

# ETSI TS 138 521-2 v16.14.0 (2023-01)



**5G;  
NR;**

**User Equipment (UE) conformance specification;  
Radio transmission and reception;  
Part 2: Range 2 standalone  
(3GPP TS 38.521-2 version 16.14.0 Release 16)**



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Reference

RTS/TSGR-0538521-2vge0

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Keywords

5G

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## Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

The present document is part 2 of a multi-part Technical Specification (TS) covering the New Radio (NR) User Equipment (UE) conformance specification, which is divided in the following parts:

3GPP TS 38.521-1 [13]: NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: Range 1 Standalone;

**3GPP TS 38.521-2: NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Range 2 Standalone;**

3GPP TS 38.521-3 [14]: NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 3: Range 1 and Range 2 Interworking operation with other radios;

3GPP TS 38.521-4 [15]: NR; User Equipment conformance specification; Radio transmission and reception; Part 4: Performance;

3GPP TS 38.522 [16]: NR; User Equipment (UE) conformance specification; Applicability of radio transmission, radio reception and radio resource management test cases;

3GPP TS 38.533 [17]: NR; User Equipment (UE) conformance specification; Radio resource management (RRM);

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## 1 Scope

The present document specifies the measurement procedures for the conformance test of the user equipment (UE) that contain RF characteristics for frequency Range 2 as part of the 5G-NR.

The requirements are listed in different clauses only if the corresponding parameters deviate. More generally, tests are only applicable to those mobiles that are intended to support the appropriate functionality. To indicate the circumstances in which tests apply, this is noted in the "*definition and applicability*" part of the test.

For example only Release 15 and later UE declared to support 5G-NR shall be tested for this functionality. In the event that for some tests different conditions apply for different releases, this is indicated within the text of the test itself.

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## 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*.

[1] to [28] (void)

[29] 3GPP TS 38.521-2 Release 17: "NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Range 2 Standalone"

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## 3 Definitions, symbols and abbreviations

Void

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## 4 General

The requirements of the present document are provided in 3GPP TS 38.521-2 Release 17 [29].

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## 5 to 7 Void

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## Annex A to P: Void

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## Annex Q (informative): Change history

Change history							
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
2017-08	RAN5 #76	R5-174709	-	-	-	Draft skeleton	0.0.1
2018-01	RAN5#1-5G-NR Adhoc	R5-180002	-	-	-	Add references	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180103	-	-	-	Add definitions, symbols and abbreviations	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180104	-	-	-	Introduction of Operating bands and Channel arrangement	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180094	-	-	-	Introduction of new test case 6.3.2 Transmit OFF power	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180095	-	-	-	TP to add skeleton of 6.5.1 Occupied bandwidth to 38.521-2	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180096	-	-	-	TP to add skeleton of 6.5.2.1 SEM to 38.521-2	0.1.0
2018-01	RAN5#1-5G-NR Adhoc	R5-180097	-	-	-	TP to add skeleton of 6.5.2.3 ACLR to 38.521-2	0.1.0
2018-03	RAN5 #78	R5-181508	-	-	-	Updated 38.521-2 to extend Annex with additional testing information	0.2.0
2018-03	RAN5 #78	R5-181680	-	-	-	TP to skeleton of 7.6.1 Inband blocking to 38.521-2	0.2.0
2018-03	RAN5 #78	R5-181681	-	-	-	5G-NR: Text Proposal to add spurious emissions test case to 38.521-2	0.2.0
2018-04	RAN5#2-5G-NR Adhoc	R5-181978	-	-	-	Update TS 38.521-2 further to align with the latest TS 38.101-2 spec structure.	0.3.1
2018-04	RAN5#2-5G-NR Adhoc	R5-182027	-	-	-	5G-NR Text Proposal to update spurious emissions test case to 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182041</a>	-	-	-	5G-NR Text Proposal to add REFSENS test case to 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182009</a>	-	-	-	General section updated to 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	R5-182048	-	-	-	Addition of FR2 test case 6.3.1 Minimum Output Power	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182049</a>	-	-	-	Addition of FR2 test case 6.3.3.2 General ON/OFF time mask	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	R5-181839	-	-	-	Definitions and abbreviations updated to 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-181840</a>	-	-	-	Operating bands and Channel arrangement updated to 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182008</a>	-	-	-	Introduction of new test case 7.4 Maximum input level	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182010</a>	-	-	-	Common uplink configuration table for Tx test cases for TS 38.521-2 non-CA	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182011</a>	-	-	-	TP for 6.5.1 Occupied Bandwidth in TS 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182029</a>	-	-	-	TP for 6.5.2.1 Spectrum Emission Mask in TS 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182031</a>	-	-	-	TP for 6.5.2.3 Adjacent Channel Leakage Ratio in TS 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182043</a>	-	-	-	TP for 7.6.2 InBand Blocking in TS 38.521-2	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-182046</a>	-	-	-	TP for 7.5 Adjacent channel selectivity in TS 38.521-2	0.4.0

2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-181844</a>	-	-	-	Add Annex G (normative): Measurement uncertainties and Test Tolerances	0.4.0
2018-04	RAN5#2-5G-NR Adhoc	<a href="#">R5-181844</a>	-	-	-	Add clause 4.4 Test point analysis	0.4.0
2018-05	RAN5 #79	<a href="#">R5-183908</a>	-	-	-	Introduction of New FR2 test case 6.3.3.4 PRACH time mask	0.5.0
2018-05	RAN5 #79	<a href="#">R5-182769</a>	-	-	-	General section updated to 38.521-2	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183914</a>	-	-	-	TP for FR2 spurious test procedure (38.521-2)	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183925</a>	-	-	-	Update of Refsens test procedure for FR2	0.5.0
2018-05	RAN5 #79	<a href="#">R5-182883</a>	-	-	-	Definitions, symbols and abbreviations updated to 38.521-2	0.5.0
2018-05	RAN5 #79	<a href="#">R5-182884</a>	-	-	-	Operating bands and Channel arrangement updated to 38.521-2	0.5.0
2018-05	RAN5 #79	<a href="#">R5-182890</a>	-	-	-	Update minimum conformance requirements and test requirement for 6.3.2 Transmit OFF power	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183926</a>	-	-	-	Annex for test case applicability per permitted test method	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183712</a>	-	-	-	Corrections annexes for EIRP and TRP metric definition	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183927</a>	-	-	-	Clean up TBD from Occupied Bandwidth, SEM and ACLR test cases	0.5.0
2018-05	RAN5 #79	<a href="#">R5-183928</a>	-	-	-	Clean up TBD from ACS and Inband Blocking test cases	0.5.0
2018-05	RAN5 #79	R5-183948	-	-	-	Statistical Testing Annex for 38.521-2	0.5.0
2018-08	RAN5 #80	R5-185348	-	-	-	Correction to FR2 Spurious TC and introduction of TRP measurement grid requirement	1.0.0
2018-08	RAN5 #80	R5-185350	-	-	-	Addition of Frequency Error test case to TS 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185490	-	-	-	FR2_TxSpurious_TestConfig_38.521-2	1.0.0
2018-08	RAN5 #80	R5-185562	-	-	-	FR2_StoreTxRxBeamPeakCoordinates_38.521-2	1.0.0
2018-08	RAN5 #80	<a href="#">R5-184742</a>	-	-	-	Update of FR2 test case 6.3.1	1.0.0
2018-08	RAN5 #80	<a href="#">R5-184743</a>	-	-	-	Update of FR2 test case 6.3.3.2	1.0.0
2018-08	RAN5 #80	<a href="#">R5-184856</a>	-	-	-	General sections updated to 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185519	-	-	-	Updates of FR2 TRx MU and TT in Annex	1.0.0
2018-08	RAN5 #80	R5-185555	-	-	-	FR2 UE_BeamlockInvoke_38.521-2	1.0.0
2018-08	RAN5 #80	R5-185191	-	-	-	Update to Occupied Bandwidth, SEM and ACLR test cases in TS 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185192	-	-	-	Update to ACS and inband blocking test cases in TS 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185187	-	-	-	FR2_RefSens_TestConfig_38.521-2	1.0.0
2018-08	RAN5 #80	R5-185188	-	-	-	DL and UL RMC updated for FR2 tests	1.0.0
2018-08	RAN5 #80	R5-185189	-	-	-	Downlink physical channel updated for FR2 tests	1.0.0
2018-08	RAN5 #80	R5-185190	-	-	-	OCNG Patterns updated for FR2 tests	1.0.0
2018-08	RAN5 #80	R5-185194	-	-	-	Update to Test frequencies for SEM in TS 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185196	-	-	-	Addition of Carrier Leakage test case to TS 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185193	-	-	-	Addition of Annex Global In-Channel TX-Test to 38.521-2	1.0.0
2018-08	RAN5 #80	R5-185197	-	-	-	Introduction of maximum output power test cases	1.0.0
2018-08	RAN5 #80	R5-185195	-	-	-	Addition of EVM test case to TS 38.521-2	1.0.0
2018-09	RAN #81	-	-	-	-	raised to v15.0.0 with editorial changes only	15.0.0
2018-12	RAN #82	R5-186504	0021	-	F	FR2 RefSens test case updates	15.1.0
2018-12	RAN #82	R5-186505	0022	-	F	Update Text on Store Beam Peak Coordinate	15.1.0
2018-12	RAN #82	R5-186510	0023	-	F	Structure updates to Annex C and G	15.1.0
2018-12	RAN #82	R5-186675	0026	-	F	Updating test case 6.2.3 maximum output power with additional requirements	15.1.0
2018-12	RAN #82	R5-187151	0034	-	F	Updated to Annexes for FR2 tests	15.1.0
2018-12	RAN #82	R5-187152	0035	-	F	General Information updated for TS38.521-2	15.1.0
2018-12	RAN #82	R5-187561	0042	-	F	Update to Table 5.3.5-1 in TS 38.521-2	15.1.0
2018-12	RAN #82	R5-187619	0050	-	F	Update of Section 6.3.3.1 General	15.1.0
2018-12	RAN #82	R5-187838	0045	1	F	Update of transmit signal quality test cases in 38.521-2	15.1.0
2018-12	RAN #82	R5-187839	0046	1	F	Addition of In-band Emissions test case to TS 38.521-2	15.1.0
2018-12	RAN #82	R5-187840	0047	1	F	Addition of EVM equalizer spectral flatness test cases 6.4.2.4 and 6.4.2.5 to TS 38.521-2	15.1.0
2018-12	RAN #82	R5-187841	0048	1	F	Update of Common Uplink Configuration for FR2	15.1.0
2018-12	RAN #82	R5-187842	0029	1	F	General sections updated to 38.521-2	15.1.0
2018-12	RAN #82	R5-187843	0044	1	F	Update of Global In-channel Tx Test Annex in 38.521-2	15.1.0
2018-12	RAN #82	R5-187886	0020	1	F	FR2 Spurious Emission test case updates	15.1.0
2018-12	RAN #82	R5-187912	0038	1	F	Addition of notes to clarify test point selection into general section of TS 38.521-2	15.1.0
2018-12	RAN #82	R5-188037	0032	1	F	Removing the Editor's notes of SA messages and procedures for all FR2 test cases	15.1.0
2018-12	RAN #82	R5-188038	0036	1	F	FR2 downlink signal level(38.521-2)	15.1.0
2018-12	RAN #82	R5-188063	0027	1	F	Update of FR2 6.3.2 Transmit OFF power	15.1.0
2018-12	RAN #82	R5-188212	0040	2	F	Updates to maximum output power test cases	15.1.0
2018-12	RAN #82	R5-188213	0028	1	F	Update of FR2 test case 7.4	15.1.0
2018-12	RAN #82	R5-188214	0025	1	F	Updates of TT in TS 38.521-2 Annex F during RAN5#81	15.1.0
2018-12	RAN #82	R5-188215	0031	1	F	TDD configuration for UE Tx test in FR2	15.1.0
2018-12	RAN #82	R5-188216	0039	1	F	Core alignment CR to capture TS 38.101-2 updates during RAN4#89	15.1.0
2018-12	RAN #82	R5-188217	0041	2	F	On measurement grids	15.1.0

