

TEST REPORT

of

FCC Part 2 Subpart J, Part 22 Subpart C/H,
Part 24 Subpart E and Part 27 Subpart C,
IC RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6,
RSS-139 Issue 3, RSS-199 Issue 3 and RSS-Gen Issue 5

FCC ID: BEJ-TM04ANNABM0

IC Certification: 2703H-TM04ANNABM0

1. Equipment Under Test : Telematics Module
2. Model Name : TM04ANNABM0
3. Variant Model Name(s) : -
4. FCC Applicant : LG Electronics USA
5. IC Applicant : LG ELECTRONICS INC.
6. Manufacturer : LG Electronics Inc.
7. Date of Receipt : 2019.12.10
8. Date of Test(s) : 2020.01.13 ~ 2020.06.19
9. Date of Issue : 2020.07.03

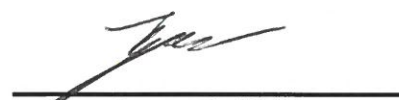
In the configuration tested, the EUT complied with the standards specified above. This test report does not assure KOLAS accreditation.

- 1) The results of this test report are effective only to the items tested.
- 2) The SGS Korea is not responsible for the sampling, the results of this test report apply to the sample as received.

Tested by:


Nancy Park

Technical
Manager:


Jungmin Yang

SGS Korea Co., Ltd. Gunpo Laboratory

INDEX

<u>Table of Contents</u>	Page
1. General Information -----	3
2. RF Radiated Output Power & Spurious Radiated Emission -----	8
3. Conducted Output Power -----	57
4. Occupied Bandwidth -----	65
5. Peak-Average Ratio -----	140
6. Spurious Emissions at Antenna Terminal -----	181
7. Band Edge -----	259
8. Frequency Stability -----	332

1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- Designation number: KR0150

All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.

Phone No. : +82 31 688 0901

Fax No. : +82 31 688 0921

1.2. Details of Applicant

FCC Applicant : LG Electronics USA

FCC Address : 1000 Sylvan Avenue, Englewood Cliffs, New Jersey, United States, 07632

IC Applicant : LG ELECTRONICS INC.

IC Address : 222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea (Republic of), 451-713

Contact Person : Han, Kyung-su

Phone No. : +1 201 472 2623

1.3. Details of Manufacturer

Company : LG Electronics Inc.

Address : 10, Magokjungang 10-ro, Gangseo-gu, Seoul, Korea, 07796

1.4. Description of EUT

Kind of Product	Telematics Module
Model Name	TM04ANNABM0
Model Serial Number	001, 002
Power Supply	DC 12.5 V
Rated Power	LTE Band 2, 4, 5, 7, 12, 13, 17, 25, 26, 41, 66, 71: 23 dBm
Frequency Range	LTE Band 2: 1 850 MHz ~ 1 910 MHz LTE Band 4: 1 710 MHz ~ 1 755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2 500 MHz ~ 2 570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1 850 MHz ~ 1 915 MHz LTE Band 26: 824 MHz ~ 849 MHz LTE Band 41: 2 496 MHz ~ 2 690 MHz LTE Band 66: 1 710 MHz ~ 1 780 MHz LTE Band 71: 663 MHz ~ 698 MHz

Emission Designator	LTE Band 7 (5 MHz): 4M53G7D (QPSK) / 4M52D7D (16QAM) LTE Band 7 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 7 (15 MHz): 13M5G7D (QPSK) / 13M5D7D (16QAM) LTE Band 7 (20 MHz): 17M9G7D (QPSK) / 17M9D7D (16QAM) LTE Band 12/17 (1.4 MHz): 1M10G7D (QPSK) / 1M10D7D (16QAM) LTE Band 12/17 (3 MHz): 2M69G7D (QPSK) / 2M69D7D (16QAM) LTE Band 12/17 (5 MHz): 4M52G7D (QPSK) / 4M53D7D (16QAM) LTE Band 12/17 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 13 (5 MHz): 4M52G7D (QPSK) / 4M53D7D (16QAM) LTE Band 13 (10 MHz): 8M92G7D (QPSK) / 8M94D7D (16QAM) LTE Band 25/2 (1.4 MHz): 1M10G7D (QPSK) / 1M10D7D (16QAM) LTE Band 25/2 (3 MHz): 2M69G7D (QPSK) / 2M70D7D (16QAM) LTE Band 25/2 (5 MHz): 4M52G7D (QPSK) / 4M53D7D (16QAM) LTE Band 25/2 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 25/2 (15 MHz): 13M6G7D (QPSK) / 13M5D7D (16QAM) LTE Band 25/2 (20 MHz): 18M0G7D (QPSK) / 18M0D7D (16QAM) LTE Band 26/5 (1.4 MHz): 1M10G7D (QPSK) / 1M10D7D (16QAM) LTE Band 26/5 (3 MHz): 2M69G7D (QPSK) / 2M69D7D (16QAM) LTE Band 26/5 (5 MHz): 4M52G7D (QPSK) / 4M52D7D (16QAM) LTE Band 26/5 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 26 (15 MHz): 13M5G7D (QPSK) / 13M5D7D (16QAM) LTE Band 41 (5 MHz): 4M53G7D (QPSK) / 4M53D7D (16QAM) LTE Band 41 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 41 (15 MHz): 13M5G7D (QPSK) / 13M5D7D (16QAM) LTE Band 41 (20 MHz): 17M9G7D (QPSK) / 17M9D7D (16QAM) LTE Band 66/4 (1.4 MHz): 1M10G7D (QPSK) / 1M10D7D (16QAM) LTE Band 66/4 (3 MHz): 2M70G7D (QPSK) / 2M69D7D (16QAM) LTE Band 66/4 (5 MHz): 4M52G7D (QPSK) / 4M52D7D (16QAM) LTE Band 66/4 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 66/4 (15 MHz): 13M5G7D (QPSK) / 13M5D7D (16QAM) LTE Band 66/4 (20 MHz): 17M9G7D (QPSK) / 18M0D7D (16QAM) LTE Band 71 (5 MHz): 4M52G7D (QPSK) / 4M53D7D (16QAM) LTE Band 71 (10 MHz): 8M97G7D (QPSK) / 8M97D7D (16QAM) LTE Band 71 (15 MHz): 13M5G7D (QPSK) / 13M5D7D (16QAM) LTE Band 71 (20 MHz): 17M9G7D (QPSK) / 18M0D7D (16QAM)
Modulation Technique	QPSK, 16QAM
Antenna Type	Shark antenna
Antenna gain	663 MHz ~ 698 MHz: -4.2 dB i 699 MHz ~ 716 MHz: -2.1 dB i 777 MHz ~ 787 MHz: -0.1 dB i 824 MHz ~ 849 MHz: -1.9 dB i 1 710 MHz ~ 1 780 MHz: 2.6 dB i 1 850 MHz ~ 1 915 MHz: 2.1 dB i 2 496 MHz ~ 2 690 MHz: 2.7 dB i
H/W Version	Rev.C3
S/W Version	WN22XA28

1.5. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval	Cal. Due
Signal Generator	Agilent	E8257D	MY51501169	Jul. 03, 2019	Annual	Jul. 03, 2020
Spectrum Analyzer	R&S	FSV30	103210	Dec. 05, 2019	Annual	Dec. 05, 2020
Spectrum Analyzer	Agilent	N9030A	US51350132	Sep. 11, 2019	Annual	Sep. 11, 2020
Mobile Test Unit	R&S	CMW500	144034	Feb. 28, 2020	Annual	Feb. 28, 2021
Mobile Test Unit	R&S	CMW500	144032	May 08, 2020	Annual	May 08, 2021
Power Meter	Anritsu	ML2495A	1223004	Jun. 01, 2020	Annual	Jun. 01, 2021
Power Sensor	Anritsu	MA2411B	1207272	Jun. 01, 2020	Annual	Jun. 01, 2021
Temperature Chamber	ESPEC CORP.	PL-1J	15000796	Sep. 18, 2019	Annual	Sep. 18, 2020
High Pass Filter	Wainwright Instrument GmbH	WHKX10-900-1000-18000-40SS	7	Mar. 04, 2020	Annual	Mar. 04, 2021
High Pass Filter	Wainwright Instrument GmbH	WHKX1.5/15G-6SS	4	Jun. 11, 2020	Annual	Jun. 11, 2021
High Pass Filter	Wainwright Instrument GmbH	WHKX2.2/12.75G-10SS	8	Mar. 04, 2020	Annual	Mar. 04, 2021
High Pass Filter	Wainwright Instrument GmbH	WHK3.0/18G-10SS	344	May 18, 2020	Annual	May 18, 2021
High Pass Filter	Wainwright Instrument GmbH	WHK7.5/26.5G-6SS	15	Jun. 05, 2020	Annual	Jun. 05, 2021
Directional Coupler	KRYTAR	152613	122660	Jun. 11, 2020	Annual	Jun. 11, 2021
DC Power Supply	Agilent	U8002A	MY50060028	Mar. 03, 2020	Annual	Mar. 03, 2021
Preamplifier	H.P.	8447F	2944A03909	Aug. 07, 2019	Annual	Aug. 07, 2020
Preamplifier	R&S	SCU 18	10117	Jun. 10, 2020	Annual	Jun. 10, 2021
Preamplifier	TESTEK	TK-PA1840H	130016	Jan. 06, 2020	Annual	Jan. 06, 2021
Test Receiver	R&S	ESU26	100109	Feb. 18, 2020	Annual	Feb. 18, 2021
Loop Antenna	Schwarzbeck Mess-Elektronik	FMZB 1519	1519-039	Aug. 22, 2019	Biennial	Aug. 22, 2021
Bilog Antenna	Schwarzbeck Mess-Elektronik	VULB9163	396	Mar. 21, 2019	Biennial	Mar. 21, 2021
Horn Antenna	R&S	HF906	100326	Feb. 14, 2020	Annual	Feb. 14, 2021
Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA9170	9170-540	Jul. 24, 2019	Biennial	Jul. 24, 2021
Antenna Master	Innco systems GmbH	MM4000	N/A	N.C.R.	N/A	N.C.R.
Turn Table	Innco systems GmbH	DS 1200S	N/A	N.C.R.	N/A	N.C.R.
Controller	Innco systems GmbH	CONTROLLER CO3000-4P	CO3000/963/383 30516/L	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L × W × H (9.6 m × 6.4 m × 6.4 m)	N/A	N.C.R.	N/A	N.C.R.
Coaxial Cable	RFONE	PL520-NMNM-4M (4 m)	20200324001	May 06, 2020	Semi-annual	Nov. 06, 2020
Coaxial Cable	RFONE	PL520-NMNM-10M (10 m)	20200324001	May 06, 2020	Semi-annual	Nov. 06, 2020
Coaxial Cable	Rosenberger	LA1-C006-1500	131014 01/20	Feb. 13, 2020	Semi-annual	Aug. 13, 2020
Coaxial Cable	Rosenberger	LA1-C006-1500	131014 05/20	Feb. 13, 2020	Semi-annual	Aug. 13, 2020
Coaxial Cable	Rosenberger	LA1-C006-1500	131014 10/20	Feb. 13, 2020	Semi-annual	Aug. 13, 2020

► Support Equipment

Description	Manufacturer	Model	Serial Number
N/A	-	-	-

1.6. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 2, 22, 24 and 27 / IC part RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 3 and RSS-Gen Issue 5			
Section in FCC	Section in IC	Test Item	Result
§22.913(a)(5) §24.232(c) §27.50(c)(10) §27.50(d)(4) §27.50(h)(2)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 3 6.5 RSS-199 Issue 3 4.4	RF Radiated Output Power	Complied
§22.917(a) §24.238(a) §27.53(c) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Spurious Radiated Emission	Complied
§2.1046	RSS-Gen Issue 5 6.12	Conducted Output Power	Complied
§2.1049	RSS-Gen Issue 5 6.7	Occupied Bandwidth	Complied
§22.913(d) §24.232(d) §27.50(d)(5)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 3 6.5 RSS-199 Issue 3 4.4	Peak-Average Ratio	Complied
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Spurious Emission at Antenna Terminal	Complied
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Band Edge	Complied
§2.1055 §22.355 §24.235 §27.54	RSS-Gen Issue 5 6.11 RSS-130 Issue 2 4.5 RSS-132 Issue 3 5.3 RSS-133 Issue 6 6.3 RSS-139 Issue 3 6.4 RSS-199 Issue 3 4.3	Frequency Stability	Complied

1.7. Sample Calculation for Offset

Where relevant, the following sample calculation is provided:

1.7.1. Conducted Test

Offset value (dB) = Directional Coupler (dB) + Cable loss (dB)

1.7.2. Radiation Test

- E.I.R.P. (dB m) = Measured level (dBμV) + Antenna factor (dB) + Cable loss (dB) + 20 Log D - 104.5; where D is the measurement distance in meters.
- E.R.P (dB m) = E.I.R.P. (dB m) - 2.15 (dB)

1.8. Device Capabilities

This device contains the following capabilities;

LTE Band 12 (699 MHz ~ 716 MHz) overlaps the entire frequency range of LTE Band 17 (704 MHz ~ 716 MHz).

Therefore, test data provided in this report covers LTE Band 17 as well as Band 12.

LTE Band 25 (1 850 MHz ~ 1 915 MHz) overlaps the entire frequency range of LTE Band 2 (1 850 MHz ~ 1 910 MHz).

Therefore, test data provided in this report covers LTE Band 2 as well as Band 25.

LTE Band 26 (814 MHz ~ 849 MHz) overlaps the entire frequency range of LTE Band 5 (824 MHz ~ 849 MHz).

Therefore, test data provided in this report covers LTE Band 5 as well as Band 26.

LTE Band 66 (1 710 MHz ~ 1 780 MHz) overlaps the entire frequency range of LTE Band 4 (1 710 MHz ~ 1 755 MHz).

Therefore, test data provided in this report covers LTE Band 4 as well as Band 66.

1.9. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Radiated Emission, 9 kHz to 30 MHz	± 3.59 dB
Radiated Emission, below 1 GHz	± 5.88 dB
Radiated Emission, above 1 GHz	± 5.94 dB

Uncertainty figures are valid to a confidence level of 95 %.

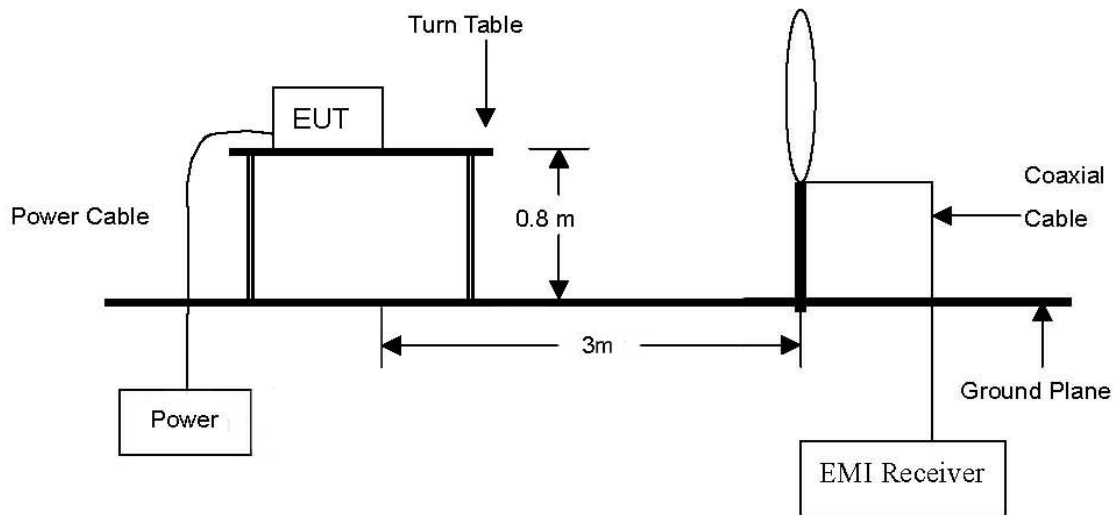
1.10. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501-RF-RTL000881	2020.07.03	Initial

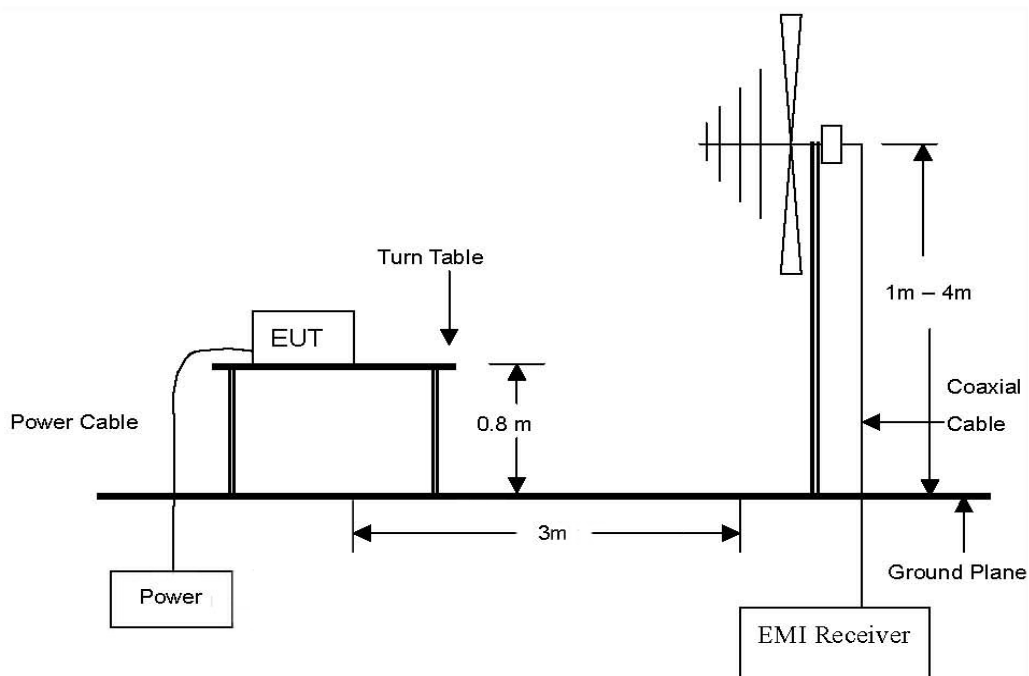
2. RF Radiated Output Power & Spurious Radiated Emission

2.1. Test Setup

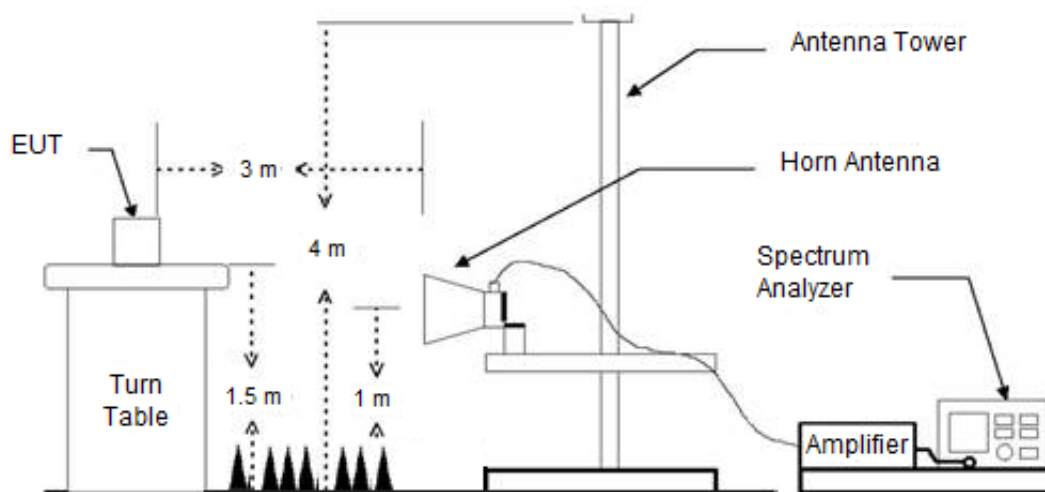
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 MHz to 30 MHz.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to 27 GHz.



2.2. Limit

2.2.1. Limit of Radiated Output Power

FCC

- §22.913(a)(5), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.
- §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.
- §27.50(c)(10), portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.
- §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1 710-1 755 MHz band and mobile and portable stations operating in the 1 695-1 710 MHz and 1 755-1 780 MHz bands are limited to 1 watt EIRP.
- §27.50(h)(2), mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

IC

- RSS-130 Issue 2
4.6.3, the e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

For base and fixed equipment other than fixed subscriber equipment, refer to SRSP-518 for the e.i.r.p. limits.

- RSS-132 Issue 3
5.4, the transmitter output power shall be measured in terms of average power.
The equivalent isotropically radiated power (e.i.r.p.) for mobile equipment shall not exceed 11.5 watts.
Refer to SRSP-503 for base station e.i.r.p. limits.

- RSS-133 Issue 6
6.4, the equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510. Moreover, base station transmitters operating in the band 1 930-1 995 MHz shall not have output power exceeding 100 watts.

- RSS-139 Issue 3
6.5, the equivalent isotropically radiated power (e.i.r.p.) for mobile and portable transmitters shall not exceed one watt. The e.i.r.p. for fixed and base stations in the band 1 710-1 780 MHz shall not exceed one watt.

- RSS-199 Issue 3
4.4, the transmitter output power shall be measured in terms of average value.
For base station equipment, refer to SRSP-517 for the maximum permissible e.i.r.p.
For mobile subscriber equipment, the e.i.r.p. shall not exceed 2 W. For fixed subscriber equipment, the transmitter output power shall not exceed 2 W and the e.i.r.p. shall be limited to 40 W.

2.2.2. Limit of Spurious Radiated Emission

FCC

- §22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.
- §24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.
- §27.53(c)(2), on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.
- §27.53(g), the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB.
- §27.53(h)(1), for operations in the 1 695-1 710 MHz, 1 710-1 755 MHz, 1 755-1 780 MHz, 1 915-1 920 MHz, 1 995-2 000 MHz, 2 000-2 020 MHz, 2 110-2 155 MHz, 2 155-2 180 MHz, and 2 180-2 200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.
- §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log_{10} (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log_{10} (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log_{10} (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log_{10} (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log_{10} (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

IC

- RSS-130 Issue 2

4.7.1, the unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dB W), by at least $43 + 10 \log_{10} p$ (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

- RSS-132 Issue 3

5.5, Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1 % of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1 % of the occupied bandwidth, power integration over 100 kHz is required.

- RSS-133 Issue 6

6.5, Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1 % of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts).

(ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1 % of the emission bandwidth, power integration over 1.0 MHz is required.

- RSS-139 Issue 3

6.6, (i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power per any 1 % of the emission bandwidth shall be attenuated below the transmitter output power P (in dB W) by at least $43 + 10 \log_{10} p$ (watts) dB.

(ii) After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dB W) by at least $43 + 10 \log_{10} p$ (watts) dB.

- RSS-199 Issue 3

4.5, In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

- a. for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least $43 + 10 \log_{10} p$
- b. for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:
 - i. $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away
 - ii. $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and
 - iii. $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz, and $55 + 10 \log_{10} p$ at or below 2490.5 MHz.

In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

2.3. Test Procedure: Based on ANSI/TIA 603E: 2016 and ANSI C63.26-2015

1. On a test site, the EUT shall be placed at 0.8 m or 1.5 m height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. The maximized power level is recorded using the spectrum analyzer "Channel Power" function with the integration band set to the emissions occupied bandwidth, RBW = 1-5 % of the OBW (not to exceed 1 MHz), VBW $\geq 3 \times$ RBW, Detector = power averaging (rms), sweep time = auto, trace average at least 100 traces in power averaging (rms) mode, per the guidelines of KDB 971168 D01 Power Meas License Digital Systems v03r01.
5. Radiated spurious emissions measurement method was set as follows:
RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz, VBW $\geq 3 \times$ RBW,
Detector = RMS, trace mode = max hold, per the guidelines of ANSI C63.26-2015 and KDB 971168 D01 Power Meas License Digital Systems v03r01.
6. The transmitter shall be switched on, the measuring receiver shall be tuned to the frequency of the transmitter under test.
7. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
8. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
9. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
10. The maximum signal level detected by the measuring receiver shall be noted.
11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
13. The measurement shall be repeated with the test antenna orientated for horizontal polarization.

2.4. Test Result for RF Radiated Output Power

Ambient temperature : (23 ± 1) °C

Relative humidity : 47 % R.H.

Band	Frequency (MHz)	Maximum Conducted Power (dB m)	Maximum Conducted Power (W)	Antenna Gain (dB i)	Maximum E.I.R.P. (dB m)	Maximum E.I.R.P. (W)	Maximum E.R.P. (dB m)	Maximum E.R.P. (W)	Output Power Limit
7	2 500 ~ 2 570	25.70	0.372	2.7	28.40	0.692			2 W E.I.R.P.
12/17	699 ~ 716	25.70	0.372	-2.1	23.60	0.229	21.45	0.140	3 W E.R.P.
13	777 ~ 787	25.70	0.372	-0.1	25.60	0.363	23.45	0.221	3 W E.R.P.
25/2	1 850 ~ 1 915	25.70	0.372	2.1	27.80	0.603			2 W E.I.R.P.
26/5	824 ~ 849	25.70	0.372	-1.9	23.80	0.240	21.65	0.146	7 W E.R.P.
41	2 496 ~ 2 690	25.70	0.372	2.7	28.40	0.692			2 W E.I.R.P.
66/4	1 710 ~ 1 780	25.70	0.372	2.6	28.30	0.676			1 W E.I.R.P.
71	663 ~ 698	25.70	0.372	-4.2	21.50	0.141	19.35	0.086	3 W E.R.P.

Remark;

1. E.I.R.P. (dB m) = Maximum Conducted Power (dB m) + Antenna Gain (dB i)
2. E.R.P. (dB m) = E.I.R.P. (dB m) - 2.15 (dB); where E.R.P. and E.I.R.P. are expressed in consistent units.

