AND A.4.3-4a/11 AND A.4.6-1/6 THEN R ELSE N/A
C347	IF A.4.1-1/8 AND (A.4.3-4c/1 or A.4.3-4c/2) THEN R ELSE N/A
C348	Void
C349	IF (A.4.1-1/1 AND A.4.6-1/5 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C350	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/5 AND A.4.5-1/15 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C351	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/5 AND A.4.5-1/14 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C352	IF A.4.3-3b/2 AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.5-1/x01 AND (A.4.5-1/x02a OR A.4.5-1/x02b OR A.4.5-1/x02c) AND A.4.1-1/1THEN R ELSE N/A
C352a	IF A.4.3-3b/2 AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.5-1/x01 AND A.4.5-1/x02a AND A.4.1-1/2 THEN R ELSE N/A
C353	IF A.4.1-1/1 AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.5-1/x01 AND (A.4.5-1/x02a OR A.4.5-1/x02b OR A.4.5-1/x02c) THEN R ELSE N/A
C353a	IF A.4.1-1/2 AND NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.5-1/x01 AND A.4.5-1/x02a THEN R ELSE N/A
C354	IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/x01 AND (A.4.5-1/x02a OR A.4.5-1/x02b OR A.4.5-1/x02c)) THEN R ELSE N/A
C354a	IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/x01 AND A.4.5-1/x02a) THEN R ELSE N/A
C355	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1) AND A.4.4-3a/103 AND A.4.5-1/x01 AND (A.4.5-1/x02a OR A.4.5-1/x02b OR A.4.5-1/x02c)) THEN R ELSE N/A
C355a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2) AND A.4.4-3a/103 AND A.4.5-1/x01 AND A.4.5-1/x02a) THEN R ELSE N/A
C356	IF NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND A.4.1-1/2 AND A.4.5-1/x01 AND A.4.5-1/x02a THEN R ELSE N/A
C357	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/1 AND A.4.4-3a/103) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/x01 AND (A.4.5-1/x02a OR A.4.5-1/x02b OR A.4.5-1/x02c)) THEN R ELSE N/A
C357a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1) AND (A.4.1-1/2 AND A.4.4-3a/103) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) AND A.4.5-1/x01 AND A.4.5-1/x02a) THEN R ELSE N/A
C358	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/6 AND A.4.5-1/15 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C359	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/6 AND A.4.5-1/14 AND (A.4.3-4/8 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A
C360	IF A.4.1-1/2 AND A.4.2-1/2 AND (NOT A.4.5-1/18) AND (A.4.3-4/11 OR A.4.3-4/12 OR A.4.3-4a/6 OR A.4.3-4a/7 OR A.4.3-4a/10) AND (A.4.6.3-1/13 OR A.4.6.3-1/14 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.3-1/18) THEN R ELSE N/A
Note 1:	Cxxxh applicability is defined for small cell enhancements for physical layer related test.

Table 4.1-1b: Tested Bands Selection Criteria

Code	Selection	Comment
D01	A.4.3-3	All supported Bands
D02	A.4.3-3 AND FDD	All supported FDD Bands
D03	A.4.3-3 AND TDD	All supported TDD Bands
D04	A.4.3-3 AND {14, 31, 41, 72}	Band 14, 31, 41 or 72 if supported
D05	A.4.3-3 AND A.4.5-3	Bands supporting UL MIMO
D06	A.4.3-3 AND NOT A.4.5-3	Bands not supporting UL MIMO
D07	A.4.3-3 AND A.4.5-4	Bands supporting Multicluster PUSCH
D08	A.4.3-3 AND NOT FALLBACK(A.4.6.1-3)	All supported Bands that are not part of contiguous CA configuration.
D09	A.4.3-3 AND A.4.5-5	Bands supporting 4 Rx antenna ports
D10	A.4.3-3 AND A.4.5-6a	Bands supporting ProSe Direct
D11	A.4.3-3 AND category NB1 and NB2	All supported category NB1 and NB2 Bands
D12	A.4.3-3 AND { category NB1 and NB2 Bands < 1GHz}	Lowest and highest category NB1 and NB2 Bands supported below 1GHz (Note 2)
D13	A.4.3-3 AND { category NB1 and NB2 Bands > 1GHz}	Lowest and highest category NB1 and NB2 Bands supported above 1GHz (Note 3)
D14	A.4.3-3 AND A.4.5-7	Bands supporting V2X Sidelink Communication
D15	A.4.3-3 AND NOT A.4.5-5	Bands not supporting 4Rx antenna ports
D16	A.4.3-3c	All supported Power Class 1 Bands
D17	A.4.3-3d	All supported Power Class 2 Bands
D17a	A.4.3-3c OR A.4.3-3d	All supported Power Class 1 Bands or Power Class 2 Bands
D18	A.4.3-3 AND { category NB1 and NB2 TDD Bands > 1GHz}	Category NB1 and NB2 TDD Bands supported above 1GHz (Note 4)

Note 1: Band Selection is based on set theory. For each feature, item number shall correspond to the Band number. The result is the set of bands for which the test shall be conducted. The following operators are used:

AND: Set intersection ($\cap$). {1,2} AND {2,3} = {2}

OR: Set union ($\cup$). {1,2} OR {2,3} = {1,2,3}

NOT: Set complement (\), full set being all bands. NOT{1} = {2 ...256}

Also note that this is set without repetitions so {1} AND {1} = {1}

The following basic sets are used:

FDD: All FDD bands, currently {1...32, 65…70}

TDD: All TDD bands, currently {33...64}

Category NB1: All Category NB1 bands, currently {1, 2, 3, 5, 8, 11, 12, 13, 17, 18, 19, 20, 21, 25,, 26, 28, 31, 66, 70}

{1,2}: Explicitly given band set

The following sets derived from pro-forma tables are also used:

A.4.X-Y: All bands supporting the feature defined in A.4.X-Y. For A.4.3-3, all supported bands.

FALLBACK(A.4.6.X-Y): Fallback bands of supported CA Combinations defined in Table A.4.6.X-Y

Note 2: Category NB1 Bands < 1GHz {5, 8, 12, 13, 17, 18, 19, 20, 26, 28, 31}

Note 3: Category NB1 Bands > 1GHz {1, 2, 3, 11, 21, 25, 66, 70}

Note 4: Category NB1 and NB2 Bands > 1GHz {41}

Table 4.1-1c: Tested CA Configurations Selection Criteria

Code	Selection	Comment
E01	UL(A.4.6.1-3) AND CARRIER_NO(2)	All supported intra-band contiguous CA Configurations with 2 carriers in both UL and DL
E02	UL(A.4.6.2-3) AND CARRIER_NO(2)	All supported intra-band non-contiguous CA Configurations with 2 carriers in both UL and DL
E03	UL(A.4.6.3-3) AND CARRIER_NO(2)	All supported inter-band CA Configurations with 2 carriers in both UL and DL
E04	A.4.6.1-3 AND CARRIER_NO(2) AND NOT UL(A.4.6.1-3)	All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL
E05	A.4.6.2-3 AND CARRIER_NO(2) AND NOT UL(A.4.6.2-3)	All supported intra-band non-contiguous CA Configurations with 2 carriers in DL but no CA in UL
E06	A.4.6.3-3 AND CARRIER_NO(2) AND NOT UL(A.4.6.3-3)	All supported inter-band CA Configurations with 2 carriers in DL but no CA in UL
E07	((A.4.6.1-3 AND NOT UL(A.4.6.1-3)) OR (A.4.6.2-3 AND NOT UL(A.4.6.2-3)) OR (A.4.6.3-3 AND NOT UL(A.4.6.3-3)) OR (A.4.6.3-4 AND NOT UL(A.4.6.3-4)) OR (A.4.6.3-5 AND NOT UL(A.4.6.3-5))) AND CARRIER_NO(3)	All supported 3DL CA without UL
E08	E04 AND NOT DL_FALLBACKS	All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL, that are not fallbacks of 3DL CA
E09	E05 AND NOT DL_FALLBACKS	All supported intra-band non-contiguous CA Configurations with 2 carriers in DL but no CA in UL that are not fallbacks of 3DL CA.
E10	E06 AND NOT DL_FALLBACKS	All supported inter-band CA Configurations with 2 carriers in DL but no CA in UL that are not fallbacks of 3DL CA
E11	E04 AND NOT (FALLBACK(A.4.6.2-3) OR FALLBACK(A.4.6.3-3) OR FALLBACK(A.4.6.3-4) OR FALLBACK(A.4.6.3-5))	All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL, that are not fallbacks of 3DL CA, except of class D intra-band 3DL CA.
E12	E06 AND NOT (FALLBACK(A.4.6. 1-3) OR FALLBACK(A.4.6.3-4) OR FALLBACK(A.4.6.3-5))	All supported inter-band CA Configurations with 2 carriers in DL that are fallbacks of inter-band on inter-band + intra-band contiguous 3DL CA.
DL_FALLBACKS	FALLBACK(A.4.6.1-3) OR FALLBACK(A.4.6.2-3) OR FALLBACK(A.4.6.3-3) OR FALLBACK(A.4.6.3-4) OR FALLBACK(A.4.6.3-5)	All DL Fallbacks of supported CA Configurations
DL_FALLBACKS_EtoD	FALLBACK_EtoD(A.4.6.1-3) OR FALLBACK_EtoD(A.4.6.2-3) OR FALLBACK_EtoD(A.4.6.3-3) OR FALLBACK_EtoD(A.4.6.3-4) OR FALLBACK_EtoD(A.4.6.3-5)	All DL Fallbacks of supported CA Configurations where BW class for one sub-block has changed from class E to class D
DL_FALLBACKS_BtoA	FALLBACK_BtoA(A.4.6.1-3) OR FALLBACK_BtoA(A.4.6.2-3) OR FALLBACK_BtoA(A.4.6.3-3) OR FALLBACK_BtoA(A.4.6.3-4) OR FALLBACK_BtoA(A.4.6.3-5)	All DL Fallbacks of supported CA Configurations where BW class for one sub-block has changed from class B to class A
DL_FALLBACKS_LAA	FALLBACK_LAA(A.4.6.1-3) OR FALLBACK_LAA(A.4.6.2-3) OR FALLBACK_LAA(A.4.6.3-3) OR FALLBACK_LAA(A.4.6.3-4) OR FALLBACK_LAA(A.4.6.3-5)	All DL Fallbacks of supported CA Configurations where BW class for sub-block in LAA band has changed
E13	E06 AND DL_ONLY_BAND	All supported inter-band CA Configurations with 2 carriers in DL where one of the bands is a DL-only band
E14	((A.4.6.1-3 AND NOT UL(A.4.6.1-3)) OR (A.4.6.2-3 AND NOT UL(A.4.6.2-3)) OR (A.4.6.3-3 AND NOT UL(A.4.6.3-3)) OR (A.4.6.3-4 AND NOT UL(A.4.6.3-4)) OR (A.4.6.3-5 AND NOT UL(A.4.6.3-5))) AND CARRIER_NO(4)	All supported 4DL CA without UL
E15	((A.4.6.1-3 AND NOT UL(A.4.6.1-3)) OR (A.4.6.2-3 AND NOT UL(A.4.6.2-3)) OR (A.4.6.3-3 AND NOT UL(A.4.6.3-3)) OR (A.4.6.3-4 AND NOT UL(A.4.6.3-4)) OR (A.4.6.3-5 AND NOT UL(A.4.6.3-5))) AND CARRIER_NO(5)	All supported 5DL CA without UL

E16	A.4.5-7a	Bands supporting Inter-band con-current V2X configurations
E17	A.4.5-7b	Bands supporting V2X Intra-band multi-carrier configurations
E18	UL(A.4.6.1-3 OR A.4.6.2-3 OR A.4.6.3-3 OR A.4.6.3-4) AND CARRIER_NO(3)	All support 3DL CA with UL CA
E19	E07 AND NOT DL_FALLBACKS OR E18 {AND DL_FALLBACKS}	All support 3DL CA without UL CA, that are not fallbacks of 4DL CA. OR All support 3DL CA with UL CA
E20	UL({A.4.6.1-3 OR A.4.6.2-3} OR A.4.6.3-3 OR A.4.6.3-4 OR A.4.6.3-5) AND CARRIER_NO(4)	All support 4DL CA with UL CA
E21	E14 AND NOT DL_FALLBACKS OR E20 {AND DL_FALLBACKS}	All support 4DL CA without UL CA, that are not fallbacks of 5DL CA. OR All support 4DL CA with UL CA
E22	(E07 AND NOT DL_FALLBACKS) OR (E07 AND DL_FALLBACKS_EtoD) OR (E07 AND DL_FALLBACKS_BtoA) OR E18	All supported 3DL CA without UL CA, that are not fallbacks of 4DL CA except class E to D and class B to A fallback. OR All supported 3DL CA with UL CA
E23	(E14 AND NOT DL_FALLBACKS) OR (E14 AND DL_FALLBACKS_EtoD) OR (E14 AND DL_FALLBACKS_BtoA) OR E20	All supported 4DL CA without UL CA, that are not fallbacks of 4DL CA except class E to D and class B to A fallback. OR All supported 4DL CA with UL CA
E24	(E07 AND NOT DL_FALLBACKS_LAA) OR E18	All supported 3DL CA without UL CA, that are not LAA fallbacks of 4DL CA. OR All supported 3DL CA with UL CA
E25	(E14 AND NOT DL_FALLBACKS_LAA) OR E20	All supported 4DL CA without UL CA, that are not LAA fallbacks of 5DL CA. OR All supported 4DL CA with UL CA

Note: CA Configuration Selection is based on set theory. Each CA Configuration is designated by its name, including bands and BW classes, e.g. CA_1A-5A. The following operators are used:

AND: Set intersection ($\cap$). {CA_1C,CA_1A-5A} AND {CA_1C, CA_2A-4A } = CA_1C

OR: Set union ($\cup$). {CA_1C,CA_1A-5A} OR {CA_1C, CA_2A-4A } = {CA_1C,CA_1A-5A, CA_2A-4A}

NOT: Set complement (\), full set being all possible CA Configurations

Also note that this is set without repetitions so {CA_1C} AND {CA_1C} = {CA_1C}

The following basic sets are used:

FDD: All FDD-only CA Configurations

TDD: All TDD-only CA Configurations

FDD-TDD: All mixed CA Configurations

{CA_1C}: Explicitly given CA Configurations

CARRIER_NO(n): All CA Configurations with n Carriers, e.g. for n=2 CA_1C and CA_1A-5A would be a part of this set

BAND_NO(n): All CA Configurations containing n Bands, e.g.. for n=2, CA_1A-5A and CA_1A-41C are part of this set

BWCLASS(x): All CA Configurations containing BW Class x, e.g.. for x=C, CA_1C and CA_1A-41C are part of this set

DL_ONLY_BAND: All CA configurations containing a DL-only band, e.g. CA_20A-32A is part of this set

The following sets derived from pro-forma tables are also used:

A.4.6.X-Y: All supported DL CA Combinations defined in table A.4.6.X-Y

UL(A.4.6.X-Y): All DL CA Combinations that also support UL CA with any number of carriers >1, as per column "Supported CA Bandwidth Class(es) in UL" defined in table A.4.6.X-Y.

UL_2CC(A.4.6.X-Y): All DL CA Combinations that also support 2 Carrier UL CA, as per column "Supported CA Bandwidth Class(es) in UL" defined in table A.4.6.X-Y. Note that DL might support a larger number of carriers than UL.

UL_3CC(A.4.6.X-Y): All DL CA Combinations that also support 3 Carrier UL CA, as per column "Supported CA Bandwidth Class(es) in UL" defined in table A.4.6.X-Y

FALLBACK(A.4.6.X-Y): Fallback DL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y

FALLBACK_EtoD(A.4.6.X-Y): Fallback DL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y where BW class for one sub-block has changed from class E to class D

FALLBACK_BtoA(A.4.6.X-Y): Fallback DL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y where BW class for one sub-block has changed from class B to class A

FALLBACK_LAA(A.4.6.X-Y): Fallback DL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y where BW class for B46 or B49 band changed from class E to D, D to C or C to A

FALLBACK_UL(A.4.6.X-Y): Fallback DL and UL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y. This set only includes Combinations with same CA Capability in UL and DL

Table 4.1-2: Default Fallback Bands and Fallback CA Configurations

CA Configuration	Default Fallback Bands	Default Fallback CA Configurations (Note 3)
CA_XC (2 carrier intra-band contiguous)	X	-
CA_XB (2 carrier intra-band contiguous)	X	-
CA_XA-YA (2 carrier inter-band)	X,Y	-
CA_XA-XA (2 carrier intra-band non-contiguous)	X	-
CA_XD (3 carrier intra-band contiguous)	X	CA_XC
CA_XA-YA-ZA (3 carrier inter-band)	X,Y,Z	CA_XA-YA, CA_XA-ZA, CA_YA-ZA
CA_XC-YA(3 carrier intra-band contiguous + inter-band)[2]	X,Y	CA_XC, CA_XA-YA
CA_XB-YA(3 carrier intra-band contiguous + inter-band)[2]	X,Y	CA_XB, CA_XA-YA
CA_XA-XA-YA(3 carrier intra-band non-contiguous + inter-band)[2]	X,Y	CA_XA-YA, CA_XA-XA
CA_XC-XA(3 carrier intra-band non-contiguous + intra-band contiguous)[2]	X	CA_XC, CA_XA-XA
CA_XE (4 carrier intra-band contiguous)	X	CA_XD
CA_XA-XD (4 carrier intra-band contiguous + inter-band with 2 bands)[2]	X	CA_XA-XC
CA_XC-YC (4 carrier intra-band contiguous + inter-band with 2 bands)[2]	X, Y	CA_XA-YC, CA_XC-YA
CA_XA-XA-YC (4 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands)	X, Y	CA_XA-XA-YA, CA_XA-YC
CA_XA-YA-ZC (4 carrier intra-band contiguous + inter-band with 3 bands)[2]	X, Y, Z	CA_XA-YA-ZA, CA_XA-ZC CA_ YA-ZC
CA_XC-XC (4 carrier intra-band non-contiguous + intra-band contiguous)	X	CA_XC-XA, CA_XA-XC
CA_XA-YA-YC (4 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-YA-YA, CA_XA -YC, CA YA-YC
CA_XA-XA-YA-YA (4 carrier intra-band non-contiguous + inter-band with 2 bands)[2]	X, Y	CA_XA-XA-YA, CA_XA-YA-YA
CA_XA-YA-ZA-RA (4 carrier inter-band with 4 bands)	X, Y, Z, R	CA_XA-YA-ZA, CA_XA-YA-RA, CA_XA-ZA-RA, CA_YA-ZA-RA
CA_XF (5 carrier intra-band contiguous)	X	CA_XE
CA_XA-XE (5 carrier intra-band non-contiguous + intra-band contiguous)	X	CA_XE, CA_XA-XD
CA_XC-XD (5 carrier intra-band non-contiguous + intra-band contiguous)	X	CA_XC-XC, CA_XA-XD
CA_XA-YE (5 carrier intra-band contiguous + inter-band with 2 bands)[2]	X, Y	CA_XA-YD, CA_YE
CA_XC-YD (5 carrier intra-band contiguous + inter-band with 2 bands)[2]	X, Y	CA_XC-YC, CA_XA-YD
CA_XA-YA-ZD (5 carrier intra-band contiguous + inter-band with 3 bands)[2]	X, Y, Z	CA_XA-YA-ZC, CA_XA-ZD, CA_YA-ZD
CA_XA-YC-ZC (5 carrier intra-band contiguous + inter-band with 3 bands)[2]	X, Y, Z	CA_XA-YC-ZA, CA_XA-YA-ZC, CA_YC-ZC
CA_XA-YA-ZA-RC (5 carrier intra-band contiguous + inter-band with 4 bands)[2]	X, Y, Z, R	CA_XA-YA-ZA, CA_XA-YA-RC, CA_XA-ZA-RC, CA_YA-ZA-RC
CA_XA-YA-YD (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-YA-YC, CA_XA-YD, CA_YA-YD
CA_XA-YC-YC (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-YC-YA, CA_XA-YA-YC, CA_YC-YC

CA_XA-XA-YD (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-XA-YC, CA_XA-YD,
CA_XA-XC-YC (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-XC-YA, CA_XA-XA-YC, CA_XC-YC
CA_XA-XA-YA-YC (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 2 bands) [2]	X, Y	CA_XA-XA-YA-YA, CA_XA-XA-YC, CA_XA-YA-YC
CA_XA-YA-ZA-ZC (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 3 bands) [2]	X, Y, Z	CA_XA-YA-ZA-ZA, CA_XA-YA-ZC, CA_XA-ZA-ZC, CA_YA-ZA-ZC
CA_XA-YA-YA-ZA-ZA (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 3 bands) [2]	X, Y, Z	CA_XA-YA-YA-ZA, CA_XA-YA-ZA-ZA, CA_YA-YA-ZA-ZA
CA_XA-YA-ZA-RA-RA (5 carrier intra-band non-contiguous + intra-band contiguous + inter-band with 4 bands) [2]	X, Y, Z, R	CA_XA-YA-ZA-RA, CA_XA-YA-RA-RA, CA_XA-ZA-RA-RA, CA_YA-ZA-RA-RA
CA_XA-YA-ZA-RA-SA (5 carrier inter-band with 5 bands)	X, Y, R, S	CA_XA-YA-ZA-RA, CA_XA-YA-ZA -SA, CA_XA-YA - RA-SA, CA_XA-ZA-RA-SA, CA_YA-ZA-RA-SA
Note 1: Table used for deriving default fallbacks in sections A.4.6.1,2 and 3. Note 2: Also applicable for different band orderings (e.g.. YA-XC). Note 3: Only the CA fallback configuration with 1 less CC indicated. To get the full list of fallback configurations, all fallback configurations down to 2 carrier are recursively generated.		

Table 4.1-3: 3DL CA Name/Release mapping

Number of Bands	3CA Band Combinations	Release for test applicability	Name
1	CA_XD	Rel-10	3DL CA with TDD CA_XD
2	CA_XA-YB	Rel-11	3DL CA with FDD CA_XA-YB
	CA_XA-YB	Rel-11	3DL CA with TDD CA_XA-YB
	CA_XA-YB	Rel-12	3DL CA with FDD-TDD CA_XA-YB
2	CA_XA-YC	Rel-11	3DL CA with FDD CA_XA-YC
	CA_XA-YC	Rel-11	3DL CA with TDD CA_XA-YC
	CA_XA-YC	Rel-12	3DL CA with FDD-TDD CA_XA-YC
3	CA_XA-YA-ZA	Rel-10	3DL CA with FDD CA_XA-YA-ZA
		Rel-10	3DL CA with TDD CA_XA-YA-ZA
		Rel-12	3DL CA with FDD-TDD CA_XA-YA-ZA
2	CA_XA-XA-YA	Rel-11	3DL CA with FDD CA_XA-XA-YA
1	CA_XA-XA-XA	Rel-11	3DL CA with FDD CA_XA-XA-XA

Table 4.1-4: 4DL CA Name/Release mapping

Number of Bands	4CA Band Combinations	Release for test applicability	Name
1	CA_XE	Rel-11	4DL CA with TDD CA_XE
2	CA_XA-XD	Rel-11	4DL CA with FDD CA_XA-XD
		Rel-11	4DL CA with TDD CA_XA-XD
		Rel-12	4DL CA with FDD-TDD CA_XA-XD
2	CA_XB-YB	Rel-10	4DL CA with FDD CA_XB-YB
	CA_XC-YB	Rel-10	4DL CA with FDD CA_XC-YB
		Rel-12	4DL CA with FDD-TDD CA_XC-YB
2	CA_XC-YC	Rel-10	4DL CA with FDD CA_XC-YC
		Rel-10	4DL CA with TDD CA_XC-YC
1	CA_XC-XC	Rel-11	4DL CA with TDD CA_XC-XC
2	CA_XA-XA-YB	Rel-11	4DL CA with FDD CA_XA-XA-YB
	CA_XA-YA-YB	Rel-11	4DL CA with FDD CA_XA-YA-YB
3	CA_XA-YA-ZB	Rel-11	4DL CA with FDD CA_XA-YA-ZB
3	CA_XA-YA-ZC	Rel-11	4DL CA with FDD CA_XA-YA-ZC
		Rel-12	4DL CA with FDD-TDD CA_XA-YA-ZC
2	CA_XA-YA-YC	Rel-11	4DL CA with FDD CA_XA-YA-YC
		Rel-12	4DL CA with FDD-TDD CA_XA-YA-YC
2	CA_XA-XC-YA	Rel-12	4DL CA with FDD-TDD CA_XA-XC-YA
3	CA_XA-YA-ZC	Rel-12	4DL CA with FDD-TDD_XA-YA-ZC
2	CA_XA-XA-YA-YA	Rel-11	4DL CA with FDD CA_XA-XA-YA-YA
3	CA_XA-YA-YA-ZA	Rel-11	4DL CA with FDD CA_XA-YA-YA-ZA
		Rel-12	4DL CA with FDD-TDD CA_XA-YA-YA-ZA
4	CA_XA-YA-ZA-RA	Rel-11	4DL CA with FDD CA_XA-YA-ZA-RA
		Rel-12	4DL CA with FDD-TDD CA_XA-YA-ZA-RA

Table 4.1-5: 5DL CA Name/Release mapping

Number of Bands	5CA Band Combinations	Release for test applicability	Name
1	CA_XF	Rel-12	5DL CA with TDD CA_XF
1	CA_XA-XE	Rel-11	5DL CA with TDD CA_XA-XE
1	CA_XC-XD	Rel-11	5DL CA with FDD CA_XC-XD
		Rel-11	5DL CA with TDD CA_XC-XD
1	CA_XA-XA-XD	FFS	5DL CA with FDD CA_XA-XA-XD
		FFS	5DL CA with TDD CA_XA-XA-XD
1	CA_XA-XC-XC	FFS	5DL CA with FDD CA_XA-XC-XC
		FFS	5DL CA with TDD CA_XA-XC-XC
2	CA_XA-YE	Rel-11	5DL CA with TDD CA_XA-YE
		Rel-12	5DL CA with FDD-TDD CA_XA-YE
2	CA_XC-YD	Rel-11	5DL CA with FDD CA_XC-YD
		Rel-11	5DL CA with TDD CA_XC-YD
		Rel-12	5DL CA with FDD-TDD CA_XC-YD
2	CA_XA-YA-YD	Rel-11	5DL CA with TDD CA_XA-YA-YD
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-YD
2	CA_XA-YC-YC	Rel-11	5DL CA with FDD CA_XA-YC-YC
		Rel-11	5DL CA with TDD CA_XA-YC-YC
		Rel-12	5DL CA with FDD-TDD CA_XA-YC-YC
2	CA_XA-YA-YA-YC	FFS	5DL CA with FDD CA_XA-XA-XA-YC
		FFS	5DL CA with TDD CA_XA-XA-XA-YC
		FFS	5DL CA with FDD-TDD CA_XA-XA-XA-YC
2	CA_XA-XA-YD	Rel-11	5DL CA with TDD CA_XA-XA-YD
		Rel-12	5DL CA with FDD-TDD CA_XA-XA-YD
2	CA_XA-XC-YC	Rel-10	5DL CA with FDD CA_XA-XC-YC
		Rel-10	5DL CA with TDD CA_XA-XC-YC
		Rel-12	5DL CA with FDD-TDD CA_XA-XC-YC
2	CA_XA-XA-YA-YC	Rel-11	5DL CA with FDD CA_XA-XA-YA-YC
		Rel-11	5DL CA with TDD CA_XA-XA-YA-YC
		Rel-12	5DL CA with FDD-TDD CA_XA-XA-YA-YC
2	CA_XA-XA-YA-YA-YA	FFS	5DL CA with FDD CA_XA-XA-YA-YA-YA
		FFS	5DL CA with TDD CA_XA-XA-YA-YA-YA
		FFS	5DL CA with FDD-TDD CA_XA-XA-YA-YA-YA

Number of Bands	5CA Band Combinations	Release for test applicability	Name
2	CA_XA-XA-XA-YC	FFS	5DL CA with FDD CA_XA-XA-XA-YC
		FFS	5DL CA with TDD CA_XA-XA-XA-YC
		FFS	5DL CA with FDD-TDD CA_XA-XA-XA-YC
3	CA_XA-YA-ZD	Rel-11	5DL CA with TDD CA_XA-YA-ZD
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-ZD
3	CA_XA-YC-ZC	Rel-11	5DL CA with FDD CA_XA-YC-ZC
		Rel-11	5DL CA with TDD CA_XA-YC-ZC
		Rel-12	5DL CA with FDD-TDD CA_XA-YC-ZC
3	CA_XA-YA-ZA-ZC	Rel-11	5DL CA with FDD CA_XA-YA-ZA-ZC
		Rel-11	5DL CA with TDD CA_XA-YA-ZA-ZC
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-ZA-ZC
3	CA_XA-YA-ZA-ZA-ZA	FFS	5DL CA with FDD CA_XA-YA-ZA-ZA-ZA
		FFS	5DL CA with TDD CA_XA-YA-ZA-ZA-ZA
		FFS	5DL CA with FDD-TDD CA_XA-YA-ZA-ZA-ZA
3	CA_XA-YA-YA-ZC	Rel-11	5DL CA with FDD CA_XA-YA-YA-ZC
		Rel-11	5DL CA with TDD CA_XA-YA-YA-ZC
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-YA-ZC
3	CA_XA-YA-YA-ZA-ZA	Rel-11	5DL CA with FDD CA_XA-YA-YA-ZA-ZA
		Rel-11	5DL CA with TDD CA_XA-YA-YA-ZA-ZA
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-YA-ZA-ZA
4	CA_XA-YA-ZA-RC	Rel-11	5DL CA with FDD CA_XA-YA-ZA-RC
		Rel-11	5DL CA with TDD CA_XA-YA-ZA-RC
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-ZA-RC
4	CA_XA-YA-ZA-RA-RA	Rel-11	5DL CA with FDD CA_XA-YA-ZA-RA-RA
		Rel-11	5DL CA with TDD CA_XA-YA-ZA-RA-RA
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-ZA-RA-RA
5	CA_XA-YA-ZA-RA-SA	Rel-12	5DL CA with FDD CA_XA-YA-ZA-RA-SA
		Rel-12	5DL CA with TDD CA_XA-YA-ZA-RA-SA
		Rel-12	5DL CA with FDD-TDD CA_XA-YA-ZA-RA-SA

Note 1: X, Y, Z, R and S in this table correspond to different bands i.e. X != Y != Z != R != S.
Note 2: The band combinations with difference appearance order of bands/sub-blocks in the band combination string are not distinguished. E.g. CA_XA-YA-YD represents the set of CA_XA-YD-YA, YD-YA-XA, YA-XA-YD and YA-YD-XA.

Table 4.1-6: 6DL CA Name/Release mapping

Number of Bands	6CA Band Combinations	Release for test applicability	Name
2	CA_XA-YF	Rel-14	6DL CA with TDD CA_XA-YF
		Rel-14	6DL CA with FDD-TDD CA_XA-YF
2	CA_XC-YE	Rel-14	6DL CA with TDD CA_XC-YE
		Rel-14	6DL CA with FDD-TDD CA_XC-YE
2	CA_XC-YE	Rel-14	6DL CA with TDD CA_XD-YD
		Rel-14	6DL CA with FDD-TDD CA_XD-YD
2	CA_XA-XA-YE	Rel-14	6DL CA with FDD CA_XA-XA-YE
		Rel-14	6DL CA with TDD CA_XA-XA-YE
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YE
2	CA_XA-YA-YE	Rel-14	6DL CA with FDD CA_XA-YA-YE
		Rel-14	6DL CA with TDD CA_XA-YA-YE
		Rel-14	6DL CA with FDD-TDD CA_XA-YA-YE
2	CA_XA-XA-XA-YD	Rel-14	6DL CA with FDD CA_XA-XA-XA-YD
		Rel-14	6DL CA with TDD CA_XA-XA-XA-YD
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-XA-YD
2	CA_XA-XA-YA-YD	Rel-14	6DL CA with FDD CA_XA-XA-YA-YD
		Rel-14	6DL CA with TDD CA_XA-XA-YA-YD
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YA-YD
2	CA_XA-YA-YA-YD	Rel-14	6DL CA with FDD CA_XA-YA-YA-YD
		Rel-14	6DL CA with TDD CA_XA-YA-YA-YD
		Rel-14	6DL CA with FDD-TDD CA_XA-YA-YA-YD
2	CA_XA-XA-XA-XA-YC	Rel-14	6DL CA with FDD CA_XA-XA-XA-XA-YC
		Rel-14	6DL CA with TDD CA_XA-XA-XA-XA-YC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-XA-XA-YC
2	CA_XA-XA-XA-YA-YC	Rel-14	6DL CA with FDD CA_XA-XA-XA-YA-YC
		Rel-14	6DL CA with TDD CA_XA-XA-XA-YA-YC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-XA-YA-YC
2	CA_XA-XA-YA-YA-YC	Rel-14	6DL CA with FDD CA_XA-XA-YA-YA-YC
		Rel-14	6DL CA with TDD CA_XA-XA-YA-YA-YC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YA-YA-YC
2	CA_XA-YA-YA-YA-YC	Rel-14	6DL CA with FDD CA_XA-YA-YA-YA-YC
		Rel-14	6DL CA with TDD CA_XA-YA-YA-YA-YC

		Rel-14	6DL CA with FDD-TDD CA_XA-YA-YA-YA-YC
2	CA_XC-YC-YC	Rel-14	6DL CA with FDD CA_XC-YC-YC
		Rel-14	6DL CA with TDD CA_XC-YC-YC
		Rel-14	6DL CA with FDD-TDD CA_XC-YC-YC
2	CA_XA-XA-YC-YC	Rel-14	6DL CA with FDD CA_XA-XA-YC-YC
		Rel-14	6DL CA with TDD CA_XA-XA-YC-YC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YC-YC
2	CA_XA-XC-YA-YC	Rel-14	6DL CA with FDD CA_XA-XC-YA-YC
		Rel-14	6DL CA with TDD CA_XA-XC-YA-YC
		Rel-14	6DL CA with FDD-TDD CA_XA-XC-YA-YC
3	CA_XA-YA-ZE	Rel-14	6DL CA with FDD CA_XA-YA-ZE
		Rel-14	6DL CA with TDD CA_XA-YA-ZE
		Rel-14	6DL CA with FDD-TDD CA_XA-YA-ZE
3	CA_XA-YC-ZD	Rel-14	6DL CA with FDD CA_XA-YC-ZD
		Rel-14	6DL CA with TDD CA_XA-YC-ZD
		Rel-14	6DL CA with FDD-TDD CA_XA-YC-ZD
3	CA_XC-YC-ZC	Rel-14	6DL CA with FDD CA_XC-YC-ZC
		Rel-14	6DL CA with TDD CA_XC-YC-ZC
		Rel-14	6DL CA with FDD-TDD CA_XC-YC-ZC
3	CA_XA-XA-YC-ZC	Rel-14	6DL CA with FDD CA_XA-XA-YC-ZC
		Rel-14	6DL CA with TDD CA_XA-XA-YC-ZC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YC-ZC
3	CA_XA-XA-YA-ZD	Rel-14	6DL CA with FDD CA_XA-XA-YA-ZD
		Rel-14	6DL CA with TDD CA_XA-XA-YA-ZD
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YA-ZD
3	CA_XA-XA-YA-YA-ZC	Rel-14	6DL CA with FDD CA_XA-XA-YA-YA-ZC
		Rel-14	6DL CA with TDD CA_XA-XA-YA-YA-ZC
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YA-YA-ZC
3	CA_XA-XA-YA-YA-ZA-ZA	Rel-14	6DL CA with FDD CA_XA-XA-YA-YA-ZA-ZA
		Rel-14	6DL CA with TDD CA_XA-XA-YA-YA-ZA-ZA
		Rel-14	6DL CA with FDD-TDD CA_XA-XA-YA-YA-ZA-ZA
4	CA_XA-YA-ZA-RD	Rel-14	6DL CA with FDD CA_XA-YA-ZA-RD
		Rel-14	6DL CA with TDD CA_XA-YA-ZA-RD

		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-RD**
4	**CA_XA-YA-ZC-RC**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZC-RC**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZC-RC**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZC-RC**
4	**CA_XA-YA-ZA-ZA-RC**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZA-ZA-RC**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZA-ZA-RC**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-ZA-RC**
4	**CA_XA-YA-ZA-ZA-RA-RA**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZA-ZA-RA-RA**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZA-ZA-RA-RA**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-ZA-RA-RA**
5	**CA_XA-YA-ZA-RA-SC**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZA-RA-SC**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZA-RA-SC**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-RA-SC**
5	**CA_XA-YA-ZA-RA-SA-SA**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZA-RA-SA-SA**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZA-RA-SA-SA**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-RA-SA-SA**
6	**CA_XA-YA-ZA-RA-SA-UA**	**Rel-14**	**6DL CA with FDD CA_XA-YA-ZA-RA-SA-UA**
		Rel-14	**6DL CA with TDD CA_XA-YA-ZA-RA-SA-UA**
		Rel-14	**6DL CA with FDD-TDD CA_XA-YA-ZA-RA-SA-UA**

Note 1: X, Y, Z, R and S in this table correspond to different bands i.e. X != Y != Z != R != S.
Note 2: The band combinations with difference appearance order of bands/sub-blocks in the band combination string are not distinguished. E.g. CA_XA-YA-YD represents the set of CA_XA-YD-YA, YD-YA-XA, YA-XA-YD and YA-YD-XA.

Table 4.1-6: 7DL CA Name/Release mapping

Number of Bands	7CA Band Combinations	Release for test applicability	Name
3	CA_XA-YC-ZE	Rel-14	7DL CA with FDD-TDD CA_XA-YC-ZE
4	CA_XA-YA-ZC-RD	Rel-14	7DL CA with FDD-TDD CA_XA-YA-ZC-RD

Note 1: X, Y, Z and R in this table correspond to different bands i.e. X != Y != Z != R.
Note 2: The band combinations with difference appearance order of bands/sub-blocks in the band combination string are not distinguished. E.g. CA_XA-YA-YD represents the set of CA_XA-YD-YA, YD-YA-XA, YA-XA-YD and YA-YD-XA
Note 3: CA configurations involving downlink only operation in Band 46 are release independent from Rel-13 onwards (LAA was introduced in Rel-13). The 10 MHz channel bandwidth for Band 46 was introduced in TS 36.101 Rel-14 [2] and can be implemented in a release independent way from Rel-13.

4.2 RRM conformance test cases

Table 4.2-1: Applicability of RRM conformance test cases, ref. TS 36.521-3 [2]

NOTE: To determine applicability of a test case, FGI support in combined or fdd-Add-UE-EUTRA-Capabilities or tdd-Add-UE-EUTRA-Capabilities is taken into account.

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
E-UTRAN RRC_IDLE State Mobility							
4.2.1	E-UTRAN FDD - FDD cell re-selection intra frequency case	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
4.2.2	E-UTRAN TDD - TDD cell re-selection intra frequency case	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
4.2.3	E-UTRAN FDD - FDD cell re-selection inter frequency case	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
4.2.4	E-UTRAN FDD - TDD cell re-selection inter frequency case	Rel-9	C03	UE supporting E-UTRA FDD and E-UTRA TDD			2Rx, 4Rx
4.2.5	E-UTRAN TDD - FDD cell re-selection inter frequency case	Rel-9	C03	UE supporting E-UTRA FDD and E-UTRA TDD			2Rx, 4Rx
4.2.6	E-UTRAN TDD - TDD cell re-selection inter frequency case	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
4.2.7	E-UTRAN FDD - FDD Inter frequency case in the existence of non-allowed CSG cell	Rel-9	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
4.2.8	E-UTRAN TDD - TDD Inter frequency case in the existence of non-allowed CSG cell	Rel-9	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
4.2.9	E-UTRAN FDD-FDD intra-frequency Cell Re-selection case for 5MHz bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
4.2.10	E-UTRAN FDD – FDD reselection using an increased number of carriers	Rel-12	C01s	UE supporting E-UTRA FDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.2.11	E-UTRAN TDD – TDD reselection using an increased number of carriers	Rel-12	C01t	UE supporting E-UTRA TDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.2.12	E-UTRAN FDD - FDD Intra frequency case for CE UE in normal coverage	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
4.2.13	E-UTRAN HD - FDD Intra frequency case for CE UE in normal coverage	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
4.2.14	E-UTRAN TDD - TDD Intra frequency case for CE UE in normal coverage	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
4.2.15	E-UTRAN FDD - FDD Intra frequency case for CE UE in enhanced coverage	Rel-13	C94e	UE supporting E-UTRA FD-FDD and CEMode B			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
4.2.16	E-UTRAN HD - FDD Intra frequency case for CE UE in enhanced coverage	Rel-13	C94f	UE supporting E-UTRA HD-FDD and CEModeB			
4.2.17	E-UTRAN TDD - TDD Intra frequency case for CE UE in enhanced coverage	Rel-13	C93e	UE supporting E-UTRA TDD and CEModeB			
4.2.18	HD-FDD Cel Re-selection Intra frequency case for Category NB1 UE In-Band mode under Normal Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
4.2.19	HD-FDD Intra frequency case for UE Category NB1 In-Band mode in enhanced coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
4.2.20	E-UTRAN FDD – FDD Intra frequency case for UE Category 1bis	Rel-13	C194	UE supporting E-UTRA FDD and UE Category 1bis			
4.2.21	E-UTRAN TDD – TDD Intra frequency case for UE Category 1bis	Rel-13	C195	UE supporting E-UTRA TDD and UE Category 1bis			
4.2.22	E-UTRAN FDD - FDD cell re-selection intra frequency case for UE configured with highSpeedEnhancedMeasFlag	Rel-14	C196	UEs supporting E-UTRA FDD and high speed enhancement for measurement			
4.2.23	E-UTRAN TDD - TDD cell re-selection intra frequency case for UE configured with highSpeedEnhancedMeasFlag	Rel-14	C197	UEs supporting E-UTRA TDD and high speed enhancement for measurement			
4.2.24	HD – FDD Inter frequency case for UE Category NB1 In-Band mode in normal coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
4.2.25	E-UTRAN FDD – FDD Inter frequency case for CE UE in normal coverage	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
4.2.26	E-UTRAN HD – FDD Inter frequency case for CE UE in normal coverage	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
4.2.27	E-UTRAN TDD – TDD Inter frequency case for CE UE in normal coverage	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
4.2.28	E-UTRAN FDD – FDD Inter frequency case for CE UE in enhanced coverage	Rel-14	C94e	UE supporting E-UTRA FD-FDD and CEModeB			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
4.2.29	E-UTRAN HD – FDD Inter frequency case for CE UE in enhanced coverage	Rel-14	C94f	UE supporting E-UTRA HD-FDD and CEModeB			
4.2.30	E-UTRAN TDD Inter frequency case for CE UE in enhanced coverage	Rel-14	C93e	UE supporting E-UTRA TDD and CEModeB			
4.2.31	E-UTRAN FDD – FDD Inter frequency case for UE Category 1bis	Rel-13	C01m	UE supporting E-UTRA FDD and UE Category 1bis			
4.2.32	E-UTRAN FDD – TDD Inter frequency case for UE Category 1bis	Rel-13	C03a	UE supporting E-UTRA FDD and E-UTRA TDD and UE Category 1bis			
4.2.33	E-UTRAN TDD – FDD Inter frequency case for UE Category 1bis	Rel-13	C03a	UE supporting E-UTRA FDD and E-UTRA TDD and UE Category 1bis			
4.2.34	E-UTRAN TDD – TDD: Inter frequency case for UE Category 1bis	Rel-13	C02m	UE supporting E-UTRA TDD and UE Category 1bis			
4.2.35	E-UTRAN TDD – TDD Intra frequency case for UE Category NB1 In-Band mode in normal coverage	Rel-15	C235	UE supporting NB-IoT TDD			
4.2.36	E-UTRAN TDD – TDD Intra frequency case for UE Category NB1 In-Band mode in enhanced coverage	Rel-15	C235	UE supporting NB-IoT TDD			
4.2.37	E-UTRAN TDD – TDD Inter frequency case for UE Category NB1 In-Band mode in enhanced coverage	Rel-15	C235	UE supporting NB-IoT TDD			
4.2.38	HD – FDD Intra frequency case for UE Category NB1 In-Band mode in normal coverage with serving cell RRM measurement relaxation	Rel-15	C236	UE supporting NB-IoT HD-FDD and WUS			
4.3.1.1	E-UTRA FDD - UTRAN FDD cell re-selection	Rel-8	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
4.3.1.2	E-UTRA FDD - UTRAN FDD cell re-selection: UTRA FDD is of lower priority	Rel-8	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
4.3.1.3	E-UTRAN FDD - UTRAN FDD cell re-selection in fading propagation conditions: UTRA FDD is of lower priority	Rel-8	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
4.3.1.4	E-UTRAN FDD - UTRAN FDD cell re-selection: UTRA FDD is of lower priority for 5MHz bandwidth	Rel-8	C53	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand UTRA FDD			
4.3.1.5	Idle mode FDD to UTRA FDD interRAT reselection	Rel-12	C04l	UE supporting E-UTRA FDD, UTRA FDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.3.2	E-UTRAN FDD - UTRAN TDD cell re-selection	Rel-8	C06	UE supporting E-UTRA FDD and UTRA TDD		Rel-9 UTRA TDD	2Rx, 4Rx
4.3.2A	E-UTRA FDD to UTRA TDD cell re-selection for IncMon	Rel-12	C04i	UE supporting E-UTRA FDD, UTRA TDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.3.3	E-UTRAN TDD - UTRAN FDD cell re-selection	Rel-8	C07	UE supporting E-UTRA TDD and UTRA FDD			2Rx, 4Rx
4.3.3A	Idle mode TDD to UTRA FDD interRAT reselection	Rel-12	C04j	UE supporting E-UTRA TDD, UTRA FDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.3.4.1	E-UTRA TDD - UTRAN TDD cell re-selection	Rel-8	C05	UE supporting E-UTRA TDD and UTRA TDD		Rel-9 UTRA TDD	2Rx, 4Rx
4.3.4.2	E-UTRAN TDD - UTRAN TDD cell re-selection: UTRA is of lower priority	Rel-8	C05	UE supporting E-UTRA TDD and UTRA TDD		Rel-9 UTRA TDD	2Rx, 4Rx
4.3.4.3	EUTRA TDD-UTRA TDD cell reselection in fading propagation conditions: UTRA TDD is of lower priority	Rel-8	C05	UE supporting E-UTRA TDD and UTRA TDD		Rel-9 UTRA TDD	2Rx, 4Rx
4.3.4.4	E-UTRA TDD to UTRA TDD cell re-selection for IncMon	Rel-12	C04k	UE supporting E-UTRA TDD, UTRA TDD and Increased Carrier Monitoring E-UTRA			2Rx, 4Rx
4.4.1	E-UTRAN FDD - GSM cell re-selection	Rel-8	C08	UE supporting E-UTRA FDD and GSM			2Rx, 4Rx
4.4.2	E-UTRAN TDD - GSM cell re-selection	Rel-8	C09	UE supporting E-UTRA TDD and GSM			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
4.5.1.1	E-UTRAN FDD - HRPD Cell re-selection: HRPD is of lower priority	Rel-8	C10	UE supporting E-UTRA FDD and cdma2000 HRPD			2Rx, 4Rx
4.5.2.1	E-UTRAN TDD - HRPD Cell Reselection: HRPD is of Lower Priority	Rel-9	C34	UE supporting E-UTRA TDD and cdma2000 HRPD			2Rx, 4Rx
4.6.1.1	E-UTRAN FDD - cdma2000 1xRTT Cell re-selection: cdma2000 1x is of lower priority	Rel-8	C11	UE supporting E-UTRA FDD and cdma2000 1xRTT			2Rx, 4Rx
4.6.2.1	E-UTRAN TDD-cdma2000 1X Cell Reselection: cdma2000 1X is of Lower Priority	Rel-9	C35	UE supporting E-UTRA TDD and cdma2000 1xRTT			2Rx, 4Rx
E-UTRAN RRC_CONNECTED State Mobility							
5.1.1	E-UTRAN FDD - FDD Handover intra frequency case	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
5.1.2	E-UTRAN TDD - TDD Handover intra frequency case	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
5.1.3	E-UTRAN FDD - FDD Handover inter frequency case	Rel-8	C01d	UE supporting E-UTRA FDD and Feature Group Indicators 5, 13 and 25			2Rx, 4Rx
5.1.3_2	E-UTRAN FDD – FDD Inter frequency handover for UE Category 1bis	Rel-13	C01dh	UE supporting E-UTRA FDD and UE Category 1bis and Feature Group Indicators 5, 13 and 25			
5.1.4	E-UTRAN TDD - TDD Handover inter frequency case	Rel-8	C02d	UE supporting E-UTRA TDD and Feature Group Indicators 5, 13 and 25			2Rx, 4Rx
5.1.4_2	E-UTRAN TDD – TDD Inter frequency handover for UE Category 1bis	Rel-13	C02dh	UE supporting E-UTRA TDD and UE Category 1bis and Feature Group Indicators 5, 13 and 25			
5.1.5	E-UTRAN FDD - FDD inter frequency handover: unknown target cell	Rel-8	C01a	UE supporting E-UTRA FDD and Feature Group Indicators 13 and 25			2Rx, 4Rx
5.1.5_2	E-UTRAN FDD – FDD Inter frequency handover: unknown target cell for UE Category 1bis	Rel-13	C01ah	UE supporting E-UTRA FDD and UE Category 1bis and Feature Group Indicators 13 and 25			
5.1.6	E-UTRAN TDD-TDD inter frequency handover: unknown target cell	Rel-8	C02a	UE supporting E-UTRA TDD and Feature Group Indicators 13 and 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
5.1.6_2	E-UTRAN TDD – TDD Inter frequency handover: unknown Target Cell for UE Category 1bis	Rel-13	C02ah	UE supporting E-UTRA TDD and UE Category 1bis and Feature Group Indicators 13 and 25			
5.1.7	E-UTRAN FDD - TDD handover inter frequency case	Rel-9	C21	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30			2Rx, 4Rx
5.1.7_2	E-UTRAN FDD – TDD Inter frequency handover for UE Category 1bis	Rel-13	C21a	UE supporting E-UTRA FDD and E-UTRA TDD and UE Category 1bis and Feature Group Indicators 5, 25 and 30			
5.1.8	E-UTRAN TDD - FDD handover inter frequency case	Rel-9	C21	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30			2Rx, 4Rx
5.1.8_2	E-UTRAN TDD – FDD Inter frequency handover for UE Category 1bis	Rel-13	C21a	UE supporting E-UTRA FDD and E-UTRA TDD and UE Category 1bis and Feature Group Indicators 5, 25 and 30			
5.1.9	E-UTRAN FDD-FDD Intra frequency handover for 5MHz bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
5.1.10	E-UTRAN FDD-FDD Handover intra frequency handover for UE category 0	Rel-12	C94	UE supporting E-UTRA FD-FDD and UE Category 0			
5.1.11	E-UTRAN HD-FDD Handover intra frequency handover for UE category 0	Rel-12	C110	UE supporting E-UTRA HD-FDD and UE Category 0			
5.1.12	E-UTRAN TDD-TDD Handover intra frequency handover for UE category 0	Rel-12	C93	UE supporting E-UTRA TDD and UE Category 0			
5.1.13	E-UTRAN FDD-FDD Intra frequency handover for CE UEs in CEModeA	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
5.1.14	E-UTRAN HD-FDD Intra frequency handover for CE UEs in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
5.1.15	E-UTRAN TDD Intra frequency handover for CE UEs in CEModeA	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
5.1.16	E-UTRAN FDD-FDD Intra frequency handover for CE UEs in CEModeB	Rel-13	C94e	UE supporting E-UTRA FD-FDD and CEMode B			
5.1.17	E-UTRAN HD-FDD Intra frequency handover for CE UEs in CEModeB	Rel-13	C94f	UE supporting E-UTRA HD-FDD and CEModeB			
5.1.18	E-UTRAN TDD Intra frequency handover for CE UEs in CEModeB	Rel-13	C93e	UE supporting E-UTRA TDD and CEModeB			
5.1.19	E-UTRAN FDD – FDD Intra frequency handover for UE Category 1bis	Rel-13	C194	UE supporting E-UTRA FDD and UE Category 1bis			
5.1.20	E-UTRAN TDD – TDD Intra frequency handover for UE Category 1bis	Rel-13	C195	UE supporting E-UTRA TDD and UE Category 1bis			
5.1.28	E-UTRAN HD-FDD inter frequency handover for CE UEs in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
5.1.34	E-UTRAN HD-FDD intra frequency handover for CE UEs in CEModeA without SFN acquisition	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
5.2.1	E-UTRAN FDD - UTRAN FDD handover	Rel-8	C04a	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22			2Rx, 4Rx
5.2.2	E-UTRAN TDD - UTRAN FDD handover	Rel-8	C07a	UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 8 and 22			2Rx, 4Rx
5.2.3	E-UTRAN FDD - GSM handover	Rel-8	C08e	UE supporting E-UTRA FDD and GSM and inter-RAT PS handover to GERAN and Feature Group Indicators 9, 15 and 23			2Rx, 4Rx
5.2.4	E-UTRAN TDD - UTRAN TDD handover	Rel-8	C05a	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 8 and 22		Rel-9 UTRA TDD	2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
5.2.5	E-UTRAN FDD - UTRAN TDD handover	Rel-8	C06a	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 8 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
5.2.6	E-UTRA TDD - GSM handover	Rel-8	C09f	UE supporting E-UTRA TDD and GSM and inter-RAT PS handover to GERAN and Feature Group Indicators 9, 15 and 23			2Rx, 4Rx
5.2.7	E-UTRAN FDD - UTRAN FDD handover: unknown target cell	Rel-8	C04a	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22			2Rx, 4Rx
5.2.8	E-UTRAN FDD - GSM handover: unknown target cell	Rel-8	C08a	UE supporting E-UTRA FDD and GSM and inter-RAT PS handover to GERAN and inter-RAT PS handover to GERAN and Feature Group Indicators 9 and 23			2Rx, 4Rx
5.2.9	E-UTRAN TDD - GSM handover: unknown target cell	Rel-8	C09b	UE supporting E-UTRA TDD and GSM and Feature Group Indicators 9 and 23			2Rx, 4Rx
5.2.10	E-UTRAN TDD - UTRAN TDD handover: unknown target cell	Rel-8	C05a	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 8 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
5.2.11	E-UTRAN FDD - UTRAN FDD handover for 5MHz Bandwidth	Rel-8	C54	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand UTRA FDD and Feature Group Indicators 8 and 22			
5.3.1	E-UTRAN FDD - HRPD Handover	Rel-8	C10a	UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26			2Rx, 4Rx
5.3.2	E-UTRAN FDD - cdma2000 1xRTT handover	Rel-8	C11a	UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
5.3.3	E-UTRAN FDD - HRPD handover: unknown target cell	Rel-8	C10a	UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26			2Rx, 4Rx
5.3.4	E-UTRAN FDD - cdma2000 1xRTT handover: unknown target cell	Rel-8	C11a	UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24			2Rx, 4Rx
5.3.5	E-UTRAN TDD-HRPD Handover	Rel-9	C36	UE supporting E-UTRA TDD and cdma2000 HRPD and Feature Group Indicators 12 and 26.			2Rx, 4Rx
5.3.6	E-UTRAN TDD-cdma2000 1X Handover	Rel-9	C37	UE supporting E-UTRA TDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24.			2Rx, 4Rx
RRC Connection Mobility Control							
6.1.1	E-UTRAN FDD Intra-frequency RRC Re-establishment	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
6.1.1_2	E-UTRAN FDD Intra-frequency RRC Re-establishment for UE Category 1bis	Rel-13	C01m	UE supporting E-UTRA FDD and UE Category 1bis			
6.1.2	E-UTRAN FDD Inter-frequency RRC Re-establishment	Rel-8	C01b	UE supporting E-UTRA FDD and Feature Group Indicator 25			2Rx, 4Rx
6.1.2_2	E-UTRAN FDD Inter-frequency RRC Re-establishment for UE Category 1bis	Rel-13	C01n	UE supporting E-UTRA FDD and Feature Group Indicator 25 and UE Category 1bis			
6.1.3	E-UTRAN TDD Intra-frequency RRC Re-establishment	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
6.1.3_2	E-UTRAN TDD Intra-frequency RRC Re-establishment for UE Category 1bis	Rel-13	C02m	UE supporting E-UTRA TDD and UE Category 1bis			
6.1.4	E-UTRAN TDD Inter-frequency RRC Re-establishment	Rel-8	C02b	UE supporting E-UTRA TDD and Feature Group Indicator 25			2Rx, 4Rx
6.1.4_2	E-UTRAN TDD Inter-frequency RRC Re-establishment for UE Category 1bis	Rel-13	C02n	UE supporting E-UTRA TDD and Feature Group Indicator 25 and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.1.5	E-UTRAN FDD Intra-frequency RRC Re-establishment for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
6.1.6	E-UTRAN FD-FDD Intra-frequency RRC Re-establishment for UE category 0	Rel-12	C94	UE supporting E-UTRA FD-FDD and UE Category 0			
6.1.7	E-UTRAN HD-FDD Intra-frequency RRC Re-establishment for UE category 0	Rel-12	C107	UE supporting E-UTRA HD-FDD and UE Category 0			
6.1.8	E-UTRAN TDD Intra-frequency RRC Re-establishment for UE category 0	Rel-12	C93	UE supporting E-UTRA TDD and UE Category 0			
6.1.9	E-UTRAN FD-FDD Intra-frequency RRC Re-establishment for CE UE in CEModeA	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
6.1.10	E-UTRAN HD-FDD Intra-frequency RRC Re-establishment for CE UE in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
6.1.11	E-UTRAN TDD Intra-frequency RRC Re-establishment for CE UE in CEModeA	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
6.1.12	E-UTRAN FD-FDD Intra-frequency RRC Re-establishment for UE in CEModeB	Rel-13	C94e	UE supporting E-UTRA FD-FDD and CEModeB			
6.1.13	E-UTRAN HD-FDD Intra-frequency RRC Re-establishment for UE in CEModeB	Rel-13	C94f	UE supporting E-UTRA HD-FDD and CEModeB			
6.1.14	E-UTRAN TDD Intra-frequency RRC Re-establishment for UE in CEModeB	Rel-13	C93e	UE supporting E-UTRA TDD and CEModeB			
6.1.15	HD-FDD Intra-frequency RRC Re-establishment for category NB1 UE in In-Band mode under normal coverage	Rel-13	C162	UE supporting NB-IoT HD-FDD and User plane CIoT			
6.1.16	HD-FDD Inter-frequency RRC Re-establishment for category NB1 UE in In-Band mode under Enhanced Coverage	Rel-13	C162	UE supporting NB-IoT HD-FDD and User plane CIoT			
6.1.18	E-UTRAN HD-FDD Inter-frequency RRC Re-establishment for CE UE in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.1.23	E-UTRAN TDD Inter-frequency RRC Re-establishment for UE category NB1 in In-Band mode under normal coverage	Rel-15	C234	UE supporting NB-IoT TDD and User plane CIoT			
6.1.24	E-UTRAN TDD - TDD Intra-frequency RRC Re-establishment for UE category NB1 in In-Band mode under enhanced coverage	Rel-15	C234	UE supporting NB-IoT TDD and User plane CIoT			
6.2.1	E-UTRAN FDD - Contention Based Random Access Test	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
6.2.1_2	E-UTRAN FDD - Contention Based Random Access Test for UE Category 1bis	Rel-8	C01m	UE supporting E-UTRA FDD and UE Category 1bis			
6.2.2	E-UTRAN FDD - Non-Contention Based Random Access Test	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
6.2.2_2	E-UTRAN FDD - Non-Contention Based Random Access Test for UE Category 1bis	Rel-8	C01m	UE supporting E-UTRA FDD and UE Category 1bis			
6.2.3	E-UTRAN TDD - Contention Based Random Access Test	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
6.2.3_2	E-UTRAN TDD - Contention Based Random Access Test for UE Category 1bis	Rel-8	C02m	UE supporting E-UTRA TDD and UE Category 1bis			
6.2.4	E-UTRAN TDD - Non-Contention Based Random Access Test	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
6.2.4_2	E-UTRAN TDD - Non-Contention Based Random Access Test for UE Category 1bis	Rel-8	C02m	UE supporting E-UTRA TDD and UE Category 1bis			
6.2.5	E-UTRAN FDD - Contention Based Random Access Test for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			2Rx, 4Rx
6.2.6	E-UTRAN FDD - Non-Contention Based Random Access Test for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			2Rx, 4Rx
6.2.7	E-UTRAN FDD - Non-Contention Based Random Access Test For SCell in sTAG	Rel-12	C61	UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.2.8	E-UTRAN TDD - Non-Contention Based Random Access Test For SCell in sTAG	Rel-12	C62	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances			2Rx, 4Rx
6.2.9	3DL/3UL TDD CA Non-Contention Based Random Access Test for 2 SCells	Rel-13	C230	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances			2Rx, 4Rx
6.2.10	E-UTRAN FDD Contention Based Random Access Test for CE UEs in Normal Coverage	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
6.2.11	E-UTRAN HD-FDD Contention Based Random Access Test for CE UEs in Normal Coverage	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
6.2.12	E-UTRAN TDD Contention Based Random Access Test for CE UEs in Normal Coverage	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
6.2.13	E-UTRAN FDD - Contention Based Random Access Test for CE UEs in Enhanced Coverage	Rel-13	C94e	U supporting E-UTRA FD-FDD andCEModeB			
6.2.14	E-UTRAN HD-FDD - Contention Based Random Access Test for CE UEs in Enhanced Coverage	Rel-13	C94f	UE supporting E-UTRA HD-FDD andCEModeB			
6.2.15	E-UTRAN TDD - Contention Based Random Access Test for CE UEs in Enhanced Coverage	Rel-13	C93e	UE supporting E-UTRA TDD andCEModeB			
6.2.16	Contention Based Random Access Test for UE category NB1 UEs In-band mode in normal coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
6.2.17	Contention Based Random Access Test for UE category NB1 UEs In-band mode in Enhanced Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
6.2.18	Contention Based Random Access on Non-anchor Carrier Test for UE category NB1 UEs In-band mode in Enhanced Coverage	Rel-14	C219	UE supporting category NB1 and supporting NPRACH on non-anchor carrier			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.2.19	TDD Contention Based Random Access Test for UE category NB1 UEs In-band mode in normal coverage	Rel-15	C235	UE supporting NB-IoT TDD			
6.2.20	TDD Contention Based Random Access Test for UE category NB1 UEs In-band mode in enhanced coverage	Rel-15	C235	UE supporting NB-IoT TDD			
6.2.21	TDD Contention Based Random Access on Non-anchor Carrier Test for UE category NB1 UEs In-band mode in Enhanced Coverage	Rel-15	C235	UE supporting NB-IoT TDD			
6.3.1	Redirection from E-UTRAN FDD to UTRAN FDD	Rel-9	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
6.3.1_2	Redirection from E-UTRAN FDD to UTRAN FDD for UE Category 1bis	Rel-13	C04h	UE supporting E-UTRA FDD and UTRA FDD and UE Category 1bis			
6.3.2	Redirection from E-UTRAN TDD to UTRAN FDD	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD			2Rx, 4Rx
6.3.2_2	Redirection from E-UTRAN TDD to UTRAN FDD for UE Category 1bis	Rel-13	C07d	UE supporting E-UTRA TDD and UTRA FDD and UE Category 1bis			
6.3.3	Redirection from E-UTRAN FDD to GERAN when System Information is provided	Rel-9	C27	UE supporting E-UTRA FDD and GERAN			2Rx, 4Rx
6.3.3_2	Redirection from E-UTRAN FDD to GERAN when System Information is provided for UE Category 1bis	Rel-13	C27a	UE supporting E-UTRA FDD and GERAN and UE Category 1bis			
6.3.4	Redirection from E-UTRAN TDD to GERAN when System Information is provided	Rel-9	C28	UE supporting E-UTRA TDD and GERAN			2Rx, 4Rx
6.3.4_2	Redirection from E-UTRAN TDD to GERAN when System Information is provided for UE Category 1bis	Rel-13	C28a	UE supporting E-UTRA TDD and GERAN and UE Category 1bis			
6.3.5	E-UTRA TDD RRC connection release redirection to UTRA TDD	Rel-9	C26	UE supporting E-UTRA TDD and UTRA TDD			2Rx, 4Rx
6.3.5_2	E-UTRA TDD RRC connection release redirection to UTRA TDD for UE Category 1bis	Rel-13	C26a	UE supporting E-UTRA TDD and UTRA TDD and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.3.6	E-UTRA FDD RRC connection release redirection to UTRA TDD	Rel-9	C25	UE supporting E-UTRA FDD and UTRA TDD			2Rx, 4Rx
6.3.6_2	E-UTRA FDD RRC connection release redirection to UTRA TDD for UE Category 1bis	Rel-13	C25a	UE supporting E-UTRA FDD and UTRA TDD and UE Category 1bis			
6.3.7	E-UTRA TDD RRC connection release redirection to UTRA TDD without SI provided	Rel-9	C26	UE supporting E-UTRA TDD and UTRA TDD			2Rx, 4Rx
6.3.7_2	E-UTRA TDD RRC connection release redirection to UTRA TDD without SI provided for UE Category 1bis	Rel-13	C26a	UE supporting E-UTRA TDD and UTRA TDD and UE Category 1bis			
6.3.8	E-UTRA FDD RRC connection release redirection to UTRA TDD without SI provided	Rel-9	C25	UE supporting E-UTRA FDD and UTRA TDD			2Rx, 4Rx
6.3.8_2	E-UTRA FDD RRC connection release redirection to UTRA TDD without SI provided for UE Category 1bis	Rel-13	C25a	UE supporting E-UTRA FDD and UTRA TDD and UE Category 1bis			
6.3.9	Redirection from E-UTRAN FDD to UTRAN FDD without System Information	Rel-9	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
6.3.9_2	Redirection from E-UTRAN FDD to UTRAN FDD without System Information for UE Category 1bis	Rel-13	C04h	UE supporting E-UTRA FDD and UTRA FDD and UE Category 1bis			
6.3.10	Redirection from E-UTRAN FDD to GERAN when System Information is not provided	Rel-9	C27	UE supporting E-UTRA FDD and GERAN			2Rx, 4Rx
6.3.10_2	Redirection from E-UTRAN FDD to GERAN when System Information is not provided for UE Category 1bis	Rel-13	C27a	UE supporting E-UTRA FDD and GERAN and UE Category 1bis			
6.3.11	Redirection from E-UTRAN TDD to GERAN when System Information is not provided	Rel-9	C28	UE supporting E-UTRA TDD and GERAN			2Rx, 4Rx
6.3.11_2	Redirection from E-UTRAN TDD to GERAN when System Information is not provided for UE Category 1bis	Rel-13	C28a	UE supporting E-UTRA TDD and GERAN and UE Category 1bis			
6.3.12	E-UTRAN TDD RRC connection release redirection to UTRAN FDD without SI provided	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
6.3.12_2	E-UTRAN TDD RRC connection release redirection to UTRAN FDD without SI provided for UE Category 1bis	Rel-13	C07d	UE supporting E-UTRA TDD and UTRA FDD and UE Category 1bis			
Timing and Signalling Characteristics							
7.1.1	E-UTRAN FDD - UE Transmit Timing Accuracy	Rel-8	C01c	UE supporting E-UTRA FDD and Feature Group Indicator 5			2Rx, 4Rx
7.1.1_1	E-UTRAN FDD - UE Transmit Timing Accuracy (Non DRx UE)	Rel-8 only	C23	UE supporting E-UTRA FDD but not supporting Feature Group Indicator 5			
7.1.1_2	E-UTRAN FDD - UE Transmit Timing Accuracy for UE category 1bis	Rel-13	C214	UE supporting E-UTRA FDD and Feature Group Indicator 5 and UE Category 1bis			
7.1.2	E-UTRAN TDD - UE Transmit Timing Accuracy	Rel-8	C02c	UE supporting E-UTRA TDD and Feature Group Indicator 5			2Rx, 4Rx
7.1.2_1	E-UTRAN TDD - UE Transmit Timing Accuracy (Non DRx UE)	Rel-8 only	C24	UE supporting E-UTRA TDD but not supporting Feature Group Indicator 5			
7.1.2_2	E-UTRAN TDD - UE Transmit Timing Accuracy for UE category 1bis	Rel-13	C207	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
7.1.3	E-UTRAN FDD - UE Transmit Timing Accuracy Tests for SCell	Rel-11	C57	UE supporting E-UTRA FDD and Uplink Carrier Aggregation and Feature Group Indicator 5			
7.1.3_1	E-UTRAN FDD - UE Transmit Timing Accuracy Tests for SCell (Release 12 and forward)	Rel-12	C57	UE supporting E-UTRA FDD and Uplink Carrier Aggregation and Feature Group Indicator 5			
7.1.4	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell	Rel-11	C58	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5	Either TC 7.1.4 or TC 7.1.4A shall be executed. (Note 1)		
7.1.4A	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell for 20 MHz +10 MHz bandwidth	Rel-11	C58a	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5	Either TC 7.1.4 or TC 7.1.4A shall be executed. (Note 1)		

