

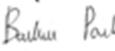


| | |
|----------------------|---------------|
| Report Reference ID: | 283765-1TRFWL |
|----------------------|---------------|

| | |
|---------------------|---|
| Test specification: | Title 47 – Telecommunication Chapter I – Federal Communications Commission Subchapter B – Common carrier services Part 27 – Miscellaneous wireless communications services |
|---------------------|---|

| | |
|------------|--|
| Applicant: | TEKO Telecom Srl. Via Meucci, 24/a I-40024 Castel S. Pietro Terme (BO) (Italy) |
| Apparatus: | Remote Unit |
| Model: | TRU2325WE/AC-WT |
| FCC ID: | XM2-EP2325 |

| | |
|---------------------|---|
| Testing laboratory: | Nemko Italy Spa Via del Carroccio, 4 20853 Biassono (MB) – Italy Telephone: +39 039 2201201 Facsimile: +39 039 2201221 |
|---------------------|---|

| | Name and title | Date |
|--------------|---|------------|
| Tested by: |  G. Curioni, Wireless/EMC Specialist | 2015-05-22 |
| Reviewed by: |  P. Barbieri, Wireless/EMC Specialist | 2015-05-22 |

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Section 1: Report summary

1.1 Test specification

| | |
|----------------|--|
| Specifications | Part 27 – Miscellaneous wireless communications services |
|----------------|--|

1.2 Statement of compliance

| | |
|------------|---|
| Compliance | In the configuration tested the EUT was found compliant Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> This report contains an assessment of apparatus against specifications based upon tests carried out on samples submitted at Nemko Canada Inc. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 27. Radiated tests were conducted in accordance with ANSI C63.4-2003. |
|------------|---|

1.3 Exclusions

| | |
|------------|------|
| Exclusions | None |
|------------|------|

1.4 Registration number

| | |
|-------------------------|------------------------------------|
| Test site FCC ID number | 176392 (3 m Semi anechoic chamber) |
|-------------------------|------------------------------------|

1.5 Test report revision history

| | |
|------------|--|
| Revision # | Details of changes made to test report |
| TRF | Original report issued |
| R1TRF | --- |

1.6 Limits of responsibility

| |
|--|
| Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report. |
| This test report has been completed in accordance with the requirements of ISO/IEC 17025. Nemko Spa authorizes the applicant to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only. |
| Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. |
| Nemko Spa accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. |



Section 2: Summary of test results

2.1 FCC Part 27, test results

| Part | Test description | Verdict |
|-----------------------------------|---|---------|
| §27.50(a) | Peak output power at RF antenna connector | Pass |
| §27.53(a) | Spurious emissions at RF antenna connector, continued | Pass |
| §27.53(a) | Radiated spurious emissions | Pass |
| §27.54 | Frequency stability | N/A a) |
| §2.1049 | Occupied bandwidth | Pass |
| § 935210 D02v02r01 (D.3)(l) | Out of band rejection | Pass |

Notes:

- a) NOT APPLICABLE: Modulation/frequency conversion circuitry not in use. No frequency change in EUT (input and output have same frequency)

Section 3: Equipment under test (EUT) and application details

3.1 Applicant details

| | | |
|---|--|---|
| Applicant complete business name | Name: | Teko Telecom Srl |
| | Federal Registration Number (FRN): | 0018963462 |
| | Grantee code | XM2 |
| Mailing address | Address: City: Province/State: Post code: Country: | Via Meucci, 24/a Castel S. Pietro Terme Bologna 40024 Italy |

3.2 Modular equipment

| | |
|---|--|
| a) Single modular approval | Single modular approval Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| b) Limited single modular approval | Limited single modular approval Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

3.3 Product details

| | | |
|---|--------------------------------|-----------------|
| FCC ID | Grantee code: | XM2 |
| | Product code: | -EP2325 |
| Equipment class | B2I | |
| Description of product as it is marketed | Remote Unit for optical system | |
| | Model name/number: | TRU2325WE/AC-WT |
| | Serial number: | 1001130001 |

3.4 Application purpose

| | |
|----------------------------|---|
| Type of application | <input checked="" type="checkbox"/> Original certification |
| | <input type="checkbox"/> Change in identification of presently authorized equipment |
| | Original FCC ID: <input type="text"/> Grant date: <input type="text"/> |
| | <input type="checkbox"/> Class II permissive change or modification of presently authorized equipment |



Section 3: Equipment under test

3.5 Composite/related equipment

| | |
|-------------------------------|--|
| a) Composite equipment | The EUT is a composite device subject to an additional equipment authorization Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| b) Related equipment | The EUT is part of a system that operates with, or is marketed with, another device that requires an equipment authorization Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| c) Related FCC ID | If either of the above is "yes": <input type="checkbox"/> has been granted under the FCC ID(s) listed below: <input type="checkbox"/> is in the process of being filled under the FCC ID(s) listed below: <input type="checkbox"/> is pending with the FCC ID(s) listed below: <input type="checkbox"/> has a mix of pending and granted statuses under the FCC ID(s) listed below: i FCC ID: ii FCC ID: |

3.6 Sample information

| | |
|--------------------------------|------------|
| Receipt date: | 2015-05-18 |
| Nemko sample ID number: | ----- |

3.7 EUT technical specifications

| | |
|-----------------------------|---|
| Operating band: | Down Link: 2350–2360 MHz, Up Link: 2305-2315 MHz |
| Operating frequency: | Wideband |
| Modulation type: | LTE (QAM and QPSK) |
| Occupied bandwidth: | LTE: 5 MHz, 10 MHz |
| Channel spacing: | standard |
| Emission designator: | LTE: D7W |
| RF Output | Down Link: 31dBm (1,25W) Up Link: N.A. (The EUT does not transmit over the air in the up-link direction) |
| Gain | Down Link: 36dB Up Link: N.A. (The EUT does not transmit over the air in the up-link direction) |
| Antenna type: | External Antenna is not provided, equipment that has an external 50 Ω RF connector |
| Power source: | 100-240 Vac |



Section 3: Equipment under test

3.8 Accessories and support equipment

The following information identifies accessories used to exercise the EUT during testing:

Item # 1

| | |
|------------------------|-----------------------|
| Type of equipment: | Master Unit - Subrack |
| Brand name: | Teko Telecom srl |
| Model name or number: | SUB-TRX-PSU |
| Serial number: | 101083001 |
| Nemko sample number: | ----- |
| Connection port: | ----- |
| Cable length and type: | ----- |

Item # 2

| | |
|------------------------|---------------------------------|
| Type of equipment: | Master Unit – Management Module |
| Brand name: | Teko Telecom srl |
| Model name or number: | TSPV-R |
| Serial number: | 081900043 |
| Nemko sample number: | ----- |
| Connection port: | LAN port |
| Cable length and type: | ----- |

Item # 3

| | |
|------------------------|---|
| Type of equipment: | Master Unit – Optical Module |
| Brand name: | Teko Telecom srl |
| Model name or number: | TTRU4W-S-M |
| Serial number: | 110679007 |
| Nemko sample number: | ----- |
| Connection port: | DL/UL RF connector (to connect to the base station) Optical port (to connect to remote unit) |
| Cable length and type: | ----- |

Item # 4

| | |
|------------------------|----------------------------|
| Type of equipment: | Master Unit – Power Supply |
| Brand name: | Teko Telecom srl |
| Model name or number: | TPSU/AC |
| Serial number: | 100012286 |
| Nemko sample number: | ----- |
| Connection port: | ----- |
| Cable length and type: | ----- |

3.9 Operation of the EUT during testing

| | |
|-----------------|---|
| Details: | In down-link direction, normal working at max gain with max RF power output |
|-----------------|---|

3.10 EUT setup diagram

In this system, Remote Unit is the EUT. Master Unit includes only management module and optical module (to convert RF signal in optical signal in down link direction and viceversa optical signal in RF signal in up link direction). As described in “Operational description”, master unit is connected directly to base station, so the system doesn’t use another equipment (under another FCC ID) to exercise the EUT. Signal generator is linked directly to the RF connector of optical module in the Master Unit.

Test setup for output power, occupied bandwidth, spurious emissions:



Procedure

Connect the signal modulated generator to the input of the EUT, so that the EUT works at the max gain. Raise the input level to the EUT until reach the maximum output power. Connect the spectrum analyzer to the RF output connector of the EUT.



Section 4: Engineering considerations

4.1 Modifications incorporated in the EUT

| | |
|----------------------|--|
| Modifications | Modifications performed to the EUT during this assessment |
| | None <input checked="" type="checkbox"/> Yes <input type="checkbox"/> , performed by Client <input type="checkbox"/> or Nemko <input type="checkbox"/> Details: |

4.2 Deviations from laboratory tests procedures

| | |
|-------------------|---|
| Deviations | Deviations from laboratory test procedures |
| | None <input checked="" type="checkbox"/> Yes <input type="checkbox"/> - details are listed below: |

4.3 Technical judgment

| | |
|-----------------|------|
| Judgment | None |
|-----------------|------|

Section 5: Test conditions

5.1 Deviations from laboratory tests procedures

No deviations were made from laboratory test procedures.

5.2 Test conditions, power source and ambient temperatures

| | |
|---|---|
| Normal temperature, humidity and air pressure test conditions | Temperature: 15–30 °C Relative humidity: 20–75 % Air pressure: 86–106 kPa When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated. |
| Power supply range: | The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$, for which the equipment was designed. |

Section 5: Test conditions, continued

5.3 Measurement uncertainty

Nemko S.p.A. measurement uncertainty has been calculated using the standard CISPR 16-4-2 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modeling – Uncertainty in EMC measurements". All calculations can be found in Nemko S.p.A. document WML1002.