2.5. Spurious Radiated Emission

LTE band 7 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 502.5 MHz)									
5 000.64	59.61	H	33.20	-35.78	57.03	-95.26	-38.23	-25	13.23
5 000.48	56.91	V	33.20	-35.78	54.33	-95.26	-40.93	-25	15.93
7 501.03	49.01	H	36.00	-34.77	50.24	-95.26	-45.02	-25	20.02
7 500.91	52.16	V	36.00	-34.77	53.39	-95.26	-41.87	-25	16.87
10 001.21	48.01	H	37.70	-32.30	53.41	-95.26	-41.85	-25	16.85
10 001.28	49.67	V	37.70	-32.30	55.07	-95.26	-40.19	-25	15.19
15 002.17	47.92	H	40.50	-28.76	59.66	-95.26	-35.60	-25	10.60
15 001.71	43.25	V	40.50	-28.76	54.99	-95.26	-40.27	-25	15.27
17 502.14	49.88	H	43.20	-27.88	65.20	-95.26	-30.06	-25	5.06
17 502.39	46.79	V	43.20	-27.88	62.11	-95.26	-33.15	-25	8.15
Middle Channel (2 535.0 MHz)									
5 065.72	62.69	H	33.26	-35.65	60.30	-95.26	-34.96	-25	9.96
5 065.69	61.09	V	33.26	-35.65	58.70	-95.26	-36.56	-25	11.56
7 598.48	48.84	H	36.00	-34.48	50.36	-95.26	-44.90	-25	19.90
7 598.52	50.59	V	36.00	-34.48	52.11	-95.26	-43.15	-25	18.15
10 131.52	49.69	H	37.70	-32.02	55.37	-95.26	-39.89	-25	14.89
10 131.39	51.95	V	37.70	-32.02	57.63	-95.26	-37.63	-25	12.63
15 197.31	48.09	H	40.11	-28.65	59.55	-95.26	-35.71	-25	10.71
15 197.26	43.69	V	40.11	-28.65	55.15	-95.26	-40.11	-25	15.11
17 729.60	46.61	H	43.76	-27.69	62.68	-95.26	-32.58	-25	7.58
17 729.65	44.35	V	43.76	-27.69	60.42	-95.26	-34.84	-25	9.84

High Channel (2 567.5 MHz)									
5 130.70	62.19	H	33.46	-35.68	59.97	-95.26	-35.29	-25	10.29
5 130.84	60.76	V	33.46	-35.68	58.54	-95.26	-36.72	-25	11.72
7 695.98	47.76	H	35.91	-34.61	49.06	-95.26	-46.20	-25	21.20
7 696.08	48.33	V	35.91	-34.61	49.63	-95.26	-45.63	-25	20.63
10 261.41	50.09	H	37.70	-31.94	55.85	-95.26	-39.41	-25	14.41
10 261.38	53.29	V	37.70	-31.94	59.05	-95.26	-36.21	-25	11.21
15 391.76	48.15	H	39.82	-28.54	59.43	-95.26	-35.83	-25	10.83
15 391.74	43.54	V	39.82	-28.54	54.82	-95.26	-40.44	-25	15.44
17 957.65	42.14	H	44.62	-27.49	59.27	-95.26	-35.99	-25	10.99
17 957.58	40.32	V	44.62	-27.49	57.45	-95.26	-37.81	-25	12.81

* 5 BW 1 RB size / 0 Offset for B7

LTE band 7 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 505.0 MHz)									
5 001.24	59.31	H	33.20	-35.78	56.73	-95.26	-38.53	-25	13.53
5 001.21	56.87	V	33.20	-35.78	54.29	-95.26	-40.97	-25	15.97
7 501.92	49.46	H	36.00	-34.77	50.69	-95.26	-44.57	-25	19.57
7 501.81	52.43	V	36.00	-34.77	53.66	-95.26	-41.60	-25	16.60
10 002.47	47.87	H	37.70	-32.29	53.28	-95.26	-41.98	-25	16.98
10 002.51	49.72	V	37.70	-32.29	55.13	-95.26	-40.13	-25	15.13
15 003.26	47.86	H	40.49	-28.75	59.60	-95.26	-35.66	-25	10.66
15 003.60	43.09	V	40.49	-28.75	54.83	-95.26	-40.43	-25	15.43
17 504.17	49.73	H	43.21	-27.87	65.07	-95.26	-30.19	-25	5.19
17 504.18	47.10	V	43.21	-27.87	62.44	-95.26	-32.82	-25	7.82
Middle Channel (2 535.0 MHz)									
5 061.14	62.33	H	33.24	-35.65	59.92	-95.26	-35.34	-25	10.34
5 061.16	60.67	V	33.24	-35.65	58.26	-95.26	-37.00	-25	12.00
7 591.72	47.97	H	36.00	-34.48	49.49	-95.26	-45.77	-25	20.77
7 591.70	51.03	V	36.00	-34.48	52.55	-95.26	-42.71	-25	17.71
10 122.24	48.95	H	37.70	-32.01	54.64	-95.26	-40.62	-25	15.62
10 122.43	52.20	V	37.70	-32.01	57.89	-95.26	-37.37	-25	12.37
15 183.49	48.22	H	40.13	-28.66	59.69	-95.26	-35.57	-25	10.57
15 183.55	43.64	V	40.13	-28.66	55.11	-95.26	-40.15	-25	15.15
17 714.06	47.02	H	43.73	-27.70	63.05	-95.26	-32.21	-25	7.21
17 714.25	44.37	V	43.73	-27.70	60.40	-95.26	-34.86	-25	9.86

High Channel (2 565.0 MHz)									
5121.19	56.33	H	33.44	-35.66	54.11	-95.26	-41.15	-25	16.15
5121.12	55.16	V	33.44	-35.66	52.94	-95.26	-42.32	-25	17.32
7681.73	49.31	H	35.94	-34.61	50.64	-95.26	-44.62	-25	19.62
7681.72	51.49	V	35.94	-34.61	52.82	-95.26	-42.44	-25	17.44
10242.33	48.06	H	37.70	-31.97	53.79	-95.26	-41.47	-25	16.47
10242.42	51.43	V	37.70	-31.97	57.16	-95.26	-38.10	-25	13.10
15363.30	47.39	H	39.87	-28.56	58.70	-95.26	-36.56	-25	11.56
15363.25	42.98	V	39.87	-28.56	54.29	-95.26	-40.97	-25	15.97
17924.47	42.02	H	44.50	-27.52	59.00	-95.26	-36.26	-25	11.26
17924.13	40.75	V	44.50	-27.52	57.73	-95.26	-37.53	-25	12.53

* 10 BW 1 RB size / 0 Offset for B7

LTE band 7 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 507.5 MHz)									
5 001.58	59.84	H	33.20	-35.78	57.26	-95.26	-38.00	-25	13.00
5 001.79	57.47	V	33.20	-35.78	54.89	-95.26	-40.37	-25	15.37
7 502.61	49.89	H	36.00	-34.76	51.13	-95.26	-44.13	-25	19.13
7 502.43	52.42	V	36.00	-34.76	53.66	-95.26	-41.60	-25	16.60
10 003.43	47.83	H	37.70	-32.29	53.24	-95.26	-42.02	-25	17.02
10 003.45	49.62	V	37.70	-32.29	55.03	-95.26	-40.23	-25	15.23
15 005.08	48.13	H	40.49	-28.76	59.86	-95.26	-35.40	-25	10.40
15 004.98	43.22	V	40.49	-28.76	54.95	-95.26	-40.31	-25	15.31
17 505.91	49.96	H	43.21	-27.87	65.30	-95.26	-29.96	-25	4.96
17 506.10	47.47	V	43.21	-27.87	62.81	-95.26	-32.45	-25	7.45
Middle Channel (2 535.0 MHz)									
5 056.71	61.55	H	33.23	-35.65	59.13	-95.26	-36.13	-25	11.13
5 056.74	60.07	V	33.23	-35.65	57.65	-95.26	-37.61	-25	12.61
7 585.10	49.87	H	36.00	-34.48	51.39	-95.26	-43.87	-25	18.87
7 584.94	53.34	V	36.00	-34.48	54.86	-95.26	-40.40	-25	15.40
10 113.36	49.11	H	37.70	-32.02	54.79	-95.26	-40.47	-25	15.47
10 113.45	51.67	V	37.70	-32.02	57.35	-95.26	-37.91	-25	12.91
15 170.09	47.87	H	40.16	-28.67	59.36	-95.26	-35.90	-25	10.90
15 169.99	43.09	V	40.16	-28.67	54.58	-95.26	-40.68	-25	15.68
17 698.38	47.32	H	43.70	-27.71	63.31	-95.26	-31.95	-25	6.95
17 698.42	44.60	V	43.70	-27.71	60.59	-95.26	-34.67	-25	9.67

High Channel (2 562.5 MHz)									
5 111.77	57.93	H	33.42	-35.65	55.70	-95.26	-39.56	-25	14.56
5 111.73	57.42	V	33.42	-35.65	55.19	-95.26	-40.07	-25	15.07
7 667.53	44.66	H	35.96	-34.61	46.01	-95.26	-49.25	-25	24.25
7 667.51	47.67	V	35.96	-34.61	49.02	-95.26	-46.24	-25	21.24
10 223.49	41.95	H	37.70	-31.99	47.66	-95.26	-47.60	-25	22.60
10 223.35	44.40	V	37.70	-31.99	50.11	-95.26	-45.15	-25	20.15
15 335.35	38.93	H	39.93	-28.57	50.29	-95.26	-44.97	-25	19.97
15 334.90	36.37	V	39.93	-28.57	47.73	-95.26	-47.53	-25	22.53
17 890.89	39.98	H	44.38	-27.56	56.80	-95.26	-38.46	-25	13.46
17 890.93	38.57	V	44.38	-27.56	55.39	-95.26	-39.87	-25	14.87

* 15 BW 1 RB size / 0 Offset for B7

LTE band 7 (20 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 510.0 MHz)									
5 002.23	59.59	H	33.20	-35.77	57.02	-95.26	-38.24	-25	13.24
5 002.19	57.43	V	33.20	-35.77	54.86	-95.26	-40.40	-25	15.40
7 503.42	49.77	H	36.00	-34.76	51.01	-95.26	-44.25	-25	19.25
7 503.23	52.33	V	36.00	-34.76	53.57	-95.26	-41.69	-25	16.69
10 004.39	47.95	H	37.70	-32.29	53.36	-95.26	-41.90	-25	16.90
10 004.28	49.51	V	37.70	-32.29	54.92	-95.26	-40.34	-25	15.34
15 006.41	48.38	H	40.49	-28.76	60.11	-95.26	-35.15	-25	10.15
15 006.18	43.24	V	40.49	-28.76	54.97	-95.26	-40.29	-25	15.29
17 507.68	50.11	H	43.22	-27.87	65.46	-95.26	-29.80	-25	4.80
17 507.77	47.69	V	43.22	-27.87	63.04	-95.26	-32.22	-25	7.22
Middle Channel (2 535.0 MHz)									
5 052.05	58.18	H	33.21	-35.66	55.73	-95.26	-39.53	-25	14.53
5 052.14	56.71	V	33.21	-35.66	54.26	-95.26	-41.00	-25	16.00
7 578.11	50.86	H	36.00	-34.48	52.38	-95.26	-42.88	-25	17.88
7 578.09	55.27	V	36.00	-34.48	56.79	-95.26	-38.47	-25	13.47
10 104.36	48.40	H	37.70	-32.01	54.09	-95.26	-41.17	-25	16.17
10 104.39	50.56	V	37.70	-32.01	56.25	-95.26	-39.01	-25	14.01
15 156.67	47.34	H	40.19	-28.67	58.86	-95.26	-36.40	-25	11.40
15 156.26	42.07	V	40.19	-28.67	53.59	-95.26	-41.67	-25	16.67
17 682.64	47.22	H	43.70	-27.72	63.20	-95.26	-32.06	-25	7.06
17 682.26	44.68	V	43.70	-27.72	60.66	-95.26	-34.60	-25	9.60

High Channel (2 560.0 MHz)									
5 102.17	58.87	H	33.40	-35.63	56.64	-95.26	-38.62	-25	13.62
5 102.22	58.41	V	33.40	-35.63	56.18	-95.26	-39.08	-25	14.08
7 653.09	40.26	H	35.99	-34.61	41.64	-95.26	-53.62	-25	28.62
7 653.44	43.55	V	35.99	-34.61	44.93	-95.26	-50.33	-25	25.33
10 204.42	40.49	H	37.70	-32.03	46.16	-95.26	-49.10	-25	24.10
10 204.34	42.29	V	37.70	-32.03	47.96	-95.26	-47.30	-25	22.30
15 306.78	36.81	H	39.99	-28.59	48.21	-95.26	-47.05	-25	22.05
15 306.56	34.23	V	39.99	-28.59	45.63	-95.26	-49.63	-25	24.63
17 857.66	38.05	H	44.32	-27.58	54.79	-95.26	-40.47	-25	15.47
17 857.88	35.25	V	44.32	-27.58	51.99	-95.26	-43.27	-25	18.27

* 20 BW 1 RB size / 0 Offset for B7

LTE band 12/17 (1.4 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (699.7 MHz)									
1 398.40	48.85	H	24.90	-41.03	32.72	-97.41	-64.69	-13	51.69
1 398.44	48.22	V	24.90	-41.03	32.09	-97.41	-65.32	-13	52.32
Middle Channel (707.5 MHz)									
1 414.22	48.36	H	24.99	-40.97	32.38	-97.41	-65.03	-13	52.03
High Channel (715.3 MHz)									
1 429.41	46.49	H	25.08	-40.92	30.65	-97.41	-66.76	-13	53.76

* 1.4 BW 1 RB size / 0 Offset for B12/17

LTE band 12/17 (3 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (700.5 MHz)									
1 398.52	49.95	H	24.90	-41.03	33.82	-97.41	-63.59	-13	50.59
1 398.59	47.97	V	24.90	-41.03	31.84	-97.41	-65.57	-13	52.57
Middle Channel (707.5 MHz)									
1 412.54	48.72	H	24.98	-40.98	32.72	-97.41	-64.69	-13	51.69
1 412.48	47.87	V	24.97	-40.98	31.86	-97.41	-65.55	-13	52.55
High Channel (714.5 MHz)									
1 426.25	47.16	H	25.06	-40.93	31.29	-97.41	-66.12	-13	53.12
1 426.51	46.86	V	25.06	-40.93	30.99	-97.41	-66.42	-13	53.42

* 3 BW 1 RB size / 0 Offset for B12/17

LTE band 12/17 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (701.5 MHz)									
1 398.77	50.08	H	24.90	-41.03	33.95	-97.41	-63.46	-13	50.46
1 398.78	48.45	V	24.90	-41.03	32.32	-97.41	-65.09	-13	52.09
Middle Channel (707.5 MHz)									
1 410.46	48.74	H	24.96	-40.99	32.71	-97.41	-64.70	-13	51.70
1 410.49	47.26	V	24.96	-40.99	31.23	-97.41	-66.18	-13	53.18
High Channel (713.5 MHz)									
1 422.66	48.00	H	25.04	-40.94	32.10	-97.41	-65.31	-13	52.31
1 422.77	46.90	V	25.04	-40.94	31.00	-97.41	-66.41	-13	53.41

* 5 BW 1 RB size / 0 Offset for B12/17

LTE band 12/17 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (704.0 MHz)									
1 399.28	49.62	H	24.90	-41.03	33.49	-97.41	-63.92	-13	50.92
1 399.32	48.10	V	24.90	-41.03	31.97	-97.41	-65.44	-13	52.44
Middle Channel (707.5 MHz)									
1 406.14	48.94	H	24.94	-41.01	32.87	-97.41	-64.54	-13	51.54
1 406.17	47.43	V	24.94	-41.01	31.36	-97.41	-66.05	-13	53.05
High Channel (711.0 MHz)									
1 413.24	48.41	H	24.98	-40.98	32.41	-97.41	-65.00	-13	52.00

* 10 BW 1 RB size / 0 Offset for B12/17

LTE band 13 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (779.5 MHz)									
1 554.63	49.36	H	25.09	-40.72	33.73	-97.41	-63.68	-13	50.68
1 554.55	46.82	V	25.09	-40.72	31.19	-97.41	-66.22	-13	53.22
Middle Channel (782.0 MHz)									
1 559.61	52.46	H	25.08	-40.71	36.83	-97.41	-60.58	-13	47.58
1 559.70	48.70	V	25.08	-40.71	33.07	-97.41	-64.34	-13	51.34
High Channel (784.5 MHz)									
1 564.88	51.30	H	25.07	-40.69	35.68	-97.41	-61.73	-13	48.73
1 564.91	49.01	V	25.07	-40.69	33.39	-97.41	-64.02	-13	51.02

* 5 BW 1 RB size / 0 Offset for B13

LTE band 13 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (782.0 MHz)									
1 555.04	50.23	H	25.09	-40.72	34.60	-97.41	-62.81	-13	49.81
1 555.27	47.40	V	25.09	-40.72	31.77	-97.41	-65.64	-13	52.64

* 10 BW 1 RB size / 0 Offset for B13

LTE band 25/2 (1.4 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 850.7 MHz)									
3 700.43	53.81	H	32.30	-37.12	48.99	-95.26	-46.27	-13	33.27
3 700.31	51.91	V	32.30	-37.12	47.09	-95.26	-48.17	-13	35.17
9 251.22	75.32	H	37.00	-33.19	79.13	-95.26	-16.13	-13	3.13
9 251.29	70.92	V	37.01	-33.19	74.74	-95.26	-20.52	-13	7.52
14 802.11	54.80	H	40.80	-29.03	66.57	-95.26	-28.69	-13	15.69
14 802.01	49.95	V	40.80	-29.03	61.72	-95.26	-33.54	-13	20.54
18 502.37	60.83	H	37.50	-29.82	68.51	-104.80	-36.29	-13	23.29
18 502.57	52.46	V	37.50	-29.82	60.14	-104.80	-44.66	-13	31.66
Middle Channel (1 882.5 MHz)									
3 764.02	54.34	H	32.23	-36.89	49.68	-95.26	-45.58	-13	32.58
3 764.21	55.16	V	32.23	-36.89	50.50	-95.26	-44.76	-13	31.76
9 410.12	67.58	H	37.44	-33.07	71.95	-95.26	-23.31	-13	10.31
9 410.08	66.69	V	37.44	-33.07	71.06	-95.26	-24.20	-13	11.20
15 056.39	53.57	H	40.39	-28.73	65.23	-95.26	-30.03	-13	17.03
15 056.24	47.95	V	40.39	-28.73	59.61	-95.26	-35.65	-13	22.65
18 820.39	51.00	H	37.60	-29.31	59.29	-104.80	-45.51	-13	32.51
18 820.46	49.30	V	37.60	-29.31	57.59	-104.80	-47.21	-13	34.21
High Channel (1 914.3 MHz)									
3 827.77	52.83	H	32.30	-36.93	48.20	-95.26	-47.06	-13	34.06
3 827.76	54.86	V	32.30	-36.93	50.23	-95.26	-45.03	-13	32.03
9 569.33	68.35	H	37.50	-33.02	72.83	-95.26	-22.43	-13	9.43
9 569.23	65.97	V	37.50	-33.02	70.45	-95.26	-24.81	-13	11.81
15 311.09	52.66	H	39.98	-28.58	64.06	-95.26	-31.20	-13	18.20
15 310.73	48.38	V	39.98	-28.58	59.78	-95.26	-35.48	-13	22.48
19 138.57	53.81	H	37.70	-28.95	62.56	-104.80	-42.24	-13	29.24
19 138.42	51.79	V	37.70	-28.95	60.54	-104.80	-44.26	-13	31.26

* 1.4 BW 1 RB size / 0 Offset for B25/2

LTE band 25/2 (3 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 851.5 MHz)									
3 700.44	53.57	H	32.30	-37.12	48.75	-95.26	-46.51	-13	33.51
3 700.36	51.71	V	32.30	-37.12	46.89	-95.26	-48.37	-13	35.37
9 251.05	75.08	H	37.00	-33.19	78.89	-95.26	-16.37	-13	3.37
9 251.21	71.10	V	37.00	-33.19	74.91	-95.26	-20.35	-13	7.35
14 801.93	54.57	H	40.80	-29.03	66.34	-95.26	-28.92	-13	15.92
14 802.02	50.21	V	40.80	-29.03	61.98	-95.26	-33.28	-13	20.28
18 502.42	60.86	H	37.50	-29.82	68.54	-104.80	-36.26	-13	23.26
18 502.60	53.34	V	37.50	-29.82	61.02	-104.80	-43.78	-13	30.78
Middle Channel (1 882.5 MHz)									
3 762.37	54.38	H	32.22	-36.89	49.71	-95.26	-45.55	-13	32.55
3 762.41	54.88	V	32.22	-36.89	50.21	-95.26	-45.05	-13	32.05
9 406.05	65.07	H	37.42	-33.11	69.38	-95.26	-25.88	-13	12.88
9 406.21	64.22	V	37.42	-33.11	68.53	-95.26	-26.73	-13	13.73
15 049.95	51.24	H	40.40	-28.73	62.91	-95.26	-32.35	-13	19.35
15 050.05	47.43	V	40.40	-28.74	59.09	-95.26	-36.17	-13	23.17
18 812.42	49.87	H	37.60	-29.33	58.14	-104.80	-46.66	-13	33.66
18 812.11	47.30	V	37.60	-29.33	55.57	-104.80	-49.23	-13	36.23
High Channel (1 913.5 MHz)									
3 824.53	52.30	H	32.30	-36.93	47.67	-95.26	-47.59	-13	34.59
3 824.47	54.05	V	32.30	-36.93	49.42	-95.26	-45.84	-13	32.84
9 561.09	68.62	H	37.50	-33.03	73.09	-95.26	-22.17	-13	9.17
9 561.27	66.19	V	37.50	-33.03	70.66	-95.26	-24.60	-13	11.60
15 297.99	50.93	H	40.00	-28.60	62.33	-95.26	-32.93	-13	19.93
15 297.97	47.21	V	40.00	-28.60	58.61	-95.26	-36.65	-13	23.65
19 122.51	53.27	H	37.70	-28.96	62.01	-104.80	-42.79	-13	29.79
19 122.61	52.60	V	37.70	-28.96	61.34	-104.80	-43.46	-13	30.46

* 3 BW 1 RB size / 0 Offset for B25/2

LTE band 25/2 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 852.5 MHz)									
3 700.75	53.46	H	32.30	-37.12	48.64	-95.26	-46.62	-13	33.62
3 700.76	51.59	V	32.30	-37.12	46.77	-95.26	-48.49	-13	35.49
9 251.61	75.13	H	37.01	-33.19	78.95	-95.26	-16.31	-13	3.31
9 251.91	71.61	V	37.01	-33.19	75.43	-95.26	-19.83	-13	6.83
14 802.69	54.62	H	40.80	-29.02	66.40	-95.26	-28.86	-13	15.86
14 802.60	50.26	V	40.80	-29.02	62.04	-95.26	-33.22	-13	20.22
18 503.53	60.79	H	37.50	-29.81	68.48	-104.80	-36.32	-13	23.32
18 503.45	52.74	V	37.50	-29.81	60.43	-104.80	-44.37	-13	31.37
Middle Channel (1 882.5 MHz)									
3 760.65	54.30	H	32.22	-36.89	49.63	-95.26	-45.63	-13	32.63
3 760.48	54.42	V	32.22	-36.89	49.75	-95.26	-45.51	-13	32.51
9 401.88	65.79	H	37.41	-33.14	70.06	-95.26	-25.20	-13	12.20
9 401.64	65.15	V	37.41	-33.15	69.41	-95.26	-25.85	-13	12.85
15 042.66	51.92	H	40.41	-28.74	63.59	-95.26	-31.67	-13	18.67
15 042.42	47.50	V	40.42	-28.74	59.18	-95.26	-36.08	-13	23.08
18 803.34	48.87	H	37.60	-29.34	57.13	-104.80	-47.67	-13	34.67
18 803.38	46.88	V	37.60	-29.34	55.14	-104.80	-49.66	-13	36.66
High Channel (1 912.5 MHz)									
3 820.59	51.88	H	32.30	-36.94	47.24	-95.26	-48.02	-13	35.02
3 820.69	53.64	V	32.30	-36.94	49.00	-95.26	-46.26	-13	33.26
9 551.71	69.26	H	37.50	-33.04	73.72	-95.26	-21.54	-13	8.54
9 551.70	67.28	V	37.50	-33.04	71.74	-95.26	-23.52	-13	10.52
15 282.75	52.36	H	40.00	-28.60	63.76	-95.26	-31.50	-13	18.50
15 282.91	48.20	V	40.00	-28.60	59.60	-95.26	-35.66	-13	22.66
19 103.43	53.91	H	37.70	-28.97	62.64	-104.80	-42.16	-13	29.16
19 103.49	52.31	V	37.70	-28.97	61.04	-104.80	-43.76	-13	30.76

