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**5G;
NR;
User Equipment (UE) conformance specification;
Radio transmission and reception;
Part 4: Performance
(3GPP TS 38.521-4 version 16.14.0 Release 16)**



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Foreword

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x the first digit:

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

FFS.

1 Scope

The present document specifies the measurement procedures for the conformance test of the user equipment (UE) that contain performance requirements as part of 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.

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.
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- 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 [25] (void)

[26] 3GPP TS 38.521-4 Release 17: "NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 4: Performance requirements"

3 Definition of terms, symbols and abbreviations

Void

4 General

The requirements of the present document are provided in 3GPP TS 38.521-4 Release 17 [26].

5 to 11 Void

Annex A to H: Void

Annex I (informative): Change history

Change history							
Date	Meeting	Tdoc	CR	Rev	Cat	Subject/Comment	New version
2018-01		R5-180064				Skeleton for NR Demod spec	0.0.1
2018-04-13		R5-182036				Added the test procedure for FR2 Demod testing in Annex	0.1.0
2018-10-12		R5-185903				Added the demod spec test case section titles to be in line with RAN4 approved skeleton for 38.101-4	0.1.1
2018-11-20	RAN5 #81	R5-188006				new TC for PDSCH FR1 demod	0.2.0
2018-11-20	RAN5 #81	R5-188008				new TC for PDSCH FR2 demod	0.2.0
2018-11-20	RAN5 #81	R5-187573				section 3 of 38.521-4 spec	0.2.0
2018-11-20	RAN5 #81	R5-187845				section 4 of 38.521-4 spec	0.2.0
2018-11-20	RAN5 #81	R5-188009				pCR for new TC addition for FR1 FDD PDSCH Demod	0.2.0
2018-11-20	RAN5 #81	R5-188010				pCR for new TC addition for FR1 FDD PDCCH Demod	0.2.0
2019-01-25	RAN5 5G-NR AH#4	R5-190054				update to 2Rx TDD FR1 PDSCH mapping Type A performance test case	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190926				pCR for new TC addition for FR1 4Rx FDD PDSCH Demodulation performance (2x4)	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190927				pCR for new TC addition for FR1 4Rx FDD PDSCH Demodulation performance (4x4)	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190928				pCR for new TC addition for FR1 4Rx FDD PDSCH Demodulation performance with enhanced receiver type X (4x4)	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190291				Updated to Annex A Measurement Channels for Performance tests	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190292				Updated to Annex B Propagation conditions for Performance tests	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190458				update to 2Rx TDD FR2 PDSCH mapping Type A performance test case	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190461				2Rx TDD FR2 PDCCH performance test case	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190929				LTE link setup details for demod test cases	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190930				Annex for statistical tput calculation for demod test cases	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190931				pCR for TC addition of FR1 TDD 4Rx PDSCH	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190932				pCR for modification of FDD 2Rx FR1 PDSCH Demod	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190933				Annex for DL and UL Signal Setup	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190934				pCR for modification of FDD FR1 PDCCH Demod	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190935				PDSCH and PDCCH Config before measurement	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190986				38.521-4 Common Section updates to clarify leverage across architecture options	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190552				Addition of 2Rx TDD FR1 Single PMI tests for both SA and NSA	0.3.0
2019-01-25	RAN5 5G-NR AH#4	R5-190553				Addition of 2Rx TDD FR1 RI reporting for both SA and NSA	0.3.0
2019-03-01	RAN5 #82	R5-191183				Adding relevant references to 38.521-4	0.4.0
2019-03-01	RAN5 #82	R5-192461				Adding of test case 6.2.2.1.2.1.2, Rx FDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192672				Introduction of New test case 5.3.2.2.1 2Rx TDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192463				Introduction of New test case 5.3.2.2.2 2Rx TDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192462				Introduction of New test case 5.3.3.1.1 4Rx FDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192464				Introduction of New test case 5.3.3.1.2 4Rx FDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192465				Introduction of New test case 5.3.3.2.1 4Rx TDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192465				Introduction of New test case 5.3.3.2.2 4Rx TDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192474				Introduction of TS 38.521-4 test case 6.3.2.1.1	0.4.0
2019-03-01	RAN5 #82	R5-192475				Introduction of TS 38.521-4 test case 6.3.2.1.2	0.4.0
2019-03-01	RAN5 #82	R5-192467				Introduction of test case 5.2.2.1.2_1, 2Rx FDD FR1 PDSCH mapping Type A and CSI-RS overlapped with PDSCH performance - 2x2 MIMO with baseline receiver for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192840				Demod spec section 4 update	0.4.0

2019-03-01	RAN5 #82	R5-192673				Update to TDD FR1 2Rx PDSCH Type A test case	0.4.0
2019-03-01	RAN5 #82	R5-192103				addition of 2Rx TDD FR1 periodic CQI reporting test case	0.4.0
2019-03-01	RAN5 #82	R5-192468				pCR for addition of 2Rx TDD FR1 TypeA and CSI-RS overlapped TC	0.4.0
2019-03-01	RAN5 #82	R5-192866				pCR for modification of PDSCH and PDCCH Config before measurement	0.4.0
2019-03-01	RAN5 #82	R5-192470				pCR for modification of FDD FR1 PDCCH Demod	0.4.0
2019-03-01	RAN5 #82	R5-192471				pCR for modification of FDD 2Rx FR1 PDSCH Demod	0.4.0
2019-03-01	RAN5 #82	R5-192472				Update to 2Rx TDD FR1 RI reporting for both SA and NSA	0.4.0
2019-03-01	RAN5 #82	R5-192460				Minimum test time update for FR1 Demod test case	0.4.0
2019-03-01	RAN5 #82	R5-192473				Addition of Annex F for Demod spec	0.4.0
2019-03	RAN#83	RP-190222	-	-	-	Presented to the RAN#83 plenary for 1-step approval	1.0.0
2019-03	RAN#83	-	-	-	-	raised to v15.0.0 with editorial changes only	15.0.0
2019-06	RAN5#83	R5-193544	0030	-	F	Updates to test case 6.2.2.1.2.1, 2Rx FDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-193943	0035	-	F	Adding test case 6.2.2.2.2, 2Rx TDD FR1 periodic subband CQI reporting under fading conditions for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194159	0048	-	F	Alignment of Annex C with core specification	15.1.0
2019-06	RAN5#83	R5-194466	0056	-	F	Introduction of FR1 CQI test case 6.2.2.2.1	15.1.0
2019-06	RAN5#83	R5-194622	0057	-	F	Corrections TDD UL-DL configurations	15.1.0
2019-06	RAN5#83	R5-194680	0066	-	F	Demod section 5 general update	15.1.0
2019-06	RAN5#83	R5-194689	0073	-	F	Addition of text for FR1 PBCH demodulation test case	15.1.0
2019-06	RAN5#83	R5-194690	0074	-	F	Update to 2Rx TDD FR2 PDSCH Type A test case	15.1.0
2019-06	RAN5#83	R5-194691	0075	-	F	Update to FR2 PDCCH config param	15.1.0
2019-06	RAN5#83	R5-194692	0076	-	F	Addition of text for FR2 PBCH demodulation test case	15.1.0
2019-06	RAN5#83	R5-194693	0077	-	F	Update to section 8 CSI reporting	15.1.0
2019-06	RAN5#83	R5-194979	0063	1	F	Further updates to 2Rx TDD FR1 PDSCH mapping Type A test case	15.1.0
2019-06	RAN5#83	R5-194980	0032	1	F	Introduction of TC 6.4.3.2_1 4Rx TDD FR1 RI reporting for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194981	0034	1	F	Adding test case 6.2.2.1.2.2, 2Rx FDD FR1 periodic subband CQI reporting under fading conditions for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194982	0053	1	F	Update to 4Rx FDD FR1 PDSCH mapping Type A performance 4x4 MIMO with baseline Rx	15.1.0
2019-06	RAN5#83	R5-194983	0054	1	F	Update to 4Rx FDD FR1 PDSCH mapping Type A performance 4x4 MIMO with enhanced Rx	15.1.0
2019-06	RAN5#83	R5-194984	0037	1	F	Editorial changes to TS 38.521-4 test case 6.3.2.1.2	15.1.0
2019-06	RAN5#83	R5-194985	0038	1	F	Introduction to TS 38.521-4 test case 6.3.3.1.1	15.1.0
2019-06	RAN5#83	R5-194986	0039	1	F	Introduction to TS 38.521-4 test case 6.3.3.1.2	15.1.0
2019-06	RAN5#83	R5-194987	0040	1	F	Introduction to TS 38.521-4 test case 6.3.3.2.1	15.1.0
2019-06	RAN5#83	R5-194988	0041	1	F	Introduction to TS 38.521-4 test case 6.3.3.2.2	15.1.0
2019-06	RAN5#83	R5-194989	0059	1	F	Modification of 2Rx FDD FR1 PDSCH mapping Type A performance - enhanced Rx	15.1.0
2019-06	RAN5#83	R5-194990	0060	1	F	Modification of 2Rx TDD FR1 PDSCH mapping Type A and CSI-RS overlapped with PDSCH performance - baseline Rx	15.1.0
2019-06	RAN5#83	R5-194991	0061	1	F	Modification of 2Rx FDD FR1 PDCCH 1 Tx	15.1.0
2019-06	RAN5#83	R5-194992	0062	1	F	Modification of 2Rx FDD FR1 PDCCH 2 Tx	15.1.0
2019-06	RAN5#83	R5-194993	0042	1	F	Update to test case 5.3.2.2.1 2Rx TDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194994	0043	1	F	Update to test case 5.3.2.2 2Rx TDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194995	0044	1	F	Update to test case 5.3.3.1.1 4Rx FDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194996	0045	1	F	Update to test case 5.3.3.1.2 4Rx FDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194997	0046	1	F	Update to test case 5.3.3.2.1 4Rx TDD FR1 PDCCH 1 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194998	0047	1	F	Update to test case 5.3.3.2.2 4Rx TDD FR1 PDCCH 2 Tx antenna performance for both SA and NSA	15.1.0
2019-06	RAN5#83	R5-194999	0055	1	F	Update to FR1 demod test case 5.2.2.1.2_1	15.1.0
2019-06	RAN5#83	R5-195000	0078	1	F	Update to RI Reporting Accuracy test	15.1.0
2019-06	RAN5#83	R5-195001	0049	1	F	Updated to Annexes for performance tests	15.1.0
2019-06	RAN5#83	R5-195002	0068	1	F	Demod section 2-4 update	15.1.0
2019-06	RAN5#83	R5-195003	0058	1	F	Modification of 2Rx FDD FR1 PDSCH mapping Type A performance - baseline Rx	15.1.0
2019-06	RAN5#83	R5-195088	0029	1	F	Editorial Aligning CSI common test parameters with core specification	15.1.0
2019-06	RAN5#83	R5-195089	0031	1	F	Updating of E-UTRA test frequency for DEMOD test cases	15.1.0
2019-06	RAN5#83	R5-195098	0079	-	F	Performance implementation of FR2 UL demod OTA tests using single pol Rx TE	15.1.0