5.4 Test equipment

| Equipment | Manufacturer | Model No. | Asset/Serial No. | Next cal. |
|---------------------------------------|--------------|---------------------------|------------------|-----------|
| Vector Signal Generator | Agilent | N5172B EXG | MY53050534 | Feb 2017 |
| Vector Signal Generator | Agilent | E4438C ESG | MY45094485 | Ago 2016 |
| Spectrum Analyzer | Agilent | N9030A PXA | MY53120882 | May 2015 |
| Network Analyzer | Agilent | E5071B ENA | MY46418709 | Jan 2016 |
| EMI Receiver | R & S | ESCI | 100888 | 08/2015 |
| V-network | R & S | ESH2-Z5 | 872 460/041 | 09/2015 |
| Trilog Broad Band Antenna 25-2000 MHz | Schwarzbeck | VULB 9168 | VULB 9168-242 | 06/2015 |
| Trilog Broad Band Antenna 25-8000 MHz | Schwarzbeck | VULB 9162 | VULB 9162-25 | 05/2015 |
| Antenna 1-18 GHz | Schwarzbeck | STLP 9148 | STPL 9148-123 | 06/2015 |
| Double ridge waveguide horn | RFspin | DRH40 | 061106A40 | 08/2016 |
| Preamplifier 18-40 GHz | Miteq | JS44 | 1648665 | 11/2015 |
| Broadband preamplifier 1-18 GHz | Schwarzbeck | BBV 9718 | 9718-137 | 10/2015 |
| EMI receiver 20 Hz ÷ 8 GHz | R&S | ESU8 | 100202 | 04/2016 |
| EMI receiver 20 Hz ÷ 3 GHz | R&S | ESCI | 100888 | 08/2015 |
| Hydraulic revolving platform | Nemko | RTPL 01 | 4.233 | NCR |
| Turning-table | R&S | HCT | 835 803/03 | NCR |
| Antenna mast | R&S | HCM | 836 529/05 | NCR |
| Controller | R&S | HCC | 836 620/7 | NCR |
| Spectrum Analyzer 9kHz ÷ 40GHz | R&S | FSEK | 848255/005 | 08/2015 |
| Semi-anechoic chamber | Nemko | 10m semi-anechoic chamber | 530 | 09/2016 |
| Shielded room | Siemens | 10m control room | 1947 | NCR |
| Semi-anechoic chamber | Nemko | 10m semi-anechoic chamber | 70 | NCR |
| Shielded Room | Siemens | 3m semi-anechoic chamber | 3 | NCR |
| Motor controller | Emco | 1051-25 | 9012-1559 | NCR |
| Motor controller | Emco | 1061-1.521 | 9012-1508 | NCR |
| Antenna Tower | Emco | 2071-2 | 9601-1940 | NCR |
| Controller pole/table | Emco | 2090 | 9511-1099 | NCR |
| V-Network | R & S | ESH2-Z5 | 872 460/041 | 09/2015 |
| | | | | |

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use

(*) Equipment supplied by manufacturer's

Appendix A: Test results

Clause 27.50(a) Peak output power at RF antenna connector

§ 27.50(a) The following power limits and related requirements apply to stations transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band:

(1) Base and fixed stations.

(i) For base and fixed stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band:

(A) The average equivalent isotropically radiated power (EIRP) must not exceed 2,000 watts within any 5 megahertz of authorized bandwidth and must not exceed 400 watts within any 1 megahertz of authorized bandwidth.

(B) The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

Test date: **2015-05-20**

Test results: **Pass**

Special notes

The power was measured using spectrum analyzer with RMS detector / average power meter.

- In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB

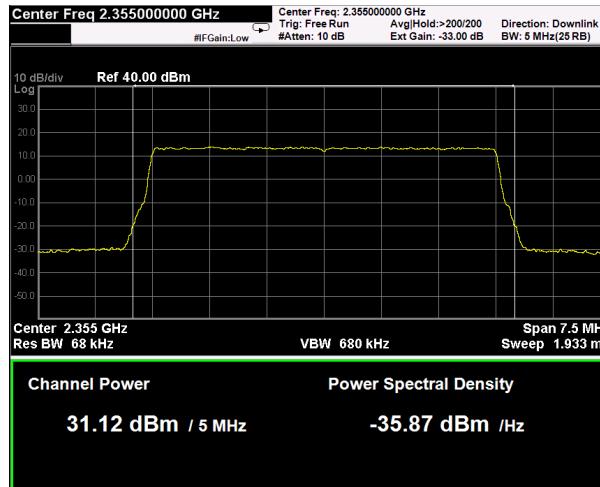
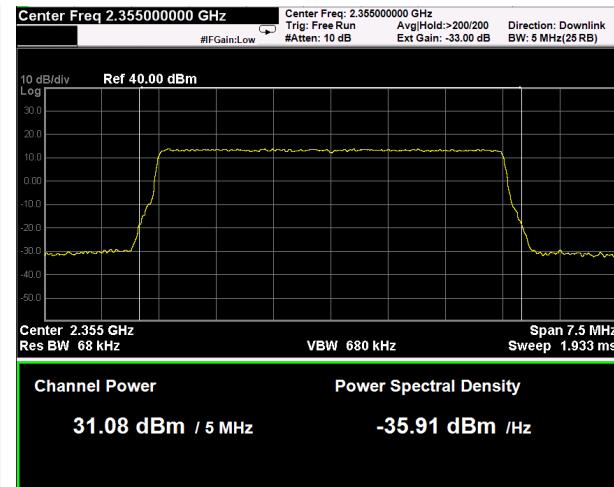
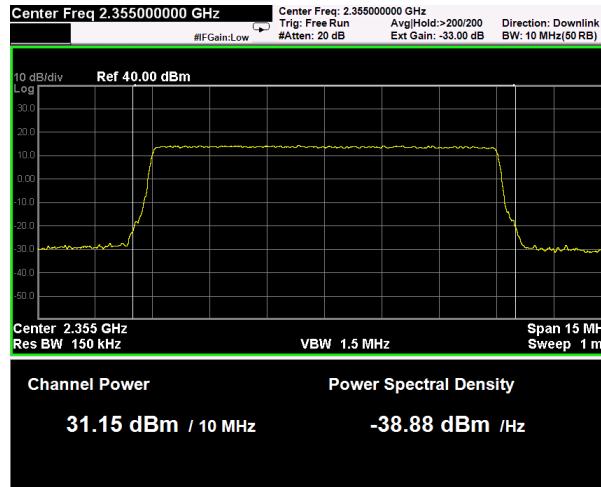
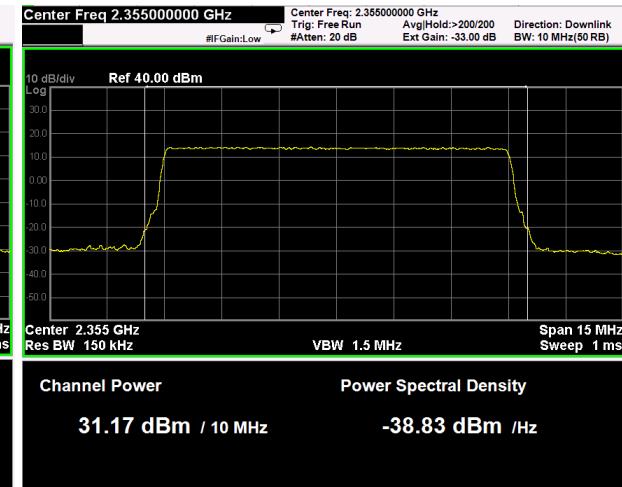
Clause 27.50(a) Peak output power at RF antenna connector
Test data
Conducted measurements

| Test data | | | | | | |
|-----------|-------------------|-----------------|-----------------------|-----------------------------|-------------------------|----------|
| Direction | Modulation | Frequency (MHz) | RF output Power (dBm) | RF output channel Power (W) | RF output Power (W/MHz) | PAR (dB) |
| Down-link | LTE (QAM, 5MHz) | 2355.0 | 31.12 | 1.29 | 0.258 | 9.63 |
| Down-link | LTE (QPSK, 5MHz) | 2355.0 | 31.08 | 1.28 | 0.256 | 9.49 |
| Down-link | LTE (QAM, 10MHz) | 2355.0 | 31.15 | 1.30 | 0.130 | 9.81 |
| Down-link | LTE (QPSK, 10MHz) | 2355.0 | 31.17 | 1.31 | 0.131 | 9.66 |

Transmitting these powers by a $\lambda/2$ dipole tuned on the carriers' frequency we get: erp.

PAR measure is performed by the "CCDF" function installed on Spectrum analyzer that provides average power (the same measured with "Channel power" function), peak power and PAR. Below an example:



Mod. LTE 5MHz (Down-link)

QAM

QPSK
Mod. LTE 10MHz (Down-link)

QAM

QPSK

Clause 27.53(a) Spurious emissions at RF antenna connector, continued

(a) **For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:**

(1) For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

(i) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than $75 + 10 \log (P)$ dB on all frequencies between 2320 and 2345 MHz;
(ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2287.5 and 2300 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2285 and 2287.5 MHz, and $75 + 10 \log (P)$ dB below 2285 MHz;
(iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2362.5 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2362.5 and 2365 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2365 and 2367.5 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2367.5 and 2370 MHz, and $75 + 10 \log (P)$ dB above 2370 MHz.