2018-12	RAN #82	R5-188218	0043	1	F	Update to Annex K	15.1.0
2018-12	RAN #82	RP-182736	0024	2	F	Updates of MU Annex F	15.1.0
2019-03	RAN #83	R5-191091	0083	-	F	Updates of TT in TS38.521-2 Annex F during RAN5#NR4	15.2.0
2019-03	RAN #83	R5-191092	0084	-	F	Editorial correction of core alignment in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-191093	0085	-	F	Editorial cleaning up of test configuration tables in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-191246	0086	-	F	Update TRP measurement procedure Annex in TS38.521-2	15.2.0
2019-03	RAN #83	R5-191247	0087	-	F	Update Annex K and Annex M in TS38.521-2	15.2.0
2019-03	RAN #83	R5-191259	0088	-	F	Update to FR2 test case 6.3.3.4 PRACH time mask	15.2.0
2019-03	RAN #83	R5-191507	0090	-	F	Shared Risk clarification in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-191609	0093	-	F	CR to TS 38.521-2 to add text proposal for Annex F.1	15.2.0
2019-03	RAN #83	R5-191676	0094	-	F	Addition of FR2 6.2.4 Configured transmitted power	15.2.0
2019-03	RAN #83	R5-191677	0095	-	F	Update of FR2 6.3.1 Minimum Output Power	15.2.0
2019-03	RAN #83	R5-191679	0096	-	F	Addition of FR2 6.3.4.2 Absolute power tolerance	15.2.0
2019-03	RAN #83	R5-191680	0097	-	F	Update of FR2 6.3.3.2 General ON/OFF time mask	15.2.0
2019-03	RAN #83	R5-191793	0098	-	F	Introduction of Minimum output power for 2UL CA	15.2.0
2019-03	RAN #83	R5-191809	0099	-	F	OBW test procedure update for 38.521-2	15.2.0
2019-03	RAN #83	R5-191812	0100	-	F	FR2 Spurious Emission test case updates	15.2.0
2019-03	RAN #83	R5-191824	0102	-	F	Update to Annex K and Annex L	15.2.0
2019-03	RAN #83	R5-191986	0107	-	F	Introduction of Annex on Characteristics of the Interfering Signal FR2	15.2.0
2019-03	RAN #83	R5-192092	0110	-	F	Test mode and test loop function activation in SA Tx RF test cases in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-192095	0111	-	F	Test mode and test loop function activation in SA Rx RF test cases in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-192122	0112	-	F	Update of Global In-channel Tx Test Annex for FR2	15.2.0
2019-03	RAN #83	R5-192450	0089	1	F	Update of test case 6.3.4.3, Relative power tolerance in 38.521-2	15.2.0
2019-03	RAN #83	R5-192451	0082	1	F	Updates of test environment for frequency error	15.2.0
2019-03	RAN #83	R5-192452	0105	1	F	FR2 SA Spurious Emission Coexistence test case	15.2.0
2019-03	RAN #83	R5-192648	0106	1	F	Introduction of Aggregate power tolerance in NR SA FR2	15.2.0
2019-03	RAN #83	R5-192649	0117	1	F	CR to add UL RMC for 60kHz SCS in Annex A.2.3	15.2.0
2019-03	RAN #83	R5-192650	0113	1	F	Update of transmit signal quality test cases for FR2	15.2.0
2019-03	RAN #83	R5-192651	0114	1	F	Update OBW test case in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-192652	0115	1	F	Update SEM test case in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-192653	0116	1	F	Update ACLR test case in TS 38.521-2	15.2.0
2019-03	RAN #83	R5-192654	0101	1	F	FR2 Reference Sensitivity test case updates	15.2.0
2019-03	RAN #83	R5-192655	0104	1	F	FR2 Reference Sensitivity EIS spherical coverage	15.2.0
2019-03	RAN #83	R5-192667	0108	1	F	Update of Annex F.2	15.2.0
2019-03	RAN #83	R5-192849	0080	2	F	Updates of MU in TS38.521-2 Annex F during RAN5#82	15.2.0
2019-03	RAN #83	R5-192843	0081	2	F	Updates of TT in TS38.521-2 Annex F during RAN5#82	15.2.0
2019-03	RAN #83	R5-192680	0103	1	F	38.521-2 Editor's Note Updates	15.2.0
2019-03	RAN #83	RP-190746	0118	4	F	Updates to maximum output power test cases	15.2.0
2019-03	RAN #83	-	-	-	-	Editorial correction of references to TS 38.508-1 clause 4.6 tables	15.2.0
2019-06	RAN#84	R5-193541	0137	-	F	Alignment of scheduling of DL RMC with scheduling of UL RMC	15.3.0
2019-06	RAN#84	R5-193552	0138	-	F	Core alignment of RAN4 pending issues in TS 38.521-2	15.3.0
2019-06	RAN#84	R5-193575	0143	-	F	Correction of 38.521-2 7.4	15.3.0
2019-06	RAN#84	R5-193749	0151	-	F	Updates of ACLR test procedure	15.3.0
2019-06	RAN#84	R5-193820	0152	-	F	Correction of 38.521-2 clause 2 to 5	15.3.0
2019-06	RAN#84	R5-194009	0153	-	F	FR2 Reference Sensitivity test case updates	15.3.0
2019-06	RAN#84	R5-194243	0161	-	F	Addition FR2 blocking measurement procedure in Annex K	15.3.0
2019-06	RAN#84	R5-194264	0163	-	F	Correction to FR2 EIRP test configurations	15.3.0
2019-06	RAN#84	R5-194265	0164	-	F	Correction to FR2 EIS test configurations	15.3.0
2019-06	RAN#84	R5-194269	0165	-	F	Update FR2 ACS and Inband blocking test cases	15.3.0
2019-06	RAN#84	R5-194461	0170	-	F	Update to 6.2.3 A-MPR FR2	15.3.0
2019-06	RAN#84	R5-194618	0171	-	F	Update of Global In-channel Tx Test Annex for FR2	15.3.0
2019-06	RAN#84	R5-194958	0139	1	F	Updates of MU and TT in TS 38.521-2 Annex F during RAN5#NR5	15.3.0
2019-06	RAN#84	R5-194968	0167	1	F	Update of TC 6.3A.1.1 Minimum output power for 2UL CA	15.3.0
2019-06	RAN#84	R5-194969	0166	1	F	Clean up FR2 SA test cases	15.3.0
2019-06	RAN#84	R5-194970	0160	1	F	Introduction of beam correspondence	15.3.0
2019-06	RAN#84	R5-194971	0162	1	F	Introduction of beam correspondence for CA	15.3.0
2019-06	RAN#84	R5-194976	0173	1	F	Update of Frequency Error Test Case for FR2	15.3.0
2019-06	RAN#84	R5-194977	0175	1	F	Editorial corrections for 6.2.1 UE maximum output power	15.3.0
2019-06	RAN#84	R5-195080	0176	-	F	Update of FR2 ON_ON time mask test cases	15.3.0
2019-06	RAN#84	R5-195147	0141	1	F	Addition of new SA FR2 RF test case 6.2.2	15.3.0
2019-06	RAN#84	R5-195149	0142	1	F	Correction of 38.521-2 6.3.2	15.3.0
2019-06	RAN#84	R5-195151	0144	1	F	Introduction of MOP (SA UL CA)	15.3.0
2019-06	RAN#84	R5-195152	0145	1	F	Introduction of OFF power (SA UL CA)	15.3.0
2019-06	RAN#84	R5-195153	0146	1	F	Introduction of Frequency error (SA UL CA)	15.3.0
2019-06	RAN#84	R5-195154	0148	1	F	Introduction of SEM (SA UL CA)	15.3.0
2019-06	RAN#84	R5-195155	0149	1	F	Introduction of ACLR (SA UL CA)	15.3.0
2019-06	RAN#84	R5-195156	0150	1	F	Introduction of General Spurious (SA UL CA)	15.3.0