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.1.4_1	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell (Release 12 and forward)	Rel-12	C58	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5			
7.1.5	E-UTRAN FDD - UE Transmit Timing Accuracy Tests for 5MHz Bandwidth	Rel-8	C56	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand Feature Group Indicator 5			
7.1.6	E-UTRAN FDD - UE Transmit Timing Accuracy Tests for SCell in sTAG	Rel-11	C63	UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances and Feature Group Indicator 5			
7.1.7	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell in sTAG	Rel-11	C64	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5	Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1)		
7.1.7A	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell in sTAG for 20MHz +20MHz bandwidth	Rel-11	C64a	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5	Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1)		
7.1.7B	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for SCell in sTAG for 20MHz +10MHz bandwidth	Rel-11	C64b	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5	Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1)		
7.1.10	E-UTRAN FDD - UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeA	Rel-13	C94b	UE supporting E-UTRA FD-FDD and UE Category M1 and Feature Group Indicator 5			
7.1.11	E-UTRAN HD-FDD - UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeA	Rel-13	C107c	UE supporting E-UTRA HD-FDD and UE Category M1 and Feature Group Indicator 5			
7.1.12	E-UTRAN TDD – UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeA	Rel-13	C93c	UE supporting E-UTRA TDD and UE Category M1 and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.1.13	3DL/3UL TDD CA UE Transmit Timing Accuracy Tests for 2 SCells	Rel-13	C231	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5			2Rx, 4Rx
7.1.14	E-UTRAN FDD – UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeB	Rel-13	C94h	UE supporting E-UTRA FD-FDD and (UE category M1 and CE Mode B) and Feature Group Indicator 5			
7.1.15	E-UTRAN HD-FDD – UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeB	Rel-13	C94i	UE supporting E-UTRA HD-FDD and (UE category M1 and CE Mode B) and Feature Group Indicator 5			
7.1.16	E-UTRAN TDD – UE Transmit Timing Accuracy Tests for Cat-M1 UE in CEModeB	Rel-13	C93k	UE supporting E-UTRA TDD and (UE category M1 and CE Mode B) and Feature Group Indicator 5			
7.1.17	HD-FDD Transmit Timing Accuracy Test for Category NB1 UE In-Band mode under Normal Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.1.18	HD-FDD Transmit Timing Accuracy Test for Category NB1 UE In-band mode under Enhanced Coverage	Rel-13	C155	UE supporting NB-IoT HD-FDD and Feature Group Indicator 5			
7.1.21	E-UTRAN FDD – UE Transmit Timing Accuracy Tests for CE UE in CEModeA	Rel-14	C94d	UE supporting E-UTRA FD-FDD and CEModeA and Feature Group Indicator 5			
7.1.22	E-UTRAN HD-FDD – UE Transmit Timing Accuracy Tests for CE UE in CEModeA	Rel-14	C107b	UE supporting E-UTRA HD-FDD and CEModeA and Feature Group Indicator 5			
7.1.23	E-UTRAN TDD - UE Transmit Timing Accuracy Tests for CE UE in CEModeA	Rel-14	C93h	UE supporting E-UTRA TDD and CEModeA and Feature Group Indicator 5			
7.1.24	E-UTRAN FDD – UE Transmit Timing Accuracy Tests for CE UE in CEModeB	Rel-14	C94k	UE supporting E-UTRA FD-FDD and CEModeB and Feature Group Indicator 5			
7.1.27	E-UTRAN TDD – UE Transmit Timing Accuracy Tests for Category NB1 UE In-Band mode under normal coverage	Rel-15	C235	UE supporting NB-IoT TDD			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.1.28	E-UTRAN TDD – UE Transmit Timing Accuracy Tests for Category NB1 UE In-band mode under enhanced coverage	Rel-15	C235	UE supporting NB-IoT TDD			
7.2.1	E-UTRAN FDD - UE Timing Advance Adjustment Accuracy	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
7.2.1_2	E-UTRAN FDD - UE Timing Advance Adjustment Accuracy for UE category 1bis	Rel-13	C194	UE supporting E-UTRA FDD and UE Category 1bis			
7.2.2	E-UTRAN TDD - UE Timing Advance Adjustment Accuracy	Rel-8	C02	UE supporting E-UTRA TDD			2Rx, 4Rx
7.2.2_2	E-UTRAN TDD - UE Timing Advance Adjustment Accuracy for UE category 1bis	Rel-13	C195	UE supporting E-UTRA TDD and UE Category 1bis			
7.2.3	E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
7.2.4	E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG	Rel-12	C61	UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances			
7.2.5	E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG	Rel-11	C62	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances	Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1)		
7.2.5A	E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test for SCell in sTAG for 20MHz +20MHz bandwidth	Rel-11	C62a	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances	Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1)		
7.2.5B	E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test for SCell in sTAG for 20MHz +10MHz bandwidth	Rel-11	C62b	UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances	Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1)		
7.2.6	E-UTRAN FDD Timing Advance Adjustment Accuracy Test for CE UE in CEModeA	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.2.7	E-UTRAN HD-FDD UE Timing Advance Adjustment Accuracy Test for CE UE in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
7.2.8	E-UTRAN TDD Timing Advance Adjustment Accuracy Test for CE UE in CEModeA	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
7.2.9	HD-FDD UE Timing Advance Adjustment Accuracy Test for Category NB1 UE in Standalone Mode under Enhance Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.2.10	E-UTRAN FDD UE Timing Advance Adjustment Accuracy Test in CEModeB	Rel-13	C94e	U supporting E-UTRA FD-FDD and CEModeB			
7.2.11	E-UTRAN HD-FDD UE Timing Advance Adjustment Accuracy Test in CEModeB	Rel-13	C94f	UE supporting E-UTRA HD-FDD and CEModeB			
7.2.12	E-UTRAN TDD UE Timing Advance Adjustment Accuracy Test in CEModeB	Rel-13	C93e	UE supporting E-UTRA TDD and CEModeB			
7.2.15	E-UTRAN TDD – TDD UE Timing Advance Adjustment Accuracy Test for UE Category NB1 in Standalone Mode under Enhanced Coverage	Rel-15	C235	UE supporting NB-IoT TDD			
7.3.1	E-UTRAN FDD Radio Link Monitoring Test for Out-of-Sync	Rel-8	C01i	UE supporting E-UTRA FDD but not 4Rx antenna ports on all supported FDD operating bands			
7.3.1_1	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync with 4 Rx antenna ports	Rel-10	C140	UE supporting E-UTRA FDD and 4Rx antenna ports on all supported FDD operating bands			
7.3.2	E-UTRAN FDD Radio Link Monitoring Test for In-Sync	Rel-8	C01i	UE supporting E-UTRA FDD but not 4Rx antenna ports on all supported FDD operating bands			
7.3.2_1	E-UTRAN FDD Radio Link Monitoring Test for In-Sync with 4 Rx antenna ports	Rel-10	C140	UE supporting E-UTRA FDD and 4Rx antenna ports on all supported FDD operating bands			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.3	E-UTRAN TDD Radio Link Monitoring Test for Out-of-Sync	Rel-8	C02a	UE supporting E-UTRA TDD but not 4Rx antenna ports on all supported TDD operating bands			
7.3.3_1	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync with 4 Rx antenna ports	Rel-10	C143	UE supporting E-UTRA TDD and 4Rx antenna ports on all supported TDD operating bands			
7.3.4	E-UTRAN TDD Radio Link Monitoring Test for In-Sync	Rel-8	C02i	UE supporting E-UTRA TDD but not 4Rx antenna ports on all supported TDD operating bands			
7.3.4_1	E-UTRAN TDD Radio Link Monitoring Test for In-sync with 4 Rx antenna ports	Rel-10	C143	UE supporting E-UTRA TDD and 4Rx antenna ports on all supported TDD operating bands			
7.3.5	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync in DRX	Rel-8	C01j	UE supporting E-UTRA FDD but not 4Rx antenna ports on all supported FDD operating bands and Feature Group Indicator 5			
7.3.5_1	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync in DRX with 4 Rx antenna ports	Rel-10	C181	UE supporting E-UTRA FDD and Feature Group Indicator 5 and 4Rx antenna ports on all supported FDD operating bands			
7.3.6	E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX	Rel-8	C01j	UE supporting E-UTRA FDD but not 4Rx antenna ports on all supported FDD operating bands and Feature Group Indicator 5			
7.3.6_1	E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX with 4 Rx antenna ports	Rel-10	C181	UE supporting E-UTRA FDD and 4Rx antenna ports on all supported FDD operating bands and Feature Group Indicator 5			
7.3.7	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX	Rel-8	C02j	UE supporting E-UTRA TDD but not 4Rx antenna ports on all supported TDD operating bands and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.7_1	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX with 4 Rx antenna ports	Rel-10	C182	UE supporting E-UTRA TDD and 4Rx antenna ports on all supported TDD operating bands and Feature Group Indicator 5			
7.3.8	E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX	Rel-8	C02j	UE supporting E-UTRA TDD but not 4Rx antenna ports on all supported TDD operating bands and Feature Group Indicator 5			
7.3.8_1	E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX with 4 Rx antenna ports	Rel-10	C182	UE supporting E-UTRA TDD and 4Rx antenna ports on all supported TDD operating bands and Feature Group Indicator 5			
7.3.9	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
7.3.10	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
7.3.11	E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
7.3.12	E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
7.3.13	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.14	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
7.3.15	E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
7.3.16	E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
7.3.17	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
7.3.18	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non MBSFN ABS (feICIC)	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			
7.3.19	E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non-MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
7.3.20	E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non-MBSFN ABS (feICIC)	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.21	E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
7.3.22	E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (feICIC)	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			
7.3.23	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
7.3.23_1	E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync for 5MHz Bandwidth with 4Rx antenna ports	Rel-10	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
7.3.24	E-UTRAN FDD Radio Link Monitoring Test for In-sync for 5MHz Bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			
7.3.25	E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX for 5MHz Bandwidth	Rel-8	C56	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand Feature Group Indicator 5			
7.3.26	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync for UE category 0	Rel-12	C94	UE supporting E-UTRA FD-FDD and UE Category 0			
7.3.26_2	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync for UE Category 1bis	Rel-13	C194	UE supporting E-UTRA FD-FDD and UE Category 1bis			
7.3.27	E-UTRAN FD-FDD Radio Link Monitoring Test for In-sync for UE category 0	Rel-12	C94	UE supporting E-UTRA FD-FDD and UE Category 0			
7.3.27_2	E-UTRAN FD-FDD Radio Link Monitoring Test for In-sync for UE Category 1bis	Rel-13	C194	UE supporting E-UTRA FD-FDD and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.28	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category 0	Rel-12	C95	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0			
7.3.28_2	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for UE Category 1bis	Rel-13	C214	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 1bis			
7.3.29	E-UTRAN FD-FDD Radio Link Monitoring Test for In-sync in DRX for UE category 0	Rel-12	C95	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0			
7.3.29_2	E-UTRAN FD-FDD Radio Link Monitoring Test for In-sync in DRX for UE Category 1bis	Rel-13	C214	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 1bis			
7.3.30	E-UTRAN HD-FDD Radio Link Monitoring Test for Out-of-sync for UE category 0	Rel-12	C110	UE supporting E-UTRA HD-FDD and UE Category 0			
7.3.31	E-UTRAN HD-FDD Radio Link Monitoring Test for In-sync for UE category 0	Rel-12	C110	UE supporting E-UTRA HD-FDD and UE Category 0			
7.3.32	E-UTRAN HD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category 0	Rel-12	C111	UE supporting E-UTRA HD-FDD and Feature Group Indicator 5 and UE Category 0			
7.3.33	E-UTRAN HD-FDD Radio Link Monitoring Test for In-sync in DRX for UE category 0	Rel-12	C111	UE supporting E-UTRA HD-FDD and Feature Group Indicator 5 and UE Category 0			
7.3.34	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync for UE category 0	Rel-12	C93	UE supporting E-UTRA TDD and UE Category 0			
7.3.34_2	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync for UE Category 1bis	Rel-13	C195	UE supporting E-UTRA TDD and UE Category 1bis			
7.3.35	E-UTRAN TDD Radio Link Monitoring Test for In-sync for UE category 0	Rel-12	C93	UE supporting E-UTRA TDD and UE Category 0			
7.3.35_2	E-UTRAN TDD Radio Link Monitoring Test for In-sync for UE Category 1bis	Rel-13	C195	UE supporting E-UTRA TDD and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.36	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category 0	Rel-12	C96	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0			
7.3.36_2	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX for UE Category 1bis	Rel-13	C215	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
7.3.37	E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX for UE category 0	Rel-12	C96	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0			
7.3.37_2	E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX for UE Category 1bis	Rel-13	C215	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
7.3.38	E-UTRAN FDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in synchronous DC	Rel-12	C123b	UE supporting E-UTRA FDD and Dual Connectivity but not 4Rx antenna ports on all supported FDD operating bands			
7.3.38_1	E-UTRAN FDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in synchronous DC with 4 Rx antenna ports	Rel-12	C185	UE supporting E-UTRA FDD and Dual Connectivity and 4Rx antenna ports on all supported FDD operating bands			
7.3.39	E-UTRAN FDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in asynchronous DC	Rel-12	C125a	UE supporting E-UTRA FDD and asynchronous Dual Connectivity but not 4Rx antenna ports on all supported FDD operating bands			
7.3.39_1	E-UTRAN FDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in asynchronous DC with 4 Rx antenna ports	Rel-12	C186	UE supporting E-UTRA FDD and asynchronous Dual Connectivity and 4Rx antenna ports on all supported FDD operating bands			
7.3.40	E-UTRAN TDD-TDD DC Radio Link Monitoring Test for Out-of-sync in DRX in synchronous DC	Rel-12	C124	UE supporting E-UTRA TDD and Dual Connectivity			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.41	E-UTRAN FDD-FDD Radio Link Monitoring Test for In-sync in DRX in synchronous dual connectivity	Rel-12	C123	UE supporting E-UTRA FDD and Dual Connectivity			
7.3.42	E-UTRAN FDD-FDD DC Radio Link Monitoring Test for In-sync in DRX in asynchronous DC	Rel-12	C125	UE supporting E-UTRA FDD and asynchronous Dual Connectivity			
7.3.43	E-UTRAN TDD-TDD Radio Link Monitoring Test for In-sync in DRX in synchronous dual connectivity	Rel-12	C124	UE supporting E-UTRA TDD and Dual Connectivity			
7.3.44	E-UTRAN TDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in synchronous DC with PCell in FDD	Rel-12	C123a	UE supporting E-UTRA FDD and E-UTRA TDD and Dual Connectivity			
7.3.45	E-UTRAN TDD-FDD DC Radio Link Monitoring Test for Out-of-sync in DRX in synchronous DC with PCell in TDD	Rel-12	C123a	UE supporting E-UTRA FDD and E-UTRA TDD and Dual Connectivity			
7.3.46	E-UTRAN TDD-FDD Radio Link Monitoring Test for In-sync in DRX for PSCell in synchronous DC with PCell in FDD	Rel-12	C123a	UE supporting E-UTRA FDD and E-UTRA TDD and Dual Connectivity			
7.3.47	E-UTRAN TDD-FDD Radio Link Monitoring Test for In-sync in DRX for PSCell in synchronous DC with PCell in TDD	Rel-12	C123a	UE supporting E-UTRA FDD and E-UTRA TDD and Dual Connectivity			
7.3.48	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync for CE UE in CEMode A	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
7.3.49	E-UTRAN FD-FDD Radio Link Monitoring Test for In-Sync for CE UE in CEMode A	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
7.3.50	E-UTRAN FD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for CE UE configured in CEMode A	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
7.3.51	E-UTRAN FD-FDD Radio Link Monitoring Test for In-sync in DRX for CE UE configured in CEMode A	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
7.3.52	E-UTRAN HD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for CE UE	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.53	E-UTRAN HD-FDD Radio Link Monitoring Test for In-sync for CE UE category	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
7.3.54	E-UTRAN HD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for CE UE configured in CEMode A	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
7.3.55	E-UTRAN HD-FDD Radio Link Monitoring Test for In-sync in DRX for CE UE configured in CEMode A	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
7.3.56	E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync for CE UE in CEMode A	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
7.3.57	E-UTRAN TDD Radio Link Monitoring Test for In-Sync for CE UE in CEMode A	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
7.3.58	E- UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX for CE UE configured in CEMode A	Rel-13	C93c	UE supporting E-UTRA TDD and CEModeA and Feature Group Indicator 5			
7.3.59	E- UTRAN TDD Radio Link Monitoring Test for In-sync in DRX for CE UE configured in CEMode A	Rel-13	C93c	UE supporting E-UTRA TDD and CEModeA and Feature Group Indicator 5			
7.3.60	HD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category NB1 In-band mode in normal coverag	Rel-13	C155	UE supporting NB-IoT HD-FDD and Feature Group Indicators 5			
7.3.61	HD-FDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category NB1 In-band mode in Enhanced Coverage	Rel-13	C155	UE supporting NB-IoT HD-FDD and Feature Group Indicators 5			
7.3.62	HD-FDD Radio Link Monitoring Test for In-sync with DRX for UE Category NB1 In-Band mode in Enhanced Coverage	Rel-13	C155	UE supporting NB-IoT HD-FDD and Feature Group Indicators 5			
7.3.63	HD-FDD Radio Link Monitoring Test for In-sync with DRX for UE Category NB1 In-Band mode in Normal Coverage	Rel-13	C155	UE supporting NB-IoT HD-FDD and Feature Group Indicators 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.64	HD-FDD Radio Link Monitoring Test for In-sync without DRX for UE Category NB1 In-Band mode in Normal Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.3.65	HD-FDD Radio Link Monitoring Test for In-sync without DRX for UE Category NB1 In-Band mode in Enhanced Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.3.66	HD-FDD Radio Link Monitoring Test for Out-of-sync without DRX for UE Category NB1 Standalone mode in Normal Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.3.67	HD-FDD Radio Link Monitoring Test for Out-of-sync without DRX for UE Category NB1 guard band mode in Enhanced Coverage	Rel-13	C154	UE supporting NB-IoT HD-FDD			
7.3.69	E-UTRAN HD-FDD Early Out-of-sync reporting Test for CE UE in CEMode A	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
7.3.88	TDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category NB1 In-band mode in normal coverage	Rel-15	C237	UE supporting NB-IoT TDD and Feature Group Indicators 5			
7.3.89	TDD Radio Link Monitoring Test for Out-of-sync in DRX for UE category NB1 In-band mode in enhanced coverage	Rel-15	C237	UE supporting NB-IoT TDD and Feature Group Indicators 5			
7.3.90	TDD Radio Link Monitoring Test for In-sync with DRX for UE Category NB1 In-Band mode in Normal Coverage	Rel-15	C237	UE supporting NB-IoT TDD and Feature Group Indicators 5			
7.3.91	TDD Radio Link Monitoring Test for In-sync with DRX for UE Category NB1 In-Band mode in Enhanced Coverage	Rel-15	C237	UE supporting NB-IoT TDD and Feature Group Indicators 5			
7.3.92	TDD Radio Link Monitoring Test for In-sync without DRX for UE Category NB1 In-Band mode in Normal Coverage	Rel-15	C235	UE supporting NB-IoT TDD			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
7.3.93	TDD Radio Link Monitoring Test for In-sync without DRX for UE Category NB1 In-Band mode in Enhanced Coverage	Rel-15	C235	UE supporting NB-IoT TDD			
7.3.94	TDD Radio Link Monitoring Test for Out-of-sync without DRX for UE Category NB1 Standalone mode in Normal Coverage	Rel-15	C235	UE supporting NB-IoT TDD			
7.3.95	TDD Radio Link Monitoring Test for Out-of-sync without DRX for UE Category NB1 guard band mode in Enhanced Coverage	Rel-15	C235	UE supporting NB-IoT TDD			
7.4.1	E-UTRAN FDD-FDD DC interruption at transitions between active and non-active during DRX in synchronous DC	Rel-12	C175	UE supporting E-UTRA FDD, Dual Connectivity and Feature Group Indicator 5	It is not necessary for DC ASYNCH UEs to be tested in this test if 7.4.3 case is executed. (Note 2)		
7.4.2	E-UTRAN TDD-TDD DC interruption at transitions between active and non-active during DRX in synchronous DC	Rel-12	C136	UE supporting E-UTRA TDD, Dual Connectivity and Feature Group Indicator 5	It is not necessary for DC ASYNCH UEs to be tested in this test if 7.4.4 case is executed. (Note 2)		
7.4.3	E-UTRAN FDD-FDD Interruption at transitions between active and non-active during DRX in asynchronous dual connectivity	Rel-12	C135	UE supporting E-UTRA FDD, Dual Connectivity Asynch and Feature Group Indicator 5			
7.6.1	E-UTRAN FDD-TDD CA interruption at SRS carrier based switching	Rel-14	C200	UE supporting E-UTRA FDD and TDD CA with FDD as PCell and SRS switching between component carriers			
7.6.2	E-UTRAN TDD-TDD CA interruption at SRS carrier based switching	Rel-14	C201	UE supporting E-UTRA TDD CA and SRS switching between component carriers			
UE Measurements Procedures							

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.1	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells	Rel-8	C01	UE supporting E-UTRA FDD			2Rx, 4Rx
8.1.2	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-8	C01c	UE supporting E-UTRA FDD and Feature Group Indicator 5			2Rx, 4Rx
8.1.3	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX	Rel-8	C01c	UE supporting E-UTRA FDD and Feature Group Indicator 5			2Rx, 4Rx
8.1.4	Void						
8.1.5	E-UTRAN FDD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C13	UE supporting E-UTRA FDD and intra-frequency SI acquisition in FDD for HO			2Rx, 4Rx
8.1.6	E-UTRAN FDD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX	Rel-9	C13	UE supporting E-UTRA FDD and intra-frequency SI acquisition in FDD for HO			2Rx, 4Rx
8.1.7	E-UTRAN FDD-FDD Intra-Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
8.1.8	E-UTRAN FDD-FDD Intra-Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
8.1.9	E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in asynchronous cells for 5MHz bandwidth	Rel-8	C49	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_N			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.10	E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for 5MHz bandwidth	Rel-8	C56	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand Feature Group Indicator 5			
8.1.11	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 0	Rel-12	C94	UE supporting E-UTRA FD-FDD and UE Category 0			
8.1.11_1	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 1bis	Rel-13	C194	UE supporting E-UTRA FDD and UE Category 1bis			
8.1.11_2	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 1bis	Rel-13	C194	UE supporting E-UTRA FDD and UE Category 1bis			
8.1.12	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 0	Rel-12	C95	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0			
8.1.12_1	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C194a	UE supporting E-UTRA FDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.12_2	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C194a	UE supporting E-UTRA FDD and Feature Group Indicator 5 and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.13	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 0	Rel-12	C95	UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0			
8.1.13_1	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 1bis	Rel-13	C194a	UE supporting E-UTRA FDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.13_2	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 1bis	Rel-13	C194a	UE supporting E-UTRA FDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.14	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 0	Rel-12	C112	UE supporting E-UTRA HD-FDD and Feature Group Indicator 5 and UE Category 0			
8.1.15	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 0	Rel-12	C112	UE supporting E-UTRA HD-FDD and Feature Group Indicator 5 and UE Category 0			
8.1.16	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 0	Rel-12	C112	UE supporting E-UTRA HD-FDD and Feature Group Indicator 5 and UE Category 0			
8.1.17	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 0	Rel-12	C96	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.17_1	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.17_2	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.18	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 0	Rel-12	C96	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0			
8.1.18_1	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.18_2	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 1bis			
8.1.19	E-UTRAN FD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for UE category 0	Rel-12	C108	UE supporting E-UTRA FD-FDD, CSG and intra-frequency SI acquisition in FDD for HO and Category 0			
8.1.19_2	E-UTRAN FDD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for UE category 1bis	Rel13	C108a	UE supporting E-UTRA FDD-FDD, CSG and intra-frequency SI acquisition in FDD for HO and Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.20	E-UTRAN FDD – FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for UE category 0	Rel-12	C108	UE supporting E-UTRA FD-FDD, CSG and intra-frequency SI acquisition in FDD for HO and Category 0			
8.1.20_2	E-UTRAN FDD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for UE category 1bis	Rel-13	C108b	UE supporting E-UTRA FDD-FDD, CSG and intra-frequency SI acquisition in FDD for HO, Feature Group Indicator 5 and Category 1bis			
8.1.21	E-UTRAN HD - FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for UE category 0	Rel-12	C109	UE supporting E-UTRA HD-FDD, CSG and intra-frequency SI acquisition in FDD for HO and Category 0			
8.1.22	E-UTRAN HD- FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for UE category 0	Rel-12	C109	UE supporting E-UTRA HD-FDD, CSG and intra-frequency SI acquisition in FDD for HO and Category 0			
8.1.23	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
8.1.24	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA	Rel-13	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
8.1.25	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeA in DRX	Rel-13	C94d	UE supporting E-UTRA FD-FDD and CEModeA and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.26	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.1.27	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeA	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.1.28	E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeA in DRX	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.1.29	E-UTRAN TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeA	Rel-13	C93a	UE supporting E-UTRA TDD and CEModeA			
8.1.30	E-UTRAN TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeA in DRX	Rel-13	C93h	UE supporting E-UTRA TDD and CEModeA and Feature Group Indicator 5			
8.1.31	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeB	Rel-13	C94e	UE supporting E-UTRA FD-FDD and CEModeB			
8.1.32	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeB	Rel-13	C94e	UE supporting E-UTRA FD-FDD and CEModeB			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.33	E-UTRAN HD-FDD Intra-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeB	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.1.34	E-UTRAN HD-FDD Intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeB	Rel-13	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.1.35	E-UTRAN TDD Intra-frequency event triggered reporting under fading propagation conditions in synchronous cells for CE UE in CEModeB	Rel-13	C93e	UE supporting E-UTRA TDD and CEModeB			
8.1.36	E-UTRAN FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for CE UE in CEModeB	Rel-13	C94g	UE supporting E-UTRA FD-FDD and CEModeB and intra-frequency SI acquisition for HO			
8.1.37	E-UTRAN FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for CE UE in CEModeB	Rel-13	C94g	UE supporting E-UTRA FD-FDD and CEModeB and intra-frequency SI acquisition for HO			
8.1.38	E-UTRAN HD- FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for CE UE in CEModeB	Rel-13	FFS	FFS			
8.1.39	E-UTRAN HD-FDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for CE UE in CEModeB	Rel-13	FFS	FFS			
8.1.40	E-UTRAN FDD-FDD intra-frequency event triggered reporting for UE configured with highSpeedEnhancedMeasFlag in synchronous cells	Rel-14	C205	UE supporting E-UTRA FDD and highspeed measurement enhancement and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.1.41	E-UTRAN FDD intra-frequency event triggered reporting for serving cell under fading propagation conditions for CE UE in CEModeA without gap	Rel-14	C94a	UE supporting E-UTRA FD-FDD and CEModeA			
8.1.42	E-UTRAN HD-FDD intra-frequency event triggered reporting for serving cell under fading propagation conditions for CE UE in CEModeA without gap	Rel-14	C107a	UE supporting E-UTRA HD-FDD and CEModeA			
8.2.1	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-8	C02c	UE supporting E-UTRA TDD and Feature Group Indicator 5			2Rx, 4Rx
8.2.2	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX	Rel-8	C02c	UE supporting E-UTRA TDD and Feature Group Indicator 5			2Rx, 4Rx
8.2.3	E-UTRAN TDD - TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C15	UE supporting E-UTRA TDD and intra-frequency SI acquisition in TDD for HO.			2Rx, 4Rx
8.2.4	E-UTRAN TDD - TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX	Rel-9	C15	UE supporting E-UTRA TDD and intra-frequency SI acquisition in TDD for HO			2Rx, 4Rx
8.2.5	E-UTRAN TDD-TDD Intra-Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
8.2.6	E-UTRAN TDD-TDD Intra-Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.2.7	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for UE category 0	Rel-12	C113	UE supporting E-UTRA TDD, CSG. inter-frequency SI acquisition in TDD for HO and Feature Group Indicator 5 and UE Category 0			
8.2.7_2	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD, intra-frequency SI acquisition in TDD for HO and Feature Group Indicator 5 and UE Category 1bis			
8.2.8	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for UE category 0	Rel-12	C113	UE supporting E-UTRA TDD, CSG. inter-frequency SI acquisition in TDD for HO and Feature Group Indicator 5 and UE Category 0			
8.2.8_2	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for UE category 1bis	Rel-13	C195a	UE supporting E-UTRA TDD, intra-frequency SI acquisition in TDD for HO and Feature Group Indicator 5 and UE Category 1bis			
8.2.9	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps for CE UE in CEModeB	Rel-13	C93f	UE supporting E-UTRA TDD and CEModeB and intra-frequency SI acquisition for HO			
8.2.10	E-UTRAN TDD Intra-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX for CE UE in CEModeB	Rel-13	C93f	UE supporting E-UTRA TDD and CEModeB and intra-frequency SI acquisition for HO			
8.2.14	E-UTRAN TDD intra-frequency event triggered reporting for serving cell under fading propagation conditions for CE in CEModeA without gap	Rel-14	C93a	UE supporting E-UTRA TDD and CEModeA			
8.3.1	E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells	Rel-8	C01b	UE supporting E-UTRA FDD and Feature Group Indicator 25	It is not necessary for CA UEs to be tested in this test if 8.20.1 case is executed.		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.3.1_2	E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 1bis	Rel-13	C212	UE supporting E-UTRA FDD and Feature Group Indicator 25 and UE Category 1bis			
8.3.2	E-UTRAN FDD-FDD inter-frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells	Rel-8	C01e	UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25			2Rx, 4Rx
8.3.2_2	E-UTRAN FDD-FDD inter-frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells for UE category 1bis	Rel-13	C214	UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 and UE Category 1bis			
8.3.3	E-UTRAN FDD-FDD inter frequency event triggered reporting under AWGN propagation conditions in asynchronous cells with DRX when L3 filtering is used	Rel-8	C01e	UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25			2Rx, 4Rx
8.3.3_2	E-UTRAN FDD-FDD inter-frequency event triggered reporting under AWGN propagation conditions in asynchronous cells with DRX when L3 filtering is used for UE category 1bis	Rel-13	C194c	UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 and UE category 1bis			
8.3.4	E-UTRAN FDD - FDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C14	UE supporting E-UTRA FDD and inter-frequency SI acquisition in FDD for HO			2Rx, 4Rx
8.3.5	E-UTRAN FDD - FDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX	Rel-9	C14	UE supporting E-UTRA FDD and inter-frequency SI acquisition in FDD for HO			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.3.6	E-UTRAN FDD-FDD Inter-frequency event triggered reporting without measurement gaps under AWGN propagation conditions in asynchronous cells	Rel-10	C47	UE supporting E-UTRA FDD and Feature Group Indicator 25 and Measurement without gaps			2Rx, 4Rx
8.3.7	E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for Increased Carrier Monitoring without Reduced Performance Group	Rel-12	C01p	UE supporting E-UTRA FDD and Increased Carrier Monitoring E-UTRA and Feature Group Indicator 25			2Rx, 4Rx
8.3.8	FDD-FDD Inter-frequency correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C01p	UE supporting E-UTRA FDD and Increased Carrier Monitoring E-UTRA and Feature Group Indicator 25			2Rx, 4Rx
8.3.9	FDD-FDD Inter-frequency correct reporting of measurement events with reduced performance group configured, DRX	Rel-12	C01q	UE supporting E-UTRA FDD and Increased Carrier Monitoring E-UTRA and Feature Group Indicator 5 and 25			2Rx, 4Rx
8.3.12	E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeA	Rel-14	FFS	FFS			
8.3.13	E-UTRAN HD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeA	Rel-14	FFS	FFS			
8.3.14	E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeB	Rel-14	FFS	FFS			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.3.15	E-UTRAN HD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeB	Rel-14	FFS	FFS			
8.3.16	E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA when DRX is used	Rel-14	FFS	FFS			
8.3.17	E-UTRAN HD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA in DRX	Rel-14	FFS	FFS			
8.3.18	E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category M1 in CEModeB in DRX	Rel-14	FFS	FFS			
8.3.19	E-UTRAN HD-FDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeB in DRX	Rel-14	FFS	FFS			
8.4.1	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-8	C02b	UE supporting E-UTRA TDD and Feature Group Indicator 25	It is not necessary for CA UEs to be tested in this test if 8.20.2 case is executed.		2Rx, 4Rx
8.4.1_2	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C213	UE supporting E-UTRA TDD and Feature Group Indicator 25 and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.4.2	E-UTRAN TDD-TDD inter-frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells	Rel-8	C02e	UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25			2Rx, 4Rx
8.4.2_2	E-UTRAN TDD-TDD inter-frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells for UE category 1bis	Rel-13	C215	UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 and UE Category 1bis			
8.4.3	E-UTRAN TDD-TDD inter-frequency event triggered reporting under AWGN propagation conditions in synchronous cells with DRX when L3 filtering is used	Rel-8	C02e	UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25			2Rx, 4Rx
8.4.3_2	E-UTRAN TDD-TDD inter-frequency event triggered reporting under AWGN propagation conditions in synchronous cells with DRX when L3 filtering is used for UE category 1bis	Rel-13	C195c	UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 and UE category 1bis			
8.4.4	E-UTRAN TDD - TDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C16	UE supporting E-UTRA TDD and inter-frequency SI acquisition in TDD for HO			2Rx, 4Rx
8.4.5	E-UTRAN TDD - TDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX	Rel-9	C16	UE supporting E-UTRA TDD and inter-frequency SI acquisition in TDD for HO			2Rx, 4Rx
8.4.6	E-UTRAN TDD-TDD Inter-frequency event triggered reporting for TDD UL/DL configuration 0	Rel-12	C02b	UE supporting E-UTRA TDD and Feature Group Indicator 25			2Rx, 4Rx
8.4.6_2	E-UTRAN TDD-TDD Inter-frequency event triggered reporting for TDD UL/DL configuration 0 for UE category 1bis	Rel-13	C213	UE supporting E-UTRA TDD and Feature Group Indicator 25 and UE Category 1bis			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.4.7	E-UTRAN TDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for Increased Carrier Monitoring without Reduced Performance Group	Rel-12	C01o	UE supporting E-UTRA TDD and Increased Carrier Monitoring and Feature Group Indicator 25			2Rx, 4Rx
8.4.8	TDD-TDD Interfrequency correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C01o	E supporting E-UTRA TDD and Increased Carrier Monitoring E-UTRA and Feature Group Indicator 25			2Rx, 4Rx
8.4.9	TDD-TDD Inter-frequency correct reporting of measurement events with reduced performance group configured, DRX	Rel-12	C01r	E supporting E-UTRA TDD and Increased Carrier Monitoring E-UTRA and Feature Group Indicator 5 and 25			2Rx, 4Rx
8.4.12	E-UTRAN TDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeA	Rel-14	FFS	FFS			
8.4.13	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE with discontinuous MPDCCH monitoring in CEModeB	Rel-14	FFS	FFS			
8.4.14	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeA in DRX	Rel-14	FFS	FFS			
8.4.15	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells for CE UE in CEModeB in DRX	Rel-14	FFS	FFS			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.5.1	E-UTRAN FDD-UTRAN FDD event triggered reporting under fading propagation conditions	Rel-8	C04g	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 15 and 22	It is not necessary for CA UEs to be tested in this test if 8.20.3 case is executed.		2Rx, 4Rx
8.5.2	E-UTRAN FDD-UTRAN FDD SON ANR cell search reporting under AWGN propagation conditions	Rel-8	C04f	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 19 and 22			2Rx, 4Rx
8.5.3	E-UTRAN FDD - UTRAN FDD event triggered reporting when DRX is used under fading propagation conditions	Rel-8	C04d	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 15 and 22			2Rx, 4Rx
8.5.4	E-UTRAN FDD - UTRAN FDD enhanced cell identification under AWGN propagation conditions	Rel-9	C29	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15			2Rx, 4Rx
8.5.6	E-UTRAN FDD - UTRAN FDD event triggered reporting without measurement gaps under AWGN propagation conditions	Rel-10	C48	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15 and 22 and Measurement without gaps			2Rx, 4Rx
8.5.7	E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions for 5MHz bandwidth	Rel-8	C55	UE supporting E-UTRA FDD and only E-UTRA bands within band group FDD_Nand UTRA FDD and Feature Group Indicators 15 and 22			
8.5.8	E-UTRA FDD InterRAT UTRA FDD correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C07h	UE supporting E-UTRA FDD and UTRA FDD, Increased Carrier Monitoring UTRA and Feature Group Indicators 15 and 22			2Rx, 4Rx
8.6.1	E-UTRAN TDD-UTRAN FDD event triggered reporting under fading propagation conditions	Rel-8	C07b	UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 15 and 22			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.6.3	E-UTRA TDD InterRAT UTRA FDD correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C07i	UE supporting E-UTRA TDD and UTRA FDD, Increased Carrier Monitoring UTRA and Feature Group Indicators 15 and 22			2Rx, 4Rx
8.7.1	E-UTRAN TDD-UTRAN TDD event triggered reporting under fading propagation conditions	Rel-8 Only	C05b	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 15 and 22	It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed.		2Rx, 4Rx
		Rel-9	C83	UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD Feature Group Indicators 15 and 22	It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed.		2Rx, 4Rx
		Rel-9	C79	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 15 and 39	It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed		2Rx, 4Rx
8.7.2	E-UTRAN TDD - UTRAN TDD cell search when DRX is used under fading propagation conditions	Rel-8 Only	C05d	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 5, 15 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
		Rel-9	C84	UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 5, 15 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
		Rel-9	C80	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 5, 15 and 39		Rel-9 UTRA TDD	2Rx, 4Rx
8.7.3	E-UTRAN TDD - UTRAN TDD SON ANR cell search reporting under AWGN propagation conditions	Rel-8 Only	C120	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 19 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
		Rel-9	C121	UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 22 and 37		Rel-9 UTRA TDD	2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
		Rel-9	C122	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 37 and 39		Rel-9 UTRA TDD	2Rx, 4Rx
8.7.4	E-UTRAN TDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions	Rel-9	C79	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 15 and 39			2Rx, 4Rx
		Rel-9	C31	UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicator 15 and 22			2Rx, 4Rx
8.7.5	E-UTRA TDD InterRAT UTRA TDD correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C07e	UE supporting E-UTRA TDD and UTRA TDD, Increased Carrier Monitoring UTRA and Feature Group Indicators 15 and 22			2Rx, 4Rx
8.7A.1	E-UTRA FDD InterRAT UTRA TDD correct reporting of measurement events with reduced performance group configured, non DRX	Rel-12	C07f	UE supporting E-UTRA FDD and UTRA TDD, Increased Carrier Monitoring UTRA and Feature Group Indicators 15 and 22			2Rx, 4Rx
8.8.1	E-UTRAN FDD-GSM event triggered reporting in AWGN	Rel-8	C08f	UE supporting E-UTRA FDD and GSM and Feature Group Indicator s 15 and 23			2Rx, 4Rx
8.8.2	E-UTRAN FDD - GSM event triggered reporting when DRX is used in AWGN	Rel-8	C08d	UE supporting E-UTRA FDD and GSM and Feature Group Indicators 5, 15 and 23			2Rx, 4Rx
8.9.1	E-UTRAN FDD-UTRAN TDD event triggered reporting in fading propagation conditions	Rel-8 Only	C06b	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 22		Rel-9 UTRA TDD	2Rx, 4Rx
		Rel-9	C85	UE supporting E-UTRA FDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 15 and 22		Rel-9 UTRA TDD	2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
		Rel-9	C77	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 39		Rel-9 UTRA TDD	2Rx, 4Rx
8.9.2	E-UTRAN FDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions	Rel-9	C78	UE supporting E-UTRA FDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicator 15 and 22			2Rx, 4Rx
		Rel-9	C77	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 39			2Rx, 4Rx
8.10.1	E-UTRAN TDD-GSM event triggered reporting in AWGN	Rel-8	C09g	UE supporting E-UTRA TDD and GSM and Feature Group Indicators 15 and 23			2Rx, 4Rx
8.10.2	E-UTRAN TDD - GSM event triggered reporting when DRX is used in AWGN	Rel-8	C09e	UE supporting E-UTRA TDD and GSM and Feature Group Indicators 5, 15 and 23			2Rx, 4Rx
8.2.11	E-UTRAN TDD-TDD intra-frequency event triggered reporting for UE configured with highSpeedEnhancedMeasFlag in synchronous cells	Rel-14	C190	UEs supporting E-UTRA TDD and high speed enhancement for measurement			
8.11.1	Multiple E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions	Rel-8	C01b	UE supporting E-UTRA FDD and Feature Group Indicator 25			2Rx, 4Rx
8.11.2	E-UTRAN TDD - E-UTRAN TDD and E-UTRAN TDD Inter-frequency event triggered reporting under fading propagation conditions	Rel-8	C02b	UE supporting E-UTRA TDD and Feature Group Indicator 25			2Rx, 4Rx
8.11.3	E-UTRAN FDD-FDD Inter-frequency and UTRAN FDD event triggered reporting under fading propagation conditions	Rel-8	C04e	UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 22 and 25			2Rx, 4Rx
8.11.4	InterRAT E-UTRA TDD to E-UTRA TDD and UTRA TDD cell search	Rel-8 Only	C05e	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 22 and 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
		Rel-9	C86	UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 22 and 25			2Rx, 4Rx
		Rel-9	C82	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 25 and 39			2Rx, 4Rx
8.11.5	Combined E-UTRAN FDD - E-UTRA FDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions	Rel-8	C08b	UE supporting E-UTRA FDD and GSM and Feature Group Indicator 23 and 25			2Rx, 4Rx
8.11.6	Combined E-UTRAN TDD - E-UTRA TDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions	Rel-8	C09a	UE supporting E-UTRA TDD and GSM and Feature Group Indicator 23 and 25			2Rx, 4Rx
8.12.1	Void						
8.13.1	Void						
8.14.1	E-UTRAN TDD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells	Rel-9	C22	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25			2Rx, 4Rx
8.14.2	E-UTRAN TDD-FDD Inter-frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells	Rel-9	C38	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25			
8.14.3	E-UTRAN TDD - FDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C39a	UE supporting E-UTRA FDD and E-UTRA TDD and inter-frequency SI acquisition in TDD for HO and Feature Group Indicator 25			2Rx, 4Rx
8.15.1	E-UTRAN FDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells	Rel-9	C22	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.15.2	E-UTRAN FDD-TDD Inter-frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells	Rel-9	C38	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25			2Rx, 4Rx
8.15.3	E-UTRAN FDD - TDD Inter-frequency identification of a new CGI of E-UTRA cell using autonomous gaps	Rel-9	C39	UE supporting E-UTRA FDD and E-UTRA TDD and inter-frequency SI acquisition in FDD for HO and Feature Group Indicator 25			2Rx, 4Rx
8.16.1	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX	Rel-10	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1)		2Rx, 4Rx
8.16.2	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX	Rel-10	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1)		2Rx, 4Rx
8.16.3	E-UTRAN FDD-FDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX	Rel-10	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1)		2Rx, 4Rx
8.16.4	E-UTRANTDD-TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX	Rel-10	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1)		2Rx, 4Rx
8.16.5	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth	Rel-10	C32c	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.6	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth	Rel-10	C33c	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1)		2Rx, 4Rx
8.16.7	E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth	Rel-10	C32c	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1)		2Rx, 4Rx
8.16.8	E-UTRAN TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth	Rel-10	C33c	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1)		2Rx, 4Rx
8.16.9	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz	Rel-11	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1)		2Rx, 4Rx
8.16.10	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz	Rel-11	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1)		2Rx, 4Rx
8.16.11	E-UTRAN FDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz	Rel-11	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.12	E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz	Rel-11	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1)		2Rx, 4Rx
8.16.13	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz	Rel-10	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1)		2Rx, 4Rx
8.16.14	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz	Rel-10	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1)		2Rx, 4Rx
8.16.15	E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth	Rel-10	C32	UE supporting E-UTRA FDD and CA and Feature Group Indicator 111	Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1)		2Rx, 4Rx
8.16.16	E-UTRA TDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth	Rel-10	C33	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1)		2Rx, 4Rx
8.16.17	E-UTRAN FDD activation and deactivation of known SCell in non-DRX	Rel-10	C32b	UE supporting E-UTRA FDD and CA and Feature Group Indicator 25	Either TC 8.16.17 or TC 8.16.17A shall be executed. (Note 1)		2Rx, 4Rx
8.16.17A	E-UTRAN FDD activation and deactivation of known SCell in non-DRX for 20MHz +20MHz bandwidth	Rel-10	C32a	UE supporting E-UTRA FDD and CA and Feature Group Indicator 25	Either TC 8.16.17 or TC 8.16.17A shall be executed. (Note 1)		