2019-06	RAN5#83	R5-195170	0052	1	F	Update to 4Rx FDD FR1 PDSCH mapping Type A performance 2x4 MIMO with baseline Rx	15.1.0
2019-06	RAN5#83	R5-195171	0033	1	F	Introducing MU and TT clauses in annex F for Channel State Information reporting test cases	15.1.0
2019-06	RAN5#83	R5-195172	0069	1	F	Annex update for PDSCH PDCCH minimum test time	15.1.0
2019-06	RAN5#83	R5-195413	0067	1	F	Update to section 9 and 10 of Demod spec	15.1.0
2019-06	RAN5#83	R5-195438	0050	2	F	Introducing 5.2.2.1.4_1 2Rx FDD FR1 PDSCH Mapping Type A and LTE-NR coexistence performance	15.1.0
2019-06	RAN5#83	R5-195439	0051	2	F	Introducing 5.2.3.1.4_1 4Rx FDD FR1 PDSCH Mapping Type A and LTE-NR coexistence performance	15.1.0
2019-06	RAN5#83	R5-195440	0064	1	F	Addition of new test case for 2Rx FDD FR1 periodic CQI reporting under AWGN	15.1.0
2019-06	RAN5#83	R5-195441	0065	1	F	Update to 2Rx TDD FR1 periodic CQI reporting under AWGN	15.1.0
2019-06	RAN5#83	R5-195442	0070	1	F	Addition of SDR test case for single carrier in SA mode	15.1.0
2019-06	RAN5#83	R5-195443	0072	1	F	Addition of FR1 SDR test case for CA in NSA mode	15.1.0
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	R5-195558	0080	-	F	Correction to 5.2.2.1.4_1 2Rx FR1 PDSCH LTE-NR coexistence performance	16.1.0
2019-09	RAN#85	R5-196245	0090	-	F	Correction to 2Rx TDD FR1 periodic CQI reporting under AWGN conditions for both SA and NSA	16.1.0
2019-09	RAN#85	R5-196247	0092	-	F	Correction to 5.3.2.2.1 and 5.3.3.2.1 TDD FR1 PDCCH 1Tx performance	16.1.0
2019-09	RAN#85	R5-196495	0097	-	F	Updated to Annex A for performance tests	16.1.0
2019-09	RAN#85	R5-196496	0098	-	F	Updated to Annex B for performance tests	16.1.0
2019-09	RAN#85	R5-196498	0100	-	F	Updated to General clauses for Demod and CSI requirements	16.1.0
2019-09	RAN#85	R5-196857	0119	-	F	Corrections to PDSCH demod TCs	16.1.0
2019-09	RAN#85	R5-197370	0086	1	F	Updates to 6.2.2.1.2.1, 2Rx FDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197371	0087	1	F	Updates to 6.2.2.2.1, 2Rx TDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197372	0125	1	F	Modification of 4Rx FDD FR1 PDSCH mapping Type A performance - 2x4 MIMO with baseline receiver for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197373	0084	1	F	Clean up test cases 5.3.3.1.1, 5.3.3.1.2, 5.3.3.2.1 and 5.3.3.2.2 for 4Rx PDCCH	16.1.0
2019-09	RAN#85	R5-197374	0099	1	F	Updated to General clauses for performance tests	16.1.0
2019-09	RAN#85	R5-197375	0123	1	F	Modification of FDD FR1 2Rx TypeA baseline and TypeX Rxvr	16.1.0
2019-09	RAN#85	R5-197376	0083	1	F	Clean up test cases 5.3.2.2.1 and 5.3.2.2.2 for 2Rx PDCCH	16.1.0
2019-09	RAN#85	R5-197377	0093	1	F	Correction to FR1 FDD PDSCH mapping Type A performance test cases	16.1.0
2019-09	RAN#85	R5-197378	0095	1	F	Correction to MU and TT for FR1 demodulation test cases	16.1.0
2019-09	RAN#85	R5-197379	0096	1	F	Update to 4Rx FDD FR1 PDSCH mapping Type A performance	16.1.0
2019-09	RAN#85	R5-197380	0117	1	F	Update of Annex F to add new CSI test cases	16.1.0
2019-09	RAN#85	R5-197512	0101	1	F	Update to SA SDR test case	16.1.0
2019-09	RAN#85	R5-197513	0102	1	F	Update to NSA SDR test case	16.1.0
2019-09	RAN#85	R5-197566	0127	1	F	Modification on 2Rx TDD FR1 Single PMI with 4Tx Type1 - SinglePanel codebook for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197567	0128	1	F	Introduce 2Rx TDD FR1 Single PMI with 8Tx Type1 - SinglePanel codebook for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197572	0126	1	F	Modification of 4Rx FDD FR1 PDSCH mapping Type A performance - 4x4 MIMO with baseline receiver for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197573	0091	1	F	Correction to 2Rx TDD FR1 PDSCH mapping Type A performance	16.1.0
2019-09	RAN#85	R5-197574	0105	1	F	Update to TDD FR1 2Rx TypeA Baseline and Type X receiver Demod test cases	16.1.0
2019-09	RAN#85	R5-197575	0107	1	F	Editorial and updates to TS 38.521-4 test case 6.3.2.1.1	16.1.0
2019-09	RAN#85	R5-197576	0108	1	F	Updates to TS 38.521-4 test case 6.3.2.1.2	16.1.0
2019-09	RAN#85	R5-197577	0109	1	F	Updates to TS 38.521-4 test case 6.3.3.1.1	16.1.0
2019-09	RAN#85	R5-197578	0110	1	F	Update to TS 38.521-4 test case 6.3.3.1.2	16.1.0
2019-09	RAN#85	R5-197579	0111	1	F	Editorial and update to TS 38.521-4 test case 6.3.3.2.1	16.1.0
2019-09	RAN#85	R5-197580	0112	1	F	Editorial and update to TS 38.521-4 test case 6.3.3.2.2	16.1.0
2019-09	RAN#85	R5-197581	0120	1	F	Correction of PRACH-ConfigurationIndex for TC 5.2.2.2.1_1	16.1.0
2019-09	RAN#85	R5-197582	0122	1	F	Update to RI Reporting Accuracy test	16.1.0
2019-09	RAN#85	R5-197615	0088	1	F	Updates to 6.2.2.1.2.2, 2Rx FDD FR1 periodic subband CQI reporting under fading conditions for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197616	0089	1	F	Updates to 6.2.2.2.2.2, 2Rx TDD FR1 periodic subband CQI reporting under fading conditions for both SA and NSA	16.1.0
2019-09	RAN#85	R5-197648	0115	2	F	Update to Annex G to restructure minimum test time tables for Demodulation test cases	16.1.0
2019-09	RAN#85	R5-197649	0116	2	F	Update to Annex G to add minimum test time for CSI test cases	16.1.0