2019-06	RAN#84	R5-195157	0157	1	F	Introduction of New test case 6.5A.1.1 Occupied bandwidth for CA (2UL CA)	15.3.0
2019-06	RAN#84	R5-195158	0156	1	F	Update Out of band emission test cases in TS 38.521-2	15.3.0
2019-06	RAN#84	R5-195160	0159	1	F	Introduction of SRS time mask for UL-MIMO	15.3.0
2019-06	RAN#84	R5-195404	0172	1	F	Update of transmit signal quality test cases for FR2	15.3.0
2019-06	RAN#84	R5-195417	0154	1	F	38.521-2 implementation of FR2 UL demod OTA tests using single pol Rx TE	15.3.0
2019-06	RAN#84	R5-195432	0168	2	F	Update to 6.2.1.1 UE maximum output power - EIRP and TRP	15.3.0
2019-06	RAN#84	R5-195433	0169	2	F	Update to 6.2.1.2 UE maximum output power - Spherical coverage	15.3.0
2019-06	RAN#84	R5-195434	0140	1	F	Updates of MU and TT in TS 38.521-2	15.3.0
2019-06	RAN#84	R5-195435	0155	1	F	Core alignment with TS 38.101-2	15.3.0
2019-06	RAN#84	-	-	-	-	Administrative release upgrade to match the release of 3GPP TS 38.508-1 and TS 38.521-1 which were upgraded at RAN#84 to Rel-16 due to Rel-16 relevant CR(s)	16.0.0
2019-09	RAN#85	R5-195695	0178	-	F	Change of TS 38.521-2 UL CA MOP Minimum conformance requirements	16.1.0
2019-09	RAN#85	R5-196069	0194	-	F	Introduction of absolute power tolerance for CA test cases	16.1.0
2019-09	RAN#85	R5-196165	0198	-	F	Correction of wrong spec reference numbers for TS 38.508-1	16.1.0
2019-09	RAN#85	R5-196236	0202	-	F	Correction to test procedure of TC 6.4.2.2 Carrier Leakage	16.1.0
2019-09	RAN#85	R5-196240	0206	-	F	Clarification on EVM test requirement for PUCCH and PRACH	16.1.0
2019-09	RAN#85	R5-196427	0208	-	F	Update of FR2 6.2.4 Configured transmitted power	16.1.0
2019-09	RAN#85	R5-196428	0209	-	F	Update of FR2 6.3.3.2 General ON/OFF time mask	16.1.0
2019-09	RAN#85	R5-196431	0211	-	F	Addition of FR2 6.2A.4 Configured transmitted power for 2UL CA	16.1.0
2019-09	RAN#85	R5-196433	0213	-	F	Addition of FR2 6.2D.4 Configured transmitted power for UL MIMO	16.1.0
2019-09	RAN#85	R5-196434	0214	-	F	Addition of FR2 6.3D.1 Minimum output power for UL MIMO	16.1.0
2019-09	RAN#85	R5-196594	0220	-	F	Addition of new test case 6.4A.2.1.2 Error vector magnitude for 3UL CA in FR2	16.1.0
2019-09	RAN#85	R5-196595	0221	-	F	Addition of new test case 6.4A.2.1.3 Error vector magnitude for 4UL CA in FR2	16.1.0
2019-09	RAN#85	R5-196650	0225	-	F	Update of Minimum conformance requirements and test configurations in TC 6.2.2	16.1.0
2019-09	RAN#85	R5-196810	0229	-	F	Update to TRP measurement grid section in TS 38.521-2	16.1.0
2019-09	RAN#85	R5-196950	0239	-	F	Corrections on clause 2 and 3 in 38.521-2	16.1.0
2019-09	RAN#85	R5-197384	0197	1	F	Update UL-MIMO to UL MIMO to align with RAN4 terminology in FR2	16.1.0
2019-09	RAN#85	R5-197385	0238	1	F	Update OBW FR2 test case	16.1.0
2019-09	RAN#85	R5-197386	0200	1	F	Alignment of clause 2 to 5 with the core spec	16.1.0
2019-09	RAN#85	R5-197387	0242	-	F	Integrating the QoQZ Procedures into 38.521-2	16.1.0
2019-09	RAN#85	R5-197388	0219	1	F	Addition of new test case 6.4A.2.1.1 Error vector magnitude for 2UL CA in FR2	16.1.0
2019-09	RAN#85	R5-197389	0222	1	F	Update of TC 6.3A.1.1 Minimum output power for 2UL CA	16.1.0
2019-09	RAN#85	R5-197390	0223	1	F	Addition of new test case 6.3A.1.2 Minimum output power for 3UL CA in FR2	16.1.0
2019-09	RAN#85	R5-197391	0224	1	F	Addition of new test case 6.3A.1.3 Minimum output power for 4UL CA in FR2	16.1.0
2019-09	RAN#85	R5-197392	0227	1	F	Update of Common Uplink Configuration table for PC3	16.1.0
2019-09	RAN#85	R5-197393	0212	1	F	Addition of FR2 6.3A.3 ON/OFF time mask for 2 UL CA	16.1.0
2019-09	RAN#85	R5-197394	0215	1	F	Addition of FR2 6.3D.3 General ON/OFF power for UL MIMO	16.1.0
2019-09	RAN#85	R5-197395	0199	1	F	Addition of new Annex N (normative): UE coordinate system	16.1.0
2019-09	RAN#85	R5-197500	0231	1	F	Update of Spurious Emissions TRP test procedure	16.1.0
2019-09	RAN#85	R5-197501	0233	1	F	Update of FR2 MUs in TS 38.521-2	16.1.0
2019-09	RAN#85	R5-197503	0230	1	F	Update of TRP measurement grids for spurious emissions	16.1.0
2019-09	RAN#85	R5-197529	0180	1	F	New Introduction of TC 6.2A.1.2.1 UE Maximum output power Spherical coverage 2UL CA	16.1.0
2019-09	RAN#85	R5-197530	0181	1	F	New Introduction of TC 6.2A.1.2.2 UE Maximum output power Spherical coverage 3UL CA	16.1.0
2019-09	RAN#85	R5-197531	0182	1	F	New Introduction of TC 6.2A.1.2.3 UE Maximum output power Spherical coverage 4UL CA	16.1.0
2019-09	RAN#85	R5-197532	0183	1	F	New Introduction of TC 6.4A.2.2.1 Carrier leakage 2UL CA	16.1.0
2019-09	RAN#85	R5-197533	0184	1	F	New Introduction of TC 6.4A.2.2.2 Carrier leakage 3UL CA	16.1.0
2019-09	RAN#85	R5-197534	0185	1	F	New Introduction of TC 6.4A.2.2.3 Carrier leakage 4UL CA	16.1.0
2019-09	RAN#85	R5-197535	0189	1	F	Rel-16_NR_38.521-2_Addition of new TC 6.2A.1.1.1	16.1.0
2019-09	RAN#85	R5-197536	0193	1	F	Additions to the SRS time mask for UL-MIMO test case	16.1.0
2019-09	RAN#85	R5-197537	0195	1	F	Additions to the beam correspondence test case	16.1.0
2019-09	RAN#85	R5-197538	0203	1	F	Correction to RB allocation in 6.2.2 UE maximum output power reduction	16.1.0
2019-09	RAN#85	R5-197539	0204	1	F	Correction to number of measurements of 6.4.2.3 In-band emissions	16.1.0
2019-09	RAN#85	R5-197540	0205	1	F	Correction to UBF in transmit modulation quality test cases	16.1.0
2019-09	RAN#85	R5-197541	0226	1	F	Update of FR2 A-MPR test case	16.1.0
2019-09	RAN#85	R5-197543	0190	1	F	Refsens test case updates	16.1.0
2019-09	RAN#85	R5-197544	0196	1	F	Introduction of beam correspondence to direct far field (DFF)	16.1.0
2019-09	RAN#85	R5-197545	0216	1	F	Updated to Annex A for RF FR2 tests	16.1.0

2019-09	RAN#85	R5-197546	0232	1	F	Integrating the Re-Positioning Concept into Annex K	16.1.0
2019-09	RAN#85	R5-197614	0191	1	F	Spurious test case updates	16.1.0
2019-09	RAN#85	R5-197642	0201	1	F	Correction to 6.5.2.1 SEM and 6.5.2.3 ACLR to consider MPR values	16.1.0
2019-09	RAN#85	R5-197643	0210	2	F	Addition of FR2 6.2A.2 MPR for 2 UL CA	16.1.0
2019-09	RAN#85	R5-197644	0177	2	F	Updates of MU and TT in TS 38.521-2	16.1.0
2019-09	RAN#85	R5-197645	0234	2	F	Addition of the connection setup in TS 38.521-2	16.1.0
2019-12	RAN#86	R5-198072	0247	-	F	Introduction of 4 New test cases 6.5A.1 Occupied bandwidth for CA	16.2.0
2019-12	RAN#86	R5-198073	0248	-	F	Introduction of 4 New test cases 6.5A.2.1 Spectrum Emission Mask for CA	16.2.0
2019-12	RAN#86	R5-198075	0249	-	F	Introduction of 4 New test cases 6.5A.2.2 Adjacent channel leakage ratio for CA	16.2.0
2019-12	RAN#86	R5-198078	0250	-	F	New Introduction of TC 6.2A.1.2.4 UE maximum output power - Spherical coverage 5UL CA	16.2.0
2019-12	RAN#86	R5-198079	0251	-	F	New Introduction of TC 6.2A.1.2.5 UE maximum output power - Spherical coverage 6UL CA	16.2.0
2019-12	RAN#86	R5-198080	0252	-	F	New Introduction of TC 6.2A.1.2.6 UE maximum output power - Spherical coverage 7UL CA	16.2.0
2019-12	RAN#86	R5-198081	0253	-	F	New Introduction of TC 6.2A.1.2.7 UE maximum output power - Spherical coverage 8UL CA	16.2.0
2019-12	RAN#86	R5-198210	0260	-	F	Addition of Common Uplink Configuration for PC1 in SA FR2 6.1	16.2.0
2019-12	RAN#86	R5-198381	0267	-	F	Introduction of beam correspondence side conditions	16.2.0
2019-12	RAN#86	R5-198385	0269	-	F	Update of minimum conformance requirements for SA FR2 7.4	16.2.0
2019-12	RAN#86	R5-198636	0276	-	F	General clause updated for FR2 spec	16.2.0
2019-12	RAN#86	R5-198730	0278	-	F	Correction of test requirements	16.2.0
2019-12	RAN#86	R5-199086	0262	1	F	CR to 38.521-2 on Measurement Grids for PC1 UEs	16.2.0
2019-12	RAN#86	R5-199087	0243	2	F	Updates of MU and TT in TS 38.521-2	16.2.0
2019-12	RAN#86	R5-199356	0245	1	F	Update of FR2 6.3.3.2 ON-OFF time mask	16.2.0
2019-12	RAN#86	R5-199357	0244	1	F	Update of FR2 6.3.1 minimum output power	16.2.0
2019-12	RAN#86	R5-199358	0263	1	F	CR to 38.521-2 on optimized search procedure for REFSENS	16.2.0
2019-12	RAN#86	R5-199359	0264	1	F	CR to 38.521-2 on optimized search procedure for RX Beam Peak Search	16.2.0
2019-12	RAN#86	R5-199360	0254	1	F	Updating incorrect note in test procedure	16.2.0
2019-12	RAN#86	R5-199361	0256	1	F	Spurious UL MIMO test case updates	16.2.0
2019-12	RAN#86	R5-199373	0265	1	F	Introduction of New TC 6.4A.2.3.1 In-band emissions for 2UL CA	16.2.0
2019-12	RAN#86	R5-199374	0266	1	F	Update to test case 6.3.3.4 PRACH time mask in FR2	16.2.0
2019-12	RAN#86	R5-199375	0257	1	F	Ref Sens UL MIMO test case updates	16.2.0
2019-12	RAN#86	R5-199376	0258	1	F	Alignment of clause 3 to 5 with the core spec	16.2.0
2019-12	RAN#86	R5-199461	0271	2	F	Further updates to the SRS time mask for UL-MIMO test case	16.2.0
2019-12	RAN#86	R5-199473	0282	-	F	Update to UE maximum output power - Spherical coverage	16.2.0
2019-12	RAN#86	R5-199483	0277	1	F	Update of applicability for Spherical coverage and Beam Correspondence test cases	16.2.0
2019-12	RAN#86	R5-199494	0281	1	F	Add section 4.5 Applicability and test coverage rules	16.2.0
2019-12	RAN#86	R5-199495	0246	1	F	Update of FR2 6.3.4.2 absolute power tolerance	16.2.0
2019-12	RAN#86	R5-199496	0270	1	F	Further updates to the absolute power tolerance for CA test cases	16.2.0
2019-12	RAN#86	R5-199504	0259	1	F	Addition of test requirements and update of minimum conformance requirements and test configurations for SA FR2 6.2.2	16.2.0
2019-12	RAN#86	R5-199548	0268	1	F	Updates to the beam correspondence TC	16.2.0
2019-12	RAN#86	R5-199579	0279	1	F	Update of quality of quiet zone validation procedure	16.2.0
2019-12	RAN#86	R5-199586	0275	1	F	Update on FR2 Spurious Test in 38.521-2	16.2.0
2020-03	RAN#87	R5-200319	0288		F	CR to 38.521-2 on CDF/PDF Scaling Factor	16.3.0
2020-03	RAN#87	R5-200320	0289		F	CR to 38.521-2: Correction to TRP grid	16.3.0
2020-03	RAN#87	R5-200368	0292		F	Addition of new test case 6.3A.1.4 Minimum output power for 5UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200369	0293		F	Addition of new test case 6.3A.1.5 Minimum output power for 6UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200372	0294		F	Addition of new test case 6.3A.1.6 Minimum output power for 7UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200374	0295		F	Addition of new test case 6.3A.1.7 Minimum output power for 8UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200375	0296		F	Addition of new test case 6.4A.2.1.4 Error vector magnitude for 5UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200376	0297		F	Addition of new test case 6.4A.2.1.5 Error vector magnitude for 6UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200377	0298		F	Addition of new test case 6.4A.2.1.6 Error vector magnitude for 7UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200382	0300		F	Addition of new test case 6.4A.2.1.7 Error vector magnitude for 8UL CA in FR2	16.3.0
2020-03	RAN#87	R5-200383	0301		F	Update of test cases for Error vector magnitude for CA in FR2	16.3.0
2020-03	RAN#87	R5-200418	0302		F	Update of Operating bands and Channel arrangement of SA FR2 R15	16.3.0
2020-03	RAN#87	R5-200444	0303		F	Clarification of measurement interval of frequency error in FR2	16.3.0
2020-03	RAN#87	R5-200557	0309		F	Clarify absolute power tolerance for CA TP3	16.3.0