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.18	E-UTRAN TDD activation and deactivation of known SCell in non-DRX	Rel-10	C33b	UE supporting E-UTRA TDD and CA and Feature Group Indicator 25	Either TC 8.16.18 or TC 8.16.18A shall be executed. (Note 1)		2Rx, 4Rx
8.16.18A	E-UTRAN TDD activation and deactivation of known SCell in non-DRX for 20MHz +20MHz bandwidth	Rel-10	C33a	UE supporting E-UTRA TDD and CA and Feature Group Indicator 25	Either TC 8.16.18 or TC 8.16.18A shall be executed. (Note 1)		2Rx, 4Rx
8.16.21	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20MHz+10MHz	Rel-10	C33d	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1)		2Rx, 4Rx
8.16.22	E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 20MHz+10MHz	Rel-10	C33d	UE supporting E-UTRA TDD and CA and Feature Group Indicator 111	Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1)		2Rx, 4Rx
8.16.23	E-UTRAN TDD-FDD CA event triggered reporting under deactivated SCell in non-DRX with PCell in FDD	Rel-12	C67	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell and Feature Group Indicator 111			2Rx, 4Rx
8.16.24	E-UTRAN TDD-FDD CA event triggered reporting under deactivated SCell in non-DRX with PCell in TDD	Rel-12	C68	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell and Feature Group Indicator 111			2Rx, 4Rx
8.16.25	E-UTRAN TDD-FDD CA event triggered reporting on deactivated SCell with PCell interruption in non-DRX with PCell in FDD	Rel-12	C67	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell and Feature Group Indicator 111			2Rx, 4Rx
8.16.26	E-UTRAN TDD-FDD CA event triggered reporting on deactivated SCell with PCell interruption in non-DRX with PCell in TDD	Rel-12	C68	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell and Feature Group Indicator 111			2Rx, 4Rx
8.16.47	2DL/2UL FDD CA activation and deactivation of known PUCCH SCell without valid TA in non-DRX	Rel-13	C206	UE supporting E-UTRA FDD and CA and Feature Group Indicator 25 and PUCCH transmission on SCell in CA			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.48	2DL/2UL TDD CA activation and deactivation of known PUCCH SCell without valid TA in non-DRX	Rel-13	C207	UE supporting E-UTRA TDD and CA and Feature Group Indicator 25 and PUCCH transmission on SCell in CA			2Rx, 4Rx
8.16.49	2DL/2UL TDD-FDD CA (FDD PCell) activation and deactivation of known PUCCH SCell without valid TA in non-DRX	Rel-13	C208	UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell and Feature Group Indicator 25 and PUCCH transmission on SCell in CA			2Rx, 4Rx
8.16.50	2DL/2UL TDD-FDD CA (TDD PCell) activation and deactivation of known PUCCH SCell without valid TA in non-DRX	Rel-13	C209	UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell and Feature Group Indicator 25 and PUCCH transmission on SCell in CA			2Rx, 4Rx
8.16.83	3 DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with generic duplex modes	Rel-10	C226	UE supporting E-UTRA FDD or TDD and 3DL CA and Feature Group Indicator 111.			2Rx, 4Rx
		Rel-12	C224	UE supporting E-UTRA FDD and TDD and 3DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.84	3 DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX with generic duplex modes	Rel-10	C226	UE supporting E-UTRA FDD or TDD and 3DL CA and Feature Group Indicator 111.			2Rx, 4Rx
		Rel-12	C224	UE supporting E-UTRA FDD and TDD and 3DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.85	3 DL CA Activation and Deactivation of Known SCell in Non-DRX with generic duplex modes	Rel-10	C227	UE supporting E-UTRA FDD or TDD and 3DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C225	UE supporting E-UTRA FDD and E-UTRA TDD and 3DL CA and Feature Group Indicator 25.			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.86	3 DL CA Activation and Deactivation of Unknown SCell in Non-DRX with generic duplex modes	Rel-10	C227	UE supporting E-UTRA FDD or TDD and 3DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C225	UE supporting E-UTRA FDD and E-UTRA TDD and 3DL CA and Feature Group Indicator 25.			2Rx, 4Rx
8.16.87	4 DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with generic duplex modes	Rel-11	C220	UE supporting E-UTRA FDD or TDD and 4DL CA and Feature Group Indicator 111.	The UE shall execute only either 8.16.87 or the corresponding test from 8.16.51, 8.16.52, 8.16.53 and 8.16.54.		2Rx, 4Rx
		Rel-12	C220a	UE supporting E-UTRA FDD, TDD and 4DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.88	4 DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX with generic duplex modes	Rel-12	C220	UE supporting E-UTRA FDDor TDD and 4DL CA and Feature Group Indicator 111.	The UE shall execute only either 8.16.88 or the corresponding test from 8.16.55 and 8.16.56.		2Rx, 4Rx
		Rel-12	C220a	UE supporting E-UTRA FDD, TDD and 4DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.89	4 DL CA Activation and Deactivation of Known SCell in Non-DRX with generic duplex modes	Rel-12	C222	UE supporting E-UTRA FDD or E-UTRA TDD and 4DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C222a	UE supporting E-UTRA FDD, E-UTRA TDD and 4DL CA and Feature Group Indicator 25.			2Rx, 4Rx
8.16.90	4 DL CA Activation and Deactivation of Unknown SCell in Non-DRX with generic duplex modes	Rel-11	C222	UE supporting E-UTRA FDD or E-UTRA TDD and 4DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C222a	UE supporting E-UTRA FDD, E-UTRA TDD and 4DL CA and Feature Group Indicator 25.			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.16.91	5 DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with generic duplex modes	Rel-11	C221	UE supporting E-UTRA FDD or TDD and 5DL CA and Feature Group Indicator 111.	The UE shall execute only either 8.16.91 or the corresponding test from 8.16.65, 8.16.66, 8.16.71 and 8.16.72.		2Rx, 4Rx
		Rel-12	C221a	UE supporting E-UTRA FDD, TDD and 5DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.92	5 DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX with generic duplex modes	Rel-11	C221	UE supporting E-UTRA FDD or TDD and 5DL CA and Feature Group Indicator 111.	The UE shall execute only either 8.16.92 or the corresponding test from 8.16.73 and 8.16.74.		2Rx, 4Rx
		Rel-12	C221a	UE supporting E-UTRA FDD, TDD and 5DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.93	5 DL CA Activation and Deactivation of Known SCell in Non-DRX with generic duplex modes	Rel-11	C223	UE supporting E-UTRA FDDor E-UTRA TDD and 5DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C223a	UE supporting E-UTRA FDD, E-UTRA TDD and 5DL CA and Feature Group Indicator 25.			2Rx, 4Rx
8.16.94	5 DL CA Activation and Deactivation of Unknown SCell in Non-DRX with generic duplex modes	Rel-11	C223	UE supporting E-UTRA FDD or E-UTRA TDD and 5DL CA and Feature Group Indicator 25.			2Rx, 4Rx
		Rel-12	C223a	UE supporting E-UTRA FDD, E-UTRA TDD and 5DL CA and Feature Group Indicator 25.			2Rx, 4Rx
8.16.95	6DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with generic duplex modes	Rel-14	C232	UE supporting E-UTRA FDD or TDD and 6DL CA and Feature Group Indicator 111.			2Rx, 4Rx
8.16.99	7DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with generic duplex modes	Rel-14	C233	UE supporting E-UTRA FDD or TDD and 7DL CA and Feature Group Indicator 111.			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.18.1	E-UTRAN TDD-HRPD event triggered reporting under fading propagation conditions	Rel-9	C40	UE supporting E-UTRA TDD and cdma2000 HRPD and Feature Group Indicator 15			2Rx, 4Rx
8.19.1	E-UTRAN TDD-CDMA2000 1X event triggered reporting under fading propagation conditions	Rel-9	C41	UE supporting E-UTRA TDD and cdma2000 1xRTT and Feature Group Indicator 15			2Rx, 4Rx
8.20.1	E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions in asynchronous cells	Rel-10	C18	UE supporting E-UTRA FDD and CA			2Rx, 4Rx
8.20.2	E-UTRAN TDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1)		2Rx, 4Rx
8.20.2A	E-UTRAN TDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in synchronous cells for 20 MHz +20 MHz bandwidth	Rel-10	C19a	UE supporting E-UTRA TDD and CA	Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1)		2Rx, 4Rx
8.20.2B	E-UTRAN TDD-TDD Inter-frequency event triggered reporting under fading propagation conditions in synchronous cells for 20 MHz +10 MHz bandwidth	Rel-10	C19b	UE supporting E-UTRA TDD and CA	Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1)		2Rx, 4Rx
8.20.3	E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions	Rel-10	C43	UE supporting E-UTRA FDD, CA and UTRA FDD and Feature Group Indicator 15			2Rx, 4Rx
8.20.4	E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions	Rel-10	C44	UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15	Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.20.4A	E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions for 20 MHz + 20 MHz bandwidth	Rel-10	C44a	UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15	Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1)		2Rx, 4Rx
8.20.4B	E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions for 20 MHz + 10 MHz bandwidth	Rel-10	C44b	UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15	Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1)		2Rx, 4Rx
8.22.1	E-UTRAN FDD-FDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells in DRX based on CRS based discovery signal	Rel-12	C01ch	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 5			
8.22.2	E-UTRAN TDD-TDD intra-frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX	Rel-12	C02ch	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 5			
8.22.3	E-UTRAN FDD-FDD inter-frequency event triggered reporting under fading propagation conditions in DRX based on CRS based discovery signal	Rel-12	C01eh	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicators 5 and 25			
8.22.4	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation conditions in DRX based on CRS based discovery signal	Rel-12	C02eh	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicators 5 and 25			
8.22.5	E-UTRAN FDD-FDD intra-frequency event triggered reporting in DRX based on CSI-RS based discovery signal	Rel-12	C97	UE supporting E-UTRA FDD and CSI-RS based discovery signals measurement and Feature Group Indicator 5			
8.22.6	E-UTRAN TDD-TDD intra-frequency event triggered reporting in DRX based on CSI-RS based discovery signal	Rel-12	C98	UE supporting E-UTRA TDD and CSI-RS based discovery signals measurement and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.22.7	E-UTRAN FDD-FDD Inter-frequency event triggered reporting in DRX based on CSI-RS based discovery signal	Rel-12	C99	UE supporting E-UTRA FDD and CSI-RS based discovery signals measurement and Feature Group Indicators 5 and 25			
8.22.8	E-UTRAN TDD-TDD inter-frequency event triggered reporting under fading propagation condition in DRX based on CSI-RS based discovery signal	Rel-12	C100	UE supporting E-UTRA TDD and CSI-RS based discovery signals measurement and Feature Group Indicators 5 and 25			
8.22.9	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX based on CRS based discovery signal	Rel-12	C126	UE supporting E-UTRA FDD and CA and CRS based discovery signal measurement and Feature Group Indicators 111			
8.22.10	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX based on CRS based discovery signal	Rel-12	C126	UE supporting E-UTRA TDD and CA and CRS based discovery signal measurement and Feature Group Indicators 111			
8.22.11	E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX based on CSI-RS based discovery signal	Rel-12	C118	UE supporting E-UTRA FDD and CA and CSI-RS based discovery signal measurement			
8.22.12	E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX based on CSI-RS based discovery signal	Rel-12	C119	UE supporting E-UTRA TDD and CA and CSI-RS based discovery signal measurement			
8.23.1	E-UTRAN FDD-FDD DC intra-frequency event triggered reporting with DRX in synchronous DC	Rel-12	C134	UE supporting E-UTRA FDD, Dual Connectivity and Feature Group Indicator 5	It is not necessary for DC ASYNCH UEs to be tested in this test if 8.23.2 case is executed. (Note 2)		
8.23.2	E-UTRAN FDD-FDD DC intra-frequency event triggered reporting with DRX in asynchronous DC	Rel-12	C135	UE supporting E-UTRA FDD, Dual Connectivity Asynch and Feature Group Indicator 5			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.23.3	E-UTRAN TDD-TDD DC intra-frequency event triggered reporting with DRX in synchronous DC	Rel-12	C136	UE supporting E-UTRA TDD, Dual Connectivity and Feature Group Indicator 5			
8.23.4	E-UTRAN FDD-FDD DC inter-frequency event triggered reporting with DRX in synchronous DC	Rel-12	C137	UE supporting E-UTRA FDD, Dual Connectivity and Feature Group Indicator 5 and 25	It is not necessary for DC ASYNCH UEs to be tested in this test if 8.23.5 case is executed. (Note 2)		
8.23.5	E-UTRAN FDD-FDD DC inter-frequency event triggered reporting with DRX in asynchronous DC	Rel-12	C138	UE supporting E-UTRA FDD, Dual Connectivity Asynch and Feature Group Indicator 5 and 25			
8.23.6	E-UTRAN TDD-TDD DC inter-frequency event triggered reporting with DRX in synchronous DC	Rel-12	C139	UE supporting E-UTRA TDD, Dual Connectivity and Feature Group Indicator 5 and 25			
8.23.7	E-UTRAN FDD-FDD Addition and Release Delay of known PSCell in Synchronous DC	Rel-12	C176	UE supporting E-UTRA FDD, Dual Connectivity	It is not necessary for DC ASYNCH UEs to be tested in this test if 8.23.2 case is executed. (Note 2)		
8.23.8	E-UTRAN FDD-FDD Addition and Release Delay of known PSCell in Asynchronous DC	Rel-12	C177	UE supporting E-UTRA FDD, Dual Connectivity Asynch			
8.23.9	E-UTRAN TDD Addition and Release Delay of known PSCell in Synchronous DC	Rel-12	C178	UE supporting E-UTRA TDD, Dual Connectivity			
8.25.1	E-UTRAN FDD-WLAN Event Triggered Reporting in non-DRX under AWGN	Rel-13	C179	UE supporting E-UTRA FDD and WLAN Aggregation			
8.25.2	E-UTRAN TDD-WLAN Event Triggered Reporting in non-DRX under AWGN	Rel-13	C180	UE supporting E-UTRA TDD and WLAN Aggregation			
8.26.1	E-UTRAN FDD-FS3 Activation and deactivation of known FS3 SCell with FDD PCell in non-DRX	Rel-13	C144	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and Feature Group Indicator 25			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.26.2	E-UTRAN TDD-FS3 Activation and deactivation of known FS3 SCell with TDD PCell in non-DRX	Rel-13	C159	UE supporting E-UTRA TDD and downlink LAA and Feature Group Indicator 25			
8.26.3	E-UTRAN FDD-FS3 Event triggered reporting on deactivated FS3 SCell and FDD PCell interruption in non-DRX	Rel-13	C145	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and Feature Group Indicator 111	It is not necessary for LAA UEs to execute this test if 8.26.3A case is executed (Note 3)		
8.26.3A	E-UTRAN FDD-FS3 3DL Event triggered reporting on deactivated FS3 SCell and FDD PCell interruption in non-DRX	Rel-13	C145a	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and Feature Group Indicator 111			
8.26.4	E-UTRAN TDD-FS3 Event triggered reporting on deactivated FS3 SCell and TDD PCell interruption in non-DRX	Rel-13	C160	UE supporting E-UTRA TDD and downlink LAA and Feature Group Indicator 111	It is not necessary for LAA UEs to execute this test if 8.26.4A case is executed (Note 3)		
8.26.4A	E-UTRAN TDD-FS3 3DL Event triggered reporting on deactivated FS3 SCell and TDD PCell interruption in non-DRX	Rel-13	C160a	UE supporting E-UTRA TDD and downlink LAA on two SCells and Feature Group Indicator 111			
8.26.5	E-UTRAN FDD-FS3 Intra-frequency event triggered reporting in non-DRX for CRS based discovery signal	Rel-13	C153	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and CRS based discovery signals Feature Group Indicator 111	It is not necessary for LAA UEs to execute this test if 8.26.5A case is executed (Note 3)		
8.26.5A	E-UTRAN FDD-FS3 Intra-frequency event triggered reporting in non-DRX for CRS based discovery signal with 2 SCells	Rel-13	C153a	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and CRS based discovery signals Feature Group Indicator 111			
8.26.6	E-UTRAN TDD-FS3 Intra-frequency event triggered reporting in non-DRX for CRS based discovery signal	Rel-13	C146	UE supporting E-UTRA TDD and downlink LAA and CRS based discovery signals and Feature Group Indicator 111	It is not necessary for LAA UEs to execute this test if 8.26.6A case is executed (Note 3)		

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
8.26.6A	E-UTRAN TDD-FS3 Intra-frequency event triggered reporting in non-DRX for CRS based discovery signal with 2 SCells	Rel-13	C146a	UE supporting E-UTRA TDD and downlink LAA CRS based discovery signals and Feature Group Indicator 111			
8.26.7	E-UTRAN FDD-FS3 Intra-frequency event triggered reporting in DRX for CRS based discovery signal	Rel-13	C198	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and Feature Group Indicators 5 and 111			
8.26.8	E-UTRAN TDD-FS3 Intra-frequency event triggered reporting in DRX for CRS based discovery signal	Rel-13	C199	UE supporting E-UTRA TDD and downlink LAA and Feature Group Indicator 5 and 111			
8.26.9	E-UTRAN FDD-FS3 Inter-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-13	C147	UE supporting E-UTRA FDD and downlink LAA with FDD as Pcell and Feature Group Indicator 25			
8.26.10	E-UTRAN TDD-FS3 Inter-frequency event triggered reporting under fading propagation conditions in synchronous cells	Rel-13	C148	UE supporting E-UTRA TDD and downlink LAA and Feature Group Indicator 25			
Measurement Performance Requirements							
9.1.1.1	FDD Intra Frequency Absolute RSRP Accuracy	Rel-8 to Rel-11	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.1.1_1	FDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.1.1_2	FDD Intra frequency Absolute RSRP accuracy for UE category 1bis	Rel-13	C01k	UE supporting E-UTRA FDD and UE Category 1bis and Feature Group Indicator 16			
9.1.1.1_3	FDD Intra Frequency Absolute RSRP Accuracy for CA Idle Mode Measurements	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.1.2	FDD Intra Frequency Relative Accuracy of RSRP	Rel-8	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.1.2_2	FDD Intra Frequency Relative Accuracy of RSRP for UE category 1bis	Rel-13	C01k	UE supporting E-UTRA FDD and UE Category 1bis and Feature Group Indicator 16			
9.1.2.1	TDD Intra Frequency Absolute RSRP Accuracy	Rel-8 to Rel-11	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.2.1_1	TDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.2.1_2	TDD Intra Frequency Absolute RSRP Accuracy for UE category 1bis	Rel-13	C02k	UE supporting E-UTRA TDD and UE Category 1bis and Feature Group Indicator 16			
9.1.2.2	TDD Intra Frequency Relative Accuracy of RSRP	Rel-8	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.1.2.2_2	TDD Intra Frequency Relative Accuracy of RSRP for UE category 1bis	Rel-13	C02k	UE supporting E-UTRA TDD and UE Category 1bis and Feature Group Indicator 16			
9.1.3.1	FDD - FDD Inter Frequency Absolute RSRP Accuracy	Rel-8 to Rel-11	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.3.1_1	FDD - FDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.3.1_2	FDD - FDD Inter Frequency Absolute RSRP Accuracy for UE category 1bis	Rel-13	C01l	UE supporting E-UTRA FDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.3.1_3	FDD-FDD Inter Frequency Absolute RSRP Accuracy for CA Idle Mode Measurements for Overlapping Carrier	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			
9.1.3.1_4	FDD-FDD Inter Frequency Absolute RSRP Accuracy for CA Idle Mode Measurements for Non-Overlapping Carrier	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.3.2	FDD - FDD Inter Frequency Relative Accuracy of RSRP	Rel-8 to Rel-11	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.3.2_1	FDD - FDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward)	Rel-12	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.3.2_2	FDD - FDD Inter Frequency Relative Accuracy of RSRP for UE category 1bis	Rel-13	C01l	UE supporting E-UTRA FDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.4.1	TDD - TDD Inter Frequency Absolute RSRP Accuracy	Rel-8 to Rel-11	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.4.1_1	TDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.4.1_2	TDD - TDD Inter Frequency Absolute RSRP Accuracy for UE category 1bis	Rel-13	C02l	UE supporting E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.4.2	TDD - TDD Inter Frequency Relative Accuracy of RSRP	Rel-8 to Rel-11	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.4.2_1	TDD - TDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward)	Rel-12	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.4.2_2	TDD - TDD Inter Frequency Relative Accuracy of RSRP for UE category 1bis	Rel-13	C02l	UE supporting E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.5.1	FDD - TDD Inter Frequency Absolute RSRP Accuracy	Rel-9 to Rel-11	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.5.1_1	FDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.5.1_2	FDD - TDD Inter Frequency Absolute RSRP Accuracy for UE category 1bis	Rel-13	C42a	UE supporting E-UTRA FDD and E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.5.2	FDD - TDD Inter Frequency Relative Accuracy of RSRP	Rel-9 to Rel-11	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.5.2_1	FDD - TDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward)	Rel-12	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.1.5.2_2	FDD - TDD Inter Frequency Relative Accuracy of RSRP for UE category 1bis	Rel-13	C42a	UE supporting E-UTRA FDD and E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.1.6.1	FDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10 and Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.6.1_1	FDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.6.2	FDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10 and Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.6.2_1	FDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.7.1	TDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10 and Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.7.1_1	TDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.7.2	TDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation	Rel-10 and Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.7.2_1	TDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.8.1	FDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10 and Rel-11 only	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.8.1_1	FDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) (Rel-12 and forward)	Rel-12	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.1.8.2	FDD Relative RSRP under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.1.9.1	TDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10 and Rel-11 only	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.1.9.1_1	TDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) (Rel-12 and forward)	Rel-12	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.1.9.2	TDD Relative RSRP under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.1.10.1	FDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10 and Rel-11 only	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.1.10.1_1	FDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC) (Rel-12 and forward)	Rel-12	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.1.10.2	FDD Relative RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.1.11.1	TDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10 and Rel-11 only	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.1.11.1_1	TDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC) (Rel-12 and forward)	Rel-12	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.11.2	TDD Relative RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.1.12.1	FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz	Rel-10 and Rel-11 only	C18a	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.12.1_1	FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward)	Rel-12	C18a	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.12.2	FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz	Rel-10 and Rel-11 only	C18a	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.12.2_1	FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward)	Rel-12	C18a	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.13.1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz	Rel-10 and Rel-11 only	C19a	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.13.1_1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward)	Rel-12	C19a	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.13.2	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz	Rel-10 and Rel-11 only	C19a	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.13.2_1	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward)	Rel-12	C19a	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.14.1	FDD Intra Frequency Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11 only	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
9.1.14.1_1	FDD Intra Frequency Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) (Rel-12 and forward)	Rel-12	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
9.1.14.2	FDD Intra Frequency Relative RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.15.1	TDD Intra Frequency Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11 only	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			
9.1.15.1_1	TDD Intra Frequency Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) (Rel-12 and forward)	Rel-12	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			
9.1.15.2	TDD Intra Frequency Relative RSRP Accuracy under Time-Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			
9.1.16.1	FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth	Rel-8 to Rel-11	C50	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicator 16			
9.1.16.1_1	FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward)	Rel-12	C50	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicator 16			
9.1.16.2	FDD Intra Frequency Relative Accuracy of RSRP for 5MHz Bandwidth	Rel-8	C50	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicator 16			
9.1.17.1	FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth	Rel-8 to Rel-11	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicators 16 and 25			
9.1.17.1_1	FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward)	Rel-12	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicators 16 and 25			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.17.2	FDD - FDD Inter Frequency Relative Accuracy of RSRP for 5MHz Bandwidth	Rel-8 to Rel-11	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_Nand Feature Group Indicators 16 and 25			
9.1.17.2_1	FDD - FDD Inter Frequency Relative Accuracy of RSRP for 5MHz Bandwidth (Rel-12 and forward)	Rel-12	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicators 16 and 25			
9.1.18.1	FDD Absolute RSRP Accuracy for E-UTRA for Carrier Aggregation for 10MHz + 5MHz	Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.18.1_1	FDD Absolute RSRP Accuracy for E-UTRA for Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.18.2	FDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation for 10MHz + 5MHz	Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.18.2_1	FDD Relative RSRP Accuracy E-UTRA for Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.19.1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz	Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.19.1_1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.19.2	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz	Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.19.2_1	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.20.1	FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth	Rel-10 and Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.20.1_1	FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.20.2	FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth	Rel-10 and Rel-11 only	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.20.2_1	FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth (Rel-12 and forward)	Rel-12	C18	UE supporting E-UTRA FDD and CA	Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.21.1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz	Rel-10 and Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.21.1_1	TDD Absolute RSRP Accuracy for E-UTRAN Carrier Aggregation for 5MHz + 5MHz (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.21.2	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz	Rel-10 and Rel-11 only	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.21.2_1	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz (Rel-12 and forward)	Rel-12	C19	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.22	FDD-TDD RSRP Accuracy E-UTRA for Carrier Aggregation with PCell in FDD	Rel-12	C141	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell			2Rx, 4Rx
9.1.23	FDD-TDD RSRP Accuracy E-UTRA for Carrier Aggregation with PCell in TDD	Rel-12	C142	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.24.1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz	Rel-10 and Rel-11 only	C19b	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.24.1_1	TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz (Rel-12 and forward)	Rel-12	C19b	UE supporting E-UTRA TDD and CA			2Rx, 4Rx
9.1.24.2	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz	Rel-10 and Rel-11 only	C19b	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1)		2Rx, 4Rx
9.1.24.2_1	TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz (Rel-12 and forward)	Rel-12	C19b	UE supporting E-UTRA TDD and CA	Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1)		2Rx, 4Rx
9.1.25	FDD intra-frequency absolute and relative RSRP accuracies in CRS based discovery signal	Rel-12	C101	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 16			2Rx, 4Rx
9.1.26	TDD intra-frequency absolute and relative RSRP accuracies in CRS based discovery signal	Rel-12	C102	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 16			2Rx, 4Rx
9.1.27	FDD-FDD inter-frequency absolute and relative RSRP accuracies in CRS based discovery signal	Rel-12	C103	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.28	TDD-TDD inter-frequency absolute and relative RSRP accuracies in CRS based discovery signal	Rel-12	C104	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx
9.1.29	FDD intra frequency absolute and relative CSI-RSRP accuracies in CSI-RS based discovery signal	Rel-12	C114	UE supporting E-UTRA FDD and CSI-RS based discovery signal measurement and Feature Group Indicator 16			2Rx, 4Rx
9.1.30	TDD intra frequency absolute and relative CSI-RSRP accuracies in CSI-RS based discovery signal	Rel-12	C115	UE supporting E-UTRA TDD and CSI-RS based discovery signal measurement and Feature Group Indicator 16			2Rx, 4Rx
9.1.31	FDD-FDD inter-frequency absolute and relative CSI-RSRP accuracies in CSI-RS based discovery signal	Rel-12	C116	UE supporting E-UTRA FDD and CSI-RS based discovery signal measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx
9.1.32	TDD-TDD inter-frequency absolute and relative CSI-RSRP accuracies in CSI-RS based discovery signal	Rel-12	C117	UE supporting E-UTRA TDD and CSI-RS based discovery signal measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx
9.1.33	FDD absolute and relative RSRP accuracies for E-UTRAN Carrier Aggregation in CRS based discovery signal	Rel-12	C128	UE supporting E-UTRA FDD and CA and CRS based discovery signal measurement			2Rx, 4Rx
9.1.34	TDD absolute and relative RSRP accuracies for E-UTRAN Carrier Aggregation in CRS based discovery signal	Rel-12	C129	UE supporting E-UTRA TDD and CA and CRS based discovery signal measurement			2Rx, 4Rx
9.1.35	FDD absolute and relative CSI-RSRP accuracies for E-UTRAN Carrier Aggregation in CSI-RS based discovery signal	Rel-12	C118	UE supporting E-UTRA FDD and CA and CSI-RS based discovery signal measurement			2Rx, 4Rx
9.1.36	TDD absolute and relative CSI-RSRP accuracies for E-UTRAN Carrier Aggregation in CSI-RS based discovery signal	Rel-12	C119	UE supporting E-UTRA TDD and CA and CSI-RS based discovery signal measurement			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.41.1	FD-FDD Intra Frequency Absolute RSRP Accuracy for UE category 0	Rel-12	C88	UE supporting E-UTRA FD-FDD (UE Category 0) and Feature Group Indicator 16			
9.1.41.2	FD-FDD Intra Frequency Relative RSRP Accuracy for UE category 0	Rel-12	C88	UE supporting E-UTRA FD-FDD (UE Category 0) and Feature Group Indicator 16			
9.1.42.1	HD-FDD Intra Frequency Absolute RSRP Accuracy for UE category 0	Rel-12	C89	UE supporting E-UTRA HD-FDD (UE category 0) and Feature Group Indicator 16			
9.1.42.2	HD-FDD Intra Frequency Relative RSRP Accuracy for UE category 0	Rel-12	C89	UE supporting E-UTRA HD-FDD (UE category 0) and Feature Group Indicator 16			
9.1.43.1	TDD Intra Frequency Absolute RSRP Accuracy for UE category 0	Rel-12	C90	UE supporting E-UTRA TDD (UE Category 0) and Feature Group Indicator 16			
9.1.43.2	TDD Intra Frequency Relative RSRP Accuracy for UE category 0	Rel-12	C90	UE supporting E-UTRA TDD (UE Category 0) and Feature Group Indicator 16			
9.1.52	FD-FDD RSRP Intra frequency case for BL/CE UE in CEModeA	Rel-13	C94c	UE supporting E-UTRA FD-FDD and (UE Category M1 or UE Category M2) and Feature Group Indicator 16			
9.1.53	HD-FDD RSRP Intra frequency case for BL/CE UE in CEModeA	Rel-13	C107d	UE supporting E-UTRA HD-FDD and (UE Category M1 or UE Category M2) and Feature Group Indicator 16			
9.1.54	TDD RSRP Intra frequency case for BL/CE UE in CEModeA	Rel-13	C93b	UE supporting E-UTRA TDD and (UE Category M1 or UE Category M2) and Feature Group Indicator 16			
9.1.55	FS3 Intra frequency absolute and relative RSRP accuracies with FDD PCell	Rel-13	C149	UE supporting E-UTRA FDD and Downlink LAA with FDD as Pcell			2Rx, 4Rx
9.1.56	FS3 Intra frequency absolute and relative RSRP accuracies with TDD PCell	Rel-13	C152	UE supporting E-UTRA TDD and Downlink LAA with TDD as PCell			2Rx, 4Rx
9.1.57	FD-FDD RSRP Intra frequency case for BL/CE UE in CEModeB	Rel-13	C107f	UE supporting E-UTRA FD-FDD and (UE Category M1 or UE Category M2) and CE Mode B and Feature Group Indicator 16			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.58	HD-FDD RSRP Intra frequency case for BL/CE UE in CEModeB	Rel-13	C107e	UE supporting E-UTRA HD-FDD and (UE Category M1 or UE Category M2) and CE Mode B and Feature Group Indicator 16			
9.1.59	TDD RSRP Intra frequency case for BL/CE UE in CEModeB	Rel-13	C93d	UE supporting E-UTRA TDD and (UE Category M1 or UE Category M2) and CE Mode B and Feature Group Indicator 16			
9.1.60	FS3 absolute and relative CSI-RSRP accuracies for E-UTRAN Carrier Aggregation in CSI-RS based discovery signal with FDD PCell	Rel-13	C150	UE supporting E-UTRA FDD and Downlink LAA with FDD as Pcell and CSI-RS based discovery signals and Feature Group Indicator 16			2Rx, 4Rx
9.1.61	FS3 absolute and relative CSI-RSRP accuracies for E-UTRAN Carrier Aggregation in CSI-RS based discovery signal with TDD PCell	Rel-13	C151	UE supporting E-UTRA TDD and Downlink LAA and CSI-RS based discovery signals and Feature Group Indicator 16			2Rx, 4Rx
9.1.68	3 DL RSRP for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-12	C229	UE supporting E-UTRA FDD and/or E-UTRA TDD and 3DL CA. Note: the UE shall execute only either 9.1.68 or the corresponding test from 9.1.37, 9.1.38, 9.1.39_1 and 9.1.40_1.			
9.1.69	4 DL RSRP for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-12	C191b	UE supporting E-UTRA FDD or E-UTRA TDD and 4DL CA.	Note: the UE shall execute only either 9.1.69 or the corresponding test from 9.1.44, 9.1.45, 9.1.46 and 9.1.47.		2Rx, 4Rx
		Rel-12	C191f	UE supporting E-UTRA FDD, E-UTRA TDD and 4DL CA			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.1.70	5 DL RSRP for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-11	C191c	UE supporting E-UTRA FDDor E-UTRA TDD and 5DL CA.	Note: the UE shall execute only either 9.1.70 or the corresponding test from 9.1.48, 9.1.49, 9.1.50 and 9.1.51		2Rx, 4Rx
		Rel-12	C191g	UE supporting E-UTRA FDD, E-UTRA TDD and 5DL CA			2Rx, 4Rx
9.2.1.1	FDD Intra Frequency Absolute RSRQ Accuracy	Rel-8	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.2.1.1_2	FDD Intra Frequency Absolute RSRQ Accuracy for UE Category 1bis	Rel-13	C01k	UE supporting E-UTRA FDD and UE Category 1bis and Feature Group Indicator 16			
9.2.1.1_3	FDD Intra Frequency Absolute RSRQ Accuracy for CA Idle Mode Measurements	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			
9.2.2.1	TDD Intra Frequency Absolute RSRQ Accuracy	Rel-8	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.2.2.1_2	TDD Intra Frequency Absolute RSRQ Accuracy for UE Category 1bis	Rel-13	C02k	UE supporting E-UTRA TDD and UE Category 1bis and Feature Group Indicator 16			
9.2.3.1	FDD - FDD Inter Frequency Absolute RSRQ Accuracy	Rel-8	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.3.1_2	FDD - FDD Inter Frequency Absolute RSRQ Accuracy for UE Category 1bis	Rel-13	C01l	UE supporting E-UTRA FDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.3.1_3	FDD - FDD Inter Frequency Absolute RSRQ Accuracy for CA Idle Mode Measurements for Overlapping Carrier	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			
9.2.3.1_4	FDD - FDD Inter Frequency Absolute RSRQ Accuracy for CA Idle Mode Measurements for Non-overlapping Carriers	Rel-15	C238	UE supporting E-UTRA FDD and CA Idle mode measurements			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.3.2	FDD - FDD Inter Frequency Relative Accuracy of RSRQ	Rel-8	C01g	UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.3.2_2	FDD - FDD Inter Frequency Relative Accuracy of RSRQ for UE Category 1bis	Rel-13	C01l	UE supporting E-UTRA FDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.4.1	TDD - TDD Inter Frequency Absolute RSRQ Accuracy	Rel-8 to Rel-11	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.4.1_1	TDD - TDD Inter Frequency Absolute RSRQ Accuracy (Rel-12 and forward)	Rel-12	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.4.1_2	TDD - TDD Inter Frequency Absolute RSRQ Accuracy for UE Category 1bis	Rel-13	C02l	UE supporting E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.4.2	TDD -TDD Inter Frequency Relative Accuracy of RSRQ	Rel-8 to Rel-11	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.4.2_1	TDD -TDD Inter Frequency Relative Accuracy of RSRQ (Rel-12 and forward)	Rel-12	C02g	UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.4.2_2	TDD -TDD Inter Frequency Relative Accuracy of RSRQ for UE Category 1bis	Rel-13	C02l	UE supporting E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.4A.1	FDD - TDD Inter Frequency Absolute RSRQ Accuracy	Rel-9	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.4A.1_2	FDD - TDD Inter Frequency Absolute RSRQ Accuracy for UE Category 1bis	Rel-13	C42a	UE supporting E-UTRA FDD and E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.4A.2	FDD - TDD Inter Frequency Relative Accuracy of RSRQ	Rel-9	C42	UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.4A.2_2	FDD - TDD Inter Frequency Relative Accuracy of RSRQ for UE Category 1bis	Rel-13	C42a	UE supporting E-UTRA FDD and E-UTRA TDD and UE category 1bis and Feature Group Indicators 16 and 25			
9.2.5.1	FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.5.2	FDD Relative RSRQ Accuracy E-UTRA for Carrier Aggregation	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.6.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.6.2	TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.7.1	FDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			
9.2.8.1	TDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.2.9.1	FDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C45	UE supporting E-UTRA FDD and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.10.1	TDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC)	Rel-10	C46	UE supporting E-UTRA TDD and Feature Group Indicator 115			
9.2.11.1	FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.11.2	FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.12.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.12.2	TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.15.1	FDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11	C59	UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115			
9.2.16.1	TDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC)	Rel-11	C60	UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.17.1	FDD Intra Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth	Rel-8	C50	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicator 16			
9.2.18.1	FDD - FDD Inter Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth	Rel-8	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicators 16 and 25			
9.2.18.2	FDD - FDD Inter Frequency Relative Accuracy of RSRQ for 5MHz Bandwidth	Rel-8	C51	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and Feature Group Indicators 16 and 25			
9.2.19.1	FDD-FDD Inter Frequency absolute WB-RSRQ	Rel-11	C01h	UE supporting E-UTRA FDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.20.1	TDD-TDD Inter Frequency absolute WB-RSRQ	Rel-11	C02h	UE supporting E-UTRA TDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25			2Rx, 4Rx
9.2.21.1	FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz	Rel-11	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.21.2	FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz	Rel-11	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.22.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz	Rel-11	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1)		2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.22.2	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz	Rel-11	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.23.1	FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.23.2	FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz	Rel-10	C18	UE supporting E-UTRA FDD and CA	Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.24.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.24.2	TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz	Rel-10	C19	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.25.1	Absolute RSRQ Accuracy for E-UTRAN TDD-FDD Carrier Aggregation with PCell in FDD	Rel-12	C67	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell			2Rx, 4Rx
9.2.25.2	Relative RSRQ Accuracy for E-UTRAN TDD-FDD Carrier Aggregation with PCell in FDD	Rel-12	C67	UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell			2Rx, 4Rx
9.2.26.1	Absolute RSRQ Accuracy for E-UTRAN TDD-FDD Carrier Aggregation with PCell in TDD	Rel-12	C142	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.26.2	Relative RSRQ Accuracy for E-UTRAN TDD-FDD Carrier Aggregation with PCell in TDD	Rel-12	C142	UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell			2Rx, 4Rx
9.2.27.1	TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz	Rel-10	C19b	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1)		2Rx, 4Rx
9.2.27.2	TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz	Rel-10	C19b	UE supporting E-UTRA TDD and CA	Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1)		2Rx, 4Rx
9.2.28	FDD intra-frequency absolute RSRQ accuracy with CRS based discovery signal	Rel-12	C101	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 16			2Rx, 4Rx
9.2.29	TDD intra-frequency absolute RSRQ accuracy with CRS based discovery signal	Rel-12	C102	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 16			2Rx, 4Rx
9.2.30	FDD-FDD inter-frequency absolute and relative RSRQ accuracies with CRS based discovery signal	Rel-12	C103	UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx
9.2.31	TDD-TDD inter-frequency absolute and relative RSRQ accuracies with CRS based discovery signal	Rel-12	C104	UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 16 and 25			2Rx, 4Rx
9.2.32	FDD absolute and relative RSRQ accuracy for E-UTRAN Carrier Aggregation in CRS based discovery signal	Rel-12	C128	UE supporting E-UTRA FDD and CA and CRS based discovery signal measurement			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.2.33	TDD absolute and relative RSRQ accuracy for E-UTRAN Carrier Aggregation in CRS based discovery signal	Rel-12	C129	UE supporting E-UTRA TDD and CA and CRS based discovery signal measurement			2Rx, 4Rx
9.2.42.1	FD-FDD Intra Frequency Absolute RSRQ Accuracy for UE category 0	Rel-12	C88	UE supporting E-UTRA FD-FDD (UE Category 0) and Feature Group Indicator 16			
9.2.43.1	HD-FDD Intra Frequency Absolute RSRQ Accuracy for UE category 0	Rel-12	C89	UE supporting E-UTRA HD-FDD (UE Category 0) and Feature Group Indicator 16			
9.2.44.1	TDD Intra Frequency Absolute RSRQ Accuracy for UE category 0	Rel-12	C90	UE supporting E-UTRA TDD (UE Category 0) and Feature Group Indicator 16			
9.2.51	FS3 Intra frequency absolute and relative RSRQ accuracies with FDD PCell	Rel-13	C149	UE supporting E-UTRA FDD and Downlink LAA with FDD as Pcell			2Rx, 4Rx
9.2.52	FS3 Intra frequency absolute and relative RSRQ accuracies with TDD PCell	Rel-13	C152	UE supporting E-UTRA TDD and Downlink LAA with TDD as PCell			2Rx, 4Rx
9.2.55	3 DL RSRQ for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-12	C229	UE supporting E-UTRA FDD and/or E-UTRA TDD and 3DL CA. Note: the UE shall execute only either 9.2.55 or the corresponding test from 9.2.38, 9.2.39, 9.2.40 or 9.2.41			2Rx, 4Rx
9.2.56	4 DL RSRQ for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-11	C191b	UE supporting E-UTRA FDD or E-UTRA TDD and 4DL CA.	Note: the UE shall execute only either 9.2.56 or the corresponding test from 9.2.45, 9.2.46		2Rx, 4Rx
		Rel-12	C191f	UE supporting E-UTRA FDD, E-UTRA TDD and 4DL CA			2Rx, 4Rx
9.2.57	5 DL RSRQ for E-UTRAN in Carrier Aggregation with generic duplex modes	Rel-11	C191c	UE supporting E-UTRA FDD and/or E-UTRA TDD and 5DL CA.	Note: the UE shall execute only either 9.2.57 or the corresponding test from 9.2.47, 9.2.48		2Rx, 4Rx
		Rel-12	C191g	UE supporting E-UTRA FDD, E-UTRA TDD and 5DL CA			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.3.1	E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy	Rel-9	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
9.3.2	E-UTRAN TDD - UTRA FDD CPICH RSCP absolute accuracy	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD			2Rx, 4Rx
9.3.3	E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy for 5MHz bandwidth	Rel-9	C52	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_Nand UTRA FDD			
9.4.1	E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy	Rel-9	C04	UE supporting E-UTRA FDD and UTRA FDD			2Rx, 4Rx
9.4.2	E-UTRAN TDD - UTRA FDD CPICH Ec/No absolute accuracy	Rel-9	C07	UE supporting E-UTRA TDD and UTRA FDD			2Rx, 4Rx
9.4.3	E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy for 5MHz bandwidth	Rel-9	C52	UE supporting E-UTRA FDD and E-UTRA bands within band group FDD_N and UTRA FDD			
9.5.1	E-UTRAN FDD - UTRA TDD PCCPCH RSCP absolute accuracy	Rel-9	C65	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 39			2Rx, 4Rx
		Rel-9	C105	UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 22 and not supporting UTRA FDD			2Rx, 4Rx
9.5.2	E-UTRAN TDD - UTRA TDD PCCPCH RSCP absolute accuracy	Rel-9	C66	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 39			2Rx, 4Rx
		Rel-9	C106	UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 22 and not supporting UTRA FDD			2Rx, 4Rx
9.6.1	GSM RSSI accuracy for E-UTRAN FDD	Rel-9	C08g	UE supporting E-UTRA FDD and GSM and Feature Group Indicator 16 and 23			2Rx, 4Rx
9.6.2	GSM RSSI accuracy for E-UTRAN TDD	Rel-9	C09h	UE supporting E-UTRA TDD and GSM and Feature Group Indicator 16 and 23			2Rx, 4Rx
9.9.1.1	FDD Intra Frequency Serving Cell Absolute RSRP Accuracy	Rel-10 and Rel-11 only	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
9.9.1.1_1	FDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.9.1.2	FDD Intra Frequency Serving Cell Absolute RSRQ Accuracy	Rel-10	C01f	UE supporting E-UTRA FDD and Feature Group Indicator 16			2Rx, 4Rx
9.9.2.1	TDD Intra Frequency Serving Cell Absolute RSRP Accuracy	Rel-10 and Rel-11 only	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.9.2.1_1	TDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward)	Rel-12	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.9.2.2	TDD Intra Frequency Serving Cell Absolute RSRQ Accuracy	Rel-10	C02f	UE supporting E-UTRA TDD and Feature Group Indicator 16			2Rx, 4Rx
9.11.1	FS3 average RSSI accuracy case (PCell using FDD)	Rel-13	C157	UE supporting E-UTRA FDD and Downlink LAA with FDD as Pcell and RSSI measurement			2Rx, 4Rx
9.11.2	FS3 average RSSI accuracy case (PCell using TDD)	Rel-13	C158	UE supporting E-UTRA TDD and Downlink LAA with TDD as Pcell and RSSI measurement			2Rx, 4Rx
9.12.1	FS3 channel occupancy test (PCell using FDD)	Rel-13	C157	UE supporting E-UTRA FDD and Downlink LAA with FDD as Pcell and channel occupancy measurement			2Rx, 4Rx
9.12.2	FS3 channel occupancy test (PCell using TDD)	Rel-13	C158	UE supporting E-UTRA TDD and Downlink LAA with TDD as Pcell and channel occupancy measurement			2Rx, 4Rx
V2V Communications							
11.1	V2V UE Transmission Timing Accuracy Test	Rel-14	C203	UE supporting V2X Sidelink communication			
11.2	Interruptions due to V2V sidelink communication	Rel-14	C204	UE supporting V2X Sidelink communication			
V2X Communications							
12.1.1	V2X UE Transmission Timing Accuracy Test for eNB as Timing Reference	Rel-14	C204	UE supporting E-UTRA and V2X Sidelink communication			

Clause	Title	Release	Applicability		Additional Information		
			Condition	Comments	Number of TC Executions	Release on other RAT	Branch
12.1.2	V2X UE Transmission Timing Accuracy Test for SyncRef UE as Timing Reference	Rel-14	C216	UE supporting V2X Sidelink communication and SLSS transmission and reception			
12.2.1	Initiation/Cease of SLSS Transmission with V2X Sidelink Communication for eNB as Timing Reference	Rel-14	C216	UE supporting V2X Sidelink communication and SLSS transmission and reception			
12.2.2	Initiation/Cease of SLSS Transmission with V2X Sidelink Communication for SyncRef UE as Timing Reference	Rel-14	C216	UE supporting V2X Sidelink communication and SLSS transmission and reception			
12.3.1	V2X Synchronization Reference Selection/Reselection Tests for GNSS configured as the highest priority	Rel-14	C216	UE supporting V2X Sidelink communication and SLSS transmission and reception			
12.3.2	V2X Synchronization Reference Selection/Reselection Tests for eNB configured as the highest priority	Rel-14	C216	UE supporting V2X Sidelink communication and SLSS transmission and reception			
12.4	Congestion Control Measurement Test for V2X UE	Rel-14	C217	UE supporting V2X Sidelink communication and congestion control			
12.5	Interruptions due to V2X Sidelink Communication	Rel-14	C204	UE supporting E-UTRA and V2X Sidelink communication			
12.6.1	V2X UE Autonomous Resource Selection/Reselection Tests for PSSCH-RSRP measurements	Rel-14	C228	UE supporting V2X Sidelink communication and autonomous resource selection			
12.6.2	V2X UE Autonomous Resource Selection/Reselection Tests for S-RSSI measurements	Rel-14	C228	UE supporting V2X Sidelink communication and autonomous resource selection			

Table 4.2-1a: Applicability of RRM conformance test cases Conditions

C01	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 THEN R ELSE N/A
C01a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/13 AND A.4.4-1a/25) THEN R ELSE N/A
C01ah	IF A.4.1-1/1 AND A.4.4-1a/13 AND A.4.4-1a/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C01b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/25) THEN R ELSE N/A
C01c	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.4-1a/5) THEN R ELSE N/A
C01ch	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.4-1a/5) THEN R ELSE N/A
C01d	IF (A.4.1-1/1 AND A.4.4-1a/5 AND A.4.4-1a/13 AND A.4.4-1a/25) THEN R ELSE N/A
C01dh	IF (A.4.1-1/1 AND A.4.4-1a/5 AND A.4.4-1a/13 AND A.4.4-1a/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C01e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C01eh	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C01f	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/16) THEN R ELSE N/A
C01g	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/16 AND A.4.4-1a/25) THEN R ELSE N/A
C01h	IF (A.4.1-1/1 AND A.4.4-1a/16 AND A.4.4-1a/25 AND A.4.5-1/7) THEN R ELSE N/A
C01i	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND NOT(A.4.5-1/40)) THEN R ELSE N/A
C01j	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1 OR A.4.3-4aa/1 OR A.4.3-4aa/1 OR A.4.3-4aa/1 OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/5 AND NOT(A.4.5-1/40)) THEN R ELSE N/A
C01k	IF (A.4.1-1/1 AND A.4.4-1a/16 AND A.4.3-4a/1a) THEN R ELSE N/A
C01m	IF A.4.3-4a/1a AND A.4.1-1/1 THEN R ELSE N/A
C01n	IF A.4.3-4a/1a AND (A.4.1-1/1 AND A.4.4-1a/25) THEN R ELSE N/A
C01l	IF (A.4.1-1/1 AND A.4.4-1a/16 AND A.4.4-1a/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C01o	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a)) AND (A.4.5-1/71 AND A.4.1-1/2 AND A.4.4-1b/25 AND A.4.5-2aa/1) THEN R ELSE N/A
C01p	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a)) AND (A.4.5-1/71 AND A.4.1-1/1 AND A.4.4-1a/25 AND A.4.5-2aa/1) THEN R ELSE N/A
C01q	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a)) AND (A.4.5-1/71 AND A.4.1-1/1 AND A.4.4-1a/5 AND A.4.4-1a/25 AND A.4.5-2aa/1) THEN R ELSE N/A
C01r	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a)) AND (A.4.5-1/71 AND A.4.1-1/2 AND A.4.4-1b/5 AND A.4.4-1a/25 AND A.4.5-2aa/1) THEN R ELSE N/A
C01s	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.5-1/71 THEN R ELSE N/A
C01t	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND A.4.5-1/71 THEN R ELSE N/A
C02	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 THEN R ELSE N/A
C02a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/13 AND A.4.4-1b/25 AND NOT(A.4.5-1/41)) THEN R ELSE N/A
C02ah	IF (A.4.1-1/2 AND A.4.4-1b/13 AND A.4.4-1b/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C02b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/25) THEN R ELSE N/A
C02c	IF (A.4.1-1/2 AND A.4.4-1b/5) THEN R ELSE N/A
C02ch	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.4-1b/5) THEN R ELSE N/A
C02d	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/5 AND A.4.4-1b/13 AND A.4.4-1b/25) THEN R ELSE N/A
C02dh	IF (A.4.1-1/2 AND A.4.4-1b/5 AND A.4.4-1b/13 AND A.4.4-1b/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C02e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C02eh	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C02f	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/16) THEN R ELSE N/A
C02g	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-1b/16 AND A.4.4-1b/25) THEN R ELSE N/A
C02h	IF (A.4.1-1/2 AND A.4.4-1b/16 AND A.4.4-1b/25 AND A.4.5-1/7) THEN R ELSE N/A
C02i	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (NOT(A.4.1-1/2 AND A.4.5-1/41)) THEN R ELSE N/A
C02j	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1b/5 AND NOT(A.4.5-1/41)) THEN R ELSE N/A
C02k	IF (A.4.1-1/2 AND A.4.4-1b/16 AND A.4.3-4a/1a) THEN R ELSE N/A
C02l	IF (A.4.1-1/2 AND A.4.4-1b/16 AND A.4.4-1b/25 AND A.4.3-4a/1a) THEN R ELSE N/A
C02m	IF A.4.3-4a/1a AND A.4.1-1/2 THEN R ELSE N/A
C02n	IF A.4.3-4a/1a AND (A.4.1-1/2 AND A.4.4-1b/25) THEN R ELSE N/A
C03	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2) THEN R ELSE N/A
C03a	IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.3-4a/1a) THEN R ELSE N/A
C04	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3) THEN R ELSE N/A
C04a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/8 AND A.4.4-1a/22) THEN R ELSE N/A
C04b	Void
C04c	Void

C04d	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/5 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C04e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/22 AND A.4.4-1a/25) THEN R ELSE N/A
C04f	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/5 AND A.4.4-1a/19 AND A.4.4-1a/22) THEN R ELSE N/A
C04g	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C04h	IF (A.4.3-4a/1a AND A.4.1-1/1 AND A.4.1-1/3) THEN R ELSE N/A
C04i	IF A.4.5-1/76 AND A.4.1-1/1 AND A.4.1-1/4 THEN R ELSE N/A
C04j	IF A.4.5-1/76 AND A.4.1-1/2 AND A.4.1-1/3 THEN R ELSE N/A
C04k	IF A.4.5-1/76 AND A.4.1-1/2 AND A.4.1-1/4 THEN R ELSE N/A
C04l	IF A.4.5-1/76 AND A.4.1-1/1 AND A.4.1-1/3 THEN R ELSE N/A
C05	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A
C05a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/8 AND A.4.4-1b/22) THEN R ELSE N/A
C05b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/15 AND A.4.4-1b/25) THEN R ELSE N/A
C05c	Void
C05d	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/5 AND A.4.4-1b/15 AND A.4.4-1b/25) THEN R ELSE N/A
C05e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/22 AND A.4.4-1b/25) THEN R ELSE N/A
C06	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A
C06a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1a/8 AND A.4.4-1a/22) THEN R ELSE N/A
C06b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C07	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/3) THEN R ELSE N/A
C07a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1b/8 AND A.4.4-1b/22) THEN R ELSE N/A
C07b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1b/15 AND A.4.4-1b/22) THEN R ELSE N/A
C07c	Void
C07d	IF (A.4.3-4a/1a AND A.4.1-1/2 AND A.4.1-1/3) THEN R ELSE N/A
C07e	IF (A.4.5-1/76 AND A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/15 AND A.4.4-1b/22) THEN R ELSE N/A
C07f	IF (A.4.5-1/76 AND A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1b/15 AND A.4.4-1b/22) THEN R ELSE N/A
C07h	IF (A.4.5-1/76 AND A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C07i	IF (A.4.5-1/76 AND A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1b/15 AND A.4.4-1b/22) THEN R ELSE N/A
C08	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A
C08a	IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1a/9 AND A.4.4-1a/23) THEN R ELSE N/A
C08b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1a/23 AND A.4.4-1a/25) THEN R ELSE N/A
C08c	Void
C08d	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1a/5 AND A.4.4-1a/15 AND A.4.4-1a/23) THEN R ELSE N/A
C08e	IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1a/9 AND A.4.4-1a/15 AND A.4.4-1a/23) THEN R ELSE N/A
C08f	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1a/15 AND A.4.4-1a/23) THEN R ELSE N/A
C08g	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1a/16 AND A.4.4-1a/23) THEN R ELSE N/A
C09	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A
C09a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1b/23 AND A.4.4-1b/25) THEN R ELSE N/A
C09b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1b/9 AND A.4.4-1b/23) THEN R ELSE N/A
C09c	Void
C09d	Void
C09e	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1b/5 AND A.4.4-1b/15 AND A.4.4-1b/23) THEN R ELSE N/A
C09f	IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1b/9 AND A.4.4-1b/15 AND A.4.4-1b/23) THEN R ELSE N/A
C09g	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1b/15 AND A.4.4-1b/23) THEN R ELSE N/A