* 5 BW 1 RB size / 0 Offset for B25/2

LTE band 25/2 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 855.0 MHz)									
3 701.11	53.61	H	32.30	-37.11	48.80	-95.26	-46.46	-13	33.46
3 701.24	51.52	V	32.30	-37.11	46.71	-95.26	-48.55	-13	35.55
9 253.05	74.98	H	37.01	-33.20	78.79	-95.26	-16.47	-13	3.47
9 253.00	71.23	V	37.01	-33.20	75.04	-95.26	-20.22	-13	7.22
14 804.72	54.32	H	40.80	-29.01	66.11	-95.26	-29.15	-13	16.15
14 804.80	50.11	V	40.80	-29.01	61.90	-95.26	-33.36	-13	20.36
18 505.88	59.40	H	37.50	-29.81	67.09	-104.80	-37.71	-13	24.71
18 506.06	53.38	V	37.50	-29.81	61.07	-104.80	-43.73	-13	30.73
Middle Channel (1 882.5 MHz)									
3 756.28	54.76	H	32.21	-36.89	50.08	-95.26	-45.18	-13	32.18
3 756.29	53.69	V	32.21	-36.89	49.01	-95.26	-46.25	-13	33.25
9 390.52	65.69	H	37.40	-33.16	69.93	-95.26	-25.33	-13	12.33
9 390.52	63.58	V	37.40	-33.16	67.82	-95.26	-27.44	-13	14.44
15 024.84	52.17	H	40.45	-28.75	63.87	-95.26	-31.39	-13	18.39
15 024.79	48.11	V	40.45	-28.75	59.81	-95.26	-35.45	-13	22.45
18 780.85	47.91	H	37.58	-29.38	56.11	-104.80	-48.69	-13	35.69
18 780.79	47.70	V	37.58	-29.38	55.90	-104.80	-48.90	-13	35.90
High Channel (1 910.0 MHz)									
3 811.14	52.81	H	32.30	-36.97	48.14	-95.26	-47.12	-13	34.12
3 811.31	52.69	V	32.30	-36.97	48.02	-95.26	-47.24	-13	34.24
9 528.01	67.71	H	37.54	-33.00	72.25	-95.26	-23.01	-13	10.01
9 527.92	65.46	V	37.54	-33.00	70.00	-95.26	-25.26	-13	12.26
15 244.73	53.50	H	40.01	-28.62	64.89	-95.26	-30.37	-13	17.37
15 244.86	49.14	V	40.01	-28.62	60.53	-95.26	-34.73	-13	21.73
19 055.92	50.99	H	37.70	-29.00	59.69	-104.80	-45.11	-13	32.11
19 055.98	52.35	V	37.70	-29.00	61.05	-104.80	-43.75	-13	30.75

* 10 BW 1 RB size / 0 Offset for B25/2

LTE band 25/2 (15 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 857.5 MHz)									
3 701.72	53.44	H	32.30	-37.11	48.63	-95.26	-46.63	-13	33.63
3 701.65	52.21	V	32.30	-37.11	47.40	-95.26	-47.86	-13	34.86
9 254.38	75.35	H	37.02	-33.20	79.17	-95.26	-16.09	-13	3.09
9 254.41	71.17	V	37.02	-33.20	74.99	-95.26	-20.27	-13	7.27
14 806.77	54.32	H	40.80	-29.00	66.12	-95.26	-29.14	-13	16.14
14 806.73	50.52	V	40.80	-29.00	62.32	-95.26	-32.94	-13	19.94
18 508.50	59.64	H	37.50	-29.81	67.33	-104.80	-37.47	-13	24.47
18 508.52	52.59	V	37.50	-29.81	60.28	-104.80	-44.52	-13	31.52
Middle Channel (1 882.5 MHz)									
3 751.64	54.29	H	32.20	-36.90	49.59	-95.26	-45.67	-13	32.67
3 751.61	51.96	V	32.20	-36.90	47.26	-95.26	-48.00	-13	35.00
9 379.26	67.29	H	37.40	-33.16	71.53	-95.26	-23.73	-13	10.73
9 379.25	64.78	V	37.40	-33.16	69.02	-95.26	-26.24	-13	13.24
15 006.48	53.02	H	40.49	-28.76	64.75	-95.26	-30.51	-13	17.51
15 006.81	47.75	V	40.49	-28.76	59.48	-95.26	-35.78	-13	22.78
18 758.47	51.12	H	37.56	-29.41	59.27	-104.80	-45.53	-13	32.53
18 758.42	47.84	V	37.56	-29.41	55.99	-104.80	-48.81	-13	35.81
High Channel (1 907.5 MHz)									
3 801.60	52.95	H	32.30	-36.99	48.26	-95.26	-47.00	-13	34.00
3 801.81	51.31	V	32.30	-36.99	46.62	-95.26	-48.64	-13	35.64
9 504.41	67.05	H	37.59	-32.96	71.68	-95.26	-23.58	-13	10.58
9 504.12	64.96	V	37.59	-32.96	69.59	-95.26	-25.67	-13	12.67
15 206.74	52.02	H	40.09	-28.65	63.46	-95.26	-31.80	-13	18.80
15 206.70	48.69	V	40.09	-28.65	60.13	-95.26	-35.13	-13	22.13
19 008.59	50.19	H	37.70	-29.03	58.86	-104.80	-45.94	-13	32.94
19 008.36	51.78	V	37.70	-29.03	60.45	-104.80	-44.35	-13	31.35

* 15 BW 1 RB size / 0 Offset for B25/2

LTE band 25/2 (20 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 860.0 MHz)									
3 702.14	53.51	H	32.30	-37.11	48.70	-95.26	-46.56	-13	33.56
3 702.27	52.03	V	32.30	-37.11	47.22	-95.26	-48.04	-13	35.04
9 255.58	75.36	H	37.02	-33.20	79.18	-95.26	-16.08	-13	3.08
9 255.38	71.09	V	37.02	-33.20	74.91	-95.26	-20.35	-13	7.35
14 808.93	53.96	H	40.80	-28.98	65.78	-95.26	-29.48	-13	16.48
14 808.56	50.03	V	40.80	-28.99	61.84	-95.26	-33.42	-13	20.42
18 510.89	59.74	H	37.50	-29.80	67.44	-104.80	-37.36	-13	24.36
18 511.03	52.08	V	37.50	-29.80	59.78	-104.80	-45.02	-13	32.02
Middle Channel (1 882.5 MHz)									
3 747.26	54.40	H	32.21	-36.90	49.71	-95.26	-45.55	-13	32.55
3 747.34	50.70	V	32.21	-36.90	46.01	-95.26	-49.25	-13	36.25
9 368.15	67.16	H	37.40	-33.15	71.41	-95.26	-23.85	-13	10.85
9 367.94	65.11	V	37.40	-33.15	69.36	-95.26	-25.90	-13	12.90
14 988.71	52.48	H	40.52	-28.71	64.29	-95.26	-30.97	-13	17.97
14 988.69	48.59	V	40.52	-28.71	60.40	-95.26	-34.86	-13	21.86
18 735.80	48.52	H	37.54	-29.45	56.61	-104.80	-48.19	-13	35.19
18 736.02	48.00	V	37.54	-29.45	56.09	-104.80	-48.71	-13	35.71
High Channel (1 905.0 MHz)									
3 792.36	52.86	H	32.28	-36.97	48.17	-95.26	-47.09	-13	34.09
3 792.22	50.77	V	32.28	-36.97	46.08	-95.26	-49.18	-13	36.18
9 480.53	67.33	H	37.60	-32.86	72.07	-95.26	-23.19	-13	10.19
9 480.58	67.36	V	37.60	-32.86	72.10	-95.26	-23.16	-13	10.16
15 168.88	51.15	H	40.16	-28.67	62.64	-95.26	-32.62	-13	19.62
15 168.71	47.82	V	40.16	-28.67	59.31	-95.26	-35.95	-13	22.95
18 961.09	49.91	H	37.66	-29.09	58.48	-104.80	-46.32	-13	33.32
18 961.03	51.10	V	37.66	-29.09	59.67	-104.80	-45.13	-13	32.13

* 20 BW 1 RB size / 0 Offset for B25/2

LTE band 26/5 (1.4 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (824.7 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
High Channel (848.3 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 1.4 BW 1RB size / 0 Offset for B26/5

LTE band 26/5 (3 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (825.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
High Channel (847.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 3 BW 1RB size / 0 Offset for B26/5

LTE band 26/5 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (826.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
High Channel (846.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 5 BW 1RB size / 0 Offset for B26/5

LTE band 26/5 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (829.0 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
High Channel (844.0 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 10 BW 1RB size / 0 Offset for B26/5

LTE band 26 (15 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (831.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-
High Channel (841.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 15 BW 1RB size / 0 Offset for B26

LTE band 41 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 498.5 MHz)									
4 992.74	45.50	H	33.20	-35.82	42.88	-95.26	-52.38	-25	27.38
4 992.58	50.07	V	33.20	-35.82	47.45	-95.26	-47.81	-25	22.81
7 488.89	54.61	H	36.00	-34.74	55.87	-95.26	-39.39	-25	14.39
7 489.10	55.81	V	36.00	-34.74	57.07	-95.26	-38.19	-25	13.19
9 985.46	43.83	H	37.67	-32.29	49.21	-95.26	-46.05	-25	21.05
9 985.42	48.47	V	37.67	-32.29	53.85	-95.26	-41.41	-25	16.41
17 474.45	63.28	H	37.40	-30.96	69.72	-104.80	-35.08	-25	10.08
17 474.64	65.03	V	37.40	-30.96	71.47	-104.80	-33.33	-25	8.33
19 970.49	51.31	H	37.60	-28.78	60.13	-104.80	-44.67	-25	19.67
19 970.73	51.01	V	37.60	-28.78	59.83	-104.80	-44.97	-25	19.97
Middle Channel (2 593.0 MHz)									
5 181.49	46.35	H	33.56	-35.68	44.23	-95.26	-51.03	-25	26.03
5 181.71	51.61	V	33.56	-35.68	49.49	-95.26	-45.77	-25	20.77
7 772.53	55.48	H	36.00	-34.67	56.81	-95.26	-38.45	-25	13.45
7 772.52	59.70	V	36.00	-34.67	61.03	-95.26	-34.23	-25	9.23
10 353.51	42.13	H	37.70	-31.98	47.85	-95.26	-47.41	-25	22.41
10 363.32	46.62	V	37.70	-32.00	52.32	-95.26	-42.94	-25	17.94
18 135.62	65.60	H	37.40	-30.65	72.35	-104.80	-32.45	-25	7.45
18 135.81	64.36	V	37.40	-30.65	71.11	-104.80	-33.69	-25	8.69
20 726.84	54.22	H	37.70	-30.23	61.69	-104.80	-43.11	-25	18.11
20 726.94	51.90	V	37.70	-30.23	59.37	-104.80	-45.43	-25	20.43

High Channel (2 687.5 MHz)									
5 370.59	64.98	H	33.94	-35.25	63.67	-95.26	-31.59	-25	6.59
5 370.64	68.11	V	33.94	-35.25	66.80	-95.26	-28.46	-25	3.46
8 056.24	44.63	H	36.21	-33.97	46.87	-95.26	-48.39	-25	23.39
8 056.04	48.10	V	36.21	-33.97	50.34	-95.26	-44.92	-25	19.92
10 741.45	40.48	H	37.88	-31.27	47.09	-95.26	-48.17	-25	23.17
10 741.33	47.51	V	37.88	-31.27	54.12	-95.26	-41.14	-25	16.14
18 797.56	68.31	H	37.60	-29.35	76.56	-104.80	-28.24	-25	3.24
18 797.50	65.11	V	37.60	-29.35	73.36	-104.80	-31.44	-25	6.44
21 482.69	49.32	H	37.88	-29.22	57.98	-104.80	-46.82	-25	21.82
21 482.54	60.16	V	37.88	-29.23	68.81	-104.80	-35.99	-25	10.99

* 5 BW 1 RB size / 0 Offset for B41

LTE band 41 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 501.0 MHz)									
4 993.01	45.89	H	33.20	-35.82	43.27	-95.26	-51.99	-25	26.99
4 993.21	50.21	V	33.20	-35.82	47.59	-95.26	-47.67	-25	22.67
7 489.68	54.89	H	36.00	-34.74	56.15	-95.26	-39.11	-25	14.11
7 489.64	55.85	V	36.00	-34.74	57.11	-95.26	-38.15	-25	13.15
9 986.28	43.20	H	37.67	-32.29	48.58	-95.26	-46.68	-25	21.68
9 986.33	48.12	V	37.67	-32.29	53.50	-95.26	-41.76	-25	16.76
17 476.02	63.62	H	37.40	-30.96	70.06	-104.80	-34.74	-25	9.74
17 476.47	63.73	V	37.40	-30.96	70.17	-104.80	-34.63	-25	9.63
19 972.71	51.06	H	37.60	-28.78	59.88	-104.80	-44.92	-25	19.92
19 972.83	49.20	V	37.60	-28.78	58.02	-104.80	-46.78	-25	21.78
Middle Channel (2 593.0 MHz)									
5 177.28	46.72	H	33.55	-35.68	44.59	-95.26	-50.67	-25	25.67
5 177.07	51.17	V	33.55	-35.68	49.04	-95.26	-46.22	-25	21.22
7 765.75	55.73	H	36.00	-34.69	57.04	-95.26	-38.22	-25	13.22
7 765.64	60.12	V	36.00	-34.69	61.43	-95.26	-33.83	-25	8.83
10 354.45	42.71	H	37.70	-31.98	48.43	-95.26	-46.83	-25	21.83
10 354.36	46.79	V	37.70	-31.98	52.51	-95.26	-42.75	-25	17.75
18 119.83	65.57	H	37.40	-30.69	72.28	-104.80	-32.52	-25	7.52
18 120.14	64.82	V	37.40	-30.69	71.53	-104.80	-33.27	-25	8.27
20 709.10	56.18	H	37.70	-30.24	63.64	-104.80	-41.16	-25	16.16
20 709.01	52.20	V	37.70	-30.24	59.66	-104.80	-45.14	-25	20.14

High Channel (2 685.0 MHz)									
5 361.17	61.83	H	33.92	-35.28	60.47	-95.26	-34.79	-25	9.79
5 361.20	67.51	V	33.92	-35.28	66.15	-95.26	-29.11	-25	4.11
8 041.80	48.92	H	36.18	-33.98	51.12	-95.26	-44.14	-25	19.14
8 041.68	49.12	V	36.18	-33.98	51.32	-95.26	-43.94	-25	18.94
10 722.57	41.05	H	37.85	-31.32	47.58	-95.26	-47.68	-25	22.68
10 722.12	47.52	V	37.84	-31.32	54.04	-95.26	-41.22	-25	16.22
18 764.17	68.57	H	37.56	-29.40	76.73	-104.80	-28.07	-25	3.07
18 764.14	64.56	V	37.56	-29.40	72.72	-104.80	-32.08	-25	7.08
21 444.85	51.90	H	37.84	-29.29	60.45	-104.80	-44.35	-25	19.35
21 444.93	61.75	V	37.84	-29.29	70.30	-104.80	-34.50	-25	9.50

* 10 BW 1 RB size / 0 Offset for B41

LTE band 41 (15 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 503.5 MHz)									
4 993.71	45.70	H	33.20	-35.82	43.08	-95.26	-52.18	-25	27.18
4 993.62	50.09	V	33.20	-35.82	47.47	-95.26	-47.79	-25	22.79
7 490.58	54.48	H	36.00	-34.74	55.74	-95.26	-39.52	-25	14.52
7 490.36	55.57	V	36.00	-34.74	56.83	-95.26	-38.43	-25	13.43
9 987.61	43.04	H	37.68	-32.29	48.43	-95.26	-46.83	-25	21.83
9 987.28	48.00	V	37.67	-32.29	53.38	-95.26	-41.88	-25	16.88
17 477.87	62.97	H	37.40	-30.96	69.41	-104.80	-35.39	-25	10.39
17 478.11	64.87	V	37.40	-30.96	71.31	-104.80	-33.49	-25	8.49
19 974.72	51.10	H	37.60	-28.78	59.92	-104.80	-44.88	-25	19.88
19 974.94	51.97	V	37.60	-28.78	60.79	-104.80	-44.01	-25	19.01
Middle Channel (2 593.0 MHz)									
5 172.81	46.69	H	33.55	-35.68	44.56	-95.26	-50.70	-25	25.70
5 172.76	51.15	V	33.55	-35.68	49.02	-95.26	-46.24	-25	21.24
7 758.93	55.97	H	36.00	-34.71	57.26	-95.26	-38.00	-25	13.00
7 759.26	60.42	V	36.00	-34.71	61.71	-95.26	-33.55	-25	8.55
10 345.62	42.33	H	37.70	-31.97	48.06	-95.26	-47.20	-25	22.20
10 345.46	47.59	V	37.70	-31.97	53.32	-95.26	-41.94	-25	16.94
18 104.40	64.90	H	37.40	-30.72	71.58	-104.80	-33.22	-25	8.22
18 104.55	63.61	V	37.40	-30.72	70.29	-104.80	-34.51	-25	9.51
20 690.73	54.74	H	37.70	-30.27	62.17	-104.80	-42.63	-25	17.63
20 690.88	52.03	V	37.70	-30.27	59.46	-104.80	-45.34	-25	20.34

High Channel (2 682.5 MHz)									
5 351.77	57.25	H	33.90	-35.30	55.85	-95.26	-39.41	-25	14.41
5 351.67	65.23	V	33.90	-35.30	63.83	-95.26	-31.43	-25	6.43
8 027.79	45.57	H	36.16	-34.05	47.68	-95.26	-47.58	-25	22.58
8 027.75	46.22	V	36.16	-34.05	48.33	-95.26	-46.93	-25	21.93
10 703.49	41.23	H	37.81	-31.39	47.65	-95.26	-47.61	-25	22.61
10 703.55	47.38	V	37.81	-31.39	53.80	-95.26	-41.46	-25	16.46
18 731.22	68.15	H	37.53	-29.45	76.23	-104.80	-28.57	-25	3.57
18 730.61	63.82	V	37.53	-29.46	71.89	-104.80	-32.91	-25	7.91
21 406.78	50.56	H	37.81	-29.34	59.03	-104.80	-45.77	-25	20.77
21 406.82	63.55	V	37.81	-29.34	72.02	-104.80	-32.78	-25	7.78

* 15 BW 1 RB size / 0 Offset for B41

LTE band 41 (20 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 506.0 MHz)									
4 994.11	44.92	H	33.20	-35.82	42.30	-95.26	-52.96	-25	27.96
4 994.23	50.00	V	33.20	-35.82	47.38	-95.26	-47.88	-25	22.88
7 491.27	54.44	H	36.00	-34.75	55.69	-95.26	-39.57	-25	14.57
7 491.41	55.75	V	36.00	-34.75	57.00	-95.26	-38.26	-25	13.26
9 988.31	42.96	H	37.68	-32.29	48.35	-95.26	-46.91	-25	21.91
9 988.44	48.70	V	37.68	-32.29	54.09	-95.26	-41.17	-25	16.17
17 479.58	63.31	H	37.40	-30.96	69.75	-104.80	-35.05	-25	10.05
17 479.79	65.05	V	37.40	-30.96	71.49	-104.80	-33.31	-25	8.31
19 976.97	50.69	H	37.60	-28.78	59.51	-104.80	-45.29	-25	20.29
19 977.03	49.61	V	37.60	-28.78	58.43	-104.80	-46.37	-25	21.37
Middle Channel (2 593.0 MHz)									
5 168.03	46.51	H	33.54	-35.68	44.37	-95.26	-50.89	-25	25.89
5 168.10	50.99	V	33.54	-35.68	48.85	-95.26	-46.41	-25	21.41
7 752.20	57.91	H	36.00	-34.72	59.19	-95.26	-36.07	-25	11.07
7 752.22	60.71	V	36.00	-34.72	61.99	-95.26	-33.27	-25	8.27
10 336.36	42.41	H	37.70	-31.95	48.16	-95.26	-47.10	-25	22.10
10 336.32	47.74	V	37.70	-31.95	53.49	-95.26	-41.77	-25	16.77
18 088.68	66.19	H	37.40	-30.76	72.83	-104.80	-31.97	-25	6.97
18 088.59	63.09	V	37.40	-30.76	69.73	-104.80	-35.07	-25	10.07
20 672.74	53.61	H	37.70	-30.28	61.03	-104.80	-43.77	-25	18.77
20 672.50	51.01	V	37.70	-30.28	58.43	-104.80	-46.37	-25	21.37

High Channel (2 680.0 MHz)									
5 342.15	52.98	H	33.88	-35.33	51.53	-95.26	-43.73	-25	18.73
5 342.16	63.31	V	33.88	-35.33	61.86	-95.26	-33.40	-25	8.40
8 013.29	46.54	H	36.13	-34.12	48.55	-95.26	-46.71	-25	21.71
8 013.28	46.91	V	36.13	-34.12	48.92	-95.26	-46.34	-25	21.34
10 684.38	40.87	H	37.80	-31.43	47.24	-95.26	-48.02	-25	23.02
10 684.51	49.83	V	37.80	-31.43	56.20	-95.26	-39.06	-25	14.06
18 697.68	68.78	H	37.50	-29.51	76.77	-104.80	-28.03	-25	3.03
18 697.71	66.67	V	37.50	-29.51	74.66	-104.80	-30.14	-25	5.14
21 368.73	52.60	H	37.80	-29.41	60.99	-104.80	-43.81	-25	18.81
21 368.73	61.92	V	37.80	-29.41	70.31	-104.80	-34.49	-25	9.49

* 20 BW 1 RB size / 0 Offset for B41

LTE band 66/4 (1.4 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 710.7 MHz)									
3 420.46	51.03	H	31.02	-37.57	44.48	-95.26	-50.78	-13	37.78
3 420.85	49.03	V	31.03	-37.57	42.49	-95.26	-52.77	-13	39.77
5 130.73	55.19	H	33.46	-35.68	52.97	-95.26	-42.29	-13	29.29
5 130.69	54.20	V	33.46	-35.68	51.98	-95.26	-43.28	-13	30.28
8 551.11	48.46	H	36.50	-33.71	51.25	-95.26	-44.01	-13	31.01
8 551.36	51.35	V	36.50	-33.71	54.14	-95.26	-41.12	-13	28.12
10 261.26	48.91	H	37.70	-31.94	54.67	-95.26	-40.59	-13	27.59
10 261.73	51.59	V	37.70	-31.94	57.35	-95.26	-37.91	-13	24.91
11 971.42	39.74	H	38.54	-30.11	48.17	-95.26	-47.09	-13	34.09
11 971.69	42.58	V	38.54	-30.11	51.01	-95.26	-44.25	-13	31.25
13 682.05	40.11	H	40.46	-29.39	51.18	-95.26	-44.08	-13	31.08
13 682.28	39.63	V	40.46	-29.39	50.70	-95.26	-44.56	-13	31.56
Middle Channel (1 745.0 MHz)									
3 489.09	50.26	H	31.20	-37.38	44.08	-95.26	-51.18	-13	38.18
3 488.87	49.41	V	31.20	-37.37	43.24	-95.26	-52.02	-13	39.02
5 233.64	55.28	H	33.67	-35.55	53.40	-95.26	-41.86	-13	28.86
5 233.72	53.96	V	33.67	-35.55	52.08	-95.26	-43.18	-13	30.18
8 722.56	50.85	H	36.79	-33.67	53.97	-95.26	-41.29	-13	28.29
8 722.75	52.35	V	36.79	-33.67	55.47	-95.26	-39.79	-13	26.79
10 467.57	41.41	H	37.60	-31.65	47.36	-95.26	-47.90	-13	34.90
10 467.41	44.95	V	37.60	-31.66	50.89	-95.26	-44.37	-13	31.37
12 212.03	42.33	H	38.48	-29.85	50.96	-95.26	-44.30	-13	31.30
12 211.75	46.71	V	38.48	-29.85	55.34	-95.26	-39.92	-13	26.92
13 956.31	44.27	H	40.71	-29.48	55.50	-95.26	-39.76	-13	26.76
13 956.50	44.07	V	40.71	-29.48	55.30	-95.26	-39.96	-13	26.96

High Channel (1 779.3 MHz)									
3 557.69	46.81	H	31.13	-37.20	40.74	-95.26	-54.52	-13	41.52
3 557.78	46.67	V	31.13	-37.20	40.60	-95.26	-54.66	-13	41.66
5 336.41	46.77	H	33.87	-35.35	45.29	-95.26	-49.97	-13	36.97
5 336.24	46.80	V	33.87	-35.35	45.32	-95.26	-49.94	-13	36.94
8 894.32	58.78	H	37.00	-33.57	62.21	-95.26	-33.05	-13	20.05
8 894.42	60.04	V	37.00	-33.57	63.47	-95.26	-31.79	-13	18.79
10 672.94	40.14	H	37.80	-31.46	46.48	-95.26	-48.78	-13	35.78
10 673.28	41.76	V	37.80	-31.46	48.10	-95.26	-47.16	-13	34.16
12 452.18	42.15	H	38.60	-29.98	50.77	-95.26	-44.49	-13	31.49
12 452.04	46.63	V	38.60	-29.98	55.25	-95.26	-40.01	-13	27.01
14 230.95	47.92	H	41.10	-29.32	59.70	-95.26	-35.56	-13	22.56
14 230.80	44.79	V	41.10	-29.32	56.57	-95.26	-38.69	-13	25.69

* 1.4 BW 1 RB size / 0 Offset for B66/4

LTE band 66/4 (3 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 711.5 MHz)									
3 420.67	51.18	H	31.02	-37.57	44.63	-95.26	-50.63	-13	37.63
3 420.51	49.00	V	31.02	-37.57	42.45	-95.26	-52.81	-13	39.81
5 130.73	55.15	H	33.46	-35.68	52.93	-95.26	-42.33	-13	29.33
5 130.66	54.11	V	33.46	-35.68	51.89	-95.26	-43.37	-13	30.37
8 551.19	48.28	H	36.50	-33.71	51.07	-95.26	-44.19	-13	31.19
8 551.28	51.42	V	36.50	-33.71	54.21	-95.26	-41.05	-13	28.05
10 261.73	49.70	H	37.70	-31.94	55.46	-95.26	-39.80	-13	26.80
10 261.77	51.38	V	37.70	-31.94	57.14	-95.26	-38.12	-13	25.12
11 971.89	37.11	H	38.54	-30.12	45.53	-95.26	-49.73	-13	36.73
11 971.91	42.34	V	38.54	-30.12	50.76	-95.26	-44.50	-13	31.50
13 681.58	40.43	H	40.46	-29.39	51.50	-95.26	-43.76	-13	30.76
13 682.05	39.68	V	40.46	-29.39	50.75	-95.26	-44.51	-13	31.51
Middle Channel (1 745.0 MHz)									
3 487.42	50.18	H	31.20	-37.37	44.01	-95.26	-51.25	-13	38.25
3 487.36	48.74	V	31.20	-37.37	42.57	-95.26	-52.69	-13	39.69
5 231.24	53.37	H	33.66	-35.55	51.48	-95.26	-43.78	-13	30.78
5 231.17	52.42	V	33.66	-35.55	50.53	-95.26	-44.73	-13	31.73
8 718.70	51.20	H	36.77	-33.68	54.29	-95.26	-40.97	-13	27.97
8 718.59	52.86	V	36.77	-33.68	55.95	-95.26	-39.31	-13	26.31
10 462.87	43.55	H	37.60	-31.68	49.47	-95.26	-45.79	-13	32.79
10 462.24	44.28	V	37.60	-31.69	50.19	-95.26	-45.07	-13	32.07
12 205.92	40.84	H	38.49	-29.89	49.44	-95.26	-45.82	-13	32.82
12 206.35	46.41	V	38.49	-29.88	55.02	-95.26	-40.24	-13	27.24
13 950.39	43.52	H	40.70	-29.46	54.76	-95.26	-40.50	-13	27.50
13 950.01	43.63	V	40.70	-29.46	54.87	-95.26	-40.39	-13	27.39