2019-12	RAN#86	R5-198248	0141	-	F	Updates to Annex F	16.2.0
2019-12	RAN#86	R5-198281	0142	-	F	Update to FR1 4Rx FDD PDSCH Type A Demodulation performance	16.2.0
2019-12	RAN#86	R5-198395	0151	-	F	Corrections to E-UTRA configurations for EN-DC test cases	16.2.0
2019-12	RAN#86	R5-198407	0152	-	F	Correction to 2Rx FDD FR1 periodic CQI reporting under AWGN conditions for both SA and NSA	16.2.0
2019-12	RAN#86	R5-198408	0153	-	F	Correction to 2Rx and 4Rx TDD FR1 Single PMI with 4Tx Type1 - SinglePanel codebook for both SA and NSA	16.2.0
2019-12	RAN#86	R5-198409	0154	-	F	Correction to Sections 5.2 and 5.3	16.2.0
2019-12	RAN#86	R5-198560	0157	-	F	Updated to Annex A and B for performance tests	16.2.0
2019-12	RAN#86	R5-198679	0161	-	F	Correction of SchedulingRequestResourceConfig periodicityAndOffset for TC 7.2.2.2.1_1	16.2.0
2019-12	RAN#86	R5-198680	0162	-	F	Include PDSCH RMC for PDCCH demod FR1 test cases	16.2.0
2019-12	RAN#86	R5-199079	0137	2	F	Adding new test case 6.2.3.1.2.1, 4Rx FDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	16.2.0
2019-12	RAN#86	R5-199382	0129	1	F	Addition of 5.2.2.1.3_1 2Rx FDD PDSCH mapping Type B	16.2.0
2019-12	RAN#86	R5-199383	0130	1	F	Addition of NR test case 5.2.3.1.2_1-FDD type A CSI-RS overlap 4x4 MIMO	16.2.0
2019-12	RAN#86	R5-199384	0134	1	F	Addition of NR test case 6.2.3.1.1.1-FDD periodical CQI	16.2.0
2019-12	RAN#86	R5-199385	0136	1	F	Addition of NR test case 6.4.2.1_1-FDD RI reporting	16.2.0
2019-12	RAN#86	R5-199387	0149	1	F	Update to starting MCS index for CQI reporting test cases	16.2.0
2019-12	RAN#86	R5-199388	0145	1	F	Update to Annex G for minimum test time for FR2 Demod test cases	16.2.0
2019-12	RAN#86	R5-199414	0131	1	F	Addition of NR test case 5.2.3.1.3_1-FDD type B 2x4 MIMO	16.2.0
2019-12	RAN#86	R5-199415	0132	1	F	Addition of NR test case 5.2.3.2.2_1-TDD type A CSI-RS overlap 2x4 MIMO	16.2.0
2019-12	RAN#86	R5-199416	0133	1	F	Addition of NR test case 5.2.3.2.3_1-TDD type B 2x4 MIMO	16.2.0
2019-12	RAN#86	R5-199417	0135	1	F	Addition of NR test case 6.2.3.2.1.1-TDD periodical CQI	16.2.0
2019-12	RAN#86	R5-199418	0138	1	F	Adding new test case 6.2.3.1.2.2, 4Rx FDD FR1 aperiodic subband CQI reporting under fading conditions for both SA and NSA	16.2.0
2019-12	RAN#86	R5-199419	0139	1	F	Adding new test case 6.2.3.2.2.1, 4Rx TDD FR1 periodic wideband CQI reporting under fading conditions for both SA and NSA	16.2.0
2019-12	RAN#86	R5-199420	0140	1	F	Adding new test case 6.2.3.2.2.2, 4Rx TDD FR1 aperiodic subband CQI reporting under fading conditions for both SA and NSA	16.2.0
2019-12	RAN#86	R5-199421	0155	1	F	Correction to chapter 5 and 6 to be aligned with core spec	16.2.0
2019-12	RAN#86	R5-199422	0156	1	F	Editorial correction to CSI reporting tests	16.2.0
2019-12	RAN#86	R5-199425	0146	1	F	Update to FR2 2Rx PDSCH Type A enhanced type X receiver test case	16.2.0
2019-12	RAN#86	R5-199516	0160	1	F	Update PrachConfigIndex in 5.2.3.2.1_1 test case	16.2.0
2019-12	RAN#86	R5-199525	0148	1	F	Clarification on PDCP SDU size for SDR SA Demod test case	16.2.0
2019-12	RAN#86	R5-199526	0147	1	F	Clarification on PDCP SDU size for SDR NSA Demod test case	16.2.0
2019-12	RAN#86	R5-199527	0143	1	F	Update to FR2 2Rx PDSCH Type A baseline receiver test case	16.2.0
2019-12	RAN#86	R5-199531	0144	1	F	Annex update for UE positioning procedure for Demod test cases	16.2.0
2019-12	RAN#86	R5-199532	0150	1	F	Update to FR2 PDCCH Demod test case	16.2.0
2019-12	RAN#86	R5-199570	0158	1	F	Introduction of FR2 CQI test cases	16.2.0
2020-03	RAN#87	R5-200271	0165	-	F	Update to Demod TC 5.2.3.2.1_1	16.3.0
2020-03	RAN#87	R5-200322	0166	-	F	CR to 38.521-4 to introduce isolation procedure	16.3.0
2020-03	RAN#87	R5-200450	0168	-	F	Addition of message exceptions for Type2 QCL information	16.3.0
2020-03	RAN#87	R5-201245	0170	1	F	Core alignment to 4Rx PDCCH Demod Test Cases	16.3.0
2020-03	RAN#87	R5-200453	0171	-	F	Correction to FR1 2Rx PDSCH demodulation test cases	16.3.0
2020-03	RAN#87	R5-200454	0172	-	F	Correction to FR1 4Rx PDSCH demodulation test cases	16.3.0
2020-03	RAN#87	R5-200455	0173	-	F	Correction to measurement uncertainty and test tolerance for CQI test cases	16.3.0
2020-03	RAN#87	R5-200456	0174	-	F	Correction to PDCCH demod TCs	16.3.0
2020-03	RAN#87	R5-200660	0175	-	F	Correcting CQI value in test procedure	16.3.0
2020-03	RAN#87	R5-200672	0178	-	F	Updated to Annex A and B for performance tests	16.3.0
2020-03	RAN#87	R5-200682	0179	-	F	Correction to Applicability rules for Performance tests	16.3.0
2020-03	RAN#87	R5-200710	0180	-	F	Update of TC 5.2.2.1.3_1 2Rx FDD PDSCH mapping Type B	16.3.0
2020-03	RAN#87	R5-200711	0181	-	F	Update of TC 5.2.3.1.2_1 4Rx FDD PDSCH mapping Type A and CSI-RS overlapped	16.3.0
2020-03	RAN#87	R5-200712	0182	-	F	Update of TC 5.2.3.1.3_1 4Rx FDD PDSCH mapping Type B	16.3.0
2020-03	RAN#87	R5-200713	0183	-	F	Update of TC 5.2.3.2.2_1 4Rx TDD PDSCH mapping Type A and CSI-RS overlapped	16.3.0
2020-03	RAN#87	R5-200714	0184	-	F	Update of TC 5.2.3.2.3_1 4Rx TDD PDSCH mapping Type B	16.3.0
2020-03	RAN#87	R5-200718	0188	-	F	Update of Test Tolerance in Annex F	16.3.0
2020-03	RAN#87	R5-200729	0189	-	F	Core spec alignment for FR1 4Rx FDD PDSCH Type A Demodulation performance	16.3.0