C09h	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1b/16 AND A.4.4-1b/23) THEN R ELSE N/A
C10	IF (A.4.1-1/1 AND A.4.1-1/6) THEN R ELSE N/A
C10a	IF (A.4.1-1/1 AND A.4.1-1/6 AND A.4.4-1a/12 AND A.4.4-1a/26) THEN R ELSE N/A
C11	IF (A.4.1-1/1 AND A.4.1-1/7) THEN R ELSE N/A
C11a	IF (A.4.1-1/1 AND A.4.1-1/7 AND A.4.4-1a/11 AND A.4.4-1a/24) THEN R ELSE N/A
C12	Void
C13	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.5-1/2) THEN R ELSE N/A
C14	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.5-1/3) THEN R ELSE N/A
C15	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.5-1/44) THEN R ELSE N/A
C16	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.5-1/45) THEN R ELSE N/A
C17	Void
C18	IF (A.4.1-1/1 AND A.4.2-1/2) THEN R ELSE N/A
C18a	IF (A.4.1-1/1 AND A.4.2-1/2) AND A.4.3-3a/7 THEN R ELSE N/A
C18b	Void
C19	IF (A.4.1-1/2 AND A.4.2-1/2) THEN R ELSE N/A
C19a	IF (A.4.1-1/2 AND A.4.2-1/2) AND A.4.3-3a/7 THEN R ELSE N/A
C19b	IF (A.4.1-1/2 AND A.4.2-1/2) AND A.4.3-3a/8 THEN R ELSE N/A
C20	Void
C21	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.1-1/2 AND (A.4.4-1a/5 AND A.4.4-1b/5) AND (A.4.4-1a/25 AND A.4.4-1b/25) AND (A.4.4-1a/30 AND A.4.4-1b/30) THEN R ELSE N/A
C22	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C21a	IF (A.4.1-1/1 AND A.4.1-1/2) AND (A.4.4-1a/5 AND A.4.4-1b/5) AND (A.4.4-1a/25 AND A.4.4-1b/25) AND (A.4.4-1a/30 AND A.4.4-1b/30) AND A.4.3-4a/1a THEN R ELSE N/A
C23	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND NOT A.4.4-1a/5) THEN R ELSE N/A
C24	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND NOT A.4.4-1b/5) THEN R ELSE N/A
C25	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A
C25a	IF (A.4.3-4a/1a AND A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A
C26	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A
C26a	IF (A.4.3-4a/1a AND A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A
C27	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A
C27a	IF (A.4.3-4a/1a AND A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A
C28	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A
C28a	IF (A.4.3-4a/1a AND A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A
C29	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/15) THEN R ELSE N/A
C30	Void
C31	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1b/15 AND A.4.4-1b/22) THEN R ELSE N/A
C32	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-3a/111) THEN R ELSE N/A
C32a	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-1a/25) AND A.4.3-3a/7 THEN R ELSE N/A
C32b	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-1a/25) THEN R ELSE N/A
C32c	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-3a/111) AND A.4.3-3a/7 THEN R ELSE N/A
C33	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3b/111) THEN R ELSE N/A
C33a	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-1b/25) AND A.4.3-3a/7 THEN R ELSE N/A
C33b	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-1b/25) THEN R ELSE N/A
C33c	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3b/111) AND A.4.3-3a/7 THEN R ELSE N/A
C33d	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3b/111) AND A.4.3-3a/8 THEN R ELSE N/A
C34	IF (A.4.1-1/2 AND A.4.1-1/6) THEN R ELSE N/A
C35	IF (A.4.1-1/2 AND A.4.1-1/7) THEN R ELSE N/A
C36	IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1b/12 AND A.4.4-1b/26) THEN R ELSE N/A
C37	IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1b/11 AND A.4.4-1b/24) THEN R ELSE N/A
C38	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2 AND (A.4.4-1a/4 AND A.4.4-1b/4) AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C39	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2 AND A.4.5-1/ 3 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C39a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2 AND A.4.5-1/45 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C40	IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1b/15) THEN R ELSE N/A
C41	IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1b/15) THEN R ELSE N/A
C42	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/2 AND (A.4.4-1a/16 AND A.4.4-1b/16) AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A

C42a	IF (A.4.1-1/1 AND A.4.1-1/2 AND (A.4.4-1a/16 AND A.4.4-1b/16) AND (A.4.4-1a/25 AND A.4.4-1b/25) AND A.4.3-4a/1a) THEN R ELSE N/A
C43	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.2-1/2 AND A.4.4-1a/15) THEN R ELSE N/A
C44	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.2-1/2 AND A.4.4-1b/15) THEN R ELSE N/A
C44a	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.2-1/2 AND A.4.4-1b/15) AND A.4.3-3a/7 THEN R ELSE N/A
C44b	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.2-1/2 AND A.4.4-1b/15) AND A.4.3-3a/8 THEN R ELSE N/A
C45	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-3a/115) THEN R ELSE N/A
C46	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.4-3b/115) THEN R ELSE N/A
C47	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.4-1a/25 AND NOT A.4.5-1/4) THEN R ELSE N/A
C48	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1a/15 AND A.4.4-1a/22 AND NOT A.4.5-1/5) THEN R ELSE N/A
C49	IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A
C50	IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1a/16) THEN R ELSE N/A
C51	IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1a/16 AND A.4.4-1a/25) THEN R ELSE N/A
C52	IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A
C53	IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A
C54	IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1a/8 AND A.4.4-1a/22) THEN R ELSE N/A
C55	IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C56	IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1a/5) THEN R ELSE N/A
C57	IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1a/5) THEN R ELSE N/A
C58	IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1b/5) THEN R ELSE N/A
C58a	IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1b/5) AND A.4.3-3a/8 THEN R ELSE N/A
C59	IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3a/115) THEN R ELSE N/A
C60	IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3b/115) THEN R ELSE N/A
C61	IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3) THEN R ELSE N/A
C62	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3) THEN R ELSE N/A
C62a	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.3-3a/7) THEN R ELSE N/A
C62b	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.3-3a/8) THEN R ELSE N/A
C63	IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1a/5) THEN R ELSE N/A
C64	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1b/5) THEN R ELSE N/A
C64a	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1b/5 AND A.4.3-3a/7) THEN R ELSE N/A
C64b	IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1b/5 AND A.4.3-3a/8) THEN R ELSE N/A
C65	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-2a/39) THEN R ELSE N/A
C66	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-2b/39) THEN R ELSE N/A
C67	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A
C68	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A
C69	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15) THEN R ELSE N/A
C69a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15) THEN R ELSE N/A
C69b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15) THEN R ELSE N/A
C70	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14) THEN R ELSE N/A
C70a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14) THEN R ELSE N/A
C70b	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/14) THEN R ELSE N/A
C71	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A

C72	IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A
C73	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A
C74	IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A
C75	IF (A.4.1-1/1 AND A.4.6-1/2) THEN R ELSE N/A
C75a	IF (A.4.1-1/1 AND A.4.6-1/3) THEN R ELSE N/A
C75b	IF (A.4.1-1/1 AND A.4.6-1/4) THEN R ELSE N/A
C75c	IF (A.4.1-1/1 AND A.4.6-1/4 AND A.4.4-1a/25) THEN R ELSE N/A
C75d	IF (A.4.1-1/1 AND A.4.6-1/4 AND A.4.4-1a/111) THEN R ELSE N/A
C76	IF (A.4.1-1/2 AND A.4.6-1/2) THEN R ELSE N/A
C76a	IF (A.4.1-1/2 AND A.4.6-1/3) THEN R ELSE N/A
C76b	IF (A.4.1-1/2 AND A.4.6-1/4) THEN R ELSE N/A
C76c	IF (A.4.1-1/2 AND A.4.6-1/4 AND A.4.4-1b/25) THEN R ELSE N/A
C76d	IF (A.4.1-1/2 AND A.4.6-1/4 AND A.4.4-1b/111) THEN R ELSE N/A
C77	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1a/15 AND A.4.4-2a/39) THEN R ELSE N/A
C78	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C79	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/15 AND A.4.4-2b/39) THEN R ELSE N/A
C80	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/5 AND A.4.4-1b/15 AND A.4.4-2b/39) THEN R ELSE N/A
C81	Void
C82	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/25 AND A.4.4-2b/39) THEN R ELSE N/A
C83	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1b/15 AND A.4.4-1b/25) THEN R ELSE N/A
C84	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1b/5 AND A.4.4-1b/15 AND A.4.4-1b/25) THEN R ELSE N/A
C85	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1a/15 AND A.4.4-1a/22) THEN R ELSE N/A
C86	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1b/22 AND A.4.4-1b/25) THEN R ELSE N/A
C87	Void
C88	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.3-4a/1 AND A.4.4-1a/16) THEN R ELSE N/A
C89	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.3-4a/1 AND A.4.3-7/2 AND A.4.4-1a/16) THEN R ELSE N/A
C90	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.3-4a/1 AND A.4.4-1b/16) THEN R ELSE N/A
C91	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.4-1a/25) THEN R ELSE N/A
C92	IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND A.4.4-1a/25) THEN R ELSE N/A
C93	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND A.4.3-4a/1 THEN R ELSE N/A
C93a	IF A.4.1-1/2 AND A.4.5-1/25 THEN R ELSE N/A
C93b	IF A.4.1-1/2 AND (A.4.3-4aa/1 OR A.4.3-4aa2) AND A.4.4-1b/16 THEN R ELSE N/A
C93c	IF A.4.1-1/2 AND A.4.3-4aa/1 AND A.4.4-1b/5 THEN R ELSE N/A
C93d	IF A.4.1-1/2 AND (A.4.3-4aa/1 OR A.4.3-4aa/2) AND A.4.5-1/26 AND A.4.4-1b/16 THEN R ELSE N/A
C93e	IF A.4.1-1/2 AND A.4.5-1/26 THEN R ELSE N/A
C93f	IF A.4.1-1/2 AND A.4.5-1/26 AND A.4.5-1/2 THEN R ELSE N/A
C93h	IF A.4.1-1/2 AND A.4.3-4aa/2 AND A.4.4-1b/5 THEN R ELSE N/A
C93k	IF A.4.1-1/2 AND A.4.3-4aa/1 AND A.4.5-1/26 AND A.4.4-1b/5 THEN R ELSE N/A
C94	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.3-4a/1 THEN R ELSE N/A
C94a	IF A.4.1-1/1 AND NOT A.4.3-7/2AND A.4.5-1/25THEN R ELSE N/A
C94b	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.3-4aa/1 AND A.4.4-1a/5 THEN R ELSE N/A
C94c	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND (A.4.3-4aa/1 OR A.4.3-4aa/2) AND A.4.4-1a/16 THEN R ELSE N/A
C94d	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.5-1/25 AND A.4.4-1a/5 THEN R ELSE N/A
C94e	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.5-1/26 THEN R ELSE N/A
C94f	IF A.4.1-1/1 AND A.4.3-7/2 AND A.4.5-1/26 THEN R ELSE N/A
C94g	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.5-1/26 AND A.4.5-1/2 THEN R ELSE N/A
C94h	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.5-1/26 AND A.4.4-1a/5 THEN R ELSE N/A
C94i	IF A.4.1-1/1 AND A.4.3-7/2 AND (A.4.3-4aa/1 AND A.4.5-1/26) AND A.4.4-1a/5 THEN R ELSE N/A
C94k	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.5-1/26 AND A.4.4-1a/5 THEN R ELSE N/A
C94m	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.3-4aa/2 AND A.4.4-1a/5 THEN R ELSE N/A
C95	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND NOT A.4.3-7/2 AND A.4.4-1a/5 AND A.4.3-4a/1 THEN R ELSE N/A

C96	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND A.4.4-1b/5 AND A.4.3-4a/1 THEN R ELSE N/A
C97	IF (A.4.1-1/1 AND A.4.5-1/20 AND A.4.4-1a/5) THEN R ELSE N/A
C98	IF (A.4.1-1/2 AND A.4.5-1/20 AND A.4.4-1b/5) THEN R ELSE N/A
C99	IF (A.4.1-1/1 AND A.4.5-1/20 AND A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C100	IF (A.4.1-1/2 AND A.4.5-1/20 AND A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C101	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.4-1a/16) THEN R ELSE N/A
C102	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.4-1b/16) THEN R ELSE N/A
C103	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.4-1a/16 AND A.4.4-1a/25) THEN R ELSE N/A
C104	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.4-1b/16 AND A.4.4-1b/25) THEN R ELSE N/A
C105	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/1 AND A.4.1-1/4 AND (NOT A.4.1-1/3) AND A.4.4-1a/22) THEN R ELSE N/A
C106	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND (NOT A.4.1-1/3) AND A.4.4-1b/22) THEN R ELSE N/A
C107	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.3-4a/1 AND A.4.3-7/2 THEN R ELSE N/A
C107a	IF A.4.1-1/1 AND A.4.3-7/2 AND A.4.5-1/25 THEN R ELSE N/A
C107b	IF A.4.1-1/1 AND A.4.3-7/2 AND A.4.5-1/25 AND A.4.4-1a/5 THEN R ELSE N/A
C107c	IF A.4.1-1/1 AND A.4.3-7/2 AND A.4.3-4aa/1 AND A.4.4-1a/5 THEN R ELSE N/A
C107d	IF A.4.1-1/1 AND A.4.3-7/2 AND (A.4.3-4aa/1 OR A.4.3-4aa/2) AND A.4.4-1a/16 THEN R ELSE N/A
C107e	IF A.4.1-1/1 AND A.4.3-7/2 AND (A.4.3-4aa/1 OR A.4.3-4aa/2) AND A.4.5-1/26 AND A.4.4-1a/16 THEN R ELSE N/A
C107f	IF A.4.1-1/1 AND NOT A.4.3-7/2 AND (A.4.3-4aa/1 OR A.4.3-4aa/2) AND A.4.5-1/26 AND A.4.4-1a/16 THEN R ELSE N/A
C108	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND NOT A.4.3-7/2 AND A.4.5-1/1 AND A.4.5-1/2 AND A.4.3-4a/1 THEN R ELSE N/A
C108a	IF (A.4.3-4a/1a AND A.4.1-1/1) AND A.4.5-1/1 AND A.4.5-1/2 AND THEN R ELSE N/A
C108b	IF (A.4.3-4a/1a AND A.4.1-1/1) AND A.4.5-1/1 AND A.4.5-1/2 AND A.4.4-1a/5 THEN R ELSE N/A
C109	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/2 AND A.4.3-4a/1 AND A.4.3-7/2 THEN R ELSE N/A
C110	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.3-7/2 AND A.4.3-4a/1 THEN R ELSE N/A
C111	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.3-7/2 AND A.4.4-1a/5 AND A.4.3-4a/1 THEN R ELSE N/A
C112	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/1 AND A.4.4-1a/5 AND A.4.3-4a/1 AND A.4.3-7/2 THEN R ELSE N/A
C113	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/44 AND A.4.4-1b/5 AND A.4.3-4a/1 THEN R ELSE N/A
C114	IF (A.4.1-1/1 AND A.4.5-1/20 AND A.4.4-1a/16) THEN R ELSE N/A
C115	IF (A.4.1-1/2 AND A.4.5-1/20 AND A.4.4-1b/16) THEN R ELSE N/A
C116	IF (A.4.1-1/1 AND A.4.5-1/20 AND A.4.4-1a/16 AND A.4.4-1a/25) THEN R ELSE N/A
C117	IF (A.4.1-1/2 AND A.4.5-1/20 AND A.4.4-1b/16 AND A.4.4-1b/25) THEN R ELSE N/A
C118	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.5-1/20) THEN R ELSE N/A
C119	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.5-1/20) THEN R ELSE N/A
C120	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1b/19 AND A.4.4-1b/22) THEN R ELSE N/A
C121	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1b/22 AND A.4.4-2b/37) THEN R ELSE N/A
C122	IF (NOT(A.4.3-4a/1 OR A.4.3-4a/1a OR A.4.3-4aa/1)) AND (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-2b/37 AND A.4.4-2b/39) THEN R ELSE N/A
C123	IF A.4.1-1/1 AND A.4.2-1/8 THEN R ELSE N/A
C123a	IF A.4.1-1/1 AND A.4.1-1/2 AND A.4.2-1/8 THEN R ELSE N/A
C123b	IF A.4.1-1/1 AND A.4.2-1/8 AND A.4.5-1/40 THEN R ELSE N/A
C124	IF A.4.1-1/2 AND A.4.2-1/8 THEN R ELSE N/A
C125	IF A.4.1-1/1 AND A.4.5-1/27 THEN R ELSE N/A
C125a	IF A.4.1-1/1 AND A.4.5-1/27 AND A.4.5-1/40 THEN R ELSE N/A
C126	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.5-1/19 AND A.4.4-3b/111) THEN R ELSE N/A
C127	Void
C128	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.5-1/19) THEN R ELSE N/A
C129	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.5-1/19) THEN R ELSE N/A
C130	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND A.4.4-1b/25) THEN R ELSE N/A
C131	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND A.4.4-1b/25) THEN R ELSE N/A
C132	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.4-1b/25) THEN R ELSE N/A
C133	IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND A.4.4-1a/25) THEN R ELSE N/A
C134	IF A.4.1-1/1 AND A.4.2-1/8 AND A.4.4-1a/5 THEN R ELSE N/A
C135	IF A.4.1-1/1 AND (A.4.2-1/8 AND A.4.5-1/27) AND A.4.4-1a/5 THEN R ELSE N/A

C136	IF A.4.1-1/2 AND A.4.2-1/8 AND A.4.4-1b/5 THEN R ELSE N/A
C137	IF A.4.1-1/1 AND A.4.2-1/8 AND (A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C138	IF A.4.1-1/1 AND (A.4.2-1/8 AND A.4.5-1/27) AND (A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C139	IF A.4.1-1/2 AND A.4.2-1/8 AND (A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C140	IF (A.4.1-1/1 AND A.4.5-1/40) THEN R ELSE N/A
C141	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15) THEN R ELSE N/A
C142	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14) THEN R ELSE N/A
C143	IF (A.4.1-1/2 AND A.4.5-1/41) THEN R ELSE N/A
C144	IF (A.4.1-1/1 AND A.4.5-1/32 AND A.4.4-1a/25) THEN R ELSE N/A
C145	IF (A.4.1-1/1 AND A.4.5-1/32 AND A.4.4-3a/111 AND A.4.6-1/1) THEN R ELSE N/A
C145a	IF (A.4.1-1/1 AND A.4.5-1/15 AND A.4.5-1/32 AND A.4.4-1a/111 AND (NOT A.4.6.1-1/1)) THEN R ELSE N/A
C146	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3b/111 AND A.4.6-1/1) THEN R ELSE N/A
C146a	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3b/111 AND (NOT A.4.6-1/1)) THEN R ELSE N/A
C147	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3a/111) THEN R ELSE N/A
C148	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3b/111) THEN R ELSE N/A
C149	IF (A.4.1-1/1 AND A.4.5-1/32) THEN R ELSE N/A
C150	IF (A.4.1-1/1 AND A.4.5-1/57 AND A.4.5-1/32 AND A.4.5-1/61) THEN R ELSE N/A
C151	IF (A.4.1-1/2 AND A.4.5-1/57 AND A.4.5-1/32 AND A.4.5-1/61 AND A.4.4-1b/16) THEN R ELSE N/A
C152	IF (A.4.1-1/2 AND A.4.5-1/32) THEN R ELSE N/A
C153	IF (A.4.1-1/1 AND A.4.5-1/32 AND A.4.5-1/19 AND A.4.4-3a/111 AND A.4.6-1/1) THEN R ELSE N/A
C153a	IF (A.4.1-1/1 AND A.4.5-1/32 AND A.4.5-1/19 AND A.4.4-3a/111 AND (NOT A.4.6-1/1)) THEN R ELSE N/A
C154	IF (A.4.1-1/8 AND A.4.3-7/2) THEN R ELSE N/A
C155	IF (A.4.1-1/8 AND A.4.3-7/2) AND A.4.4-1a/5 THEN R ELSE N/A
C156	IF A.4.1-1/1 AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/12 OR A.4.6.3-1/11 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND A.4.4-3a/111 THEN R ELSE N/A
C157	IF (A.4.1-1/1 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.5-1/33) THEN R ELSE N/A
C158	IF (A.4.1-1/2 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.5-1/33) THEN R ELSE N/A
C159	IF (A.4.1-1/2 AND A.4.5-1/32 AND A.4.4-1b/25) THEN R ELSE N/A
C160	IF (A.4.1-1/2 AND A.4.5-1/32 AND A.4.4-3b/111 AND A.4.6-1/1) THEN R ELSE N/A
C160a	IF (A.4.1-1/2 AND A.4.5-1/32 AND A.4.4-1b/111 AND (NOT A.4.6.1-1/1)) THEN R ELSE N/A
C161	IF A.4.1-1/2 AND (A.4.6.1-1/4 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/12 OR A.4.6.3-1/11 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND A.4.4-3b/111 THEN R ELSE N/A
C162	IF (A.4.1-1/8 AND A.4.3-7/2) AND A.4.5-1/34 THEN R ELSE N/A
C163	IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.4-3a/111) THEN R ELSE N/A
C164	IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND A.4.4-3a/111) THEN R ELSE N/A
C165	IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.4-3b/111) THEN R ELSE N/A
C166	IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND A.4.4-3b/111) THEN R ELSE N/A
C167	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A
C168	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A
C169	IF (A.4.1-1/1 AND A.4.1-1/2) AND (A.4.6.2-1/6 OR A.4.6.3-1/13 OR A.4.6.2-1/8 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17) AND (A.4.4-3a/111 AND A.4.4-3b/111) THEN R ELSE N/A
C170	IF (A.4.1-1/1 AND A.4.1-1/2) AND (A.4.6.3-1/14) AND A.4.4-3a/111 THEN R ELSE N/A
C171	IF A.4.1-1/1 AND (A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8) AND A.4.4-3b/111 THEN R ELSE N/A
C172	IF A.4.1-1/1 AND (A.4.6.3-1/14) AND A.4.4-3a/111 THEN R ELSE N/A
C173	IF A.4.1-1/2 AND (A.4.6.3-1/13 OR A.4.6.3-1/15 OR A.4.6.3-1/16 OR A.4.6.3-1/17 OR A.4.6.2-1/6 OR A.4.6.2-1/7 OR A.4.6.2-1/8) AND A.4.4-3a/111 THEN R ELSE N/A
C174	IF A.4.1-1/2 AND (A.4.6.3-1/14 OR A.4.6.1-1/5) AND A.4.4-3a/111 THEN R ELSE N/A
C175	IF A.4.1-1/1 AND A.4.2-1/8 AND A.4.4-1a/5 THEN R ELSE N/A
C176	IF A.4.1-1/1 AND A.4.2-1/8 THEN R ELSE N/A
C177	IF A.4.1-1/1 AND (A.4.2-1/8 AND A.4.5-1/27) THEN R ELSE N/A
C178	IF A.4.1-1/2 AND A.4.2-1/8 THEN R ELSE N/A
C179	IF (A.4.1-1/1 AND A.4.1-1/9) AND (A.4.2-1/9 OR A.4.2-1/10) THEN R ELSE N/A
C180	IF (A.4.1-1/2 AND A.4.1-1/9) AND (A.4.2-1/9 OR A.4.2-1/10) THEN R ELSE N/A
C181	IF (A.4.1-1/1 AND A.4.4-1a/5 AND A.4.5-1/40) THEN R ELSE N/A
C182	IF (A.4.1-1/2 AND A.4.4-1b/5 AND A.4.5-1/41) THEN R ELSE N/A
C183	Void
C184	Void
C185	IF (A.4.1-1/1 AND A.4.2-1/8 AND A.4.5-1/40) THEN R ELSE N/A
C186	IF (A.4.1-1/1 AND A.4.5-1/27 AND A.4.5-1/40) THEN R ELSE N/A
C187	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A

C188	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14 AND (A.4.4-3a/111 AND A.4.4-3b/111)) THEN R ELSE N/A
C189	IF (A.4.1-1/2 AND A.4.6-1/3 AND A.4.4-3b/111) THEN R ELSE N/A
C190	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/15 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C190a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/15 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C191	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND A.4.5-1/14 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C191a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND A.4.5-1/14 AND (A.4.4-1a/25 AND A.4.4-1b/25)) THEN R ELSE N/A
C191b	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/3) THEN R ELSE N/A
C191c	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/4) THEN R ELSE N/A
C191d	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2) THEN R ELSE N/A
C191e	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/2) THEN R ELSE N/A
C191f	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3) THEN R ELSE N/A
C191g	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4) THEN R ELSE N/A
C192	IF (A.4.1-1/2 AND (A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND A.4.4-1b/25) THEN R ELSE N/A
C193	IF (A.4.1-1/2 AND (A.4.6.1-1/4 OR A.4.6.3-1/6 OR A.4.6.3-1/7 OR A.4.6.3-1/9 OR A.4.6.3-1/10 OR A.4.6.3-1/11 OR A.4.6.3-1/12 OR A.4.6.2-1/4 OR A.4.6.2-1/5) AND A.4.4-1b/25) THEN R ELSE N/A
C194	IF (A.4.1-1/1 AND A.4.3-4a/1a) THEN R ELSE N/A
C194a	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/5) THEN R ELSE N/A
C194b	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/25) THEN R ELSE N/A
C194c	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C195	IF (A.4.1-1/22 AND A.4.3-4a/a) THEN R ELSE N/A
C195a	IF (A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-1b/5) THEN R ELSE N/A
C195b	Void
C195c	IF (A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-1b/5 AND A.4.4-1b/25) THEN R ELSE N/A
C196	IF (A.4.1-1/1 AND A.4.3-7/5) THEN R ELSE N/A
C197	IF (A.4.1-1/2 AND A.4.3-7/5) THEN R ELSE N/A
C198	IF (A.4.1-1/1 AND 4.4-1a/5 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3a/111 AND A.4.6-1/1) THEN R ELSE N/A
C199	IF (A.4.1-1/2 AND 4.4-1a/5 AND A.4.5-1/19 AND A.4.5-1/32 AND A.4.4-3b/111 AND A.4.6-1/1) THEN R ELSE N/A
C200	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.2-1/8 AND A.4.5-1/59) THEN R ELSE N/A
C201	IF (A.4.1-1/2 AND A.4.2-1/8 AND A.4.5-1/59) THEN R ELSE N/A
C202	IF (A.4.1-1/8 AND A.4.3-4c/1 AND A.4.5-1/60) THEN R ELSE N/A
C203	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1) THEN R ELSE N/A
C204	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1) THEN R ELSE N/A
C205	IF (A.4.1-1/1 AND A.4.4-1a/5 AND A.4.5-1/64) THEN R ELSE N/A
C206	IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-1a/25 AND A.4.5-1/65) THEN R ELSE N/A
C207	IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-1b/25 AND A.4.5-1/65) THEN R ELSE N/A
C208	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.2-1/2 AND A.4.5-1/15 AND A.4.4-1b/25 AND A.4.5-1/65) THEN R ELSE N/A
C209	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.2-1/2 AND A.4.5-1/14 AND A.4.4-1b/25 AND A.4.5-1/65) THEN R ELSE N/A
C210	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/5) THEN R ELSE N/A
C211	IF (A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-1a/5) THEN R ELSE N/A
C212	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/25) THEN R ELSE N/A
C213	IF (A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-1b/25) THEN R ELSE N/A
C214	IF (A.4.1-1/1 AND A.4.3-4a/1a AND A.4.4-1a/5 AND A.4.4-1a/25) THEN R ELSE N/A
C215	IF (A.4.1-1/2 AND A.4.3-4a/1a AND A.4.4-1b/5 AND A.4.4-1b a/25) THEN R ELSE N/A
C216	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.1-1/10 AND A.4.5-1/49) THEN R ELSE N/A
C217	IF (A.4.1-1/10 AND A.4.3-4d/2 AND A.4.5-7/1 AND A.4.5-1/68) THEN R ELSE N/A
C218	Void
C219	IF (A.4.1-1/8 AND A.4.3-7/2) AND (A.4.5-1/60 AND A.4.5-1/77) THEN R ELSE N/A
C220	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/3 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C220a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C221	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/4 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C221a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C222	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/3 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C222a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/3 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C223	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/4 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C223a	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/4 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C224	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A

C225	IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C226	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/2 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C227	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/2 AND (A.4.5-1/14 OR A.4.5-1/15)) THEN R ELSE N/A
C228	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.1-1/10 AND A.4.5-1/48) THEN R ELSE N/A
C229	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/2) THEN R ELSE N/A
C230	IF (A.4.1-1/2 AND A.6.1-1/3 AND A.4.6.1-2/3 AND A.4.5-2/3) THEN R ELSE N/A
C231	IF (A.4.1-1/2 AND A.6.1-1/3 AND A.4.6.1-2/3 AND A.4.5-2/3 AND A.4.4-1b/5) THEN R ELSE N/A
C232	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/5 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C233	IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6-1/6 AND (A.4.4-3a/111 OR A.4.4-3b/111)) THEN R ELSE N/A
C234	IF (A.4.1-1/8a AND (A.4.3-4c/1 or A.4.3-4c/2)) AND A.4.5-1/34 THEN R ELSE N/A
C235	IF (A.4.1-1/8a AND (A.4.3-4c/1 or A.4.3-4c/2)) THEN R ELSE N/A
C236	IF (A.4.1-1/8 AND A.4.3-7/2 AND A.4.5-1/abc) THEN R ELSE N/A
C237	IF (A.4.1-1/8a AND (A.4.3-4c/1 or A.4.3-4c/2)) AND A.4.4-1a/5 THEN R ELSE N/A
C238	IF (A.4.1-1/1 AND A.4.5-1/86) THEN R ELSE N/A

Table 4.2-1b: Number of TC Executions - Notes

Note 1:	The Carrier Aggregation TCs verify the same core requirement(s) however with different channel bandwidth configurations, this according to the guidance in TS 36.521-3, Annex C.3.3 [2].
Note 2:	The Dual Connectivity TCs verify the same RRM requirements(s) however with different synchronous or asynchronous DC scenarios, this according to the guidance in TS 36.521-3, Annex 3A.5 [2].
Note 3:	Unique FS3 Event triggered reporting tests are defined for one or more FS3 cells. Therefore, only the test case specific to the number of FS3 cells needs to be executed.

Annex A (normative):ICS proforma for E-UTRA User Equipment

Notwithstanding the provisions of the copyright related to the text of the present document, The Organizational Partners of 3GPP grant that users of the present document may freely reproduce the ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.

A.1 Guidance for completing the ICS proforma

A.1.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in relevant specifications may provide information about the implementation in a standardised manner.

The ICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the ICS proforma;
- identification of the implementation;
- identification of the protocol;
- ICS proforma tables (for example: UE implementation types, Teleservices, etc).

A.1.2 Abbreviations and conventions

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Reference column

The reference column gives reference to the relevant 3GPP core specifications.

Release column

The release column indicates the earliest release from which the capability or option is relevant.

Comments column

This column is left blank for particular use by the reader of the present document.

References to items

For each possible item answer (answer in the support column) within the ICS proforma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.4.1-1/2 is the reference to the answer of item 2 in table A.4.1-1.

A.1.3 Instructions for completing the ICS proforma

The supplier of the implementation may complete the ICS proforma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the ICS proforma.

A.2 Identification of the User Equipment

Identification of the User Equipment should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

A.2.1 Date of the statement

.....

A.2.2 User Equipment Under Test (UEUT) identification

UEUT name:

.....

.....

Hardware configuration:

.....

.....

.....

Software configuration:

.....

.....

.....

A.2.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.4 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.5 ICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

A.3 Identification of the protocol

This ICS proforma applies to the 3GPP standards listed in the normative references clause of the present document.

A.4 ICS proforma tables

A.4.1 UE Implementation Types

Table A.4.1-1: UE Radio Technologies

Item	UE Radio Technologies	Ref.	Release	Comments
1	E-UTRA FDD	36.101	Rel-8	
2	E-UTRA TDD	36.101	Rel-8	
3	UTRA FDD	25.101	R99	
4	UTRA TDD	25.102	R99	
5	GSM	45.005	R99	
6	cdma2000 HRPD	C.S0024-A	Rel-8	
7	cdma2000 1xRTT	C.S0002-A	Rel-8	
8	NB-IoT	36.101	Rel-13	
8a	NB-IoT TDD	36.101	Rel-15	
9	WLAN	IEEE Std 802.11		
10	V2X Sidelink Communication	36.101	Rel-14	

A.4.2 UE Service Capabilities

Table A.4.2-1: UE Radio Technologies

Item	UE Radio Technologies	Ref.	Release	Comments
1	LTE MBMS	36.101	Rel-9	
2	LTE CA	36.101	Rel-10	
3	UL-MIMO	36.306, 4.3.4.6	Rel-10	
4	Void			
5	Enhanced Dual Layer TDD	36.306, 4.3.4.5	Rel-9	
6	EPDCCH	36.306, 4.3.4.18	Rel-11	
7	FDD - TDD CA	36.306, 4.3.4.28	Rel-12	
8	Support of DC	36.306, 4.3.5.9	Rel-12	The UE supports of synchronous dual connectivity and power control mode 1
9	Support of E-UTRAN WLAN Aggregation - LWA	36.306, 4.3.18, 4.3.25, 4.3.27, 7.10.2	Rel-13	
10	Support of E-URAN WLAN Aggregation with IPsec Tunnel - LWIP	36.306, 4.3.18, 4.3.24, 4.3.27, 7.10.2	Rel-13	

A.4.3 Baseline Implementation Capabilities

Table A.4.3-1: Supported protocols

Item	Supported protocols	Ref.	Release	Comments
1	EPS Mobility Management	24.301, 5	Rel-8	For NB-IoT the release is from Rel-13
2	EPS Session Management	24.301, 6	Rel-8	For NB-IoT the release is from Rel-13
3	GPRS Mobility Management	23.060	R99	For NB-IoT the release is from Rel-13
4	Radio Resource Control	36.331	Rel-8	For NB-IoT the release is from Rel-13
5	Packet Data Convergence Protocol	36.323	Rel-8	For NB-IoT the release is from Rel-13
6	Radio Link Control	36.322	Rel-8	For NB-IoT the release is from Rel-13
7	Medium Access Control	36.321	Rel-8	For NB-IoT the release is from Rel-13
8	Physical Layer	36.201 36.302	Rel-8	For NB-IoT the release is from Rel-13

Table A.4.3-2: Special Conformance Testing Functions

Item	Special Conformance Testing Functions	Ref.	Release	Comments
1	UE test loop	36.509	Rel-8	For NB-IoT the release is from Rel-13
2	Max UE test loop UL RLC SDU size 65535 bits	36.509	Rel-8	

Table A.4.3-3: RF Baseline Implementation Capabilities

Item	RF Baseline Implementation Capabilities	Ref.	Release	Comments
1	Frequency band: 1920-1980, 2110-2170 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 1
2	Frequency band: 1850-1910, 1930-1990 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 2
3	Frequency band: 1710-1785, 1805-1880 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 3
4	Frequency band: 1710-1755, 2110-2155 MHz	36.101, 5.5	Rel-8	FDD Band 4
5	Frequency band: 824-849, 869-894 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 5
6	Frequency band: 830-840, 875-885 MHz	36.101, 5.5	Rel-8	FDD Band 6
7	Frequency band: 2500-2570, 2620-2690 MHz	36.101, 5.5	Rel-8	FDD Band 7
8	Frequency band: 880-915, 925-960 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 8
9	Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz	36.101, 5.5	Rel-8	FDD Band 9
10	Frequency band: 1710-1770, 2110-2170 MHz	36.101, 5.5	Rel-8	FDD Band 10
11	Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 11
12	Frequency band: 699-716, 729-746 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 12
13	Frequency band: 777-787, 746-756 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 13
14	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	Rel-8	FDD Band 14
15	Reserved	36.101, 5.5	Rel-8	FDD Band 15
16	Reserved	36.101, 5.5	Rel-8	FDD Band 16
17	Frequency band: 704-716, 734-746 MHz	36.101, 5.5	Rel-8	FDD and HD-FDD Band 17
18	Frequency band: 815-830, 860-875 MHz	36.101, 5.5	Rel-9	FDD and HD-FDD Band 18
19	Frequency band: 830-845, 875-890 MHz	36.101, 5.5	Rel-9	FDD and HD-FDD Band 19
20	Frequency band: 832-862, 791-821MHz	36.101, 5.5	Rel-9	FDD and HD-FDD Band 20
21	Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz	36.101, 5.5	Rel-9	FDD and HD-FDD Band 21Band 21
22	Frequency band: 3410-3490, 3510-3590 MHz	36.101, 5.5	Rel-10	FDD Band 22
23	Frequency band: 2000-2020, 2180-2200 MHz	36.101, 5.5	Rel-10	FDD Band 23
24	Frequency band: 1626.5-1660.5, 1525-1559 MHz	36.101, 5.5	Rel-10	FDD Band 24
25	Frequency band: 1850-1915, 1930-1995 MHz	36.101, 5.5	Rel-10	FDD and HD-FDD Band 25
26	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	Rel-11	FDD and HD-FDD Band 26
27	Frequency band: 807-824, 852-869 MHz	36.101, 5.5	Rel-11	FDD Band 27
28	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	Rel-11	FDD and HD-FDD Band 28
29	Frequency band: N/A, 717-728 MHz	36.101, 5. 5	Rel-11	FDD Band 29
30	Frequency band: 2305-2315, 2350-2360 MHz (Note 2)	36.101, 5.5	Rel-12	FDD Band 30
31	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	Rel-12	FDD and HD-FDD Band 31
32	Frequency band: N/A, 1452-1496 MHz	36.101, 5.5	Rel-12	FDD Band 32
33	Frequency band: 1900-1920, 1900-1920 MHz	36.101, 5.5	Rel-8	TDD Band 33
34	Frequency band: 2010-2025, 2010-2025 MHz	36.101, 5.5	Rel-8	TDD Band 34
35	Frequency band: 1850-1910, 1850-1910 MHz	36.101, 5.5	Rel-8	TDD Band 35
36	Frequency band: 1930-1990, 1930-1990 MHz	36.101, 5.5	Rel-8	TDD Band 36
37	Frequency band: 1910-1930, 1910-1930 MHz	36.101, 5.5	Rel-8	TDD Band 37
38	Frequency band: 2570-2620, 2570-2620 MHz	36.101, 5.5	Rel-8	TDD Band 38
39	Frequency band: 1880-1920, 1880-1920 MHz	36.101, 5.5	Rel-8	TDD Band 39
40	Frequency band: 2300-2400, 2300-2400 MHz	36.101, 5.5	Rel-8	TDD Band 40
41	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	Rel-10	TDD Band 41
42	Frequency band: 3400-3600, 3400-3600 MHz	36.101, 5.5	Rel-10	TDD Band 42
43	Frequency band: 3600-3800, 3600-3800 MHz	36.101, 5.5	Rel-10	TDD Band 43
44	Frequency band: 703-803, 703-803 MHz	36.101, 5.5	Rel-11	TDD Band 44
45	Frequency band: 1447-1467, 1447-1467 MHz	36.101, 5.5	Rel-13	TDD Band 45
46	Frequency band: 5150-5925, 5250-5925 MHz	36.101, 5.5	Rel-13	TDD Band 46
47	Frequency band: 5855-5925, 5855-5925 MHz	36.101, 5.5	Rel-14	TDD Band 47

...				
48	Frequency band: 3550-3700, 3550-3700 MHz	36.101, 5.5	Rel-14	TDD Band 48
..				
53	Frequency band: 2483.5-2495, 2483.5-2495 MHz	36.101, 5.5	Rel-16	TDD Band 53
...				
65	Frequency band: 1920-2010, 2110-2200 MHz	36.101, 5.5	Rel-13	FDD Band 65
66	Frequency band: 1710-1780, 2110-2200 MHz	36.101, 5.5	Rel-13	FDD and HD-FDD Band 66
...				
68	Frequency band: 698-728, 753-783 MHz	36.101, 5.5	Rel-15	FDD Band 68
69	Frequency band: N/A, 2570-2620 MHz	36.101, 5.5	Rel-14	FDD Band 69
70	Frequency band: 1695-1710, 1995-2020 MHz	36.101, 5.5	Rel-14	FDD and HD-FDD Band 70
71	Frequency band: 663-698, 617-652 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 71
72	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 72
73	Frequency band: 450-455, 460-465 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 73
74	Frequency band: 1427-1470, 1475-1518 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 74
...				
85	Frequency band: 698-716, 728-746 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 85
...				
87	Frequency band: 410-415, 420-425 MHz	36.101, 5.5	Rel-16	FDD and HD-FDD Band 87
88	Frequency band: 412-417, 422-427 MHz	36.101, 5.5	Rel-16	FDD and HD-FDD Band 88

Note 1: The values indicated in column "Release" are to be understood as the specifications release version in which a band was introduced and not as a mandate that a UE conforming to particular release shall support a particular band. For further guidance to release independent bands see TS 36.307 [16]

Note 2: The uplink transmission is not allowed at this band for the UE with the externally vehicle-mounted antennas.

Table A.4.3-3a: RF Additional Baseline Implementation Capabilities

Item	RF Additional Baseline Implementation Capabilities	Ref.	Comments
1	Support of 1.4 MHz channel bandwidth	36.101, 5.6.1	Operating bands supporting 1.4 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 31, 35, 36, 53, 65, 66, 72, 73, 74, 87, 88
2	Support of 3 MHz channel bandwidth	36.101, 5.6.1	Operating bands supporting 3 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 28, 31, 35, 36, 44, 53, 65, 66, 72, 73, 74, 87, 88
3	Support of 5 MHz channel bandwidth	36.101, 5.6.1	All operating bands support 5 MHz Bandwidth except band 46 and Band 47
4	Support of 10 MHz channel bandwidth	36.101, 5.6.1	All operating bands support 10 MHz Bandwidth except band 31, 72 and 73
5	Support of 15 MHz channel bandwidth	36.101, 5.6.1	Operating bands supporting 15 MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 18, 19, 20, 21, 22, 23, 25, 26, 28, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 48, 65, 66, 70, 74
6	Support of 20 MHz channel bandwidth	36.101, 5.6.1	Operating bands supporting 20MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 20, 22, 23, 25, 28, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 65, 66, 70[1], 74
7	Support of 20 MHz for both PCell and SCell	36.101, 5.6A.1	
8	Support of 20 MHz for PCell and 10 MHz for SCell	36.101, 5.6A.1	
9	Support at most 40 MHz aggregated bandwidth	36.101, 5.6A.1	
10	Support at most 60 MHz aggregated bandwidth	36.101, 5.6A.1	
11	Support at most 80 MHz aggregated bandwidth	36.101, 5.6A.1	
12	Support at most 100 MHz aggregated bandwidth	36.101, 5.6A.1	
Note 1: [1] For the 20 MHz channel bandwidth, the additional baseline implementation capabilities are restricted to E-UTRA operation when carrier aggregation is configured.			

Table A.4.3-3b: Additional UE Power Class implementation Capabilities

Item	RF baseline UE Baseline implementation capability	Ref.	Comments
1	UE Power Class 1	36.101, 6.2.2	Applicable to Bands 14, 31, 72, 87, 88
2	UE Power Class 3	36.101, 6.2.2	All applicable E-UTRA and NB-IoT bands
3	UE Power Class 5	36.101, 6.2.2E 36.306, 4.3.5.1 and 4.3.5.1A	All applicable E-UTRA and NB-IoT bands 20dBm
4	UE Power Class 2	36.101, 6.2.2. 6.2.2E	Applicable to Bands 31, 41, 47, 72
5	UE Power Class 6	36.101, 6.2.2E 36.306, 4.3.5.1A.2	All applicable E-UTRA and NB-IoT bands 14dBm

Table A.4.3-3c: UE Power Class 1 implementation Capabilities per band

Item	RF Baseline Implementation Capabilities	Ref.	Release	Comments
1	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	Rel-8	FDD Band 14
2	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	Rel-12	FDD and HD-FDD Band 31
3	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 72
4	Frequency band: 410-415, 420-425 MHz	36.101, 5.5	Rel-16	FDD and HD-FDD Band 87
5	Frequency band: 412-417, 422-427 MHz	36.101, 5.5	Rel-16	FDD and HD-FDD Band 88

Table A.4.3-3d: UE Power Class 2 implementation Capabilities per band

Item	RF Baseline Implementation Capabilities	Ref.	Release	Comments
1	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	Rel-10	TDD Band 41
2	Frequency band: 5855-5925, 5855-5925 MHz	36.101, 5.5	Rel-14	TDD Band 47
3	Frequency band: 2570-2620, 2570-2620 MHz	36.101, 5.5	Rel-15	TDD Band 38
4	Frequency band: 2300-2400, 2300-2400 MHz	36.101, 5.5	Rel-15	TDD Band 40
5	Frequency band: 3400-3600, 3400-3600 MHz	36.101, 5.5	Rel-15	TDD Band 42
6	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	Rel-12	FDD and HD-FDD Band 31
7	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	Rel-15	FDD and HD-FDD Band 72

Table A.4.3-4: UE Category

Item	UE Category	Ref.	Release	Comments
1	Category 1	36.306, 4.1	Rel-8	
2	Category 2	36.306, 4.1	Rel-8	
3	Category 3	36.306, 4.1	Rel-8	
4	Category 4	36.306, 4.1	Rel-8	
5	Category 5	36.306, 4.1	Rel-8	Support for 64QAM in UL
6	Category 6	36.306, 4.1	Rel-10	
7	Category 7	36.306, 4.1	Rel-10	
8	Category 8	36.306, 4.1	Rel-10	Support for 64QAM in UL
9	Category 9	36.306, 4.1	Rel-11	
10	Category 10	36.306, 4.1	Rel-11	
11	Category 11	36.306, 4.1	Rel-11	
12	Category 12	36.306, 4.1	Rel-11	

Table A.4.3-4a: UE Downlink Category

Item	UE Category	Ref.	Release	Comments
1	Category DL 0	36.306, 4.1A	Rel-12	Only in combination with Category UL 0
1a	Category DL 1bis	36.306, 4.1A	Rel-13	Only in combination with Category UL 1bis
2	Category DL 6	36.306, 4.1A	Rel-12	Only in combination with Category UL 5 or Category UL 16
3	Category DL 7	36.306, 4.1A	Rel-12	Only in combination with Category UL 13 or Category UL 18
4	Category DL 9	36.306, 4.1A	Rel-12	Only in combination with Category UL 5 or Category UL 16
5	Category DL 10	36.306, 4.1A	Rel-12	Only in combination with Category UL 13 or Category UL 18
6	Category DL 11	36.306, 4.1A	Rel-12	Only in combination with Category UL 5 or Category UL 16
7	Category DL 12	36.306, 4.1A	Rel-12	Only in combination with Category UL 13 or Category UL 15 or Category UL 18 or Category UL 20
8	Category DL 13	36.306, 4.1A	Rel-12	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 16 or Category UL 18
9	Category DL 14	36.306, 4.1A	Rel-12	Only in combination with Category UL 8 or Category UL 17
10	Category DL 15	36.306, 4.1A	Rel-12	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 16 or Category UL 18
11	Category DL 16	36.306, 4.1A	Rel-12	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 15 or Category UL 16 or Category UL 18 or Category UL 20
12	Category DL 17	36.306, 4.1A	Rel-13	Only in combination with Category UL 14 or Category UL 19

13	Category DL 18	36.306, 4.1A	Rel-13	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 15 or Category UL 16 or Category UL 18 or Category UL 20
14	Category DL 19	36.306, 4.1A	Rel-13	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 15 or Category UL 16 or Category UL 18 or Category UL 20 or Category UL 21
15	Category DL 4	36.306, 4.1A	Rel-12	Only in combination with Category UL 5
16	Category DL 20	36.306, 4.1A	Rel-14	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 15 or Category UL 16 or Category UL 18 or Category UL 20 or Category UL 21
17	Category DL 21	36.306, 4.1A	Rel-14	Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 or Category UL 15 or Category UL 16 or Category UL 18 or Category UL 20
18	Category DL 22	36.306, 4.1A	Rel-14	Only in combination with Category UL 20 or Category UL 22 or Category UL 23 or Category UL 24 or Category UL 25 or Category UL 26
19	Category DL 23	36.306, 4.1A	Rel-14	Only in combination with Category UL 20 or Category UL 22 or Category UL 23 or Category UL 24 or Category UL 25 or Category UL 26
20	Category DL 24	36.306, 4.1A	Rel-14	Only in combination with Category UL 20 or Category UL 22 or Category UL 23 or Category UL 24 or Category UL 25 or Category UL 26

21	Category DL 25	36.306, 4.1A	Rel-14	Only in combination with Category UL 20 or Category UL 22 or Category UL 23 or Category UL 24 or Category UL 25 or Category UL 26
22	Category DL 26	36.306, 4.1A	Rel-14	Only in combination with Category UL 20 or Category UL 22 or Category UL 23 or Category UL 24 or Category UL 25 or Category UL 26

Table A.4.3-4aa: Additional UE Downlink Category

Item	UE Category	Ref.	Release	Comments
1	Category DL M1	36.306, 4.1A	Rel-13	Only in combination with Category UL M1
2	Category DL M2 (NOTE 1)	36.306, 4.1A	Rel-14	Only in combination with Category UL M2
NOTE 1: A UE indicating Category M2 shall also indicate Category M1.				

Table A.4.3-4b: UE Uplink Category

Item	UE Category	Ref.	Release	Comments
1	Category UL 0	36.306, 4.1A	Rel-12	Only in combination with Category DL 0
1a	Category UL 1bis	36.306, 4.1A	Rel-13	Only in combination with Category DL 1bis
2	Category UL 3	36.306, 4.1A	Rel-12	Only in combination with Category DL 13, Category DL 15, Category DL 16, Category DL 18, Category DL 19, Category DL 20 or Category DL 21
3	Category UL 5	36.306, 4.1A	Rel-12	Only in combination with Category DL 6, Category DL 9, Category DL 11, Category DL 13, Category DL 15 , Category DL 16, Category DL 18, Category DL 19, Category DL 20 or Category DL 21
4	Category UL 7	36.306, 4.1A	Rel-12	Only in combination with Category DL 13, Category DL 15, Category DL 16, Category DL 18, Category DL 19, Category DL 20 or Category DL 21
5	Category UL 8	36.306, 4.1A	Rel-12	Only in combination with Category DL 14
6	Category UL 13	36.306, 4.1A	Rel-12	Only in combination with Category DL 7, Category DL 10, Category DL 12, Category DL 13, Category DL 15, Category DL 16, Category DL 18, Category DL 19, Category DL 20 or Category DL 21
7	Category UL 14	36.306, 4.1A	Rel-13	Only in combination with Category DL 17
8	Category UL 15	36.306, 4.1A	Rel-13	Only in combination with Category DL 12 or Category DL 16 or Category DL 18 or Category DL 19 or Category DL 20 or Category DL 21

9	Category UL 16	36.306, 4.1A	Rel-14	Only in combination with Category DL 6, Category DL 9, Category DL 11, Category DL 13, Category DL 15, Category DL 16. Category DL 18, Category DL 19, Category DL 20 or Category DL 21
10	Category UL 17	36.306, 4.1A	Rel-14	Only in combination with Category DL 14
11	Category UL 18	36.306, 4.1A	Rel-14	Only in combination with Category DL 7, Category DL 10, Category DL 12, Category DL 13, Category DL 15, Category DL 16. Category DL 18, Category DL 19, Category DL 20 or Category DL 21
12	Category UL 19	36.306, 4.1A	Rel-14	Only in combination with Category DL 17
13	Category UL 20	36.306, 4.1A	Rel-14	Only in combination with Category DL 12, Category DL 16, Category DL 18, Category DL 19, Category DL 20, Category DL 21, Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26
14	Category UL 21	36.306, 4.1A	Rel-14	Only in combination with Category DL 19 or Category DL 20
15	Category UL 22	36.306, 4.1A	Rel-14	Only in combination with Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26
16	Category UL 23	36.306, 4.1A	Rel-14	Only in combination with Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26
17	Category UL 24	36.306, 4.1A	Rel-14	Only in combination with Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26

18	Category UL 25	36.306, 4.1A	Rel-14	Only in combination with Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26
19	Category UL 26	36.306, 4.1A	Rel-14	Only in combination with Category DL 22, Category DL 23, Category DL 24, Category DL 25 or Category DL 26

Table A.4.3-4ba: Additional UE Uplink Category

Item	UE Category	Ref.	Release	Comments
1	Category UL M1	36.306, 4.1A	Rel-12	Only in combination with Category DL M1
2	Category UL M2 (NOTE 1)	36.306, 4.1A	Rel-14	Only in combination with Category DL M2
NOTE 1: A UE indicating Category M2 shall also indicate Category M1.				

Table A.4.3-4c: UE Category NB

Item	UE Category	Ref.	Release	Comments
1	Category NB1	36.306, 4.1C	Rel-13	
2	Category NB2 (Note 1)	36.306, 4.1C	Rel-14	
NOTE 1: A UE indicating Category NB2 shall also indicate Category NB1.				

Table A.4.3-4d: UE Category for V2X sidelink communication and sidelink discovery

Item	UE Category	Ref.	Release	Comments
1	SL-D Category 1	36.306, 4.1B	Rel-14	
NOTE 1: If a UE of this release supports sidelink discovery, the UE shall support SL-D Category 1				

Table A.4.3-4da: UE Category for reception capabilities for sidelink communication

Item	UE Category	Ref.	Release	Comments
1	SL-C-RX Category 1	36.306, 4.1B	Rel-14	
2	SL-C-RX Category 2	36.306, 4.1B	Rel-14	
3	SL-C-RX Category 3	36.306, 4.1B	Rel-14	
4	SL-C-RX Category 4	36.306, 4.1B	Rel-14	
NOTE 1: If a UE of this release supports sidelink communication, the UE shall support SL-C-RX Category 1 and SL-C-TX Category 1. If a UE of this release supports V2X sidelink communication, the UE shall support SL-C-RX Category 2 to 4 for reception, and SL-C-TX category 2 to 5 for transmission.				

Table A.4.3-4db: UE Category for transmission capabilities for sidelink communication

Item	UE Category	Ref.	Release	Comments
1	SL-C-TX Category 1	36.306, 4.1B	Rel-14	
2	SL-C-TX Category 2	36.306, 4.1B	Rel-14	
3	SL-C-TX Category 3	36.306, 4.1B	Rel-14	
4	SL-C-TX Category 4	36.306, 4.1B	Rel-14	
5	SL-C-TX Category 5	36.306, 4.1B	Rel-14	
NOTE 1: If a UE of this release supports sidelink communication, the UE shall support SL-C-RX Category 1 and SL-C-TX Category 1. If a UE of this release supports V2X sidelink communication, the UE shall support SL-C-RX Category 2 to 4 for reception, and SL-C-TX category 2 to 5 for transmission.				