High Channel (1 778.5 MHz)									
3 554.47	47.42	H	31.12	-37.21	41.33	-95.26	-53.93	-13	40.93
3 554.45	47.24	V	31.12	-37.21	41.15	-95.26	-54.11	-13	41.11
5 331.61	46.69	H	33.86	-35.37	45.18	-95.26	-50.08	-13	37.08
5 331.77	46.71	V	33.86	-35.36	45.21	-95.26	-50.05	-13	37.05
8 886.13	56.99	H	37.00	-33.58	60.41	-95.26	-34.85	-13	21.85
8 886.15	57.75	V	37.00	-33.58	61.17	-95.26	-34.09	-13	21.09
10 663.54	37.28	H	37.80	-31.47	43.61	-95.26	-51.65	-13	38.65
10 663.60	41.48	V	37.80	-31.47	47.81	-95.26	-47.45	-13	34.45
12 440.91	41.96	H	38.60	-29.92	50.64	-95.26	-44.62	-13	31.62
12 440.79	45.39	V	38.60	-29.92	54.07	-95.26	-41.19	-13	28.19
14 218.26	46.14	H	41.10	-29.39	57.85	-95.26	-37.41	-13	24.41
14 218.20	46.19	V	41.10	-29.39	57.90	-95.26	-37.36	-13	24.36

* 3 BW 1 RB size / 0 Offset for B66/4

LTE band 66/4 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 712.5 MHz)									
3 420.63	51.62	H	31.02	-37.57	45.07	-95.26	-50.19	-13	37.19
3 420.72	49.58	V	31.02	-37.57	43.03	-95.26	-52.23	-13	39.23
5 131.08	55.48	H	33.46	-35.68	53.26	-95.26	-42.00	-13	29.00
5 131.13	53.90	V	33.46	-35.68	51.68	-95.26	-43.58	-13	30.58
8 551.59	48.30	H	36.50	-33.71	51.09	-95.26	-44.17	-13	31.17
8 551.77	51.44	V	36.50	-33.71	54.23	-95.26	-41.03	-13	28.03
10 262.21	50.03	H	37.70	-31.94	55.79	-95.26	-39.47	-13	26.47
10 262.22	51.78	V	37.70	-31.94	57.54	-95.26	-37.72	-13	24.72
11 972.83	37.46	H	38.55	-30.12	45.89	-95.26	-49.37	-13	36.37
11 972.81	42.97	V	38.55	-30.12	51.40	-95.26	-43.86	-13	30.86
13 682.99	39.88	H	40.47	-29.40	50.95	-95.26	-44.31	-13	31.31
13 682.95	39.12	V	40.47	-29.40	50.19	-95.26	-45.07	-13	32.07
Middle Channel (1 745.0 MHz)									
3 485.85	50.71	H	31.20	-37.36	44.55	-95.26	-50.71	-13	37.71
3 485.64	49.15	V	31.20	-37.36	42.99	-95.26	-52.27	-13	39.27
5 228.50	52.62	H	33.66	-35.56	50.72	-95.26	-44.54	-13	31.54
5 228.56	52.59	V	33.66	-35.56	50.69	-95.26	-44.57	-13	31.57
8 714.17	50.94	H	36.76	-33.70	54.00	-95.26	-41.26	-13	28.26
8 714.28	53.20	V	36.76	-33.70	56.26	-95.26	-39.00	-13	26.00
10 457.23	42.48	H	37.60	-31.71	48.37	-95.26	-46.89	-13	33.89
10 457.06	42.89	V	37.60	-31.71	48.78	-95.26	-46.48	-13	33.48
12 200.28	41.47	H	38.50	-29.91	50.06	-95.26	-45.20	-13	32.20
12 199.83	45.31	V	38.50	-29.91	53.90	-95.26	-41.36	-13	28.36
13 942.41	42.08	H	40.68	-29.42	53.34	-95.26	-41.92	-13	28.92
13 942.82	42.41	V	40.69	-29.42	53.68	-95.26	-41.58	-13	28.58

High Channel (1 777.5 MHz)									
3 550.66	48.16	H	31.10	-37.22	42.04	-95.26	-53.22	-13	40.22
3 550.70	48.00	V	31.10	-37.22	41.88	-95.26	-53.38	-13	40.38
5 325.86	47.00	H	33.85	-35.38	45.47	-95.26	-49.79	-13	36.79
5 326.13	47.18	V	33.85	-35.38	45.65	-95.26	-49.61	-13	36.61
8 876.97	55.60	H	37.00	-33.60	59.00	-95.26	-36.26	-13	23.26
8 876.67	56.89	V	37.00	-33.60	60.29	-95.26	-34.97	-13	21.97
10 652.26	37.19	H	37.80	-31.49	43.50	-95.26	-51.76	-13	38.76
10 652.13	38.70	V	37.80	-31.49	45.01	-95.26	-50.25	-13	37.25
12 427.74	41.08	H	38.60	-29.85	49.83	-95.26	-45.43	-13	32.43
12 427.52	43.99	V	38.60	-29.85	52.74	-95.26	-42.52	-13	29.52
14 203.22	44.17	H	41.10	-29.47	55.80	-95.26	-39.46	-13	26.46
14 203.13	45.16	V	41.10	-29.47	56.79	-95.26	-38.47	-13	25.47

* 5 BW 1 RB size / 0 Offset for B66/4

LTE band 66/4 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 715.0 MHz)									
3 421.20	50.95	H	31.03	-37.57	44.41	-95.26	-50.85	-13	37.85
3 421.11	49.35	V	31.03	-37.57	42.81	-95.26	-52.45	-13	39.45
5 131.80	55.43	H	33.46	-35.68	53.21	-95.26	-42.05	-13	29.05
5 131.77	54.02	V	33.46	-35.68	51.80	-95.26	-43.46	-13	30.46
8 553.01	48.46	H	36.50	-33.71	51.25	-95.26	-44.01	-13	31.01
8 553.10	51.79	V	36.50	-33.71	54.58	-95.26	-40.68	-13	27.68
10 264.08	48.35	H	37.70	-31.94	54.11	-95.26	-41.15	-13	28.15
10 263.80	51.01	V	37.70	-31.94	56.77	-95.26	-38.49	-13	25.49
11 974.71	39.41	H	38.55	-30.12	47.84	-95.26	-47.42	-13	34.42
11 974.39	42.91	V	38.55	-30.12	51.34	-95.26	-43.92	-13	30.92
13 684.87	41.57	H	40.47	-29.41	52.63	-95.26	-42.63	-13	29.63
13 684.98	39.48	V	40.47	-29.42	50.53	-95.26	-44.73	-13	31.73
Middle Channel (1 745.0 MHz)									
3 481.19	50.43	H	31.20	-37.36	44.27	-95.26	-50.99	-13	37.99
3 481.33	49.22	V	31.20	-37.36	43.06	-95.26	-52.20	-13	39.20
5 221.80	53.12	H	33.64	-35.58	51.18	-95.26	-44.08	-13	31.08
5 221.77	52.88	V	33.64	-35.58	50.94	-95.26	-44.32	-13	31.32
8 703.14	49.11	H	36.71	-33.74	52.08	-95.26	-43.18	-13	30.18
8 702.88	51.32	V	36.71	-33.74	54.29	-95.26	-40.97	-13	27.97
10 443.62	40.96	H	37.61	-31.80	46.77	-95.26	-48.49	-13	35.49
10 443.79	42.19	V	37.61	-31.80	48.00	-95.26	-47.26	-13	34.26
12 184.78	35.83	H	38.53	-29.88	44.48	-95.26	-50.78	-13	37.78
12 184.30	42.28	V	38.53	-29.88	50.93	-95.26	-44.33	-13	31.33
13 925.01	44.27	H	40.65	-29.36	55.56	-95.26	-39.70	-13	26.70
13 925.04	42.14	V	40.65	-29.36	53.43	-95.26	-41.83	-13	28.83

High Channel (1 775.0 MHz)									
3 541.14	47.58	H	31.12	-37.18	41.52	-95.26	-53.74	-13	40.74
3 541.20	47.13	V	31.12	-37.18	41.07	-95.26	-54.19	-13	41.19
5 311.67	49.11	H	33.82	-35.41	47.52	-95.26	-47.74	-13	34.74
5 311.94	48.12	V	33.82	-35.41	46.53	-95.26	-48.73	-13	35.73
8 853.06	53.74	H	37.00	-33.63	57.11	-95.26	-38.15	-13	25.15
8 852.99	55.76	V	37.00	-33.63	59.13	-95.26	-36.13	-13	23.13
10 623.59	39.05	H	37.75	-31.55	45.25	-95.26	-50.01	-13	37.01
10 623.78	41.19	V	37.75	-31.55	47.39	-95.26	-47.87	-13	34.87
12 394.38	37.81	H	38.59	-29.68	46.72	-95.26	-48.54	-13	35.54
12 393.99	40.06	V	38.59	-29.68	48.97	-95.26	-46.29	-13	33.29
14 164.22	42.85	H	41.03	-29.41	54.47	-95.26	-40.79	-13	27.79
14 164.88	42.50	V	41.03	-29.42	54.11	-95.26	-41.15	-13	28.15

* 10 BW 1 RB size / 0 Offset for B66/4

LTE band 66/4 (15 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 717.5 MHz)									
3 421.66	51.14	H	31.03	-37.56	44.61	-95.26	-50.65	-13	37.65
3 421.57	49.67	V	31.03	-37.57	43.13	-95.26	-52.13	-13	39.13
5 132.45	55.71	H	33.46	-35.69	53.48	-95.26	-41.78	-13	28.78
5 132.50	54.69	V	33.47	-35.69	52.47	-95.26	-42.79	-13	29.79
8 554.22	48.76	H	36.50	-33.71	51.55	-95.26	-43.71	-13	30.71
8 554.32	51.90	V	36.50	-33.71	54.69	-95.26	-40.57	-13	27.57
10 265.25	49.55	H	37.70	-31.94	55.31	-95.26	-39.95	-13	26.95
10 265.15	52.46	V	37.70	-31.94	58.22	-95.26	-37.04	-13	24.04
11 975.98	39.32	H	38.55	-30.12	47.75	-95.26	-47.51	-13	34.51
11 976.19	42.39	V	38.55	-30.13	50.81	-95.26	-44.45	-13	31.45
13 687.16	40.53	H	40.47	-29.42	51.58	-95.26	-43.68	-13	30.68
13 686.78	40.50	V	40.47	-29.42	51.55	-95.26	-43.71	-13	30.71
Middle Channel (1 745.0 MHz)									
3 476.73	50.13	H	31.20	-37.35	43.98	-95.26	-51.28	-13	38.28
3 476.69	49.52	V	31.20	-37.35	43.37	-95.26	-51.89	-13	38.89
5 215.26	54.30	H	33.63	-35.60	52.33	-95.26	-42.93	-13	29.93
5 215.03	53.56	V	33.63	-35.60	51.59	-95.26	-43.67	-13	30.67
8 691.82	48.00	H	36.68	-33.76	50.92	-95.26	-44.34	-13	31.34
8 691.75	51.26	V	36.68	-33.76	54.18	-95.26	-41.08	-13	28.08
10 429.93	41.14	H	37.64	-31.88	46.90	-95.26	-48.36	-13	35.36
10 430.07	42.97	V	37.64	-31.88	48.73	-95.26	-46.53	-13	33.53
12 168.50	36.14	H	38.56	-29.85	44.85	-95.26	-50.41	-13	37.41
12 168.81	38.83	V	38.56	-29.85	47.54	-95.26	-47.72	-13	34.72
13 906.73	44.61	H	40.61	-29.28	55.94	-95.26	-39.32	-13	26.32
13 906.59	43.74	V	40.61	-29.28	55.07	-95.26	-40.19	-13	27.19

High Channel (1 772.5 MHz)									
3 531.73	45.97	H	31.14	-37.13	39.98	-95.26	-55.28	-13	42.28
3 531.69	45.34	V	31.14	-37.13	39.35	-95.26	-55.91	-13	42.91
5 297.39	52.36	H	33.79	-35.45	50.70	-95.26	-44.56	-13	31.56
5 297.65	50.46	V	33.80	-35.45	48.81	-95.26	-46.45	-13	33.45
8 829.19	54.73	H	37.00	-33.68	58.05	-95.26	-37.21	-13	24.21
8 829.19	55.82	V	37.00	-33.68	59.14	-95.26	-36.12	-13	23.12
10 595.07	39.86	H	37.69	-31.59	45.96	-95.26	-49.30	-13	36.30
10 594.98	42.07	V	37.69	-31.59	48.17	-95.26	-47.09	-13	34.09
12 360.69	37.50	H	38.52	-29.61	46.41	-95.26	-48.85	-13	35.85
12 360.92	43.98	V	38.52	-29.61	52.89	-95.26	-42.37	-13	29.37
14 127.21	45.23	H	40.91	-29.35	56.79	-95.26	-38.47	-13	25.47
14 126.63	42.32	V	40.91	-29.34	53.89	-95.26	-41.37	-13	28.37

* 15 BW 1 RB size / 0 Offset for B66/4

LTE band 66/4 (20 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 720.0 MHz)									
3 422.22	50.94	H	31.03	-37.56	44.41	-95.26	-50.85	-13	37.85
3 422.31	49.24	V	31.03	-37.56	42.71	-95.26	-52.55	-13	39.55
5 133.38	56.16	H	33.47	-35.69	53.94	-95.26	-41.32	-13	28.32
5 133.34	55.26	V	33.47	-35.69	53.04	-95.26	-42.22	-13	29.22
8 555.41	48.91	H	36.50	-33.72	51.69	-95.26	-43.57	-13	30.57
8 555.65	51.83	V	36.50	-33.72	54.61	-95.26	-40.65	-13	27.65
10 266.62	51.39	H	37.70	-31.94	57.15	-95.26	-38.11	-13	25.11
10 266.58	51.11	V	37.70	-31.94	56.87	-95.26	-38.39	-13	25.39
11 977.33	38.80	H	38.55	-30.13	47.22	-95.26	-48.04	-13	35.04
11 977.14	39.09	V	38.55	-30.13	47.51	-95.26	-47.75	-13	34.75
13 688.96	41.16	H	40.48	-29.43	52.21	-95.26	-43.05	-13	30.05
13 689.04	39.62	V	40.48	-29.43	50.67	-95.26	-44.59	-13	31.59
Middle Channel (1 745.0 MHz)									
3 471.93	49.65	H	31.20	-37.36	43.49	-95.26	-51.77	-13	38.77
3 471.78	48.77	V	31.20	-37.36	42.61	-95.26	-52.65	-13	39.65
5 208.34	55.21	H	33.62	-35.62	53.21	-95.26	-42.05	-13	29.05
5 208.42	54.60	V	33.62	-35.62	52.60	-95.26	-42.66	-13	29.66
8 680.58	49.71	H	36.66	-33.78	52.59	-95.26	-42.67	-13	29.67
8 680.62	52.41	V	36.66	-33.78	55.29	-95.26	-39.97	-13	26.97
10 416.88	41.56	H	37.67	-31.95	47.28	-95.26	-47.98	-13	34.98
10 416.73	43.86	V	37.67	-31.95	49.58	-95.26	-45.68	-13	32.68
12 209.05	35.86	H	38.48	-29.87	44.47	-95.26	-50.79	-13	37.79
12 209.12	37.41	V	38.48	-29.87	46.02	-95.26	-49.24	-13	36.24
13 888.74	46.37	H	40.60	-29.26	57.71	-95.26	-37.55	-13	24.55
13 888.66	44.33	V	40.60	-29.26	55.67	-95.26	-39.59	-13	26.59

High Channel (1 770.0 MHz)									
3 522.33	46.53	H	31.16	-37.13	40.56	-95.26	-54.70	-13	41.70
3 522.49	46.11	V	31.16	-37.13	40.14	-95.26	-55.12	-13	42.12
5 283.23	52.16	H	33.77	-35.47	50.46	-95.26	-44.80	-13	31.80
5 283.29	51.34	V	33.77	-35.47	49.64	-95.26	-45.62	-13	32.62
8 805.59	53.63	H	37.00	-33.71	56.92	-95.26	-38.34	-13	25.34
8 805.41	56.38	V	37.00	-33.71	59.67	-95.26	-35.59	-13	22.59
10 566.72	42.76	H	37.63	-31.55	48.84	-95.26	-46.42	-13	33.42
10 566.66	42.59	V	37.63	-31.55	48.67	-95.26	-46.59	-13	33.59
12 327.39	41.43	H	38.50	-29.53	50.40	-95.26	-44.86	-13	31.86
12 327.54	43.93	V	38.50	-29.53	52.90	-95.26	-42.36	-13	29.36
14 088.97	47.52	H	40.80	-29.33	58.99	-95.26	-36.27	-13	23.27
14 088.81	45.25	V	40.80	-29.33	56.72	-95.26	-38.54	-13	25.54

* 20 BW 1 RB size / 0 Offset for B66/4

LTE band 71 (5 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (665.5 MHz)									
1 990.05	66.85	H	27.34	-39.36	54.83	-97.41	-42.58	-13	29.58
1 989.96	63.36	V	27.34	-39.37	51.33	-97.41	-46.08	-13	33.08
2 653.44	53.30	H	28.99	-38.87	43.42	-97.41	-53.99	-13	40.99
2 653.39	53.51	V	28.99	-38.88	43.62	-97.41	-53.79	-13	40.79
Middle Channel (680.5 MHz)									
2 035.22	53.10	H	27.72	-38.89	41.93	-97.41	-55.48	-13	42.48
2 035.00	52.01	V	27.72	-38.89	40.84	-97.41	-56.57	-13	43.57
2 713.39	44.20	H	28.75	-38.77	34.18	-97.41	-63.23	-13	50.23
2 713.27	45.90	V	28.75	-38.77	35.88	-97.41	-61.53	-13	48.53
High Channel (695.5 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 5 BW 1 RB size / 0 Offset for B71

LTE band 71 (10 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (668.0 MHz)									
1 990.63	66.64	H	27.34	-39.36	54.62	-97.41	-42.79	-13	29.79
1 990.87	63.51	V	27.34	-39.36	51.49	-97.41	-45.92	-13	32.92
2 654.46	53.34	H	28.98	-38.87	43.45	-97.41	-53.96	-13	40.96
2 654.32	53.80	V	28.98	-38.87	43.91	-97.41	-53.50	-13	40.50
Middle Channel (680.5 MHz)									
2 028.28	54.28	H	27.64	-38.97	42.95	-97.41	-54.46	-13	41.46
2 028.40	53.47	V	27.64	-38.97	42.14	-97.41	-55.27	-13	42.27
2 704.14	48.79	V	28.78	-38.77	38.80	-97.41	-58.61	-13	45.61
High Channel (693.0 MHz)									
Above 0.009	Not Detected	-	-	-	-	-	-	-	-

* 10 BW 1 RB size / 0 Offset for B71

LTE band 71 (15 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (670.5 MHz)									
1 991.52	66.48	H	27.33	-39.36	54.45	-97.41	-42.96	-13	29.96
1 991.56	63.48	V	27.33	-39.36	51.45	-97.41	-45.96	-13	32.96
2 655.51	53.06	H	28.98	-38.87	43.17	-97.41	-54.24	-13	41.24
2 655.47	53.84	V	28.98	-38.87	43.95	-97.41	-53.46	-13	40.46
Middle Channel (680.5 MHz)									
2 021.60	58.64	H	27.56	-39.05	47.15	-97.41	-50.26	-13	37.26
2 021.47	56.01	V	27.56	-39.05	44.52	-97.41	-52.89	-13	39.89
2 695.38	46.81	H	28.82	-38.77	36.86	-97.41	-60.55	-13	47.55
2 695.18	47.36	V	28.82	-38.77	37.41	-97.41	-60.00	-13	47.00
High Channel (690.5 MHz)									
2 051.72	49.08	H	27.91	-38.71	38.28	-97.41	-59.13	-13	46.13
2 051.51	50.40	V	27.91	-38.71	39.60	-97.41	-57.81	-13	44.81

* 15 BW 1 RB size / 0 Offset for B71

LTE band 71 (20 MHz – QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (673.0 MHz)									
1 992.29	66.39	H	27.33	-39.35	54.37	-97.41	-43.04	-13	30.04
1 992.23	63.14	V	27.33	-39.35	51.12	-97.41	-46.29	-13	33.29
2 656.28	51.67	H	28.97	-38.86	41.78	-97.41	-55.63	-13	42.63
2 656.38	54.65	V	28.97	-38.86	44.76	-97.41	-52.65	-13	39.65
Middle Channel (680.5 MHz)									
2 014.71	61.68	H	27.48	-39.14	50.02	-97.41	-47.39	-13	34.39
2 014.80	59.48	V	27.48	-39.14	47.82	-97.41	-49.59	-13	36.59
2 686.55	46.30	H	28.85	-38.77	36.38	-97.41	-61.03	-13	48.03
2 686.36	49.30	V	28.85	-38.77	39.38	-97.41	-58.03	-13	45.03
High Channel (688.0 MHz)									
2 037.09	52.85	H	27.75	-38.87	41.73	-97.41	-55.68	-13	42.68
2 037.41	51.30	V	27.75	-38.87	40.18	-97.41	-57.23	-13	44.23

* 20 BW 1 RB size / 0 Offset for B71

Remark;

1. $E \text{ (dB}\mu\text{V/m)} = \text{Measured Level (dB}\mu\text{V)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)}$.
2. $E.I.R.P. \text{ (dB m)} = E \text{ (dB}\mu\text{V/m)} + 20 \log D - 104.8$; where D is the measurement distance in meters.
3. $E.R.P. \text{ (dB m)} = E.I.R.P. \text{ (dB m)} - 2.15 \text{ (dB)}$; where E.R.P. and E.I.R.P. are expressed in consistent units.
4. $CF \text{ (dB)} (E.I.R.P.) = 20 \log D - 104.8 - \text{Distance Correction Factor}$
5. $CF \text{ (dB)} (E.R.P.) = 20 \log D - 104.8 - 2.15$.
6. Distance Correction Factor = $20 \log (\text{specific distance} / \text{test distance})$
7. AF = Antenna Factor, CL = Cable Loss, CF = Conversion Factor.

3. Conducted Output Power

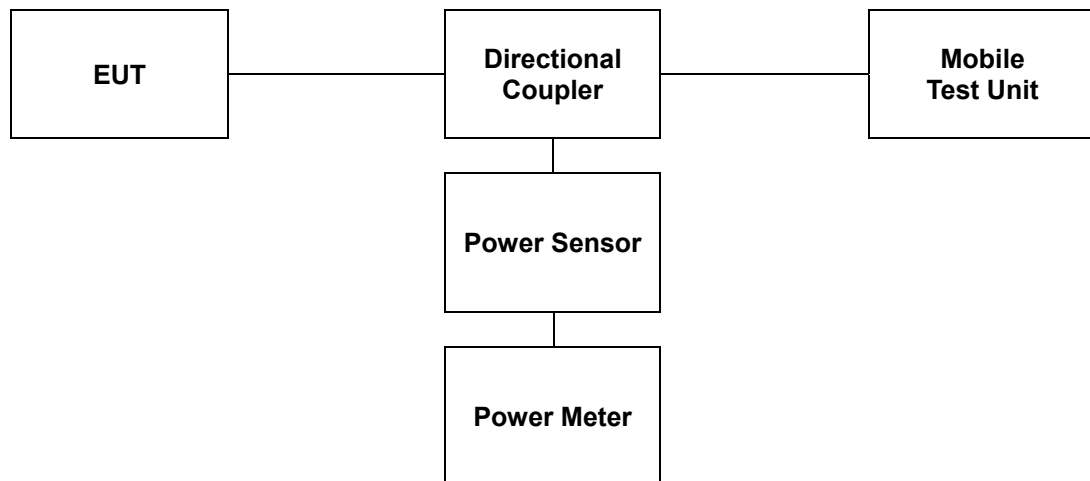
3.1. Limit

CFR 47, Section FCC §2.1046 and IC RSS-Gen Issue 5 6.12.

3.2. Test Procedure

Output power shall be measured at the RF output terminals for all configurations.

1. The RF output of the transmitter was connected to the input of the mobile test unit in order to establish communication with the EUT.
2. The EUT was set up for the max. output power with pseudo random data modulation by using mobile test unit parameters.
3. The measurement performed using a wideband RF power meter.
4. This EUT was tested under all configurations and the highest power was investigated and reported.