2020-03	RAN#87	R5-200914	0176	1	F	Correction to test case 8.2.2.2.1.1 2 Rx, TDD FR2 periodic CQI reporting under AWGN performance for both SA and NSA	16.3.0
2020-03	RAN#87	R5-200915	0164	1	F	Update of Clause 4 in TS 38.521-4	16.3.0
2020-03	RAN#87	R5-200985	0169	1	F	Core alignment for FR2 demod test case	16.3.0
2020-03	RAN#87	R5-201068	0187	1	F	Update of TC 6.4.2.1_1 2Rx FDD RI reporting	16.3.0
2020-03	RAN#87	R5-201090	0177	1	F	Replacing derivation paths to 38.331	16.3.0
2020-03	RAN#87	R5-201180	0167	1	F	Addition of FR2 Demod sustained data rate test case	16.3.0
2020-06	RAN#88	R5-201816	0190	-	F	Correction to TC 5.2.3.1.1_4 4Rx FDD FR1 PDSCH mapping Type A performance	16.4.0
2020-06	RAN#88	R5-201945	0191	-	F	Updated to Annex A and B for performance tests	16.4.0
2020-06	RAN#88	R5-202242	0195	-	F	Clarification of propagation condition for Demod test cases during call setup	16.4.0
2020-06	RAN#88	R5-202297	0198	-	F	Correction to 4Rx FDD FR1 periodic CQI reporting under AWGN conditions for both SA and NSA	16.4.0
2020-06	RAN#88	R5-202980	0201	1	F	Correction to CSI reporting test cases missing MIMO correlation matrixes	16.4.0
2020-06	RAN#88	R5-202304	0205	-	F	Correction to FR2 PDCCH demodulation tests	16.4.0
2020-06	RAN#88	R5-202307	0208	-	F	Editorial correction on the table numbers for Minimum Test Time	16.4.0
2020-06	RAN#88	R5-202308	0209	-	F	Editorial correction to 4x4 MIMO PDSCH demodulation tests	16.4.0
2020-06	RAN#88	R5-202736	0197	1	F	Message exception correction for Demod test cases	16.4.0
2020-06	RAN#88	R5-202737	0202	1	F	Correction to FR1 aperiodic subband CQI reporting under fading conditions	16.4.0
2020-06	RAN#88	R5-202738	0203	1	F	Correction to FR1 Single PMI with 8Tx Type1 - SinglePanel codebook for both SA and NSA	16.4.0
2020-06	RAN#88	R5-202739	0207	1	F	Correction to message exception and test description in RI tests	16.4.0
2020-06	RAN#88	R5-202740	0196	1	F	Update to FR2 PDSCH Demod test case	16.4.0
2020-06	RAN#88	R5-202741	0211	1	F	Introduction of 8.4.2.2.1 2Rx TDD FR2 RI reporting for both SA and NSA	16.4.0
2020-06	RAN#88	R5-202742	0210	1	F	Editorial correction to Annex C.2	16.4.0
2020-06	RAN#88	R5-202743	0213	1	F	Update Wireless isolation procedure	16.4.0
2020-06	RAN#88	R5-202766	0212	1	F	Updates of FR2 MU and TT in TS 38.521-4	16.4.0
2020-06	RAN#88	R5-202832	0214	1	F	Addition of message exceptions for PDSCH test cases	16.4.0
2020-06	RAN#88	R5-202908	0193	1	F	Clarification of disabling Tx diversity for FR2 UE for FR2 Demod testing	16.4.0
2020-06	RAN#88	R5-202979	0199	2	F	Correction to 4Rx TDD FR1 RI reporting	16.4.0
2020-06	RAN#88	R5-202981	0204	1	F	Correction to FR2 CQI reporting tests	16.4.0
2020-06	RAN#88	R5-202989	0192	1	F	Updates to 8.2.2.2.1, 2Rx TDD FR2 aperiodic CQI reporting under fading performance for both SA and NSA	16.4.0
2020-09	RAN#89	R5-203298	0215	-	F	Activate Test Mode in NSA Demod Test Cases	16.5.0
2020-09	RAN#89	R5-203670	0217	-	F	message contents correction for TC 5.2.3.1.2_1	16.5.0
2020-09	RAN#89	R5-203717	0219	-	F	Correction to TC 5.2.3.1.1_1 4Rx FDD FR1 PDSCH mapping Type A performance	16.5.0
2020-09	RAN#89	R5-203756	0220	-	F	Removing unnecessary IE rbg-Size from message exceptions	16.5.0
2020-09	RAN#89	R5-203902	0221	-	F	Correction to Annex G minimum test time table	16.5.0
2020-09	RAN#89	R5-204062	0226	-	F	Correction to PDSCH reference channel	16.5.0
2020-09	RAN#89	R5-204063	0227	-	F	Correction to 2Rx FDD FR1 periodic wideband CQI reporting under fading conditions	16.5.0
2020-09	RAN#89	R5-204064	0228	-	F	Correction to LTE-NR coexistence performance	16.5.0
2020-09	RAN#89	R5-204100	0232	-	F	Update to common test parameters and channel mappings	16.5.0
2020-09	RAN#89	R5-204101	0233	-	F	Update E-UTRA cell configuration for NSA	16.5.0
2020-09	RAN#89	R5-204261	0235	-	F	Editorial correction of message exceptions	16.5.0
2020-09	RAN#89	R5-204774	0223	1	F	Test applicability update for all PDSCH mapping type B test cases	16.5.0
2020-09	RAN#89	R5-204870	0222	1	F	Addition of FR1 2Rx TDD PDSCH mapping type B test case	16.5.0
2020-09	RAN#89	R5-204871	0224	1	F	Addition of 4Rx FDD FR1 RI reporting test case	16.5.0
2020-09	RAN#89	R5-204933	0229	1	F	CR to update MU and TT in 38.521-4	16.5.0
2020-09	RAN#89	R5-204934	0225	1	F	Correction to frequencyDomainAllocation	16.5.0
2020-09	RAN#89	R5-204935	0230	1	F	Correction to MU and TT for FR1 PMI and RI tests	16.5.0
2020-09	RAN#89	R5-204936	0218	1	F	Update to FR2 PDSCH test case	16.5.0
2020-09	RAN#89	R5-204937	0216	1	F	Annex F Update of MU and TT for FR2 PDSCH and PDCCH Demodulation scenario	16.5.0
2020-09	RAN#89	R5-204938	0236	1	F	Update of AWGN flatness in TS 38.521-4	16.5.0
2020-12	RAN#90	R5-205920	0243	-	F	Introduction of new test case for FR2 CA PDSCH Demodulation	16.6.0
2020-12	RAN#90	R5-205925	0247	-	F	Update to FDD LTE-NR coexistence test case	16.6.0
2020-12	RAN#90	R5-206090	0248	-	F	Correction to 5.2.2.1.4_1 LTE NR coexistence performance	16.6.0
2020-12	RAN#90	R5-206091	0249	-	F	Correction to 9.4B.1.1 Sustained downlink data rate performance for EN-DC within FR1	16.6.0
2020-12	RAN#90	R5-206092	0250	-	F	Core alignment to FR1 and FR2 CSI test cases	16.6.0
2020-12	RAN#90	R5-206093	0251	-	F	Clean up on FR2 CQI and RI test cases	16.6.0
2020-12	RAN#90	R5-206094	0252	-	F	Clean up on FR1 RI test cases	16.6.0
2020-12	RAN#90	R5-206097	0255	-	F	Correction to incorrect parameter settings for subband CQI tests	16.6.0

2020-12	RAN#90	R5-206098	0256	-	F	Correction to Message contents for Sustained downlink data rate tests	16.6.0
2020-12	RAN#90	R5-206163	0259	-	F	Correction in message content of 5.2.2.2.1_1, 5.2.3.2.1_1 test cases	16.6.0
2020-12	RAN#90	R5-206165	0260	-	F	Update on TB success rate definition in Sustain data rate test cases	16.6.0
2020-12	RAN#90	R5-206208	0262	-	F	Editorial update of uplink signals	16.6.0
2020-12	RAN#90	R5-206666	0237	1	F	Update of LTE-NR coexistence performance test case 5.2.2.1.4	16.6.0
2020-12	RAN#90	R5-206667	0238	1	F	Update of LTE-NR coexistence performance test case 5.2.3.1.4	16.6.0
2020-12	RAN#90	R5-206668	0253	1	F	Correction to number of CQI and HARQ in CQI TCs under fading	16.6.0
2020-12	RAN#90	R5-206669	0254	1	F	Correction to FR1 periodic wideband CQI reporting under fading conditions	16.6.0
2020-12	RAN#90	R5-206670	0258	1	F	Correction of CSI-IM periodicity and offset in 4RX FDD wideband CQI under fading condition	16.6.0
2020-12	RAN#90	R5-206671	0240	1	F	Update to OCNB definition in DEMOD spec	16.6.0
2020-12	RAN#90	R5-206775	0239	1	F	Addition of test case 5.2.2.2.4_1 2Rx TDD FR1 PDSCH Mapping Type A and LTE-NR coexistence performance - 4x2 MIMO with baseline receiver for both SA and NSA	16.6.0
2020-12	RAN#90	R5-206776	0241	1	F	Applicability rules for section 5 CA Demodulation requirements	16.6.0
2020-12	RAN#90	R5-206777	0242	1	F	Applicability rules for section 7 CA Demodulation requirements	16.6.0
2020-12	RAN#90	R5-206829	0263	1	F	Update of Annex F	16.6.0
2020-12	RAN#90	R5-206830	0244	1	F	Update to FR2 PDSCH Demodulation test case	16.6.0
2020-12	RAN#90	R5-206831	0245	1	F	Update to FR2 PDCCH Demodulation test case	16.6.0
2020-12	RAN#90	R5-206832	0246	1	F	Update to FR2 CQI reporting under AWGN test case	16.6.0
2020-12	RAN#90	R5-206833	0261	1	F	CR on MU and testability limit for FR2 demod test case	16.6.0
2021-03	RAN#91	R5-210520	0275	-	F	Correction to SR config for TDD PDSCH Type A performance test cases	16.7.0
2021-03	RAN#91	R5-210521	0276	-	F	Correction to test applicability for LTE-NR coexistence performance test cases	16.7.0
2021-03	RAN#91	R5-210522	0277	-	F	Correction to wideband CQI reporting under fading test cases	16.7.0
2021-03	RAN#91	R5-210523	0278	-	F	Addition of 8.3.2.2.1 2Rx TDD FR2 Single PMI with 2TX Type1-SinglePanel Codebook	16.7.0
2021-03	RAN#91	R5-210770	0282	-	F	Update message content in test case 7.3.2.2.2	16.7.0
2021-03	RAN#91	R5-210773	0283	-	F	Correction in 6.4.2.1_1 test requirements	16.7.0
2021-03	RAN#91	R5-210868	0284	-	F	Correction to Table F.1.1.2-2 for FR1 test cases	16.7.0
2021-03	RAN#91	R5-210869	0285	-	F	Correction to Test Purpose of PDCCH test cases	16.7.0
2021-03	RAN#91	R5-210993	0288	-	F	Editorial, cleanup of some references in 38.521-4	16.7.0
2021-03	RAN#91	R5-211050	0289	-	F	Updating applicability in test case 5.2.2.2.4_1	16.7.0
2021-03	RAN#91	R5-211081	0293	-	F	Update to downlink physical channel EPRE level for LTE-NR coex scenario	16.7.0
2021-03	RAN#91	R5-211086	0296	-	F	Adding new CSI test cases to annex F	16.7.0
2021-03	RAN#91	R5-211658	0297	1	F	Addition of new test case 6.3.2.1.3 2Rx FDD FR1 Multiple PMI with 16Tx Type1 - SinglePanel codebook for both SA and NSA	16.7.0
2021-03	RAN#91	R5-211659	0298	1	F	Addition of new test case 6.3.3.1.3 4Rx FDD FR1 Multiple PMI with 16Tx Type1 - SinglePanel codebook for both SA and NSA	16.7.0
2021-03	RAN#91	R5-211716	0280	1	F	Correction to DCI bit size for PDSCH Type B performance and LTE coexistence tests	16.7.0
2021-03	RAN#91	R5-211717	0281	1	F	Correction to LB setup DRB in CLOSE UE TEST LOOP message	16.7.0
2021-03	RAN#91	R5-211718	0286	1	F	Correction to NR test case 6.2.2.1.2.1	16.7.0
2021-03	RAN#91	R5-211719	0273	1	F	Correction to E-UTRA link setup for NSA testing	16.7.0
2021-03	RAN#91	R5-211813	0290	1	F	Adding new test case 6.3.2.2.3, 2Rx TDD FR1 Single PMI with 16Tx Type1 - SinglePanel codebook for both SA and NSA	16.7.0
2021-03	RAN#91	R5-211814	0292	1	F	Adding new test case 6.3.3.2.3, 4Rx TDD FR1 Single PMI with 16Tx Type1 - SinglePanel codebook for both SA and NSA	16.7.0
2021-03	RAN#91	R5-211816	0274	1	F	Update of minimum conformance requirements for 4Rx FDD FR1 PDSCH in TC 5.2.3.1.1_1	16.7.0
2021-03	RAN#91	R5-211817	0265	1	F	Addition of Applicability of different requirements for R16 NR HST in 5.1.1.7	16.7.0
2021-03	RAN#91	R5-211818	0268	1	F	Update of Applicability of requirements for mandatory UE features with capability signalling for R16 NR HST in 5.1.1.4	16.7.0
2021-03	RAN#91	R5-211819	0269	1	F	Update of Applicability of requirements for optional UE features for R16 NR HST in 5.1.1.3	16.7.0
2021-03	RAN#91	R5-211820	0264	1	F	Addition of Abbreviations and References for R16 NR HST in 3.3 and References	16.7.0
2021-03	RAN#91	R5-211821	0266	1	F	Addition of HST-DPS Channel Profile in B.3.3	16.7.0
2021-03	RAN#91	R5-211822	0267	1	F	Addition of HST-SFN Channel Profile in B.3.2	16.7.0
2021-03	RAN#91	R5-211823	0270	1	F	Update of Combinations of channel model parameters for R16 NR HST in B.2.2	16.7.0
2021-03	RAN#91	R5-211824	0271	1	F	Update of Reference measurement channels for PDSCH performance requirements for R16 NR HST in A.3.2	16.7.0
2021-03	RAN#91	R5-211825	0272	1	F	Update of Single Tap Channel Profile for R16 NR HST in B.3.1	16.7.0

