

3GPP TS 36.521-1 V8.6.0 (2010-06)

**3rd Generation Partnership Project;
Technical Specification Group Radio Access Network;
Evolved Universal Terrestrial Radio Access (E-UTRA);
User Equipment (UE) conformance specification;
Radio transmission and reception;
Part 1: Conformance Testing
(Release 8)**



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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:

Version x.y.z

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.

1 Scope

The present document specifies the measurement procedures for the conformance test of the user equipment (UE) that contain transmitting characteristics, receiving characteristics and performance requirements as part of the 3G Long Term Evolution (3G LTE). Conformance test for the support of RRM (Radio Resource Management) are specified in TS 36.521-3.

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 8 and later UE declared to support LTE 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.
- 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*.

[<seq>] <doctype> <#> [([up to and including]{yyyy[-mm]}V<a[b.c]>)[onwards]]: "<Title>".

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] to [10] (void)

[11] 3GPP TS 36.521-1: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception; Part 1: Conformance Testing".

3 Definitions, symbols and abbreviations

Void

4 General

The requirements of the present document are provided in 3GPP TS 36.521-1 Release 9 [11].

5 to 9 Void

Annex A to H: Void

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Annex I (informative): Change history

| Change history | | | | | | | |
|----------------|--|------------|----|-----|---|-------|-------|
| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
| 2007-08 | RAN5 #36 | R5-072185 | | | Skeleton proposed for RAN5#36Athens | | 0.0.1 |
| 2007-08 | RAN5 #36 | R5-072419 | | | Update the skeleton base on R4-071234_TR36.803.0.4.0.doc | 0.0.1 | 0.0.2 |
| 2007-08 | RAN5 #36 | R5-072424 | | | Update with editorial changes | 0.0.2 | 0.0.3 |
| 2007-11 | RAN5 #37 | R5-073043 | | | Update document with some info as following: Section 5: Frequency band information Section 6.2: Maximum output power Section 6.5: Output RF spectrum emissions Section 6.5.1: Occupied bandwidth Section 6.5.2: Out of band emission Section 6.5.3: Spurious emissions | 0.0.3 | 0.0.4 |
| 2007-11 | RAN5 #37 | R5-073360 | | | Editorial change to split MOP and UE Power classes | 0.0.4 | 0.0.5 |
| 2008-03 | RAN5 #38 | R5-080069 | | | Editorial changes to sync up with 36.101 v1.0.0 as much as feasible for the moment: Update definitions, symbols and abbreviations Update frequency bands, channel bandwidth, channel numbers information. Restructure document to move "frequency error" subsection inside Transmit signal quality. Add "additional spectrum Emission Mask" sub-test (mask A,B,C) section to address the regulatory requirements that are not met with the general mask (OOB and spurious emission). Add "Additional ACLR requirements" to address additional requirements that the network might indicate to the UE via signalling for a specific deployment scenario (in terms of additional requirements for UTRA/ACLR2 Restructure "Spurious Emission" to indicate we need to have 3 test cases to address: "E-UTRA Spurious Emission" requirements, "Spurious Emission band UE co-existence" requirements, and "Additional spurious emissions" requirements Separate wide band and narrow band intermodulation in the intermodulation characteristics | 0.0.5 | 0.0.6 |
| 2008-03 | RAN5 #38 | R5-080408 | | | LTE Reference Sensitivity test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080409 | | | LTE Maximum Rx input level test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080410 | | | LTE Adjacent Channel Selectivity test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080064 | | | LTE RF Receiver tests, General section Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080412 | | | LTE RF: transmission modulation initial EVM test proposal | | 0.0.7 |
| 2008-03 | RAN5 Workshop-UE LTE Test (9-11 April) | R5w0800027 | | | Modify styles and formats of tables and others according to drafting rules. Add some definitions and abbreviations Modified section 6.2 structure to be aligned with 36.101 v8.1.0 Modify tables of requirements to remove 1.6 MHz and 3.2MHz channel bandwidth according to new requirements 36.101 v8.1.0 | | 0.0.9 |
| 2008-03 | RAN5 Workshop-UE LTE Test (9-11 April) | R5w0800028 | | | Following TPs have been included: R5w080013r1 R5w080014r1 R5w080008r2 R5w080009r2 R5w080040r1 R5w080015r1 R5w080016r1 R5w080017r1 R5w080018r2 | 0.0.9 | 0.1.0 |