Table A.4.3-5: Void

Table A.4.3-6: Void

Table A.4.3-7: Additional capabilities

Item	Additional capabilities	Ref.	Release	Comments
1	Enhanced performance requirements type A for LTE	36.101, 8	Rel-11	Support for Enhanced performance requirements type A
2	Support of Type B Half-duplex FDD operation	36.211, 6,2,5 36.306, 4.2.6	Rel-12	Support of Half-duplex FDD operation type B for category 0, category M1, category M2, category NB1 and category NB2 UE
3	Enhanced performance requirements type C for LTE	36.101, 8	Rel-12	Support for Enhanced performance requirements type C
4	Enhanced performance requirements type B for LTE	36.101, 8 36.306, 4.3.4.35	Rel-12	Support for Enhanced performance requirements type B
5	Enhanced measurement in high speed scenario	36.306,4.3.3 3.1	Rel-14	Support measurement enhancements in high speed scenario
6	Enhanced downlink control channel performance requirements type A for LTE	36.101, 8	Rel-13	Support for Enhanced downlink control channel performance requirements type A for LTE
7	Enhanced downlink control channel performance requirements type B for LTE	36.101, 8	Rel-13	Support for Enhanced downlink control channel performance requirements type B for LTE
8	DMRS enhancements for TM9	36.306, 4.3.28.4	Rel-13	Support for DMRS enhancements in TM9

Table A.4.3-8: Void

A.4.4 Feature group indicators

In Table A.4.4-1a and Table A.4.4-1b, a 'VoLTE capable UE' corresponds to a UE that is capable of the "Voice domain preference for E-UTRAN" defined in TS 24.301 [15] being set to "IMS PS voice only", "IMS PS voice preferred, CS voice as secondary" or "CS voice preferred, IMS PS voice as secondary" (Ref TS 36.331 [14], clause B.1)

When a UE supports E-UTRA FDD only, it's required to indicate combined FGI capabilities in Table A.4.4-1a, Table A.4.4-2a and Table A.4.4-3a; when a UE supports E-UTRA TDD only, it's required to indicate combined FGI capabilities in Table A.4.4-1b, Table A.4.4-2b and Table A.4.4-3b; when a UE supports E-UTRA FDD/TDD dual mode with same FGI capabilities on FDD and TDD, it's required to indicate both FGI capabilities in Table A.4.4-1a, Table A.4.4-2a, Table A.4.4-3a, Table A.4.4-1b, Table A.4.4-2b and Table A.4.4-3b and make sure those FDD and TDD tables are identical.

Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits. Instead it has introduced a different mechanism to accomplish the same purposes based on the principles described in TS 36.306 [17] clause 4. This new principles where applicable have been catered for in section A.4.5, e.g. Table A.4.5-2.

Table A.4.4-1:Void

Table A.4.4-1a: Feature group indicators 1-32 for FDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
1	Support of - Intra-subframe frequency hopping for PUSCH scheduled by UL grant - DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments) - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PMI - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI	- set to 1 by category M1 UE that has implemented and successfully tested "Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PM"		Rel-8	36.331, Annex B.1	pc_FeatrGrp_1_F	Corresponding to the Index of Indicator, the leftmost binary bit 1. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
2	Support of - Simultaneous CQI and ACK/NACK on PUCCH, i.e. PUCCH format 2a and 2b - Absolute TPC command for PUSCH - Resource allocation type 1 for PDSCH - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 - UE selected subband CQI without PMI - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_2_F	Corresponding to the Index of Indicator, the leftmost binary bit 2. Set to true if supporting all functionalities in the feature group.
3	Support of - Semi-persistent scheduling - TTI bundling - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_3_F	Corresponding to the Index of Indicator, the leftmost binary bit 3. Set to true if supporting all functionalities in the feature group.
	Support of - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.	Yes, if UE supports VoLTE	Rel-9, Rel-10			
			Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
4	Support of - Short DRX cycle	- can only be set to 1 if the UE has set bit number 5 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_4_F	Corresponding to the Index of Indicator, the leftmost binary bit 4. Set to true if supporting all functionalities in the feature group.
5	Support of - Long DRX cycle - DRX command MAC control element			Rel-8	36.331, Annex B.1	pc_FeatrGrp_5_F	Corresponding to the Index of Indicator, the leftmost binary bit 5. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			
6	Support of - Prioritized bit rate			Rel-8	36.331, Annex B.1	pc_FeatrGrp_6_F	Corresponding to the Index of Indicator, the leftmost binary bit 6. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
7	Support of - RLC UM	- can only be set to 0 if the UE does not support voice		Rel-8	36.331, Annex B.1	pc_FeatrGrp_7_F	Corresponding to the Index of Indicator, the leftmost binary bit 7. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports VoLTE	Rel-9			
			Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
8	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH PS handover	- can only be set to 1 if the UE has set bit number 22 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_8_F	Corresponding to the Index of Indicator, the leftmost binary bit 8. Set to true if supporting all functionalities in the feature group.
	Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH PS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD		Yes (except for category M1 UE), if UE supports UTRA FDD	Rel-9			
9	Support of - EUTRA RRC_CONNECTED to GERAN GSM_Dedicated handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 23 to 1		Rel-8, Rel-9, Rel-10	36.331, Annex B.1	pc_FeatrGrp_9_F	Corresponding to the Index of Indicator, the leftmost binary bit 9. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE), if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
10	Support of - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order with NACC (Network Assisted Cell Change)			Rel-8	36.331, Annex B.1	pc_FeatrGrp_10_F	Corresponding to the Index of Indicator, the leftmost binary bit 10. Set to true if supporting all functionalities in the feature group.
11	Support of - EUTRA RRC_CONNECTED to CDMA2000 1xRTT CS Active handover	- can only be set to 1 if the UE has sets bit number 24 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_11_F	Corresponding to the Index of Indicator, the leftmost binary bit 11. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
12	Support of - EUTRA RRC_CONNECTED to CDMA2000 HRPD Active handover	- can only be set to 1 if the UE has set bit number 26 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_12_F	Corresponding to the Index of Indicator, the leftmost binary bit 12. Set to true if supporting all functionalities in the feature group.
13	Support of - Inter-frequency handover (within FDD or TDD)	- can only be set to 1 if the UE has set bit number 25 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_13_F	Corresponding to the Index of Indicator, the leftmost binary bit 13. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE), unless UE only supports band 13	Rel-9			
14	Support of - Measurement reporting event: Event A4 - Neighbour > threshold - Measurement reporting event: Event A5 - Serving < threshold1 & Neighbour > threshold2			Rel-8	36.331, Annex B.1	pc_FeatrGrp_14_F	Corresponding to the Index of Indicator, the leftmost binary bit 14. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE)	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
15	Support of - Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Measurement reporting event: Event B1 - Neighbour > threshold for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set at least one of the bit number 22, 23, 24, 26 or 39 to 1. - even if the UE sets bits 41, it shall still set bit 15 to 1 if measurement reporting event B1 is tested for all RATs supported by UE - If a category M1 UE does not support this feature group, this bit shall be set to 0.	 Yes for FDD, if UE supports only UTRAN FDD and does not support UTRAN TDD or GERAN or 1xRTT or HRPD	Rel-8 Rel-9	36.331, Annex B.1	pc_FeatrGrp_15_F	Corresponding to the Index of Indicator, the leftmost binary bit 15. Set to true if supporting all functionalities in the feature group.
16		- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_16_F	Corresponding to the Index of Indicator, the leftmost binary bit 16. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
	Support of - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*; - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*, if the UE has set bit number 25 to 1; and - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively. NOTE: Event triggered periodical reporting (i.e. with *triggerType* set to *event* and with *reportAmount* > 1) is a mandatory functionality of event triggered reporting and therefore not the subject of this bit. Support of - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*, if the UE has set bit number 25 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively. NOTE: Event triggered periodical reporting (i.e., with *triggerType* set to *event* and with *reportAmount* > 1) is a mandatory functionality of event triggered reporting and therefore not the subject of this bit.		Yes	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
17	Support of Intra-frequency ANR features including: - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 to 1. - If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_17_F	Corresponding to the Index of Indicator, the leftmost binary bit 17. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			
18	Support of Inter-frequency ANR features including: - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 to 1. - If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_18_F	Corresponding to the Index of Indicator, the leftmost binary bit 18. Set to true if supporting all functionalities in the feature group.
			Yes, unless UE only supports band 13	Rel-9			
19	Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN, 1xRTT or HRPD, if the UE has set bit number 22, 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 23, 24 or 26 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_19_F	Corresponding to the Index of Indicator, the leftmost binary bit 19. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
	Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for 1xRTT or HRPD, if the UE has set bit number 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRANTDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 39, 23, 24 or 26 to 1. - even if the UE sets bits 33 to 37, it shall still set bit 19 to 1 if inter-RAT ANR features are tested for all RATs for which inter-RAT measurement reporting is indicated as tested		Rel-9			
20	If bit number 7 is set to ' 0': - SRB1 and SRB2 for DCCH + 8x AM DRB If bit number 7 is set to ' 1': - SRB1 and SRB2 for DCCH + 8x AM DRB - SRB1 and SRB2 for DCCH + 5x AM DRB + 3x UM DRB NOTE: UE which indicate support for a DRB combination also support all subsets of the DRB combination. Therefore, release of DRB(s) never results in an unsupported DRB combination.			Rel-8	36.331, Annex B.1	pc_FeatrGrp_20_F	Corresponding to the Index of Indicator, the leftmost binary bit 20. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
		- Regardless of what bit number 7 and bit number 20 is set to, UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB - Regardless of what bit number 20 is set to, if bit number 7 is set to ' 1', UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB + 1x UM DRB	Yes	Rel-9			
21	Support of - Predefined intra- and inter-subframe frequency hopping for PUSCH with N_sb > 1 - Predefined inter-subframe frequency hopping for PUSCH with N_sb > 1	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_21_F	Corresponding to the Index of Indicator, the leftmost binary bit 21. Set to true if supporting all functionalities in the feature group.
22	Support of - UTRAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_22_F	Corresponding to the Index of Indicator, the leftmost binary bit 22. Set to true if supporting all functionalities in the feature group.
	Support of - UTRAN FDD or UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports either only UTRAN FDD or only UTRAN TDD - UTRAN FDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD		Yes for FDD, if UE supports UTRA FDD	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
23	Support of - GERAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_23_F	Corresponding to the Index of Indicator, the leftmost binary bit 23. Set to true if supporting all functionalities in the feature group.
24	Support of - 1xRTT measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_24_F	Corresponding to the Index of Indicator, the leftmost binary bit 24. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports enhanced 1xRTT CSFB	Rel-9			
25	Support of - Inter-frequency measurements and reporting in E-UTRA connected mode NOTE: The UE setting this bit to 1 and indicating support for FDD and TDD frequency bands in the UE capability signalling implements and is tested for FDD measurements while the UE is in TDD, and for TDD measurements while the UE is in FDD.	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_25_F	Corresponding to the Index of Indicator, the leftmost binary bit 25. Set to true if supporting all functionalities in the feature group.
			Yes, unless UE only supports band 13	Rel-9			
26	Support of - HRPD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_26_F	Corresponding to the Index of Indicator, the leftmost binary bit 26. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports HRPD	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
27	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH CS handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 8 to 1 and supports SR-VCC from EUTRA defined in TS 24.008 - If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_27_F	Corresponding to the Index of Indicator, the leftmost binary bit 27. Set to true if supporting all functionalities in the feature group.
	Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH CS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD		Yes for FDD, if UE supports VoLTE and UTRA FDD	Rel-9			
28	Support of - TTI bundling	- If a category M1 UE does not support this feature group, this bit shall be set to 0.	Yes for FDD	Rel-9	36.331, Annex B.1	pc_FeatrGrp_28_F	Corresponding to the Index of Indicator, the leftmost binary bit 28. Set to true if supporting all functionalities in the feature group.
29	Support of - Semi-Persistent Scheduling	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_29_F	Corresponding to the Index of Indicator, the leftmost binary bit 29. Set to true if supporting all functionalities in the feature group.
30	Support of - Handover between FDD and TDD	- can only be set to 1 if the UE has set bit number 13 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_30_F	Corresponding to the Index of Indicator, the leftmost binary bit 30. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
31	Support of - Indicates whether the UE supports the mechanisms defined for cells broadcasting multi band information i.e. comprehending multiBandInfoList, disregarding in RRC_CONNECTED the related system information fields and understanding the EARFCN signalling for all bands, that overlap with the bands supported by the UE, and that are defined in the earliest version of TS 36.101 [42] that includes all UE supported bands.	- In this release of the protocol, this bit will never be mandated to be set to 1 - This FGI bit concerns an optional release independent feature (as it was difficult to introduce this from REL-8 when using regular UE capability signalling)		Rel-8	36.331, Annex B.1	pc_FeatrGrp_31_F	Corresponding to the Index of Indicator, the leftmost binary bit 31. Set to true if supporting all functionalities in the feature group.
				Rel-9			
			Yes	Rel-10			
32	Undefined			Rel-8	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 32.

Table A.4.4-1b: Feature group indicators 1-32 for TDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
1	Support of - Intra-subframe frequency hopping for PUSCH scheduled by UL grant - DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments) - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PMI - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI	- set to 1 by category M1 UE that has implemented and successfully tested "Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PM"		Rel-8	36.331, Annex B.1	pc_FeatrGrp_1_T	Corresponding to the Index of Indicator, the leftmost binary bit 1. Set to true if supporting all functionalities in the feature group.
2	Support of - Simultaneous CQI and ACK/NACK on PUCCH, i.e. PUCCH format 2a and 2b - Absolute TPC command for PUSCH - Resource allocation type 1 for PDSCH - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 - UE selected subband CQI without PMI - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_2_T	Corresponding to the Index of Indicator, the leftmost binary bit 2. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
3	Support of - Semi-persistent scheduling - TTI bundling - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_3_T	Corresponding to the Index of Indicator, the leftmost binary bit 3. Set to true if supporting all functionalities in the feature group.
	Support of - 5bit RLC UM SN - 7bit PDCP SN	- can only be set to 1 if the UE has set bit number 7 to 1.	Yes, if UE supports VoLTE	Rel-9, Rel-10			
			Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
4	Support of - Short DRX cycle	- can only be set to 1 if the UE has set bit number 5 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_4_T	Corresponding to the Index of Indicator, the leftmost binary bit 4. Set to true if supporting all functionalities in the feature group.
5	Support of - Long DRX cycle - DRX command MAC control element			Rel-8	36.331, Annex B.1	pc_FeatrGrp_5_T	Corresponding to the Index of Indicator, the leftmost binary bit 5. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			
6	Support of - Prioritized bit rate			Rel-8	36.331, Annex B.1	pc_FeatrGrp_6_T	Corresponding to the Index of Indicator, the leftmost binary bit 6. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
7	Support of - RLC UM	- can only be set to 0 if the UE does not support voice		Rel-8	36.331, Annex B.1	pc_FeatrGrp_7_T	Corresponding to the Index of Indicator, the leftmost binary bit 7. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports VoLTE	Rel-9			
			Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
8	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH PS handover	- can only be set to 1 if the UE has set bit number 22 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_8_T	Corresponding to the Index of Indicator, the leftmost binary bit 8. Set to true if supporting all functionalities in the feature group.
	Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH PS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD		Yes, if UE supports UTRA	Rel-9			
9	Support of - EUTRA RRC_CONNECTED to GERAN GSM_Dedicated handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 23 to 1		Rel-8, Rel-9, Rel-10	36.331, Annex B.1	pc_FeatrGrp_9_T	Corresponding to the Index of Indicator, the leftmost binary bit 9. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE), if UE supports SRVCC to EUTRAN from GERAN.	Rel-11			
10	Support of - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order with NACC (Network Assisted Cell Change)			Rel-8	36.331, Annex B.1	pc_FeatrGrp_10_T	Corresponding to the Index of Indicator, the leftmost binary bit 10. Set to true if supporting all functionalities in the feature group.
11	Support of - EUTRA RRC_CONNECTED to CDMA2000 1xRTT CS Active handover	- can only be set to 1 if the UE has sets bit number 24 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_11_T	Corresponding to the Index of Indicator, the leftmost binary bit 11. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
12	Support of - EUTRA RRC_CONNECTED to CDMA2000 HRPD Active handover	- can only be set to 1 if the UE has set bit number 26 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_12_T	Corresponding to the Index of Indicator, the leftmost binary bit 12. Set to true if supporting all functionalities in the feature group.
13	Support of - Inter-frequency handover (within FDD or TDD)	- can only be set to 1 if the UE has set bit number 25 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_13_T	Corresponding to the Index of Indicator, the leftmost binary bit 13. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE), unless UE only supports band 13	Rel-9			
14	Support of - Measurement reporting event: Event A4 - Neighbour > threshold - Measurement reporting event: Event A5 - Serving < threshold1 & Neighbour > threshold2			Rel-8	36.331, Annex B.1	pc_FeatrGrp_14_T	Corresponding to the Index of Indicator, the leftmost binary bit 14. Set to true if supporting all functionalities in the feature group.
			Yes (except for category M1 UE)	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
15	Support of - Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Measurement reporting event: Event B1 - Neighbour > threshold for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set at least one of the bit number 22, 23, 24, 26 or 39 to 1. - even if the UE sets bits 41, it shall still set bit 15 to 1 if measurement reporting event B1 is tested for all RATs supported by UE - If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_15_T	Corresponding to the Index of Indicator, the leftmost binary bit 15. Set to true if supporting all functionalities in the feature group.
			Yes for FDD, if UE supports only UTRAN FDD and does not support UTRAN TDD or GERAN or 1xRTT or HRPD	Rel-9			
16		- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_16_T	Corresponding to the Index of Indicator, the leftmost binary bit 16. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
	Support of - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*; - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*, if the UE has set bit number 25 to 1; and - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively. NOTE: Event triggered periodical reporting (i.e. with *triggerType* set to *event* and with *reportAmount* > 1) is a mandatory functionality of event triggered reporting and therefore not the subject of this bit. Support of - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells*, if the UE has set bit number 25 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively. NOTE: Event triggered periodical reporting (i.e., with *triggerType* set to *event* and with *reportAmount* > 1) is a mandatory functionality of event triggered reporting and therefore not the subject of this bit.		Yes	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
17	Support of Intra-frequency ANR features including: - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Intra-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 to 1. - If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_17_T	Corresponding to the Index of Indicator, the leftmost binary bit 17. Set to true if supporting all functionalities in the feature group.
			Yes	Rel-9			
18	Support of Inter-frequency ANR features including: - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-frequency periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 to 1. - If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_18_T	Corresponding to the Index of Indicator, the leftmost binary bit 18. Set to true if supporting all functionalities in the feature group.
			Yes, unless UE only supports band 13	Rel-9			
19	Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN, 1xRTT or HRPD, if the UE has set bit number 22, 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 23, 24 or 26 to 1.		Rel-8	36.331, Annex B.1	pc_FeatrGrp_19_T	Corresponding to the Index of Indicator, the leftmost binary bit 19. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
	Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* for 1xRTT or HRPD, if the UE has set bit number 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRANTDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI* for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively	- can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 39, 23, 24 or 26 to 1. - even if the UE sets bits 33 to 37, it shall still set bit 19 to 1 if inter-RAT ANR features are tested for all RATs for which inter-RAT measurement reporting is indicated as tested		Rel-9			
20	If bit number 7 is set to '0': - SRB1 and SRB2 for DCCH + 8x AM DRB If bit number 7 is set to '1': - SRB1 and SRB2 for DCCH + 8x AM DRB - SRB1 and SRB2 for DCCH + 5x AM DRB + 3x UM DRB NOTE: UE which indicate support for a DRB combination also support all subsets of the DRB combination. Therefore, release of DRB(s) never results in an unsupported DRB combination.			Rel-8	36.331, Annex B.1	pc_FeatrGrp_20_T	Corresponding to the Index of Indicator, the leftmost binary bit 20. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
		- Regardless of what bit number 7 and bit number 20 is set to, UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB - Regardless of what bit number 20 is set to, if bit number 7 is set to '1', UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB + 1x UM DRB	Yes	Rel-9			
21	Support of - Predefined intra- and inter-subframe frequency hopping for PUSCH with N_sb > 1 - Predefined inter-subframe frequency hopping for PUSCH with N_sb > 1	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_21_T	Corresponding to the Index of Indicator, the leftmost binary bit 21. Set to true if supporting all functionalities in the feature group.
22	Support of - UTRAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_22_T	Corresponding to the Index of Indicator, the leftmost binary bit 22. Set to true if supporting all functionalities in the feature group.
	Support of - UTRAN FDD or UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports either only UTRAN FDD or only UTRAN TDD - UTRAN FDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD		Yes for FDD, if UE supports UTRA FDD	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
23	Support of - GERAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_23_T	Corresponding to the Index of Indicator, the leftmost binary bit 23. Set to true if supporting all functionalities in the feature group.
24	Support of - 1xRTT measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_24_T	Corresponding to the Index of Indicator, the leftmost binary bit 24. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports enhanced 1xRTT CSFB	Rel-9			
25	Support of - Inter-frequency measurements and reporting in E-UTRA connected mode NOTE: The UE setting this bit to 1 and indicating support for FDD and TDD frequency bands in the UE capability signalling implements and is tested for FDD measurements while the UE is in TDD, and for TDD measurements while the UE is in FDD.	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_25_T	Corresponding to the Index of Indicator, the leftmost binary bit 25. Set to true if supporting all functionalities in the feature group.
			Yes, unless UE only supports band 13	Rel-9			
26	Support of - HRPD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_26_T	Corresponding to the Index of Indicator, the leftmost binary bit 26. Set to true if supporting all functionalities in the feature group.
			Yes, if UE supports HRPD	Rel-9			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
27	Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH CS handover	- related to SR-VCC - can only be set to 1 if the UE has set bit number 8 to 1 and supports SR-VCC from EUTRA defined in TS 24.008 - If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-8	36.331, Annex B.1	pc_FeatrGrp_27_T	Corresponding to the Index of Indicator, the leftmost binary bit 27. Set to true if supporting all functionalities in the feature group.
	Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH CS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD		Yes for FDD, if UE supports VoLTE and UTRA FDD	Rel-9			
28	Support of - TTI bundling	- If a category M1 UE does not support this feature group, this bit shall be set to 0	Yes for FDD	Rel-9	36.331, Annex B.1	pc_FeatrGrp_28_T	Corresponding to the Index of Indicator, the leftmost binary bit 28. Set to true if supporting all functionalities in the feature group.
29	Support of - Semi-Persistent Scheduling	- If a category M1 UE does not support this feature group, this bit shall be set to 0		Rel-9	36.331, Annex B.1	pc_FeatrGrp_29_T	Corresponding to the Index of Indicator, the leftmost binary bit 29. Set to true if supporting all functionalities in the feature group.
30	Support of - Handover between FDD and TDD	- can only be set to 1 if the UE has set bit number 13 to 1		Rel-8	36.331, Annex B.1	pc_FeatrGrp_30_T	Corresponding to the Index of Indicator, the leftmost binary bit 30. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
31	Support of - Indicates whether the UE supports the mechanisms defined for cells broadcasting multi band information i.e. comprehending multiBandInfoList, disregarding in RRC_CONNECTED the related system information fields and understanding the EARFCN signalling for all bands, that overlap with the bands supported by the UE, and that are defined in the earliest version of TS 36.101 [42] that includes all UE supported bands.	- In this release of the protocol, this bit will never be mandated to be set to 1 - This FGI bit concerns an optional release independent feature (as it was difficult to introduce this from REL-8 when using regular UE capability signalling)		Rel-8	36.331, Annex B.1	pc_FeatrGrp_31_T	Corresponding to the Index of Indicator, the leftmost binary bit 31. Set to true if supporting all functionalities in the feature group.
				Rel-9			
			Yes	Rel-10			
32	Undefined			Rel-8	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 32.

Table A.4.4-2: Void

Table A.4.4-2a: Feature group indicators 33-64 for FDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
33	Inter-RAT ANR features for UTRAN including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 22 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_33_F	Corresponding to the Index of Indicator, the leftmost binary bit 33. Set to true if supporting all functionalities in the feature group.
34	Inter-RAT ANR features for GERAN including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 23 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_34_F	Corresponding to the Index of Indicator, the leftmost binary bit 34. Set to true if supporting all functionalities in the feature group.
35	Inter-RAT ANR features for 1xRTT including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 24 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_35_F	Corresponding to the Index of Indicator, the leftmost binary bit 35. Set to true if supporting all functionalities in the feature group.
36	Inter-RAT ANR features for HRPD including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 26 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_36_F	Corresponding to the Index of Indicator, the leftmost binary bit 36. Set to true if supporting all functionalities in the feature group.
37	Inter-RAT ANR features for UTRAN TDD including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI	- can only be set to 1 if the UE has set bit number 5 and at least one of the bit number 22 (for UEs supporting only UTRA TDD) or the bit number 39 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_37_F	Corresponding to the Index of Indicator, the leftmost binary bit 37. Set to true if supporting all functionalities in the feature group.
38	-EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD	- can only be set to 1 if the UE has set bit number 39 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_38_F	Corresponding to the Index of Indicator, the leftmost binary bit 38. Set to true if supporting all functionalities in the feature group.
39	-UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_39_F	Corresponding to the Index of Indicator, the leftmost binary bit 39. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
40	-EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD	- related to SR-VCC - can only be set to 1 if the UE has set bit number 38 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_40_F	Corresponding to the Index of Indicator, the leftmost binary bit 40. Set to true if supporting all functionalities in the feature group.
41	Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD, if the UE supports UTRAN FDD and has set bit number 22 to 1	- If a category M1 UE does not support this feature group, this bit shall be set to 0.	Yes for FDD, unless UE has set bit number 15 to 1	Rel-9	36.331, Annex B.1	pc_FeatrGrp_41_F	Corresponding to the Index of Indicator, the leftmost binary bit 41. Set to true if supporting all functionalities in the feature group.
42	DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments)			Rel-13	36.331, Annex B.1	pc_FeatrGrp_42_F	Corresponding to the Index of Indicator, the leftmost binary bit 42.
43	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 43.
44	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 44.
45	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 45.
46	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 46.
47	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 47.
48	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 48.
49	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 49.
50	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 50.
51	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 51.
52	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 52.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
53	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 53.
54	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 54.
55	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 55.
56	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 56.
57	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 57.
58	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 58.
59	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 59.
60	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 60.
61	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 61.
62	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 62.
63	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 63.
64	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 64.

Table A.4.4-2b: Feature group indicators 33-64 for TDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
33	Inter-RAT ANR features for UTRAN including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 22 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_33_T	Corresponding to the Index of Indicator, the leftmost binary bit 33. Set to true if supporting all functionalities in the feature group.
34	Inter-RAT ANR features for GERAN including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCells* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 23 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_34_T	Corresponding to the Index of Indicator, the leftmost binary bit 34. Set to true if supporting all functionalities in the feature group.
35	Inter-RAT ANR features for 1xRTT including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 24 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_35_T	Corresponding to the Index of Indicator, the leftmost binary bit 35. Set to true if supporting all functionalities in the feature group.
36	Inter-RAT ANR features for HRPD including: - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportStrongestCellsForSON* - Inter-RAT periodical measurement reporting where *triggerType* is set to *periodical* and *purpose* is set to *reportCGI*	- can only be set to 1 if the UE has set bit number 5 and bit number 26 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_36_T	Corresponding to the Index of Indicator, the leftmost binary bit 36. Set to true if supporting all functionalities in the feature group.
37	Inter-RAT ANR features for UTRAN TDD including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI	- can only be set to 1 if the UE has set bit number 5 and at least one of the bit number 22 (for UEs supporting only UTRA TDD) or the bit number 39 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_37_T	Corresponding to the Index of Indicator, the leftmost binary bit 37. Set to true if supporting all functionalities in the feature group.
38	-EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD	- can only be set to 1 if the UE has set bit number 39 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_38_T	Corresponding to the Index of Indicator, the leftmost binary bit 38. Set to true if supporting all functionalities in the feature group.
39	-UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_39_T	Corresponding to the Index of Indicator, the leftmost binary bit 39. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
40	-EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD	- related to SR-VCC - can only be set to 1 if the UE has set bit number 38 to 1.		Rel-9	36.331, Annex B.1	pc_FeatrGrp_40_T	Corresponding to the Index of Indicator, the leftmost binary bit 40. Set to true if supporting all functionalities in the feature group.
41	Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD, if the UE supports UTRAN FDD and has set bit number 22 to 1	- If a category M1 UE does not support this feature group, this bit shall be set to 0.	Yes for FDD, unless UE has set bit number 15 to 1	Rel-9	36.331, Annex B.1	pc_FeatrGrp_41_T	Corresponding to the Index of Indicator, the leftmost binary bit 41. Set to true if supporting all functionalities in the feature group.
42	DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments)			Rel-13	36.331, Annex B.1	pc_FeatrGrp_42_T	Corresponding to the Index of Indicator, the leftmost binary bit 42.
43	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 43.
44	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 44.
45	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 45.
46	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 46.
47	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 47.
48	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 48.
49	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 49.
50	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 50.
51	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 51.
52	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 52.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
53	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 53.
54	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 54.
55	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 55.
56	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 56.
57	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 57.
58	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 58.
59	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 59.
60	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 60.
61	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 61.
62	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 62.
63	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 63.
64	Undefined			Rel-9	36.331, Annex B.1		Corresponding to the Index of Indicator, the leftmost binary bit 64.

Table A.4.4-3: Void

Table A.4.4-3a: Feature group indicators 101-132 for FDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
101	- DMRS with OCC (orthogonal cover code) and SGH (sequence group hopping) disabling	- if the UE supports two or more layers for spatial multiplexing in UL, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_101_F	Corresponding to the Index of Indicator, the leftmost binary bit 101. Set to true if supporting all functionalities in the feature group.
		- If a category 0 UE does not support this feature, this bit shall be set to 0.		Rel-12			
102	- Trigger type 1 SRS (aperiodic SRS) transmission (Up to X ports) NOTE: X = number of supported layers on given band			Rel-10	36.331, Annex C.1	pc_FeatrGrp_102_F	Corresponding to the Index of Indicator, the leftmost binary bit 102. Set to true if supporting all functionalities in the feature group.
103	- PDSCH transmission mode 9 when up to 4 CSI reference signal ports are configured	- for Category 8 UEs, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_103_F	Corresponding to the Index of Indicator, the leftmost binary bit 103. Set to true if supporting all functionalities in the feature group.
		- for Category 8 UEs, this bit shall be set to 1. - for Category 11 and higher UEs, this bit shall be set to 1. - for DL Category 11 and higher UEs (except for DL Category 13), this bit shall be set to 1.	Yes for the UE categories listed in the column “Notes”	Rel-15			
104	- PDSCH transmission mode 9 for TDD when 8 CSI reference signal ports are configured	- if the UE does not support TDD, this bit is irrelevant (capability signalling exists for FDD for this feature), and this bit shall be set to 0. - for Category 8 UEs, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_104_F	Corresponding to the Index of Indicator, the leftmost binary bit 104. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
		- if the UE does not support TDD, this bit is irrelevant, and this bit shall be set to 0. - this bit is not applicable to FDD (capability signalling exists for FDD for this feature). - for Category 8 UEs, this bit shall be set to 1. - for Category 11 and higher UEs, this bit shall be set to 1. - for DL Category 11 and higher UEs (except for DL Category 13), this bit shall be set to 1.	Yes for TDD, for the UE categories listed in the column “Notes”	Rel-15			
105	- Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 - UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured	- this bit can be set to 1 only if indices 2 (Table B.1-1) and 103 are set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_105_F	Corresponding to the Index of Indicator, the leftmost binary bit 105. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if index 2 is set to 1 for both FDD and TDD, and index 103 is set to 1 either for FDD and TDD.		Rel-12			
106	- Periodic CQI/PMI/RI/PTI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to ' supported') and if index 2 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_106_F	Corresponding to the Index of Indicator, the leftmost binary bit 106. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to' supported', and if index 2 is set to 1 for both FDD and TDD.		Rel-12			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
107	- Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured	- this bit can be set to 1 only if indices 1 (Table B.1-1) and 103 are set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_107_F	Corresponding to the Index of Indicator, the leftmost binary bit 107. Set to true if supporting all functionalities in the feature group.
108	- Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to' supported') and if index 1 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_108_F	Corresponding to the Index of Indicator, the leftmost binary bit 108. Set to true if supporting all functionalities in the feature group.
109	- Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 1	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to' supported').		Rel-10	36.331, Annex C.1	pc_FeatrGrp_109_F	Corresponding to the Index of Indicator, the leftmost binary bit 109. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to 'supported'.		Rel-12			
110	- Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 2	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to 'supported').		Rel-10	36.331, Annex C.1	pc_FeatrGrp_110_F	Corresponding to the Index of Indicator, the leftmost binary bit 110. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to 'supported'.		Rel-12			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
111	- Measurement reporting trigger Event A6	- this bit can be set to 1 only if the UE supports carrier aggregation.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_111_F	Corresponding to the Index of Indicator, the leftmost binary bit 111. Set to true if supporting all functionalities in the feature group.
112	- SCell addition within3 the Handover to EUTRA procedure	- this bit can be set to 1 only if the UE supports carrier aggregation and the Handover to EUTRA procedure.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_112_F	Corresponding to the Index of Indicator, the leftmost binary bit 112. Set to true if supporting all functionalities in the feature group.
113	- Trigger type 0 SRS (periodic SRS) transmission on X Serving Cells NOTE: X = number of supported component carriers in a given band combination	- this bit can be set to 1 only if the UE supports carrier aggregation in UL.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_113_F	Corresponding to the Index of Indicator, the leftmost binary bit 113. Set to true if supporting all functionalities in the feature group.
114	- Reporting of both UTRA CPICH RSCP and Ec/N0 in a Measurement Report	- this bit can be set to 1 only if index 22 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_114_F	Corresponding to the Index of Indicator, the leftmost binary bit 114. Set to true if supporting all functionalities in the feature group.
115	- time domain ICIC RLM/RRM measurement subframe restriction for the serving cell - time domain ICIC RRM measurement subframe restriction for neighbour cells - time domain ICIC CSI measurement subframe restriction	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_115_F	Corresponding to the Index of Indicator, the leftmost binary bit 115. Set to true if supporting all functionalities in the feature group.
116	- Relative transmit phase continuity for spatial multiplexing in UL	- this bit can be set to 1 only if the UE supports two or more layers for spatial multiplexing in UL.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_116_F	Corresponding to the Index of Indicator, the leftmost binary bit 116. Set to true if supporting all functionalities in the feature group.
117	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 117.
118	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 118.
119	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 119.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
120	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 120.
121	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 121.
122	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 122.
123	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 123.
124	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 124.
125	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 125.
126	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 126.
127	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 127.
128	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 128.
129	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 129.
130	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 130.
131	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 131.
132	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 132.

Table A.4.4-3b: Feature group indicators 101-132 for TDD

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
101	- DMRS with OCC (orthogonal cover code) and SGH (sequence group hopping) disabling	- if the UE supports two or more layers for spatial multiplexing in UL, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_101_T	Corresponding to the Index of Indicator, the leftmost binary bit 101. Set to true if supporting all functionalities in the feature group.
		- If a category 0 UE does not support this feature, this bit shall be set to 0.		Rel-12			
102	- Trigger type 1 SRS (aperiodic SRS) transmission (Up to X ports) NOTE: X = number of supported layers on given band			Rel-10	36.331, Annex C.1	pc_FeatrGrp_102_T	Corresponding to the Index of Indicator, the leftmost binary bit 102. Set to true if supporting all functionalities in the feature group.
103	- PDSCH transmission mode 9 when up to 4 CSI reference signal ports are configured	- for Category 8 UEs, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_103_T	Corresponding to the Index of Indicator, the leftmost binary bit 103. Set to true if supporting all functionalities in the feature group.
		- for Category 8 UEs, this bit shall be set to 1. - for Category 11 and higher UEs, this bit shall be set to 1. - for DL Category 11 and higher UEs (except for DL Category 13), this bit shall be set to 1.	Yes for the UE categories listed in the column “Notes”	Rel-15			
104	- PDSCH transmission mode 9 for TDD when 8 CSI reference signal ports are configured	- if the UE does not support TDD, this bit is irrelevant (capability signalling exists for FDD for this feature), and this bit shall be set to 0. - for Category 8 UEs, this bit shall be set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_104_T	Corresponding to the Index of Indicator, the leftmost binary bit 104. Set to true if supporting all functionalities in the feature group.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
		- if the UE does not support TDD, this bit is irrelevant, and this bit shall be set to 0. - this bit is not applicable to FDD (capability signalling exists for FDD for this feature). - for Category 8 UEs, this bit shall be set to 1. - for Category 11 and higher UEs, this bit shall be set to 1. - for DL Category 11 and higher UEs (except for DL Category 13), this bit shall be set to 1.	Yes for TDD, for the UE categories listed in the column “Notes”	Rel-15			
105	- Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 - UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured	- this bit can be set to 1 only if indices 2 (Table B.1-1) and 103 are set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_105_T	Corresponding to the Index of Indicator, the leftmost binary bit 105. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if index 2 is set to 1 for both FDD and TDD, and index 103 is set to 1 either for FDD and TDD.		Rel-12			
106	- Periodic CQI/PMI/RI/PTI reporting on PUCCH: Mode 2-1 - UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to' supported') and if index 2 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_106_T	Corresponding to the Index of Indicator, the leftmost binary bit 106. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to 'supported', and if index 2 is set to 1 for both FDD and TDD.		Rel-12			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
107	- Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 - UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured	- this bit can be set to 1 only if indices 1 (Table B.1-1) and 103 are set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_107_T	Corresponding to the Index of Indicator, the leftmost binary bit 107. Set to true if supporting all functionalities in the feature group.
108	- Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 - UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to ' supported') and if index 1 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_108_T	Corresponding to the Index of Indicator, the leftmost binary bit 108. Set to true if supporting all functionalities in the feature group.
109	- Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 1	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to' supported').		Rel-10	36.331, Annex C.1	pc_FeatrGrp_109_T	Corresponding to the Index of Indicator, the leftmost binary bit 109. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to 'supported'.		Rel-12			
110	- Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 2	- this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if *tm9-With-8Tx-FDD-r10* is set to' supported').		Rel-10	36.331, Annex C.1	pc_FeatrGrp_110_T	Corresponding to the Index of Indicator, the leftmost binary bit 110. Set to true if supporting all functionalities in the feature group.
		- For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to' supported'.		Rel-12			

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
111	- Measurement reporting trigger Event A6	- this bit can be set to 1 only if the UE supports carrier aggregation.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_111_T	Corresponding to the Index of Indicator, the leftmost binary bit 111. Set to true if supporting all functionalities in the feature group.
112	- SCell addition within the Handover to EUTRA procedure	- this bit can be set to 1 only if the UE supports carrier aggregation and the Handover to EUTRA procedure.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_112_T	Corresponding to the Index of Indicator, the leftmost binary bit 112. Set to true if supporting all functionalities in the feature group.
113	- Trigger type 0 SRS (periodic SRS) transmission on X Serving Cells NOTE: X = number of supported component carriers in a given band combination	- this bit can be set to 1 only if the UE supports carrier aggregation in UL.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_113_T	Corresponding to the Index of Indicator, the leftmost binary bit 113. Set to true if supporting all functionalities in the feature group.
114	- Reporting of both UTRA CPICH RSCP and Ec/N0 in a Measurement Report	- this bit can be set to 1 only if index 22 (Table B.1-1) is set to 1.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_114_T	Corresponding to the Index of Indicator, the leftmost binary bit 114. Set to true if supporting all functionalities in the feature group.
115	- time domain ICIC RLM/RRM measurement subframe restriction for the serving cell - time domain ICIC RRM measurement subframe restriction for neighbour cells - time domain ICIC CSI measurement subframe restriction	- If a category M1 UE does not support this feature group, this bit shall be set to 0.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_115_T	Corresponding to the Index of Indicator, the leftmost binary bit 115. Set to true if supporting all functionalities in the feature group.
116	- Relative transmit phase continuity for spatial multiplexing in UL	- this bit can be set to 1 only if the UE supports two or more layers for spatial multiplexing in UL.		Rel-10	36.331, Annex C.1	pc_FeatrGrp_116_T	Corresponding to the Index of Indicator, the leftmost binary bit 116. Set to true if supporting all functionalities in the feature group.
117	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 117.
118	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 118.
119	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 119.

Item	Additional information	Notes	If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release	Release	Ref.	Mnemonic	Comments
120	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 120.
121	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 121.
122	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 122.
123	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 123.
124	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 124.
125	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 125.
126	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 126.
127	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 127.
128	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 128.
129	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 129.
130	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 130.
131	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 131.
132	Undefined			Rel-10	36.331, Annex C.1		Corresponding to the Index of Indicator, the leftmost binary bit 132.

A.4.5 Additional information

Table A.4.5-1: Additional UE radio access capabilities

Item	Additional capabilities	Ref.	Release	Comments
1	Support of CSG	36.331, Annex B.2	Rel-8	
2	Support of intra-frequency SI acquisition for HO in FDD	36.306, 4.3.11.1	Rel-9	
3	Support of inter-frequency SI acquisition for HO in FDD	36.306, 4.3.11.2	Rel-9	
4	Need for inter-frequency gaps (Note 1)	36.306, 4.3.6.1	Rel-8	
5	Need for inter-RAT gaps (Note 1)	36.306, 4.3.6.1	Rel-8	
6	Support of E-UTRA bands within band group FDD_Nonly	36.133, Annex A.3.7.2	Rel-12	
7	Support of rsrqMeasWideband	36.306, 4.3.6.2	Rel-11	
8	Support of Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10	36.306, 4.3.5.5	Rel-11	
9	Void			
10	Disable E-UTRA capability if IMSVoIP not supported by the network	23.221, 7.2a, 24.301, 4.5	Rel-8	pc_Disable_E-UTRA_NOIMSVoIP
11	Support of Maximum CSI processes of Three on a component carrier within a band with PDSCH transmission mode 10	36.306, 4.3.5.5	Rel-11	
12	Support of Maximum CSI processes of Four on a component carrier within a band with PDSCH transmission mode 10	36.306, 4.3.5.5	Rel-11	
13	Support of multiClusterPUSCH-WithinCC-r10	36.306, 4.3.4.13	Rel-10	
14	Support of FDD-TDD CA with PCell in TDD band	36.306, 4.3.4.28		The UE may not send the IE tdd-FDD-CA-PCellDuplex-r12
15	Support of FDD-TDD CA with PCell in FDD band	36.306, 4.3.4.28		The UE may not send the IE tdd-FDD-CA-PCellDuplex-r12
16	Support of interRAT-PS-HO-ToGERAN	36.306, 4.3.7.11	Rel-8	
17	Support of 64QAM in UL	36.306, 4.3.4.39	Rel-12	
18	Support of 256QAM in DL	36.306, 4.3.5.7	Rel-12	
19	Support CRS based discovery signals measurement	36.306, 4.3.6.9	Rel-12	
20	Support CSI-RS based discovery signals measurement	36.306, 4.3.6.10	Rel-12	
21	Support the behaviour on DL signals and physical channels when SCell is deactivated and discovery signals measurement is configured	36.306, 4.3.4.38	Rel-12	
22	Support of 4Rx antenna ports	36.101, 7.2	Rel-13	
23	Support of ProSe direct communication	36.306, 4.3.21.1	Rel-12	
24	Support of ProSe direct discovery	36.306, 4.3.21.3	Rel-12	
25	Support of CE mode A	36.306, 4.3.8.3	Rel-13	Mandatory for CAT M1 UE
26	Support of CE mode B	36.306, 4.3.29.1	Rel-13	
27	Support of DC ASYNCH	36.306, 4.3.29.2	Rel-12	The UE supports asynchronous dual connectivity and power control mode 2
28	Support of DC SCG DRB	36.306, 4.3.20.2	Rel-12	The UE supports dual connectivity and DRB type of SCG bearer
29	Support of DC Split DRB	36.306, 4.3.20.1	Rel-12	The UE supports dual connectivity and DRB type of Split bearer
30	Support of MPR for intra-band contiguous carrier aggregation bandwidth class C with non-contiguous resource allocation	36.306, 4.3.5.10 36.101, H.1	Rel-10	ModifiedMPR_Behavior bit 0 (leftmost bit)
31	Support of A-MPR associated with NS_05 for Band 1	36.306, 4.3.5.10 36.101, H.1	Rel-10	ModifiedMPR_Behavior bit 1
32	supports downlink LAA operation	36.306, 4.3.23.1	Rel-13	
33	supports measurement and reporting for RSSI and channel occupancy	36.306, 4.3.6.19	Rel-13	
34	Support of User plane CIoT	24.301, 5.3.15	Rel-13	
35	Support of EMM-REGISTERED without PDN	24.301, 5.3.15	Rel-13	
36	Support of EMM-REGISTERED with PDN	24.301, 5.3.15	Rel-13	
37	Support of 4Rx antenna ports in at least one FDD frequency band	36.101, 7.2	Rel-13	

38	Support of 4Rx antenna ports in at least one TDD frequency band	36.101, 7.2	Rel-13	
39	Support of FDD-TDD CA with PCell in FDD band and SCell with 4Rx supported TDD RF band	36.306, 4.3.4.28, 36.101, 7.2	Rel-13	
40	Support of 4Rx antenna ports on all supported FDD operating bands	36.101, 8.1.2.6.1, 36.133, A.3.8.1	Rel-13	UE with same FDD band support declared in tables 4.3-3 and A.4.5-5
41	Support of 4Rx antenna ports on all supported TDD operating bands	36.101, 8.1.2.6.1, 36.133, A.3.8.1	Rel-13	UE with same TDD band support declared in tables 4.3-3 and A.4.5-5
42	Support of A-MPR associated with NS_04 for Band 41	36.306, 4.3.5.10 36.101, H.1	Rel-12	ModifiedMPR_Behavior bit 2
43	Support of RSSI and Channel occupancy reporting	36.306, 4.3.6.19	Rel-13	Support of RSSI and Channel Occupancy.
44	Support of intra-frequency SI acquisition in TDD for HO	36.306, 4.3.11.1	Rel-9	
45	Support of inter-frequency SI acquisition in TDD for HO	36.306, 4.3.11.2	Rel-9	
46	Support of 4-layer spatial multiplexing with transmission mode 3 and transmission mode 4	36.306, 4.3.5.14.	Rel-10	
47	Void			
48	Support of autonomous resource selection mode with full sensing for V2X sidelink communication	36.306, 4.3.21.15	Rel-14	
49	Support of SLSS transmission and reception for V2X sidelink communication	36.306, 4.3.21.17	Rel-14	
50	Support of maximum transmit power associated with Power class 2 V2X UE	36.306, 4.3.21.22	Rel-14	
51	Support of TM-9 in CE Mode A	36.306 4.3.29.10	Rel-13	
52	Support of TM-9 in CE Mode B	36.306 4.3.29.11	Rel-13	
53	Support of 4-layer spatial multiplexing with transmission mode 9 and transmission mode 10	36.306, 4.3.4.7	Rel-10	
54	Support of TDD UL/DL reconfiguration for TDD serving cell(s) via monitoring PDCCH with eIMTA-RNTI on a TDD PCell, and HARQ feedback according to UL and DL HARQ reference configurations	36.306 4.3.4.31	Rel-12	
55	Support of Rel-12 DL CSI subframe set configuration	36.306 4.3.4.29	Rel-12	
56	Support of tm9 operation on LAA cell(s).	36.306, 4.3.23.6	Rel-13	
57	Supports of RRM measurements on LAA cell(s) based on CSI-RS-based DRS.	36.306, 4.3.23.3	Rel-13	
58	Support of 256QAM in UL	36.306 4.3.4.73	Rel-14	
59	Support of SRS switching between a band pair	36.306, 4.3.5.24, 4.3.5.25	Rel-14	
60	Support of NPRACH on non-anchor carrier	36.306, 4.3.30.1	Rel-14	
61	Support of csi-RS-DiscoverySignalsMeas-r12	36.331, 6.3.6	Rel-12	
62	Support of UL LAA	36.306, 4.3.23.8	Rel-14	
63	Support of TM-6 in CE Mode A	36.306 4.3.29.12	Rel 13	
64	Support of high speed measurement enhancements	36.306 4.3.33.1	Rel-14	
65	Support of PUCCH transmission on SCell in CA	36.306 4.3.4.47	Rel-13	
66	Support of simultaneous E-UTRA V2X sidelink and E-UTRA uplink transmissions	36.306 4.3.5.27	Rel-14	
67	Support of transmitting PSCCH/PSSCH using dynamic scheduling	36.306 4.3.21.14	Rel-14	
68	Support of Channel Busy Ratio measurement and reporting of Channel Busy Ratio measurement to eNB for V2X sidelink communication	36.306 4.3.21.18	Rel-14	
69	Support of transmission and reception in the configuration of non-adjacent PSCCH and PSSCH for V2X sidelink communication	36.306 4.3.21.21	Rel-14	
70	Support of reception of 20 PSCCH in a subframe and decoding of 136 RBs per subframe counting both PSCCH and PSSCH in a band for V2X sidelink communication	36.306 4.3.21.13	Rel-14	

71	Support of Increased UE carrier monitoring E-UTRA	36.306 4.3.6.6	Rel-12	
72	Support of codebookConfig 1 for non-precoded EBF/ FD-MIMO operation in TM9	36.306 4.3.28.6	Rel-13	
73	Support of codebookConfig 2 for non-precoded EBF/ FD-MIMO operation in TM9	36.306 4.3.28.6	Rel-13	
74	Support of codebookConfig 3 for non-precoded EBF/ FD-MIMO operation in TM9	36.306 4.3.28.6	Rel-13	
75	Support of codebookConfig 4 for non-precoded EBF/ FD-MIMO operation in TM9	36.306 4.3.28.6	Rel-13	
76	Support of Increased UE carrier monitoring UTRA	36.306 4.3.6.7	Rel-12	
77	Support of multi-carrier operation	36.306 4.3.4.115	Rel-13	
78	Support of reception ending with a subframe occupied for a DwPTS-duration on LAA cell(s)	36.306 4.3.23.4	Rel-13	
79	Support of reception of subframes with second slot starting position on LAA cell(s)	36.306 4.3.23.5	Rel-13	
80	Support of enhanced 4Tx codebook	36.306 4.3.4.33	Rel-12	
81	Support of PUSCH feedback mode 3-2	36.306 4.3.4.34	Rel-12	
82	Support for channel measurement restrictions in TM9 and TM10	36.306, 4.3.28.3	Rel-13	
83	Support for interference measurement restrictions	36.306 4.3.28.5	Rel-13	
abc	Support of WUS (wake up signal) for FDD	36.306 4.3.4.113	Rel-15	
84	Support of 64QAM for non-repeated unicast PDSCH in RRC_CONNECTED when operating in coverage enhancement mode A	36.306 4.3.4.126	Rel-15	
85	Support of alternative CQI table in RRC_CONNECTED when operating in coverage enhancement mode A	36.306 4.3.4.127	Rel-15	
86	Support of eNB-configured CRS-based RRM measurements for configured carrier(s) in RRC_IDLE mode.	36.306, 4.3.6.31	Rel-15	

Note 1: Need for inter-frequency gaps or inter-RAT gaps indicates that the UE does not support corresponding measurement without gaps.

Table A.4.5-2: Additional UE radio access capabilities (Mandatory for Rel-11 and onward)

Item	Additional capabilities	Ref.	Release	Status (Note 1)	Support (Note 2)	Comments
1	UE supports CRS interference handling	36.306, 4.3.4.15	Rel-11	O.01		This is a Rel-11 Mandatory feature
2	UE supports ss-CCH interference handling	36.306, 4.3.4.20	Rel-11	O.01		This is a Rel-11 Mandatory feature
3	UE supports multiple timing advances for each band combination supported by the UE	36.306, 4.3.5.3	Rel-11	O.01		This is a Rel-11 Mandatory feature (Note 3)

Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits (see A.4.4). Instead it has introduced a different mechanism to accomplish the same purposes based on the following principles (TS 36.306 [17] clause 4): 'For optional features, the UE radio access capability parameter indicates whether the feature has been implemented and successfully tested. For mandatory features with the UE radio access capability parameter, the parameter indicates whether the feature has been successfully tested.'
Reflecting this situation, in the present table the status for Mandatory features would be indicated as conditional Optional (O.xx) until IOT testing availability is ensured. The decision when IOT testing availability can be considered ensured is made by 3GPP TSG RAN. After the 3GPP TSG RAN decision that IOT testing is available, the status of the capability parameter will be changed to Mandatory (M) and the release from which this requirement apply would be explicitly stated.
Note 2: If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release.
Note 3: It is mandatory for UEs of this release of the specification to support this capability for band combinations having an UL on multiple FDD bands (see 36.306, 4.3.5.3). In the context of evaluating the status of the capability this would depend on the indication for UL support provided in Table A.4.3.3.3-3 i.e. if for at least one CA configurations for Inter-band CA the UE indicates A-A then the Support of multiple timing advances for this CA configuration is Mandatory.

Table A.4.5-2a: Additional UE radio access capabilities Conditions

O.01	IF The feature has been IOT-ed THEN Support shall be indicated ELSE Support shall not be indicated

Table A.4.5-3: UL MIMO Capabilities

Item	RF Baseline Implementation Capabilities	Ref.	Comments
1	Frequency band: 1920-1980, 2110-2170 MHz	36.101, 5.5	FDD Band 1
2	Frequency band: 1850-1910, 1930-1990 MHz	36.101, 5.5	FDD Band 2
3	Frequency band: 1710-1785, 1805-1880 MHz	36.101, 5.5	FDD Band 3
4	Frequency band: 1710-1755, 2110-2155 MHz	36.101, 5.5	FDD Band 4
5	Frequency band: 824-849, 869-894 MHz	36.101, 5.5	FDD Band 5
6	Frequency band: 830-840, 875-885 MHz	36.101, 5.5	FDD Band 6
7	Frequency band: 2500-2570, 2620-2690 MHz	36.101, 5.5	FDD Band 7
8	Frequency band: 880-915, 925-960 MHz	36.101, 5.5	FDD Band 8
9	Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz	36.101, 5.5	FDD Band 9
10	Frequency band: 1710-1770, 2110-2170 MHz	36.101, 5.5	FDD Band 10
11	Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz	36.101, 5.5	FDD Band 11
12	Frequency band: 699-716, 729-746 MHz	36.101, 5.5	FDD Band 12
13	Frequency band: 777-787, 746-756 MHz	36.101, 5.5	FDD Band 13
14	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	FDD Band 14
15	Reserved	36.101, 5.5	FDD Band 15
16	Reserved	36.101, 5.5	FDD Band 16
17	Frequency band: 704-716, 734-746 MHz	36.101, 5.5	FDD Band 17
18	Frequency band: 815-830, 860-875 MHz	36.101, 5.5	FDD Band 18
19	Frequency band: 830-845, 875-890 MHz	36.101, 5.5	FDD Band 19
20	Frequency band: 832-862, 791-821MHz	36.101, 5.5	FDD Band 20
21	Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz	36.101, 5.5	FDD and HD-FDD Band 21
22	Frequency band: 3410-3490, 3510-3590 MHz	36.101, 5.5	FDD Band 22
23	Frequency band: 2000-2020, 2180-2200 MHz	36.101, 5.5	FDD Band 23
24	Frequency band: 1626.5-1660.5, 1525-1559 MHz	36.101, 5.5	FDD Band 24
25	Frequency band: 1850-1915, 1930-1995 MHz	36.101, 5.5	FDD Band 25
26	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	FDD Band 26
27	Frequency band: 807-824, 852-869 MHz	36.101, 5.5	FDD Band 27
28	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	FDD Band 28
29	Frequency band: N/A, 717-728 MHz	36.101, 5.5	FDD Band 29
30	Frequency band: 2305-2315, 2350-2360 MHz (Note 1)	36.101, 5.5	FDD Band 30
31	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	FDD Band 31
...			
33	Frequency band: 1900-1920, 1900-1920 MHz	36.101, 5.5	TDD Band 33
34	Frequency band: 2010-2025, 2010-2025 MHz	36.101, 5.5	TDD Band 34
35	Frequency band: 1850-1910, 1850-1910 MHz	36.101, 5.5	TDD Band 35
36	Frequency band: 1930-1990, 1930-1990 MHz	36.101, 5.5	TDD Band 36
37	Frequency band: 1910-1930, 1910-1930 MHz	36.101, 5.5	TDD Band 37
38	Frequency band: 2570-2620, 2570-2620 MHz	36.101, 5.5	TDD Band 38
39	Frequency band: 1880-1920, 1880-1920 MHz	36.101, 5.5	TDD Band 39
40	Frequency band: 2300-2400, 2300-2400 MHz	36.101, 5.5	TDD Band 40
41	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	TDD Band 41
42	Frequency band: 3400-3600, 3400-3600 MHz	36.101, 5.5	TDD Band 42
43	Frequency band: 3600-3800, 3600-3800 MHz	36.101, 5.5	TDD Band 43
44	Frequency band: 703-803, 703-803 MHz	36.101, 5.5	TDD Band 44
45	Frequency band: 1447-1467, 1447-1467 MHz	36.101, 5.5	TDD Band 45
...			
48	Frequency band: 3550-3700, 3550-3700 MHz	36.101, 5.5	TDD Band 48
…			
53	Frequency band: 2483.5-2495, 2483.5-2495 MHz	36.101, 5.5	TDD Band 53
…			
65	Frequency band: 1920-2010, 2110-2200 MHz	36.101, 5.5	FDD Band 65
66	Frequency band: 1710-1780, 2110-2200 MHz	36.101, 5.5	FDD Band 66
...			
68	Frequency band: 698-728, 753-783 MHz	36.101, 5.5	FDD Band 68
…			
70	Frequency band: 1695-1710, 1995-2020 MHz	36.101, 5.5	FDD Band 70
…			
72	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	FDD Band 72
73	Frequency band: 450-455, 460-465 MHz	36.101, 5.5	FDD Band 73
74	Frequency band: 1427-1470, 1475-1515 MHz	36.101, 5.5	FDD Band 74
Note 1: The uplink transmission is not allowed at this band for the UE with the externally vehicle-mounted antennas.			