2021-03	RAN#91	R5-211916	0291	1	F	Adding new test case 6.3.2.2.4, 2Rx TDD FR1 Single PMI with 32Tx Type1 - SinglePanel codebook for both SA and NSA	16.7.0
2021-03	RAN#91	R5-211929	0299	1	F	Update of FR2 demod test cases	16.7.0
2021-06	RAN#92	R5-212063	0301	-	F	Addition of test applicability rules for UE supporting FR2 DL 256QAM	16.8.0
2021-06	RAN#92	R5-212064	0302	-	F	Updating on annexes for FR2 DL 256QAM test cases	16.8.0
2021-06	RAN#92	R5-212067	0303	-	F	Addition of new test case 6.3.2.1.4 2Rx FDD FR1 Single PMI with 32Tx Type1 - SinglePanel codebook for both SA and NSA	16.8.0
2021-06	RAN#92	R5-212068	0304	-	F	Addition of new test case 6.3.3.1.4 4Rx FDD FR1 Single PMI with 32Tx Type1 - SinglePanel codebook for both SA and NSA	16.8.0
2021-06	RAN#92	R5-212254	0308	-	F	Update MU and TT for 8.4.2.2.1	16.8.0
2021-06	RAN#92	R5-212632	0311	-	F	Correction of E-UTRA link settings	16.8.0
2021-06	RAN#92	R5-212635	0312	-	F	Correction of DL RMC for TC 5.2.3.1.4_1	16.8.0
2021-06	RAN#92	R5-212743	0314	-	F	Update to Demod test cases title	16.8.0
2021-06	RAN#92	R5-212933	0315	-	F	Addition of eMIMO demod test case 5.2.2.1.11	16.8.0
2021-06	RAN#92	R5-212934	0316	-	F	Addition of eMIMO demod test case 5.2.2.2.11	16.8.0
2021-06	RAN#92	R5-212935	0317	-	F	Addition of eMIMO demod test case 5.2.3.1.11	16.8.0
2021-06	RAN#92	R5-212936	0318	-	F	Addition of eMIMO demod test case 5.2.3.2.11	16.8.0
2021-06	RAN#92	R5-212937	0319	-	F	Adding FRC for eMIMO demod test cases	16.8.0
2021-06	RAN#92	R5-212977	0327	-	F	Updating G.1.2 for performance testing	16.8.0
2021-06	RAN#92	R5-213306	0328	-	F	Introduction of additional PDSCH RMC for FDD	16.8.0
2021-06	RAN#92	R5-213308	0329	-	F	Update of message exceptions in FR2 demod test cases	16.8.0
2021-06	RAN#92	R5-213341	0330	-	F	Message content update in 5.2.2.2.1_1 and 5.2.3.2.1_1 test 1-9	16.8.0
2021-06	RAN#92	R5-213342	0331	-	F	Message content update in SA LTE-NR coexistence test cases	16.8.0
2021-06	RAN#92	R5-213358	0334	-	F	Addition of FR1 PDSCH Demodulation CA with power imbalance test case	16.8.0
2021-06	RAN#92	R5-213919	0313	1	F	Correction of derivation paths to 38.508-1	16.8.0
2021-06	RAN#92	R5-213920	0332	1	F	TT update to FR2 CQI reporting under fading test case	16.8.0
2021-06	RAN#92	R5-214012	0326	1	F	Adding 256QAM into CQI reporting test case	16.8.0
2021-06	RAN#92	R5-214016	0325	1	F	Adding FRC for URLLC demod test cases	16.8.0
2021-06	RAN#92	R5-214058	0300	1	F	Update of FR2 demod test cases	16.8.0
2021-06	RAN#92	R5-214059	0310	1	F	Correction to TC 9.4B.1.1-SDR performance	16.8.0
2021-06	RAN#92	R5-214088	0307	1	F	Update to minimum test time	16.8.0
2021-06	RAN#92	R5-214098	0333	1	F	Addition of FR1 normal PDSCH demodulation CA test case for 2CC	16.8.0
2021-06	RAN#92	R5-214099	0320	1	F	Addition of URLLC demod test case 5.2.2.1.5	16.8.0
2021-06	RAN#92	R5-214100	0321	1	F	Addition of URLLC demod test case 5.2.2.2.5	16.8.0
2021-06	RAN#92	R5-214101	0322	1	F	Addition of URLLC demod test case 5.2.3.1.5	16.8.0
2021-06	RAN#92	R5-214102	0323	1	F	Addition of URLLC demod test case 5.2.3.2.5	16.8.0
2021-06	RAN#92	R5-214103	0324	1	F	Adding MU and TT for URLLC demod test cases	16.8.0
2021-06	RAN#92	R5-214112	0306	1	F	Core alignment of common test parameters for PDCCH demodulation tests	16.8.0
2021-09	RAN#93	R5-214533	0338	-	F	Updates on FRC for FR2 DL 256QAM	16.9.0
2021-09	RAN#93	R5-215065	0353	-	F	Core spec alignment of RMC	16.9.0
2021-09	RAN#93	R5-215084	0357	-	F	Addition of eMIMO demod test case 5.2.2.2.12	16.9.0
2021-09	RAN#93	R5-215085	0358	-	F	Addition of eMIMO demod test case 5.2.2.2.13	16.9.0
2021-09	RAN#93	R5-215090	0363	-	F	Addition of eMIMO demod test case 5.2.3.2.12	16.9.0
2021-09	RAN#93	R5-215091	0364	-	F	Addition of eMIMO demod test case 5.2.3.2.13	16.9.0
2021-09	RAN#93	R5-215092	0365	-	F	Addition of eMIMO demod test case 5.2.3.2.14	16.9.0
2021-09	RAN#93	R5-215093	0366	-	F	Adding FRC for eMIMO demod test cases	16.9.0
2021-09	RAN#93	R5-215094	0367	-	F	Adding MU and TT for eMIMO demod test cases	16.9.0
2021-09	RAN#93	R5-215103	0372	-	F	Addition of URLLC demod test case 5.2.3.2.7	16.9.0
2021-09	RAN#93	R5-215342	0380	-	F	Correction to reporting granularity for single PMI TCs	16.9.0
2021-09	RAN#93	R5-215343	0381	-	F	Correction to test time for measuring CQI in Sub-band CQI TCs	16.9.0
2021-09	RAN#93	R5-215345	0383	-	F	Correction to DCI bitlength for test 1-5 and 1-6 in TC 5.2.2.2.1_1 and 5.2.3.2.1_1	16.9.0
2021-09	RAN#93	R5-215470	0387	-	F	Correction of message exceptions in PDCCH test cases	16.9.0
2021-09	RAN#93	R5-215609	0390	-	F	MTSU and TT mapping related to Max Device Size in TS 38.521-4	16.9.0
2021-09	RAN#93	R5-215610	0391	-	F	Update 9.4B.1.1 message content	16.9.0
2021-09	RAN#93	R5-215663	0394	-	F	Updates to FR1 2DLCA PDSCH demodulation with power imbalance test case	16.9.0
2021-09	RAN#93	R5-215665	0396	-	F	Editorial correction to the section 6.2.2.2 title	16.9.0
2021-09	RAN#93	R5-215666	0397	-	F	Update to test coverage across 5G NR architecture options for Demod scenarios	16.9.0
2021-09	RAN#93	R5-215901	0346	1	F	Update FR2 RI test configuration update for TS 38.521-4	16.9.0
2021-09	RAN#93	R5-215902	0382	1	F	Editorial error correction in Section 7 and 8	16.9.0
2021-09	RAN#93	R5-215934	0360	1	F	Addition of eMIMO demod test case 5.2.3.1.12	16.9.0
2021-09	RAN#93	R5-215937	0343	1	F	Update of Annex F for test cases of demodulation for power saving	16.9.0
2021-09	RAN#93	R5-215942	0339	1	F	Updates to PDSCH Demodulation Performance for 2DL CA	16.9.0