(5) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;

Test date: [2015-05-20](#)

Test results: [Pass](#)

Special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- All measurements were performed using a peak detector.
- RBW within 30–1000 MHz was 100 kHz and 1 MHz above 1 GHz. VBW was wider than RBW.



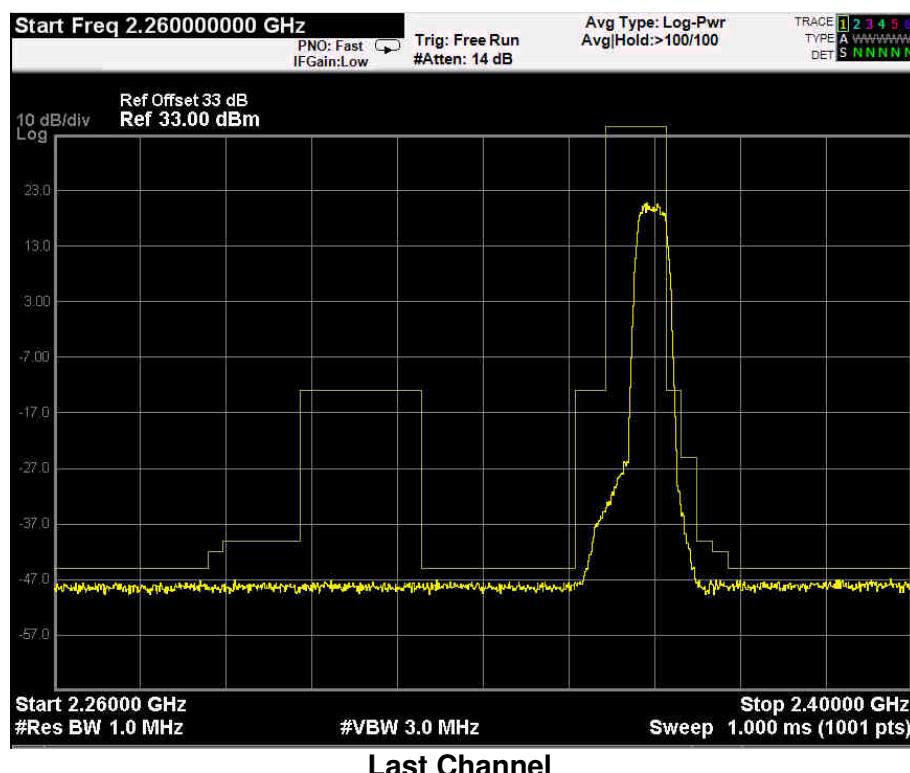
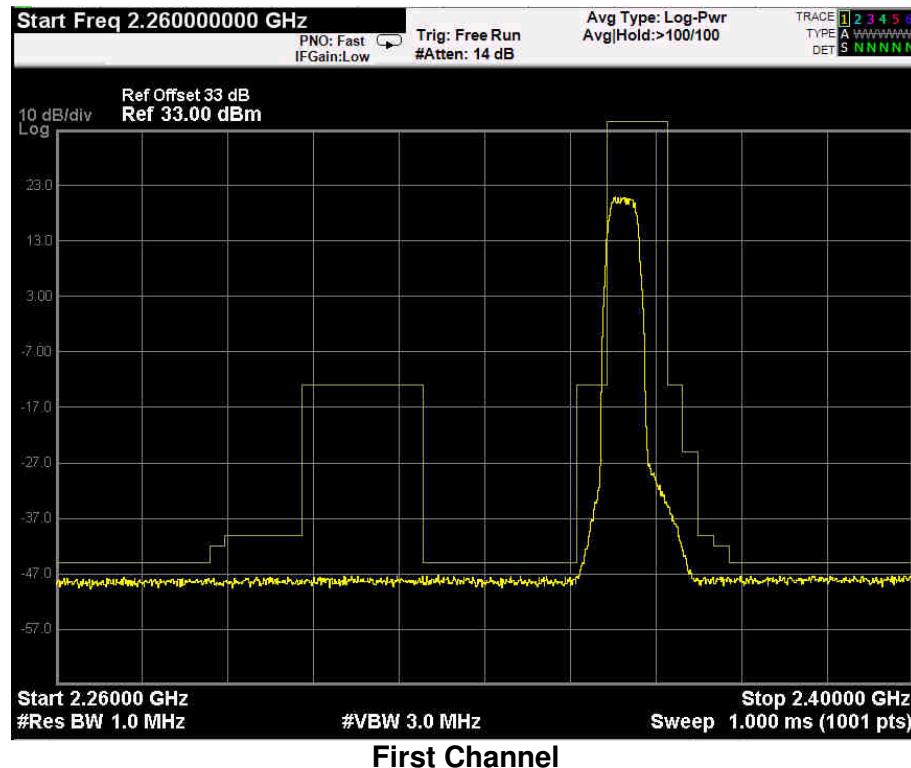
Clause 27.53 (h) Spurious emissions at RF antenna connector, continued

Test data

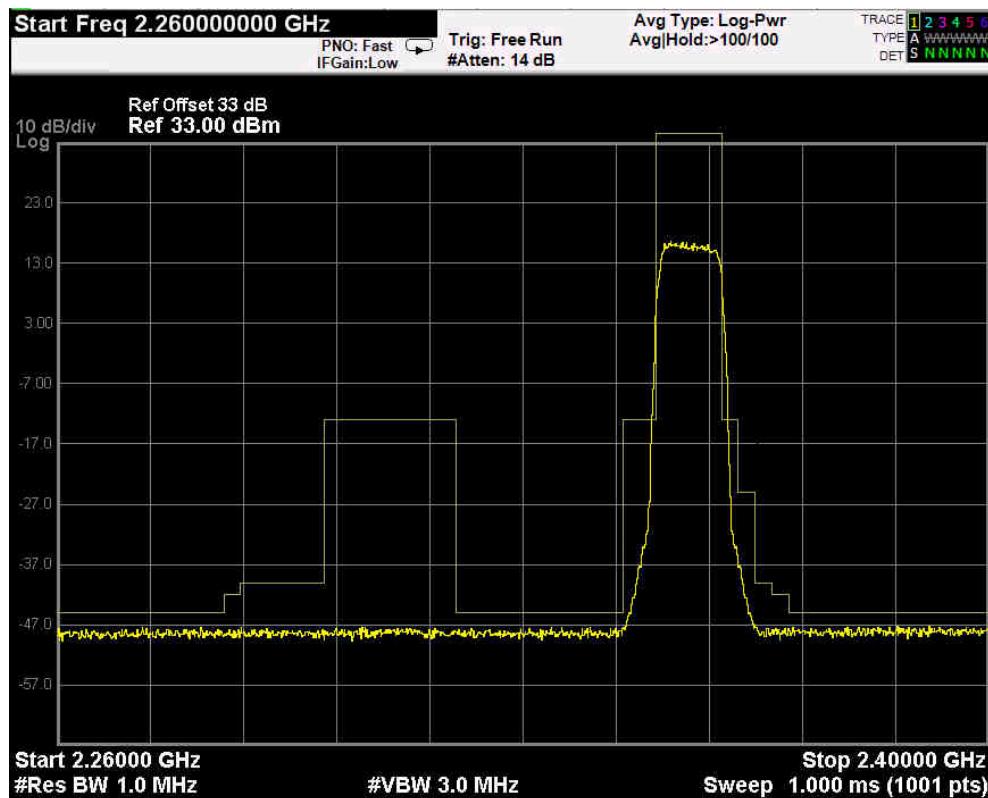
See Plots below

Spurious emissions measurement results:

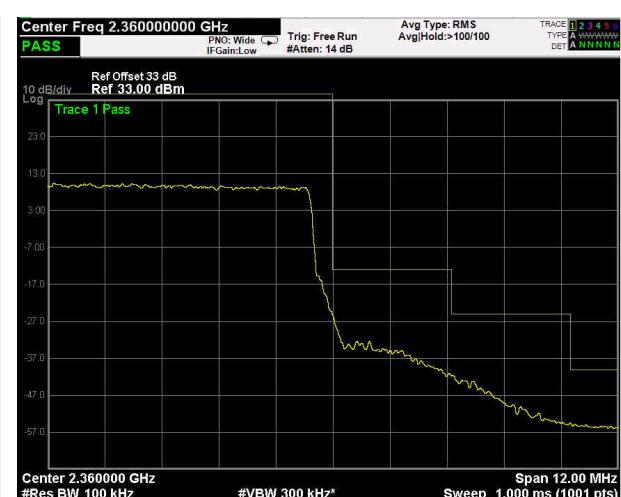
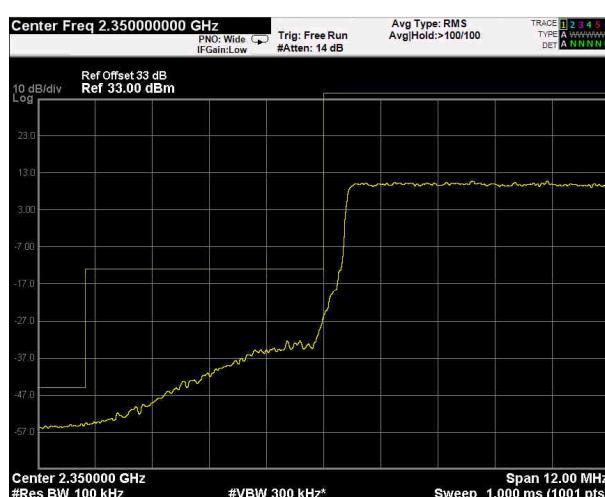
| Frequency (MHz) | Spurious emission (dBm) | Limit (dBm) | Margin (dB) |
|--------------------|----------------------------|----------------|----------------|
| Low channel | | | |
| First channel | Negligible | -13 | |
| | | | |
| | | | |
| Mid channel | | | |
| 2355 MHz | Negligible | -13 | |
| | | | |
| | | | |
| High channel | | | |
| Last channel | Negligible | -13 | |
| | | | |
| | | | |