Table A.4.5-4: nonContiguousUL-RA-WithinCC-Info-r10 Capabilities (required for MultiClusterPUSCH-WithinCC-r10)

Item	RF Baseline Implementation Capabilities	Ref.	Comments
1	Frequency band: 1920-1980, 2110-2170 MHz	36.101, 5.5	FDD Band 1
2	Frequency band: 1850-1910, 1930-1990 MHz	36.101, 5.5	FDD Band 2
3	Frequency band: 1710-1785, 1805-1880 MHz	36.101, 5.5	FDD Band 3
4	Frequency band: 1710-1755, 2110-2155 MHz	36.101, 5.5	FDD Band 4
5	Frequency band: 824-849, 869-894 MHz	36.101, 5.5	FDD Band 5
6	Frequency band: 830-840, 875-885 MHz	36.101, 5.5	FDD Band 6
7	Frequency band: 2500-2570, 2620-2690 MHz	36.101, 5.5	FDD Band 7
8	Frequency band: 880-915, 925-960 MHz	36.101, 5.5	FDD Band 8
9	Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz	36.101, 5.5	FDD Band 9
10	Frequency band: 1710-1770, 2110-2170 MHz	36.101, 5.5	FDD Band 10
11	Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz	36.101, 5.5	FDD Band 11
12	Frequency band: 699-716, 729-746 MHz	36.101, 5.5	FDD Band 12
13	Frequency band: 777-787, 746-756 MHz	36.101, 5.5	FDD Band 13
14	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	FDD Band 14
15	Reserved	36.101, 5.5	FDD Band 15
16	Reserved	36.101, 5.5	FDD Band 16
17	Frequency band: 704-716, 734-746 MHz	36.101, 5.5	FDD Band 17
18	Frequency band: 815-830, 860-875 MHz	36.101, 5.5	FDD Band 18
19	Frequency band: 830-845, 875-890 MHz	36.101, 5.5	FDD Band 19
20	Frequency band: 832-862, 791-821MHz	36.101, 5.5	FDD Band 20
21	Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz	36.101, 5.5	FDD Band 21
22	Frequency band: 3410-3490, 3510-3590 MHz	36.101, 5.5	FDD Band 22
23	Frequency band: 2000-2020, 2180-2200 MHz	36.101, 5.5	FDD Band 23
24	Frequency band: 1626.5-1660.5, 1525-1559 MHz	36.101, 5.5	FDD Band 24
25	Frequency band: 1850-1915, 1930-1995 MHz	36.101, 5.5	FDD Band 25
26	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	FDD Band 26
27	Frequency band: 807-824, 852-869 MHz	36.101, 5.5	FDD Band 27
28	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	FDD Band 28
29	Frequency band: N/A, 717-728 MHz	36.101, 5.5	FDD Band 29
30	Frequency band: 2305-2315, 2350-2360 MHz (Note 1)	36.101, 5.5	FDD Band 30
31	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	FDD Band 31
...			
33	Frequency band: 1900-1920, 1900-1920 MHz	36.101, 5.5	TDD Band 33
34	Frequency band: 2010-2025, 2010-2025 MHz	36.101, 5.5	TDD Band 34
35	Frequency band: 1850-1910, 1850-1910 MHz	36.101, 5.5	TDD Band 35
36	Frequency band: 1930-1990, 1930-1990 MHz	36.101, 5.5	TDD Band 36
37	Frequency band: 1910-1930, 1910-1930 MHz	36.101, 5.5	TDD Band 37
38	Frequency band: 2570-2620, 2570-2620 MHz	36.101, 5.5	TDD Band 38
39	Frequency band: 1880-1920, 1880-1920 MHz	36.101, 5.5	TDD Band 39
40	Frequency band: 2300-2400, 2300-2400 MHz	36.101, 5.5	TDD Band 40
41	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	TDD Band 41
42	Frequency band: 3400-3600, 3400-3600 MHz	36.101, 5.5	TDD Band 42
43	Frequency band: 3600-3800, 3600-3800 MHz	36.101, 5.5	TDD Band 43
44	Frequency band: 703-803, 703-803 MHz	36.101, 5.5	TDD Band 44
45	Frequency band: 1447-1467, 1447-1467 MHz	36.101, 5.5	TDD Band 45
...			
53	Frequency band: 2483.5-2495, 2483.5-2495 MHz	36.101, 5.5	TDD Band 53
…			
65	Frequency band: 1920-2010, 2110-2200 MHz	36.101, 5.5	FDD Band 65
66	Frequency band: 1710-1780, 2110-2200 MHz	36.101, 5.5	FDD Band 66
...			
68	Frequency band: 698-728, 753-783 MHz	36.101, 5.5	FDD Band 68
…			
70	Frequency band: 1695-1710, 1995-2020 MHz	36.101, 5.5	FDD Band 70
…			
72	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	FDD Band 72
73	Frequency band: 450-455, 460-465 MHz	36.101, 5.5	FDD Band 73
74	Frequency band: 1427-1470, 1475-1518 MHz	36.101, 5.5	FDD Band 74
Note 1: The uplink transmission is not allowed at this band for the UE with the externally vehicle-mounted antennas.			

Table A.4.5-5: 4 Rx antenna ports Capabilities

Item	Ref.	Release	Band	Supported	Comments
1	36.101, 7.2	Rel-13	FDD Band 1		
2	36.101, 7.2	Rel-13	FDD Band 2		
3	36.101, 7.2	Rel-13	FDD Band 3		
4	36.101, 7.2	Rel-15	FDD Band 4		
...					
7	36.101, 7.2	Rel-13	FDD Band 7		
...					
20	36.101, 7.2	Rel-13	FDD Band 20		
21	36.101, 7.2	Rel-14	FDD Band 21		
...					
25	36.101, 7.2	Rel-14	FDD Band 25		
...					
30	36.101, 7.2	Rel-15	FDD Band 30		
...					
34	36.101, 7.2	Rel-15	FDD Band 34		
...					
39	36.101, 7.2	Rel-13	TDD Band 39		
40	36.101, 7.2	Rel-14	TDD Band 40		
41	36.101, 7.2	Rel-13	TDD Band 41		
42	36.101, 7.2	Rel-13	TDD Band 42		
66	36.101, 7.2	Rel-15	FDD Band 66		

Table A.4.5-6: Void

Table A.4.5-6a: E-UTRA ProSe Communication Capabilities

Item	RF Baseline Implementation Capabilities	Ref.	Comments
1	Frequency band: 1710-1785, 1805-1880 MHz	36.101, 5.5	FDD Band 3
2	Frequency band: 2500-2570, 2620-2690 MHz	36.101, 5.5	FDD Band 7
3	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	FDD Band 14
4	Frequency band: 832-862, 791-821MHz	36.101, 5.5	FDD Band 20
5	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	FDD Band 26
6	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	FDD Band 28
7	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	FDD Band 31
8	Frequency band: 698-728, 753-783 MHz	36.101, 5.5	FDD Band 68
9	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	FDD Band 72
10	Frequency band: 450-455, 460-465 MHz	36.101, 5.5	FDD Band 73

Table A.4.5-6b: E-UTRA ProSe Discovery Capabilities

Item	RF Baseline Implementation Capabilities	Ref.	Comments
1	Frequency band: 1850-1910, 1930-1990 MHz	36.101, 5.5	FDD Band 2
2	Frequency band: 1710-1785, 1805-1880 MHz	36.101, 5.5	FDD Band 3
3	Frequency band: 1710-1755, 2110-2155 MHz	36.101, 5.5	FDD Band 4
4	Frequency band: 2500-2570, 2620-2690 MHz	36.101, 5.5	FDD Band 7
5	Frequency band: 788-798, 758-768 MHz	36.101, 5.5	FDD Band 14
6	Frequency band: 832-862, 791-821MHz	36.101, 5.5	FDD Band 20
7	Frequency band: 814-849, 859-894 MHz	36.101, 5.5	FDD Band 26
8	Frequency band: 703-748, 758-803 MHz	36.101, 5.5	FDD Band 28
9	Frequency band: 452.5-457.5, 462.5-467.5 MHz	36.101, 5.5	FDD Band 31
10	Frequency band: 2496-2690, 2496-2690 MHz	36.101, 5.5	TDD Band 41
11	Frequency band: 698-728, 753-783 MHz	36.101, 5.5	FDD Band 68
12	Frequency band: 451-456, 461-466 MHz	36.101, 5.5	FDD Band 72
13	Frequency band: 450-455, 460-465 MHz	36.101, 5.5	FDD Band 73

Table A.4.5-7: E-UTRA V2X Sidelink Communication

Item	RF Baseline Implementation Capabilities	Ref.	Comments
1	Frequency band: 5855-5925, 5855-5925 MHz	36.101, 5.5	TDD Band 47

Table A.4.5-7a: Supported Inter-band con-current V2X configurations

Inter-band con-current V2X configurations	Release	Comments
V2X_3A-47A	Rel-14	-
V2X_5A-47A	Rel-14	-
V2X_7A-47A	Rel-14	-
V2X_8A-47A	Rel-14	-
V2X_20A-47A	Rel-14	-
V2X_34A-47A	Rel-14	-
V2X_39A-47A	Rel-14	-
V2X_41A-47A	Rel-14	-

Table A.4.5-7b: Supported V2X intra-band multi-carrier configurations

V2X intra-band multi-carrier configurations	Release	Comments
V2X_47B	Rel-14	-

Table A.4.5-8: Supported CA configurations with multi layer spatial multiplexing

Item	Configuration	Release	Ref.	Comments
1	2DL FDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-10	36.101, 5.6A 36.306, 4.3.5.14	-
2	2DL TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-10	36.101, 5.6A 36.306, 4.3.5.14	-
3	2DL FDD-TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-12	36.101, 5.6A 36.306, 4.3.5.14	-
4	3DL FDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-10	36.101, 5.6A 36.306, 4.3.5.14	-
5	3DL TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-10	36.101, 5.6A 36.306, 4.3.5.14	-
6	3DL FDD-TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-12	36.101, 5.6A 36.306, 4.3.5.14	-
7	4DL FDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-11	36.101, 5.6A 36.306, 4.3.5.14	-
8	4DL TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-11	36.101, 5.6A 36.306, 4.3.5.14	-
9	4DL FDD-TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-12	36.101, 5.6A 36.306, 4.3.5.14	-
10	5DL FDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-11	36.101, 5.6A 36.306, 4.3.5.14	-
11	5DL TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-11	36.101, 5.6A 36.306, 4.3.5.14	-
12	5DL FDD-TDD CA, with 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4	Rel-12	36.101, 5.6A 36.306, 4.3.5.14	-
NOTE: At least one component carrier in a CA configuration shall support 4Rx antenna ports and 4-layer spatial multiplexing with TM 3 and TM 4.				

A.4.6 CA Physical Layer Baseline Implementation Capabilities

Table A.4.6-1: Downlink CA capabilities (for one or more of the supported CA configurations in Tables A.4.6.1-3, A.4.6.2-3, A.4.6.3-3, A.4.6.3-4, A.4.6.3-5)

Item	Bandwidth Class	Ref.	Comments
1	DL CA with 2 carriers	36.101, 5.6A 36.331, 6.3.6	(NOTE 1)
2	DL CA with 3 carriers	36.101, 5.6A 36.331, 6.3.6	
3	DL CA with 4 carriers	36.101, 5.6A 36.331, 6.3.6	
4	DL CA with 5 carriers	36.101, 5.6A 36.331, 6.3.6	
5	DL CA with 6 carriers	36.101, 5.6A 36.331, 6.3.6	
6	DL CA with 7 carriers	36.101, 5.6A 36.331, 6.3.6	
Note 1: A UE that supports operating Band 66 (Table A.4.3-3) and CA operation in any CA band shall support the DL CA configurations CA_66B, CA_66C and CA_66A-66A, as specified in Note 6, in Table 5.5-1, in TS 36.101 [19].			

Table A.4.6-2: Uplink CA capabilities (for one or more of the supported CA configurations in Tables A.4.6.1-3, A.4.6.2-3, A.4.6.3-3, A.4.6.3-4, A.4.6.3-5)

Item	Bandwidth Class	Ref.	Comments
1	UL CA with 2 carriers	36.101, 5.6A 36.331, 6.3.6	
2	UL CA with 3 carriers	36.101, 5.6A 36.331, 6.3.6	Not used in any valid CA configurations in TS 36.101 yet
3	UL CA with 4 carriers	36.101, 5.6A 36.331, 6.3.6	

A.4.6.1 Intra-band contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.1-1: Downlink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

Item	Bandwidth Class	Ref.	Comments
1	DL Intra-band contiguous CA BW Class B	36.101, 5.6A 36.331, 6.3.6	
2	DL Intra-band contiguous CA BW Class C	36.101, 5.6A 36.331, 6.3.6	
3	DL Intra-band contiguous CA BW Class D	36.101, 5.6A 36.331, 6.3.6	
4	DL Intra-band contiguous CA BW Class E	36.101, 5.6A 36.331, 6.3.6	
5	DL Intra-band contiguous CA BW Class F	36.101, 5.6A 36.331, 6.3.6	

Table A.4.6.1-2: Uplink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

Item	Bandwidth Class	Ref.	Comments
1	UL Intra-band contiguous CA BW Class B	36.101, 5.6A 36.331, 6.3.6	Not used in any valid CA configurations in TS 36.101 yet
2	UL Intra-band contiguous CA BW Class C	36.101, 5.6A 36.331, 6.3.6	
3	UL Intra-band contiguous CA BW Class D	36.101, 5.6A 36.331, 6.3.6	

Table A.4.6.1-3: Supported CA configurations for Intra-band contiguous CA

E-UTRA CA configuration / Item (Note 1)	Release (Note 11)	Supported	Supported CA Bandwidth Class(es) in UL (Note 2,7)	Supported Bandwidth Combination Set(s) (Note 3)	Fallback Bands Exception (Note 5,8)	Fallback CA configurations Exceptions (Note 6,8)	Supported band(s) for 4 layer spatial multiplexing (Note 10)
CA_1C	Rel-10				-	-	
CA_2C	Rel-12				-	-	
CA_3C	Rel-12				-	-	
CA_5B	Rel-13				-	-	
CA_7B	Rel-13				-	-	
CA_7C	Rel-11				-	-	
CA_8B	Rel-14				-	-	
CA_12B	Rel-12				-	-	
CA_23B	Rel-12				-	-	
CA_27B	Rel-12				-	-	
CA_38C	Rel-11				-	-	
CA_39C	Rel-12				-	-	
CA_40C	Rel-10				-	-	
CA_40D	Rel-12				-	-	
CA_40E	Rel-14						
CA_41C	Rel-11				-	-	
CA_41D	Rel-12				-	-	
CA_41F	Rel-15						
CA_42C	Rel-12				-	-	
CA_42D	Rel-13				-	-	
CA_42E	Rel-13				-	-	
CA_66B (NOTE 9)	Rel-13				-	-	
CA_48C	Rel-14						
CA_48D	Rel-14						
CA_66C (NOTE 9)	Rel-13				-	-	
CA_66D	Rel-14				-	-	
CA_70C	Rel-14				-	-	

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-1, e.g. 'CA_1C' indicates CA operation on E-UTRA band 1 with DL CA Bandwidth Class C.
Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-1. For this release of specification valid choices are 'N', 'XB' and 'XC', where X is the band. For example, for CA_1C, N would mean only DL CA, '1C' would mean both DL and UL CA.
Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-1.
Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6
Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in "Tested Band Selection Criteria" (Table 4.1-1b). FALLBACK(A.4.6.1-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table 4.1-2, with the following additional conditions:
Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration
Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in "Tested CA Configurations Criteria" (Table 4.1-1c). FALLBACK(A.4.6.1-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table 4.1-2, with the following additional conditions:
Fallback CA Configuration is not listed in "Fallback CA Configurations Exceptions"
Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.
FALLBACK_UL(A.4.6.1-3) shall return FALLBACK(A.4.6.1-3) AND UL(A.4.6.1-3)
Note 7: UL(A.4.6.1-3) shall return all supported CA Configurations where at least one UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_2CC(A.4.6.1-3) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_3CC(A.4.6.1-3) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.
Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception.
Note 9: A UE that supports operating Band 66 (Table A.4.3-3) and CA operation in any CA band shall support the DL CA configurations CA_66B, CA_66C and CA_66A-66A, as specified in Note 6, in Table 5.5-1, in TS 36.101 [19].
Note 10: The UE supplier shall indicate the frequency bands where 4 layer spatial multiplexing is supported in the supported CA Configurations.
Note 11: The release column indicates the release the CA configuration was introduced in TS 36.101 [2].

A.4.6.2 Intra-band non-contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.2-1: Downlink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

Item	Bandwidth Class	Ref.	Comments
1	DL Intra-band non-contiguous CA BW Class Combination A-A	36.101, 5.6A 36.331, 6.3.6	
2	DL Intra-band non-contiguous CA BW Class Combination A-C/C-A	36.101, 5.6A 36.331, 6.3.6	
3	Void		
4	DL Intra-band non-contiguous CA BW Class Combination A-D/D-A	36.101, 5.6A 36.331, 6.3.6	
5	DL Intra-band non-contiguous CA BW Class Combination C-C	36.101, 5.6A 36.331, 6.3.6	
6	DL Intra-band non-contiguous CA BW Class Combination A-E	36.101, 5.6A 36.331, 6.3.6	
7	DL Intra-band non-contiguous CA BW Class Combination B-D or C-D	36.101, 5.6A 36.331, 6.3.6	
8	DL Intra-band non-contiguous CA BW Class Combination A-C-C or A-B-C	36.101, 5.6A 36.331, 6.3.6	
9	DL Intra-band non-contiguous CA BW Class Combination A-A-A	36.101, 5.6A 36.331, 6.3.6	with three sub-blocks

Table A.4.6.2-2: Uplink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

Item	Bandwidth Class	Ref.	Comments
1	UL Intra-band non-contiguous CA BW Class Combination A-A	36.101, 5.6A 36.331, 6.3.6	

Table A.4.6.2-3: Supported CA configurations for Intra-band non-contiguous CA

E-UTRA CA configuration / Item (Note 1)	Release (Note 11)	Supported	Supported CA Bandwidth Class(es) in UL (Note 2,7)	Supported Bandwidth Combination Set(s) (Note 3)	Fallback Bands Exception (Note 5,8)	Fallback CA configurations Exceptions (Note 6,8)	Supported band(s) for 4 layer spatial multiplexing (Note 10)
CA_1A-1A	Rel-14						
CA_2A-2A	Rel-12				-	-	
CA_3A-3A	Rel-12				-	-	
CA_4A-4A	Rel-12				-	-	
CA_5A-5A	Rel-13				-	-	
CA_7A-7A	Rel-12				-	-	
CA_23A-23A	Rel-12				-	-	
CA_25A-25A	Rel-11				-	-	
CA_41A-41A	Rel-11				-	-	
CA_41A-41C	Rel-12				-	-	
CA_42A-42A	Rel-12				-	-	
CA_42A-42C	Rel-13				-	-	
CA_66A-66A (NOTE 9)	Rel-13						
CA_66A-66A-66A	Rel-15				-	-	
CA_66A-66C	Rel-14				-	-	

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-3, e.g. 'CA_2A-2A' indicates CA intra-band non-contiguous operation on E-UTRA band 2 with DL CA Bandwidth Class A-A.

Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-3. For this release of specification valid choices are 'N', 'XA-XA' and 'XC', where X is the band. For example, for CA_4A-4A, 'N' would mean only DL CA, '4A-4A' would mean both DL and UL CA.

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-3.

Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6

Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in "Tested Band Selection Criteria" (Table 4.1-1b). FALLBACK(A.4.6.2-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table 4.1-2, with the following additional conditions:

1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
2. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration

Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in "Tested CA Configurations Criteria" (Table 4.1-1c). FALLBACK(A.4.6.2-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table 4.1-2, with the following additional conditions:

1. Fallback CA Configuration is not listed in "Fallback CA Configurations Exceptions"
2. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.

Note 7: UL(A.4.6.2-3) shall return all supported CA Configurations where at least one >1 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_2CC(A.4.6.2-3) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_3CC(A.4.6.2-3) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.

Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception.

Note 9: A UE that supports operating Band 66 (Table A.4.3-3) and CA operation in any CA band shall support the DL CA configurations CA_66B, CA_66C and CA_66A-66A, as specified in Note 6, in Table 5.5-1, in TS 36.101 [19].

Note 10: The UE supplier shall indicate the frequency bands where 4 layer spatial multiplexing is supported in the supported CA Configurations.

Note 11: The release column indicates the release the CA configuration was introduced in TS 36.101 [2].

A.4.6.3 Inter-band CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.3-1: Downlink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3, A.4.6.3-4, A.4.6.3-5)

Item	Bandwidth Class	Ref.	Comments
1	DL Inter-band CA BW Class Combination A-A	36.101, 5.6A 36.331, 6.3.6	
2	DL Inter-band CA BW Class Combination A-A-A (two bands)	36.101, 5.6A 36.331, 6.3.6	
3	DL Inter-band CA BW Class Combination A-A-A (three bands)	36.101, 5.6A 36.331, 6.3.6	
4	DL Inter-band CA BW Class Combination A-C or A-B (two bands)	36.101, 5.6A 36.331, 6.3.6	
5	DL Inter-band CA BW Class Combination A-A where one of the bands is DL-only	36.101, 5.5	
6	DL Inter-band CA BW Class Combination A-A-A-A (four bands)	36.101, 5.6A 36.331, 6.3.6	
7	DL Inter-band CA BW Class Combination A-A-C or A-A-B (three bands)	36.101, 5.6A 36.331, 6.3.6	
8	DL Inter-band CA BW Class Combination A-A-A-C (four bands)	36.101, 5.6A 36.331, 6.3.6	
9	DL Inter-band CA BW Class Combination A-D or C-C or C-B (two bands)	36.101, 5.6A 36.331, 6.3.6	
10	DL Inter-band CA BW Class Combination A-A-C or A-A-B (two bands)	36.101, 5.6A 36.331, 6.3.6	
11	DL Inter-band CA BW Class Combination A-A-A-A (two bands)	36.101, 5.6A 36.331, 6.3.6	
12	DL Inter-band CA BW Class Combination A-A-A-A (three bands)	36.101, 5.6A 36.331, 6.3.6	
13	DL Inter-band CA BW Class Combination A-A-A-B or A-A-A-C (three bands)	36.101, 5.6A 36.331, 6.3.6	
14	DL Inter-band CA BW Class Combination A-A-A-A-A (five bands)	36.101, 5.6A 36.331, 6.3.6	
15	DL Inter-band CA BW Class Combination A-A-D (three bands)	36.101, 5.6A 36.331, 6.3.6	
16	DL Inter-band CA BW Class Combination A-A-A-B or A-A-A-C (four bands)	36.101, 5.6A 36.331, 6.3.6	
17	DL Inter-band CA BW Class Combination A-A-A-A-A (four bands)	36.101, 5.6A 36.331, 6.3.6	
18	DL Inter-band CA BW Class Combination A-A-A-C or A-A-A-B (two bands)	36.101, 5.6A 36.331, 6.3.6	
19	DL Inter-band CA BW Class Combination C-E (two bands)	36.101, 5.6A 36.331, 6.3.6	
20	DL Inter-band CA BW Class Combination A-A-E (three bands)	36.101, 5.6A 36.331, 6.3.6	
21	DL Inter-band CA BW Class Combination A-C-D (three bands)	36.101, 5.6A 36.331, 6.3.6	
22	DL Inter-band CA BW Class Combination A-A-A-D (four bands)	36.101, 5.6A 36.331, 6.3.6	
23	DL Inter-band CA BW Class Combination A-A-C-C (four bands)	36.101, 5.6A 36.331, 6.3.6	
24	DL Inter-band CA BW Class Combination C-D (two bands)	36.101, 5.6A 36.331, 6.3.6	
Note: The order of the CA bandwidth classes in the CA BW Class Combination does not imply any order in the CA operating bands.			

Table A.4.6.3-2: Uplink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3, A.4.6.3-4, A.4.6.3-5)

Item	Bandwidth Class	Ref.	Comments
1	UL Inter-band CA BW Class Combination A-A	36.101, 5.6A 36.331, 6.3.6	
2	UL Inter-band CA BW Class Combination A-A-A (two bands)	36.331, 6.3.6	
3	UL Inter-band CA BW Class Combination A-C (two bands)	36.101, 5.6A 36.331, 6.3.6	

Table A.4.6.3-3: Supported CA configurations for Inter-band CA (two bands)

E-UTRA CA configuration / Item (Note 1)	Release (Note 11)	Supported	Supported CA Bandwidth Class(es) in UL (Note 2,7)	Supported UL Bands (Note 9)	Supported Bandwidth Combination Set(s) (Note 3)	Fallback Bands Exception (Note 5)	Fallback CA configurations Exceptions (Note 6)	Supported band(s) for 4 layer spatial multiplexing (Note 10)
CA_1A-1A-7A	Rel-15							
CA_1A-3A	Rel-14					-	-	
CA_1A-3C	Rel-13					-	-	
CA_1A-5A	Rel-10					-	-	
CA_1A-7A	Rel-12					-	-	
CA_1A-7A-7A	Rel-14							
CA_1A-8A	Rel-12					-	-	
CA_1A-11A	Rel-12					-	-	
CA_1A-18A	Rel-11					-	-	
CA_1A-19A	Rel-11					-	-	
CA_1A-20A	Rel-12					-	-	
CA_1A-21A	Rel-11					-	-	
CA_1A-26A	Rel-12					-	-	
CA_1A-28A	Rel-12					-	-	
CA_1A-38A	Rel-14							
CA_1A-40A	Rel-13							
CA_1A-41A	Rel-12					-	-	
CA_1A-41C	Rel-12					-	-	
CA_1A-42A	Rel-12					-	-	
CA_1A-42C	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_1A-46C	Rel-14					-	-	
CA_1A-46D	Rel-14					-	-	
CA_1A-46E	Rel-14					-	-	
CA_1C-3A	Rel-14					-	-	
CA_2A-2A-4A-4A	Rel-13					-	-	
CA_2A-2A-5A	Rel-12					-	-	
CA_2A-2A-7A	Rel-15					-	-	
CA_2A-2A-12A	Rel-13					-	-	
CA_2A-2A-12B	Rel-13					-	-	
CA_2A-2A-13A	Rel-12					-	-	
CA_2A-2A-14A	Rel-15					-	-	
CA_2A-2A-29A	Rel-14					-	-	
CA_2A-2A-30A	Rel-14					-	-	
CA_2A-2A-66A	Rel-14							
CA_2A-2A-71A	Rel-15					-	-	
CA_2A-4A	Rel-12					-	-	
CA_2A-4A-4A	Rel-12					-	-	
CA_2A-5A	Rel-12					-	-	
CA_2A-5B	Rel-14					-	-	
CA_2A-7A	Rel-13					-	-	
CA_2A-7A-7A	Rel-14					-	-	
CA_2A-7C	Rel-14					-	-	
CA_2A-12A	Rel-12					-	-	
CA_2A-12B	Rel-12					-	-	
CA_2A-13A	Rel-12					-	-	
CA_2A-14A	Rel-15					-	-	
CA_2A-17A	Rel-11					-	-	
CA_2A-28A	Rel-13					-	-	
CA_2A-29A	Rel-11			2		-	-	
CA_2A-30A	Rel-12					-	-	
CA_2A-66A-66A	Rel-14					-	-	
CA_2A-66A	Rel-14					-	-	
CA_2A-66C	Rel-14					-	-	
CA_2A-71A	Rel-15					-	-	
CA_2C-5A	Rel-13					-	-	
CA_2C-29A	Rel-12			2		-	-	
CA_2C-66A	Rel-15					-	-	

CA_2C-66A-66A	Rel-15					-	-	
CA_3A-3A-7A-7A	Rel-14							
CA_3A-3A-8A	Rel-13							
CA_3A-5A	Rel-11					-	-	
CA_3A-7A	Rel-11					-	-	
CA_3A-7B	Rel-13					-	3A-7A	
CA_3A-7C	Rel-12					-	-	
CA_3A-8A	Rel-11					-	-	
CA_3A-11A	Rel-14					-	-	
CA_3A-18A	Rel-15 (1UL, 2UL)							
CA_3A-19A	Rel-12					-	-	
CA_3A-20A	Rel-11					-	-	
CA_3A-21A	Rel-14 (1UL, 2UL)					-	-	
CA_3A-26A	Rel-12					-	-	
CA_3A-27A	Rel-12					-	-	
CA_3A-28A	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_3A-32A	Rel-14					-	-	
CA_3A-38A	Rel-13					-	-	
CA_3A-40A	Rel-13							
CA_3A-41A	Rel-13					-	-	
CA_3A-42A	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_3A-42C	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_3A-46A	Rel-13					-	-	
CA_3A-46C	Rel-14					-	-	
CA_3A-46D	Rel-14					-	-	
CA_3A-46E	Rel-14					-	-	
CA_3A-69A	Rel-14			3		-	-	
CA_3C-5A	Rel-13					-	-	
CA_3C-7A	Rel-12					-	-	
CA_3C-7C	Rel-13					-	-	
CA_3C-8A	Rel-14					-	-	
CA_3C-20A	Rel-14							
CA_3C-28A	Rel-13					-	-	
CA_4A-4A-5A	Rel-12					-	-	
CA_4A-4A-7A	Rel-12					-	-	
CA_4A-4A-12A	Rel-12					-	-	
CA_4A-4A-13A	Rel-12					-	-	
CA_4A-4A-29A	Rel-13					-	-	
CA_4A-4A-30A	Rel-13					-	-	
CA_4A-4A-71A	Rel-15					-	-	
CA_4A-5A	Rel-11					-	-	
CA_4A-7A-7A	Rel-14					-	-	
CA_4A-7A	Rel-11					-	-	
CA_4A-7C	Rel-14					-	-	
CA_4A-12A	Rel-11					-	-	
CA_4A-12B	Rel-14					-	-	
CA_4A-13A	Rel-11					-	-	
CA_4A-17A	Rel-11					-	-	
CA_4A-27A	Rel-12					-	-	
CA_4A-28A	Rel-13							
CA_4A-29A	Rel-11			4		-	-	
CA_4A-30A	Rel-12					-	-	
CA_4A-71A	Rel-15					-	-	
CA_5A-5A-66A	Rel-14					-	-	
CA_5A-7A	Rel-12					-	-	

CA_5A-12A	Rel-11					-	-	
CA_5A-13A	Rel-12					-	-	
CA_5A-17A	Rel-11					-	-	
CA_5A-25A	Rel-12					-	-	
CA_5A-29A	Rel-13							
CA_5A-30A	Rel-12					-	-	
CA_5A-40A	Rel-13					-	-	
CA_5A-40C	Rel-13					-	-	
CA_5A-46A	Rel-14			5		-	-	
CA_5A-66A	Rel-14					-	-	
CA_5A-66A-66A	Rel-14					-	-	
CA_5B-30A	Rel-14					-	-	
CA_5B-66A	Rel-14					-	-	
CA_5B-66A-66A	Rel-14					-	-	
CA_7A-8A	Rel-12					-	-	
CA_7A-12A	Rel-12					-	-	
CA_7A-20A	Rel-11					-	-	
CA_7A-22A	Rel-13					-	-	
CA_7A-28A	Rel-12					-	-	
CA_7A-66A	Rel-14					-	-	
CA_7B-28A	Rel-13					-	-	
CA_7C-28A	Rel-13							
CA_7A-42A-42A	Rel-13					-	-	
CA_8A-11A	Rel-12					-	-	
CA_8A-20A	Rel-11					-	-	
CA_8A-27A	Rel-15					-	-	
CA_8A-28A	Rel-14			8		-	-	
CA_8A-38A	Rel-15							
CA_8A-40A	Rel-12					-	-	
CA_8A-41A	Rel-13					-	-	
CA_8A-40C	Rel-15							
CA_8A-41C	Rel-13					-	-	
CA_8A-42A	Rel-13					-	-	
CA_8A-42C	Rel-13					-	-	
CA_8A-46A	Rel-14			8		-	-	
CA_11A-18A	Rel-11					-	-	
CA_11A-28A	Rel-14					-	-	
CA_11A-41A	Rel-14					-	-	
CA_11A-41C	Rel-14					-	-	
CA_11A-42A	Rel-14					-	-	
CA_11A-42C	Rel-14					-	-	
CA_11A-46A	Rel-14			11		-	-	
CA_12A-25A	Rel-12					-	-	
CA_12A-30A	Rel-12					-	-	
CA_12A-66A	Rel-14					-	-	
CA_12A-66A-66A	Rel-14					-	-	
CA_13A-46A	Rel-14			13		-	-	
CA_13A-66A	Rel-14							
CA_13A-66A-66A	Rel-14					-	-	
CA_14A-30A	Rel-15					-	-	
CA_14A-66A	Rel-15					-	-	
CA_14A-66A-66A	Rel-15					-	-	
CA_18A-28A	Rel-12					28	-	
CA_19A-21A	Rel-12					-	-	
CA_19A-28A	Rel-13					28	-	
CA_19A-42A	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_19A-42C	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_19A-46A	Rel-14					-	-	
CA_19A-46C	Rel-14					-	-	

CA_19A-46D	Rel-14					-	-	
CA_19A-46E	Rel-14					-	-	
CA_20A-28A	Rel-14					28	-	
CA_20A-32A	Rel-12			20		-	-	
CA_20A-40A	Rel-13					-	-	
CA_20A-42A-42A	Rel-13					-	-	
CA_21A-28A	Rel-14 (1UL, 2UL)					-	-	
CA_21A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_21A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_21A-46A	Rel-14					-	-	
CA_21A-46C	Rel-14					-	-	
CA_21A-46D	Rel-14					-	-	
CA_21A-46E	Rel-14					-	-	
CA_20A-67A	Rel-13			20		-	-	
CA_23A-29A	Rel-12			23		-	-	
CA_25A-41A	Rel-12					-	-	
CA_26A-41A	Rel-12					-	-	
CA_26A-41C	Rel-12					-	-	
CA_26A-46A	Rel-14			26		-	-	
CA_28A-38A	Rel-15							
CA_28A-40D	Rel-13							
CA_28A-41A	Rel-13					-	-	
CA_28A-41C	Rel-13					-	-	
CA_28A-42A	Rel-13					-	-	
CA_28A-42C	Rel-13					-	-	
CA_28A-46A	Rel-14			28		-	-	
CA_29A-30A	Rel-12			30		-	-	
CA_29A-66A	Rel-14			66		-	-	
CA_29A-66A-66A	Rel-14			66		-	-	
CA_29A-66C	Rel-14			66		-	-	
CA_29A-70A	Rel-14			70		-	-	
CA_29A-70C	Rel-15			70		-	-	
CA_30A-66A	Rel-14					-	-	
CA_30A-66A-66A	Rel-14					-	-	
CA_38A-40A-40A	Rel-13					-	-	
CA_38A-40C	Rel-13					-	-	
CA_38A-40C	Rel-15							
CA_39A-41A	Rel-12					-	-	
CA_39A-41C	Rel-12					-	-	
CA_39A-41D	Rel-13					-	-	
CA_39C-41C	Rel-13					-	-	
CA_39A-46A	Rel-14			39		-	-	
CA_40A-46A	Rel-14			40		-	-	
CA_41A-42A	Rel-12					-	-	
CA_41A-42C	Rel-13					-	-	
CA_41C-42A	Rel-13					-	-	
CA_41C-42C	Rel-13					-	-	
CA_41A-48A	Rel-15							
CA_41A-48C	Rel-15							
CA_41A-48D	Rel-15							
CA_41C-48A	Rel-15							
CA_41C-48C	Rel-15							
CA_41C-48D	Rel-15							
CA_41D-48A	Rel-15							
CA_41D-48C	Rel-15							
CA_46A-46A-66A	Rel-14			66		-	-	
CA_46A-66A	Rel-14			66		-	-	
CA_46A-66A-66A	Rel-14			66		-	-	
CA_46A-66C	Rel-14			66		-	-	

CA_46A-70A	Rel-14			70		-	-	
CA_46C-66A	Rel-14			66		-	-	
CA_66A-66A-70A	Rel-15					-	-	
CA_66A-66A-70C	Rel-15					-	-	
CA_66A-66A-71A	Rel-15					-	-	
CA_66A-70A	Rel-15					-	-	
CA_66A-70C	Rel-15					-	-	
CA_66C-70A	Rel-15					-	-	
CA_66C-70C	Rel-15					-	-	
CA_66C-71A	Rel-15					-	-	
CA_70A-71A	Rel-15					-	-	
CA_70C-71A	Rel-15					-	-	

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-2, e.g. 'CA_1A-3A' indicates interband CA operation on E-UTRA band 1 with DL CA Bandwidth Class A and on E-UTRA band 3 with DL CA Bandwidth Class A

Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-2. For this release of specification valid choices are 'N', 'XA-XA' and 'XC', where X is the band. For example, for full UL CA support in CA_18A-28A, UE shall indicate 18A-28A. For no UL CA 'N'.

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2.

Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6

Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in "Tested Band Selection Criteria" (Table 4.1-1b). FALLBACK(A.4.6.3-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table 4.1-2, with the following additional conditions:

1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
2. UL is supported in the band for the considered CA Configuration, according to Supported UL Bands Column
3. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration

Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in "Tested CA Configurations Criteria" (Table 4.1-1c). FALLBACK(A.4.6.3-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table 4.1-2, with the following additional conditions:

1. Fallback CA Configuration is not listed in "Fallback CA Configurations Exceptions"
2. UL is supported in each Fallback CA Configuration band that is not downlink-only, according to Supported UL Bands Column
3. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.

FALLBACK_UL(A.4.6.3-3) shall return FALLBACK(A.4.6.3-3) AND UL(A.4.6.3-3)

Note 7: UL(A.4.6.3-3) shall return all supported CA Configurations where at least one UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_2CC(A.4.6.3-3) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_3CC(A.4.6.3-3) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.

Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception

Note 9: List all the CA Combination bands where UL is supported

Note 10: The UE supplier shall indicate the frequency bands where 4 layer spatial multiplexing is supported in the supported CA Configurations.

Note 11: The release column indicates the release the CA configuration was introduced in TS 36.101 [2].

Table A.4.6.3-4: Supported CA configurations for Inter-band CA (three bands)

E-UTRA CA configuration / Item (Note 1)	Release (Note 11)	Supported	Supported CA Bandwidth Class(es) in UL (Note 2,7)	Supported UL Bands (Note 9)	Supported Bandwidth Combination Set(s) (Note 3)	Fallback Bands Exception (Note 5,8)	Fallback CA configurations Exceptions (Note 6,8)	Supported band(s) for 4 layer spatial multiplexing (Note 10)
CA_1A-3A-5A	Rel-12					-	-	
CA_1A-3A-7A	Rel-13					-	-	
CA_1A-3A-8A	Rel-12					-	-	
CA_1A-3A-11A	Rel-14					-	-	
CA_1A-3A-18A	Rel-15							
CA_1A-3A-19A	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_1A-3A-20A	Rel-12					-	-	
CA_1A-3A-21A	Rel-14 (1UL, 2UL)					-	-	
CA_1A-3A-26A	Rel-12					-	-	
CA_1A-3A-28A	Rel-13					-	-	
CA_1A-3A-40A	Rel-13					-	-	
CA_1A-3A-41A	Rel-14					-	-	
CA_1A-3A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-3A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-3C-8A	Rel-14					-	-	
CA_1A-5A-7A	Rel-12					-	-	
CA_1A-7A-8A	Rel-13					-	-	
CA_1A-7A-20A	Rel-12					-	-	
CA_1A-7A-28A	Rel-14							
CA_1A-8A-11A	Rel-13					-	-	
CA_1A-8A-28A	Rel-14			1, 8		28	1A-28A	
CA_1A-8A-38A	Rel-15							
CA_1A-8A-40A	Rel-13					-	-	
CA_1A-11A-18A	Rel-13							
CA_1A-11A-28A	Rel-14							
CA_1A-18A-28A	Rel-12					28	1A-28A	
CA_1A-19A-21A	Rel-12 (1UL) Rel-14 (2UL)					-	-	
CA_1A-19A-28A	Rel-13					28	1A-28A	
CA_1A-19A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-19A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-21A-28A	Rel-14					-	-	
CA_1A-21A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-21A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-28A-42A	Rel-14					-	-	
CA_1A-28A-42C	Rel-14					-	-	

CA_1A-41A-42A	Rel-14			1, 42		41	41A-42A	
CA_1A-41A-42C	Rel-14			1, 42		41	41A-42C	
CA_1A-41C-42A	Rel-14			1, 42		41	41C-42A	
CA_1A-41C-42C	Rel-14			1, 42		41	41C-42C	
CA_2A-2A-4A-5A	Rel-13					-	-	
CA_2A-2A-4A-71A	Rel-15							
CA_2A-2A-5A-12A	Rel-13					-	-	
CA_2A-2A-5A-30A	Rel-14					-	-	
CA_2A-2A-7A-66A	Rel-15					-	-	
CA_2A-2A-12A-30A	Rel-14					-	-	
CA_2A-2A-14A-30A	Rel-15					-	-	
CA_2A-2A-14A-66A	Rel-15					-	-	
CA_2A-2A-14A-66A-66A	Rel-15					-	-	
CA_2A-2A-29A-30A	Rel-14					-	-	
CA_2A-2A-66A-71A	Rel-15					-	-	
CA_2A-4A-4A-5A	Rel-13					-	-	
CA_2A-4A-5A	Rel-12					-	-	
CA_2A-4A-7A	Rel-13					-	-	
CA_2A-4A-7A-7A	Rel-14			2, 4				
CA_2A-4A-12A	Rel-12					-	-	
CA_2A-4A-13A	Rel-12					-	-	
CA_2A-4A-29A	Rel-12					-	-	
CA_2A-4A-71A	Rel-15					-	-	
CA_2A-5A-12A	Rel-12					-	-	
CA_2A-5A-12B	Rel-13					-	-	
CA_2A-5A-13A	Rel-12					-	-	
CA_2A-5A-29A	Rel-13							
CA_2A-5A-30A	Rel-12					-	-	
CA_2A-5A-66A	Rel-14					-	-	
CA_2A-5B-30A	Rel-14					-	-	
CA_2A-5B-66A	Rel-14					-	-	
CA_2A-5B-66A-66A	Rel-15					-	-	
CA_2A-7A-12A	Rel-13					-	-	
CA_2A-7A-66A	Rel-14					-	-	
CA_2A-12A-30A	Rel-12					-	-	
CA_2A-12A-66A	Rel-14					-	-	
CA_2A-12A-66A-66A	Rel-14					-	-	
CA_2A-13A-66A	Rel-14					-	-	
CA_2A-14A-30A	Rel-15					-	-	
CA_2A-14A-66A	Rel-15					-	-	
CA_2A-14A-66A-66A	Rel-15					-	-	
CA_2A-29A-30A	Rel-12					-	-	
CA_2A-29A-66A	Rel-14					-	-	
CA_2A-30A-66A	Rel-14					-	-	
CA_2A-30A-66A-66A	Rel-14					-	-	
CA_2A-66A-71A	Rel-15					-	-	
CA_2A-66A-66A-71A	Rel-15							
CA_2A-66C-71A	Rel-15							
CA_2C-5A-30A	Rel-13					-	-	
CA_2C-12A-30A	Rel-13					-	-	
CA_2C-29A-30A	Rel-13					-	-	
CA_3A-7A-8A	Rel-13					-	-	
CA_3A-7A-20A	Rel-13					-	-	
CA_3A-7A-28A	Rel-13					-	-	
CA_3A-7A-38A	Rel-13							
CA_3A-8A-11A	Rel-14					-	-	
CA_3A-8A-28A	Rel-14			3, 8		28	3A-28A	
CA_3A-8A-40A	Rel-13					-	-	
CA_3A-11A-28A	Rel-14					-	-	
CA_3A-19A-21A	Rel-14 (1UL, 2UL)					-	-	

CA_3A-19A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_3A-19A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_3A-20A-32A	Rel-14					-	-	
CA_3A-21A-28A	Rel-14					-	-	
CA_3A-21A-42A	Rel-14 (1UL, 2UL)					-	-	
CA_3A-21A-42C	Rel-14					-	-	
CA_3A-28A-38A	Rel-15							
CA_3A-28A-41A	Rel-14					-	-	
CA_3A-28A-42A	Rel-14					-	-	
CA_3A-28A-42C	Rel-14					-	-	
CA_3A-41A-42A	Rel-13					-	-	
CA_3A-41A-42C	Rel-14					-	-	
CA_3A-41C-42A	Rel-14					-	-	
CA_3A-41C-42C	Rel-14					-	-	
CA_3A-7C-28A	Rel-13					-	-	
CA_3C-7A-28A	Rel-13					-	-	
CA_3C-7C-28A	Rel-13					-	-	
CA_4A-5A-12A	Rel-12					-	-	
CA_4A-5A-13A	Rel-12					-	-	
CA_4A-5A-30A	Rel-12					-	-	
CA_4A-7A-12A	Rel-12					-	-	
CA_4A-12A-30A	Rel-12					-	-	
CA_4A-29A-30A	Rel-12					-	-	
CA_4A-4A-5A-30A	Rel-13					-	-	
CA_4A-4A-12A-30A	Rel-13					-	-	
CA_4A-4A-29A-30A	Rel-13					-	-	
CA_5A-30A-66A	Rel-14					-	-	
CA_5B-30A-66A	Rel-14					-	-	
CA_5B-30A-66A-66A	Rel-15					-	-	
CA_7A-8A-20A	Rel-12					-	-	
CA_8A-11A-28A	Rel-14			8, 11		28	11A-28A	
CA_8A-20A-28A	Rel-15							
CA_12A-30A-66A	Rel-14					-	-	
CA_14A-30A-66A	Rel-15					-	-	
CA_14A-30A-66A-66A	Rel-15					-	-	
CA_19A-21A-42A	Rel-13					-	-	
CA_19A-21A-42C	Rel-13					-	-	
CA_21A-28A-42A	Rel-14					-	-	
CA_21A-28A-42C	Rel-14					-	-	
CA_29A-46A-66A	Rel-14			66		-	29A-46A	
CA_29A-66A-66A-70A	Rel-15			66, 70		-	-	
CA_29A-66A-66A-70C	Rel-15			66, 70		-	-	
CA_29A-66A-70A	Rel-15			66, 70		-	-	
CA_29A-66A-70C	Rel-15			66, 70		-	-	
CA_29A-66C-70A	Rel-15			66, 70		-	-	
CA_29A-66C-70C	Rel-15			66, 70		-	-	
CA_66A-66A-70A-71A	Rel-15					-	-	
CA_66A-66A-70C-71A	Rel-15					-	-	
CA_66A-70A-71A	Rel-15					-	-	
CA_66A-70C-71A	Rel-15					-	-	
CA_66C-70A-71A	Rel-15					-	-	
CA_66C-70C-71A	Rel-15					-	-	

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-2a, e.g. 'CA_1A-3A-19A' indicates CA operation on E-UTRA bands 1, 3 and 19, each with CA Bandwidth class A.

Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-2a. The UE shall also indicate in which bands is UL supported. For this release of specification valid choices are 'N', 'XA-YA' etc, where X,Y,Z are the bands. For example, for UL support in B1+B3, and B3+B19, for CA_1A-3A-19A, UE shall indicate '1A-3A','3A-19A',

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2a.

Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6

Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in "Tested Band Selection Criteria" (Table 4.1-1b). FALLBACK(A.4.6.3-4) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table 4.1-2, with the following additional conditions:

1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
2. UL is supported in the band for the considered CA Configuration, according to Supported UL Bands Column
3. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration

Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in "Tested CA Configurations Criteria" (Table 4.1-1c). FALLBACK(A.4.6.3-4) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table 4.1-2, with the following additional conditions:

1. Fallback CA Configuration is not listed in "Fallback CA Configurations Exceptions"
2. UL is supported in each Fallback CA Configuration band that is not downlink-only, according to Supported UL Bands Column
3. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.

Note 7: UL(A.4.6.3-4) shall return all supported CA Configurations where at least one >1 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL"
UL_2CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_3CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.

Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception.

Note 9: List all the CA Combination bands where UL is supported.

Note 10: The UE supplier shall indicate the frequency bands where 4 layer spatial multiplexing is supported in the supported CA Configurations.

Note 11: The release column indicates the release the CA configuration was introduced in TS 36.101 [2].

Table A.4.6.3-5: Supported CA configurations for Inter-band CA (four bands)

E-UTRA CA configuration / Item (Note 1)	Release (Note 11)	Supported	Supported CA Bandwidth Class(es) in UL (Note 2,7)	Supported UL Bands (Note 9)	Supported Bandwidth Combination Set(s) (Note 3)	Fallback Bands Exception (Note 5,8)	Fallback CA configurations Exceptions (Note 6,8)	Supported band(s) for 4 layer spatial multiplexing (Note 10)
CA_1A-3A-7A-8A	Rel-13					-	-	
CA_1A-3A-7A-20A	Rel-14					-	-	-
CA_1A-3A-7A-32A	Rel-15							
CA_1A-3A-8A-40A	Rel-13					-	-	
CA_1A-3A-19A-21A	Rel-14					-	-	
CA_1A-3A-19A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-3A-19A-42C	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-3A-21A-28A	Rel-14					-	-	
CA_1A-3A-21A-42A	Rel-14					-	-	
CA_1A-3A-21A-42C	Rel-14					-	-	
CA_1A-3A-28A-42A	Rel-14					-	-	
CA_1A-3A-28A-42C	Rel-14					-	-	
CA_1A-19A-21A-42A	Rel-13 (1UL) Rel-14 (2UL)					-	-	
CA_1A-19A-21A-42C	Rel-13					-	-	
CA_1A-21A-28A-42A	Rel-14					-	-	
CA_1A-21A-28A-42C	Rel-14					-	-	
CA_2A-2A-14A-30A-66A	Rel-15					-	-	
CA_2A-4A-5A-12A	Rel-13					-	-	
CA_2A-4A-5A-29A	Rel-13					-	-	
CA_2A-4A-5A-30A	Rel-13					-	-	
CA_2A-4A-7A-12A	Rel-13					-	-	
CA_2A-4A-12A-30A	Rel-13					-	-	
CA_2A-4A-29A-30A	Rel-13					-	-	
CA_2A-5A-30A-66A	Rel-14					-	-	
CA_2A-5B-30A-66A	Rel-14					-	-	
CA_2A-12A-30A-66A	Rel-14					-	-	
CA_2A-12A-30A-66A-66A	Rel-15					-	-	
CA_2A-14A-30A-66A	Rel-15					-	-	
CA_2A-14A-30A-66A–66A	Rel-15					-	-	
CA_2A-29A-30A-66A	Rel-15					-	-	
CA_3A-7A-20A-32A	Rel-14					-	-	
CA_3A-19A-21A-42A	Rel-14					-	-	

Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-2b, e.g. 'CA_1A-3A-19A-42A' indicates CA operation on E-UTRA bands 1, 3, 19 and 42, each with CA Bandwidth class A.

Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-2b. The UE shall also indicate in which bands is UL supported. For this release of specification valid choices are 'N', 'XA-YA' etc, where X,Y,Z are the bands. For example, for UL support in B1+B3, and B3+B19, for CA_1A-3A-19A-42A, UE shall indicate '1A-3A','3A-19A',

Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2b.

Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6

Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in "Tested Band Selection Criteria" (Table 4.1-1b). FALLBACK(A.4.6.3-4) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table 4.1-2, with the following additional conditions:

1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
2. UL is supported in the band for the considered CA Configuration, according to Supported UL Bands Column
3. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration

Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in "Tested CA Configurations Criteria" (Table 4.1-1c). FALLBACK(A.4.6.3-4) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table 4.1-2, with the following additional conditions:

4. Fallback CA Configuration is not listed in "Fallback CA Configurations Exceptions"
5. UL is supported in each Fallback CA Configuration band that is not downlink-only, according to Supported UL Bands Column
6. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.

Note 7: UL(A.4.6.3-4) shall return all supported CA Configurations where at least one >1 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL"
UL_2CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column "Supported CA Bandwidth Class(es) in UL".
UL_3CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.

Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception.

Note 9: List all the CA Combination bands where UL is supported.

Note 10: The UE supplier shall indicate the frequency bands where 4 layer spatial multiplexing is supported in the supported CA Configurations.

Note 11: The release column indicates the release the CA configuration was introduced in TS 36.101 [2].