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|---------|-------------|-----------|--|--|-------|-------|
| 2008-05 | RAN5#39 | R5-081046 | | 36-521-1 alignment of measurement state for test cases | 0.1.0 | 0.1.1 |
| 2008-05 | RAN5#39 | R5-081042 | | <p>Following approved TPs have been included:</p> <p>R5-081040 36.521-1 after April LTE-RF workshop</p> <p>R5-081415 36-521-1 alignment of measurement state for test cases – also the measurement state for each test cases has been updated according to R5-081404</p> <p>R5-081416 Cover for LTE E-UTRAN RRC_IDLE State Mobility text proposal</p> <p>R5-081417 Cover for LTE E-UTRAN RRC_CONNECTED State Mobility text proposal</p> <p>R5-081404 LTE Rx Intermodulation test case text proposal</p> <p>R5-081409 Annex structure for Measurement uncertainty & Test Tools</p> <p>R5-081405 Text Proposal for TS36.521-1 TC7.6 Blocking Characteristics</p> <p>R5-081406 Text Proposal for TS36.521-1 TC7.7 Spurious Response</p> <p>R5-081403 Text Proposal for TS36.521-1 TC7.9 Spurious Emissions</p> <p>R5-081410 Uncertainties and Test Tools for subset of UE tests</p> <p>R5-081331 Clarification of diversity characteristics section for multiple UE antennas</p> <p>R5-081335 36-521-1 update of nominal and additional channel bandwidths</p> | 0.1.1 | 0.2.0 |
| 2008-06 | RAN5 #39bis | R5-082029 | | <p>Following approved TPs have been included:</p> <p>R5-082129: Restructure of TS 36.521-1 and RRM proposal (Split of RRM from 36.521-1 v0.2.0 in its own specification 36.521-3.)</p> <p>R5-082166: Text Proposal for Annex C Downlink Physical Channels</p> <p>R5-082130: Text Proposal for Chan bandwidths in TS 36.521-1</p> <p>R5-082155: Text Proposal for LTE Tx Minimum Output Power</p> <p>R5-082027: Text Proposal for Occupied bandwidth in TS 36.521-1</p> <p>R5-082171: Text Proposal for LTE Adjacent Channel Leakage power Ratio</p> <p>R5-082134: Text Proposal for LTE Tx Spurious Emissions</p> <p>R5-082135: Text Proposal for LTE UE Maximum Output Power</p> <p>R5-082136: Text Proposal for LTE Spectrum Emission Mask</p> <p>R5-082138: UE Spurious Emissions Measurement uncertainty & Test Tolerances</p> <p>R5-082169: LTE Spectrum Emission Mask test uncertainties and TTs</p> <p>R5-082151: LTE UE Max Power and ACLR tests uncertainties and TTs</p> <p>R5-082152: Text proposal for LTE Transmit OFF Power</p> <p>R5-082153: LTE UE Max Rx Input and ACS test cases update</p> <p>R5-082082: LTE Rx Intermodulation test case uncertainties and TTs</p> <p>R5-082093: Text Proposal for TS36.521-1 TC7.6 Blocking Characteristics</p> <p>R5-082154: Text Proposal for TS36.521-1 TC7.7 Spurious Response</p> <p>R5-082167: OBW Measurement uncertainty & Test Tolerances</p> <p>R5-082158: Cover for LTE Performance Requirement text proposal</p> <p>R5-082159: Text Proposal for LTE Demodulation of PCFICH/PDCCH and PHICH</p> | 0.2.0 | 0.3.0 |