3.3. Test Result

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				20775	21100	21425	20775	21100	21425
				2502.5	2535.0	2567.5	2502.5	2535.0	2567.5
7	5	1	0	22.39	22.64	22.54	21.55	21.75	21.83
		1	12	22.55	22.67	22.58	21.66	21.81	21.79
		1	24	22.43	22.59	22.48	21.57	21.70	21.71
		12	0	21.37	21.63	21.57	20.40	20.62	20.57
		12	7	21.46	21.68	21.63	20.51	20.71	20.60
		12	13	21.45	21.60	21.55	20.47	20.63	20.55
		25	0	21.46	21.62	21.56	20.49	20.67	20.59
	Bandwidth (MHz)	RB Size	RB Offset	20800	21100	21400	20800	21100	21400
	10	1	0	22.41	22.34	22.64	21.61	21.85	21.82
		1	25	22.45	22.58	22.57	21.61	21.76	21.70
		1	49	22.50	22.45	22.50	21.65	21.61	21.64
		25	0	21.46	21.66	21.59	20.48	20.67	20.63
		25	12	21.50	21.71	21.60	20.53	20.73	20.66
		25	25	21.49	21.63	21.54	20.49	20.66	20.56
		50	0	21.47	21.63	21.59	20.46	20.65	20.58
	Bandwidth (MHz)	RB Size	RB Offset	20825	21100	21375	20825	21100	21375
	15	1	0	22.65	22.79	22.76	21.86	21.94	21.93
		1	37	22.72	22.68	22.64	21.83	21.80	21.78
		1	74	22.74	22.51	22.55	21.92	21.68	21.71
		36	0	21.67	21.78	21.71	20.89	20.79	20.74
		36	20	21.69	21.60	21.69	20.90	20.75	20.66
		36	39	21.76	21.56	21.60	20.81	20.56	20.62
		75	0	21.73	21.70	21.64	20.74	20.70	20.63
	Bandwidth (MHz)	RB Size	RB Offset	20850	21100	21350	20850	21100	21350
	20	1	0	22.66	22.85	22.81	21.83	22.00	22.03
		1	50	22.68	22.68	22.65	21.70	21.80	21.93
		1	99	22.71	22.53	22.54	21.77	21.68	21.75
		50	0	21.64	21.80	21.77	20.69	20.83	20.77
		50	25	21.72	21.69	21.74	20.74	20.66	20.69
		50	50	21.78	21.58	21.62	20.75	20.60	20.65
		100	0	21.70	21.75	21.69	20.72	20.77	20.67

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				23017	23095	23173	23017	23095	23173
				699.7	707.5	715.3	699.7	707.5	715.3
12/17	1.4	1	0	22.77	22.73	22.86	21.91	21.91	21.95
		1	3	22.94	22.90	22.93	22.07	22.01	22.05
		1	5	22.88	22.83	22.84	22.02	21.98	21.98
		3	0	22.79	22.77	22.83	21.86	21.84	21.92
		3	2	22.83	22.83	22.84	21.90	21.93	21.93
		3	3	22.88	22.85	22.81	21.92	21.94	21.92
		6	0	21.88	21.85	21.82	20.91	20.88	20.84
	Bandwidth (MHz)	RB Size	RB Offset	23025	23095	23165	23025	23095	23165
				700.5	707.5	714.5	700.5	707.5	714.5
	3	1	0	22.82	22.78	22.95	22.00	21.99	22.09
		1	8	22.88	22.85	22.93	22.03	22.05	22.02
		1	14	22.88	22.74	22.90	22.04	21.90	22.01
		8	0	21.95	21.82	21.93	20.98	20.90	20.95
		8	4	21.94	21.84	21.93	20.97	20.93	20.93
		8	7	21.92	21.88	21.92	20.97	20.90	20.94
		15	0	21.94	21.82	21.92	20.97	20.85	20.96
	Bandwidth (MHz)	RB Size	RB Offset	23035	23095	23155	23035	23095	23155
				701.5	707.5	713.5	701.5	707.5	713.5
	5	1	0	22.83	22.87	22.85	21.99	22.02	21.99
		1	12	22.99	22.96	23.06	22.09	22.11	22.15
		1	24	22.86	22.76	22.99	22.05	21.97	22.06
		12	0	21.95	21.85	22.02	20.95	20.97	20.93
		12	7	21.93	21.84	22.00	20.96	20.96	20.89
		12	13	21.92	21.80	21.99	20.90	20.96	20.89
		25	0	21.93	21.84	22.02	20.96	20.96	20.95
	Bandwidth (MHz)	RB Size	RB Offset	23060	23095	23130	23060	23095	23130
				704.0	707.5	711.0	704.0	707.5	711.0
	10	1	0	23.00	22.97	22.88	22.06	22.14	22.06
		1	25	23.04	22.95	22.98	22.13	22.14	22.04
		1	49	22.84	22.91	23.03	22.02	22.06	22.12
		25	0	22.01	21.97	21.92	21.01	21.02	20.96
		25	12	21.93	21.96	21.93	20.96	21.03	20.98
		25	25	21.86	21.99	21.95	20.87	21.02	20.96
		50	0	21.84	22.05	21.87	20.92	21.05	20.89

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				23205	23230	23255	23205	23230	23255
				779.5	782.0	784.5	779.5	782.0	784.5
13	5	1	0	22.90	23.04	23.09	22.06	22.09	22.20
		1	12	22.99	23.13	23.02	22.11	22.16	22.16
		1	24	23.04	23.04	23.03	22.15	22.04	22.19
		12	0	21.99	22.04	22.09	21.00	21.05	21.09
		12	7	22.06	22.05	22.06	21.03	21.10	21.05
		12	13	22.03	22.11	21.96	21.04	21.00	20.97
		25	0	21.94	22.03	21.98	20.96	21.05	21.01
	Bandwidth (MHz)	RB Size	RB Offset	-	23230	-	-	23230	-
				-	782.0	-	-	782.0	-
	10	1	0		22.93			22.07	
		1	25		22.98			22.13	
		1	49		22.92			22.07	
		25	0		21.96			20.97	
		25	12		21.93			20.96	
		25	25		21.90			20.90	
		50	0		21.93			20.93	

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				26047	26365	26683	26047	26365	26683
				1850.7	1882.5	1914.3	1850.7	1882.5	1914.3
25/2	1.4	1	0	22.34	22.40	22.91	21.42	21.57	22.08
		1	3	22.43	22.46	22.98	21.53	21.64	22.14
		1	5	22.35	22.40	22.93	21.48	21.53	22.01
		3	0	22.37	22.40	22.92	21.48	21.48	21.98
		3	2	22.39	22.44	22.94	21.50	21.51	22.02
		3	3	22.36	22.38	22.94	21.45	21.46	21.98
		6	0	21.30	21.37	21.89	20.39	20.43	20.91
	Bandwidth (MHz)	RB Size	RB Offset	26055	26365	26675	26055	26365	26675
				1851.5	1882.5	1913.5	1851.5	1882.5	1913.5
	3	1	0	22.45	22.43	23.01	21.59	21.58	22.12
		1	8	22.43	22.40	22.95	21.60	21.54	22.06
		1	14	22.44	22.51	22.85	21.58	21.62	22.06
		8	0	21.43	21.45	21.87	20.47	20.54	21.00
		8	4	21.45	21.46	21.85	20.49	20.52	20.97
		8	7	21.42	21.45	21.84	20.47	20.50	20.95
		15	0	21.43	21.46	21.86	20.49	20.49	20.97
	Bandwidth (MHz)	RB Size	RB Offset	26065	26365	26665	26065	26365	26665
				1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
	5	1	0	22.47	22.62	23.02	21.58	21.73	22.12
		1	12	22.49	22.54	23.00	21.62	21.65	22.08
		1	24	22.38	22.58	22.94	21.54	21.69	22.02
		12	0	21.49	21.51	21.96	20.53	20.56	20.98
		12	7	21.48	21.54	21.95	20.54	20.58	20.97
		12	13	21.46	21.60	21.94	20.52	20.62	20.94
		25	0	21.48	21.52	21.95	20.53	20.52	20.98
	Bandwidth (MHz)	RB Size	RB Offset	26090	26365	26640	26090	26365	26640
				1855.0	1882.5	1910.0	1855.0	1882.5	1910.0
	10	1	0	22.69	22.80	22.92	21.85	21.99	22.02
		1	25	22.35	22.45	22.82	21.47	21.59	21.93
		1	49	22.60	22.77	22.80	21.68	21.92	21.92
		25	0	21.51	21.65	21.91	20.56	20.68	20.92
		25	12	21.46	21.64	21.94	20.54	20.65	20.89
		25	25	21.41	21.61	21.85	20.44	20.64	20.84
		50	0	21.40	21.62	21.88	20.46	20.67	20.86
	Bandwidth (MHz)	RB Size	RB Offset	26115	26365	26615	26115	26365	26615
				1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
	15	1	0	22.53	22.66	22.97	21.70	21.83	22.11
		1	37	22.36	22.42	22.82	21.50	21.65	21.95
		1	74	22.51	22.56	22.81	21.69	21.69	21.90
		36	0	21.41	21.64	21.98	20.46	20.68	20.97
		36	20	21.40	21.62	21.96	20.45	20.63	20.89
		36	39	21.40	21.60	21.87	20.44	20.62	20.86
		75	0	21.43	21.61	21.90	20.43	20.64	20.94
	Bandwidth (MHz)	RB Size	RB Offset	26140	26365	26590	26140	26365	26590
				1860.0	1882.5	1905.0	1860.0	1882.5	1905.0
	20	1	0	22.75	22.84	23.03	21.76	21.99	22.13
		1	50	22.48	22.52	22.86	21.42	21.58	21.92
		1	99	22.70	22.61	22.81	21.77	21.78	21.92
		50	0	21.50	21.67	21.99	20.51	20.68	20.99
		50	25	21.35	21.49	21.96	20.33	20.53	20.96
		50	50	21.45	21.63	21.87	20.46	20.65	20.88
		100	0	21.47	21.66	21.92	20.50	20.66	20.93

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				20407	20525	20643	20407	20525	20643
				824.7	836.5	848.3	824.7	836.5	848.3
26/5	1.4	1	0	23.14	23.02	22.85	22.30	22.21	22.00
		1	3	23.21	23.08	22.91	22.34	22.26	22.03
		1	5	23.05	23.00	22.84	22.17	22.17	21.99
		3	0	23.12	23.02	22.87	22.19	22.04	21.96
		3	2	23.13	23.04	22.90	22.21	22.08	21.98
		3	3	23.00	23.00	22.85	22.11	22.03	21.95
		6	0	22.12	22.03	21.87	21.18	21.04	20.90
	Bandwidth (MHz)	RB Size	RB Offset	20415	20525	20635	20415	20525	20635
				825.5	836.5	847.5	825.5	836.5	847.5
	3	1	0	23.21	22.96	23.13	22.39	22.10	22.19
		1	8	23.08	23.03	23.00	22.25	22.19	22.10
		1	14	23.16	23.00	22.93	22.32	22.19	22.05
		8	0	22.21	22.00	22.06	21.24	21.00	21.11
		8	4	22.14	22.07	22.04	21.18	21.04	21.05
		8	7	22.06	22.05	21.94	21.13	21.09	20.99
		15	0	22.10	22.05	21.94	21.11	21.09	21.00
	Bandwidth (MHz)	RB Size	RB Offset	20425	20525	20625	20425	20525	20625
				826.5	836.5	846.5	826.5	836.5	846.5
	5	1	0	23.09	23.01	23.12	22.20	22.12	22.35
		1	12	23.10	23.17	23.13	22.24	22.27	22.32
		1	24	23.02	23.05	22.91	22.13	22.15	22.11
		12	0	22.00	22.00	22.12	21.00	21.02	21.12
		12	7	22.03	22.08	22.08	21.09	21.11	21.06
		12	13	22.06	22.07	22.02	21.06	21.09	20.99
		25	0	22.06	22.06	22.10	21.10	21.06	21.13
	Bandwidth (MHz)	RB Size	RB Offset	20450	20525	20600	20450	20525	20600
				829.0	836.5	844.0	829.0	836.5	844.0
	10	1	0	23.09	23.00	23.12	22.28	22.16	22.28
		1	25	23.04	23.05	23.13	22.24	22.19	22.25
		1	49	22.96	23.00	22.92	22.15	22.18	22.06
		25	0	22.10	22.03	22.08	21.10	21.04	21.08
		25	12	22.06	22.10	22.09	21.09	21.10	21.10
		25	25	22.03	22.07	22.08	21.03	21.09	21.10
		50	0	22.03	22.11	22.02	21.08	21.07	21.06
26	Bandwidth (MHz)	RB Size	RB Offset	26865	-	26965	26865	-	26965
				831.5	-	841.5	831.5	-	841.5
	15	1	0	23.08	-	23.19	22.24	-	22.36
		1	37	23.07	-	23.20	22.29	-	22.21
		1	74	23.06	-	23.08	22.22	-	22.10
		36	0	22.17	-	22.29	21.16	-	21.19
		36	20	22.18	-	22.30	21.17	-	21.18
		36	39	22.16	-	22.18	21.17	-	21.09
		75	0	22.23	-	22.21	21.13	-	21.14

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				39675	40620	41565	39675	40620	41565
				2498.5	2593.0	2687.5	2498.5	2593.0	2687.5
41	5	1	0	22.26	22.16	21.96	21.31	21.32	21.04
		1	12	22.23	22.19	22.01	21.36	21.38	21.08
		1	24	22.19	22.10	21.92	21.25	21.26	21.01
		12	0	21.23	21.13	21.00	20.15	20.16	20.03
		12	7	21.20	21.15	21.03	20.18	20.20	20.05
		12	13	21.17	21.11	20.98	20.12	20.14	20.01
		25	0	21.18	21.18	20.97	20.23	20.19	20.03
	Bandwidth (MHz)	RB Size	RB Offset	39700	40620	41540	39700	40620	41540
				2501.0	2593.0	2685.0	2501.0	2593.0	2685.0
	10	1	0	22.24	22.21	22.52	21.35	21.34	21.41
		1	25	22.14	22.10	21.96	21.23	21.26	21.17
		1	49	22.22	22.03	22.50	21.28	21.22	21.38
		25	0	21.23	21.22	21.18	20.21	20.20	20.32
		25	12	21.19	21.14	21.17	20.06	20.04	19.95
		25	25	21.14	21.12	21.16	20.15	20.12	20.29
		50	0	21.19	21.16	21.17	20.21	20.20	20.22
	Bandwidth (MHz)	RB Size	RB Offset	39725	40620	41515	39725	40620	41515
				2503.5	2593.0	2682.5	2503.5	2593.0	2682.5
	15	1	0	22.34	22.17	21.95	21.43	21.38	21.04
		1	37	22.16	22.08	21.94	21.24	21.26	21.00
		1	74	22.20	21.98	21.88	21.22	21.18	20.92
		36	0	21.28	21.15	21.00	20.28	20.18	20.00
		36	20	21.29	21.09	21.02	20.26	20.08	19.99
		36	39	21.28	21.02	20.99	20.25	20.03	19.95
		75	0	21.19	21.04	21.06	20.22	20.03	20.06
	Bandwidth (MHz)	RB Size	RB Offset	39750	40620	41490	39750	40620	41490
				2506.0	2593.0	2680.0	2506.0	2593.0	2680.0
	20	1	0	22.47	22.27	22.57	21.44	21.37	21.61
		1	50	22.31	22.11	22.01	21.32	21.15	21.08
		1	99	22.29	22.00	22.47	21.35	21.16	21.59
		50	0	21.33	21.15	20.96	20.38	20.22	19.99
		50	25	21.39	21.16	21.02	20.42	20.19	20.03
		50	50	21.41	21.14	21.06	20.44	20.17	20.06
		100	0	21.40	21.19	21.03	20.41	20.20	20.07

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				131979	132322	132665	131979	132322	132665
				1710.7	1745.0	1779.3	1710.7	1745.0	1779.3
66/4	1.4	1	0	22.94	22.87	22.85	22.03	21.97	22.01
		1	3	22.98	22.91	22.93	22.07	22.04	21.99
		1	5	22.93	22.85	22.87	22.00	21.98	21.98
		3	0	22.95	22.83	22.88	22.02	21.90	21.95
		3	2	22.91	22.84	22.90	22.01	21.92	21.99
		3	3	22.93	22.82	22.89	22.02	21.90	22.01
		6	0	21.90	21.80	21.88	20.93	20.88	20.92
	Bandwidth (MHz)	RB Size	RB Offset	131987	132322	132657	131987	132322	132657
				1711.5	1745.0	1778.5	1711.5	1745.0	1778.5
	3	1	0	23.01	22.82	22.94	22.13	21.96	22.04
		1	8	22.97	22.81	22.93	22.14	22.02	22.06
		1	14	22.99	22.82	22.90	22.12	21.96	22.02
		8	0	21.99	21.89	21.94	21.03	20.92	20.98
		8	4	22.02	21.90	21.93	21.04	20.92	20.99
		8	7	22.01	21.87	21.91	21.03	20.91	20.98
		15	0	22.00	21.89	21.94	21.04	20.91	20.96
	Bandwidth (MHz)	RB Size	RB Offset	131997	132322	132647	131997	132322	132647
				1712.5	1745.0	1777.5	1712.5	1745.0	1777.5
	5	1	0	23.04	22.90	23.07	22.24	22.01	22.12
		1	12	23.05	23.01	23.01	22.15	21.98	22.15
		1	24	22.92	22.89	22.95	22.09	22.00	22.05
		12	0	22.04	21.89	22.02	21.02	20.90	21.09
		12	7	22.06	21.90	22.05	21.04	20.92	21.05
		12	13	22.03	21.87	21.93	21.02	20.90	20.98
		25	0	22.03	21.89	21.96	21.07	20.93	20.99
	Bandwidth (MHz)	RB Size	RB Offset	132022	132322	132622	132022	132322	132622
				1715.0	1745.0	1775.0	1715.0	1745.0	1775.0
	10	1	0	23.08	23.03	22.99	22.28	22.13	22.16
		1	25	22.93	22.96	23.01	22.03	22.06	22.23
		1	49	22.94	23.00	22.93	22.07	22.03	22.07
		25	0	22.08	22.03	22.08	21.12	20.94	21.13
		25	12	22.02	22.02	22.02	21.06	20.96	21.02
		25	25	21.98	22.01	21.96	20.97	20.99	20.98
		50	0	21.98	22.03	22.09	21.01	21.03	21.10
	Bandwidth (MHz)	RB Size	RB Offset	132047	132322	132597	132047	132322	132597
				1717.5	1745.0	1772.5	1717.5	1745.0	1772.5
	15	1	0	23.16	23.07	23.11	22.28	22.19	22.18
		1	37	22.97	22.96	23.03	22.14	22.08	22.19
		1	74	23.05	23.04	22.97	22.13	22.05	22.10
		36	0	22.13	22.04	22.00	21.15	21.07	21.04
		36	20	22.05	22.03	22.03	21.08	21.06	21.05
		36	39	22.01	22.01	22.03	21.03	21.02	21.09
		75	0	22.01	21.98	22.00	21.05	21.03	21.05
	Bandwidth (MHz)	RB Size	RB Offset	132072	132322	132572	132072	132322	132572
				1720.0	1745.0	1770.0	1720.0	1745.0	1770.0
	20	1	0	23.20	23.10	23.10	22.29	22.23	22.17
		1	50	22.97	22.95	22.90	22.05	22.08	21.90
		1	99	22.98	23.00	23.00	22.03	22.18	21.96
		50	0	22.09	22.07	22.07	21.09	21.08	21.05
		50	25	22.01	22.06	22.09	21.04	21.06	21.07
		50	50	22.04	22.02	22.08	21.07	21.03	21.10
		100	0	22.05	22.07	22.03	21.08	21.07	21.17

Band	Bandwidth (MHz)	RB Size	RB Offset	QPSK			16QAM		
				133147	133297	133447	133147	133297	133447
				665.5	680.5	695.5	665.5	680.5	695.5
71	5	1	0	22.70	22.87	22.71	21.87	21.99	21.95
		1	12	22.79	22.86	22.81	21.91	21.97	22.02
		1	24	22.73	22.80	22.73	21.87	21.91	21.95
		12	0	21.69	21.72	21.70	20.74	20.74	20.71
		12	7	21.70	21.79	21.73	20.76	20.76	20.75
		12	13	21.72	21.81	21.78	20.74	20.83	20.80
		25	0	21.75	21.81	21.79	20.79	20.84	20.82
	Bandwidth (MHz)	RB Size	RB Offset	133172	133297	133422	133172	133297	133422
				668.0	680.5	693.0	668.0	680.5	693.0
	10	1	0	22.70	22.86	22.85	21.88	22.06	21.97
		1	25	22.70	22.67	22.74	21.85	21.86	21.84
		1	49	22.79	22.75	22.78	21.94	21.96	21.86
		25	0	21.76	21.86	21.80	20.80	20.91	20.80
		25	12	21.78	21.84	21.82	20.81	20.94	20.81
		25	25	21.80	21.80	21.80	20.83	20.83	20.83
		50	0	21.74	21.83	21.73	20.75	20.84	20.75
	Bandwidth (MHz)	RB Size	RB Offset	133197	133297	133397	133197	133297	133397
				670.5	680.5	690.5	670.5	680.5	690.5
	15	1	0	22.77	22.83	22.87	21.94	22.01	21.98
		1	37	22.79	22.78	22.74	21.96	21.90	21.93
		1	74	22.89	22.87	22.81	22.08	22.06	21.94
		36	0	21.77	21.90	21.87	20.80	20.92	20.88
		36	20	21.79	21.86	21.84	20.86	20.89	20.85
		36	39	21.87	21.81	21.79	20.93	20.80	20.78
		75	0	21.84	21.83	21.79	20.87	20.86	20.82
	Bandwidth (MHz)	RB Size	RB Offset	133222	133297	133372	133222	133297	133372
				673.0	680.5	688.0	673.0	680.5	688.0
	20	1	0	22.79	22.87	22.81	21.92	22.01	21.94
		1	50	22.75	22.70	22.78	21.89	21.83	21.88
		1	99	22.82	22.83	22.80	22.00	22.01	21.90
		50	0	21.80	21.92	21.84	20.79	20.93	20.84
		50	25	21.84	21.89	21.79	20.83	20.85	20.89
		50	50	21.88	21.83	21.78	20.91	20.82	20.79
		100	0	21.85	21.83	21.87	20.87	20.82	20.87

4. Occupied Bandwidth

4.1. Limit

CFR 47, Section FCC §2.1049 and IC RSS-Gen Issue 5 6.7.

4.2. Test Procedure

FCC

The test follows section 5.4.4 of ANSI C63.26-2015.

- a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation. products including the emission skirts (typically a span of $1.5 \times \text{OBW}$ is sufficient).
- b. The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1 % to 5 % of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- d. Set the detection mode to peak, and the trace mode to max-hold.
- e. If the instrument does not have a 99 % OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5 % of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5 % of the total is reached and record that frequency as the upper OBW frequency. The 99 % power OBW can be determined by computing the difference these two frequencies.
- f. The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

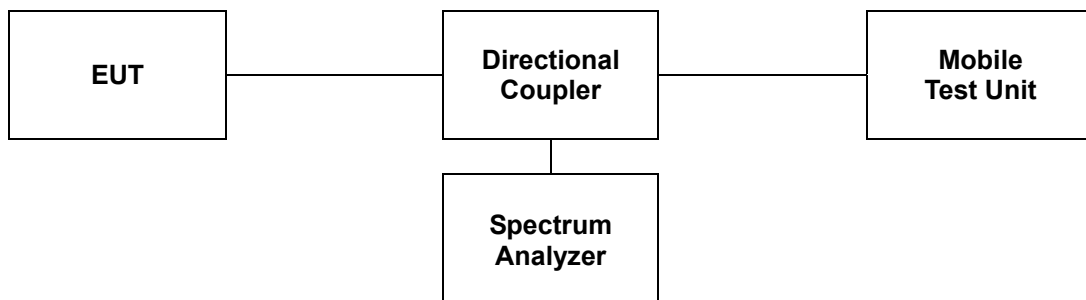
IC

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).



4.3 Test Results

Ambient temperature : (23 ± 1) °C
Relative humidity : 47 % R.H.