2020-03	RAN#87	R5-200602	0312		F	Updates to reference sensitivity test case	16.3.0
2020-03	RAN#87	R5-200656	0317		F	Correction of Editor's note of 6.2.2 and 6.3.2 of SA FR2 R15	16.3.0
2020-03	RAN#87	R5-201248	0318	1	F	Alignment of Table A.3.1-1 in 38.521-2 to core spec 38.101-2	16.3.0
2020-03	RAN#87	R5-200800	0319		F	Update of Standalone FR2 A-MPR test case	16.3.0
2020-03	RAN#87	R5-200894	0286	1	F	Correction to TC 6.3.4.4 Aggregate power tolerance	16.3.0
2020-03	RAN#87	R5-200910	0310	1	F	Beam correspondence TC message contents clarifications	16.3.0
2020-03	RAN#87	R5-200911	0285	1	F	Update of Clause 4 in TS 38.521-2	16.3.0
2020-03	RAN#87	R5-200980	0284	1	F	Correction of reference numbers in TS 38.521-2	16.3.0
2020-03	RAN#87	R5-200992	0291	1	F	Updates of MU and TT in TS 38.521-2 for Rel-16	16.3.0
2020-03	RAN#87	R5-201059	0305	1	F	Update of rx beampeak search	16.3.0
2020-03	RAN#87	R5-201060	0307	1	F	Update of absolute power tolerance for test point 3	16.3.0
2020-03	RAN#87	R5-201161	0313	1	F	Updates to test case relative power tolerance 6.3.4.3	16.3.0
2020-03	RAN#87	R5-201192	0283	1	F	Updates of MU and TT in TS 38.521-2	16.3.0
2020-03	RAN#87	R5-201244	0311	3	F	Correction of the FR2 RMC slot patterns for MOP test cases	16.3.0
2020-06	RAN#88	R5-201328	0321	-	F	Add n261 to FR2 ACLR requirements	16.4.0
2020-06	RAN#88	R5-201330	0323	-	F	Update to UBF command implementation for Relative power sub tests	16.4.0
2020-06	RAN#88	R5-201795	0325	-	F	Introduction of New TC 6.4A.2.2.4 Carrier leakage for 5UL CA	16.4.0
2020-06	RAN#88	R5-201796	0326	-	F	Introduction of New TC 6.4A.2.2.5 Carrier leakage for 6UL CA	16.4.0
2020-06	RAN#88	R5-201797	0327	-	F	Introduction of New TC 6.4A.2.2.6 Carrier leakage for 7UL CA	16.4.0
2020-06	RAN#88	R5-201811	0328	-	F	Introduction of New TC 6.4A.2.2.7 Carrier leakage for 8UL CA	16.4.0
2020-06	RAN#88	R5-201812	0329	-	F	Introduction of New TC 6.4A.2.3.2 In-band emissions for 3UL CA	16.4.0
2020-06	RAN#88	R5-201813	0330	-	F	Introduction of New TC 6.4A.2.3.3 In-band emissions for 4UL CA	16.4.0
2020-06	RAN#88	R5-201814	0331	-	F	Introduction of New TC 6.4A.2.3.4 In-band emissions for 5UL CA	16.4.0
2020-06	RAN#88	R5-201815	0332	-	F	Introduction of New TC 6.4A.2.3.5 In-band emissions for 6UL CA	16.4.0
2020-06	RAN#88	R5-201835	0333	-	F	Correction of FR2 PUCCH EVM definition	16.4.0
2020-06	RAN#88	R5-201849	0334	-	F	Updating common uplink allocation for PC1	16.4.0
2020-06	RAN#88	R5-201850	0335	-	F	Cleaning up references to common uplink configuration	16.4.0
2020-06	RAN#88	R5-201851	0336	-	F	Updating test requirements of 6.2.3 AMPR for NS_201	16.4.0
2020-06	RAN#88	R5-202045	0342	-	F	Correction of test metric in minimum conformance requirements and some test style in 6.3.2 of SA FR2 R15	16.4.0
2020-06	RAN#88	R5-202046	0343	-	F	Correction of uplink configuration table number in minimum conformance requirements and test requirement table of 7.4 of SA FR2 R15	16.4.0
2020-06	RAN#88	R5-202120	0346	-	F	CR to 38.521-2 to correct Clenshaw-Curtis Weight Equations	16.4.0
2020-06	RAN#88	R5-202122	0348	-	F	CR to 38.521-2 to clarify the applicability of QoQZ validation	16.4.0
2020-06	RAN#88	R5-202135	0354	-	F	Update to 6 test cases 6.5A.2.1.x Spectrum Emission Mask for 3 to 8 UL CA	16.4.0
2020-06	RAN#88	R5-202137	0356	-	F	Update to 6 test cases 6.5A.2.2.x Adjacent channel leakage ratio for 3 to 8 UL CA	16.4.0
2020-06	RAN#88	R5-202447	0367	-	F	Editorial correction to the test requirement of in-band blocking	16.4.0
2020-06	RAN#88	R5-202450	0368	-	F	Correction of Spectrum Emission Mask CA test cases	16.4.0
2020-06	RAN#88	R5-202504	0372	-	F	CR on EVM Window Centre Timing Definition in FR2	16.4.0
2020-06	RAN#88	R5-202720	0345	1	F	CR to 38.521-2 to correct Clenshaw-Curtis Weights at the Poles for CDF/CCDF	16.4.0
2020-06	RAN#88	R5-202722	0364	1	F	Additions to Initial Conditions and Messages for SRS time mask with UL MIMO	16.4.0
2020-06	RAN#88	R5-202723	0337	1	F	Aligning test procedure for Rx beam peak direction	16.4.0
2020-06	RAN#88	R5-202724	0341	1	F	Alignment of section 3 and 5 with core spec of SA FR2 R15	16.4.0
2020-06	RAN#88	R5-202808	0365	1	F	Receiver characteristics testing update to 38.521-2	16.4.0
2020-06	RAN#88	R5-202824	0351	1	F	Update to test case 6.5A.1.1 Occupied bandwidth for 2UL CA	16.4.0
2020-06	RAN#88	R5-202825	0353	1	F	Update to test case 6.5A.2.1.1 Spectrum Emission Mask for 2UL CA	16.4.0
2020-06	RAN#88	R5-202826	0355	1	F	Update to test case 6.5A.2.2.1 Adjacent channel leakage ratio for 2UL CA	16.4.0
2020-06	RAN#88	R5-202827	0371	1	F	Update to 6 test cases 6.5A.1.x Occupied bandwidth for 3 to 8 UL CA	16.4.0
2020-06	RAN#88	R5-202828	0338	1	F	Updating SRS config table in test case 6.3D.3.4	16.4.0
2020-06	RAN#88	R5-202885	0322	1	F	Add NS 202 requirements to FR2 additional spurious emission test case	16.4.0
2020-06	RAN#88	R5-202893	0349	1	F	Editorial correction of test case 6.5.1 Occupied bandwidth to align with core spec	16.4.0
2020-06	RAN#88	R5-202894	0350	1	F	Editorial correction of Tx test cases for Out of band emission to align with core spec	16.4.0
2020-06	RAN#88	R5-202895	0357	1	F	Clarification of disabling Tx diversity for FR2 UE for SA FR2 testing	16.4.0
2020-06	RAN#88	R5-202896	0358	1	F	Updates of Test Points of Tx CA test cases	16.4.0
2020-06	RAN#88	R5-202897	0360	1	F	Correction on txDirectCurrentLocation in FR2 SA tests	16.4.0
2020-06	RAN#88	R5-202898	0370	1	F	Update on transmit modulation quality test cases	16.4.0
2020-06	RAN#88	R5-202899	0361	1	F	Update to SA FR2 Receiver Spurious Emission Test Case	16.4.0
2020-06	RAN#88	R5-202943	0363	1	F	CR to 38.521-2: On the order of test steps for output power dynamics test cases	16.4.0
2020-06	RAN#88	R5-202968	0359	1	F	Core spec alignment of k1 value for RF test cases	16.4.0
2020-06	RAN#88	R5-202990	0362	2	F	Updates of FR2 MU and TT in TS 38.521-2	16.4.0