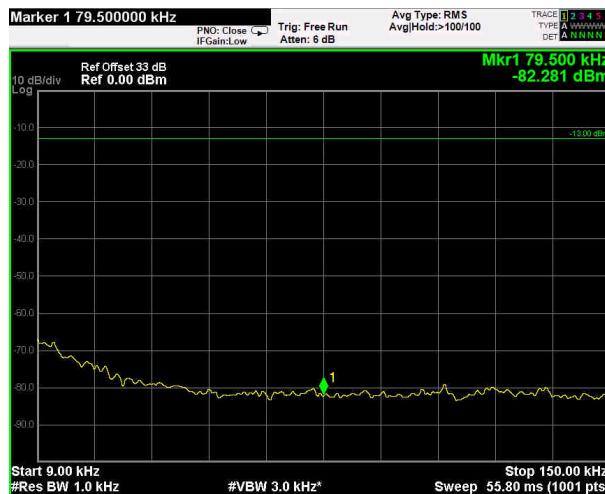
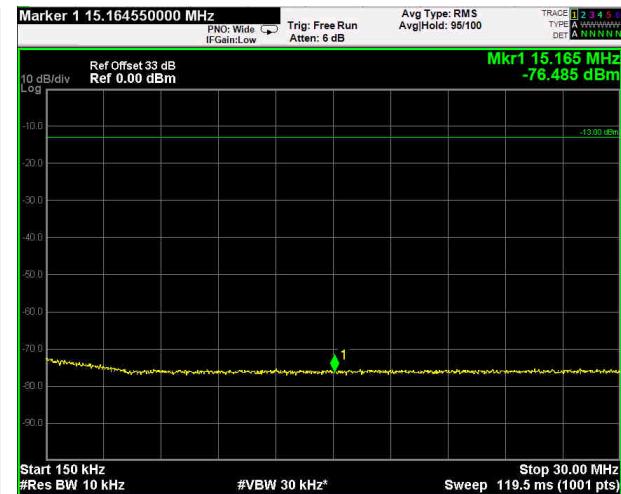
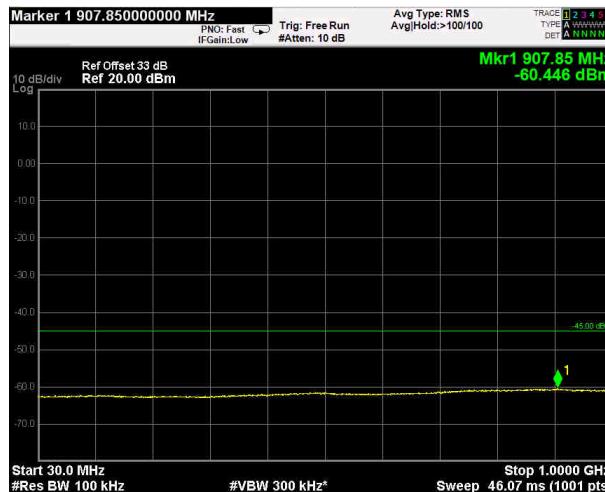
Test data, continued: clause 27.53 (a) (1)
Mod. LTE 5MHz (QAM/QPSK)


Mod. LTE 10MHz (QAM/QPSK)

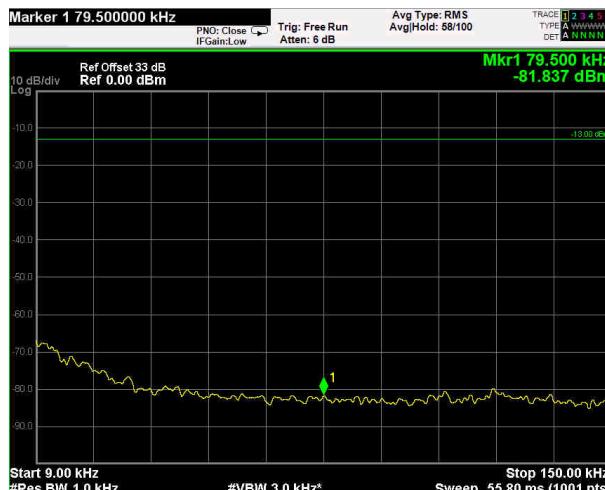
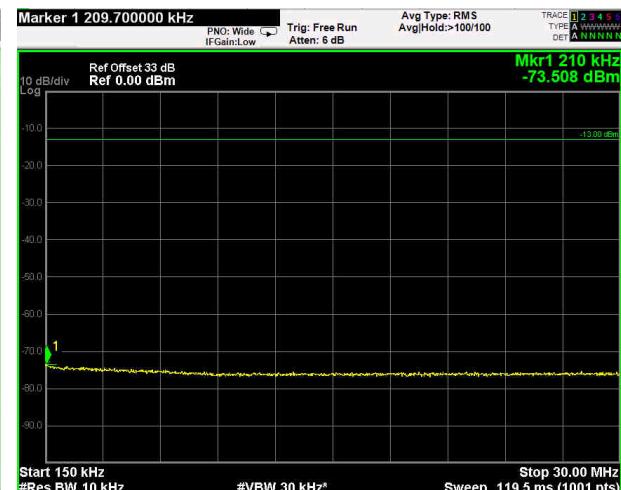
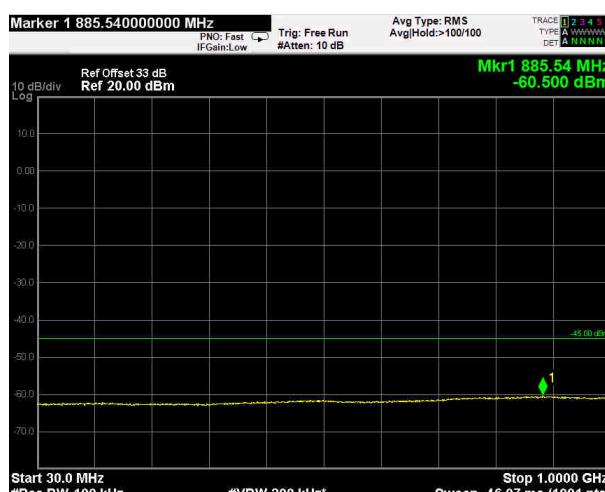


Test data, continued: band edges Inter modulation
Mod. LTE 5MHz (QAM/QPSK)

Mod. LTE 10MHz (QAM/QPSK)


Test data, continued: spurious emissions at antenna terminal
Mod. LTE 5MHz (QAM/QPSK)

9kHz-150kHz

150kHz-30MHz

30MHz-1GHz

1GHz-23.7GHz

Mod. LTE 10MHz (QAM/QPSK)

9kHz-150kHz

150kHz-30MHz

30MHz-1GHz

1GHz-23.7GHz

Clause 27.53(a) Radiated Spurious emissions

(a) **For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:**

(1) For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

(i) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than $75 + 10 \log (P)$ dB on all frequencies between 2320 and 2345 MHz;
(ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2287.5 and 2300 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2285 and 2287.5 MHz, and $75 + 10 \log (P)$ dB below 2285 MHz;
(iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2362.5 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2362.5 and 2365 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2365 and 2367.5 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2367.5 and 2370 MHz, and $75 + 10 \log (P)$ dB above 2370 MHz.

(5) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;

Test date: 2015-05-20

Test results: Pass

Special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- All measurements were performed using a peak detector.
- The measurements were performed at the distance of 3 m.
- RBW within 30–1000 MHz was 100 kHz and 1 MHz above 1 GHz. VBW was wider than RBW.

Clause 27.53(a) Radiated spurious emissions, continued

Test data

The D.U.T. was positioned according to the radiated emissions set-up

The D.U.T. antenna connector was terminated by a 50Ω shielded dummy load.