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|---------|-------------|-----------|--|---|-------|-------|
| | | | | <p>R5-082156: Text proposal for LTE Tx Minimum Output Power Uncertainty</p> <p>R5-082157: Text proposal for LTE Tx Minimum Output Power Tolerance</p> <p>R5-082164: Statistical testing of receiver characteristics</p> <p>R5-082170: Cover for LTE Propagation Conditions Text Proposal</p> <p>Editorial changes to align tables and figures numbering with R5-082025</p> | | |
| 2008-08 | RAN5 #40 | R5-083163 | | <p>Following approved TPs have been included:</p> <p>R5-083804: LTE Demodulation Performance text proposal</p> <p>R5-083159: LTE-RF Occupied bandwidth test case / measurement uncertainty and TT text proposal</p> <p>R5-083160: Transmission OFF power: TP, measurement uncertainty and test tolerances proposal</p> <p>R5-083805: Frequency Error test case / measurement uncertainty and TT test proposal</p> <p>R5-083162: Propagation conditions correction text proposal</p> <p>R5-083220:Text Proposal for LTE Tx Minimum Output Power</p> <p>R5-083806: TP of section 8 for E-UTRAN TDD in 36.521-1</p> <p>R5-083344: Test Tolerance and System uncertainty for OBW test</p> <p>R5-083848:Test Tolerance and System uncertainty for Reference sensitivity test</p> <p>R5-083840: Test Tolerances for Spectrum Emission Mask</p> <p>R5-083808: Reference Measurement Channel for LTE UE Receiver tests</p> <p>R5-083350: Test Tolerance and System uncertainty for Blocking and Spurious response</p> <p>R5-083366: Text Proposal for LTE Reporting of CQI/PMI</p> <p>R5-083810: LTE PBCH Demodulation Performance Requirements</p> <p>R5-083482: LTE-RF TP for Test Case 7.6 Blocking Characteristics</p> <p>R5-083809: LTE-RF TP for Test Case 7.7 Spurious Response</p> <p>R5-083484: LTE-RF TP for Test Case 7.9 Spurious Emissions</p> <p>R5-083811: Annex E Global In-Channel TX-Test</p> <p>R5-083163: TS 36.521-1 after RAN5#40</p> | 0.3.0 | 1.0.0 |
| 2008-10 | RAN5 #40Bis | R5-084072 | | <p>Following approved TPs have been included:</p> <p>R5-084072 TS 36.521-1 after RAN5#40Bis</p> <p>R5-084300 LTE-RF TP for Definitions Symbols and Abbreviations</p> <p>R5-084304 LTE-RF-TP for general section</p> <p>R5-084036 Test Tolerances for additional SEM</p> <p>R5-084303 LTE-RF TP for Channel bandwidths and frequency range</p> <p>R5-084305 LTE-RF TP for new Absolute Power Tolerance test case</p> <p>R5-084067 LTE-RF TP for Transmission OFF test case</p> <p>R5-084318 LTE-RF TP for Transmission Modulation test cases</p> <p>R5-084069 LTE-RF Investigation of E-UTRA-TDD Frequency Error test case applicability</p> <p>R5-084319 LTE-RF TP for Frequency Error test case</p> <p>R5-084309 Text Proposal for LTE Tx Spurious Emissions</p> <p>R5-084111 Text Proposal for LTE Adjacent Channel Leakage power Ratio</p> <p>R5-084320 Text Proposal for LTE Additional Spectrum Emission Mask</p> | 1.0.0 | 1.1.0 |

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|---------|--------|-----------|------|---|-------|-------|
| | | | | R5-084310 Test Tolerances for additional spurious emission R5-084311 Text Proposal for Occupied bandwidth R5-084321 Text Proposal for LTE Spectrum Emission Mask R5-084060 Modification to section 7.2 Diversity characteristics R5-084312 References in 36.521-1 tests initial conditions R5-084148 Update of Reference Measurement Channel for LTE UE Rx tests R5-084167 LTE-RF TP for TC7.9 Spurious Emissions R5-084075 LTE DL Reference Measurement Channel for PDSCH (FDD) text proposal R5-084077 LTE Measurement of Performance Requirements text proposal R5-084313 LTE Demodulation of PDSCH Test Requirements text proposal R5-084147 Specification of DL propagation conditions for LTE UE tests R5-084315 Text Proposal for LTE Demodulation of PCFICH/PDCCH R5-084323 Text Proposal for Annex E Global In-Channel | | |
| 2008-12 | RAN#42 | RP-080863 | | Approval of version 2.0.0 at RAN#42, then put to version 8.0.0. | 2.0.0 | 8.0.0 |
| 2008-01 | | | | Editorial corrections. | 8.0.0 | 8.0.1 |
| 2009-03 | RAN#43 | R5-086011 | 0001 | - TP for In-band emissions | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086012 | 0002 | - TP for Spectrum flatness | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086013 | 0003 | - TP for IQ-component | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086064 | 0004 | - LTE-RF: UE max output power | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086093 | 0005 | - Clarification of measurement period in minimum output power test procedure | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086094 | 0006 | - Clarification of measurement period in transmit OFF power test procedure | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086120 | 0007 | - Update of Max.input level test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086125 | 0008 | - Addition of UL Reference Measurement Channels in Annex A2 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086160 | 0009 | - correction for Maximum Power Reduction (MPR) | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086167 | 0010 | - LTE-RF: TDD applicability and CR for Blocking Characteristics and Spurious Response | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086168 | 0011 | - LTE-RF: TDD applicability and CR for Spurious Emissions | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086239 | 0012 | - Update of Symbols | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086401 | 0013 | - LTE-RF: TX-RX channel freq separation | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086405 | 0014 | - Update of 6.7 Transmit intermodulation test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086406 | 0015 | - Update of initial conditions for Tx and Rx test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086408 | 0016 | - Update of Adjacent Channel Leakage power Ratio | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086409 | 0017 | - Removal of [] from Clause 7 Receiver Characteristics | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086413 | 0018 | - Updates to Demodulation of PCFICH/PDCCH test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086414 | 0019 | - Text proposal for Reporting of Channel State Information | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086415 | 0020 | - Correction of RS_EPRES powers for default DL signal levels | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086416 | 0021 | - Update of DL Reference Measurement Channels in Annex A3 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086417 | 0022 | - Update to Annex E | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086425 | 0023 | - Update of General text in clause 6 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086426 | 0024 | - Clarification of measurement bandwidth in spectrum emission mask test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086428 | 0025 | - Demodulation of TDD PHICH test requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086429 | 0026 | - Demodulation of TDD PCFICH/PDCCH test requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090306 | 0027 | - New Annex H for Uplink Physical Channels | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090308 | 0028 | - Text proposal for Reporting of Channel State | 8.0.1 | 8.1.0 |