2020-06	RAN#88	R5-203117	0347	2	F	CR to 38.521-2 to properly define Link and Meas Angles	16.4.0
2020-09	RAN#89	R5-203292	0373	-	F	Clarification of Interferer frequency selection in FR2 IBB test case	16.5.0
2020-09	RAN#89	R5-203875	0392	-	F	Alignment of general sections with core spec of SA FR2 R15	16.5.0
2020-09	RAN#89	R5-203969	0394	-	F	Updating beam correspondence capability	16.5.0
2020-09	RAN#89	R5-204264	0412	-	F	Editorial correction of ACLR CA test cases	16.5.0
2020-09	RAN#89	R5-204265	0413	-	F	Editorial correction of Annex C.3 Connection	16.5.0
2020-09	RAN#89	R5-204266	0414	-	F	Update of FR2 OBW test case	16.5.0
2020-09	RAN#89	R5-204713	0382	1	F	Correction to test configuration for Carrier leakage for CA	16.5.0
2020-09	RAN#89	R5-204714	0383	1	F	Correction to TC 6.4A.2.3.1 In-band emissions for 2UL CA	16.5.0
2020-09	RAN#89	R5-204715	0384	1	F	Correction to test cases 6.4A.2.3.x In-band emissions for 3 to 6 UL CA	16.5.0
2020-09	RAN#89	R5-204716	0385	1	F	Introduction of New TC 6.4A.2.3.6 In-band emissions for 7UL CA	16.5.0
2020-09	RAN#89	R5-204717	0386	1	F	Introduction of New TC 6.4A.2.3.7 In-band emissions for 8UL CA	16.5.0
2020-09	RAN#89	R5-204763	0393	1	F	Miscellaneous corrections due to core spec alignment	16.5.0
2020-09	RAN#89	R5-204764	0415	1	F	Update of Tx signal quality test cases	16.5.0
2020-09	RAN#89	R5-204765	0395	1	F	Addition of UL power setting for Rx test cases	16.5.0
2020-09	RAN#89	R5-204856	0403	1	F	CR to update MU and TT in 38.521-2	16.5.0
2020-09	RAN#89	R5-204857	0380	1	F	Beam correspondence - SRS configuration corrections in section 6.6.1	16.5.0
2020-09	RAN#89	R5-204858	0397	1	F	CR to 38.521-2 to update Absolute Power Tolerance for CA on the order of test steps	16.5.0
2020-09	RAN#89	R5-204859	0401	1	F	CR to TS 38.521-2: Correction to MB relaxation minimum requirements	16.5.0
2020-09	RAN#89	R5-204860	0406	1	F	CR to 38.521-2 to adjust the test step sequences	16.5.0
2020-09	RAN#89	R5-204861	0407	1	F	CR to 38.521-2 to allow vendor declarations related to beam peak searches	16.5.0
2020-09	RAN#89	R5-204862	0408	1	F	CR to 38.521-2 on QoQZ Verification Clarification	16.5.0
2020-09	RAN#89	R5-204863	0411	1	F	FR2 Minimum output power MU updates	16.5.0
2020-09	RAN#89	R5-204864	0417	1	F	FR2 EIRP OFF power MU updates	16.5.0
2020-09	RAN#89	R5-204865	0379	1	F	Beam correspondence - SRS configuration corrections in annex K.1.1	16.5.0
2020-09	RAN#89	R5-204914	0388	1	F	Updates to test case 6.3.4.3, relative power tolerance	16.5.0
2020-09	RAN#89	R5-204915	0398	1	F	CR to 38.521-2 to update Transmit OFF Power	16.5.0
2020-09	RAN#89	R5-204916	0399	1	F	CR to TS 38.521-2: Correction to time mask requirements	16.5.0
2020-09	RAN#89	R5-204917	0402	1	F	Clean up complete status for FR2 SA test cases	16.5.0
2020-09	RAN#89	R5-204918	0404	1	F	Update to UE maximum output power for CA	16.5.0
2020-09	RAN#89	R5-204919	0410	1	F	FR2 Minimum output power measurement period definition	16.5.0
2020-09	RAN#89	R5-204920	0389	1	F	FR2 RefSens and EIS spherical PC3 MBR table update	16.5.0
2020-09	RAN#89	R5-204921	0396	1	F	Addition of modified MPR behaviour	16.5.0
2020-09	RAN#89	R5-204922	0400	1	F	CR to TS 38.521-2: Annex F EIRP OFF Power	16.5.0
2020-09	RAN#89	R5-204923	0409	1	F	CR to TS 38.521-2 on DUT alignment options	16.5.0
2020-09	RAN#89	RP-201671	0418	-	F	Adding FR2 PDCCH Aggregation Level in Annex C.3	16.5.0
2020-12	RAN#90	R5-205259	0420	-	F	Addition of new test case 6.4D.3 Time alignment error for UL MIMO in FR2	16.6.0
2020-12	RAN#90	R5-205260	0421	-	F	Addition of new test case 6.5D.1 Occupied bandwidth for UL MIMO in FR2	16.6.0
2020-12	RAN#90	R5-205496	0422	-	F	Alignment of general sections with core spec	16.6.0
2020-12	RAN#90	R5-205497	0423	-	F	Correction of minimum conformance requirements for 6.2.2 MPR	16.6.0
2020-12	RAN#90	R5-205536	0427	-	F	Aligning tested subframe numbers with defined RMC in test case 6.3.4.3	16.6.0
2020-12	RAN#90	R5-205573	0428	-	F	Adding a new note in test configuration table for ACLR and SEM test case	16.6.0
2020-12	RAN#90	R5-205711	0431	-	F	FR2 EIS editor's note clean up	16.6.0
2020-12	RAN#90	R5-205811	0433	-	F	Correction to Carrier leakage for CA	16.6.0
2020-12	RAN#90	R5-205812	0434	-	F	Correction to In-band emissions for CA	16.6.0
2020-12	RAN#90	R5-205854	0438	-	F	Correction of transmission gap for relative power tolerance TC 6.3.4.3	16.6.0
2020-12	RAN#90	R5-206009	0439	-	F	Update of in-band emission and carrier leakage test cases	16.6.0
2020-12	RAN#90	R5-206206	0448	-	F	Update of occupied bandwidth test case	16.6.0
2020-12	RAN#90	R5-206210	0449	-	F	Correction of Annex F for absolute power tolerance for CA	16.6.0
2020-12	RAN#90	R5-206644	0437	1	F	Correction of MBW for output power dynamics TCs 6.3.x and ACLR TC 6.5.2.3	16.6.0
2020-12	RAN#90	R5-206645	0440	1	F	Correction of 6.2.3.3.1 for UE additional maximum power reduction	16.6.0
2020-12	RAN#90	R5-206646	0419	1	F	forgotten change extending Table range to N.2-7	16.6.0
2020-12	RAN#90	R5-206647	0430	1	F	CR to update DMRS position in UL RMC for FR2	16.6.0
2020-12	RAN#90	R5-206821	0442	1	F	CR to 38.521-2 on ETC Testing	16.6.0
2020-12	RAN#90	R5-206822	0445	1	F	Minimum output power updates	16.6.0
2020-12	RAN#90	R5-206823	0446	1	F	FR2 time masks updates	16.6.0
2020-12	RAN#90	R5-206824	0443	1	F	Update FR2 TRx MU and TT in 38.521-2	16.6.0
2020-12	RAN#90	R5-206825	0444	1	F	Minimum output power measurement uncertainties and test tolerances	16.6.0

2020-12	RAN#90	R5-206826	0447	1	F	FR2 Time masks updates	16.6.0
2020-12	RAN#90	R5-206865	0429	1	F	Update on Test points of FR2 Transmit OFF power for CA	16.6.0
2020-12	RAN#90	R5-206866	0432	1	F	Adding NS202 and NS203 to MOP and Spurious	16.6.0
2020-12	RAN#90	R5-206867	0435	1	F	Addition of 6.5D.2.1 Spectrum Emission Mask for UL MIMO in FR2	16.6.0
2020-12	RAN#90	R5-206868	0436	1	F	Addition of 6.5D.2.2 Adjacent channel leakage ratio for UL MIMO in FR2	16.6.0
2021-03	RAN#91	R5-210489	0457	-	F	Correction of test purpose for 6.3.2 Transmit OFF power	16.7.0
2021-03	RAN#91	R5-210490	0458	-	F	Addition of new test case 6.3D.2 Transmit OFF power for UL MIMO	16.7.0
2021-03	RAN#91	R5-210491	0459	-	F	Correction of test applicability and test description for 7.4 Maximum input level	16.7.0
2021-03	RAN#91	R5-210492	0460	-	F	Addition of new test cases for 7.4A Maximum input level for CA	16.7.0
2021-03	RAN#91	R5-210494	0462	-	F	Removal of brackets for MU of EIS spherical coverage	16.7.0
2021-03	RAN#91	R5-210495	0463	-	F	Correction of Annex P for Modified MPR behaviour	16.7.0
2021-03	RAN#91	R5-210496	0464	-	F	Correction of definition for EIS	16.7.0
2021-03	RAN#91	R5-210565	0467	-	F	Update of waveform to be used during Rx peam peak search in Annex K.1.2	16.7.0
2021-03	RAN#91	R5-210724	0468	-	F	Omitting of FR2 Rx cases with UL-MIMO on TDD bands	16.7.0
2021-03	RAN#91	R5-210729	0471	-	F	Removing test condition of extreme voltage	16.7.0
2021-03	RAN#91	R5-210731	0473	-	F	Adding definition of FR2a, FR2b and FR2c in general section	16.7.0
2021-03	RAN#91	R5-210732	0474	-	F	Cleaning up of Annex K	16.7.0
2021-03	RAN#91	R5-211094	0481	-	F	Correction to assumption of aggregated channel bandwidth in TC 6.5A.2.2	16.7.0
2021-03	RAN#91	R5-211097	0484	-	F	Definition of relaxation value of spurious emissions UE co-existence in TC 6.5.3.2	16.7.0
2021-03	RAN#91	R5-211110	0486	-	F	Corrections to subclauses in 38.521-2 with appropriate subclause level and heading styles	16.7.0
2021-03	RAN#91	R5-211126	0488	-	F	Update of 5.5A.2 for corrections to configurations for intra-band non-contiguous CA	16.7.0
2021-03	RAN#91	R5-211683	0456	1	F	Editorial corrections in Occupied bandwidth test procedure	16.7.0
2021-03	RAN#91	R5-211684	0465	1	F	FR2 UL CA Frequency error test cases update	16.7.0
2021-03	RAN#91	R5-211685	0469	1	F	Addition of Inner_partial allocation in general section and a few test cases	16.7.0
2021-03	RAN#91	R5-211686	0470	1	F	Correction of parameter configuration for open loop power control	16.7.0
2021-03	RAN#91	R5-211688	0476	1	F	Addition of new test case 6.2A.1.1.4 UE maximum output power - EIRP and TRP for 5UL CA	16.7.0
2021-03	RAN#91	R5-211689	0477	1	F	Addition of new test case 6.2A.1.1.5 UE maximum output power - EIRP and TRP for 6UL CA	16.7.0
2021-03	RAN#91	R5-211690	0478	1	F	Addition of new test case 6.2A.1.1.6 UE maximum output power - EIRP and TRP for 7UL CA	16.7.0
2021-03	RAN#91	R5-211691	0479	1	F	Addition of new test case 6.2A.1.1.7 UE maximum output power - EIRP and TRP for 8UL CA	16.7.0
2021-03	RAN#91	R5-211692	0487	1	F	Corrections to reference figures for transmission bandwidth configuration in FR2	16.7.0
2021-03	RAN#91	R5-211693	0493	1	F	Update of Annex F for test case 7.3.4	16.7.0
2021-03	RAN#91	R5-211863	0466	1	F	FR2 MPR, ACLR and SEM test cases update as per TP analysis update	16.7.0
2021-03	RAN#91	R5-211864	0472	1	F	Cleaning up of FR2 test specification	16.7.0
2021-03	RAN#91	R5-211865	0475	1	F	Update of TX Test Cases for UL MIMO in FR2	16.7.0
2021-03	RAN#91	R5-211866	0482	1	F	Correction to definition of power control window size in FR2 relative power tolerance in TC 6.3.4.3	16.7.0
2021-03	RAN#91	R5-211867	0491	1	F	FR2 Tx additional spurious emission test case updates	16.7.0
2021-03	RAN#91	R5-211868	0453	1	F	ACS FR2 test case update	16.7.0
2021-03	RAN#91	R5-211869	0454	1	F	IBB FR2 test case update	16.7.0
2021-03	RAN#91	R5-211919	0451	1	F	Introduction of FR2 DL 256QAM	16.7.0
2021-03	RAN#91	R5-211921	0480	1	F	Correction to ACLR relaxation value in TC 6.5.2.3	16.7.0
2021-03	RAN#91	R5-211922	0455	1	F	MU and TT definition for REFSENS FR2 CA test cases	16.7.0
2021-03	RAN#91	R5-211923	0485	1	F	Update FR2 MU and TT in 38.521-2	16.7.0
2021-03	RAN#91	R5-211924	0490	1	F	CR to 38.521-2 on PC1 Measurement Grid MUs	16.7.0
2021-03	RAN#91	R5-211925	0492	1	F	Update of ETC MTSU	16.7.0
2021-06	RAN#92	R5-212225	0496	-	F	Configured transmitter power for UL power boosting	16.8.0
2021-06	RAN#92	R5-212226	0497	-	F	In-band emissions for UL power boosting	16.8.0
2021-06	RAN#92	R5-212227	0498	-	F	Output power dynamics for CA	16.8.0
2021-06	RAN#92	R5-212229	0500	-	F	Occupied bandwidth for CA	16.8.0
2021-06	RAN#92	R5-212230	0501	-	F	Spectrum emission mask for CA	16.8.0
2021-06	RAN#92	R5-212231	0502	-	F	Adjacent channel leakage ratio for CA	16.8.0
2021-06	RAN#92	R5-212233	0504	-	F	Spurious emission band UE co-existence for CA	16.8.0
2021-06	RAN#92	R5-212341	0505	-	F	FR2 MPR - Test configuration correction	16.8.0
2021-06	RAN#92	R5-212342	0506	-	F	Removal of requirement for EIRP measurement in the transmitter spurious emission test cases	16.8.0
2021-06	RAN#92	R5-212343	0507	-	F	Test limits update for MOP spherical coverage test case 6.2.1.2	16.8.0
2021-06	RAN#92	R5-212351	0508	-	F	ACS and IBB - FR2 MU definition in 38.521-2	16.8.0
2021-06	RAN#92	R5-212523	0510	-	F	Update of the test configuration for 6.5D.1 Occupied Bandwidth for UL MIMO test case	16.8.0