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
7	5	2 502.5	4.501	4.501
		2 535.0	4.530	4.515
		2 567.5	4.515	4.515
	10	2 505.0	8.944	8.944
		2 535.0	8.973	8.973
		2 565.0	8.944	8.944
	15	2 507.5	13.502	13.502
		2 535.0	13.502	13.502
		2 562.5	13.502	13.546
	20	2 510.0	17.945	17.887
		2 535.0	17.887	17.887
		2 560.0	17.887	17.945

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
12/17	1.4	699.7	1.103	1.098
		707.5	1.094	1.094
		715.3	1.094	1.103
	3	700.5	2.683	2.692
		707.5	2.692	2.692
		714.5	2.692	2.692
	5	701.5	4.515	4.515
		707.5	4.515	4.501
		713.5	4.515	4.530
	10	704.0	8.973	8.973
		707.5	8.973	8.973
		711.0	8.973	8.944

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
13	5	779.5	4.515	4.530
		782.0	4.501	4.501
		784.5	4.515	4.501
	10	782.0	8.915	8.944

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
25/2	1.4	1 850.7	1.103	1.094
		1 882.5	1.094	1.098
		1 914.3	1.098	1.103
	3	1 851.5	2.692	2.700
		1 882.5	2.692	2.692
		1 913.5	2.692	2.683
	5	1 852.5	4.515	4.515
		1 882.5	4.515	4.530
		1 912.5	4.515	4.501
	10	1 855.0	8.973	8.973
		1 882.5	8.973	8.944
		1 910.0	8.944	8.944
	15	1 857.5	13.589	13.546
		1 882.5	13.546	13.546
		1 907.5	13.546	13.546
	20	1 860.0	18.003	18.003
		1 882.5	17.945	17.945
		1 905.0	17.945	17.945

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
26/5	1.4	824.7	1.094	1.098
		836.5	1.098	1.103
		848.3	1.094	1.094
	3	825.5	2.692	2.683
		836.5	2.692	2.692
		847.5	2.692	2.692
	5	826.5	4.515	4.515
		836.5	4.515	4.501
		846.5	4.515	4.501
	10	829.0	8.973	8.973
		836.5	8.915	8.944
		844.0	8.944	8.973
26	15	831.5	13.546	13.516
		841.5	13.487	13.487

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
41	5	2 498.5	4.525	4.505
		2 593.0	4.505	4.515
		2 687.5	4.515	4.530
	10	2 501.0	8.944	8.944
		2 593.0	8.973	8.973
		2 685.0	8.944	8.944
	15	2 503.5	13.502	13.502
		2 593.0	13.502	13.502
		2 682.5	13.546	13.502
	20	2 506.0	17.887	17.887
		2 593.0	17.887	17.945
		2 680.0	17.887	17.945

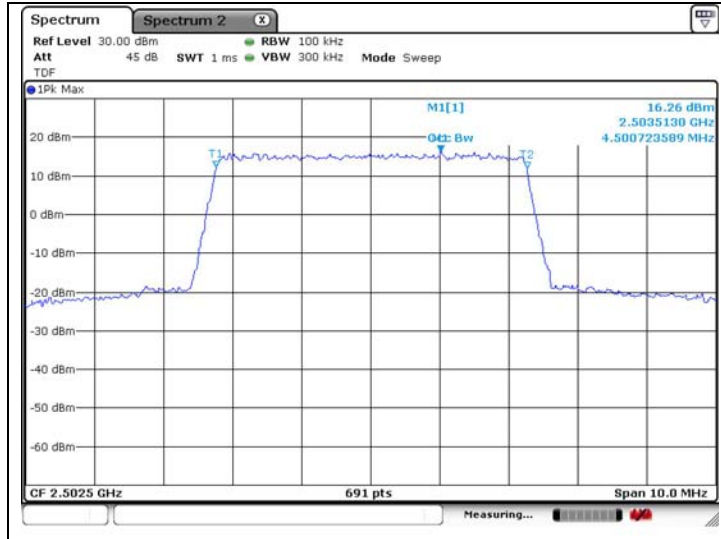
Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
66/4	1.4	1 710.7	1.098	1.094
		1 745.0	1.098	1.094
		1 779.3	1.098	1.098
	3	1 711.5	2.692	2.692
		1 745.0	2.692	2.692
		1 778.5	2.700	2.692
	5	1 712.5	4.515	4.515
		1 745.0	4.515	4.515
		1 777.5	4.515	4.515
	10	1 715.0	8.944	8.944
		1 745.0	8.973	8.973
		1 775.0	8.973	8.944
	15	1 717.5	13.502	13.502
		1 745.0	13.546	13.546
		1 772.5	13.502	13.459
	20	1 720.0	17.887	17.887
		1 745.0	17.945	18.003
		1 770.0	17.887	17.829

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
71	5	665.5	4.501	4.515
		680.5	4.515	4.530
		695.5	4.515	4.515
	10	668.0	8.973	8.944
		680.5	8.944	8.944
		693.0	8.973	8.973
	15	670.5	13.502	13.459
		680.5	13.502	13.546
		690.5	13.502	13.459
	20	673.0	17.945	17.887
		680.5	17.945	18.003
		688.0	17.887	17.887

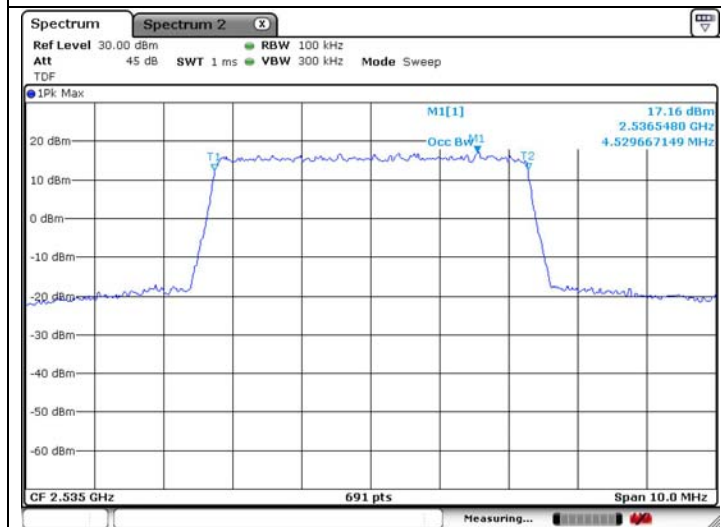
- Test plots

LTE band 7 (5 MHz - QPSK)

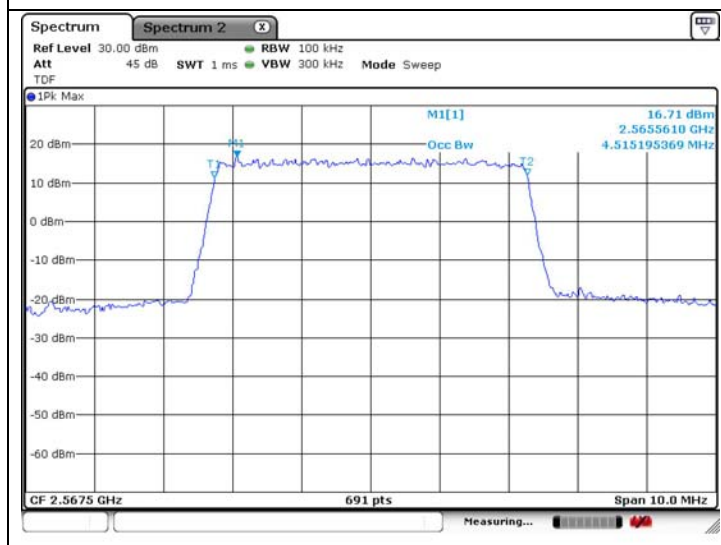
Low Channel



Middle Channel

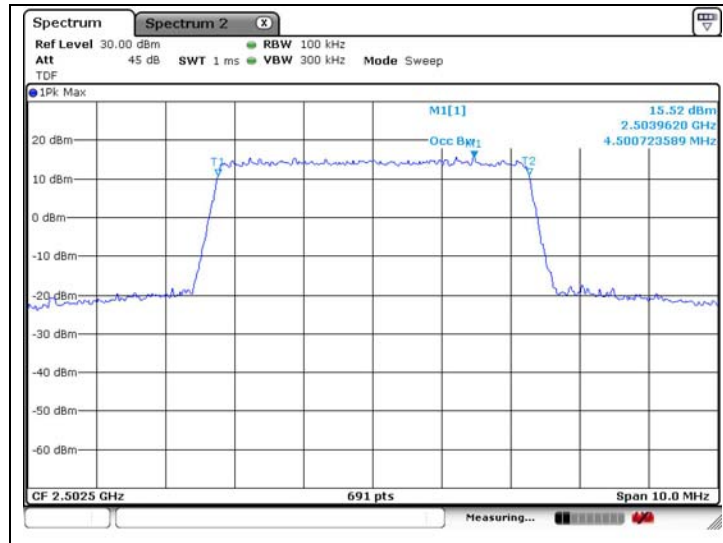


High Channel

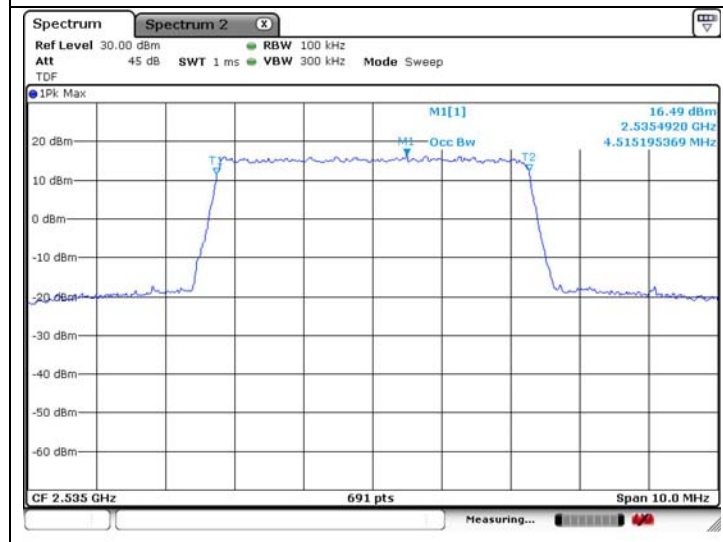


LTE band 7 (5 MHz - 16QAM)

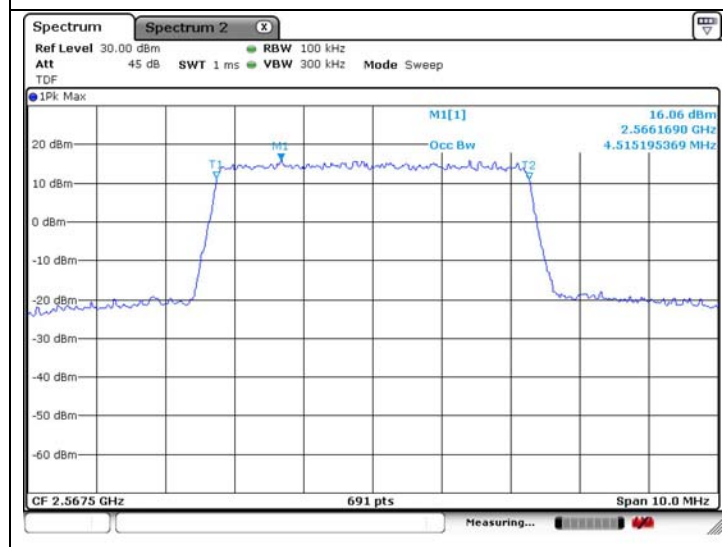
Low Channel



Middle Channel

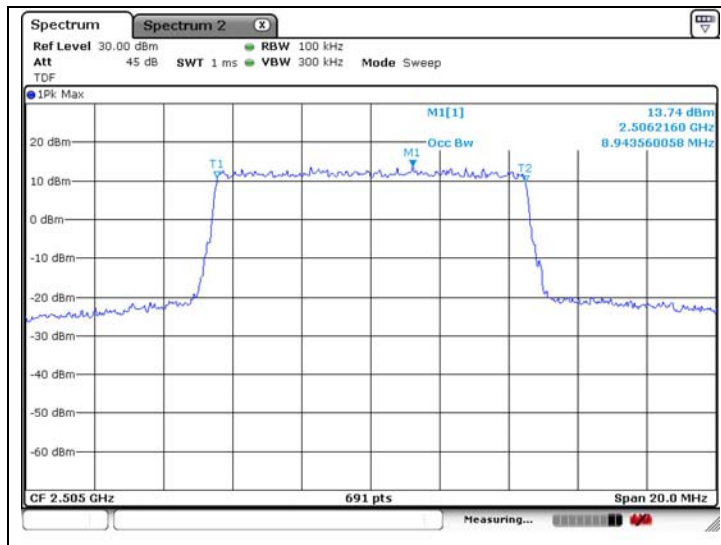


High Channel

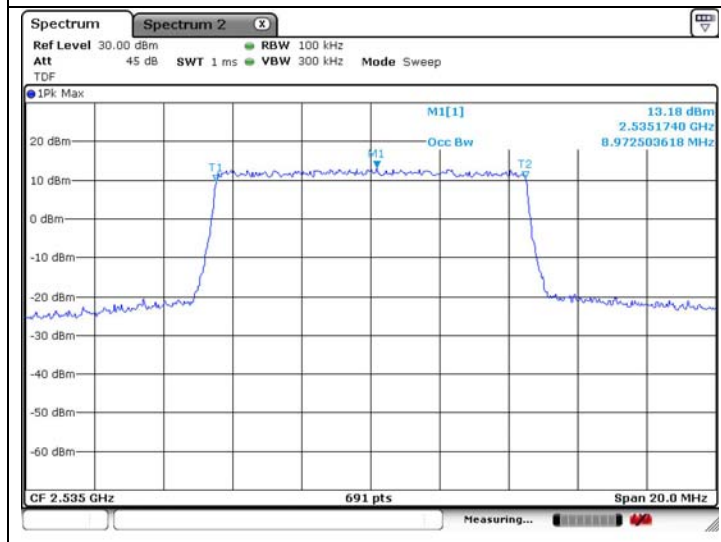


LTE band 7 (10 MHz - QPSK)

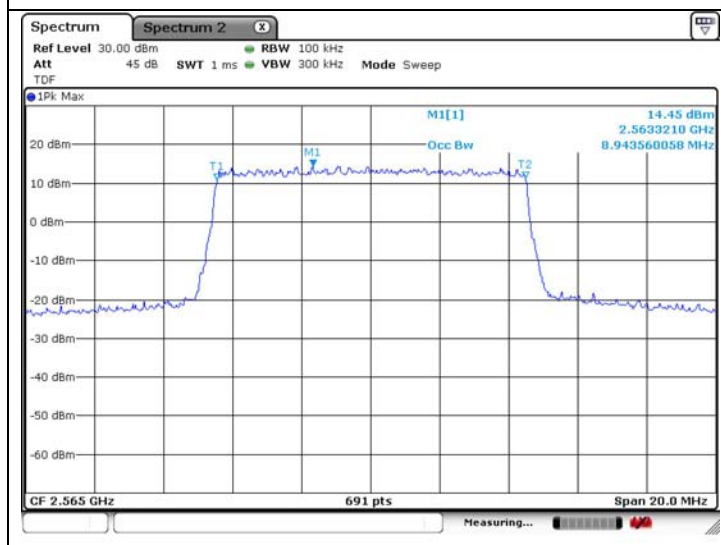
Low Channel



Middle Channel

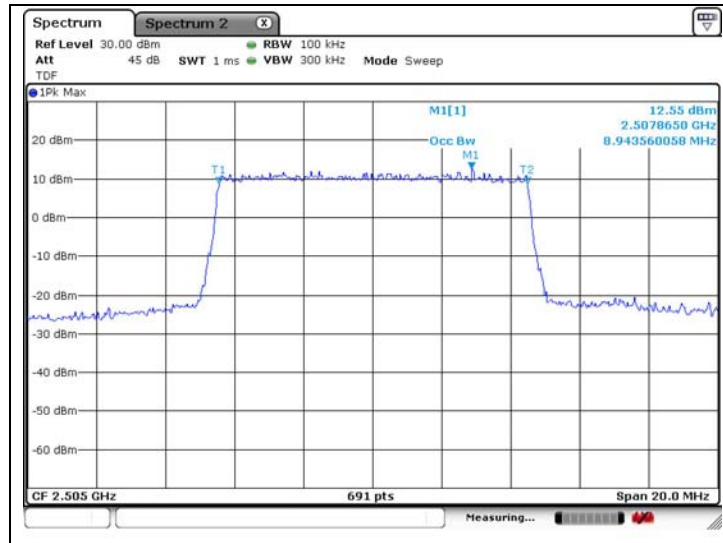


High Channel

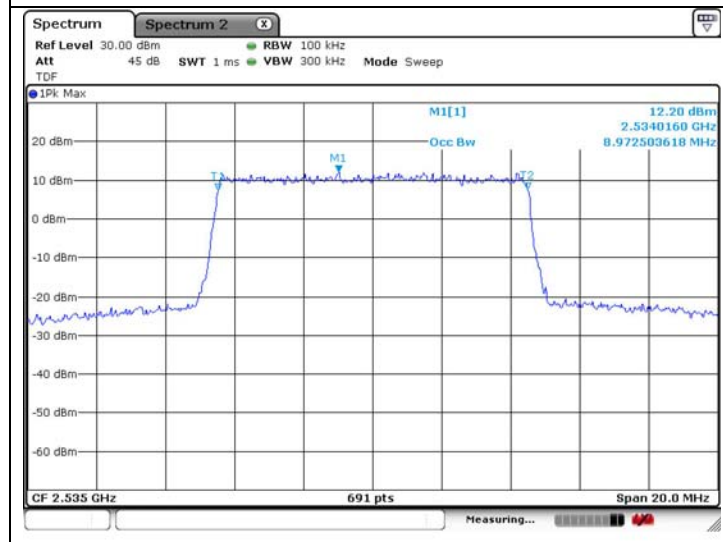


LTE band 7 (10 MHz - 16QAM)

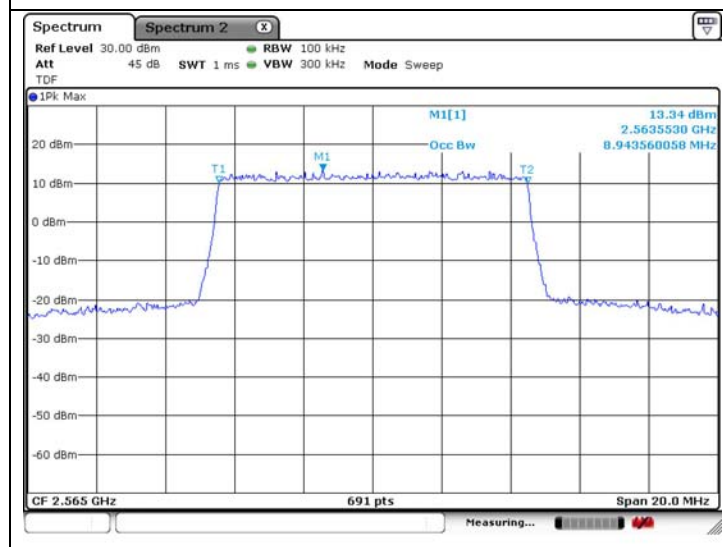
Low Channel



Middle Channel

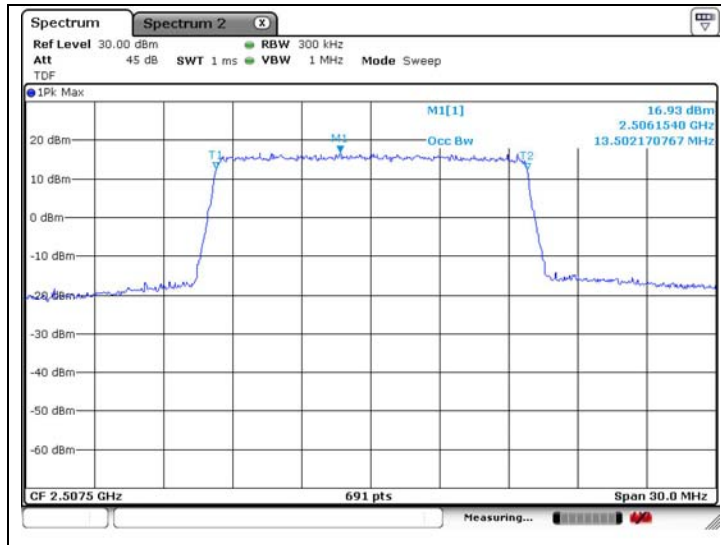


High Channel

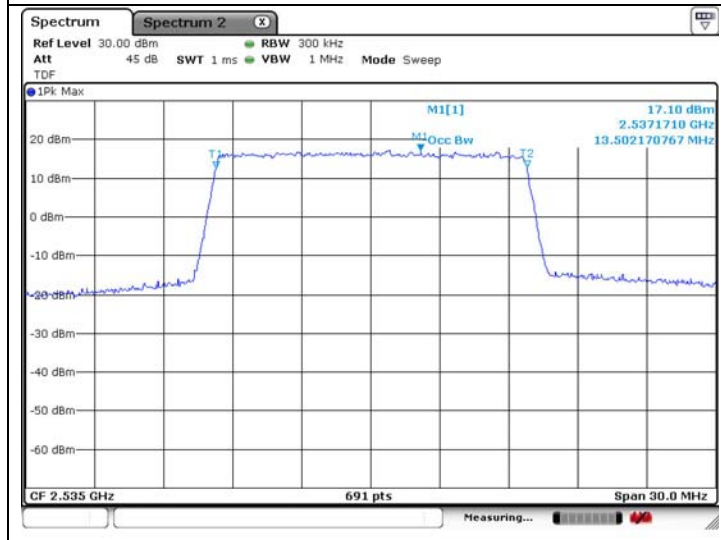


LTE band 7 (15 MHz - QPSK)

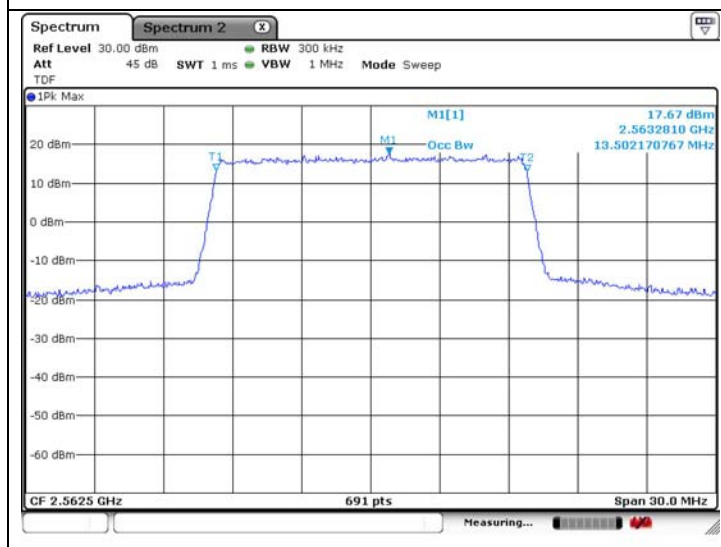
Low Channel



Middle Channel

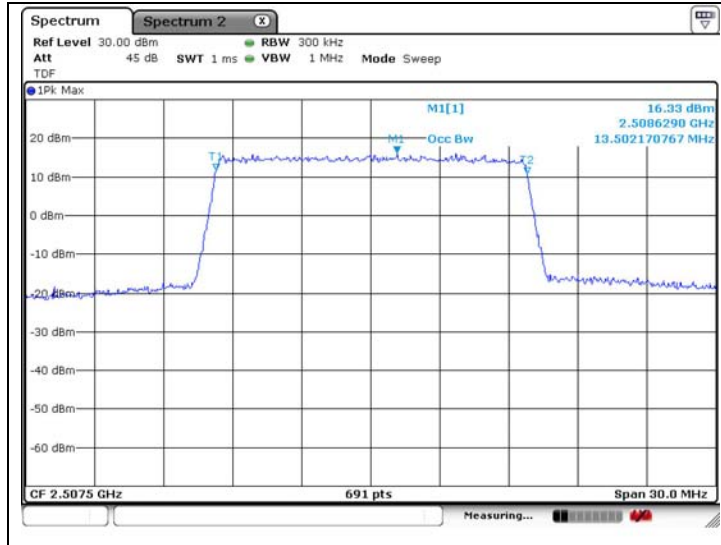


High Channel

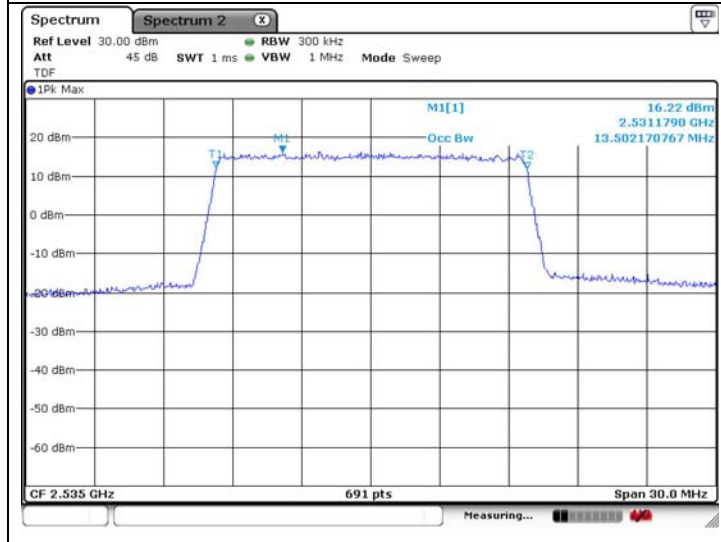


LTE band 7 (15 MHz - 16QAM)