| | | | | | Information | | |
|---------|--------|-----------|------|---|--|-------|-------|
| 2009-03 | RAN#43 | R5-090403 | 0029 | - | CR to 36.521-1: Update of Spurious Emissions test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090404 | 0030 | - | CR to 36.521-1: Update of ACLR test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090443 | 0031 | - | LTE-RF: Correction to 36.521-1 Frequency error test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090488 | 0032 | - | LTE TDD applicability for Transmit intermodulation test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091002 | 0033 | - | LTE Demodulation of PDSCH Test Requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091004 | 0034 | - | LTE-RF: CR for UE max power test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091007 | 0035 | - | LTE-RF: TDD Applicability and CR for Spectrum Emission Mask and Additional Spectrum Emission Mask | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091008 | 0036 | - | LTE-RF Investigation of E-UTRA-TDD for Occupied bandwidth test case applicability | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091009 | 0037 | - | LTE-RF: Investigation of E-UTRA-TDD for Adjacent Channel Leakage power Ratio test case applicability | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091011 | 0038 | - | LTE-RF: TDD applicability and CR for Maximum Input Level | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091012 | 0039 | - | LTE-RF: TDD applicability and CR for Adjacent Channel Selectivity (ACS) | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091017 | 0040 | - | Removal of Rx Narrowband Intermod 7.8.2 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091019 | 0041 | - | Relocation of 36.521-1 Annex C DL mapping | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091020 | 0042 | - | Removal of "Out-of-synchronization handling of output power" heading | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091023 | 0043 | - | Test requirements of TDD PDSCH demodulation performance with user-specific reference symbols | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091024 | 0044 | - | CR to 36.521-1: Update of Annex F.3.2 Measurement of transmitter | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091025 | 0045 | - | CR to 36.521-1: Update of SEM and Additional SEM test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091077 | 0046 | - | CR to 36.521-1: Addition of test combinations for test cases with MPR application | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091082 | 0047 | - | Spurious emission requirements on PHS band including the future plan in Japan | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091101 | 0048 | - | LTE-RF: CR for MPR test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091106 | 0049 | - | Update of Reference sensitivity test in 7.3 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091111 | 0050 | 1 | Update of initial conditions for Rx tests | 8.0.1 | 8.1.0 |
| 2009-05 | RAN#44 | R5-092144 | 0051 | - | LTE-RF: Resubmission of R5-086424 UE output power dynamics 36.521-1 v8.1.0 (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092146 | 0052 | - | LTE-RF: CR for UE configured UE transmitted output power test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092147 | 0053 | - | LTE-RF: CR for UE minimum output power test case (re-submit no change) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092149 | 0054 | - | LTE-RF: CR for Power Control Absolute power tolerance test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092150 | 0055 | - | LTE-RF: CR for Power Control Relative power tolerance test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092151 | 0056 | - | LTE-RF: New test case for Aggregate power control tolerance (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092263 | 0057 | - | Text proposal for Reporting of Channel State Information | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092264 | 0058 | - | Propagation conditions for CQI tests | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092265 | 0059 | - | Correction to Demodulation of PDCCH/PCFICH test cases | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092273 | 0060 | - | Mapping of downlink physical channels for TDD | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092277 | 0061 | - | Annex A RMC updates | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092369 | 0062 | - | Update of A.3.4.3 for RMC with UE-specific RS | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092372 | 0063 | - | Maintenance on Initial configurations for Perf TCs | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092436 | 0064 | - | CR to 36.521-1: Update of ACLR test case | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092442 | 0065 | - | CR to 36.521-1: Update of Spurious Emissions test case | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092467 | 0066 | - | LTE-RF: Transmit OFF Power update | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092473 | 0067 | - | LTE_RF - Update on TC 7.7 Spurious Response (re- | 8.1.0 | 8.2.0 |