2021-06	RAN#92	R5-212814	0515	-	F	Updated CA NS 201 202 203 for additional spurious emission	16.8.0
2021-06	RAN#92	R5-212815	0516	-	F	Align CA spurious emission UE coex requirements with core spec	16.8.0
2021-06	RAN#92	R5-212829	0519	-	F	Correction of 7.6 for test of blocking characteristics	16.8.0
2021-06	RAN#92	R5-212858	0521	-	F	Removal of brackets for the Configured transmitted power requirements	16.8.0
2021-06	RAN#92	R5-212859	0522	-	F	Removal of test cases in 6.3A.2	16.8.0
2021-06	RAN#92	R5-212861	0524	-	F	Correction of definition for bit 1 of modifiedMPRbehavior field of n28	16.8.0
2021-06	RAN#92	R5-212975	0531	-	F	Updating H.2.2 for NR SA FR2 testing	16.8.0
2021-06	RAN#92	R5-213309	0545	-	F	Update of output power dynamic test cases	16.8.0
2021-06	RAN#92	R5-213319	0546	-	F	Update of Spectrum Emission Mask for UL MIMO test case	16.8.0
2021-06	RAN#92	R5-213325	0549	-	F	Editorial Correction to FR2 frequency sub-group definitions	16.8.0
2021-06	RAN#92	R5-213329	0552	-	F	EIS Requirements update for Rel.16 Inter-band CA	16.8.0
2021-06	RAN#92	R5-213333	0555	-	F	Align MBR requirements table with current core spec	16.8.0
2021-06	RAN#92	R5-213836	0511	1	F	Correction of power control in 38.521-2	16.8.0
2021-06	RAN#92	R5-213837	0540	1	F	FR2 Carrier Aggregation Minimum Output power updates	16.8.0
2021-06	RAN#92	R5-213838	0548	1	F	Implementation of PCC Prio test procedure updates in UL-CA tests	16.8.0
2021-06	RAN#92	R5-213839	0535	1	F	CR to 38.521-2 on Optional 4x2 PC3 Antenna Array Configuration	16.8.0
2021-06	RAN#92	R5-213840	0536	1	F	CR to 38.521-2 on larger quiet zone with grey-box approach	16.8.0
2021-06	RAN#92	R5-213841	0537	1	F	CR to 38.521-2 to clarify BP Searches for NTC and ETC	16.8.0
2021-06	RAN#92	R5-213842	0539	1	F	Measurement uncertainties and test tolerances for FR2 Relative and aggregate power tolerance	16.8.0
2021-06	RAN#92	R5-213895	0509	1	F	Update of the test configuration for 6.4A.2.1 EVM CA test cases	16.8.0
2021-06	RAN#92	R5-213896	0514	1	F	Update to FR2 test case title in clause 6	16.8.0
2021-06	RAN#92	R5-213897	0518	1	F	Correction of 6.2.3 for mapping of network signalling label	16.8.0
2021-06	RAN#92	R5-213898	0523	1	F	Correction of Test applicability of 6.4.2.5	16.8.0
2021-06	RAN#92	R5-213899	0526	1	F	Correction of subclause titles with appropriate styles	16.8.0
2021-06	RAN#92	R5-213900	0529	1	F	Editorial correction of AMPR and Additional spurious emission	16.8.0
2021-06	RAN#92	R5-213901	0530	1	F	Clean up of CA sub-titles	16.8.0
2021-06	RAN#92	R5-213902	0541	1	F	Clarifications on UE beamlock function applicability	16.8.0
2021-06	RAN#92	R5-213903	0538	1	F	CR to 38.521-2 on Temperature Tolerance for FR2 Testing	16.8.0
2021-06	RAN#92	R5-213904	0542	1	F	Annex C: Clarifications to downlink signal levels	16.8.0
2021-06	RAN#92	R5-213984	0550	1	F	Add n259 definition in common section	16.8.0
2021-06	RAN#92	R5-214011	0495	1	F	Introduction of FR2 DL 256QAM to Maximum input level for CA	16.8.0
2021-06	RAN#92	R5-214028	0503	1	F	Spurious emissions for CA	16.8.0
2021-06	RAN#92	R5-214029	0551	1	F	Update with Rel16 Beam Correspondence requirements	16.8.0
2021-06	RAN#92	R5-214048	0512	1	F	Correction of ON OFF time mask in 38.521-2	16.8.0
2021-06	RAN#92	R5-214049	0525	1	F	Removal of for further study notes about ETC testing	16.8.0
2021-06	RAN#92	R5-214050	0554	1	F	Addition of missing clauses for SA FR2 UL-CA scenarios	16.8.0
2021-06	RAN#92	R5-214051	0534	1	F	Measurement Uncertainties updates for FR2 Extreme Testing Conditions	16.8.0
2021-06	RAN#92	R5-214078	0517	1	F	Updated spurious emission CA test configuration table	16.8.0
2021-06	RAN#92	R5-214104	0499	1	F	Transmit signal quality for CA	16.8.0
2021-09	RAN#93	R5-214605	0572	-	F	Removal of empty cells in the test configuration table	16.9.0
2021-09	RAN#93					Removal of brackets from the Minimum Conformance Requirements of Reference sensitivity power level for Intra-band non-contiguous CA	16.9.0
2021-09	RAN#93	R5-214606	0573	-	F		
2021-09	RAN#93	R5-214608	0575	-	F	Move the definition of cumulative aggregated channel bandwidth to the Definitions section	16.9.0
2021-09	RAN#93	R5-214910	0582	-	F	Editorial correction to Reference sensitivity power level for Inter-band CA	16.9.0
2021-09	RAN#93	R5-214914	0586	-	F	Transmit ON/OFF time mask test configuration for non-contiguous CA	16.9.0
2021-09	RAN#93	R5-214915	0587	-	F	Frequency error for non-contiguous CA	16.9.0
2021-09	RAN#93	R5-215056	0590	-	F	Update to time mask for FR2 UL-MIMO	16.9.0
2021-09	RAN#93	R5-215329	0598	-	F	Correction to MU and TT for spurious emission band UE co-existence	16.9.0
2021-09	RAN#93	R5-215473	0605	-	F	Clarification of PCC for FR2 DL CA	16.9.0
2021-09	RAN#93	R5-215474	0606	-	F	Correction of common UL configuration	16.9.0
2021-09	RAN#93	R5-215517	0609	-	F	Minor correction on UL additional reference channels parameters for TDD 60KHz SCS	16.9.0
2021-09	RAN#93	R5-215583	0618	-	F	MTSU and TT mapping related to Max Device Size	16.9.0
2021-09	RAN#93	R5-215584	0619	-	F	MTSU and TT mapping related to Max Device Size	16.9.0
2021-09	RAN#93	R5-215585	0620	-	F	MTSU and TT mapping related to Max Device Size	16.9.0
2021-09	RAN#93	R5-215618	0622	-	F	EIS spherical coverage for inter-band CA	16.9.0
2021-09	RAN#93	R5-215636	0628	-	F	Updates to CSI-RS based beam correspondence minimum requirements	16.9.0
2021-09	RAN#93	R5-215637	0629	-	F	Updates to SSB based beam correspondence minimum requirements	16.9.0
2021-09	RAN#93	R5-215641	0630	-	F	Text correction to section clarifying leverage from NSA test coverage	16.9.0
2021-09	RAN#93	R5-215830	0612	1	F	FR2 SA UL MIMO measurement uncertainties and test tolerances updates	16.9.0