2021-09	RAN#93	R5-215944	0345	1	F	Update Applicability of requirement for HST-DPS and multi-TRxP test cases	16.9.0
2021-09	RAN#93	R5-215946	0350	1	F	Addition of NR HST Demod TC 5.2.2.1.9 - HST SFN	16.9.0
2021-09	RAN#93	R5-215947	0351	1	F	Addition of NR HST Demod TC 5.2.2.1.10 - HST DPS	16.9.0
2021-09	RAN#93	R5-215950	0368	1	F	Completing CQI reporting test case with 256QAM	16.9.0
2021-09	RAN#93	R5-215952	0369	1	F	Addition of URLLC demod test case 5.2.2.1.7	16.9.0
2021-09	RAN#93	R5-215953	0370	1	F	Addition of URLLC demod test case 5.2.2.2.7	16.9.0
2021-09	RAN#93	R5-215954	0374	1	F	Addition of 5.2.2.1.6 2Rx FDD FR1 PDSCH repetitions over multiple slots performance	16.9.0
2021-09	RAN#93	R5-215955	0375	1	F	Addition of 5.2.2.1.8 2Rx FDD FR1 PDSCH pre-emption performance	16.9.0
2021-09	RAN#93	R5-215956	0376	1	F	Addition of 5.2.2.2.6 2Rx TDD FR1 PDSCH repetitions over multiple slots performance	16.9.0
2021-09	RAN#93	R5-215957	0377	1	F	Addition of 5.2.2.2.8 2Rx TDD FR1 PDSCH pre-emption performance	16.9.0
2021-09	RAN#93	R5-215958	0378	1	F	Addition of 5.2.3.1.6 4Rx FDD FR1 PDSCH repetitions over multiple slots performance	16.9.0
2021-09	RAN#93	R5-215959	0379	1	F	Addition of 5.2.3.2.6 4Rx TDD FR1 PDSCH repetitions over multiple slots performance	16.9.0
2021-09	RAN#93	R5-216021	0385	1	F	Clean-up of parameter settings and message contents in 8.4.2.2.1	16.9.0
2021-09	RAN#93	R5-216040	0384	1	F	Correction to dedicated CORESET ID setting in PDCCH-Config for Standalone	16.9.0
2021-09	RAN#93	R5-216041	0388	1	F	Update of message exceptions	16.9.0
2021-09	RAN#93	R5-216071	0359	1	F	Addition of eMIMO demod test case 5.2.2.2.14	16.9.0
2021-09	RAN#93	R5-216072	0340	1	F	Addition of 2Rx TDD FR1 PDCCH 1 Tx antenna performance for power saving test case	16.9.0
2021-09	RAN#93	R5-216073	0341	1	F	Addition of 4Rx TDD FR1 PDCCH 1 Tx antenna performance for power saving test case	16.9.0
2021-09	RAN#93	R5-216074	0342	1	F	Addition of 2Rx TDD FR2 PDCCH 1 Tx antenna performance for power saving test case	16.9.0
2021-09	RAN#93	R5-216075	0395	1	F	Updates to FR2 2DLCA PDSCH demodulation test case	16.9.0
2021-09	RAN#93	R5-216076	0337	1	F	Addition of FR2 DL 256QAM demodulation test case	16.9.0
2021-09	RAN#93	R5-216078	0371	1	F	Addition of URLLC demod test case 5.2.3.1.7	16.9.0
2021-09	RAN#93	R5-216096	0336	1	F	Update of FR2 demod test cases	16.9.0
2021-09	RAN#93	R5-216112	0347	1	F	Addition of NR PS Demod TC 5.3.2.1.3-FR1 FDD 2Rx	16.9.0
2021-09	RAN#93	R5-216113	0348	1	F	Addition of NR PS Demod TC 5.3.3.1.3-FR1 FDD 4Rx	16.9.0
2021-09	RAN#93	R5-216118	0392	1	F	Update to FR2 NSA SDR TC 9.4B.1.2	16.9.0
2021-09	RAN#93	R5-216126	0354	1	F	Addition of eMIMO demod test case 5.2.2.1.12	16.9.0
2021-09	RAN#93	R5-216127	0355	1	F	Addition of eMIMO demod test case 5.2.2.1.13	16.9.0
2021-09	RAN#93	R5-216128	0356	1	F	Addition of eMIMO demod test case 5.2.2.1.14	16.9.0
2021-09	RAN#93	R5-216129	0361	1	F	Addition of eMIMO demod test case 5.2.3.1.13	16.9.0
2021-09	RAN#93	R5-216130	0362	1	F	Addition of eMIMO demod test case 5.2.3.1.14	16.9.0
2021-12	RAN#94	R5-216786	0403	-	F	Addition of applicability of different requirements with Multi-TRxP	16.10.0
2021-12	RAN#94	R5-216787	0404	-	F	Update Applicability of requirements for optional UE features	16.10.0
2021-12	RAN#94	R5-216908	0407	-	F	Addition of NR HST Demod TC 5.2.2.1.1_1 - 2Rx FDD type A	16.10.0
2021-12	RAN#94	R5-216909	0408	-	F	Addition of NR HST Demod TC 5.2.2.2.1_1 - 2Rx TDD type A	16.10.0
2021-12	RAN#94	R5-216910	0409	-	F	Correction to NR HST Demod TC 5.2.2.1.9_1 - HST-SFN	16.10.0
2021-12	RAN#94	R5-217059	0412	-	F	Correction to NR TC 5.3.2.1.1-2Rx FDD FR1 PDCCH 1 Tx antenna performance	16.10.0
2021-12	RAN#94	R5-217060	0413	-	F	Correction to NR TC 5.3.3.2.1-PDCCH 1 Tx antenna performance	16.10.0
2021-12	RAN#94	R5-217363	0430	-	F	Addition of RMC in Annex A for eMIMO enhanced typeII CSI reporting	16.10.0
2021-12	RAN#94	R5-217364	0431	-	F	Addition of B.2.3.2.3A Beam steering approach with dual cluster beams	16.10.0
2021-12	RAN#94	R5-217370	0434	-	F	Updating 5.2.x.y.7 PDSCH with UE processing capability 2	16.10.0
2021-12	RAN#94	R5-217375	0439	-	F	Update to Annex F for URLLC test cases	16.10.0
2021-12	RAN#94	R5-217377	0441	-	F	Update to applicability of optional features for URLLC test cases	16.10.0
2021-12	RAN#94	R5-217378	0442	-	F	Update to URLLC RMC for demodulation testing in Annex A	16.10.0
2021-12	RAN#94	R5-217437	0443	-	F	Correction to frequencyDomainResources in PDCCHConfigCommon message exception	16.10.0
2021-12	RAN#94	R5-217522	0446	-	F	Addition of DL and UL RMC for FR2 SDR test case	16.10.0
2021-12	RAN#94	R5-217525	0449	-	F	Updates to FR1 normal PDSCH CA test cases	16.10.0
2021-12	RAN#94	R5-217526	0450	-	F	Updates to FR2 normal PDSCH CA test cases	16.10.0
2021-12	RAN#94	R5-218248	0424	1	F	Updating minimum test time in Annex G	16.10.0
2021-12	RAN#94	R5-218308	0425	1	F	Addition of 6.3.2.1.6 2Rx FDD FR1 Multiple PMI with 16Tx Enhanced Type II codebook	16.10.0
2021-12	RAN#94	R5-218309	0426	1	F	Addition of 6.3.2.2.6 2Rx TDD FR1 Multiple PMI with 16Tx Enhanced Type II codebook	16.10.0
2021-12	RAN#94	R5-218310	0427	1	F	Addition of 6.3.3.1.6 4Rx FDD FR1 Multiple PMI with 16Tx Enhanced Type II codebook	16.10.0