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| | | | | | submit with no changes) | | |
| 2009-05 | RAN#44 | R5-092474 | 0068 | - | LTE_RF - Update on TC 7.9 Spurious Emissions (re-submit with no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092527 | 0069 | - | Update of TDD PDSCH test cases | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092602 | 0070 | - | LTE-RF: CR for Maximum Power Reduction test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092603 | 0071 | - | TP for Demodulation of TDD PDCCH/PCFICH | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092605 | 0072 | - | Mapping of uplink physical channels for FDD | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092606 | 0073 | - | Update of Annex C | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092607 | 0074 | - | CR to 36.521-1: Update of test parameters for Demodulation of PDSCH (FDD) tests | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092614 | 0075 | - | Update of SEM test case | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092642 | 0076 | - | Update of transmit quality test cases | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092643 | 0077 | - | Text proposal for TDD part of CQI Reporting under Fading conditions | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092644 | 0078 | - | Text proposal for TDD part of CQI Reporting under AWGN conditions | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092645 | 0079 | - | LTE-RF: Update of Additional Spectrum Emission mask Test case with TDD Uplink Test configuration | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092649 | 0080 | - | LTE-RF: CR for TDD DL RMC to be used in TX test cases | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092653 | 0081 | - | LTE-RF: CR for Additional Maximum Power Reduction test case | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092661 | 0082 | - | RMC update for PDCCH/PCFICH performance requirement | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | RP-090444 | 1161 | - | Test frequencies for Additional Spurious Emission test case | 8.6.0 | 8.7.0 |
| 2009-05 | RAN#44 | R5-092366 | 0084 | - | Update of 7.3.1 | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092440 | 0085 | - | LTE-RF: CR for UE max output power test case | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092472 | 0086 | - | LTE_RF - Update on TC 7.6 Blocking Characteristics (re-submit with changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092636 | 0087 | - | CR to 36.521-1 Addition of frequencies for band 18 and band 19 | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092652 | 0088 | 2 | Improved stability of TC 7.8.5 Power Control in the DL fro F-DPCH to HSUPA TC 5.2D and 5.13.2B | 8.1.0 | 8.2.0 |
| - | - | - | - | - | Editorial corrections | 8.2.0 | 8.2.1 |
| 2009-09 | RAN#45 | R5-094032 | 0089 | - | Correction CR to 36.521-1: Update of Requirements for Demodulation of PDSCH (FDD) tests | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094034 | 0090 | - | Correction CR to 36.521-1: Update of General Requirements for Demodulation tests | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094214 | 0091 | - | Update of In-band emissions | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094215 | 0092 | - | TDD Initial downlink channel setting | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094216 | 0093 | - | Correction to Annex B | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094248 | 0094 | - | CR to 36.521-1: Update to ACLR test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094250 | 0095 | - | CR to 36.521-1: Update to UE max output power test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094281 | 0096 | - | Mapping of uplink physical channels for TDD | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094282 | 0097 | - | LTE-RF: CR for notes in TDD DL RMC to be used in TX test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094283 | 0098 | - | LTE-RF: message update to keep Tx power constant for some Rx test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094313 | 0099 | - | LTE-RF: CR to test case for Aggregate power control tolerance | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094317 | 0100 | - | LTE-RF: CR for UE minimum output power test case for TDD | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094318 | 0101 | - | LTE-RF: CR for Power Control Relative power tolerance test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094319 | 0102 | - | In band emission for non-allocated RB | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094320 | 0103 | - | LTE RF: correction for subclause 6.6.2.2.5 (A-SEM) supported band list | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094362 | 0104 | - | Correction of RMCs (36.521 Annex A) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094363 | 0105 | - | Usage of the Global In-Channels TX-Test across different Signal Quality tests. | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094365 | 0106 | - | LTE TX: 1to2 RX antenna | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094367 | 0107 | - | Correction to 6.6.2.2 Additional Spectrum Emission | 8.2.1 | 8.3.0 |