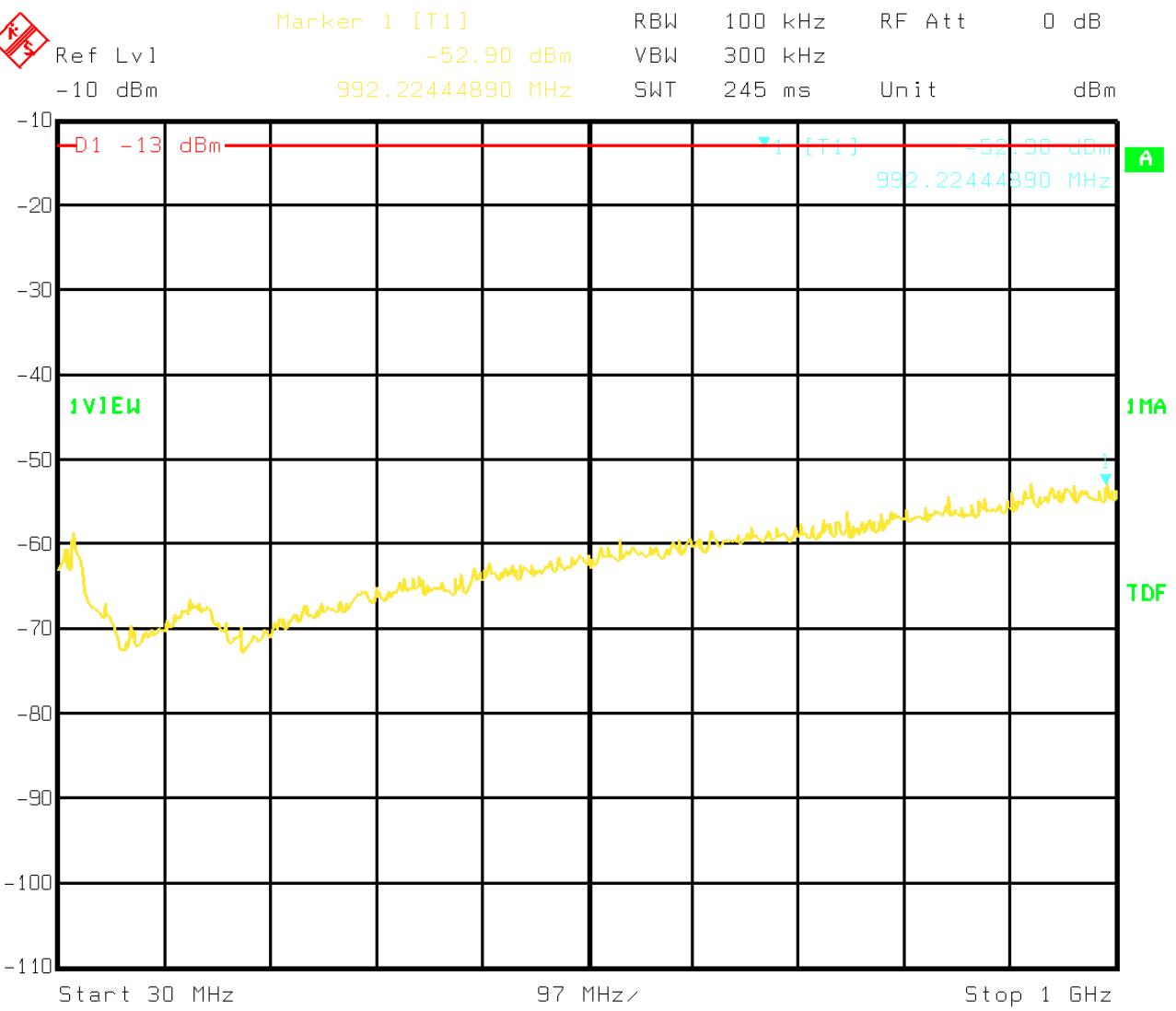
The spectrum was searched from 30 MHz to 1 GHz (RBW 100 kHz) & 1 GHz (RBW 1 MHz) to the tenth harmonic of the carrier.

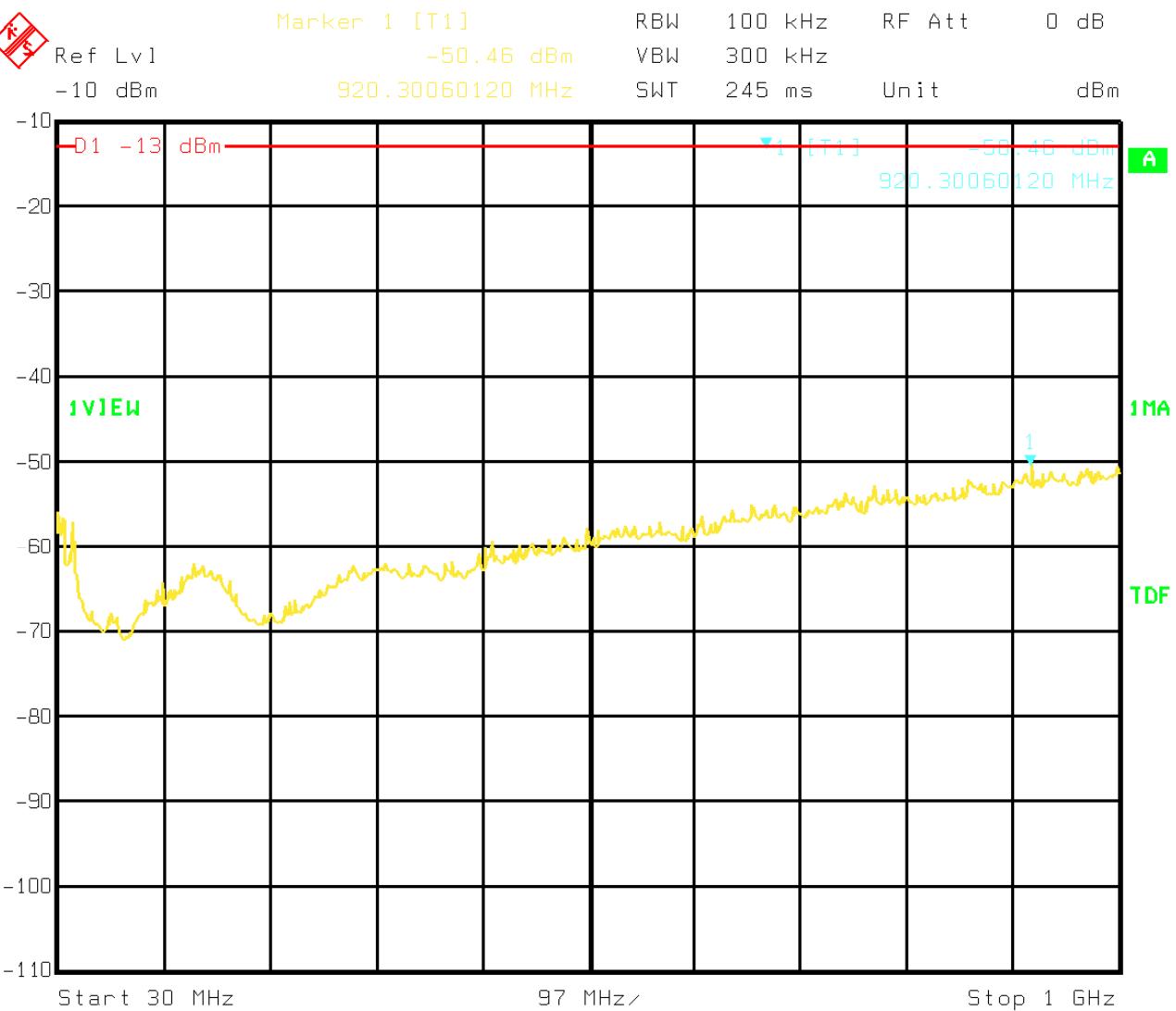
There were no emissions detected above the noise floor which was at least 20 dB below the specification limit.

Spurious emissions measurement results:

| Frequency (MHz) | Polarization. V/H | Field strength (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
|--------------------|----------------------|----------------------------------|-------------------------|----------------|
| Low channel | | | | |
| | | | | |
| | | | | |
| | | | | |
| Mid channel | | | | |
| | | | | |
| | | | | |
| | | | | |
| High channel | | | | |
| | | | | |
| | | | | |
| | | | | |

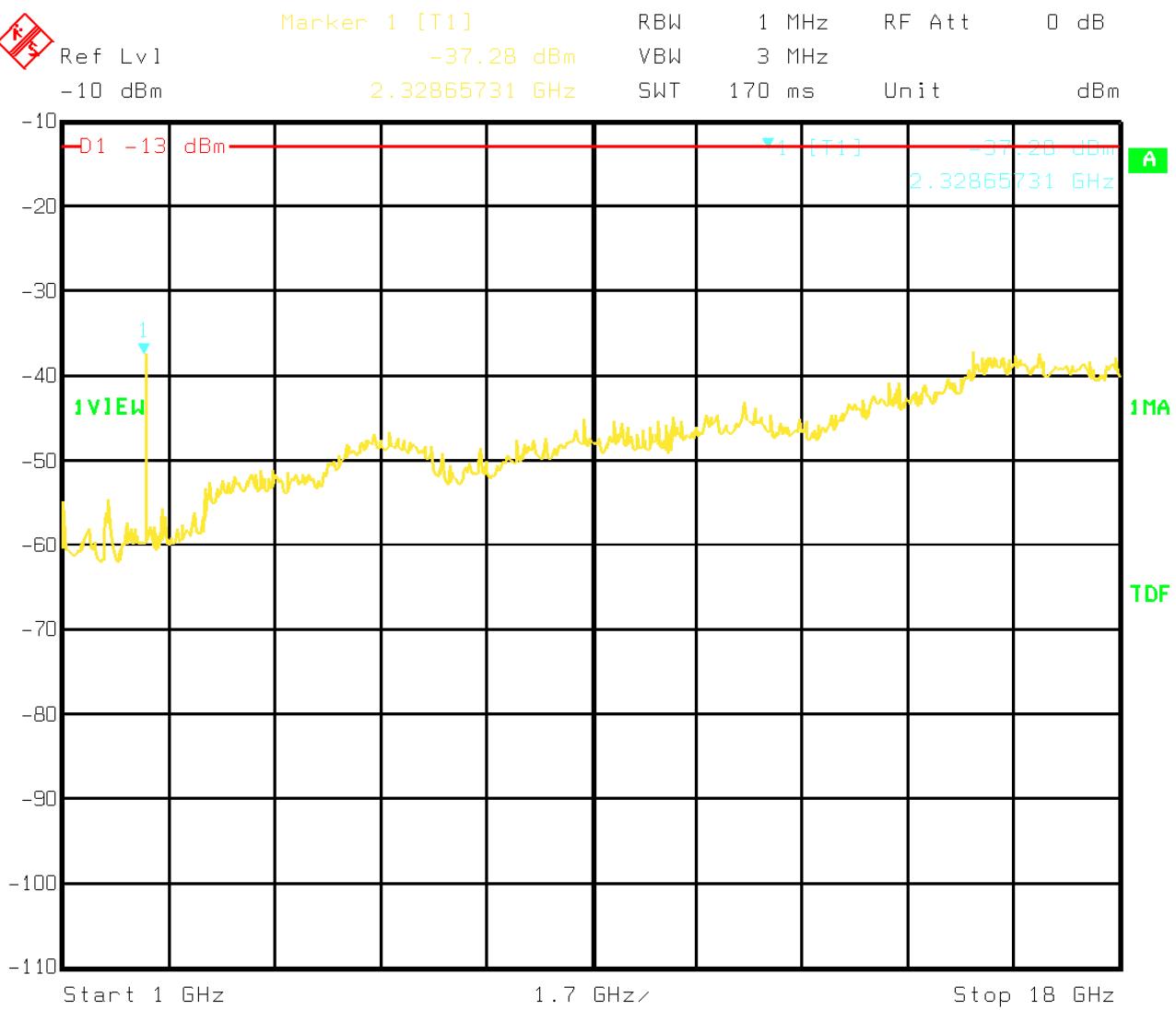
Note: Field strength includes correction factor of antenna, cable loss, amplifier, and attenuators where applicable.