2021-12	RAN#94	R5-218311	0428	1	F	Addition of 6.3.3.2.6 4Rx TDD FR1 Multiple PMI with 16Tx Enhanced Type II codebook	16.10.0
2021-12	RAN#94	R5-218312	0429	1	F	Addition of applicability of optional features in 6.1.1.3	16.10.0
2021-12	RAN#94	R5-218328	0405	1	F	Correction to PS Demod TC 5.3.2.1.3 - 2Rx	16.10.0
2021-12	RAN#94	R5-218329	0406	1	F	Correction to PS Demod TC 5.3.3.1.3 - 4Rx	16.10.0
2021-12	RAN#94	R5-218339	0420	1	F	Addition of new test case 6.3.2.1.5 2Rx FDD FR1 Multiple PMI with 16Tx TypeII codebook for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218340	0421	1	F	Addition of new test case 6.3.2.2.5 2Rx TDD FR1 Multiple PMI with 16Tx TypeII codebook for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218341	0422	1	F	Addition of new test case 6.3.3.1.5 4Rx FDD FR1 Multiple PMI with 16Tx TypeII codebook for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218342	0423	1	F	Addition of new test case 6.3.3.2.5 4Rx TDD FR1 Multiple PMI with 16Tx TypeII codebook for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218343	0444	1	F	Correction to TC 5.2.2.4_1 and editorial corrections	16.10.0
2021-12	RAN#94	R5-218344	0447	1	F	Addition of NE-DC SDR test case	16.10.0
2021-12	RAN#94	R5-218345	0399	1	F	Addition of new test case 5.2.3.1.9_1 for NR HST	16.10.0
2021-12	RAN#94	R5-218346	0400	1	F	Addition of new test case 5.2.3.1.10_1 for NR HST	16.10.0
2021-12	RAN#94	R5-218347	0414	1	F	Addition of test case 5.2.2.9_1, 2Rx TDD FR1 HST-SFN performance - 2x2 MIMO with baseline receiver for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218348	0415	1	F	Addition of test case 5.2.2.10_1, 2Rx TDD FR1 HST-DPS performance - 2x2 MIMO with baseline receiver for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218349	0416	1	F	Addition of test case 5.2.3.2.9_1, 4Rx TDD FR1 HST-SFN performance - 2x4 MIMO with baseline receiver for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218350	0418	1	F	Addition of test cases 5.2.2.2.9_1, 5.2.2.2.10_1, 5.2.3.2.9_1 to annex F	16.10.0
2021-12	RAN#94	R5-218357	0419	1	F	Update of URLLC demodulation Test Cases	16.10.0
2021-12	RAN#94	R5-218358	0433	1	F	Updating 5.2.x.y.5 PDSCH with 1e-5 BLER	16.10.0
2021-12	RAN#94	R5-218359	0435	1	F	Addition of 6.2.2.1.1.2 URLLC 2RX FDD CQI reporting test case	16.10.0
2021-12	RAN#94	R5-218360	0440	1	F	Addition of statistical testing limit for URLLC test cases in Annex G	16.10.0
2021-12	RAN#94	R5-218436	0453	1	F	Update to LTE-NR coex test case message exception	16.10.0
2021-12	RAN#94	R5-218462	0432	1	F	Addition of MU and TT in Annex F for enhanced typeII CSI reporting	16.10.0
2021-12	RAN#94	R5-218465	0401	1	F	Addition of PDCCH Search Space Ext configuration for power saving test case	16.10.0
2021-12	RAN#94	R5-218466	0417	1	F	Update of test case 5.2.3.2.1_1, 4Rx TDD FR1 PDSCH mapping Type A performance - 2x4 MIMO with baseline receiver for both SA and NSA	16.10.0
2021-12	RAN#94	R5-218467	0436	1	F	Addition of 6.2.2.2.1.2 URLLC 2RX TDD CQI reporting test case	16.10.0
2021-12	RAN#94	R5-218468	0437	1	F	Addition of 6.2.3.1.1.2 URLLC 4RX FDD CQI reporting test case	16.10.0
2021-12	RAN#94	R5-218469	0438	1	F	Addition of 6.2.3.2.1.2 URLLC 4RX TDD CQI reporting test case	16.10.0
2021-12	RAN#94	R5-218486	0445	1	F	Clarification on cl 4.6 test coverage across 5G NR architecture options for Demod	16.10.0
2022-03	RAN#95	R5-220276	0454	-	F	Clarifications on 5G NR connectivity options for Demod	16.11.0
2022-03	RAN#95	R5-220629	0460	-	F	Correction to demod TC 5.2.2.1.4_1	16.11.0
2022-03	RAN#95	R5-220630	0461	-	F	Correction to demod TC 5.2.3.2.1_1	16.11.0
2022-03	RAN#95	R5-220634	0463	-	F	Updates to HST test case 5.2.3.1.9_1	16.11.0
2022-03	RAN#95	R5-220635	0464	-	F	Updates to HST test case 5.2.3.1.10_1	16.11.0
2022-03	RAN#95	R5-220638	0467	-	F	Addition of fading profile power uncertainty for 4Tx, FR1	16.11.0
2022-03	RAN#95	R5-220651	0468	-	F	Editorial correction for test case title in Annex F	16.11.0
2022-03	RAN#95	R5-220664	0469	-	F	Editorial change for the position of clause 5.2.3.1.9 and 5.2.3.1.10	16.11.0
2022-03	RAN#95	R5-220678	0471	-	F	Correcting applicability part of HST test cases in 38.521-4	16.11.0
2022-03	RAN#95	R5-220684	0473	-	F	Addition of new RMCs to Annex	16.11.0
2022-03	RAN#95	R5-220686	0475	-	F	Correcting test applicability for EN-DC, rel-16 to rel-15	16.11.0
2022-03	RAN#95	R5-220751	0476	-	F	Correction to PS Demod TC 5.3.2.1.3	16.11.0
2022-03	RAN#95	R5-220764	0477	-	F	Updating test case 6.3.2.2.3, 2Rx TDD FR1 Single PMI with 16Tx Type1 - SinglePanel codebook for both SA and NSA	16.11.0
2022-03	RAN#95	R5-220796	0478	-	F	Update to eMIMO demod test cases	16.11.0
2022-03	RAN#95	R5-220820	0487	-	F	Adding testability description of 7.2.2.2.2 and 7.2.2.2.3	16.11.0
2022-03	RAN#95	R5-220936	0493	-	F	Editorial correction to 5.3.3.1.3 and 5.3.3.2.3	16.11.0
2022-03	RAN#95	R5-221153	0494	-	F	Update to FR1 CA normal PDSCH test cases	16.11.0
2022-03	RAN#95	R5-221154	0495	-	F	Update to FR1 CA power imbalance test cases	16.11.0
2022-03	RAN#95	R5-221155	0496	-	F	Update to FR2 CA normal PDSCH test cases	16.11.0
2022-03	RAN#95	R5-221707	0499	1	F	Editorial update to PBCH demod requirements section	16.11.0
2022-03	RAN#95	R5-221708	0500	1	F	Update to testability of test requirements due to achievable SNR improvements	16.11.0
2022-03	RAN#95	R5-221709	0501	1	F	FR1 NSA SDR message contents update	16.11.0
2022-03	RAN#95	R5-221710	0491	1	F	Correction to Annex H.1.2	16.11.0
2022-03	RAN#95	R5-221842	0455	1	F	Correction on Type I PMI test cases	16.11.0