A.4.7 Category M1 UE Centre Frequency Implementation

Table A.4.7-1: Category M1 UE Centre Frequency Implementation

Band	UE implementation on Centre Frequency (Note1)	
	Centre of Channel bandwidth	Centre of narrowband
1		
2		
3		
4		
5		
7		
8		
11		
12		
13		
18		
19		
20		
21		
26		
27		
28		
31		
39		
41		
Note 1: UE vendor updates one of the two columns across all supported bands		

Annex B (informative): Change history

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2008-03					Skeleton proposed for RAN5#38 Malaga		0.0.1
2008-06					Updated after RAN5#39bis: - Editorial update and alignment with 36.523-2 - TC included in 36.521-1 and 36.521-3 included - Some Conditions for TC selections introduce	0.0.1	0.1.0
2008-08					Updated after RAN5#40: - Editorial update in regard to changing spec names, etc. - FDD and TDD split (R5-083839) - RRM TC numbers aligned with 36.521-3 v030	0.1.1	0.2.0
2008-10					Update after RAN5#40bis: - Table split in different clauses for Conformance and RRM test cases - Extension of applicability tables to include Additional information column - Change of applicability of TCs that apply to any E-UTRA device into "R" - recommended - Updated TCs in accordance to 36.521-1 v110 and 36.521-3 v040 - Some editorial updates	0.2.0	0.3.0
2008-11					Update After RAN5#41 (R5-055360): - Renamed 8.1.1, added new 8.1.2, - Added new TCs to RRM section Measurement Performance Requirements - Added Table A.4.3-2 with reference to test loop functions in 36.509 - Some editorial changes - Normative References updated - Change RRM TC titles to reflect their applicability to FDD only	0.3.0	2.0.0
2008-12	RAN#42	RP-080970			Approval of version 2.0.0 at RAN#42, then put to version 8.0.0.	2.0.0	8.0.0
2008-01					Editorial corrections.	8.0.0	8.0.1
2009-05	RAN#44	RP-090448	0001		CR to 36.521-2: Applicability changes and additions for RRM test cases	8.0.1	8.1.0
2009-05	RAN#44	RP-090448	0002		LTE-RF: Applicability for Output Power Dynamics test cases	8.0.1	8.1.0
2009-09	RAN#45	R5-094035	0003	-	Correction CR to 36.521-2: Applicability changes to introduce additional RRM tests	8.1.0	8.2.0
2009-09	RAN#45	R5-094572	0004	-	Applicability for Output Power Dynamics test cases	8.1.0	8.2.0
2009-09	RAN#45	R5-094710	0005	-	Resubmission-Correction CR to 36.521-2: Applicability changes to introduce additional RRM tests	8.1.0	8.2.0
2009-09	RAN#45	R5-094768	0006	-	Update of RRM Conformance test applicability for SON	8.1.0	8.2.0
2009-09	RAN#45	R5-094999	0007	-	Correction CR to 36.521-2: Applicability changes to RF PDSCH Demodulation tests	8.1.0	8.2.0
2009-12	RAN#46	R5-095519	0008		Correction CR to 36.521-2: Applicability changes to update the Demodulation of PDSCH (FDD) tests based on the CR merge results from RAN5#44	8.2.0	8.3.0
2009-12	RAN#46	R5-095778	0009		Update of RRM Conformance test applicability for RLM in DRX test cases	8.2.0	8.3.0
2009-12	RAN#46	R5-095841	0010	-	CR to 36.521-2: Applicability additions for new RRM (FDD) tests	8.2.0	8.3.0
2010-03	RAN#47	R5-100358	0011	-	CR to 36.521-2 Rel-8 Introduction of Applicability for E-UTRAN FDD - FDD Intra Frequency Cell Search with DRX when L3 filtering is used	8.3.0	8.4.0
2010-03	RAN#47	R5-100561	0012	-	CR to 36.521-2: Update baseline implementation capabilities with extended LTE1500 operating bands	8.3.0	8.4.0
2010-03	RAN#47	R5-100872	0013	-	CSI: Following up corrections to tests titles and RI clause structure	8.3.0	8.4.0
2010-03	RAN#47	-	-	-	Moved to v9.0.0 with no change	8.4.0	9.0.0
2010-06	RAN#48	R5-103147	0014	-	Adding band 20, 800MHZ in EU to TS36.521-2	9.0.0	9.1.0
2010-06	RAN#48	R5-103757	0015	-	Introduction of feature group indicator in applicability for RRM test cases	9.0.0	9.1.0
2010-09	RAN#49	R5-104246	0017	-	CR to 36.521-2 on Correction to cell search	9.1.0	9.2.0
2010-09	RAN#49	R5-104264	0018	-	Addition of applicability for new RRM test cases	9.1.0	9.2.0
2010-09	RAN#49	R5-104372	0019	-	Update of Applicability for Demodulation test cases and UE implementation Types for UTRA TDD	9.1.0	9.2.0
2010-09	RAN#49	R5-104840	0020	-	36521-2 General update to add-remove TCs applicability correct, TC titles and numbers and editorials	9.1.0	9.2.0
2010-09	RAN#49	R5-105056	0021	-	Applicability of a new Rel-9 downlink sustained data rate performance test cases	9.1.0	9.2.0
2010-12	RAN#50	R5-106118	0022	-	CR to 36.521-2: Update baseline implementation capabilities for EUTRA TDD LTE band 41	9.2.0	9.3.0
2011-03	RAN#51	R5-110536	0023	-	Defining new bands 42 and 43 (3500MHz)	9.3.0	9.4.0
2011-03	RAN#51	R5-110955	0024	-	CR to 36.521-2: General update to add, remove, and correct applicability of RRM TCs	9.3.0	9.4.0

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2011-06	RAN#52	R5-112131	0025	-	Correction to Band 12 frequency range in 36.521-2	9.4.0	9.5.0
2011-06	RAN#52	R5-112212	0026	-	Adding Band 24 to TS 36.521-2	9.4.0	9.5.0
2011-06	RAN#52	R5-112378	0027	-	Update of FGI bit definitions for rel-9	9.4.0	9.5.0
2011-06	RAN#52	R5-112821	0028	-	Add release applicability for spatial multiplexing test cases	9.4.0	9.5.0
2011-06	RAN#52	R5-112857	0029	-	Addition of applicability for new RRM test cases 4.3.4.3 and 8.4.3	9.4.0	9.5.0
2011-06	RAN#52	R5-112865	0030	-	Addition of applicability for new MBMS test cases 10.1 and 10.2	9.4.0	9.5.0
2011-09	RAN#53	R5-113306	0031	-	Adding band 25 to TS36.521-2	9.5.0	9.6.0
2011-09	RAN#53	R5-113625	0033	-	Introduction of applicability of Rel-9 Scenarios	9.5.0	9.6.0
2011-09	RAN#53	R5-113626	0034	-	Introduction of applicability of PDSCH performance tests for low UE categories	9.5.0	9.6.0
2011-09	RAN#53	R5-114025	0035	-	Test Cases 6.2.3 and 6.2.4 Applicability Clarification	9.5.0	9.6.0
2011-09	RAN#53	R5-114070	0036	-	Update baseline implementation capabilities for FDD LTE Band 23 in 36.521-2	9.5.0	9.6.0
2011-09	RAN#53	R5-114074	0037	-	Applicability for new R9 RRM test cases	9.5.0	9.6.0
2011-09	RAN#53	R5-114096	0038	-	Missing FGIs in RRM Test Case Applicabilities in 36.521-2	9.5.0	9.6.0
2011-12	RAN#54	R5-115128	0039	-	Correction the content of A.4.4-1_16 in 36.521-2	9.6.0	9.7.0
2011-12	RAN#54	R5-115134	0040	-	Correction to the test case condition of C12 in 3GPP TS 36.521-2	9.6.0	9.7.0
2011-12	RAN#54	R5-115186	0041	-	Adding band 22 (3500MHz FDD) to 36.521-2	9.6.0	9.7.0
2011-12	RAN#54	R5-115785	0042	-	Requirement change in UE spurious emissions for Band 7 and 38 co-existence (Rel-8 only)	9.6.0	9.7.0
2011-12	RAN#54	R5-115422	0043	-	Update of FGI bit table in 36.521-2	9.6.0	9.7.0
2011-12	RAN#54	R5-115813	0044	-	RF: Update of the applicability list	9.6.0	9.7.0
2011-12	RAN#54	-	-	-	Moved to Rel-10 with no change	9.7.0	10.0.0
2012-03	RAN#55	R5-120340	0046	-	Addition of FGI bit 16 into test cases 9.1.x.x and 9.2.x.x	10.0.0	10.1.0
2012-03	RAN#55	R5-120534	0047	-	Introduction to Applicability for RSRQ for E-UTRA Carrier Aggregation	10.0.0	10.1.0
2012-03	RAN#55	R5-120596	0048	-	Updates to applicability for newly introduced CA feature chapter8 test cases in 36.521-2	10.0.0	10.1.0
2012-03	RAN#55	R5-120811	0049	-	Correction to FGI bits in test case 8.5.2	10.0.0	10.1.0
2012-03	RAN#55	R5-120812	0050	-	Addition of FGI bit 15 into test cases configuring event 1B	10.0.0	10.1.0
2012-03	RAN#55	R5-120832	0051	-	Update of FGI bit table in TS36.521-2	10.0.0	10.1.0
2012-03	RAN#55	R5-120836	0052	-	Introduction to CA Applicability for Transmitter Characteristics tests MPR and ACLR	10.0.0	10.1.0
2012-03	RAN#55	R5-120838	0053	-	RF/RRM: Applicability for new added RRM test cases	10.0.0	10.1.0
2012-03	RAN#55	R5-120840	0054	-	Applicability for new UL MIMO test case	10.0.0	10.1.0
2012-06	RAN#56	R5-121185	0055	-	Updates to applicability for newly introduced CA feature TDD chapter 8 test cases in 36.521-2	10.1.0	10.2.0
2012-06	RAN#56	R5-121219	0056	-	Adding operating band 26 to TS 36.521-2	10.1.0	10.2.0
2012-06	RAN#56	R5-121904	0057	-	Addition of applicability for E-UTRAN Inter frequency case reselection in the existence of non-allowed CSG cell	10.1.0	10.2.0
2012-06	RAN#56	R5-121965	0058	-	Applicability for new UL MIMO test cases	10.1.0	10.2.0
2012-06	RAN#56	R5-121966	0059	-	Updates to applicability for Transmit timing tests in 36.521-2	10.1.0	10.2.0
2012-06	RAN#56	R5-121967	0060	-	Applicability for new R9 RRM test cases	10.1.0	10.2.0
2012-06	RAN#56	R5-121990	0061	-	Addition of applicability for CA TCs	10.1.0	10.2.0
2012-09	RAN#57	R5-123093	0062	-	Updates to applicability for Chapter9 absolute and relative RSRP measurement test cases for carrier aggregation.	10.2.0	10.3.0
2012-09	RAN#57	R5-123165	0063	-	Introduction of Applicability for E-UTRAN Event Triggered reporting on deactivated SCell with PCell interruption in non-DRX for CA	10.2.0	10.3.0
2012-09	RAN#57	R5-123169	0064	-	Correction to Applicability for RSRQ for E-UTRA Carrier Aggregation	10.2.0	10.3.0
2012-09	RAN#57	R5-123170	0065	-	Introduction of eDL MIMO to UE service capabilities	10.2.0	10.3.0
2012-09	RAN#57	R5-123533	0066	-	Update of References in 36.521-2 v980 (pointer)	10.2.0	10.3.0
2012-09	RAN#57	R5-123542	0067	-	TS 36.521-2:TDD CA test cases applicability correction	10.2.0	10.3.0
2012-09	RAN#57	R5-123788	0068	-	Clarification of the release of UTRAN-EUTRAN Inter-RAT RRM test cases in 36.521-2	10.2.0	10.3.0
2012-09	RAN#57	R5-123856	0069	-	Applicability for new RRM test cases	10.2.0	10.3.0
2012-09	RAN#57	R5-123858	0070	-	Introduction of Applicability for ACS for CA and UE config Tx output power for CA	10.2.0	10.3.0
2012-09	RAN#57	R5-123909	0071	-	TS 36.521-2:New UE categories addition	10.2.0	10.3.0
2012-09	RAN#57	R5-123942	0072	-	Applicability update for test cases in TS36.521-1 with single BW requirements not defined for all operating bands, rel-8	10.2.0	10.3.0
2012-09	RAN#57	R5-123993	0073	-	Update applicability of UL-MIMO related conformance test cases	10.2.0	10.3.0
2012-09	RAN#57	R5-123997	0074	-	TS 36.521-2:Applicability for new CQI test cases	10.2.0	10.3.0
2012-12	RAN#58	R5-125251	0075	-	Removing FGI bit 5 from section four RRM test cases	10.3.0	10.4.0
2012-12	RAN#58	R5-125390	0076	-	Adding bands 28 and 44 to TS36.521-2	10.3.0	10.4.0
2012-12	RAN#58	R5-125821	0077	-	Correction to Additional Information for RRM 4.3.4.3	10.3.0	10.4.0
2012-12	RAN#58	R5-125833	0078	-	Introduction of Band 27 to TS 36.521-2	10.3.0	10.4.0

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2012-12	RAN#58	R5-125836	0079	-	Update applicability of UL-MIMO related conformance test cases	10.3.0	10.4.0
2012-12	RAN#58	R5-125920	0080	-	Applicability removal of RRM TC8.12.1	10.3.0	10.4.0
2012-12	RAN#58	R5-126049	0081	-	Updates to the applicability of CA RF Tx tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124138	0082	-	Updates to the applicability of CA RF Performance tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124168	0083	-	Updates to the applicability of CA RF Rx tests	10.3.0	10.4.0
2012-12	RAN#58	R5-124169	0084	-	Applicability for new RRM CA related TCs	10.3.0	10.4.0
2013-03	RAN#59	R5-130177	0085	-	Introduction of new rel-10 Reporting of RI test cases into applicability specification	10.4.0	10.5.0
2013-03	RAN#59	R5-130297	0086	-	Introduction of eDL-MIMO applicability	10.4.0	10.5.0
2013-03	RAN#59	R5-130306	0087	-	Updates to applicability for newly introduced eICIC feature chapter9 RRM test cases	10.4.0	10.5.0
2013-03	RAN#59	R5-130445	0090	-	Correction to CA physical layer implementation capabilities	10.4.0	10.5.0
2013-03	RAN#59	R5-130464	0091	-	Correction of FGI bit 8 in 36.521-2	10.4.0	10.5.0
2013-03	RAN#59	R5-130802	0092	-	Addition of applicability for RRM TCs 9.1.7.1 and 9.1.7.2	10.4.0	10.5.0
2013-03	RAN#59	R5-130807	0093	-	Applicability correction to Spurious emission band UE co-existence(36.521-2)	10.4.0	10.5.0
2013-03	RAN#59	R5-130997	0098	-	Addition of applicability statement for 6 new eICIC test cases	10.4.0	10.5.0
2013-03	RAN#59	R5-130375	0088	-	Updates to CA physical layer baseline implementation capabilities for CA band 7	10.5.0	11.0.0
2013-03	RAN#59	R5-130379	0089	-	Updates to CA physical layer baseline implementation capabilities for CA band 41	10.5.0	11.0.0
2013-03	RAN#59	R5-130927	0094	-	Updates on the supported CA configurations for CA_38, CA_3-7 and CA_7-20	10.5.0	11.0.0
2013-03	RAN#59	R5-130928	0095	-	Addition of CA physical layer implementation capabilities for CA_4-5 and CA_4-13	10.5.0	11.0.0
2013-03	RAN#59	R5-130929	0096	-	Updates of Inter-Band CA combinations CA_3-20 and CA_2-29	10.5.0	11.0.0
2013-03	RAN#59	R5-130930	0097	-	CA_2-17 and CA_4-17 addition to supported capabilities in 36.521-2	10.5.0	11.0.0
2013-06	RAN#60	R5-131155	0100	-	Introduction of new rel-11 Reporting of RI test cases into applicability specification	11.0.0	11.1.0
2013-06	RAN#60	R5-131159	0101	-	Introduction of Maximum Input Level test case for CA (inter-band DL CA without UL CA) into applicability specification	11.0.0	11.1.0
2013-06	RAN#60	R5-131212	0102	-	Correction of applicability conditions for TC 8.2.1.1.1_1: TC 8.2.1.2.1_1 and TC 8.3.2.1.1_1 in 36.521-2	11.0.0	11.1.0
2013-06	RAN#60	R5-131444	0103	-	Addition of applicability for Configured UE transmitted Output Power for inter-band CA	11.0.0	11.1.0
2013-06	RAN#60	R5-131525	0104	-	Corrections of eDL-MIMO applicability to align with reporting of CSI	11.0.0	11.1.0
2013-06	RAN#60	R5-131712	0105	-	Corrections to Table 4.1-1a "Applicability of RF conformance test cases Conditions" and Table 4.2-1a: Applicability of RRM conformance test cases Conditions	11.0.0	11.1.0
2013-06	RAN#60	R5-131912	0106	-	36.521-2: Inter-band CA configurations update	11.0.0	11.1.0
2013-06	RAN#60	R5-131914	0107	-	Addition of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1, 9.4.1.2.1, 9.4.2.2.1 and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2, 9.4.1.2.2 and 9.4.2.2.2	11.0.0	11.1.0
2013-06	RAN#60	R5-131927	0108	-	Updates to applicability for newly introduced eICIC feature chapter9 RRM test cases in 36.521-2	11.0.0	11.1.0
2013-06	RAN#60	R5-132013	0109	-	36.521-2 specification clean up	11.0.0	11.1.0
2013-06	RAN#60	R5-132015	0110	-	Update of FGI tables in TS 36.521-2	11.0.0	11.1.0
2013-06	RAN#60	R5-132111	0111	-	Removal of Spurious emission UE co-existence test case 6.6.3.2_1 from 36.521-2	11.0.0	11.1.0
2013-09	RAN#61	R5-133125	0112	-	editorial correction for RRM test case Condition C46	11.1.0	11.2.0
2013-09	RAN#61	R5-133143	0113	-	Addition of applicability for test cases 7.3.13 and 7.3.15	11.1.0	11.2.0
2013-09	RAN#61	R5-133251	0114	-	Addition of Band 31 to 36.521-2	11.1.0	11.2.0
2013-09	RAN#61	R5-133315	0115	-	Applicability for new CA TCs for 20MHz	11.1.0	11.2.0
2013-09	RAN#61	R5-133347	0116	-	eICIC RRM: Applicability for some new added eICIC test cases	11.1.0	11.2.0
2013-09	RAN#61	R5-133350	0117	-	CA RF: Applicability for some new added CA test cases	11.1.0	11.2.0
2013-09	RAN#61	R5-133403	0118	-	CA RRM: Corrections to applicability of CA RRM TC-s	11.1.0	11.2.0
2013-09	RAN#61	R5-133816	0119	-	Update applicability of test cases required to support PUSCH 2-2	11.1.0	11.2.0
2013-09	RAN#61	R5-133825	0120	-	eICIC RF: Applicability for some new added eICIC test cases	11.1.0	11.2.0
2013-09	RAN#61	R5-133827	0121	-	Correction to applicability of TC 8.3.2.1.2, 8.3.2.1.3 and 8.3.2.2.1	11.1.0	11.2.0
2013-09	RAN#61	R5-133839	0122	-	Correction of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1 & 9.4.1.2.1and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2 & 9.4.1.2.2	11.1.0	11.2.0
2013-09	RAN#61	R5-133840	0123	-	Addition of applicabilities for inter-freq/RAT without measurement gaps TCs	11.1.0	11.2.0
2013-09	RAN#61	R5-133841	0124	-	Correction to the reference information of chapter 2.	11.1.0	11.2.0
2013-09	RAN#61	R5-133849	0125	-	RRM: Update of applicability of some test cases	11.1.0	11.2.0

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2013-09	RAN#61	R5-133868	0126	-	Addition of UE capability information Bandwidth Combination Set for Carrier Aggregation in ICS proforma tables	11.1.0	11.2.0
2013-09	RAN#61	R5-133872	0127	-	Update RF performance test applicability table for LTE B14 public safety high power UE	11.1.0	11.2.0
2013-09	RAN#61	R5-133875	0128	-	Addition of applicability for new TCs 8.3.1.1.3 and 8.3.2.1.4	11.1.0	11.2.0
2013-09	RAN#61	R5-133891	0129	-	Applicability addition for CA test cases	11.1.0	11.2.0
2013-09	RAN#61	R5-133897	0130	-	Addition of the applicability of TC7.3.14 & TC7.3.16	11.1.0	11.2.0
2013-12	RAN#62	R5-134129	0131	-	RRM: Corrections of applicability of some test cases	11.2.0	11.3.0
2013-12	RAN#62	R5-134164	0132	-	Introduction of UE TM3 Demodulation Performance under High Speed Applicability	11.2.0	11.3.0
2013-12	RAN#62	R5-134281	0134	-	Addition of applicability for Sustained data rate test(FDD) for category 6 and 7 UEs	11.2.0	11.3.0
2013-12	RAN#62	R5-134285	0135	-	Removal of 6.2.5A.2 from applicability table	11.2.0	11.3.0
2013-12	RAN#62	R5-134293	0136	-	Correction to applicabilities for inter-freq/RAT without measurement gaps TCs	11.2.0	11.3.0
2013-12	RAN#62	R5-134315	0137	-	Removal of comma separated conditions	11.2.0	11.3.0
2013-12	RAN#62	R5-134883	0138	-	Addition of applicability for new TCs 7.4A.4 and 7.5A.4	11.2.0	11.3.0
2013-12	RAN#62	R5-134893	0142	-	Addition of applicabilities of LTE Type A performance requirements	11.2.0	11.3.0
2013-12	RAN#62	R5-134895	0139	-	Removal of redundant not applicable to any device tests from applicability table	11.2.0	11.3.0
2013-12	RAN#62	R5-134279	0133	-	Addition of Rel-12 CA band combinations(CA_3-19 and CA_19-21) to Table A.4.6.3-3	11.3.0	12.0.0
2013-12	RAN#62	R5-135011	0141	-	Updates of Table A.4.6.3-3 for CA 1A-26A	11.3.0	12.0.0
2013-12	RAN#62	R5-135032	0140	-	Applicability for new RRM test cases for 5MHz bandwidth	11.3.0	12.0.0
2014-03	RAN#63	R5-140390	0143	-	LTE Type A performance requirements - Adding a new test case 9.3.5.1.2	12.0.0	12.1.0
2014-03	RAN#63	R5-140426	0144	-	Updates to Intra-band non-contiguous CA applicability	12.0.0	12.1.0
2014-03	RAN#63	R5-140526	0145	-	Addition of applicability for TC 8.2.2.2.4 and TC 8.2.2.4.3	12.0.0	12.1.0
2014-03	RAN#63	R5-140808	0146	-	Correction the applicability for test case 8.2.1.3.2.	12.0.0	12.1.0
2014-03	RAN#63	R5-140809	0147	-	Update applicability table for LTE B14 public safety high power UE test cases	12.0.0	12.1.0
2014-03	RAN#63	R5-140817	0148	-	Applicability for new DL CoMP test cases	12.0.0	12.1.0
2014-03	RAN#63	R5-140870	0150	-	Corrections the applicability of test cases 8.16.3 and 8.16.4	12.0.0	12.1.0
2014-03	RAN#63	R5-140871	0151	-	Correcting applicability in 8.2.2.1.1_1 and 8.2.2.2.1_1 for UE categories 1 and/or 2	12.0.0	12.1.0
2014-03	RAN#63	R5-140897	0152	-	Addition of Applicability for EPDCCH New Test Cases	12.0.0	12.1.0
2014-03	RAN#63	R5-140923	0153	-	Introduction of UE CA Inter-band uplink capabilities	12.0.0	12.1.0
2014-03	RAN#63	R5-141020	0154	-	Addition of test applicability of WB-RSRQ measurement	12.0.0	12.1.0
2014-03	RAN#63	R5-141035	0155	-	Applicability for new CA RRM TCs 7.1.3+7.1.4	12.0.0	12.1.0
2014-06	RAN#64	R5-142113	0157	-	Addition of CA 3A-28A to 36.521-2	12.1.0	12.2.0
2014-06	RAN#64	R5-142337	0158	-	Applicability update for CA band Combo CA_2A-13A	12.1.0	12.2.0
2014-06	RAN#64	R5-142345	0159	-	Addition of CA band combination CA_39A-41A to Table A.4.6.3-3 in TS 36.521-2	12.1.0	12.2.0
2014-06	RAN#64	R5-142347	0160	-	Updates of Table A.4.6.3-3 for CA_3A-26A and CA_3A-27A	12.1.0	12.2.0
2014-06	RAN#64	R5-142583	0161	-	Update of FGI definitions in TS 36.521-2	12.1.0	12.2.0
2014-06	RAN#64	R5-142674	0162	-	Definition correction to UL and DL category tables	12.1.0	12.2.0
2014-06	RAN#64	R5-142772	0163	-	Addition of CA_2A-4A and CA_5A-7A to 36.521-2 Annex A4	12.1.0	12.2.0
2014-06	RAN#64	R5-142782	0164	-	Introduction of TC 7.6.xA.4 and 7.7A.4 applicabilities	12.1.0	12.2.0
2014-06	RAN#64	R5-142799	0165	-	Addition of applicability for TC 6.6.3B.2	12.1.0	12.2.0
2014-06	RAN#64	R5-143000	0166	-	Conditions C19, C20, C21	12.1.0	12.2.0
2014-06	RAN#64	R5-143016	0167	-	Addition of RF test cases applicability for eICIC	12.1.0	12.2.0
2014-06	RAN#64	R5-143017	0168	-	Addition of RRM test cases applicability for eICIC	12.1.0	12.2.0
2014-06	RAN#64	R5-143028	0169	-	LTE Type A performance requirements - Adding test case 8.2.1.4.3	12.1.0	12.2.0
2014-06	RAN#64	R5-143030	0170	-	Condition C43	12.1.0	12.2.0
2014-06	RAN#64	R5-143053	0171	-	Correction to the applicability of the test case 7.6.2A.3 and 7.7A.3.	12.1.0	12.2.0
2014-06	RAN#64	R5-143054	0172	-	Correction of the condition of test case 8.7.1.1	12.1.0	12.2.0
2014-06	RAN#64	R5-143055	0173	-	Correction of the condition of the test cases 8.2.1.1.1_A.2, 8.2.1.3.1_A.1, 8.2.1.3.1_A.2 and 8.2.1.4.2_A.2	12.1.0	12.2.0
2014-06	RAN#64	R5-143056	0174	-	Correction of the condition for the test cases 8.2.1.1.1_A.1, 8.2.1.4.2_A.1 and 8.2.2.1.1_A.1	12.1.0	12.2.0
2014-06	RAN#64	R5-143060	0175	-	Introduction of feICIC applicability statement for CSI test cases	12.1.0	12.2.0
2014-06	RAN#64	R5-143061	0176	-	Introduction of feICIC applicability statement for RRM test cases	12.1.0	12.2.0
2014-06	RAN#64	R5-143078	0177	-	Applicability for new CoMP TDD TCs	12.1.0	12.2.0
2014-06	RAN#64	R5-143083	0178	-	Addition of applicability for newly added RRM test cases	12.1.0	12.2.0
2014-06	RAN#64	R5-143084	0179	-	Addition of CA_27B related information into A.4.6 in TS 36.521-2	12.1.0	12.2.0
2014-06	RAN#64	R5-143119	0180	-	Update of applicability for EPDCCH test cases	12.1.0	12.2.0
2014-06	RAN#64	R5-143145	0181	-	Condition on no UL CA in C20 and C21	12.1.0	12.2.0

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2014-06	RAN#64	R5-143215	0182	-	Addition of applicability for new TM3, soft buffer management and SDR test cases	12.1.0	12.2.0
2014-09	RAN#65	R5-144109	0183	-	Introduction of feICIC applicability statement for Performance test cases (resubmission of R5-143075 not implemented)	12.2.0	12.3.0
2014-09	RAN#65	R5-144121	0184	-	Corrections to feICIC applicability statement for CSI test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144200	0185	-	Applicability for newly added 5MHz+5 MHz and 10MHz+5MHz BW RRM test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144245	0186	-	Corrections to applicability conditions for RRM test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144329	0187	-	Update of FGI definitions in TS 36.521-2	12.2.0	12.3.0
2014-09	RAN#65	R5-144449	0188	-	Applicability update for CA band Combo CA_7A-28A	12.2.0	12.3.0
2014-09	RAN#65	R5-144484	0189	-	Update Tx intra-band contiguous DL CA without UL CA TCs applicability to include BW Class B	12.2.0	12.3.0
2014-09	RAN#65	R5-144504	0190	-	New CA band combination CA_NC_42 and CA_4-27-Update to 36.521-2	12.2.0	12.3.0
2014-09	RAN#65	R5-144512	0191	-	Addition of applicability for CA band combo CA_2A-5A	12.2.0	12.3.0
2014-09	RAN#65	R5-144800	0192	-	Correction to RF Baseline capabilities with Band 29	12.2.0	12.3.0
2014-09	RAN#65	R5-144837	0193	-	Update test applicability for intra band non-contiguous CA test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144848	0194	-	Update test applicability for inter band and intra band contiguous CA test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144849	0195	-	Addition of CA_2A-2A to 36.521-2 Annex A4	12.2.0	12.3.0
2014-09	RAN#65	R5-144864	0202	-	Addition of operating band 30 to TS36.521-2	12.2.0	12.3.0
2014-09	RAN#65	R5-144871	0196	-	Correction to Merge UE category tables	12.2.0	12.3.0
2014-09	RAN#65	R5-144877	0197	-	CA: Review of CA capabilities tables	12.2.0	12.3.0
2014-09	RAN#65	R5-144878	0198	-	Addition of applicability for newly added performance test cases	12.2.0	12.3.0
2014-09	RAN#65	R5-144911	0199	-	Update applicabilities for serving cell RSRP and RSRQ absolute accuracy TCs	12.2.0	12.3.0
2014-09	RAN#65	R5-144919	0200	-	Update the applicability conditions for TCs 8.8.2.1 and 8.8.2.2	12.2.0	12.3.0
2014-09	RAN#65	R5-144921	0201	-	Addition of applicability for SDR test case 8.7.1.1_A.3	12.2.0	12.3.0
2014-12	RAN#66	R5-145017	0202	-	Correction to 6.7A title number	12.3.0	12.4.0
2014-12	RAN#66	R5-145180	0203	-	New CA band combination CA_1A-3A - Updates of Table A.4.6.3-3	12.3.0	12.4.0
2014-12	RAN#66	R5-145226	0204	-	Introduction of CA_42C into TS36.521-2	12.3.0	12.4.0
2014-12	RAN#66	R5-145244	0205	-	New CA band combination CA_41-42 update to 36.521-2 section A.4.6.3	12.3.0	12.4.0
2014-12	RAN#66	R5-145262	0206	-	Applicability table update for RRM CA test cases in clause 8 and 9 to avoid redundant testing	12.3.0	12.4.0
2014-12	RAN#66	R5-145359	0207	-	Addition of applicability for TCs of activation and deactivation of known SCell	12.3.0	12.4.0
2014-12	RAN#66	R5-145361	0208	-	Removing SDR test applicability for Rel-11 and 12 inter-band CA	12.3.0	12.4.0
2014-12	RAN#66	R5-145396	0209	-	New CA band combination CA_18A-28A - Updates of Table A.4.6.3-3	12.3.0	12.4.0
2014-12	RAN#66	R5-145440	0210	-	New CA band combination 1+11 and 8+11 û Introduction of 1+11 and 8+11 to 36.521-2	12.3.0	12.4.0
2014-12	RAN#66	R5-145478	0211	-	Correction to feICIC applicability statement for PHICH test cases	12.3.0	12.4.0
2014-12	RAN#66	R5-145529	0212	-	Updates to applicability of CA demodulation tests for release independence	12.3.0	12.4.0
2014-12	RAN#66	R5-145821	0213	-	Update of applicability statements for mandatory Rel-11 capabilities, CoMP, and more	12.3.0	12.4.0
2014-12	RAN#66	R5-145822	0214	-	Update of FGI definitions in TS 36.521-2	12.3.0	12.4.0
2014-12	RAN#66	R5-145823	0215	-	Updates the applicable release for soft buffer management and TDD SDR CA tests in part 2	12.3.0	12.4.0
2014-12	RAN#66	R5-145842	0216	-	Corrections to applicabilities for COMP	12.3.0	12.4.0
2014-12	RAN#66	R5-145869	0217	-	Applicability for FDD TC 8.2.1.1.1_A.3 and TDD TC 8.2.2.1.1_A.3+TC 8.2.2.4.2_A.3 for CA	12.3.0	12.4.0
2014-12	RAN#66	R5-145873	0218	-	Update to TM9 test case applicability	12.3.0	12.4.0
2014-12	RAN#66	R5-145905	0219	-	Applicability for newly added RRM TCs for testing of SCell in sTAG	12.3.0	12.4.0
2014-12	RAN#66	R5-145981	0220	-	Update to Additional information section to handle IMSVoIP not supported in 36.521-2	12.3.0	12.4.0
2015-03	RAN#67	R5-150298	0221	-	Introduction of CA_1A-7A to TS 36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150304	0222	-	Corrections to title of RRM test case 8.7.1 in applicability table	12.4.0	12.5.0
2015-03	RAN#67	R5-150365	0223	-	CA: Corrections to CA capability tables	12.4.0	12.5.0
2015-03	RAN#67	R5-150374	0224	-	Introduction of RF applicability for CA band combinations 5+25 and 12+25	12.4.0	12.5.0

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2015-03	RAN#67	R5-150444	0225	-	New CA band combination CA_1A-28A - Updates of Table A.4.6.3-3	12.4.0	12.5.0
2015-03	RAN#67	R5-150524	0226	-	Addition of CA_1A-20A to TS 36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150546	0227	-	Addition of 2A-12A and 5A-13A 2DL Interband CA to 36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150558	0228	-	Applicability conditions added to TCs 9.1.12.x and 9.2.11.x	12.4.0	12.5.0
2015-03	RAN#67	R5-150564	0229	-	Addition of CA_2A-2A-13A to TS 36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150805	0230	-	Update of FGI definitions in TS 36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150830	0231	-	Addition of CA_2-30 to Annex A.4.6 of TS 36.521-2.	12.4.0	12.5.0
2015-03	RAN#67	R5-150831	0232	-	Addition of CA_4-30 to Annex A.4.6 of TS 36.521-2.	12.4.0	12.5.0
2015-03	RAN#67	R5-150832	0233	-	Addition of CA_5-30 to Annex A.4.6 of TS 36.521-2.	12.4.0	12.5.0
2015-03	RAN#67	R5-150858	0234	-	Update of applicability statements for CoMP - TCs being split	12.4.0	12.5.0
2015-03	RAN#67	R5-150872	0235	-	Addition of applicability for 3DL CA test cases	12.4.0	12.5.0
2015-03	RAN#67	R5-150876	0236	-	Addition of applicability for CA_39C in TS36.521-2	12.4.0	12.5.0
2015-03	RAN#67	R5-150882	0238	-	Addition of applicability for newly added 20MHz+10MHz RRM test cases	12.4.0	12.5.0
2015-03	RAN#67	R5-150883	0239	-	Addition of applicability for newly added RSRP accuracy RRM test cases	12.4.0	12.5.0
2015-03	RAN#67	R5-150904	0240	-	Addition of a new table for Supported CA configurations for Inter-band CA (three bands)	12.4.0	12.5.0
2015-03	RAN#67	R5-150914	0241	-	Addition of applicability for Multi-Cluster PUSCH with One Uplink Carrier test cases	12.4.0	12.5.0
2015-03	RAN#67	R5-150923	0242	-	CA demod test case variants merge in 36.521-2	12.4.0	12.5.0
2015-06	RAN#68	R5-151156	0245	-	Correction of applicability conditions for RRM test case 5.3.5 and 5.3.6	12.5.0	12.6.0
2015-06	RAN#68	R5-151164	0246	-	CA RF: Correction to condition description	12.5.0	12.6.0
2015-06	RAN#68	R5-151461	0261	-	Updates to 36.521-2 regarding merging of TDD CA test cases	12.5.0	12.6.0
2015-06	RAN#68	R5-151463	0262	-	Addition of applicability of TD-LTE to UTRA TDD periodic measurements	12.5.0	12.6.0
2015-06	RAN#68	R5-151509	0263	-	Introduction of applicability for test cases 9.6.1.1-A.2 and 9.6.1.2-A.2: FDD/TDD CQI Reporting under AWGN conditions – PUCCH 1-0 (3DL CA)	12.5.0	12.6.0
2015-06	RAN#68	R5-151826	0250	2	Addition and correction of applicability for TDD sustained data rate performance	12.5.0	12.6.0
2015-06	RAN#68	R5-151827	0254	1	Update applicabilities of merged TDD CA cases	12.5.0	12.6.0
2015-06	RAN#68	R5-151828	0258	2	Correction of applicability for TDD sustained data rate performance	12.5.0	12.6.0
2015-06	RAN#68	R5-151829	0268	1	Correction to PICS items referenced in C32b and C33b applicability conditions.	12.5.0	12.6.0
2015-06	RAN#68	R5-151892	0248	1	Addition of frequency E-UTRA band 32	12.5.0	12.6.0
2015-06	RAN#68	R5-151949	0259	1	Applicability update of FDD-TDD RSRP accuracy test cases for FDD-TDD CA.	12.5.0	12.6.0
2015-06	RAN#68	R5-152009	0253	1	Addition of applicability for newly added 20MHz+20MHz and 20MHz+10MHz CA RRM test cases	12.5.0	12.6.0
2015-06	RAN#68	R5-152016	0264	1	Introduction to applicability for 2UL CA RF test cases (Tx and Rx)	12.5.0	12.6.0
2015-06	RAN#68	R5-152019	0260	1	Addition of UE category 0 ICS and test cases	12.5.0	12.6.0
2015-06	RAN#68	R5-152023	0251	1	Update of CA Physical Layer Baseline Implementation Capabilities for Rel-12 CA 2UL configurations	12.5.0	12.6.0
2015-06	RAN#68	R5-152029	0243	1	Introduction of Band Selection Concept and new 3DL CA Combinations to 36.521-2	12.5.0	12.6.0
2015-06	RAN#68	R5-152036	0255	1	Addition of applicability for newly introduced RSRP accuracy RRM test cases	12.5.0	12.6.0
2015-06	RAN#68	R5-152037	0256	1	Addition of applicability for newly added FDD CA RSRP accuracy RRM test cases	12.5.0	12.6.0
2015-06	RAN#68	R5-152129	0270	-	CoMP TCs applicability update	12.5.0	12.6.0
2015-09	RAN#69	R5-153062	0271	-	Introduction of LTE eDL_MIMO applicability for TCs	12.6.0	12.7.0
2015-09	RAN#69	R5-153162	0273	-	Test applicability for TC 9.7.1.2	12.6.0	12.7.0
2015-09	RAN#69	R5-153236	0278	-	Addition of additional capabilities for Enhanced performance requirements type C for LTE	12.6.0	12.7.0
2015-09	RAN#69	R5-154023	0279	1	RF: Applicability of CSI requirements to UE Category 1 (for 36.521-2)	12.6.0	12.7.0
2015-09	RAN#69	R5-153388	0286	-	Correction to applicability of feICIC test cases.	12.6.0	12.7.0
2015-09	RAN#69	R5-153416	0287	-	Correction to information of feature group indicators	12.6.0	12.7.0
2015-09	RAN#69	R5-153477	0290	-	521-2 change applicability for Rel-10 CA RSRP relative accuracy tests	12.6.0	12.7.0
2015-09	RAN#69	R5-153479	0292	-	521-2 change applicability for Rel-11 CA RSRP relative accuracy tests	12.6.0	12.7.0
2015-09	RAN#69	R5-153480	0293	-	Introduction of 2DL CA test skipping if 3DL CA is tested in 36.521-1 Chapter 7	12.6.0	12.7.0
2015-09	RAN#69	R5-153481	0294	-	521-2 Addition of test applicabilities for Rel-12 CA RSRP relative accuracy tests	12.6.0	12.7.0

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2015-09	RAN#69	R5-153503	0296	-	Correction to applicability content in Table 4.1-1, 4.1-1a. for 36.521-1	12.6.0	12.7.0
2015-09	RAN#69	R5-153528	0299	-	Update of FGI definitions in TS 36.521-2	12.6.0	12.7.0
2015-09	RAN#69	R5-153580	0300	-	Correction of applicability condition TC 9.6.1.1_A.1 non-contiguous part	12.6.0	12.7.0
2015-09	RAN#69	R5-153614	0302	-	Applicability for Receiver Spurious emissions test case for Carrier aggregation in DL-only bands	12.6.0	12.7.0
2015-09	RAN#69	R5-153689	0306	-	Applicability for new RRM TCs 7.1.3_1+7.1.4_1	12.6.0	12.7.0
2015-09	RAN#69	R5-153813	0283	1	Correction of L2G PSHO applicability for TS 36.521-2 spec	12.6.0	12.7.0
2015-09	RAN#69	R5-153828	0280	1	Addition of applicabilities for 3DL CA test cases	12.6.0	12.7.0
2015-09	RAN#69	R5-153846	0298	1	Addition of applicability of SU-MIMO conformance tests	12.6.0	12.7.0
2015-09	RAN#69	R5-153860	0282	1	Addition of test applicabilities of some test cases for 2UL CA	12.6.0	12.7.0
2015-09	RAN#69	R5-153861	0291	1	Proposal for missing Selection Criteria in table 4.1	12.6.0	12.7.0
2015-09	RAN#69	R5-153896	0281	1	Addition of applicabilities for 3DL CA RRM test cases	12.6.0	12.7.0
2015-09	RAN#69	R5-153897	0289	1	Implementation of 36.521-1 Chapter 8.1 and 9.1 test selection rules in Table 4.1-1 testcases	12.6.0	12.7.0
2015-09	RAN#69	R5-153910	0276	1	Corrections to MTC test applicabilities	12.6.0	12.7.0
2015-09	RAN#69	R5-153911	0297	1	Correction of MTC UE test case applicability	12.6.0	12.7.0
2015-09	RAN#69	R5-153929	0272	1	Addition of applicability for newly introduced 20MHz+20MHz and 20MHz+10MHz cases (Rel-12)	12.6.0	12.7.0
2015-09	RAN#69	R5-153932	0274	1	Addition of applicability for newly introduced TC8.16.18A (Rel-10)	12.6.0	12.7.0
2015-09	RAN#69	R5-153933	0275	1	Addition of applicability for newly introduced TC7.1.4A (Rel-11)	12.6.0	12.7.0
2015-09	RAN#69	R5-153935	0277	1	Correction to applicability of EUTRA TDD to UTRA TDD connected mode measurements	12.6.0	12.7.0
2015-09	RAN#69	R5-153946	0301	1	Adding applicability for TC 8.2.1.7_A.1	12.6.0	12.7.0
2015-09	RAN#69	R5-153948	0305	1	Applicability corrections for test case 8.2.1.4.2_A.1	12.6.0	12.7.0
2015-09	RAN#69	R5-154013	0295	1	Addition of UE category 0 test cases	12.6.0	12.7.0
2015-09	RAN#69	-	-	-	update of the "non-specific references" in section 2 according to the approved R5-153582 and an action point on ETSI MCC	12.6.0	12.7.0
2015-12	RAN#70	R5-155275	0314	-	Introduction of applicabilities of 2 test cases for 2UL CA Tx test cases	12.7.0	12.8.0
2015-12	RAN#70	R5-155301	0316	-	Introduction of test applicability for TC 6.6.2.2A.1	12.7.0	12.8.0
2015-12	RAN#70	R5-155318	0319	-	Update of UE categories for R8 in 36.521-2	12.7.0	12.8.0
2015-12	RAN#70	R5-155319	0320	-	Update of UE categories for R10 in 36.521-2	12.7.0	12.8.0
2015-12	RAN#70	R5-155323	0322	-	Update of UE categories for R11 in 36.521-2	12.7.0	12.8.0
2015-12	RAN#70	R5-155544	0326	-	Correction to conditions C32 and C35 in Table 4.1-1 and Table 4.1-1a	12.7.0	12.8.0
2015-12	RAN#70	R5-155545	0327	-	Correction to conditions of Table 4.1-1a	12.7.0	12.8.0
2015-12	RAN#70	R5-155556	0328	-	Correction of RRM Condition C77	12.7.0	12.8.0
2015-12	RAN#70	R5-155558	0329	-	Correction of RRM Condition C79	12.7.0	12.8.0
2015-12	RAN#70	R5-155560	0330	-	Correction of RRM Condition C80	12.7.0	12.8.0
2015-12	RAN#70	R5-155563	0332	-	Correction of RRM Condition C81	12.7.0	12.8.0
2015-12	RAN#70	R5-155565	0334	-	Correction of RRM Condition C82	12.7.0	12.8.0
2015-12	RAN#70	R5-155635	0339	-	Release indication corrections in table A.4.1-1: UE Radio Technologies	12.7.0	12.8.0
2015-12	RAN#70	R5-155750	0341	-	Addition of test cases in Table 4.1-1: Applicability of RF conformance test cases.	12.7.0	12.8.0
2015-12	RAN#70	R5-155777	0342	-	Test applicability for Intra Frequency RSRP Accuracy for UE category 0 Test Cases	12.7.0	12.8.0
2015-12	RAN#70	R5-155843	0309	1	Update of applicability of SU-MIMO conformance tests	12.7.0	12.8.0
2015-12	RAN#70	R5-155870	0323	1	Applicability updates on inter-band CA receiver test cases	12.7.0	12.8.0
2015-12	RAN#70	R5-155871	0324	1	Correction of applicability for FDD-TDD CA	12.7.0	12.8.0
2015-12	RAN#70	R5-155872	0336	1	Applicability update to FDD-TDD CA test cases	12.7.0	12.8.0
2015-12	RAN#70	R5-155873	0335	1	Introduction of applicability expression for new 3DL CA RRM test case TC 8.16.41	12.7.0	12.8.0
2015-12	RAN#70	R5-155874	0340	1	36.521-2: CA_2A-2A-13A update	12.7.0	12.8.0
2015-12	RAN#70	R5-156050	0308	1	Addition of applicability for newly introduced MTC RRM tests	12.7.0	12.8.0
2015-12	RAN#70	R5-156060	0331	1	Addition of applicability for 2UL CA test cases 6.2.5A.3 and 6.2.5A.4	12.7.0	12.8.0
2015-12	RAN#70	R5-156061	0333	1	Addition of applicability for 2UL CA test cases 6.2.4A.3, 6.3.5A.3.2 and 6.6.3.3A.3	12.7.0	12.8.0
2015-12	RAN#70	R5-156093	0313	1	LTE Type B performance requirements - Addition of applicability for 6 new NAICS test cases	12.7.0	12.8.0
2015-12	RAN#70	R5-156107	0325	1	Correction to test case condition for the test cases 9.5.1.x	12.7.0	12.8.0
2015-12	RAN#70	R5-156132	0338	2	Applicability for new SCE-L1 test cases	12.7.0	12.8.0
2015-12	RAN#70	R5-156135	0318	2	Update of test applicabilities for R12 RRM cases in 36.521-2	12.7.0	12.8.0
2015-12	RAN#70	R5-156136	0337	1	Update of the 1.4MHz MBMS test applicability	12.7.0	12.8.0
2015-12	RAN#70	R5-156087	0315	1	Introduction of test applicabilities for UL 64QAM cases	12.8.0	13.0.0
2016-03	RAN#71	R5-160037	0343	-	LTE Type B performance requirements - Addition of applicability for test cases 8.2.1.4.4 and 8.2.2.4.5	13.0.0	13.1.0

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2016-03	RAN#71	R5-160054	0344	-	Addition of applicability for 2UL CA TC 6.5.2A.1.2, 6.5.2A.1.3, 6.5.2A.2.2 and 6.5.2A.2.3	13.0.0	13.1.0
2016-03	RAN#71	R5-160069	0345	-	Introduction of applicability of Tx test case 6.5.2A.3.2	13.0.0	13.1.0
2016-03	RAN#71	R5-160071	0347	-	Introduction of applicability of Tx test case 6.6.3.1A.3	13.0.0	13.1.0
2016-03	RAN#71	R5-160073	0346	2	Introduction of applicability of Tx test case 6.5.2A.3.3	13.0.0	13.1.0
2016-03	RAN#71	R5-160108	0349	-	Removal of technical content in 36.521-2 v12.8.0 and substitution with pointer to the next Release	13.0.0	13.1.0
2016-03	RAN#71	R5-160126	0353	-	Correction to applicability condition C22.	13.0.0	13.1.0
2016-03	RAN#71	R5-160273	0362	-	Applicability for new SCE RRM test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-160372	0368	-	Rel-8 UE category correction	13.0.0	13.1.0
2016-03	RAN#71	R5-160373	0369	-	Rel-10 UE category correction	13.0.0	13.1.0
2016-03	RAN#71	R5-160511	0375	-	New CA band combination CA_41A-42C - Updates of Table A.4.6.3-3	13.0.0	13.1.0
2016-03	RAN#71	R5-160530	0378	-	Addition of CA Physical Layer Baseline Implementation Capabilities for the new CA configuration	13.0.0	13.1.0
2016-03	RAN#71	R5-160575	0381	-	Correction to the applicability of RRM test cases 9.5.1 and 9.5.2	13.0.0	13.1.0
2016-03	RAN#71	R5-160593	0382	-	Corrections to applicabilities of TDD FDD CA chapter 8 TCs	13.0.0	13.1.0
2016-03	RAN#71	R5-160694	0385	-	Applicability for newly added UL CA test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-160714	0351	1	Test applicability for Intra Frequency RSRQ Accuracy for UE category 0 Test Cases	13.0.0	13.1.0
2016-03	RAN#71	R5-160806	0355	1	Correction of applicability conditions C57 and C58	13.0.0	13.1.0
2016-03	RAN#71	R5-160807	0356	1	Missing applicability for TC 7.8.1A.4	13.0.0	13.1.0
2016-03	RAN#71	R5-160808	0357	1	Correction of Tested CA-Configurations for TC 7.5A.4 and TC 7.6.1A.4	13.0.0	13.1.0
2016-03	RAN#71	R5-160816	0366	1	Addition of some Rel-13 defined CA combinations to TS 36.521-2	13.0.0	13.1.0
2016-03	RAN#71	R5-160817	0373	1	CA_20A-67A: Update of CA Physical Layer Baseline Implementation	13.0.0	13.1.0
2016-03	RAN#71	R5-160818	0376	1	Correction to condition C25x	13.0.0	13.1.0
2016-03	RAN#71	R5-160851	0379	1	Applicability of new RF NAICS test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-160857	0361	1	MTC applicability of RF test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-160885	0360	1	Adding applicability of RRM test cases for LC_MTC_LTE-UEConTest.	13.0.0	13.1.0
2016-03	RAN#71	R5-160962	0387	-	Adding applicability statements to MTC RRM test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-161027	0363	1	Applicability for new LTE_CA_Rel12_2UL test case 6.6.3.2A.3	13.0.0	13.1.0
2016-03	RAN#71	R5-161036	0359	1	Applicability for new DL 256QAM RF and BB test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-161055	0352	1	Adding applicability of RRM test cases for LC_MTC_LTE-UEConTest	13.0.0	13.1.0
2016-03	RAN#71	R5-161058	0377	1	Correction to conditions used item “support 256QAM in DL”	13.0.0	13.1.0
2016-03	RAN#71	R5-161067	0370	1	36.521-2 Test point reduction for UL 64QAM multi-cluster ACLR tests	13.0.0	13.1.0
2016-03	RAN#71	R5-161069	0374	1	Add test case 8.16.17A and update release for test cases 8.16.18A	13.0.0	13.1.0
2016-03	RAN#71	R5-161074	0348	1	Addition of test case applicability for eDL MIMO Enhancement test cases	13.0.0	13.1.0
2016-03	RAN#71	R5-161083	0384	1	Introduction of applicability expression for new 3DL CA RRM test case TC 8.16.42	13.0.0	13.1.0
2016-03	RAN#71	R5-161084	0358	1	Adding applicability of TC 8.16.39 and 8.16.40 for LTE_CA_Rel12_3DL-UEConTest	13.0.0	13.1.0
2016-03	RAN#71	R5-161108	0364	1	Addition of applicability for Reference sensitivity with 4Rx antenna ports	13.0.0	13.1.0
2016-03	RAN#71	R5-161116	0380	2	Split FGI table for FDD and TDD and update related test case applicability	13.0.0	13.1.0
2016-06	RAN#72	R5-162022	0388	-	Adding missing ICS for UE supporting multiple timing advances	13.1.0	13.2.0
2016-06	RAN#72	R5-162197	0395	-	7.6.1_1 In-band blocking with 4 Rx antenna ports test applicability	13.1.0	13.2.0
2016-06	RAN#72	R5-162229	0396	-	Introduction of test applicability for newly introduced UL 64QAM test cases	13.1.0	13.2.0
2016-06	RAN#72	R5-162250	0397	-	Addition of applicabilities for 2 Tx test cases 6.5.1D.1 and 6.5.1D.2	13.1.0	13.2.0
2016-06	RAN#72	R5-162256	0398	-	Addition of applicability for test case 8.10.4.1.1 with 4 Rx antenna ports	13.1.0	13.2.0
2016-06	RAN#72	R5-162257	0399	-	Addition of applicability for test case 8.10.4.1.2 with 4 Rx antenna ports	13.1.0	13.2.0
2016-06	RAN#72	R5-162259	0400	-	Addition of applicability for test case 8.10.4.2.1 with 4 Rx antenna ports	13.1.0	13.2.0
2016-06	RAN#72	R5-162260	0401	-	Addition of applicability for test case 8.10.4.2.2 with 4 Rx antenna ports	13.1.0	13.2.0
2016-06	RAN#72	R5-162298	0406	-	Applicability of new RF NAICS test cases	13.1.0	13.2.0

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2016-06	RAN#72	R5-162403	0408	-	Addition of CA Physical Layer Baseline Implementation Capabilities for CA_1A-3A-7A and CA_3A-7A-8A to 36.521-2	13.1.0	13.2.0
2016-06	RAN#72	R5-162487	0413	-	Addition of applicability for Additional spurious emissions for CA (inter-band DL CA and UL CA)	13.1.0	13.2.0
2016-06	RAN#72	R5-162488	0414	-	Update to the applicability for SCE RRM test cases	13.1.0	13.2.0
2016-06	RAN#72	R5-162489	0415	-	Correction to applicability table for EUTRA TDD to UTRA TDD Son test case	13.1.0	13.2.0
2016-06	RAN#72	R5-162503	0416	-	New some Rel-13 defined CA combinations - Updates of Table A.4.6.3-3	13.1.0	13.2.0
2016-06	RAN#72	R5-162546	0419	-	Correction to condition C73h	13.1.0	13.2.0
2016-06	RAN#72	R5-162547	0420	-	Correction to condition C28y	13.1.0	13.2.0
2016-06	RAN#72	R5-162565	0421	-	Applicability for 4Rx antenna ports test cases	13.1.0	13.2.0
2016-06	RAN#72	R5-162574	0422	-	Applicability for 2UL CA test cases	13.1.0	13.2.0
2016-06	RAN#72	R5-162650	0424	-	Band 65 introduction to 36.521-2	13.1.0	13.2.0
2016-06	RAN#72	R5-162822	0402	1	Editorial corrections of the condition table in the TS 36.521-2	13.1.0	13.2.0
2016-06	RAN#72	R5-162824	0411	1	Modification to feICIC RRM test cases applicability	13.1.0	13.2.0
2016-06	RAN#72	R5-162825	0407	1	Minor correction to FGI FDD and TDD tables	13.1.0	13.2.0
2016-06	RAN#72	R5-162826	0409	1	Correction to applicability of RRM test cases condition in table 4.2-1a	13.1.0	13.2.0
2016-06	RAN#72	R5-162827	0410	1	Correction to RF applicability condition for feICIC	13.1.0	13.2.0
2016-06	RAN#72	R5-162828	0417	1	Correction of Tested CA Configurations Selection Criteria	13.1.0	13.2.0
2016-06	RAN#72	R5-162829	0423	1	New CA band combination CA_8A-40A – Updates of Table A.4.6.3-3	13.1.0	13.2.0
2016-06	RAN#72	R5-162850	0391	1	Update of CA Physical Layer Baseline Implementation Capabilities for new CA configuration in Annex A.4.6	13.1.0	13.2.0
2016-06	RAN#72	R5-162864	0390	1	Addition of applicability for TC 7.9_1 Spurious emissions with 4 Rx antenna ports	13.1.0	13.2.0
2016-06	RAN#72	R5-162873	0392	1	Add applicability for test case 6.2.4A.2	13.1.0	13.2.0
2016-06	RAN#72	R5-162956	0394	1	Addition of test cases in Table 4.1-1: Applicability of RF conformance test cases.	13.1.0	13.2.0
2016-06	RAN#72	R5-163019	0427	-	Introduction of CA Physical Layer Baseline Implementation for CA_1A-8A-11A	13.1.0	13.2.0
2016-06	RAN#72	R5-163105	0426	1	Introduction of ICS and applicability for new e-MTC RF test cases	13.1.0	13.2.0
2016-06	RAN#72	R5-163109	0389	1	Add B66 information in TS 36.521-2	13.1.0	13.2.0
2016-06	RAN#72	R5-163118	0425	1	Applicability CR to 36.521-2 for new DC test cases	13.1.0	13.2.0
2016-09	RAN#73	R5-165030	0428	-	Update of CA Physical Layer Baseline Implementation Capabilities for new CA configuration in Annex A.4.6	13.2.0	13.3.0
2016-09	RAN#73	R5-165090	0430	-	Applicability of new RF and RRM test cases for CAT-M1 UE and UE in enhanced coverage	13.2.0	13.3.0
2016-09	RAN#73	R5-165196	0432	-	Applicability of new added ProSe RF test cases	13.2.0	13.3.0
2016-09	RAN#73	R5-165197	0433	-	Applicability of new added NAICS demodulation test cases	13.2.0	13.3.0
2016-09	RAN#73	R5-165212	0435	-	New CA band combination CA_1A-40A and CA_3A-40A - Updates of Table A.4.6.3-3	13.2.0	13.3.0
2016-09	RAN#73	R5-165213	0436	-	Correction of applicability conditions to test cases 9.5.2.1_D and 9.5.2.2_D	13.2.0	13.3.0
2016-09	RAN#73	R5-165214	0437	-	Correction to applicability of RF test cases condition in table 4.1-1a	13.2.0	13.3.0
2016-09	RAN#73	R5-165216	0438	-	Correction to incorrect test case number and title in Table 4.2-1	13.2.0	13.3.0
2016-09	RAN#73	R5-165249	0439	-	Applicabilities for new 4Rx Test Cases - CQI reporting / AWGN	13.2.0	13.3.0
2016-09	RAN#73	R5-165271	0440	-	Change of names of 3DL TCs	13.2.0	13.3.0
2016-09	RAN#73	R5-165315	0443	-	Update applicability for PCFICH/PDCCH performance with 4Rx antenna ports test cases	13.2.0	13.3.0
2016-09	RAN#73	R5-165361	0444	-	Addition of CA Physical Layer Baseline Implementation Capabilities for CA_1A-3A-28A to 36.521-2.	13.2.0	13.3.0
2016-09	RAN#73	R5-165399	0445	-	Updates of physical layer baseline implementation capability for CA_1A-3C	13.2.0	13.3.0
2016-09	RAN#73	R5-165416	0448	-	Additional CA Physical Layer Baseline Implementation Capabilities for new CA combinations to TS36.521-2	13.2.0	13.3.0
2016-09	RAN#73	R5-165434	0452	-	Introduction of test applicability for NB-IoT test cases 6.2.5F, 6.5.2.1F.1 and 6.5.2.2F	13.2.0	13.3.0
2016-09	RAN#73	R5-165445	0453	-	Introduction of test applicability for UL 64QAM+UL intra-band non-contiguous CA EVM test	13.2.0	13.3.0
2016-09	RAN#73	R5-165493	0454	-	Correction to applicability of Power Class 3 only UL TCs	13.2.0	13.3.0
2016-09	RAN#73	R5-165504	0456	-	Introduction of Band 45 into 36.521-2	13.2.0	13.3.0
2016-09	RAN#73	R5-165515	0457	-	Correction to applicability of Multi-Cluster TCs	13.2.0	13.3.0
2016-09	RAN#73	R5-165533	0458	-	Supplementation of SCE RRM test cases applicability	13.2.0	13.3.0
2016-09	RAN#73	R5-165627	0460	-	Applicability of new RF NAICS test cases	13.2.0	13.3.0
2016-09	RAN#73	R5-165647	0461	-	Correction to applicability condition for EUTRA TDD to UTRA TDD	13.2.0	13.3.0