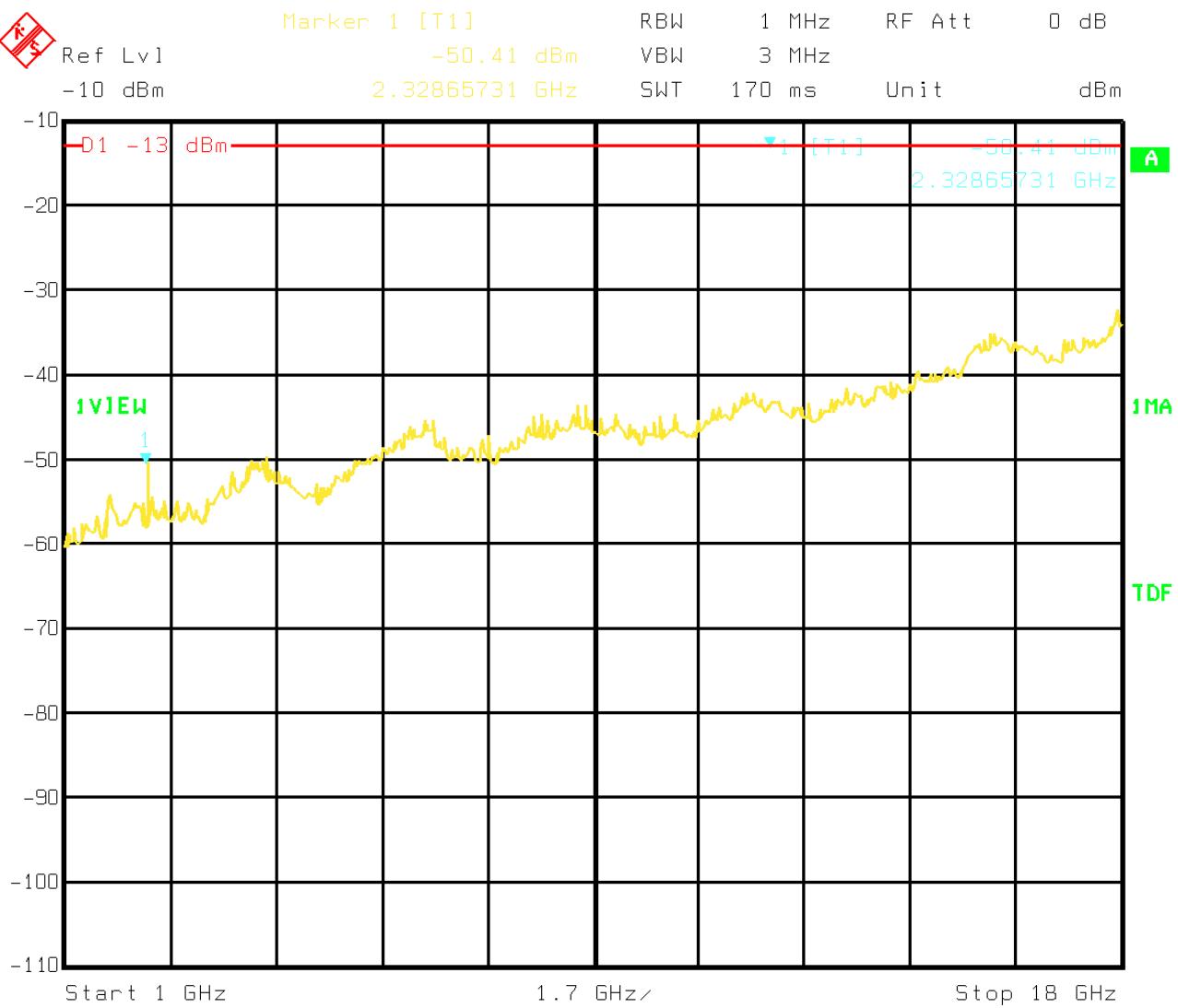
Date: 20. MAY 2015 09:02:25

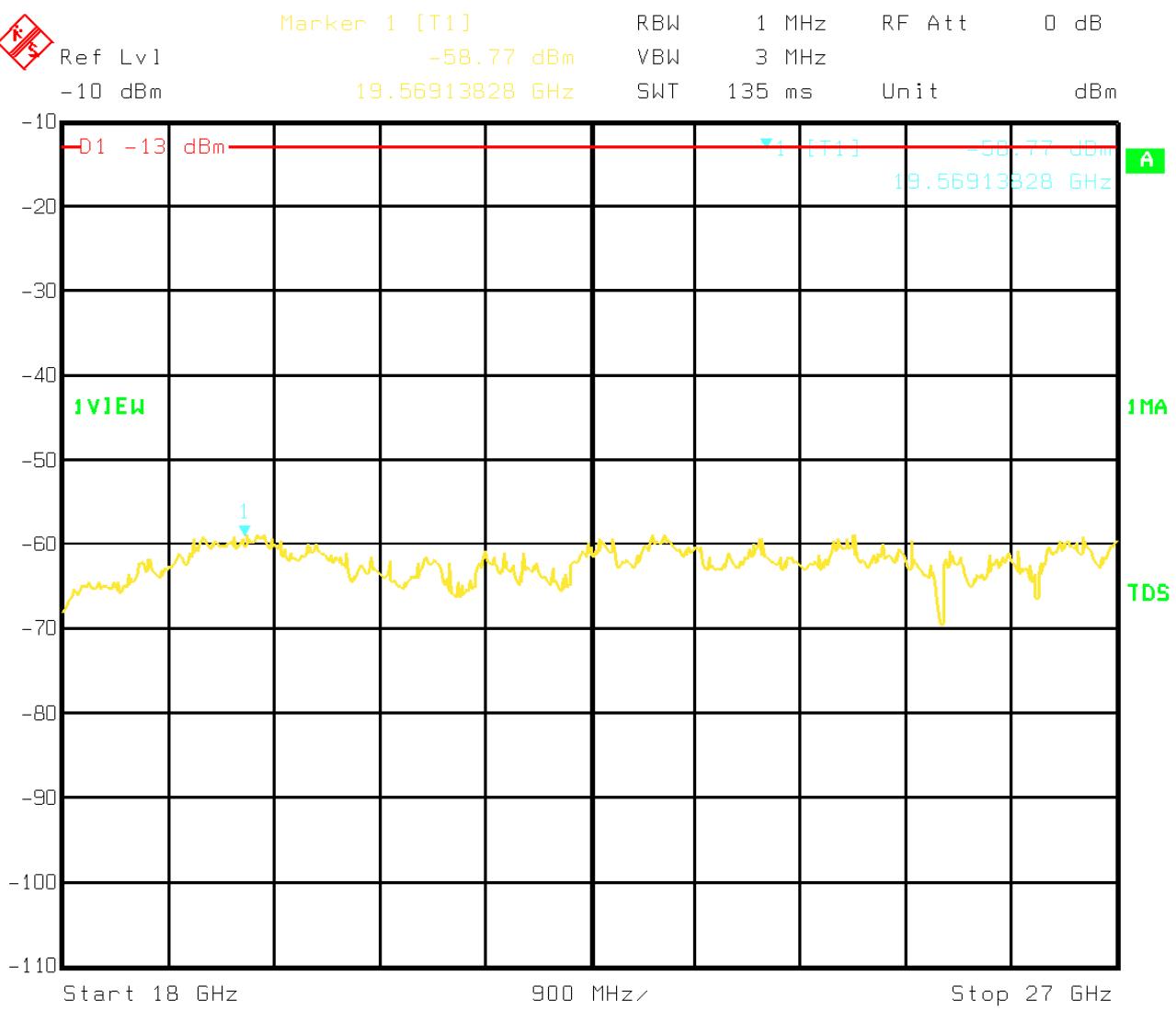
30MHz-1GHz – V Pol



Date: 20. MAY 2015 09:36:27

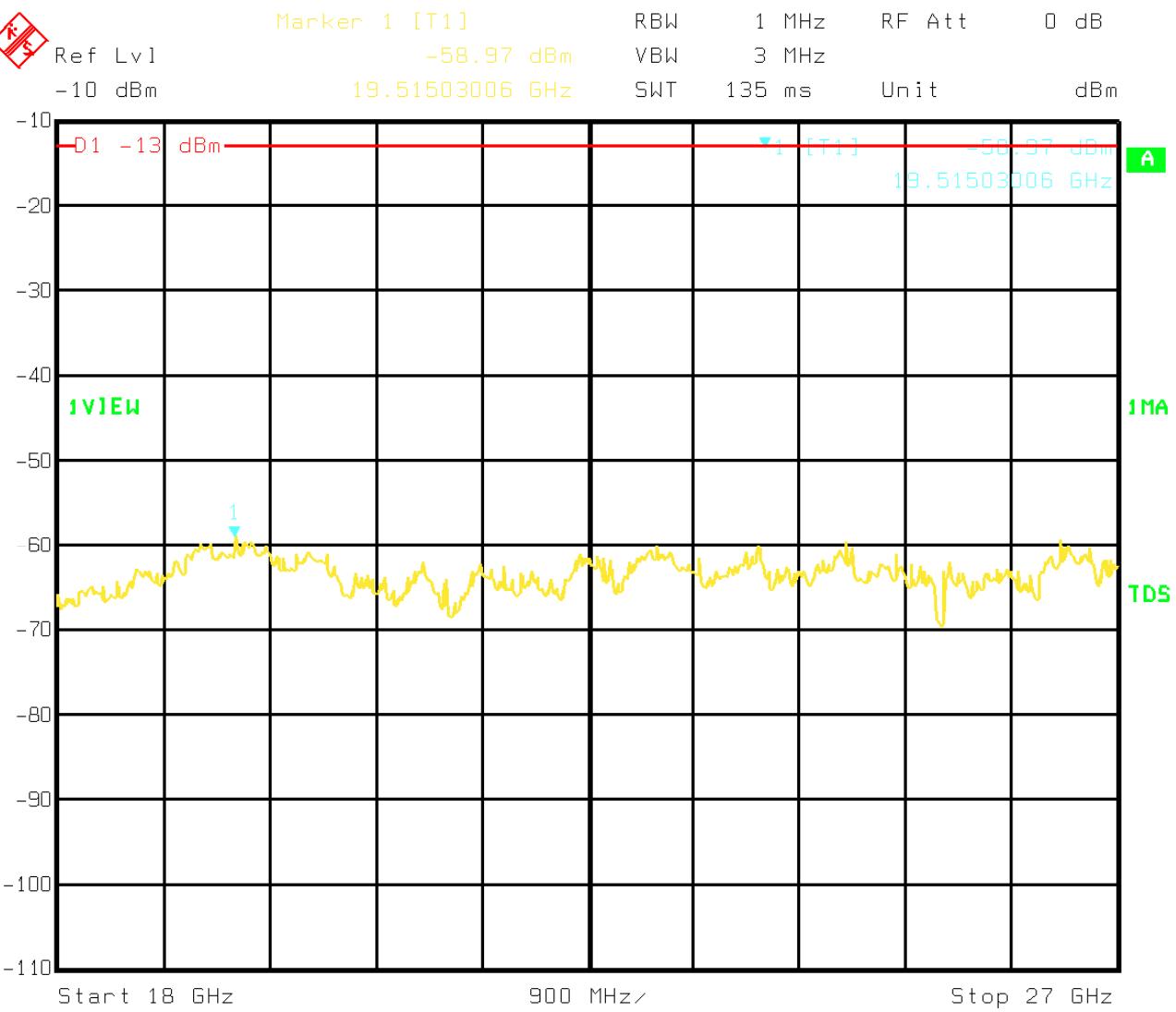
1GHz-18GHz – H Pol


1GHz-18GHz – V Pol



Date: 20. MAY 2015 11:49:03

18GHz-27GHz – H Pol


18GHz-27GHz – V Pol

Clause 2.1049 Occupied bandwidth