2021-09	RAN#93	R5-215831	0614	1	F	Editorial correction for Receiver Spurious Emissions Measurement Uncertainty	16.9.0
2021-09	RAN#93	R5-215848	0558	1	F	Introduction of new clause 6.3A.4.4 and Minimum conformance requirements	16.9.0
2021-09	RAN#93	R5-215849	0565	1	F	Introduction of new TC 6.3A.4.4.1 Aggregate power tolerance for CA (2UL CA)	16.9.0
2021-09	RAN#93	R5-215850	0566	1	F	Introduction of new TC 6.3A.4.4.2 Aggregate power tolerance for CA (3UL CA)	16.9.0
2021-09	RAN#93	R5-215851	0567	1	F	Introduction of new TC 6.3A.4.4.3 Aggregate power tolerance for CA (4UL CA)	16.9.0
2021-09	RAN#93	R5-215852	0568	1	F	Introduction of new TC 6.3A.4.4.4 Aggregate power tolerance for CA (5UL CA)	16.9.0
2021-09	RAN#93	R5-215853	0569	1	F	Introduction of new TC 6.3A.4.4.5 Aggregate power tolerance for CA (6UL CA)	16.9.0
2021-09	RAN#93	R5-215854	0570	1	F	Introduction of new TC 6.3A.4.4.6 Aggregate power tolerance for CA (7UL CA)	16.9.0
2021-09	RAN#93	R5-215855	0571	1	F	Introduction of new TC 6.3A.4.4.7 Aggregate power tolerance for CA (8UL CA)	16.9.0
2021-09	RAN#93	R5-215856	0580	1	F	Addition of new test case 6.4D.1 Frequency error for UL MIMO in FR2	16.9.0
2021-09	RAN#93	R5-215857	0581	1	F	Update of test case 6.4D.3 Time alignment error for UL MIMO in FR2	16.9.0
2021-09	RAN#93	R5-215858	0591	1	F	Cleaning up the specification skeleton	16.9.0
2021-09	RAN#93	R5-215859	0593	1	F	Editorial corrections for various test cases	16.9.0
2021-09	RAN#93	R5-215860	0595	1	F	Correction of FR2 Carrier Leakage Test Case	16.9.0
2021-09	RAN#93	R5-215861	0599	1	F	Editors note correction to reference sensitivity for CA	16.9.0
2021-09	RAN#93	R5-215862	0589	1	F	Update of FR2 UL RMCs	16.9.0
2021-09	RAN#93	R5-215925	0603	1	F	Correct the abbreviations for network signalling value in 38.521-2	16.9.0
2021-09	RAN#93	R5-215975	0588	1	F	Transmit modulation quality for non-contiguous CA	16.9.0
2021-09	RAN#93	R5-215976	0576	1	F	Update Minimum conformance requirement clause 7.4A.0 for Rel-16 Enhancement	16.9.0
2021-09	RAN#93	R5-215977	0577	1	F	Addition of clause 7.5A.0 minimum conformance requirement for Rel-16 Enhancement WP	16.9.0
2021-09	RAN#93	R5-215978	0578	1	F	Addition of clause 7.6A.2.0 minimum conformance requirement for Rel-16 Enhancement WP	16.9.0
2021-09	RAN#93	R5-215979	0623	1	F	DL CA BW Enhancement and CA REFSENS	16.9.0
2021-09	RAN#93	R5-215980	0627	1	F	Common clause updates to cover Rel.16 FR2 changes	16.9.0
2021-09	RAN#93	R5-216036	0611	1	F	FR2 SA UL MIMO Out-of-band emissions initial conditions updates	16.9.0
2021-09	RAN#93	R5-216037	0613	1	F	FR2 SA UL MIMO Maximum Power Reduction update	16.9.0
2021-09	RAN#93	R5-216063	0602	1	F	Update of 5.5A.1 for intra-band contiguous CA configuration table	16.9.0
2021-09	RAN#93	R5-216081	0626	1	F	Updates to Rel.16 enhanced Beam Correspondence test	16.9.0
2021-09	RAN#93	R5-216087	0556	1	F	Update to FR2 minimum output power test case	16.9.0
2021-09	RAN#93	R5-216088	0557	1	F	Update to FR2 ACLR test case	16.9.0
2021-09	RAN#93	R5-216089	0592	1	F	Add missing LO retrieval step in ULCA carrier leakage test procedure	16.9.0
2021-09	RAN#93	R5-216090	0594	1	F	FR2 Spur emissions test config table updates and editor notes clean up	16.9.0
2021-09	RAN#93	R5-216091	0596	1	F	Correction of power control in 38.521-2	16.9.0
2021-09	RAN#93	R5-216092	0625	1	F	38.521-2 CR FR2 ETC MU & TT updates	16.9.0
2021-09	RAN#93	R5-216111	0621	1	F	UE maximum output power for UL-MIMO	16.9.0
2021-12	RAN#94	R5-216546	0631	-	F	Addition of test configuration for FR2 DL 256QAM to Maximum input level	16.10.0
2021-12	RAN#94	R5-217092	0636	-	F	Update Rx beam peak direction search	16.10.0
2021-12	RAN#94	R5-217093	0637	-	F	Update of Reference Sensitivity Test Cases for CA	16.10.0
2021-12	RAN#94	R5-217113	0638	-	F	FR2 Refsens correction for power class 2	16.10.0
2021-12	RAN#94	R5-217114	0639	-	F	FR2 EIS spherical coverage correction for power class 2	16.10.0
2021-12	RAN#94	R5-217248	0645	-	F	Correction of note for BEAM_SELECT_WAIT_TIME	16.10.0
2021-12	RAN#94	R5-217249	0646	-	F	Correction of subclause style, number and position	16.10.0
2021-12	RAN#94	R5-217250	0647	-	F	Correction of Table 6.2.2.4.1-9 for Test Frequency	16.10.0
2021-12	RAN#94	R5-217331	0651	-	F	Correction to test requirements of 6.2D.2 MPR for UL-MIMO	16.10.0
2021-12	RAN#94	R5-217333	0653	-	F	Removing 6.3D.3.4.5 SRS time mask for MIMO	16.10.0
2021-12	RAN#94	R5-217341	0654	-	F	Correction of 3.2 and 3.3 for symbols and abbreviations	16.10.0
2021-12	RAN#94	R5-217419	0658	-	F	Correction of test configuration table in 6.3.4.2	16.10.0
2021-12	RAN#94	R5-217420	0659	-	F	Correction of aggregate power tolerance	16.10.0
2021-12	RAN#94	R5-217421	0660	-	F	Correction of core requirement of aggregate power tolerance	16.10.0
2021-12	RAN#94	R5-217614	0665	-	F	Update to FR2 Tx test cases for n260	16.10.0
2021-12	RAN#94	R5-217708	0671	-	F	FR2 Extreme Temperature Conditions applicability for ACLR	16.10.0
2021-12	RAN#94	R5-217709	0672	-	F	Minimum Output Power Editor notes review	16.10.0
2021-12	RAN#94	R5-217710	0673	-	F	38.521-2 FR2 Extreme Temperature Conditions applicability for UL-MIMO	16.10.0
2021-12	RAN#94	R5-218234	0644	1	F	Correction of exception of message contents for DFT-s-OFDM modulation	16.10.0

2021-12	RAN#94	R5-218235	0650	1	F	Global correction of test cases except those having impact on ETSI EN 301 908 25	16.10.0
2021-12	RAN#94	R5-218236	0652	1	F	Correction to testability statement of 6.5.2.3 ACLR	16.10.0
2021-12	RAN#94	R5-218237	0656	1	F	Correction of 6.2.4 for configured transmitted power	16.10.0
2021-12	RAN#94	R5-218238	0664	1	F	Correction to FR2 Rx test cases	16.10.0
2021-12	RAN#94	R5-218239	0669	1	F	Clarification on reference sensitivity power level	16.10.0
2021-12	RAN#94	R5-218240	0635	1	F	Handling of fallbacks for FR2 CA	16.10.0
2021-12	RAN#94	R5-218241	0655	1	F	Correction of 4.1 and 4.2 for minimum requirements and test requirements	16.10.0
2021-12	RAN#94	R5-218366	0678	1	F	Updates to CSI-RS based beam correspondence minimum requirements	16.10.0
2021-12	RAN#94	R5-218367	0679	1	F	Updates to SSB based beam correspondence minimum requirements	16.10.0
2021-12	RAN#94	R5-218368	0633	1	F	MTSUs for Rel-16 RF Enhancement for FR2	16.10.0
2021-12	RAN#94	R5-218369	0634	1	F	TTs for Rel-16 RF Enhancement for FR2	16.10.0
2021-12	RAN#94	R5-218401	0662	1	F	Update of transmit modulation quality test cases	16.10.0
2021-12	RAN#94	R5-218407	0670	1	F	38.521-2 Beam correspondence Measurement Uncertainties	16.10.0
2021-12	RAN#94	R5-218425	0640	1	F	Spur emissions coex test config update and editor notes clean up	16.10.0
2021-12	RAN#94	R5-218426	0641	1	F	Clarify DL CC config for UL CA test	16.10.0
2021-12	RAN#94	R5-218427	0642	1	F	Update Minimum Output Power requirement	16.10.0
2021-12	RAN#94	R5-218428	0643	1	F	Alignment of the description for initial set up of downlink and uplink signals	16.10.0
2021-12	RAN#94	R5-218429	0648	1	F	Correction of test cases having impact on ETSI EN 301 908 25	16.10.0
2021-12	RAN#94	R5-218430	0649	1	F	Correction of test configuration for CA test cases	16.10.0
2021-12	RAN#94	R5-218431	0667	1	F	Update of test case 6.2.3 A-MPR	16.10.0
2021-12	RAN#94	R5-218432	0668	1	F	Update of test case 6.5.3.3 A-Spurious	16.10.0
2021-12	RAN#94	R5-218474	0676	1	F	Enhanced Beam Correspondence test updates	16.10.0
2021-12	RAN#94	R5-218475	0677	1	F	Common clause updates to cover Rel.16 FR2 changes	16.10.0
2021-12	RAN#94	R5-218484	0675	1	F	Rel.15 Beam Correspondence Updates and clarifications	16.10.0
2022-03	RAN#95	R5-220256	0684	-	F	FR2 Frequency error tests - unify requirements per polarization	16.11.0
2022-03	RAN#95	R5-220257	0685	-	F	Test limit correction in FR2 MPR test case	16.11.0
2022-03	RAN#95	R5-220258	0686	-	F	RX beam peak direction search procedure update in case of intra-band DL CA	16.11.0
2022-03	RAN#95	R5-220259	0687	-	F	Updated reference to FR2 connection diagram in tests using modulated interferer	16.11.0
2022-03	RAN#95	R5-220274	0688	-	F	Clarifications on 5G NR connectivity options for RF FR2	16.11.0
2022-03	RAN#95	R5-220791	0693	-	F	Update to 6.2D.1 for ULFPTx	16.11.0
2022-03	RAN#95	R5-220792	0694	-	F	Update to 6.2D.2 for ULFPTx	16.11.0
2022-03	RAN#95	R5-220793	0695	-	F	Update to 6.2D.4 for ULFPTx	16.11.0
2022-03	RAN#95	R5-220908	0698	-	F	Correction to test procedure of 6.4A.1.1	16.11.0
2022-03	RAN#95	R5-221060	0699	-	F	Update of 6.2A.1 for UE maximum output power	16.11.0
2022-03	RAN#95	R5-221061	0700	-	F	Update of 6.2.3 for UE maximum output power with additional requirements	16.11.0
2022-03	RAN#95	R5-221063	0702	-	F	Update of 6.2A.4 for configured transmitted power for CA	16.11.0
2022-03	RAN#95	R5-221111	0704	-	F	Editorial correction to titles of FR2 test cases	16.11.0
2022-03	RAN#95	R5-221112	0705	-	F	Update to test applicability to FR2 test cases	16.11.0
2022-03	RAN#95	R5-221269	0706	-	F	Correction of ON OFF time mask test cases for FR2	16.11.0
2022-03	RAN#95	R5-221334	0709	-	F	Removing TP analysis editor note for FR2 Tx spur emission UL MIMO test case	16.11.0
2022-03	RAN#95	R5-221338	0710	-	F	Update to Clause 7.6 Blocking Characteristics	16.11.0
2022-03	RAN#95	R5-221341	0712	-	F	Update to Intra-band non-contiguous CA	16.11.0
2022-03	RAN#95	R5-221354	0716	-	F	Update reference to intra-band non-contiguous UL-CA FR2 RF tests in Annex	16.11.0
2022-03	RAN#95	R5-221355	0717	-	F	Editorial correction in intra-band non-contiguous configurations table	16.11.0
2022-03	RAN#95	R5-221356	0718	-	F	Add correct test case structure to Beam Correspondence CA test case	16.11.0
2022-03	RAN#95	R5-221357	0719	-	F	Introduce EIS test cases to incorporate Rel.16 inter-band CA	16.11.0
2022-03	RAN#95	R5-221657	0707	2	F	38.521-2 Beam correspondence Measurement Uncertainties and test tolerances	16.11.0
2022-03	RAN#95	R5-221685	0683	1	F	Correction of test config tables of non-CA test cases for consistency with CA test cases on without RB allocation case	16.11.0
2022-03	RAN#95	R5-221686	0689	1	F	FR2 SA EVM test case update based on MU and TT analysis	16.11.0
2022-03	RAN#95	R5-221687	0696	1	F	Correction of general ON OFF time mask	16.11.0
2022-03	RAN#95	R5-221688	0697	1	F	Correction to FR2 absolute power tolerance MU and TT	16.11.0
2022-03	RAN#95	R5-221689	0681	1	F	Removal of empty lines in Table 7.3.2.3.2-1 and Table 7.3.2.5-2	16.11.0
2022-03	RAN#95	R5-221690	0703	1	F	Correction to PDCCH DCI format for FR2 test cases	16.11.0
2022-03	RAN#95	R5-221691	0711	1	F	Update to Clause 7.5 Adjacent channel selectivity	16.11.0
2022-03	RAN#95	R5-221692	0682	1	F	Correction of the table title style of Table 5.5A.3-1	16.11.0
2022-03	RAN#95	R5-221766	0701	1	F	Update of 6.2A.2 for UE maximum output power reduction for CA	16.11.0
2022-03	RAN#95	R5-221792	0708	1	F	ETC for FR2 RF CA	16.11.0
2022-03	RAN#95	R5-221889	0714	1	F	FR2 Enhanced Beam Correspondence test updates	16.11.0