2022-03	RAN#95	R5-221843	0456	1	F	Addition of FR1 CA CQI test cases	16.11.0
2022-03	RAN#95	R5-221844	0457	1	F	Addition of applicability for FR1 CA CQI test requirements	16.11.0
2022-03	RAN#95	R5-221845	0474	1	F	Addition of test case 5.2.3.2.4_1, 4Rx TDD FR1 PDSCH Mapping Type A and LTE-NR coexistence performance - 4x4 MIMO with baseline receiver for both SA and NSA	16.11.0
2022-03	RAN#95	R5-221846	0497	1	F	Introduction of FR1 CA SDR test case	16.11.0
2022-03	RAN#95	R5-221847	0458	1	F	Addition of FR2 CA CQI test cases	16.11.0
2022-03	RAN#95	R5-221848	0459	1	F	Addition of applicability for FR2 CA CQI test requirements	16.11.0
2022-03	RAN#95	R5-221854	0470	1	F	Addition of test case 5.2.3.2.10_1, 4Rx TDD FR1 HST DPS performance - 2x4 MIMO with baseline receiver for both SA and NSA	16.11.0
2022-03	RAN#95	R5-221855	0502	1	F	Update to HST Demod test cases	16.11.0
2022-03	RAN#95	R5-221856	0465	1	F	Addition of HST test case 5.2.3.1.9_1 to annex F	16.11.0
2022-03	RAN#95	R5-221857	0466	1	F	Addition of HST test case 5.2.3.1.10_1 to annex F	16.11.0
2022-03	RAN#95	R5-221860	0480	1	F	Update to 5.2.x.y.5 PDSCH with 1e-5 BLER	16.11.0
2022-03	RAN#95	R5-221861	0481	1	F	Update to 5.2.x.y.6 PDSCH with repetitions over multiple slots	16.11.0
2022-03	RAN#95	R5-221862	0483	1	F	Update to 5.2.2.y.8 PDSCH pre-emption	16.11.0
2022-03	RAN#95	R5-221863	0484	1	F	Addition of 5.2.3.1.8 PDSCH pre-emption 4Rx FDD	16.11.0
2022-03	RAN#95	R5-221864	0485	1	F	Addition of 5.2.3.2.8 PDSCH pre-emption 4Rx TDD	16.11.0
2022-03	RAN#95	R5-221865	0488	1	F	Addition of 7.2.2.2.2 FR2 PDSCH repetition	16.11.0
2022-03	RAN#95	R5-221866	0489	1	F	Addition of 7.2.2.3 FR2 PDSCH mapping Type B	16.11.0
2022-03	RAN#95	R5-221867	0479	1	F	Addition of minimum test time for 1% residual BLER	16.11.0
2022-03	RAN#95	R5-221868	0486	1	F	Update to Annex F for URLLC test cases	16.11.0
2022-06	RAN#96	R5-222231	0503	-	F	Update of Demod TC 5.2.2.1.9_1 2Rx FDD FR1 HST-SFN performance	16.12.0
2022-06	RAN#96	R5-222232	0504	-	F	Update of Demod TC 5.2.3.1.1_1 4Rx FDD FR1 PDSCH mapping Type A perf for NR HST	16.12.0
2022-06	RAN#96	R5-222233	0505	-	F	Update of Demod TC 5.2.3.1.9_1 4Rx FDD FR1 HST-SFN performance	16.12.0
2022-06	RAN#96	R5-222234	0506	-	F	Update of Demod TC 5.2.3.1.10_1 4Rx FDD FR1 HST-DPS performance	16.12.0
2022-06	RAN#96	R5-222498	0509	-	F	Correction to k0 value description	16.12.0
2022-06	RAN#96	R5-222499	0510	-	F	Correction to coresets RB in 5.3.2.1.3 and 5.3.3.1.3	16.12.0
2022-06	RAN#96	R5-222585	0519	-	F	Update to FR1 CA SDR test case	16.12.0
2022-06	RAN#96	R5-222595	0524	-	F	Correction to demod test case procedure	16.12.0
2022-06	RAN#96	R5-222619	0525	-	F	Addition of NR SL Demod TC 11.1.2 - PSSCH	16.12.0
2022-06	RAN#96	R5-222620	0526	-	F	Addition of NR SL Demod TC 11.1.3 - PSCCH	16.12.0
2022-06	RAN#96	R5-222621	0527	-	F	Addition of NR SL Demod TC 11.1.4 - PSBCH	16.12.0
2022-06	RAN#96	R5-222622	0528	-	F	Addition of NR SL Demod TC 11.1.5 - PSFCH	16.12.0
2022-06	RAN#96	R5-222623	0529	-	F	Addition of NR SL Demod TC 11.1.6 - imbalance	16.12.0
2022-06	RAN#96	R5-222624	0530	-	F	Addition of NR SL Demod TC 11.1.7 - soft buffer	16.12.0
2022-06	RAN#96	R5-222625	0531	-	F	Addition of NR SL Demod TC 11.1.8 - PSCCH capability	16.12.0
2022-06	RAN#96	R5-222627	0533	-	F	Correction to references for NR SL Demod	16.12.0
2022-06	RAN#96	R5-222628	0534	-	F	Addition of NR SL Demod RMCs in Annex A	16.12.0
2022-06	RAN#96	R5-222629	0535	-	F	Addition of test tolerance for NR SL Demod in Annex F	16.12.0
2022-06	RAN#96	R5-222630	0536	-	F	Addition of test method for NR SL Demod in Annex G	16.12.0
2022-06	RAN#96	R5-222895	0540	-	F	Update to URLLC test cases 5.2.x.y.7	16.12.0
2022-06	RAN#96	R5-222898	0543	-	F	Update to URLLC test case 7.2.2.2.3	16.12.0
2022-06	RAN#96	R5-223024	0547	-	F	Update of FR1 RI reporting test cases	16.12.0
2022-06	RAN#96	R5-223048	0548	-	F	Removal of duplicate clauses from the Demod spec	16.12.0
2022-06	RAN#96	R5-223049	0549	-	F	Addition of test case 6.3.3.2.4, 4Rx TDD FR1 Single PMI with 32Tx Type1 - SinglePanel codebook for both SA and NSA	16.12.0
2022-06	RAN#96	R5-223107	0551	-	F	Correction in performance enhancement test cases 6.3.2.2.3, 6.3.2.2.4 and 6.3.3.2.3	16.12.0
2022-06	RAN#96	R5-223119	0552	-	F	Solving editor notes for Type I PMI test cases	16.12.0
2022-06	RAN#96	R5-223120	0553	-	F	Solving editor notes for Type II PMI test cases	16.12.0
2022-06	RAN#96	R5-223153	0554	-	F	Solve duplicated information in Annex	16.12.0
2022-06	RAN#96	R5-223275	0555	-	F	Update of FR2 CQI CA test cases	16.12.0
2022-06	RAN#96	R5-223704	0532	1	F	Addition of NR SL Demod TC 11.1.9 - PSFCH capability	16.12.0
2022-06	RAN#96	R5-223714	0508	1	F	Correction to PDCCH parameters in 5.2.2.1.4 and 5.2.2.2.4	16.12.0
2022-06	RAN#96	R5-223715	0516	1	F	Update to FR1 CA normal PDSCH test cases	16.12.0
2022-06	RAN#96	R5-223716	0517	1	F	Update to FR1 CA power imbalance test cases	16.12.0
2022-06	RAN#96	R5-223717	0520	1	F	Update to FR1 CA CQI reporting test case	16.12.0
2022-06	RAN#96	R5-223718	0518	1	F	Update to FR2 CA normal PDSCH test cases	16.12.0
2022-06	RAN#96	R5-223719	0521	1	F	Introduction of FR2 CA SDR test case	16.12.0
2022-06	RAN#96	R5-223722	0544	1	F	Editorial, removal of editors note in test case 5.2.2.2.10_1	16.12.0
2022-06	RAN#96	R5-223723	0545	1	F	Adding TT and removal of editors note in test case 5.2.3.2.9_1	16.12.0
2022-06	RAN#96	R5-223724	0546	1	F	Adding TT and removal of editors note in test case 5.2.3.2.10_1	16.12.0
2022-06	RAN#96	R5-223726	0539	1	F	Update to URLLC test cases 5.2.x.y.6	16.12.0
2022-06	RAN#96	R5-223727	0537	1	F	Update to Annex G for minimum test time	16.12.0
2022-06	RAN#96	R5-223728	0538	1	F	Update to Annex F for URLLC test cases	16.12.0
2022-06	RAN#96	R5-223837	0512	1	F	Correction to the reference of test frequency	16.12.0

2022-06	RAN#96	R5-223838	0513	1	F	Clarification of UL RMC in FR1 PMI test cases	16.12.0
2022-06	RAN#96	R5-223839	0515	1	F	Update of LTE-NR coexistence test cases	16.12.0
2022-06	RAN#96	R5-223840	0514	1	F	Update of FR2 test cases	16.12.0
2022-06	RAN#96	R5-223841	0522	1	F	Introduction of FR2 SDR test case	16.12.0
2022-06	RAN#96	R5-223871	0511	1	F	Correction to CSI-Report periodicity and offset in 6.2A.3.1	16.12.0
2022-09	RAN#97	R5-224502	0556	-	F	Re-organization of NR SL Demod test cases	16.13.0
2022-09	RAN#97	R5-224503	0557	-	F	Correction to Annex F for NR SL Demod TCs	16.13.0
2022-09	RAN#97	R5-224633	0559	-	F	Core alignment and editorial corrections for FR1 Demodulation CA test cases	16.13.0
2022-09	RAN#97	R5-224642	0560	-	F	Correction to CQI-RI-PMI delay in 6.2A.3.1	16.13.0
2022-09	RAN#97	R5-224643	0561	-	F	Correction to DCI bit size in 5.2.2.2.4_1	16.13.0
2022-09	RAN#97	R5-224644	0562	-	F	Correction to message exception in 5.2.3.2.10_1	16.13.0
2022-09	RAN#97	R5-224655	0563	-	F	Addition of missing message exceptions for CQI tests	16.13.0
2022-09	RAN#97	R5-224657	0565	-	F	Update of FR2 PDCCH TCs	16.13.0
2022-09	RAN#97	R5-225004	0569	-	F	Editorial correction to sub-clause ID for test requirement to TC5.2.3.2.1_x	16.13.0
2022-09	RAN#97	R5-225110	0573	-	F	Correction of aperiodicTriggeringOffset	16.13.0
2022-09	RAN#97	R5-225118	0575	-	F	Correction of CQI reporting test cases	16.13.0
2022-09	RAN#97	R5-225121	0577	-	F	Update of minimum test time	16.13.0
2022-09	RAN#97	R5-225208	0578	-	F	Update CQI report periodicity for TDD FR1 periodic wideband CQI reporting under fading conditions	16.13.0
2022-09	RAN#97	R5-225670	0566	1	F	FR2 demod testability update	16.13.0
2022-09	RAN#97	R5-225726	0579	1	F	Corrections for FDD Power Saving test cases	16.13.0
2022-09	RAN#97	R5-225727	0580	1	F	Corrections for TDD Power Saving test cases	16.13.0
2022-09	RAN#97	R5-225809	0558	1	F	Core alignment and editorial corrections for FR1 CSI CA test cases	16.13.0
2022-09	RAN#97	R5-225810	0572	1	F	Removal of brackets for DCI format in clause 5	16.13.0
2022-09	RAN#97	R5-225811	0574	1	F	Correction of NR-LTE coexistence test cases	16.13.0
2022-09	RAN#97	R5-225812	0576	1	F	Clarification of UL RMC in FR1 aperiodic CQI reporting tests	16.13.0
2022-09	RAN#97	R5-225813	0564	1	F	Addition of missing RMC for PDCCH tests	16.13.0
2022-12	RAN#98	R5-225992	0581	-	F	Removal of technical content in 38.521-4 v16.13.0 and substitution with pointer to the next Release	16.14.0

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