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|---------|--------|-----------|------|---|---|-------|-------|
| 2009-09 | RAN#45 | R5-094370 | 0108 | - | Correction to 6.6.2.3 ACLR | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094371 | 0109 | - | Correction to 6.7 TX Intermodulation | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094374 | 0110 | - | Correction to 7.6.1 In-Band Blocking | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094375 | 0111 | - | UE category (36.521 clause 8) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094378 | 0112 | - | Completion of Global in-Channel TX-Test (36.521 Annex E) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094379 | 0113 | - | Completion of Global in-Channel TX-Test with PRACH (36.521 Annex E) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094380 | 0114 | - | Completion of Statistical testing (36.521 Annex G) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094385 | 0115 | - | Correction to Annex D.2 Interference signals | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094439 | 0116 | - | Update for ACS | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094661 | 0117 | - | LTE RF - Core update on TC7.6.2 Out-of-band Blocking | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094663 | 0118 | - | LTE RF - Symbols Update on UL transmission configurations | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094665 | 0119 | - | LTE RF - Clarification for Test Configurations in General Section | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094668 | 0120 | - | LTE RF - Applicability of 6.2.3 MPR | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094671 | 0121 | - | LTE RF - Verification of UE Output Power in Out of Band Emission tests | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094684 | 0122 | - | CR to 36.521-1: Update to UE max output power test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094686 | 0123 | - | LTE-RF CR to 36.521-1: Update the E-UTRA channel numbers | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094687 | 0124 | - | LTE-RF: CR for UE maximum power reduction(MPR) test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094699 | 0125 | - | Update to SEM and spurious emissions TC | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094706 | 0126 | - | Resubmission-Update to the Requirements for frequency-selective fading test | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094717 | 0127 | - | Update of SEM | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094718 | 0128 | - | Update of initial conditions with Annex references | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094721 | 0129 | - | Update of 6.7 Tx Inter Mod | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094725 | 0130 | - | Correction to E-UTRA channel numbers for Band 2 | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094726 | 0131 | - | Correction to Tx spurious emissions | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094757 | 0132 | - | Update of TDD PHICH test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094874 | 0133 | - | Correction to Demodulation of PDCCH/PCFICH test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094902 | 0134 | - | Addition of 15 MHz and 20 MHz bandwidths and corresponding sensitivity requirements into band 38 | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094903 | 0135 | - | Correction CR to 36.521-1: Update of Transmitter tests network signalled parameter value | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094905 | 0136 | - | Update of TDD PDSCH test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094908 | 0137 | - | LTE-RF: CR for Power Control Absolute power tolerance test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094909 | 0138 | - | Update to Output Power dynamics test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094913 | 0139 | - | Clarification for downlink signal setting in RX tests | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094914 | 0140 | - | UL RB allocation for receiver tests | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094915 | 0141 | - | Update of TDD PCFICH/PDCCH test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094921 | 0142 | - | Correction to CQI performance test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094922 | 0143 | - | Test description for CQI test cases under AWGN conditions | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094923 | 0144 | - | Resubmission - Requirements for PMI reporting (Single and Multiple PMI) | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094966 | 0145 | - | CR to 36.521-1: Addition of A-MPR for band 19 | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094976 | 0146 | - | Without loop back: 6.2.2 UE maximum output power | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094977 | 0147 | - | Without loop back: 6.3.2 Minimum output power | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094979 | 0148 | - | LTE-RF: CR for UE configured UE transmitted output power test case | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094980 | 0149 | - | CR to 36.521-1: Definition of Maximum Power state in TX/RX test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094982 | 0150 | 1 | Correction of Tx general discription | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094986 | 0151 | - | Update of 6.6.1OBW | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094989 | 0152 | - | Correction to 1PRB tests in Demodulation of PDSCH | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094995 | 0153 | - | Correction CR to 36.521-1: Update of Requirements for Additional Maximum Power Reduction (A-MPR) test | 8.2.1 | 8.3.0 |