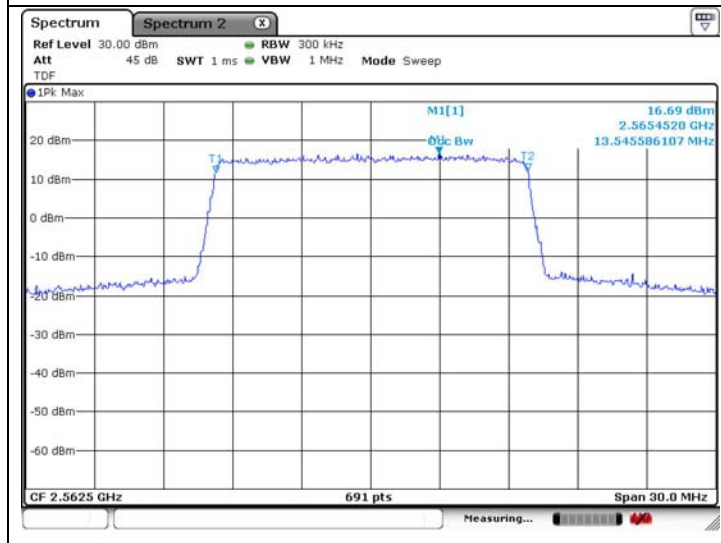
Low Channel



Middle Channel

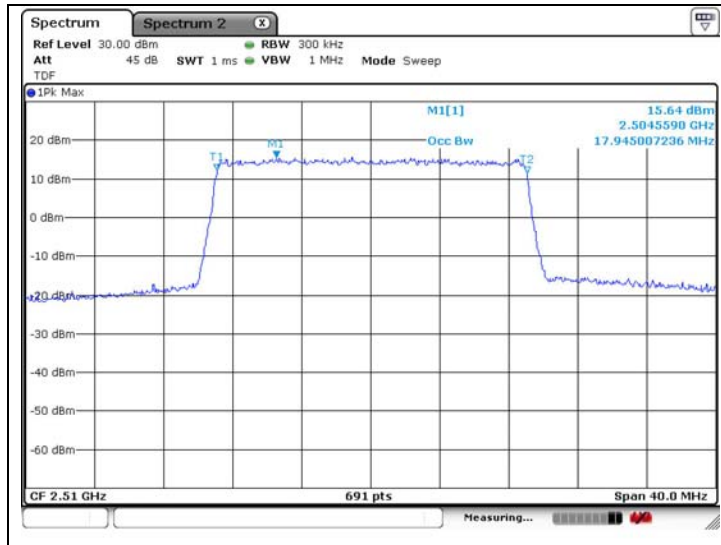


High Channel

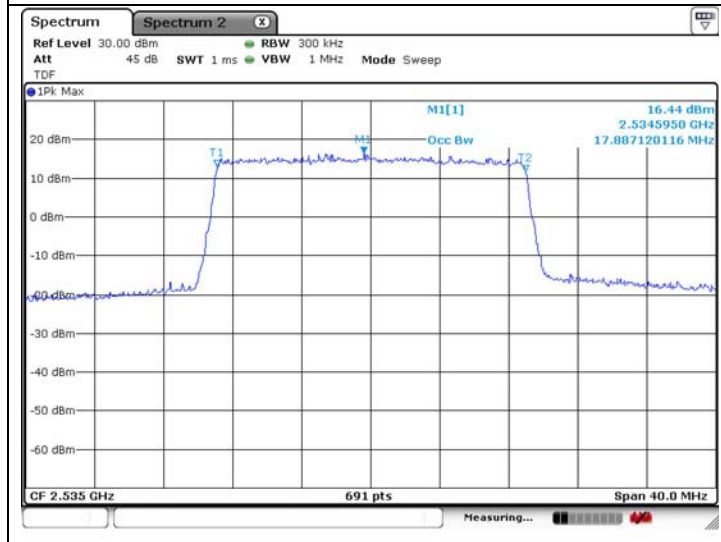


LTE band 7 (20 MHz - QPSK)

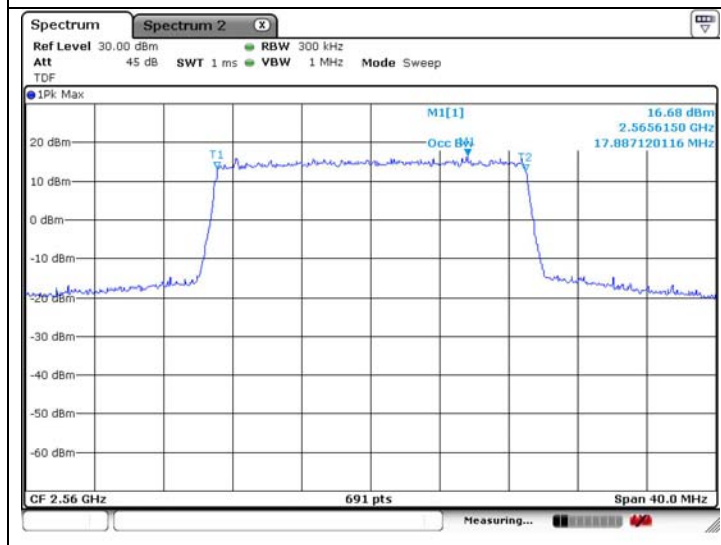
Low Channel



Middle Channel

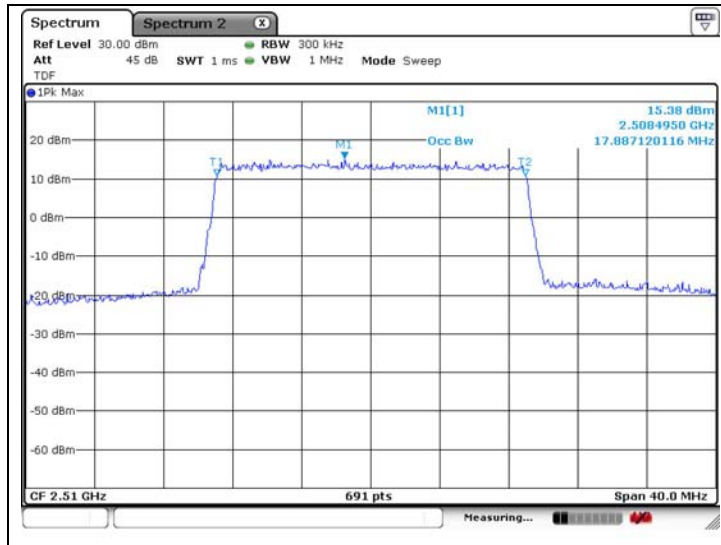


High Channel

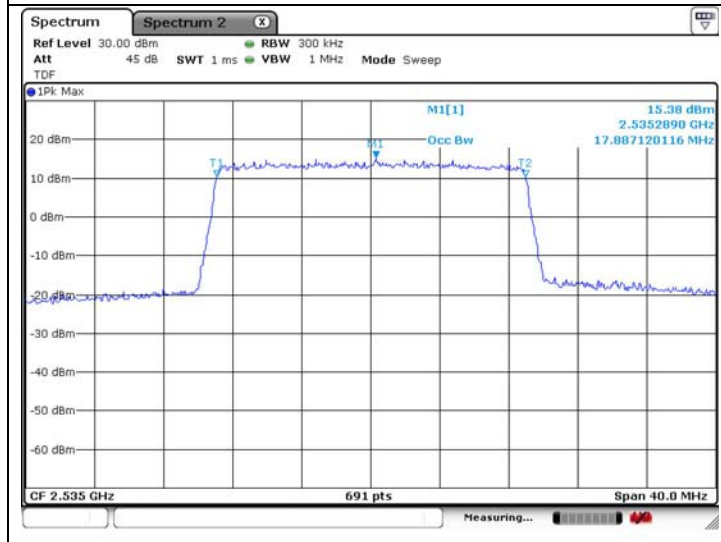


LTE band 7 (20 MHz - 16QAM)

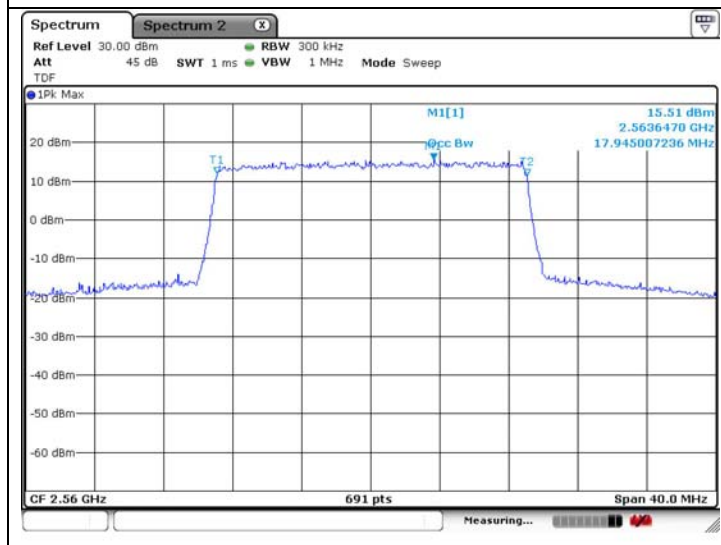
Low Channel



Middle Channel

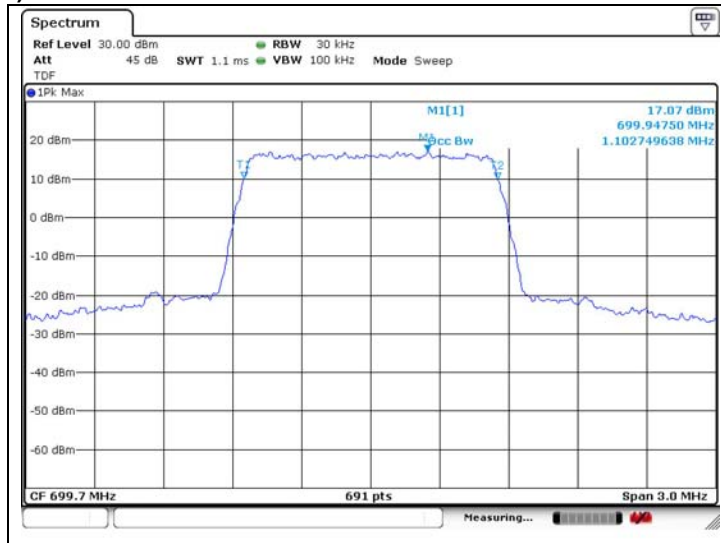


High Channel

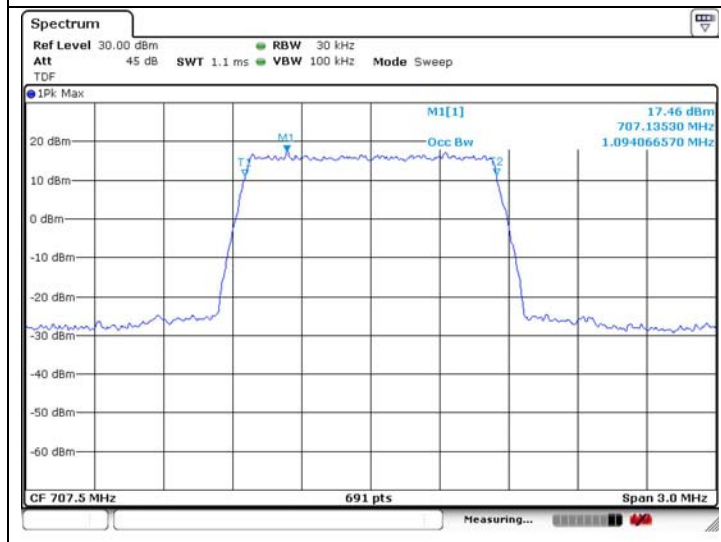


LTE band 12/17 (1.4 MHz – QPSK)

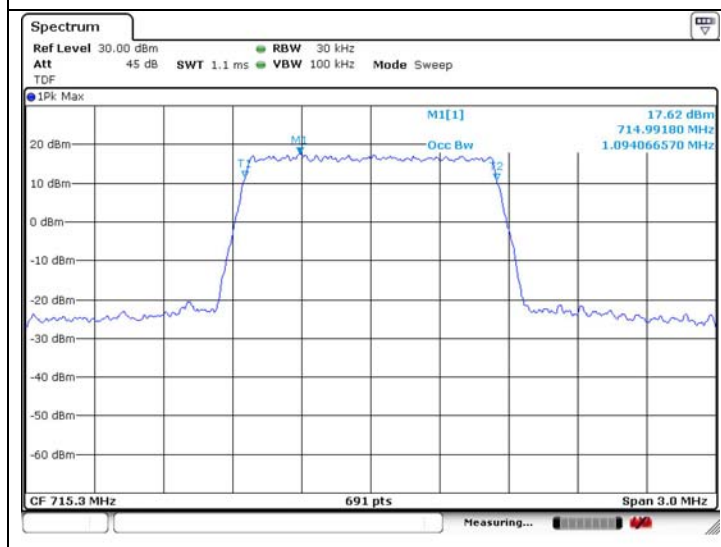
Low Channel



Middle Channel



High Channel



LTE band 12/17 (1.4 MHz – 16QAM)

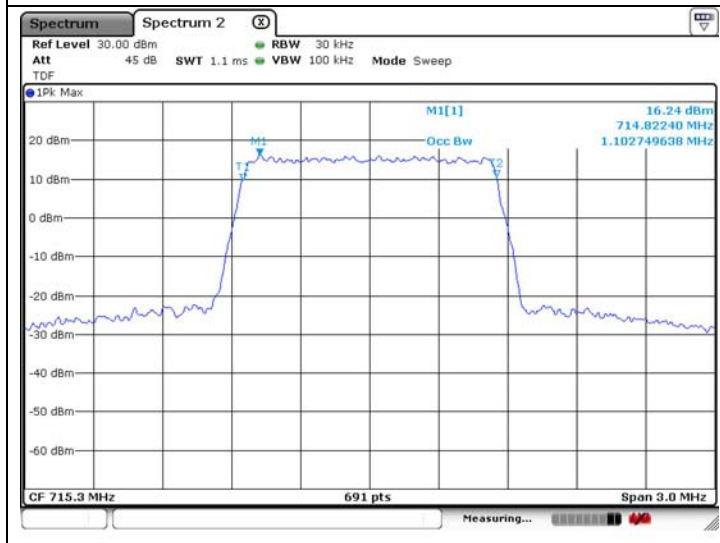
Low Channel



Middle Channel

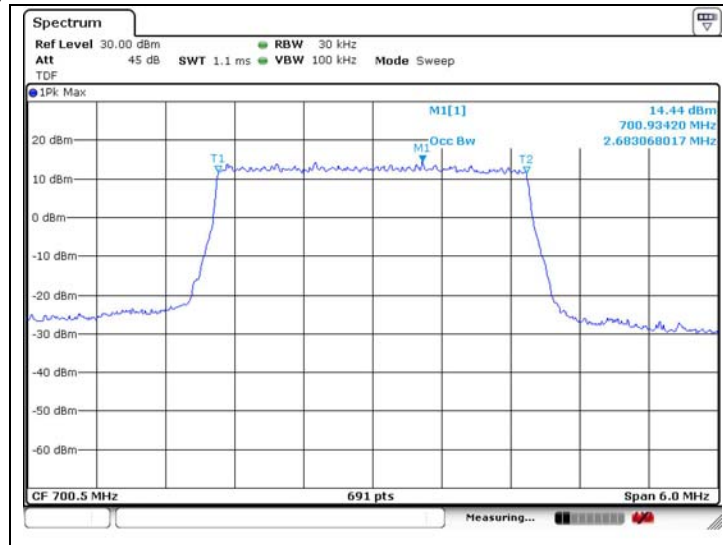


High Channel

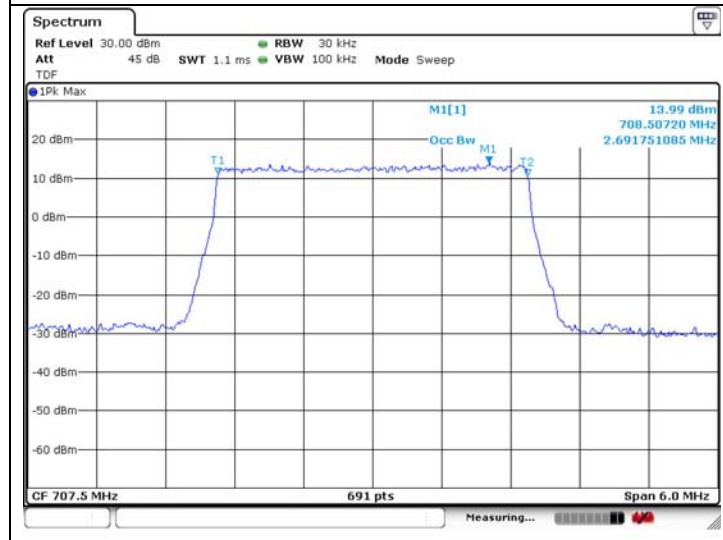


LTE band 12/17 (3 MHz – QPSK)

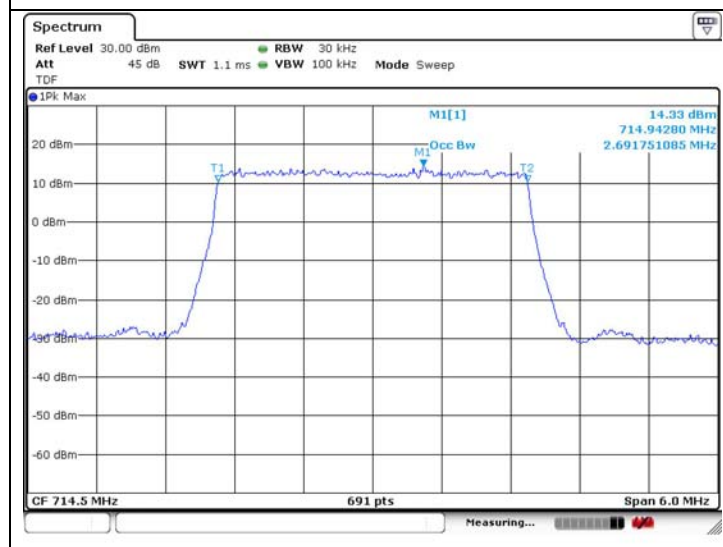
Low Channel



Middle Channel

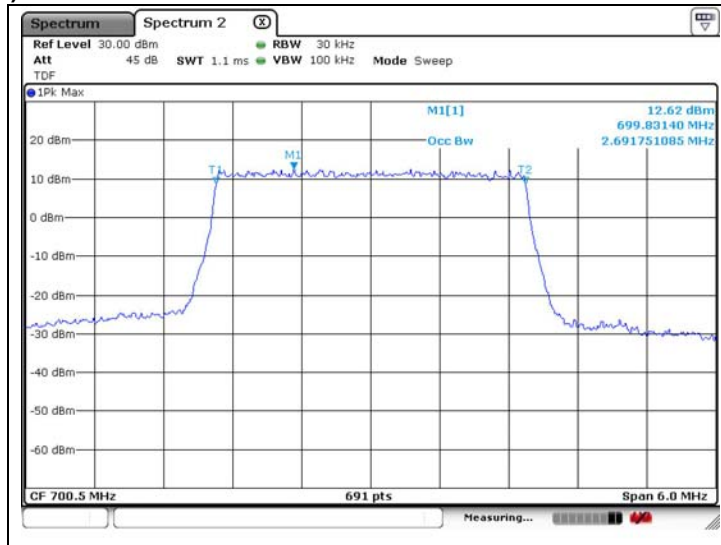


High Channel

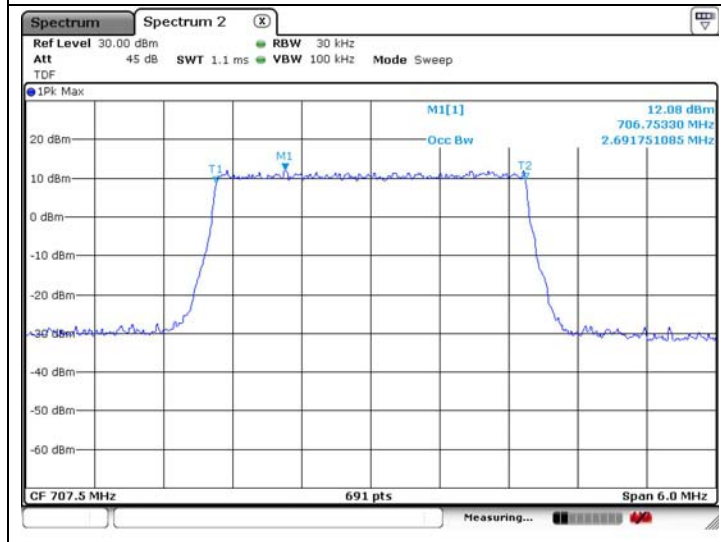


LTE band 12/17 (3 MHz – 16QAM)

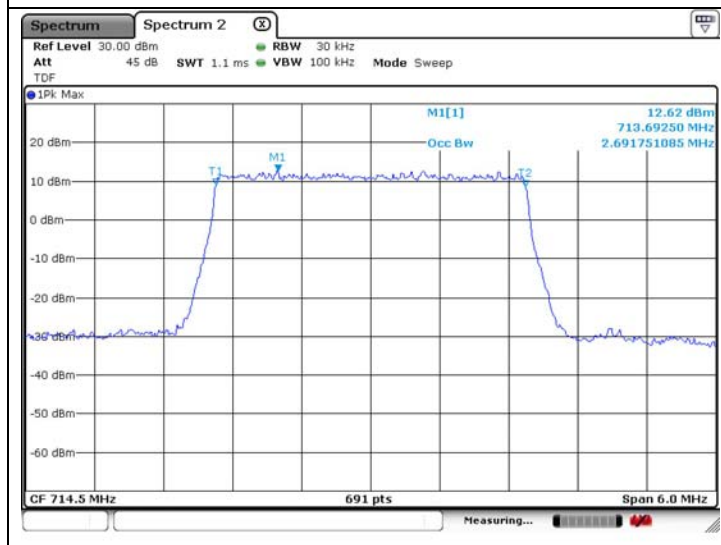
Low Channel



Middle Channel

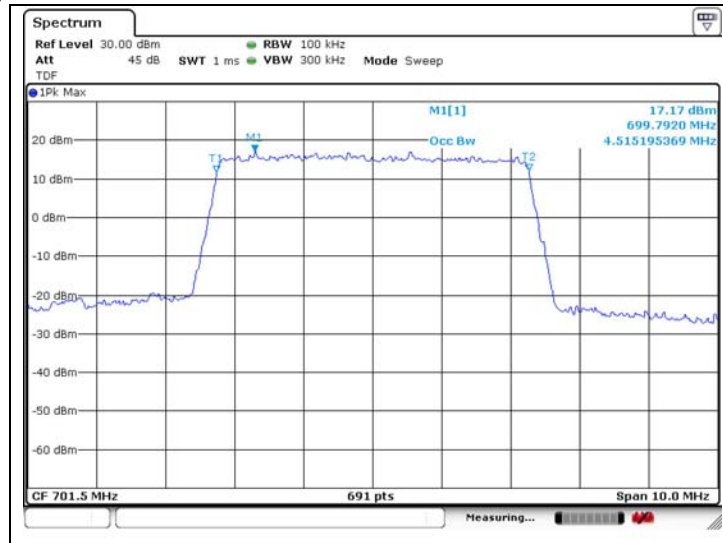


High Channel

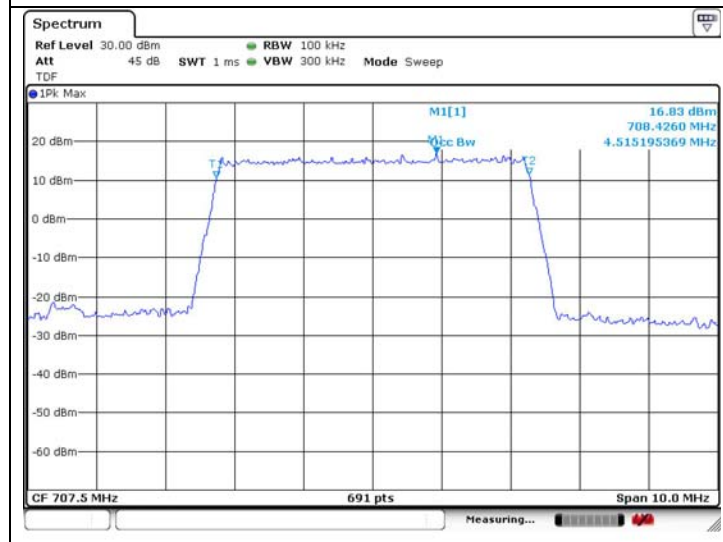


LTE band 12/17 (5 MHz – QPSK)

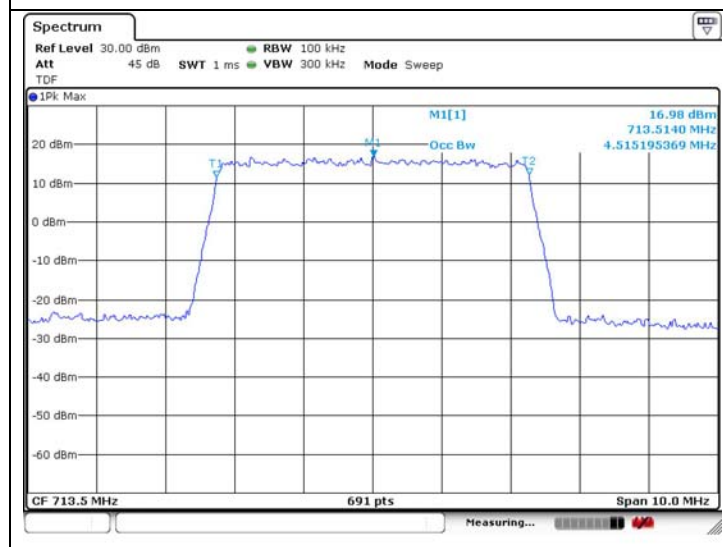
Low Channel



Middle Channel

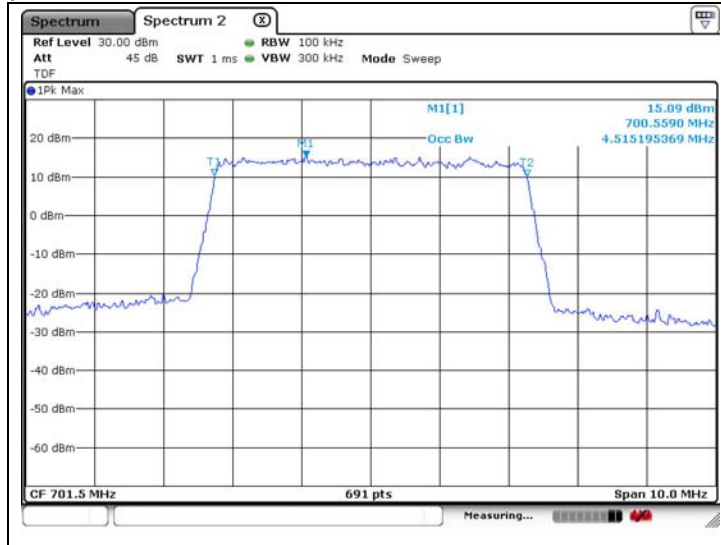


High Channel



LTE band 12/17 (5 MHz – 16QAM)