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2016-09	RAN#73	R5-165656	0462	-	Correction to test cases release information for test cases 9.3.3 and 9.4.3	13.2.0	13.3.0
2016-09	RAN#73	R5-165662	0464	-	Update of applicability for RRM 3 DL CA activation and deactivation test cases	13.2.0	13.3.0
2016-09	RAN#73	R5-165824	0465	-	36.521-2 4CC Band combinations addition (CA_2A-2A-4A-4A and CA_2A-4A-5A-30A)	13.2.0	13.3.0
2016-09	RAN#73	R5-165830	0466	-	Correction to applicability for RF test cases in TS 36.521-2 table 4.1-1	13.2.0	13.3.0
2016-09	RAN#73	R5-165984	0451	1	Introduction of ICS proforma tables for NB-IoT in 36.521-2	13.2.0	13.3.0
2016-09	RAN#73	R5-166014	0429	1	Adding missing test cases 6.3.5_1.1, 6.3.5_1.2, 6.3.5_1.3 to table 4.1-1, 36.521-2	13.2.0	13.3.0
2016-09	RAN#73	R5-166016	0449	1	Correction to test cases not applicable for UE category 1	13.2.0	13.3.0
2016-09	RAN#73	R5-166017	0450	1	Correction for UL 64QAM test cases to TS36.521-2	13.2.0	13.3.0
2016-09	RAN#73	R5-166018	0463	1	Additional new PICS items to handle CA test cases bandwidth configurations of 20MHz+20MHz and 20MHz+10MHz in 3GPP TS 36.521-3	13.2.0	13.3.0
2016-09	RAN#73	R5-166019	0467	1	Addition of modifiedMPR-behavior capability	13.2.0	13.3.0
2016-09	RAN#73	R5-166049	0441	1	Introduction of CA physical layer capabilities for CA_8A-42A (2DL) and CA_8A-42C (3DL)	13.2.0	13.3.0
2016-09	RAN#73	R5-166088	0447	1	Update of Feature Group Indicators for eMTC	13.2.0	13.3.0
2016-09	RAN#73	R5-166332	0442	2	Cleanup TS36.521-2 for XML compliant	13.2.0	13.3.0
2016-09	RAN#73	R5-166057	0459	1	New CA band combination CA_1A-41A-42A - Updates of Table A.4.6.3-3	13.3.0	14.0.0
2016-12	RAN#74	R5-168040	0469	-	Updates of Table A.4.6.3-3 to 36.521-2 for CA_1A-3A-41A	14.0.0	14.1.0
2016-12	RAN#74	R5-168261	0475	-	Update to the applicability in identification of a new CGI E-UTRA cell using autonomous gaps	14.0.0	14.1.0
2016-12	RAN#74	R5-168391	0479	-	Band 66 Intra-band CA applicability dependency to 36.521-2	14.0.0	14.1.0
2016-12	RAN#74	R5-168393	0480	-	Correction to Band 65 capabilities in 36.521-2	14.0.0	14.1.0
2016-12	RAN#74	R5-168486	0483	-	Maintenance of the tables in 4.1, 4.2 TS36.521-2 for XML conversion	14.0.0	14.1.0
2016-12	RAN#74	R5-168488	0484	-	Maintenance of tables in A.4 TS36.521-2 for XML conversion	14.0.0	14.1.0
2016-12	RAN#74	R5-168501	0489	-	Maintenance of the tables in 4.1, 4.2, A.4 TS36.521-2 for XML conversion	14.0.0	14.1.0
2016-12	RAN#74	R5-168533	0492	-	Correction of title of 256 QAM DL test case 7.4A.3_H	14.0.0	14.1.0
2016-12	RAN#74	R5-168624	0499	-	CA_20A-28A: Update of CA Physical Layer Baseline Implementation	14.0.0	14.1.0
2016-12	RAN#74	R5-168733	0502	-	Correction to applicability test conditions C120, C93a, C93b, C94a, C94b, C94c C94d, C107a, C107b, C107c and C107d	14.0.0	14.1.0
2016-12	RAN#74	R5-168748	0503	-	Addition of missing CA Configurations selection in table 4.1-1 for some RF test cases 7.4.X	14.0.0	14.1.0
2016-12	RAN#74	R5-168846	0509	-	CA_70C applicability information to 36.521-2	14.0.0	14.1.0
2016-12	RAN#74	R5-168860	0511	-	Correction to TS 36.521-2 Tested Bands Selection Criteria D10	14.0.0	14.1.0
2016-12	RAN#74	R5-168905	0512	-	CA_3A-20A-32A: Update of CA Physical Layer Baseline Implementation	14.0.0	14.1.0
2016-12	RAN#74	R5-168918	0513	-	Addition of CA Physical Layer Baseline Implementation for CA_3A-7A-28A, CA_3A-7B, CA_7A-22A, CA_7B, CA_7B-28A, CA_7C-28A and CA_20A-40A	14.0.0	14.1.0
2016-12	RAN#74	R5-169046	0517	-	Applicability test case 6.7EA	14.0.0	14.1.0
2016-12	RAN#74	R5-169090	0518	-	Applicability of Dual Connectivity RF and RRM test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169163	0497	1	Applicability of Rel-13 CA RF and RRM test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169515	0468	1	Correction to applicability condition of RRM TC 8.7.3	14.0.0	14.1.0
2016-12	RAN#74	R5-169516	0510	1	Correction to TS 36.521-2 Applicability Tables 4.1-1a & 4.2-1a	14.0.0	14.1.0
2016-12	RAN#74	R5-169518	0496	1	Additional new PICS items to handle LAA test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169530	0478	1	Introduction of applicability for new NB-IoT test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169554	0500	1	New CA band combination CA_1A-11A-18A - Updates of Table A.4.6.3-3	14.0.0	14.1.0
2016-12	RAN#74	R5-169589	0508	1	Applicability for E-UTRAN HD-FDD intra-frequency event triggered reporting under fading propagation conditions for Cat-M1 UE in CEModeA TCs	14.0.0	14.1.0
2016-12	RAN#74	R5-169590	0477	1	Addition of applicability for Dual Connectivity RRM test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169617	0491	1	Add test cases 6.3.2A.2, 6.5.1A.2 and 6.6.2.3A.2 in Table 4.1-1	14.0.0	14.1.0
2016-12	RAN#74	R5-169651	0481	1	Band 70 applicability information to 36.521-2	14.0.0	14.1.0
2016-12	RAN#74	R5-169731	0507	1	Addition of test case applicability for 4Rx RF/RRM test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169733	0495	1	Applicability of eMTC RF and RRM test cases	14.0.0	14.1.0
2016-12	RAN#74	R5-169734	0490	2	Update to the applicability in the power control test cases for HPUE	14.0.0	14.1.0
2017-03	RAN#75	R5-170524	0519	-	Update of CA Physical Layer Baseline Implementation Capabilities for R14 CA configuration to 36.521-2	14.1.0	14.2.0

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2017-03	RAN#75	R5-170544	0520	-	Update TS 36.521-2 with Addition of LTE Band 48	14.1.0	14.2.0
2017-03	RAN#75	R5-170628	0523	-	Resubmission of R5-170022 Introduction of test applicability for TC 6.3.5F.3, 8.12.1.1.2 and 8.12.2.1.1	14.1.0	14.2.0
2017-03	RAN#75	R5-170812	0528	-	Correction of description of TC 8.2.2.4.2_1 FDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 (Release 9 and Forward)	14.1.0	14.2.0
2017-03	RAN#75	R5-170888	0537	-	Corrections to Table 4.2-1 and 4.2-1.a.	14.1.0	14.2.0
2017-03	RAN#75	R5-171194	0542	-	Correction to applicability of 2CA TDD FDD RRM test cases	14.1.0	14.2.0
2017-03	RAN#75	R5-171348	0547	-	Correction to Band 70 RF additional baseline implementation capabilities	14.1.0	14.2.0
2017-03	RAN#75	R5-171350	0548	-	CA_29A-66A, CA_29A-66A-66A, CA_29A-66C, CA_46A-66A addition to 36.521-2	14.1.0	14.2.0
2017-03	RAN#75	R5-171519	0541	1	Maintenance of the tables in 4.1, 4.2, A.4 TS36.521-2 for XML conversion	14.1.0	14.2.0
2017-03	RAN#75	R5-171702	0536	1	Addition of frequency bands 46, 47, 48, 67, 68, 69 into Tables A.4.3-3, A.4.5-3 and A.4.5-4.	14.1.0	14.2.0
2017-03	RAN#75	R5-171712	0532	1	Introduction of CA_1A-8A-28A to section A4.6	14.1.0	14.2.0
2017-03	RAN#75	R5-171715	0533	1	Introduction of CA_3A-8A-28A to section A4.6	14.1.0	14.2.0
2017-03	RAN#75	R5-171718	0534	1	Introduction of CA_3A-28A-41A to section A4.6	14.1.0	14.2.0
2017-03	RAN#75	R5-171721	0530	1	Introduction of CA_8A-28A to section A4.6	14.1.0	14.2.0
2017-03	RAN#75	R5-171722	0531	1	Introduction of CA_11A-28A to section A4.6	14.1.0	14.2.0
2017-03	RAN#75	R5-171726	0526	1	Realignment and rename of the Table A.4.3.4-a0 for UE category NB	14.1.0	14.2.0
2017-03	RAN#75	R5-171893	0544	1	Applicability update for 4Rx test cases	14.1.0	14.2.0
2017-03	RAN#75	R5-171894	0522	1	Addition of applicability for 4Rx test cases 9.9.4.1.1/9.9.4.1.2/9.9.4.2.1/9.9.4.2.2	14.1.0	14.2.0
2017-03	RAN#75	R5-171920	0543	1	LAA: Applicability addition of LAA test cases	14.1.0	14.2.0
2017-03	RAN#75	R5-171925	0539	1	Introduction of applicability for new NB-IoT test cases	14.1.0	14.2.0
2017-03	RAN#75	R5-171935	0540	1	New CA band combinations CA_1A-41A-42C and 1A-41C-42A - Updates of Table A.4.6.3-4	14.1.0	14.2.0
2017-03	RAN#75	R5-171944	0549	-	Correction to 2DL CA downlink capabilities	14.1.0	14.2.0
2017-03	RAN#75	R5-171962	0525	3	Applicability of Rel-13 CA RF and RRM test cases	14.1.0	14.2.0
2017-03	RAN#75	R5-171970	0524	1	Applicability of eMTC RF and RRM test cases	14.1.0	14.2.0
2017-06	RAN#76	R5-172112	0550	-	Addition of 14 CA configurations containing Band 66 to 36.521-2	14.2.0	14.3.0
2017-06	RAN#76	R5-172158	0552	-	New CA band combination CA_1A-41C-42C - Updates of Table A.4.6.3-4	14.2.0	14.3.0
2017-06	RAN#76	R5-172356	0555	-	Update to Additional UE radio access capabilities for NS_04	14.2.0	14.3.0
2017-06	RAN#76	R5-172425	0558	-	Addition of CA_2A-66A, CA_5A-66A and CA_13A-66A to TS 36.521-2	14.2.0	14.3.0
2017-06	RAN#76	R5-172524	0560	-	Introduction of CA_1A-11A-28A to Annex A4.6.3	14.2.0	14.3.0
2017-06	RAN#76	R5-172528	0561	-	Introduction of CA_8A-11A-28A to Annex A4.6.3	14.2.0	14.3.0
2017-06	RAN#76	R5-172687	0563	-	Maintenance of the tables 4.1, 4.1-1a, 4.2 in TS36.521-2 for XML conversion	14.2.0	14.3.0
2017-06	RAN#76	R5-172695	0564	-	Correction to RRM applicability condition C132	14.2.0	14.3.0
2017-06	RAN#76	R5-172697	0565	-	Addition of new CA configuration CA_3A-69A to 36.521-2	14.2.0	14.3.0
2017-06	RAN#76	R5-172699	0566	-	Addition of new CA configuration CA_2A-2A-12A to 36.521-2	14.2.0	14.3.0
2017-06	RAN#76	R5-172721	0569	-	Applicability correction for eDL-MIMO test cases in part 2	14.2.0	14.3.0
2017-06	RAN#76	R5-172726	0571	-	Applicability of eMTC RF and RRM test cases	14.2.0	14.3.0
2017-06	RAN#76	R5-172734	0572	-	Add Applicability for TS 36.521-2 Test case 8.22.11 and 8.22.12	14.2.0	14.3.0
2017-06	RAN#76	R5-173207	0556	1	Remove MPR/A-MPR test cases from Applicability spec	14.2.0	14.3.0
2017-06	RAN#76	R5-173224	0553	1	New CA band combination CA_3C-8A - Updates of Table A.4.6.3-3	14.2.0	14.3.0
2017-06	RAN#76	R5-173282	0557	1	LAA: Applicability update of LAA test cases	14.2.0	14.3.0
2017-06	RAN#76	R5-173308	0570	1	Applicability of Rel-13 CA RF and RRM test cases	14.2.0	14.3.0
2017-06	RAN#76	R5-173324	0576	1	Update of CA Physical Layer Baseline Implementation Capabilities for new CA configuration in Annex A.4.6	14.2.0	14.3.0
2017-06	RAN#76	R5-173327	0577	-	Update test applicabilities for NB-IoT test cases 6.1.15 and 6.1.16	14.2.0	14.3.0
2017-06	RAN#76	R5-173350	0551	1	NB-IoT bands 11, 25, 31, and 70 introduction to 36.521-2	14.2.0	14.3.0
2017-06	RAN#76	R5-173367	0574	1	Corrections to Applicability Conformance and Conditions for intra/inter-frequency SI acquisition for HO	14.2.0	14.3.0
2017-06	RAN#76	R5-173413	0562	1	Correction to FD-FDD only test case comment and condition	14.2.0	14.3.0
2017-06	RAN#76	R5-173419	0554	1	Remove applicability of SDR test cases for 4Rx	14.2.0	14.3.0
2017-06	RAN#76	R5-173420	0568	1	4Rx updates to RF/RRM applicability specification	14.2.0	14.3.0
2017-09	RAN#77	R5-173701	0579	-	New CA band combination CA_1A-3C-8A - Updates of Table A.4.6.3-4	14.3.0	14.4.0
2017-09	RAN#77	R5-173938	0584	-	Addition of test applicability of LAA test case 9.2.6.2	14.3.0	14.4.0
2017-09	RAN#77	R5-173969	0586	-	Introduction of CA_1A-3A-11A to Annex	14.3.0	14.4.0
2017-09	RAN#77	R5-173976	0587	-	Introduction of CA_3A-8A-11A to Annex	14.3.0	14.4.0
2017-09	RAN#77	R5-173977	0588	-	Introduction of CA configuration CA_2A-7A	14.3.0	14.4.0
2017-09	RAN#77	R5-173986	0589	-	Introduction of CA_3A-11A-28A to Annex	14.3.0	14.4.0

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2017-09	RAN#77	R5-174025	0592	-	Addition of new CA Configuration CA_3A-38A to TS 36.521-2	14.3.0	14.4.0
2017-09	RAN#77	R5-174144	0596	-	Addition of new CA configurations to 36.521-2	14.3.0	14.4.0
2017-09	RAN#77	R5-174154	0597	-	Addition of 1.4 and 3 MHz to 36.521-2 for Band 65	14.3.0	14.4.0
2017-09	RAN#77	R5-174224	0601	-	Editorial Change to correct applicability comment to TC8.16.52	14.3.0	14.4.0
2017-09	RAN#77	R5-174225	0602	-	Corrected applicability and condition to 3DL CA tests required event A6 [TEI11]	14.3.0	14.4.0
2017-09	RAN#77	R5-174226	0603	-	Corrected applicability and condition to 3DL CA tests required event A6 [TEI12]	14.3.0	14.4.0
2017-09	RAN#77	R5-174417	0614	-	Corrections to applicability Conformance and Conditions	14.3.0	14.4.0
2017-09	RAN#77	R5-175015	0581	1	Applicability of CA RF and RRM test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175022	0578	1	Addition of CA_29A-70A, CA_29A-46A-66A, CA_46A-66A-66A, CA_46A-66C, CA_46A-70A to 36.521-2	14.3.0	14.4.0
2017-09	RAN#77	R5-175028	0591	1	Addition of a few Band 46 CA Configurations to TS 36.521-2	14.3.0	14.4.0
2017-09	RAN#77	R5-175029	0598	1	Introduction of CA_3A-32A to Table A.4.6.3-3	14.3.0	14.4.0
2017-09	RAN#77	R5-175063	0593	1	Update applicability of performance TCs	14.3.0	14.4.0
2017-09	RAN#77	R5-175072	0615	-	NB-IoT band 21 introduction to 36.521-2	14.3.0	14.4.0
2017-09	RAN#77	R5-175080	0595	1	Applicability addition of 7.4.1, 7.4.2, 7.4.3	14.3.0	14.4.0
2017-09	RAN#77	R5-175081	0611	1	Introduction of new DC test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175082	0608	1	Introduction of new RF Dual Connectivity test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175108	0585	1	Addition of V2V applicability PICS for RF/RRM test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175131	0605	1	Addition of the Rel-13 CA combinations into A.4.6	14.3.0	14.4.0
2017-09	RAN#77	R5-175147	0583	1	Addition of NB-IoT test applicabilities for multiple test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175148	0599	1	Removal of redundant capability tables for Category NB1	14.3.0	14.4.0
2017-09	RAN#77	R5-175167	0606	1	Addition of applicability statements for new LWA test cases 8.25.1 & 8.25.2	14.3.0	14.4.0
2017-09	RAN#77	R5-175172	0604	1	Addition of the Rel-14 CA combinations into A.4.6	14.3.0	14.4.0
2017-09	RAN#77	R5-175195	0600	1	Update to applicability for TDD-FDD 2DL CA with 4Rx performance test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175196	0590	1	Addition of new 4Rx SDR test cases - applicability	14.3.0	14.4.0
2017-09	RAN#77	R5-175198	0612	1	Editorial change to the content of comment and condition of the test cases 8.2.1.3.1, 8.2.1.3.1_1 and 8.2.1.3.2 in Table 4.1-1 and 4.1-1a.	14.3.0	14.4.0
2017-09	RAN#77	R5-175200	0580	1	Applicability of eMTC RF and RRM test cases	14.3.0	14.4.0
2017-09	RAN#77	R5-175211	0609	1	Applicability updates for 4Rx test cases	14.3.0	14.4.0
2017-12	RAN#78	R5-176035	0616	-	Addition of new 4Rx SDR test cases - applicability	14.4.0	14.5.0
2017-12	RAN#78	R5-176303	0623	-	Added FDD Band 69 to RF ICS	14.4.0	14.5.0
2017-12	RAN#78	R5-176396	0627	-	Applicabilities addition of test cases 8.13.3.6.1 and 8.13.3.6.2	14.4.0	14.5.0
2017-12	RAN#78	R5-176397	0628	-	Editorial Change to Clause number in Table 4.1-1	14.4.0	14.5.0
2017-12	RAN#78	R5-176426	0635	-	Correction to applicability condition of 4Rx CQI test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-176447	0637	-	Test tolerance, Addition of test applicability of RRM test case 8.4.6	14.4.0	14.5.0
2017-12	RAN#78	R5-176561	0646	-	Editorial correction of title for 4Rx chapter 9 TCs in 36.521-2	14.4.0	14.5.0
2017-12	RAN#78	R5-176613	0649	-	Editorial correction to the baseline implementation capability for Band 30	14.4.0	14.5.0
2017-12	RAN#78	R5-176702	0656	-	Applicability changes for RRM 4Rx tests	14.4.0	14.5.0
2017-12	RAN#78	R5-176797	0660	-	Applicability for new 4Rx CA demodulation test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-177093	0642	1	Change of eMTC demodulation test cases numbering, part 2	14.4.0	14.5.0
2017-12	RAN#78	R5-177326	0652	1	Correction to e-MTC TM9 PDSCH applicability	14.4.0	14.5.0
2017-12	RAN#78	R5-177328	0621	1	Updated to LAA RRM test cases condition	14.4.0	14.5.0
2017-12	RAN#78	R5-177329	0622	1	Added missing RF test cases to applicability table	14.4.0	14.5.0
2017-12	RAN#78	R5-177330	0632	1	Correction to applicability condition for RRM test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-177331	0647	1	Corrected to RRM test cases 8.16.x and relevant condition	14.4.0	14.5.0
2017-12	RAN#78	R5-177345	0634	1	Addition of UE capability of 4-layer MIMO for different transmission modes	14.4.0	14.5.0
2017-12	RAN#78	R5-177402	0648	1	applicability spec updates for Cat1bis	14.4.0	14.5.0
2017-12	RAN#78	R5-177406	0644	1	Applicability statement for HST rrm&rf TCs	14.4.0	14.5.0
2017-12	RAN#78	R5-177431	0625	1	eLAA: Applicability update to test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-177444	0619	1	Applicability of legacy LTE RF/RRM test cases for CAT-M1 UE	14.4.0	14.5.0
2017-12	RAN#78	R5-177445	0624	1	Updated test condition to RF section 8 & 9 test cases for missing TM9	14.4.0	14.5.0
2017-12	RAN#78	R5-177446	0661	1	Addition of test cases branch column for RF/Demod test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-177447	0629	1	Applicability and ICS for CA RF and RRM test cases	14.4.0	14.5.0
2017-12	RAN#78	R5-177377	0620	1	Added FDD Band 71 to RF ICS	14.5.0	15.0.0
2018-03	RAN#79	R5-180334	0665	-	Addition of FDD Band 72 to RF ICS in 36.521-2	15.0.0	15.1.0
2018-03	RAN#79	R5-180335	0666	-	Addition of FDD Band 68 to RF ICS in 36.521-2	15.0.0	15.1.0
2018-03	RAN#79	R5-180419	0670	-	Addition of test applicabilities of eIMTA new test cases.	15.0.0	15.1.0
2018-03	RAN#79	R5-180557	0676	-	Addition of applicability and ICS for 4Rx with CA	15.0.0	15.1.0

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2018-03	RAN#79	R5-180811	0684	-	Test Case Applicability and Conditions for LTE DL Control Channel Interference Mitigation	15.0.0	15.1.0
2018-03	RAN#79	R5-180830	0685	-	Corrections to Applicability test conditions related to eDL-MIMO	15.0.0	15.1.0
2018-03	RAN#79	R5-180839	0686	-	Correction to applicability of TC 7.6.3A.3	15.0.0	15.1.0
2018-03	RAN#79	R5-181006	0694	-	Correction to test case conditions C196 and C197 for RRM in Table 4.2-1a	15.0.0	15.1.0
2018-03	RAN#79	R5-181049	0697	-	Applicability of RRM Incmon test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181100	0700	-	Applicability for new 4Rx CA demodulation test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181108	0701	-	Introduction of CA_3A-7A-20A (3DL-2U)L to Annex A	15.0.0	15.1.0
2018-03	RAN#79	R5-181535	0678	1	Addition of new R14 CA configurations to 36.521-2	15.0.0	15.1.0
2018-03	RAN#79	R5-181536	0689	1	Update of test applicability for 9.6.1.3.4 and 9.6.1.4.4 in 36.521-1	15.0.0	15.1.0
2018-03	RAN#79	R5-181548	0691	1	Correction to test applicability for LAA performance test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181552	0677	1	Correct RRM LAA test applicability in 36521-2	15.0.0	15.1.0
2018-03	RAN#79	R5-181553	0687	1	Updates to Applicability of RF conformance test case 8.7.1.1_A.5	15.0.0	15.1.0
2018-03	RAN#79	R5-181554	0690	1	Correction to test applicability for LAA RRM test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181555	0699	1	[Editorial] Update of the 4Rx capable bands	15.0.0	15.1.0
2018-03	RAN#79	R5-181562	0663	1	Corrections to applicability of 4Rx SDR test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181596	0682	1	Cat1bis RRM RSRQ applicability	15.0.0	15.1.0
2018-03	RAN#79	R5-181597	0692	1	Correction to the comment content for test cases 5.1.20 and 5.2.10	15.0.0	15.1.0
2018-03	RAN#79	R5-181604	0672	1	Addition of applicability for TC8.12.1.1.3	15.0.0	15.1.0
2018-03	RAN#79	R5-181608	0675	1	Added applicability to TS 36.521-2 for eHST RF test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181609	0693	1	Correction to test case conditions C179 and C180 for RRM in Table 4.2-1a	15.0.0	15.1.0
2018-03	RAN#79	R5-181612	0698	1	Addition of the Band 74 information into TS 36.521-2	15.0.0	15.1.0
2018-03	RAN#79	R5-181614	0680	1	Introduction of test applicabilities for UL 256QAM	15.0.0	15.1.0
2018-03	RAN#79	R5-181640	0669	1	Addition of test applicability of RRM SRS test cases	15.0.0	15.1.0
2018-03	RAN#79	R5-181667	0704	1	eLAA: Applicability spec update	15.0.0	15.1.0
2018-03	RAN#79	R5-181695	0671	2	Editorial change to applicability condition for RRM TC8.7.4	15.0.0	15.1.0
2018-06	RAN#80	R5-182653	0714	-	Addition of test applicability for eNB RRM test case 6.2.18	15.1.0	15.2.0
2018-06	RAN#80	R5-182683	0716	-	Addition of applicabilities 4 test cases for UL 256QAM	15.1.0	15.2.0
2018-06	RAN#80	R5-182729	0718	-	Correction to applicability spec for LAA Section 9 RRM test cases	15.1.0	15.2.0
2018-06	RAN#80	R5-183947	0719	1	Addition of applicability for LAA SDR cases	15.1.0	15.2.0
2018-06	RAN#80	R5-182797	0723	-	eLAA: Applicability Update for eLAA test cases	15.1.0	15.2.0
2018-06	RAN#80	R5-182920	0731	-	Applicability for new 4Rx TDD FDD CA demodulation test cases	15.1.0	15.2.0
2018-06	RAN#80	R5-183276	0733	1	Cat1bis applicability CR	15.1.0	15.2.0
2018-06	RAN#80	R5-183736	0709	1	Applicability and ICS for CA RF and RRM test cases	15.1.0	15.2.0
2018-06	RAN#80	R5-183737	0725	1	Addition of new Name_Release mapping table for test applicability for DL CA	15.1.0	15.2.0
2018-06	RAN#80	R5-183753	0707	1	Correction to eMTC TM6 PDSCH applicability	15.1.0	15.2.0
2018-06	RAN#80	R5-183755	0706	1	Applicability for TC 9.2.4.1_1 and 9.2.4.2_1	15.1.0	15.2.0
2018-06	RAN#80	R5-183759	0730	1	Test Applicability for TDD - TDD Inter Frequency RSRQ Accuracy	15.1.0	15.2.0
2018-06	RAN#80	R5-183767	0713	1	Correction of wrong references to ICS proforma tables (editorial)	15.1.0	15.2.0
2018-06	RAN#80	R5-183800	0715	1	Addition of test applicability for V2V RF and RRM test cases	15.1.0	15.2.0
2018-06	RAN#80	R5-183812	0722	1	High_Speed_test: Addition of applicability of FDD event reporting test case	15.1.0	15.2.0
2018-06	RAN#80	R5-183834	0721	1	Added new ICS information for UE Category M2	15.1.0	15.2.0
2018-06	RAN#80	R5-183846	0728	1	4Rx Test Case Redundancy	15.1.0	15.2.0
2018-06	RAN#80	R5-183893	0708	1	Adding applicability for new UL 256QAM test case, 6.2.3_6	15.1.0	15.2.0
2018-06	RAN#80	R5-183898	0727	1	Corrections to table “Table 4.1-1a” and “Table 4.2-1a” Applicability of test case Conditions from 3GPP TS 36.521-2	15.1.0	15.2.0
2018-09	RAN#81	R5-184294	0740	-	Addition of test applicability for Rel-13 B5C new TC 8.16.47-50	15.2.0	15.3.0
2018-09	RAN#81	R5-184325	0741	-	36.521-2 updates for category M2 test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-184581	0746	-	Applicability C20 updated for intra-band contigous DL CA tests	15.2.0	15.3.0
2018-09	RAN#81	R5-184584	0749	-	Table format correct and removed redundant line for RF clause 6 test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-184809	0758	-	Correction to Applicability Condition of TS 36.521-1 Test Cases 6.6.2.2A.1 and 6.6.3.3A.1	15.2.0	15.3.0
2018-09	RAN#81	R5-184892	0761	-	4Rx branches in some 4DL CA and 5DL CA Demodulation test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-184980	0766	-	Cat1bis test cases applicability	15.2.0	15.3.0
2018-09	RAN#81	R5-184982	0767	-	Resubmission of Cat1bis applicability CR	15.2.0	15.3.0
2018-09	RAN#81	R5-185374	0738	1	Addition of test applicabilities of multiple V2X test cases	15.2.0	15.3.0

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2018-09	RAN#81	R5-185376	0763	1	Add a new test condition for test case 8.13.3.1.2.5.	15.2.0	15.3.0
2018-09	RAN#81	R5-185389	0753	1	Applicabilities addition of test cases 8.3.1.1.9 and 8.3.2.1.10	15.2.0	15.3.0
2018-09	RAN#81	R5-185407	0751	1	Addition of applicability for TC6.6.3.3_2	15.2.0	15.3.0
2018-09	RAN#81	R5-185428	0755	1	Applicability for New UL 256QAM test cases: 6.6.2.2_2 and 6.6.2.3A.3_2	15.2.0	15.3.0
2018-09	RAN#81	R5-185442	0768	-	Applicability and ICS for CA RF and RRM test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-185453	0744	1	Addition of applicability of RRM IncMon test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-185528	0748	1	Table format correct and removed redundant line for RF clause 7 test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-185541	0742	1	Correction of applicability to TS 36.521-2 for HPUE RF test cases	15.2.0	15.3.0
2018-09	RAN#81	R5-185549	0757	1	Correction to band selection criteria applicability for HPUE devices that support Power Class 1 & 2	15.2.0	15.3.0
2018-12	RAN#82	R5-186585	0785	-	Update the test applicability for Rel-14 NB-IOT RF test cases	15.3.0	15.4.0
2018-12	RAN#82	R5-186586	0786	-	Update the test applicability for Rel-14 NB-IOT RRM test cases	15.3.0	15.4.0
2018-12	RAN#82	R5-186591	0787	-	Addition of new CA configurations into 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188204	0791	1	Applicability and ICS for CA RF and RRM test cases	15.3.0	15.4.0
2018-12	RAN#82	R5-187095	0792	-	Addition of applicability and ICS for Tx test cases for UL 256QAM CA	15.3.0	15.4.0
2018-12	RAN#82	R5-188236	0796	1	Correction to tested CA configuration selection criteria for Rx tests	15.3.0	15.4.0
2018-12	RAN#82	R5-187310	0797	-	Editorial change to applicability condition for TC8.2.1.3.1_A.1	15.3.0	15.4.0
2018-12	RAN#82	R5-187330	0798	-	Applicability addition of test case 6.6.3.3A.1_2	15.3.0	15.4.0
2018-12	RAN#82	R5-187339	0799	-	Addition of new UL 256QAM test cases - applicability	15.3.0	15.4.0
2018-12	RAN#82	R5-187341	0800	-	Introduction of CA configurations CA_2A-66C-71A and CA_2C-66A-66A	15.3.0	15.4.0
2018-12	RAN#82	R5-187358	0801	-	Addition of applicability of feMTC test cases	15.3.0	15.4.0
2018-12	RAN#82	R5-187448	0802	-	Addition of Rel-13 CA configurations	15.3.0	15.4.0
2018-12	RAN#82	R5-187478	0804	-	Introduction of FD-MIMO test cases in 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-187495	0805	-	Correction to Reference Sensitivity Level "Tested Bands / CA-Configurations Selection"	15.3.0	15.4.0
2018-12	RAN#82	R5-187925	0784	1	Applicability for IncMon RRM Test Cases	15.3.0	15.4.0
2018-12	RAN#82	R5-187975	0789	1	Introduction of Power Class 1 for B31 and B72	15.3.0	15.4.0
2018-12	RAN#82	R5-187981	0790	1	Addition of B72 for test cases with 5MHz channel bandwidth	15.3.0	15.4.0
2018-12	RAN#82	R5-187989	0795	1	Added ICS item for missing Category DL and UL	15.3.0	15.4.0
2018-12	RAN#82	R5-188041	0780	1	Addition CA 2A2A29A and CA 2A2A29A30A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188042	0781	1	Addition CA 2A29A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188043	0782	1	Addition CA 2A30A66A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188044	0783	1	Addition CA 7A66A and CA 2A7A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188045	0774	1	Addition CA 2A2A7A and CA 2A2A7A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188046	0775	1	Addition CA 2A2A14A and CA 2A2A14A30A and CA 2A2A14A66A and CA 2A2A14A30A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188047	0776	1	Addition CA 2A12A30A66A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188048	0777	1	CA 2A14A30A66A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188049	0778	1	Addition CA 2A14A66A66A and CA 2A2A14A66A66A 36.521-2	15.3.0	15.4.0
2018-12	RAN#82	R5-188050	0779	1	Addition CA 2A29A30A66A 36.521-2	15.3.0	15.4.0
2019-03	RAN#83	R5-191115	0807	-	Addition of new UL feMTC test cases - applicability	15.4.0	15.5.0
2019-03	RAN#83	R5-191240	0808	-	Editorial Correction of title of TC 6.5.2.1EB in TS 36.521-2	15.4.0	15.5.0
2019-03	RAN#83	R5-191276	0809	-	Alignment of TS 36.521-2 to TS 36.521-1 for feMTC TCs	15.4.0	15.5.0
2019-03	RAN#83	R5-191277	0810	-	Alignment of TS 36.521-2 to TS 36.521-1 for enhanced NB-IoT TCs	15.4.0	15.5.0
2019-03	RAN#83	R5-191482	0816	-	Correction to RRM condition used incorrect PICS table for the tests	15.4.0	15.5.0
2019-03	RAN#83	R5-191603	0819	-	Adding applicability of test case 6.5.1EC, Frequency Error for UE category M2	15.4.0	15.5.0
2019-03	RAN#83	R5-191767	0820	-	Applicability addition of test case 6.6.3.3A.2_2	15.4.0	15.5.0
2019-03	RAN#83	R5-191972	0822	-	Applicability update of NB-IOT RACH test case	15.4.0	15.5.0
2019-03	RAN#83	R5-192035	0823	-	Applicability update LAA SDR test cases- Editorial	15.4.0	15.5.0
2019-03	RAN#83	R5-192099	0825	-	Correction to conditions C04i, C04j, C04k and C04l in Table 4.2-1a	15.4.0	15.5.0
2019-03	RAN#83	R5-192106	0826	-	Correction to conditions in Table A.4.1-1a which are for test case support DL CA without UL CA	15.4.0	15.5.0
2019-03	RAN#83	R5-192113	0828	-	Updating ICS Table A.4.5-1	15.4.0	15.5.0
2019-03	RAN#83	R5-192238	0829	-	Adding applicability for test case 6.5.2.1EC.1, EVM for UE category M2	15.4.0	15.5.0
2019-03	RAN#83	R5-192516	0824	1	Applicability for 4Rx TDD FDD CA TM9 demodulation test cases	15.4.0	15.5.0
2019-03	RAN#83	R5-192531	0813	1	Applicability updated for new feMTC RRM test cases	15.4.0	15.5.0
2019-03	RAN#83	R5-192613	0811	1	Update the description of FGI bits 103 and 104 in 36.521-2	15.4.0	15.5.0
2019-03	RAN#83	R5-192631	0814	1	Applicability updated for new R13 CA RRM test cases	15.4.0	15.5.0

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2019-03	RAN#83	R5-192632	0821	1	Update to 4DL/5DL CA Activation and Deactivation with generic duplex modes	15.4.0	15.5.0
2019-03	RAN#83	R5-192645	0815	1	Correction to test CA configurations selection criteria	15.4.0	15.5.0
2019-03	RAN#83	R5-192849	0812	2	Update the applicability of RF test cases related to FGI bits 103 and 104	15.4.0	15.5.0
2019-03	RAN#83	R5-192640	0817	1	Band 53 introduction in TS 36.521-2	15.5.0	16.0.0
2019-06	RAN#84	R5-193680	0830	-	Introduction of Baseline Implementation Capability for LTE Band 85	16.0.0	16.1.0
2019-06	RAN#84	R5-193882	0831	-	Update of Recommended test case applicability for 3UL CA	16.0.0	16.1.0
2019-06	RAN#84	R5-193951	0832	-	Remove CA_3A-8A-27A from Inter-band CA Physical Layer Baseline Implementation Capabilities.	16.0.0	16.1.0
2019-06	RAN#84	R5-194240	0836	-	Addition of applicability for 6-DL CA SDR test cases	16.0.0	16.1.0
2019-06	RAN#84	R5-194331	0838	-	Additional of Note for RF category NB declaration	16.0.0	16.1.0
2019-06	RAN#84	R5-194333	0839	-	Editorial correction of CEModeB test cases	16.0.0	16.1.0
2019-06	RAN#84	R5-194344	0840	-	Adding applicability for DL256QAM RF test case 8.7.2.1_H.4	16.0.0	16.1.0
2019-06	RAN#84	R5-194345	0841	-	Adding applicability for DL256QAM RF test case 8.7.2.1_H.5	16.0.0	16.1.0
2019-06	RAN#84	R5-194387	0842	-	Addition of the test applicability for V2X intra-band multi-carrier configurations	16.0.0	16.1.0
2019-06	RAN#84	R5-194433	0844	-	Adding applicability for new test case 6.5.2.1EC.2	16.0.0	16.1.0
2019-06	RAN#84	R5-194614	0851	-	Updating Table A.4.3-3a	16.0.0	16.1.0
2019-06	RAN#84	R5-194751	0855	-	Applicability for new FD-MIMO PMI test cases	16.0.0	16.1.0
2019-06	RAN#84	R5-194753	0856	-	Adding applicability for TC 6.6.3.2A.4 and 6.6.3.3A.4	16.0.0	16.1.0
2019-06	RAN#84	R5-194754	0857	-	Addition of FDD Band 73 to RF ICS in 36.521-2	16.0.0	16.1.0
2019-06	RAN#84	R5-194956	0859	-	Update Applicability to Include 4Rx Capability for Band 30	16.0.0	16.1.0
2019-06	RAN#84	R5-194966	0835	1	Introduction of CA_7C_28A to Annex 4.6.3	16.0.0	16.1.0
2019-06	RAN#84	R5-195023	0853	1	Introduction of ON/OFF time mask for 4UL CA applicability	16.0.0	16.1.0
2019-06	RAN#84	R5-195067	0833	1	Addition of new UL feMTC test cases - applicability	16.0.0	16.1.0
2019-06	RAN#84	R5-195077	0848	1	Correction to the content of PICS item A.4.6.3-2/3.	16.0.0	16.1.0
2019-06	RAN#84	R5-195082	0854	1	Correction in C01c applicability in 36.521-2	16.0.0	16.1.0
2019-06	RAN#84	R5-195084	0843	1	Applicability 3DL CA generic tests	16.0.0	16.1.0
2019-06	RAN#84	R5-195448	0849	1	Correction to applicability criteria for HPUE devices that support Power Class 1 & 2	16.0.0	16.1.0
2019-06	RAN#84	R5-195449	0850	1	Updating Table 4.1-1a	16.0.0	16.1.0
2019-09	RAN#85	R5-195723	0860	-	Addition of test applicabilities for V2X test cases	16.1.0	16.2.0
2019-09	RAN#85	R5-195798	0861	-	Introduction of CA_11A_41A, CA_11A_41C, CA_11A_42A, CA_11A_42C, CA_3A_41A_42C, CA_3A_41C_42A and CA_3A_41C_42C to Annex 4.6.3	16.1.0	16.2.0
2019-09	RAN#85	R5-196059	0863	-	Introduction of Power Control and Transmit Intermodulation for 4UL CA applicability	16.1.0	16.2.0
2019-09	RAN#85	R5-196127	0864	-	Correction 4CC and 5CC applicability	16.1.0	16.2.0
2019-09	RAN#85	R5-196152	0865	-	Applicability and ICS for 4UL CA Tx test cases	16.1.0	16.2.0
2019-09	RAN#85	R5-196288	0866	-	Introduction of applicability expression for several 3UL CA RF conformance test cases	16.1.0	16.2.0
2019-09	RAN#85	R5-196567	0867	-	Addition of Re-13 capabilitys of multiple CA in 36.521-2	16.1.0	16.2.0
2019-09	RAN#85	R5-196568	0868	-	Addition of Re-15 capabilitys of multiple CA in 36.521-2	16.1.0	16.2.0
2019-09	RAN#85	R5-196583	0869	-	Correction to Applicability condition on Table 4.2-1 for TC4.2.31	16.1.0	16.2.0
2019-09	RAN#85	R5-196712	0871	-	Addition of TC7.9F Applicability of RF conformance	16.1.0	16.2.0
2019-09	RAN#85	R5-196713	0872	-	Modify TC 4.2.31 the RRM conformance condition of applicability	16.1.0	16.2.0
2019-09	RAN#85	R5-196759	0873	-	Addition of test applicability for 8.2.2.8.1 and 8.2.2.8.2	16.1.0	16.2.0
2019-09	RAN#85	R5-196866	0876	-	Updating TS36.521-2 Table 4.1-1 Applicability of RF conformance test cases, ref. TS 36.521-1	16.1.0	16.2.0
2019-09	RAN#85	R5-196867	0877	-	Updating TS36.521-2 Table 4.2-1 Applicability of RRM conformance test cases, ref. TS 36.521-3	16.1.0	16.2.0
2019-09	RAN#85	R5-196939	0878	-	Correction to Applicability Conditions for TC8.10.1.2.6 and C183, C183m updates	16.1.0	16.2.0
2019-09	RAN#85	R5-196945	0879	-	Addition of applicability of FD-MIMO CQI test cases	16.1.0	16.2.0
2019-09	RAN#85	R5-197311	0880	-	Updating the applicability table to remove transient period for FGI bits 103 and 104	16.1.0	16.2.0
2019-09	RAN#85	R5-197452	0875	1	Updating NOTE 1 and NOTE 2 in Section 4 of TS36.521-2	16.1.0	16.2.0
2019-09	RAN#85	R5-197468	0870	1	Adding applicability for feMTC test case 7.6.2EC, Out-of-band blocking for UE category M2	16.1.0	16.2.0
2019-09	RAN#85	R5-197486	0874	1	Updates to Tested CA Configurations Selection Criteria	16.1.0	16.2.0
2019-12	RAN#86	R5-197759	0881	-	Addition of test applicabilites for V2X test cases	16.2.0	16.3.0
2019-12	RAN#86	R5-197767	0882	-	Adding test applicability for R13 CA RRM test cases	16.2.0	16.3.0
2019-12	RAN#86	R5-197956	0885	-	Updating applicability for feMTC test case 8.11.1.2.1 and 8.11.1.2.2	16.2.0	16.3.0
2019-12	RAN#86	R5-197957	0886	-	Correcting feMTC condition numbering	16.2.0	16.3.0
2019-12	RAN#86	R5-198023	0887	-	Correction feMTC applicability spec	16.2.0	16.3.0
2019-12	RAN#86	R5-198106	0889	-	Editorial correction to the contents of several Notes in Annex A.4.6	16.2.0	16.3.0

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2019-12	RAN#86	R5-198108	0890	-	Update to applicability for 3DL/3UL TDD CA for UE Transmit Timing Accuracy and Non-Contention Based Random Access Tests for 2 SCells	16.2.0	16.3.0
2019-12	RAN#86	R5-198293	0893	-	Adding applicability for RF test cases 8.7.2.1_A.6 and 8.7.2.1_H.6	16.2.0	16.3.0
2019-12	RAN#86	R5-198348	0894	-	Adding applicability for TC 7.5A.9 and 7.8.1A.9	16.2.0	16.3.0
2019-12	RAN#86	R5-198556	0895	-	Added applicability condition to LTE RRM 6DL and 7DL CA test cases	16.2.0	16.3.0
2019-12	RAN#86	R5-198673	0897	-	Introduction of applicability for new TDD FD-MIMO test cases	16.2.0	16.3.0
2019-12	RAN#86	R5-199448	0883	1	Addition of new feMTC test cases - applicability	16.2.0	16.3.0
2019-12	RAN#86	R5-199449	0884	1	Adding missing feMTC test cases to 36.521-2	16.2.0	16.3.0
2019-12	RAN#86	R5-199454	0896	1	Addition of applicability of RRM test cases	16.2.0	16.3.0
2019-12	RAN#86	R5-199456	0892	1	Update of SDR joint CA test case applicability	16.2.0	16.3.0
2019-12	RAN#86	R5-199505	0891	1	Correction of release column in CA configuration tables	16.2.0	16.3.0
2020-03	RAN#87	R5-200535	0901		Applicability of RRM feMTC Test Cases	16.3.0	16.4.0
2020-03	RAN#87	R5-200991	0899	1	Adding test case 8.11.1.2.3.2 and 8.11.1.2.3.2_1 to applicability	16.3.0	16.4.0
2020-03	RAN#87	R5-200994	0902	1	Adding missing cat M2 test cases to applicability	16.3.0	16.4.0
2020-06	RAN#88	R5-201705	0906	-	Correction to tables of UE categories in TS36.521-2	16.4.0	16.5.0
2020-06	RAN#88	R5-202180	0913	-	Adding applicability for RF test cases 8.7.1.1_A.7,8.7.1.1_H.7,8.7.2.1_A.7 and 8.7.2.1_H.7	16.4.0	16.5.0
2020-06	RAN#88	R5-202232	0915	-	Addition of UE applicability for TC 8.2.1.10 in 36.521-2	16.4.0	16.5.0
2020-06	RAN#88	R5-202444	0916	-	Correction of the CA configuration exception for CA_3A-7B	16.4.0	16.5.0
2020-06	RAN#88	R5-202763	0908	1	Addition of applicability for MOP, MPR, A-MPR & ACLR for CA HPUE	16.4.0	16.5.0
2020-06	RAN#88	R5-202797	0909	1	Correction to applicability table of NB-IoT tests	16.4.0	16.5.0
2020-06	RAN#88	R5-202798	0912	1	Update additional information for test applicability for skipping 2RX Test cases	16.4.0	16.5.0
2020-06	RAN#88	R5-202818	0904	1	Addition of Rel-14 capabilities of multiple CA in 36.521-2	16.4.0	16.5.0
2020-06	RAN#88	R5-202853	0905	1	Addition of Rel-15 capabilities of multiple CA in 36.521-2	16.4.0	16.5.0
2020-06	RAN#88	R5-202868	0911	1	Adding test applicability for Rel-15 NB1 and NB2 Test Cases	16.4.0	16.5.0
2020-06	RAN#88	R5-202936	0903	1	Addition of TS36.521-2 CA Band 5A-29A and 2A-5A-29A	16.4.0	16.5.0
2020-06	RAN#88	R5-202937	0910	1	Correction of UE Category 1bis test case applicability	16.4.0	16.5.0
2020-09	RAN#89	R5-203229	0917	-	Introduction of Baseline Implementation Capabilities for PC2 in LTE Bands 31 and 72	16.5.0	16.6.0
2020-09	RAN#89	R5-203573	0919	-	Addition of applicability for newly introduced 6DL TCs	16.5.0	16.6.0
2020-09	RAN#89	R5-203744	0920	-	Editorial correcting of format for table headings	16.5.0	16.6.0
2020-09	RAN#89	R5-203773	0921	-	Adding applicability for new efeMTC test cases 9.8.3.1, 9.8.3.2, 9.8.4.1, 9.8.4.2	16.5.0	16.6.0
2020-09	RAN#89	R5-203860	0923	-	Update of capability for HPUE	16.5.0	16.6.0
2020-09	RAN#89	R5-203889	0924	-	Adding branch of PC3 and HPUE for 6.6.2.1 and 6.6.2.2 in Table 4.1-1	16.5.0	16.6.0
2020-09	RAN#89	R5-204000	0926	-	Correction Additional Information in Table 4.2-1 of test case 9.2.56 and 9.2.57	16.5.0	16.6.0
2020-09	RAN#89	R5-204159	0927	-	Correction to applicability table of NB-IoT tests	16.5.0	16.6.0
2020-09	RAN#89	R5-204163	0928	-	Updated to applicability table of R15 NB-IoT tests	16.5.0	16.6.0
2020-09	RAN#89	R5-204976	0918	1	Correction of UE Category 1bis test case applicability	16.5.0	16.6.0
2020-09	RAN#89	R5-204977	0925	1	Correction title and description of 6.2.3A.1_3 and 6.2.4A.1_3	16.5.0	16.6.0
2020-12	RAN#90	R5-205077	0929		Void obsolete RRM test cases - Applicability	16.6.0	16.7.0
2020-12	RAN#90	R5-205086	0930		Introduction of Baseline Implementation Capability for LTE Bands 87 and 88	16.6.0	16.7.0
2020-12	RAN#90	R5-205118	0932		Addition of 48C/D to Table A.4.6.1-3	16.6.0	16.7.0
2020-12	RAN#90	R5-205246	0933		Correction to title of test case 6.2.5A.3 and TC 6.2.5A.4 in Table 4.1-1	16.6.0	16.7.0
2020-12	RAN#90	R5-205247	0934		Correction to Condition C20h in Table 4.1-1a	16.6.0	16.7.0
2020-12	RAN#90	R5-205270	0935		Update to applicability 6 DL CA test cases	16.6.0	16.7.0
2020-12	RAN#90	R5-205527	0936		Correction Table 4.1-1 for Applicability of 6.6.2.2A.2 and increase Condition in Table 4.1-1a	16.6.0	16.7.0
2020-12	RAN#90	R5-205691	0937		Update to applicability of NB-IoT ICS and RF tests	16.6.0	16.7.0
2020-12	RAN#90	R5-205692	0938		Update to applicability of NB-IoT RRM tests	16.6.0	16.7.0
2020-12	RAN#90	R5-206610	0946		Addition of new combo to Table A.4.6.3-1 and 41-48 combos to Table A.4.6.3-3	16.6.0	16.7.0
2020-12	RAN#90	R5-206753	0941	1	Addition of Test applicability for NB-IoT RRM Test Cases in TDD mode	16.6.0	16.7.0
2020-12	RAN#90	R5-206754	0943	1	Addition of test applicability of NB-IOT TDD RRM test cases 4.2.35 to 4.2.38	16.6.0	16.7.0
2020-12	RAN#90	R5-206778	0942	1	Correction of test applicability of DL CA Test Case	16.6.0	16.7.0
2020-12	RAN#90	R5-206779	0944	1	Removing V2X MOP test cases	16.6.0	16.7.0
2020-12	RAN#90	R5-206877	0939	1	Addition of test applicability for RF and Demod test cases for sTTI	16.6.0	16.7.0
2020-12	RAN#90	R5-206878	0940	1	Addition of test applicability for RRM test cases for sTTI and short processing time	16.6.0	16.7.0

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2021-03	RAN#91	R5-210482	0949	-	Addition of the Additional Information for some RF test cases in 9.6.1	16.7.0	16.8.0
2021-03	RAN#91	R5-210598	0950	-	Correction to Additional Information of 8.2.1.3.1_A and 8.7.1.1_A in Table 4.1-1	16.7.0	16.8.0
2021-03	RAN#91	R5-210889	0952	-	Addition of applicability for NB-IoT RRM TDD Test Cases	16.7.0	16.8.0
2021-03	RAN#91	R5-210990	0954	-	Addition of Note 7 in the Additional Information column of RF conformance test cases with 2Rx and 4Rx Branch in section 8 and section 9	16.7.0	16.8.0
2021-03	RAN#91	R5-211752	0947	1	Update to applicability TDD FDD 7DL CA Performance test cases	16.7.0	16.8.0
2021-03	RAN#91	R5-211757	0957	1	Introduction of CA Idle Mode Measurement RRM Testcase Applicabilities	16.7.0	16.8.0
2021-03	RAN#91	R5-211803	0955	1	Correction of Table 4.1-1	16.7.0	16.8.0
2021-03	RAN#91	R5-211844	0948	1	Correction of applicability definition for 2Rx related test cases to exclude category 1bis UEs equipped with single Rx antenna	16.7.0	16.8.0
2021-03	RAN#91	R5-211845	0953	1	Correct of test applicability for TC with and without UL CA	16.7.0	16.8.0
2021-03	RAN#91	R5-211846	0956	1	Correction of Table A.4.3-3d	16.7.0	16.8.0
2021-06	RAN#92	R5-212756	0959	-	Addition of Table 4.1-7 7DL CA Name and Release mapping	16.8.0	16.9.0
2021-06	RAN#92	R5-212759	0960	-	Update to applicability for 7DL CA TCs 7.6.1A.10 7.6.2A.10 7.6.3A.10 and 7.7A.10	16.8.0	16.9.0
2021-06	RAN#92	R5-212878	0961	-	Addition of applicability for NB-IoT RRM TDD Test Cases	16.8.0	16.9.0
2021-06	RAN#92	R5-212881	0962	-	Correct of test applicability for TC with ULCA	16.8.0	16.9.0
2021-06	RAN#92	R5-213197	0963	-	Introduction of CA Idle Mode Measurement RSRQ RRM Testcase Applicabilities	16.8.0	16.9.0
2021-06	RAN#92	R5-213832	0958	1	Update to applicability TDD 5DL CA sustained data rate performance for CA test case	16.8.0	16.9.0

History

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