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|---------|--------|-----------|------|---|---|-------|-------|
| 2009-09 | RAN#45 | R5-094996 | 0154 | - | Correction to Demodulation of PHICH test cases | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-094997 | 0155 | - | EVM TC update | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-095300 | 0156 | - | LTE-RF: test description update | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-095301 | 0157 | - | Correction CR to 36.521-1: Addition of measurement uncertainty and test tolerances for A-MPR | 8.2.1 | 8.3.0 |
| 2009-09 | RAN#45 | R5-095304 | 0158 | - | Sorting out Demodulation of PDSCH for FDD | 8.2.1 | 8.3.0 |
| 2009-09 | - | - | - | - | TOC update and Annexes' titles formatings | 8.3.0 | 8.3.1 |
| 2009-12 | RAN#46 | R5-095515 | 0159 | - | Correction CR to 36.521-1: Additional Spectrum Emission Mask test need to be updated to include the network signalled value "NS_07" message contents exceptions | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095589 | 0160 | - | Update for test period description in the general section | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095657 | 0161 | - | LTE-RF: CR for Power Control Absolute power tolerance test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095661 | 0162 | - | LTE-RF: CR for UE minimum output power test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095735 | 0163 | - | Corrections to Annex A.4 | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095766 | 0164 | - | LTE-RF: CR for In band emission for non-allocated RB | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095790 | 0165 | - | Completion of Statistical testing (36.521 Annex G) | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-095791 | 0166 | - | Corrections to Annex E | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096058 | 0167 | - | Removal of [] from 7.6.1, 7.8.1, and 7.5 of Annex F3.3 | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096096 | 0168 | - | Update on 8.2.1 | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096105 | 0169 | - | LTE RF: Symbols Update on Configured UE Transmitted Power | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096204 | 0170 | - | LTE-RF: CR to Transmission signal quality | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096208 | 0171 | - | LTE-RF: CR for Power Control Relative power tolerance test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096210 | 0172 | - | LTE-RF: CR to ON/OFF Time mask test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096211 | 0173 | - | Measurement period for TX-Tests | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096213 | 0174 | - | CR to 36.521-1: Update to Spurious Emissions test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096214 | 0175 | - | CR to 36.521-1: Update to ACLR test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096219 | 0176 | - | LTE-RF: CR for UE configured UE transmitted output power test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096222 | 0177 | - | Test description for CQI test cases under AWGN conditions | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096223 | 0178 | - | LTE RF: Blocking Characteristics update | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096224 | 0179 | - | LTE RF: Spurious Response Update | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096228 | 0180 | - | LTE-RF: CR for MPR test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096229 | 0204 | 2 | CR to 36.521-1: Update to A-MPR test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096230 | 0181 | - | LTE RF: Applicability of 6.2.4 A-MPR | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096231 | 0182 | - | Correction to Demodulation of PHICH test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096235 | 0183 | - | Introduction of CQI reporting test with frequency-selective interference | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096239 | 0184 | - | Update to the test procedure and message contents of TDD PMI reporting test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096240 | 0205 | - | CR to 36.521-1: Update to Derivation of Test Requirements for A-MPR | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096241 | 0185 | - | Measurement uncertainties and Test Tolerances for transmit quality test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096242 | 0186 | - | Update for 36.521-1 Annex A | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096289 | 0187 | - | CR on 36.521-1, 'Introduction of clause 8.2.1.1 test case uncertainties and Test Tolerances' | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096306 | 0188 | - | Update to the test procedure of SEM test cases of 36.521-1 | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096311 | 0189 | - | Update of 6.6.1 OBW | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096312 | 0190 | - | Correction to SEM | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096313 | 0191 | - | Update of 6.7 Transmit intermodulation | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096315 | 0192 | - | CR to 36.521-1: Update to UE max output power test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096316 | 0193 | - | CR to 36.521-1: Update to Additional Spurious Emissions test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096317 | 0194 | - | CR to TDD PHICH demodulation test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096318 | 0195 | - | Correction to FDD PMI reporting test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096320 | 0196 | - | Tx power range and core update for Receiver tests | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096322 | 0197 | - | Update on 7.4, 7.5, and 7.8.1 | 8.3.1 | 8.4.0 |