2022-03	RAN#95	R5-221890	0715	1	F	Minimum Conformance Requirements updates to enhanced beam correspondence	16.11.0
2022-06	RAN#96	R5-222198	0720	-	F	Correction of table numbers in 6.2D.2.5	16.12.0
2022-06	RAN#96	R5-222199	0721	-	F	Correction of Test Environment for UL MIMO MPR test case	16.12.0
2022-06	RAN#96	R5-222342	0723	-	F	Beam peak search - re-positioning formula correction	16.12.0
2022-06	RAN#96	R5-222488	0731	-	F	Editorial correction for Tx test cases	16.12.0
2022-06	RAN#96	R5-222544	0733	-	F	Update of A-MPR and A-SE test cases	16.12.0
2022-06	RAN#96	R5-222879	0736	-	F	Update to FR2 6.2.3 A-MPR	16.12.0
2022-06	RAN#96	R5-223122	0749	-	F	Addition of FR2 6.2D.3 for ULFPTx	16.12.0
2022-06	RAN#96	R5-223258	0752	-	F	Correction of FR2 MOP and beam correspondence test cases	16.12.0
2022-06	RAN#96	R5-223617	0728	1	F	Update FR2 TRx MU in 38.521-2	16.12.0
2022-06	RAN#96	R5-223749	0726	1	F	Common Uplink Configuration updates for NR RF requirement enhancements for FR2	16.12.0
2022-06	RAN#96	R5-223750	0740	1	F	FR2 Enhanced Beam Correspondence test updates	16.12.0
2022-06	RAN#96	R5-223751	0742	1	F	Updates across Spherical Coverage test cases to incorporate Rel.16 requirements	16.12.0
2022-06	RAN#96	R5-223752	0748	1	F	Test case updates in Max Input Level FR2 CA tests	16.12.0
2022-06	RAN#96	R5-223814	0724	1	F	Rel-15 MPR updates	16.12.0
2022-06	RAN#96	R5-223815	0725	1	F	Common Uplink Configuration updates for Rel-15 FR2	16.12.0
2022-06	RAN#96	R5-223816	0732	1	F	Correction to DCI format in signal quality TCs	16.12.0
2022-06	RAN#96	R5-223817	0739	1	F	Implement test function approach to limit Pcell Power in FR2 UL-CA tests	16.12.0
2022-06	RAN#96	R5-223818	0750	1	F	Correction to 6.2.1.1 for multi-band relaxation factors for PC3 UE	16.12.0
2022-06	RAN#96	R5-223819	0755	1	F	Clarification on Configured transmitted power	16.12.0
2022-06	RAN#96	R5-223820	0757	1	F	Implementation of FR2 single carrier Tx beam peak applicability for UL MIMO Tx tests	16.12.0
2022-06	RAN#96	R5-223821	0761	1	F	Editorial correction to test requirement of FR2 test cases	16.12.0
2022-06	RAN#96	R5-223822	0754	1	F	Clarification on Adjacent channel selectivity	16.12.0
2022-06	RAN#96	R5-223823	0758	1	F	Clarification on In-band blocking	16.12.0
2022-06	RAN#96	R5-223824	0730	1	F	Editorial correction in Annex	16.12.0
2022-06	RAN#96	R5-223825	0734	1	F	Correction of TRP Measurement Grids	16.12.0
2022-06	RAN#96	R5-223826	0735	1	F	CR on applicability per permitted test method	16.12.0
2022-06	RAN#96	R5-223827	0743	1	F	Correction to FR2 DL RMCs	16.12.0
2022-06	RAN#96	R5-223828	0744	1	F	Initial introduction of fast spherical coverage test method	16.12.0
2022-06	RAN#96	R5-223829	0745	1	F	Initial introduction of RSRP-B based Rx Peak Beam Search	16.12.0
2022-06	RAN#96	R5-223830	0746	1	F	Initial introduction of Enhanced EIRP measurement method	16.12.0
2022-06	RAN#96	R5-223831	0751	1	F	Correction to A.2.3 and A.3.3 for UL and DL RMCs	16.12.0
2022-06	RAN#96	R5-223832	0760	1	F	Clarification on UE Channel bandwidth per operating band for CA	16.12.0
2022-09	RAN#97	R5-224247	0772	-	F	Correction of the SCS value in Table 5.3.5-1 for n259	16.13.0
2022-09	RAN#97	R5-224248	0773	-	F	Correction of the clause numbers and table numbers in 7.3A.3	16.13.0
2022-09	RAN#97	R5-224303	0775	-	F	PUCCH format correction to test DFT-s-OFDM in FR2	16.13.0
2022-09	RAN#97	R5-224305	0777	-	F	FR2 SA EVM test case update based on TT analysis	16.13.0
2022-09	RAN#97	R5-224907	0787	-	F	Reference sensitivity power level for CA, editor notes update on ETC	16.13.0
2022-09	RAN#97	R5-225107	0794	-	F	Update of spurious emissions test cases	16.13.0
2022-09	RAN#97	R5-225205	0797	-	F	CR to update validation test frequencies and sub-ranges	16.13.0
2022-09	RAN#97	R5-225607	0798	1	F	Addition of new test case 6.2.2_1 for FR2 MPR enhancements	16.13.0
2022-09	RAN#97	R5-225658	0762	1	F	New test case addition: 6.2.4_1 Configured transmitted power with Power Boost	16.13.0
2022-09	RAN#97	R5-225659	0765	1	F	Enhanced Beam correspondence Measurement Uncertainties and test tolerances	16.13.0
2022-09	RAN#97	R5-225660	0764	1	F	Measurement uncertainties and test tolerances for test case 6.2.4_1 Configured transmitted power with Power Boost	16.13.0
2022-09	RAN#97	R5-225664	0776	1	F	PC1 - MU and TT definition for MOP in 38.521-2	16.13.0
2022-09	RAN#97	R5-225665	0778	1	F	PC1 - MU and TT definition for REFSENS in 38.521-2	16.13.0
2022-09	RAN#97	R5-225666	0767	1	F	Updates to Spherical Coverage annexes	16.13.0
2022-09	RAN#97	R5-225667	0780	1	F	Definition of PC1 MU and relaxation	16.13.0
2022-09	RAN#97	R5-225679	0779	1	F	Update of FR2 5 to 8UL CA Test Cases	16.13.0
2022-09	RAN#97	R5-225680	0766	1	F	Updates related to TPMI test methods	16.13.0
2022-09	RAN#97	R5-225719	0774	1	F	Applicable NR-ARFCN correction for n259	16.13.0
2022-09	RAN#97	R5-225743	0763	1	F	In-band emissions minimum conformance requirements update	16.13.0
2022-09	RAN#97	R5-225744	0786	1	F	Reference sensitivity power level for CA, update on intra-band non-continuous CA	16.13.0
2022-09	RAN#97	R5-225792	0768	1	F	Tx Fast Spherical Coverage test cases integration	16.13.0
2022-09	RAN#97	R5-225793	0771	1	F	FR2 Tx Signal Quality UL MIMO Test Case Updates	16.13.0
2022-09	RAN#97	R5-225794	0795	1	F	Correction of spurious emissions test case	16.13.0
2022-09	RAN#97	R5-225795	0800	1	F	Updated Test points in FR2 CA MPR test case	16.13.0
2022-09	RAN#97	R5-225796	0769	1	F	Rx Fast Spherical Coverage test cases integration	16.13.0
2022-09	RAN#97	R5-225797	0785	1	F	Correction to interfere offset in 7.6.2	16.13.0
2022-09	RAN#97	R5-225798	0770	1	F	Annex updates related to RSRP-B Rx Beam peak search	16.13.0
2022-09	RAN#97	R5-225843	0796	1	F	Update to FR2 CA MPR test case 6.2A.2.1 to prevent SCell drop by using UE PHR	16.13.0

2022-09	RAN#97	R5-225844	0799	1	F	Extension of test function approach to limit Pcell Power in some FR2 UL CA tests	16.13.0
2022-09	RAN#97	R5-225845	0784	1	F	Correction to test procedure of minimum output power	16.13.0
2022-09	RAN#97	R5-225870	0782	1	F	Correction to EVM measurement point for DFTs-OFDM DM-RS Type 2	16.13.0
2022-12	RAN#98	R5-225991	0810	-	F	Removal of technical content in 38.521-2 v16.13.0 and substitution with pointer to the next Release	16.14.0

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## History

<b>Document history</b>		
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