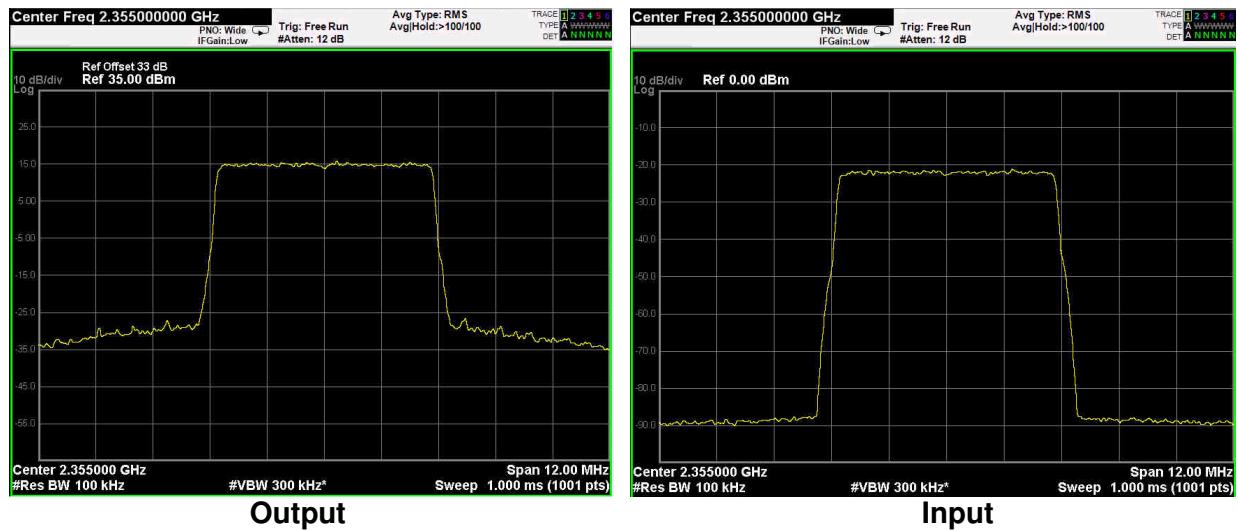
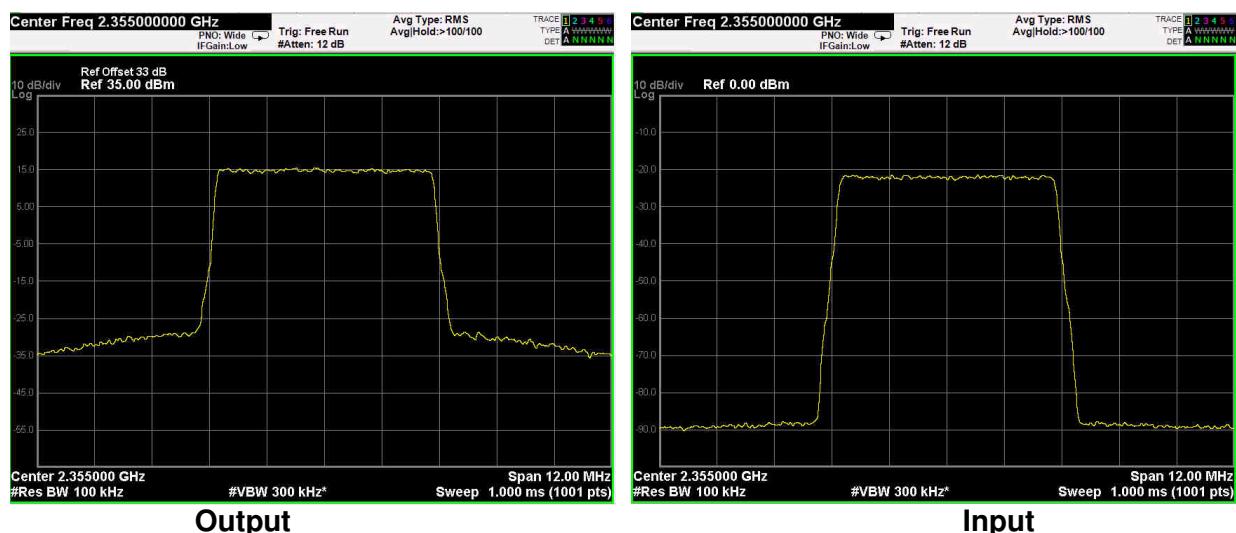
The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Test date: 2015-05-20

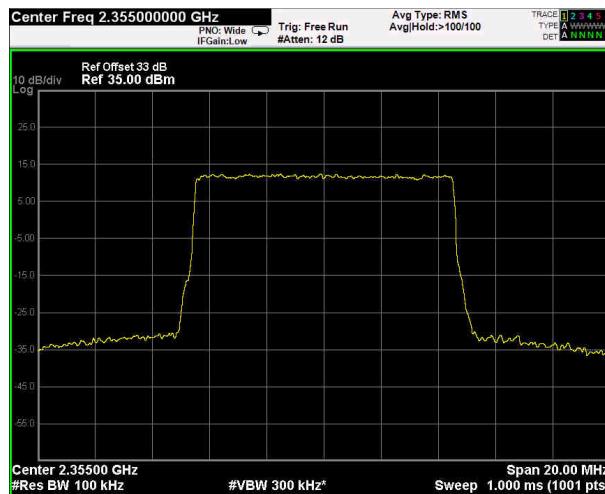
Test results: Pass

Special notes

- 26 dBc points provided in terms of attenuation below unmodulated carrier.
- RBW was set to 1 % of emissions bandwidth.