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| 2009-12 | RAN#46 | R5-096323 | 0198 | - | Intorduction of RI reporting test | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096333 | 0199 | - | Update to 6.5 Transmit signal quality test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096334 | 0200 | - | LTE-RF: CR for Aggregate power control tolerance test case | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096335 | 0201 | - | Correction CR to 36.521-1: Update for Demodulation of PDSCH (FDD) tests to correct CR merges results from RAN5#44 | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096336 | 0206 | 1 | Update TDD PDSCH test cases | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096338 | 0202 | - | Number of used HARQ processes in DL Performance tests | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096342 | 0207 | 2 | Minimum test time for performance tests | 8.3.1 | 8.4.0 |
| 2009-12 | RAN#46 | R5-096718 | 0203 | - | LTE RF: A-SEM update and A-MPR verification | 8.3.1 | 8.4.0 |
| 2010-03 | RAN#47 | R5-100353 | 0208 | - | LTE-RF CR to 36.521-1:TIME MASK test case updated | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100354 | 0209 | - | LTE-RF: CR for A-MPR notation in NS_07 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100403 | 0210 | - | LTE-RF: CR for Tx Intermodulation test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100404 | 0211 | - | LTE-RF: CR for OBW measurement period alignment | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100408 | 0212 | - | Reporting mode, Reporting Interval and Editorial corrections for demodulation | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100456 | 0213 | - | Misc update on MAC padding in Rx and performance sections | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100566 | 0214 | - | Missing Test limits in 36.521-1 Annex G | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100567 | 0215 | - | Wrong references from 36.521-1 clauses 8.4 and 8.5 into Annex G | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100569 | 0216 | - | Typos in 36.521-1, Annex E | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100571 | 0217 | - | Minimum test time for performance tests | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100572 | 0218 | - | Correction to 6.6.3.3 Additional spurious emissions | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100790 | 0219 | - | DL-RMC-s for transmitter tests: Corrections | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100800 | 0220 | - | Update of Test environment for RF test | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100803 | 0221 | - | Spectrum emission mask: Correction to uplink configuration | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100807 | 0222 | - | Performance tests: Scheduling of retransmissions | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100810 | 0223 | - | UL-RMC-s: Corrections and completion | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100814 | 0224 | - | Corrections to CI 5.4.2.1 of TS 36.521-1 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100815 | 0225 | - | LTE-RF: CR for UE configured UE transmitted output power test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100816 | 0226 | - | LTE-RF: CR for Power Control Relative power tolerance test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100822 | 0227 | - | CR to 36.521-1: Update to Maximum output power | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100823 | 0228 | - | CR to 36.521-1: Update to ACLR test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100825 | 0229 | - | CR to 36.521-1: Update to Additional Tx spurious emissions test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100826 | 0230 | - | RMC-s and OCNG patterns: Update according 36.101 8.8.0 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100827 | 0231 | - | Receiver and performance tests: Update use of OCNG according 36.101 8.8.0 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100828 | 0232 | - | Update of PDSCH Demodulation Tests | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100831 | 0233 | - | Introduction of clause 8.2.1.2, 8.2.1.3, 8.2.1.4 test case uncertainties and Test Tolerances | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100832 | 0234 | - | Clarifications on DRS performance test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100833 | 0235 | - | Misc update on MAC padding in PDCCH, CSI test | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100834 | 0236 | - | Updates to the TDD portion of CQI reporting test cases under AWGN | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100838 | 0237 | - | Editorial Correction to 8.2.1.3 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100839 | 0238 | - | Update on Annex C for 36.521-1 | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100840 | 0239 | - | Update on MAC padding in TDD PMI test case 9.4 of 36.521-1. | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100841 | 0240 | - | Correction to CQI test cases under AWGN conditions | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100842 | 0241 | - | Correction to CQI test cases under fading conditions | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100843 | 0242 | - | Correction to PMI reporting test cases | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100845 | 0243 | - | CSI: Corrections to tests titles and RI clause structure | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100848 | 0244 | - | CR to 36.521-1: Update LTE RF test cases with test requirements for extended LTE1500MHz | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100886 | 0245 | - | Transmitter characteristics: UE Categories and other corrections | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100887 | 0246 | - | CR to 36.521-1: Update to Tx spurious emissions and | 8.4.0 | 8.5.0 |

| | | | | | Spurious emission band UE co-existence | | |
|---------|--------|-----------|------|---|---|-------|-------|
| 2010-03 | RAN#47 | R5-100888 | 0247 | - | Clarification on notes in Max Power | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100889 | 0248 | - | Maximum input level: Corrections w.r.t. UE categories | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100891 | 0249 | - | Correction to PDCCH demodulation test cases | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100892 | 0250 | - | Correction to PHICH demodulation test cases | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100907 | 0251 | - | Update of RI reporting test case | 8.4.0 | 8.5.0 |
| 2010-03 | RAN#47 | R5-100909 | 0252 | - | Correction to set UL power in Rx TCs | 8.4.0 | 8.5.0 |
| 2010-06 | RAN#48 | R5-103229 | 0293 | - | Removal of technical content in 36.521-1 v8.5.0 and substitution with pointer to the next Release | 8.5.0 | 8.6.0 |