Clause 2.1049 Occupied bandwidth, continued
Test data
Mod. LTE 5MHz (QAM) (Down-link)

Mod. LTE 5MHz (QPSK) (Down-link)


Mod. LTE 10MHz (QAM) (Down-link)

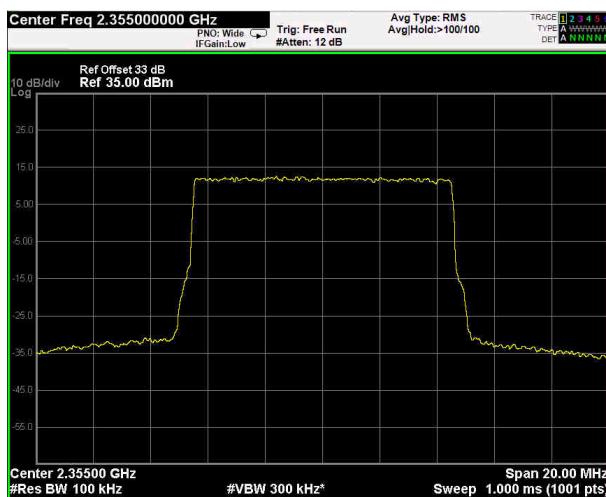


Output



Input

Mod. LTE 10MHz (QPSK) (Down-link)



Output



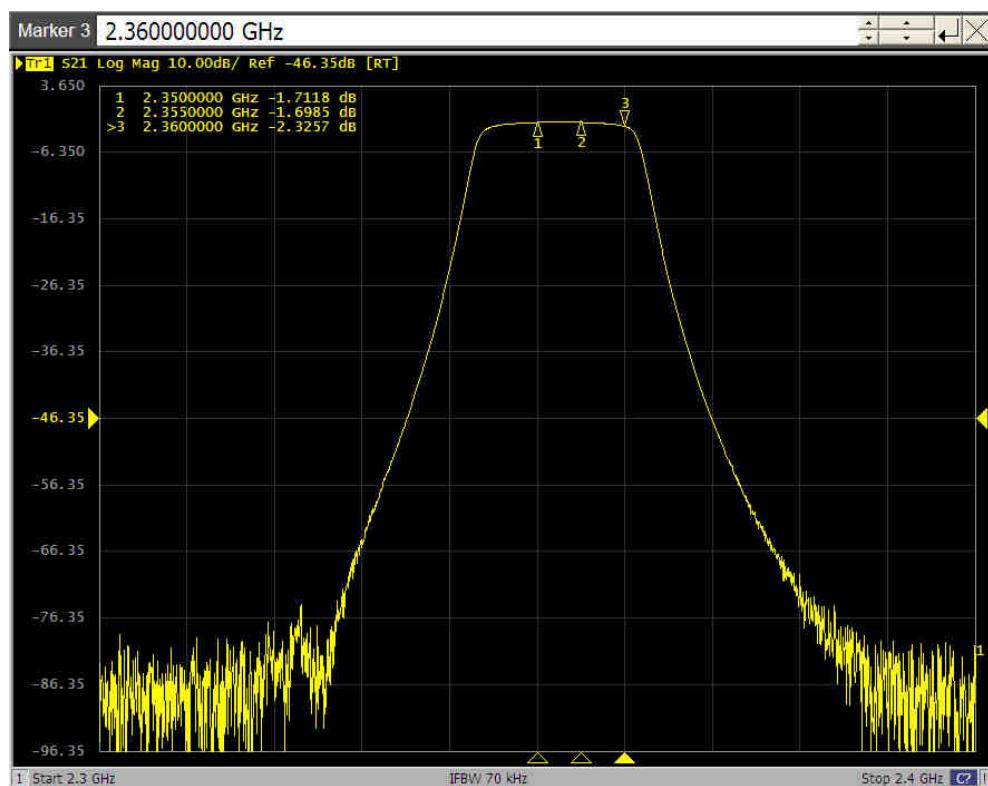
Input

Clause 935210 D02v02r01 (D.3)(l) Out of band rejection

Out of Band Rejection – Test for rejection of out of band signals.
Filter frequency response plots are acceptable.

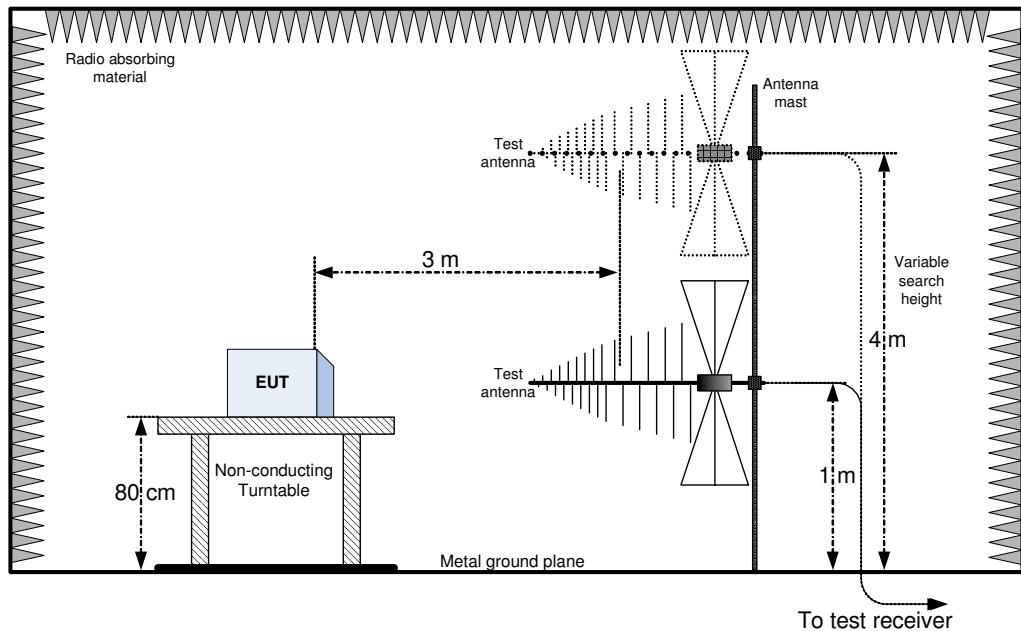
Test date: 2015-05-20

Test results: Pass

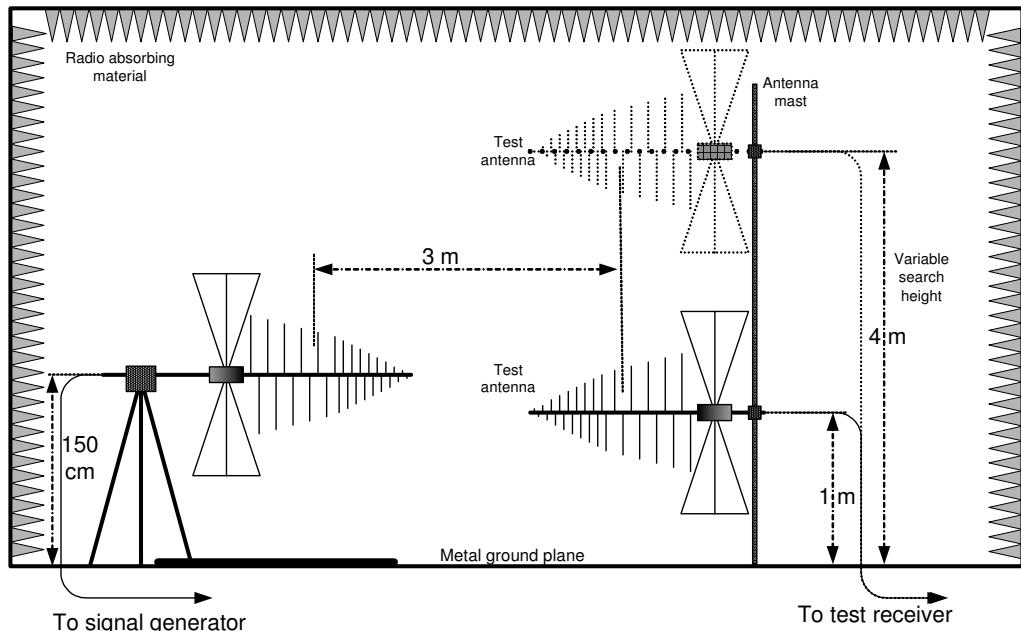


Appendix B: Block diagrams of test set-ups

Radiated emissions set-up



Substitution method set-up



Appendix C: EUT Photos

Photo Set up





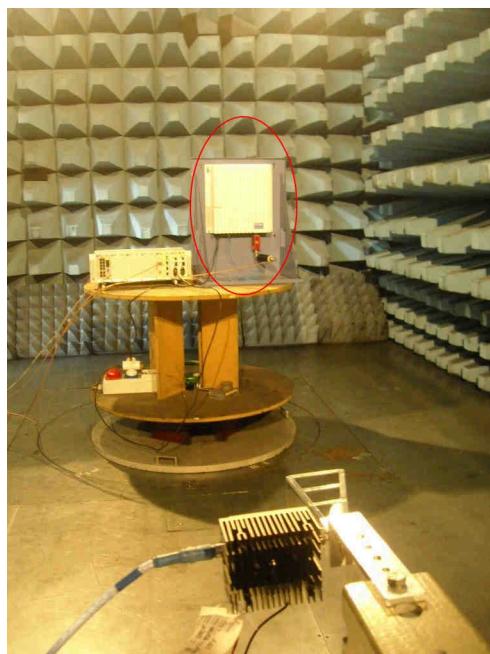


Photo EUT