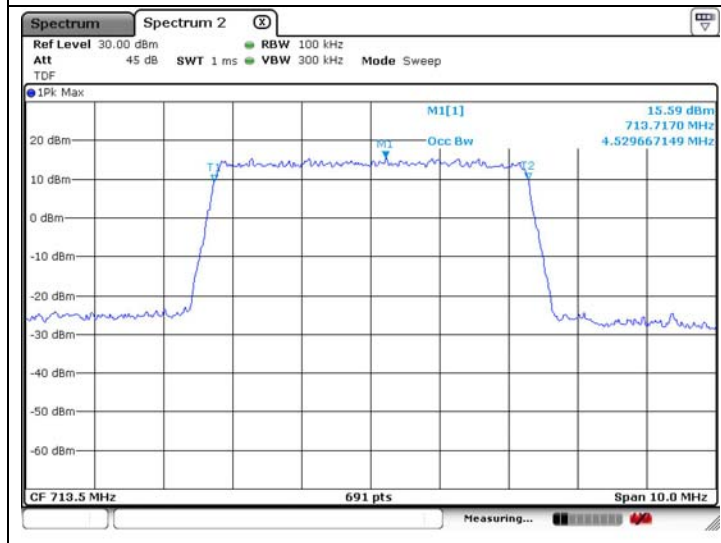
Low Channel



Middle Channel

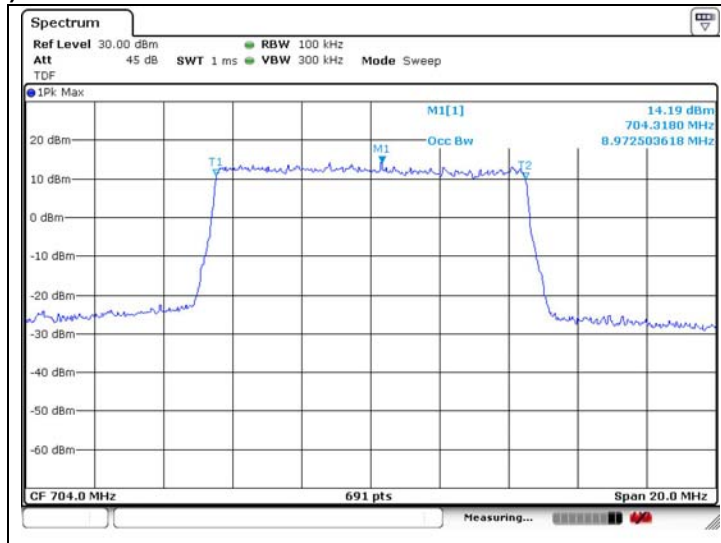


High Channel

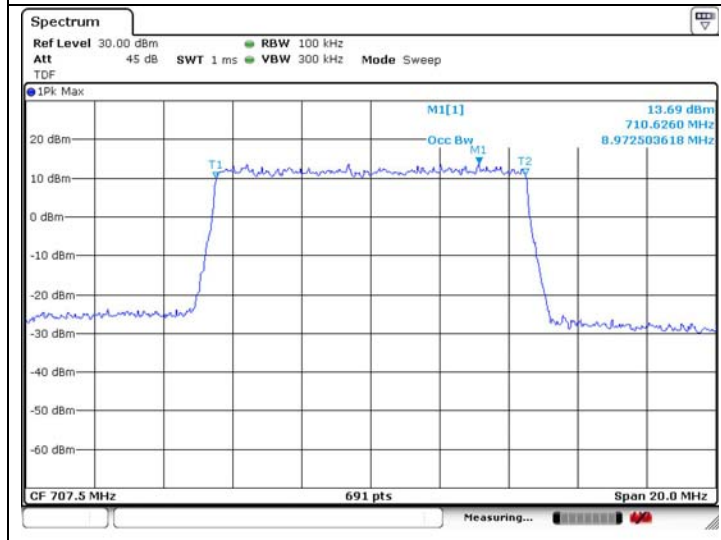


LTE band 12/17 (10 MHz – QPSK)

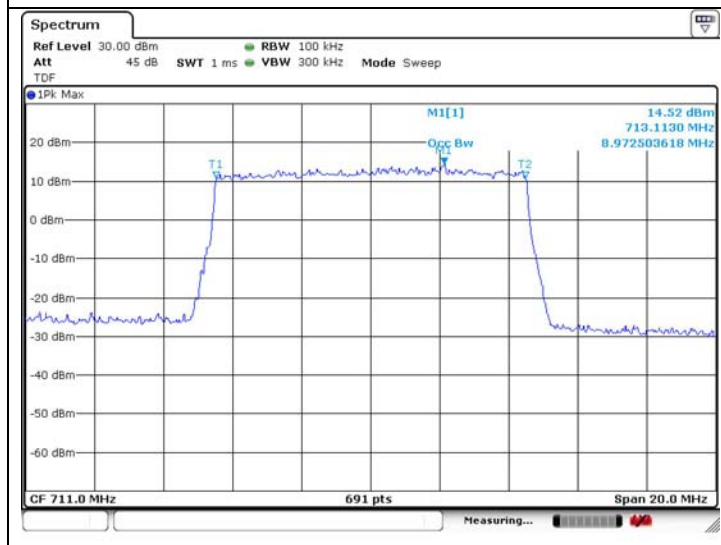
Low Channel



Middle Channel

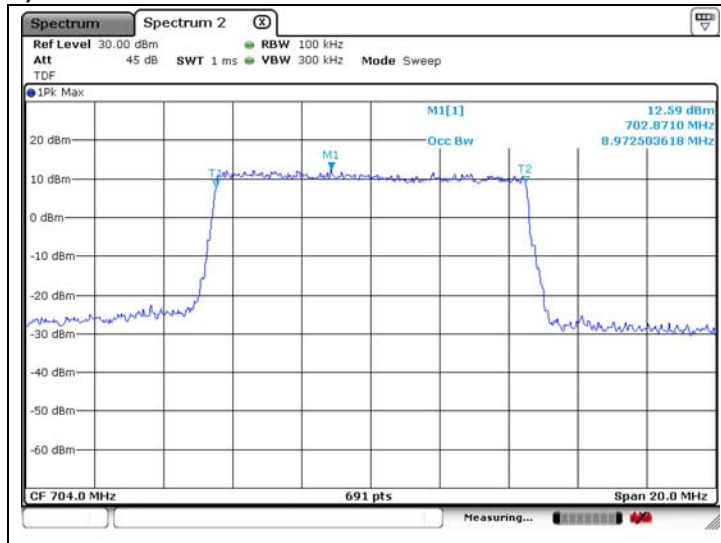


High Channel

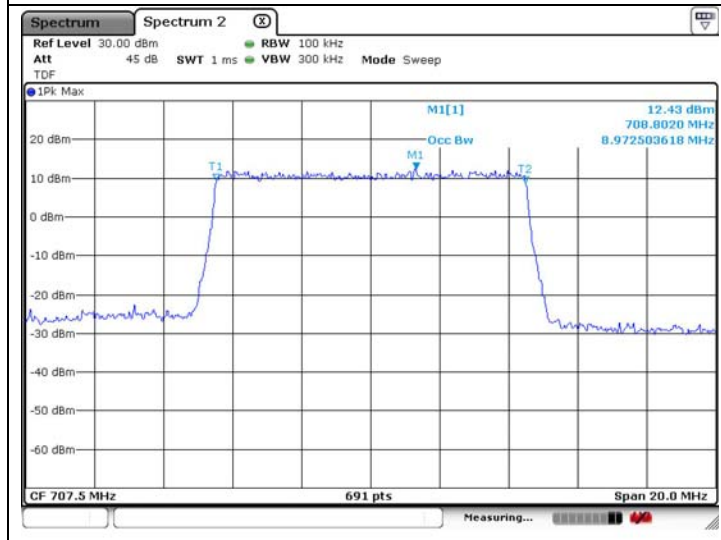


LTE band 12/17 (10 MHz – 16QAM)

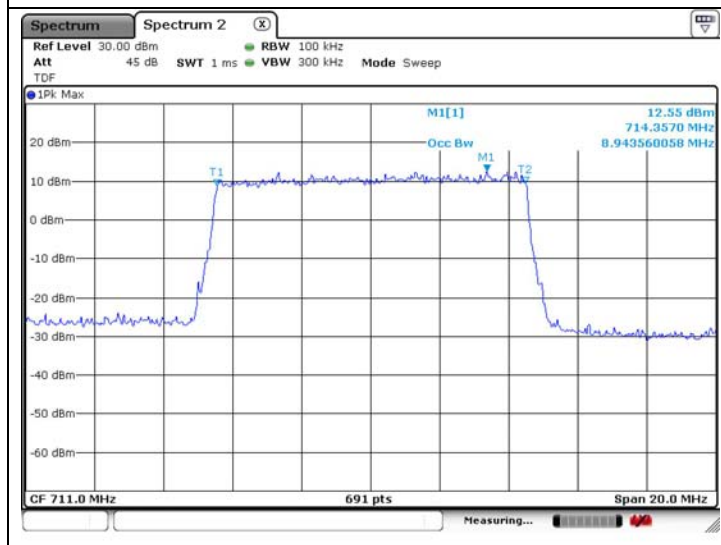
Low Channel



Middle Channel

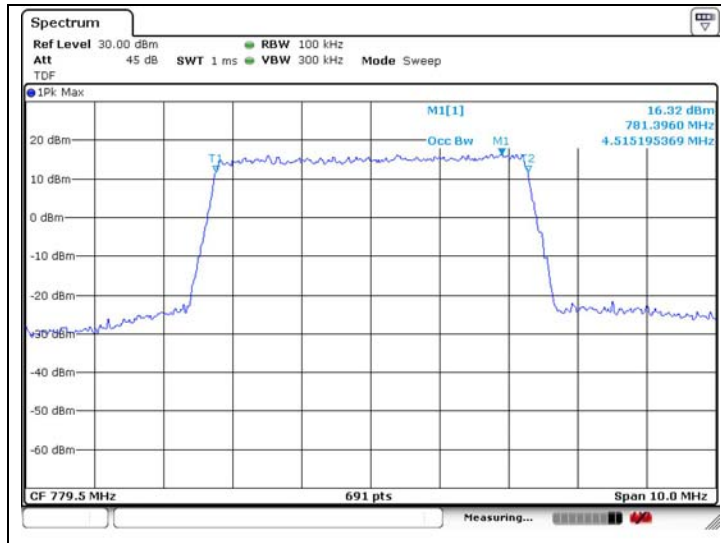


High Channel

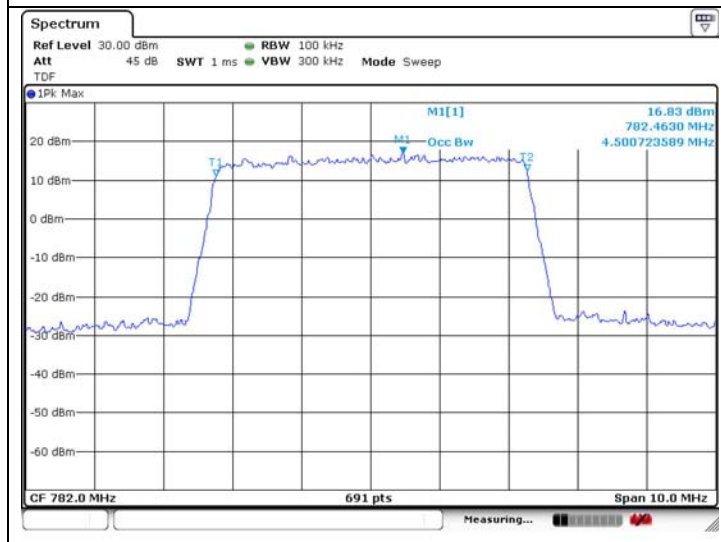


LTE band 13 (5 MHz – QPSK)

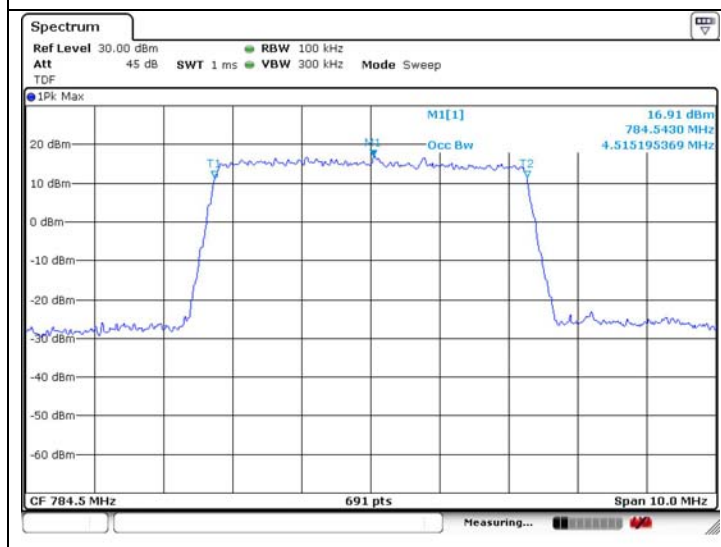
Low Channel



Middle Channel

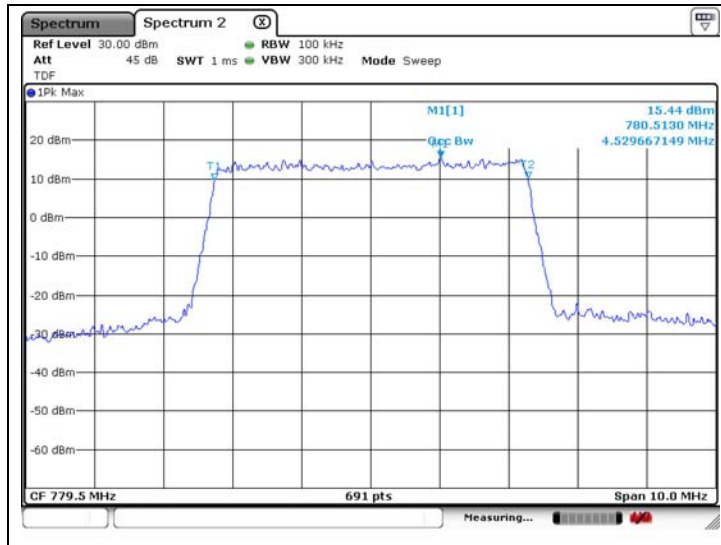


High Channel



LTE band 13 (5 MHz – 16QAM)

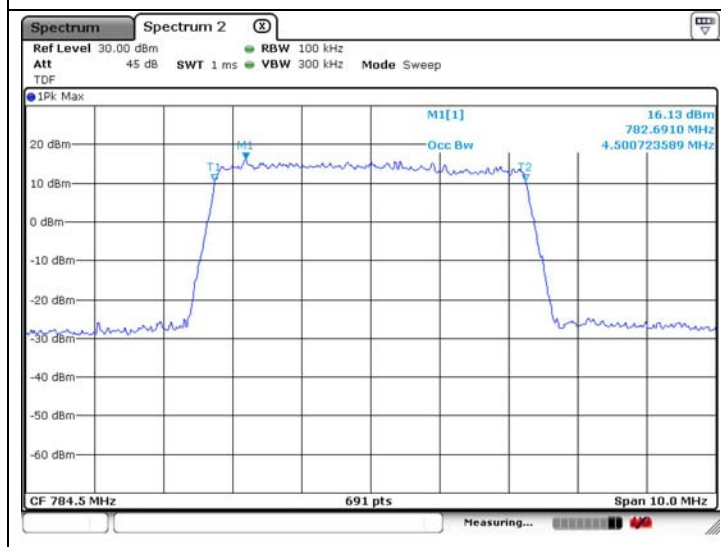
Low Channel



Middle Channel

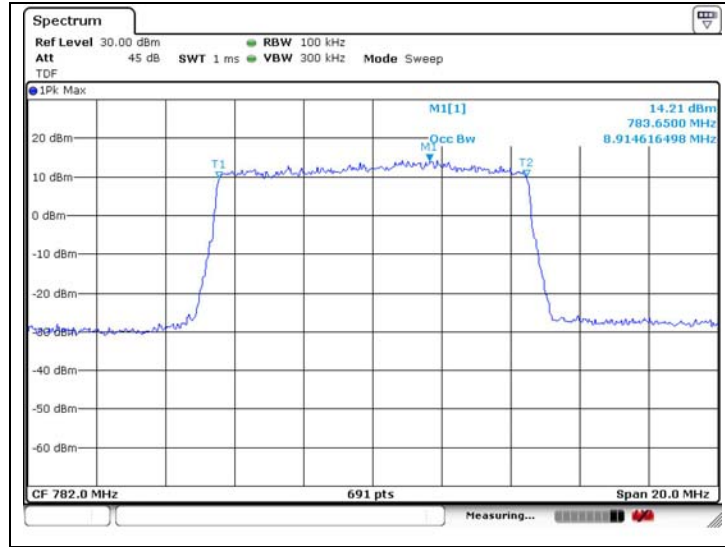


High Channel



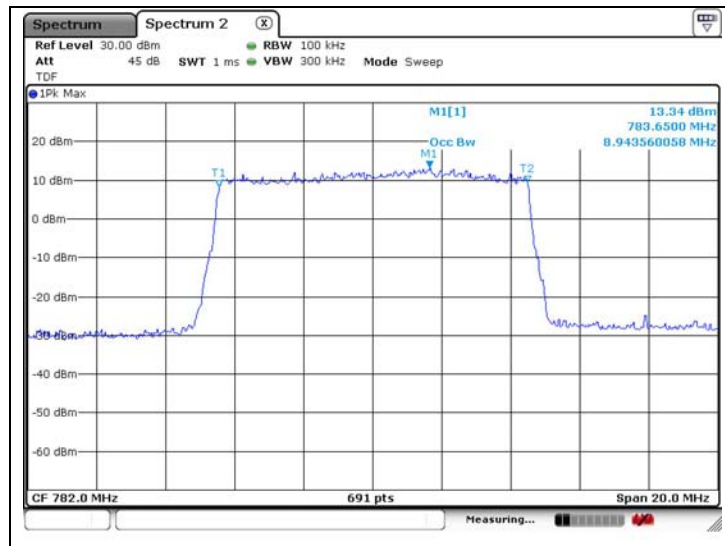
LTE band 13 (10 MHz – QPSK)

Middle Channel



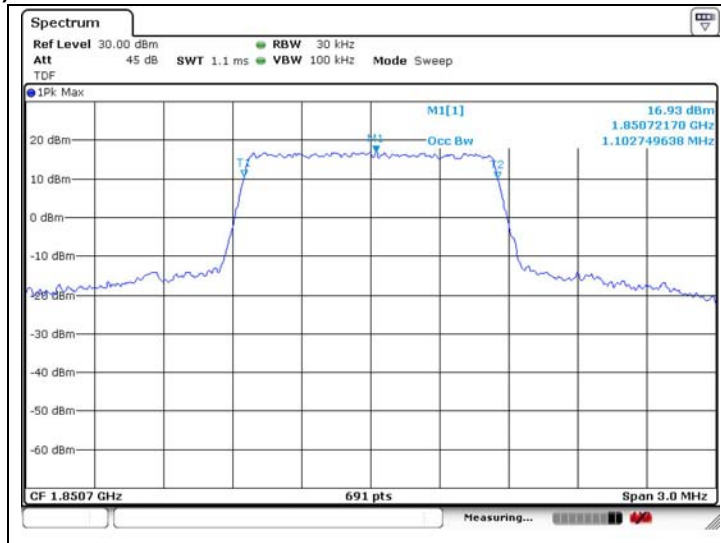
LTE band 13 (10 MHz – 16QAM)

Middle Channel

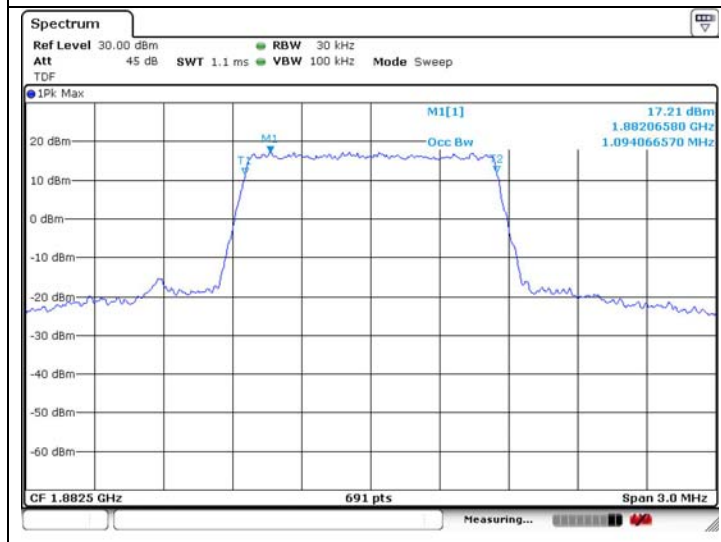


LTE band 25/2 (1.4 MHz – QPSK)

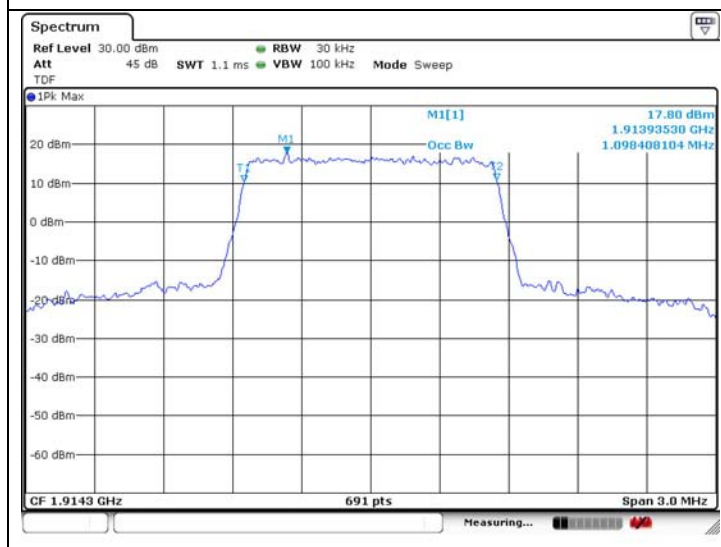
Low Channel



Middle Channel



High Channel



LTE band 25/2 (1.4 MHz – 16QAM)

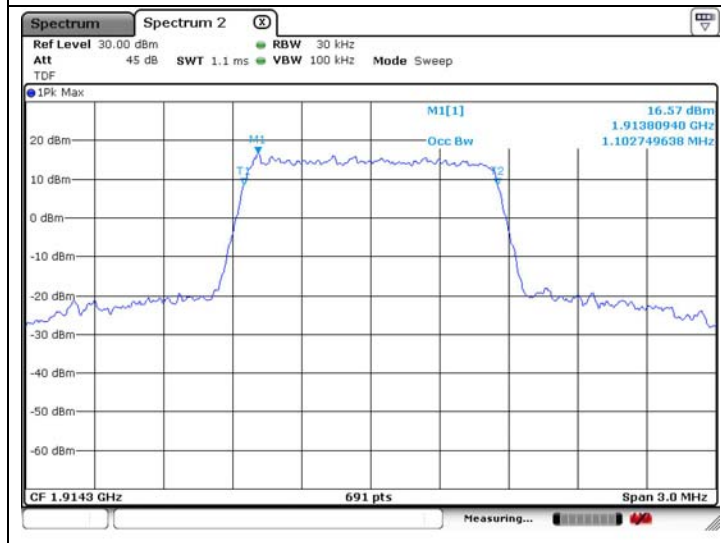
Low Channel



Middle Channel

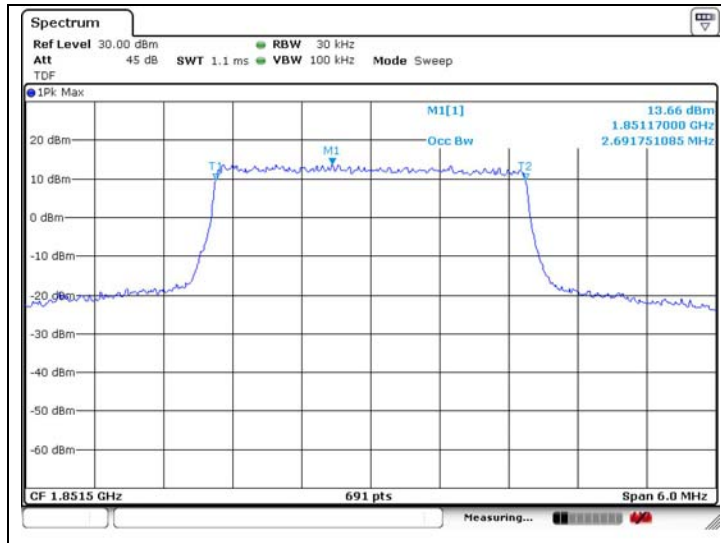


High Channel

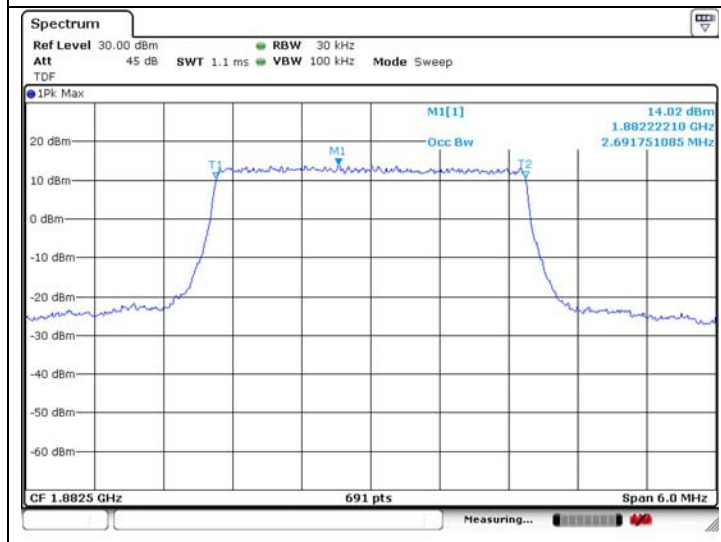


LTE band 25/2 (3 MHz – QPSK)

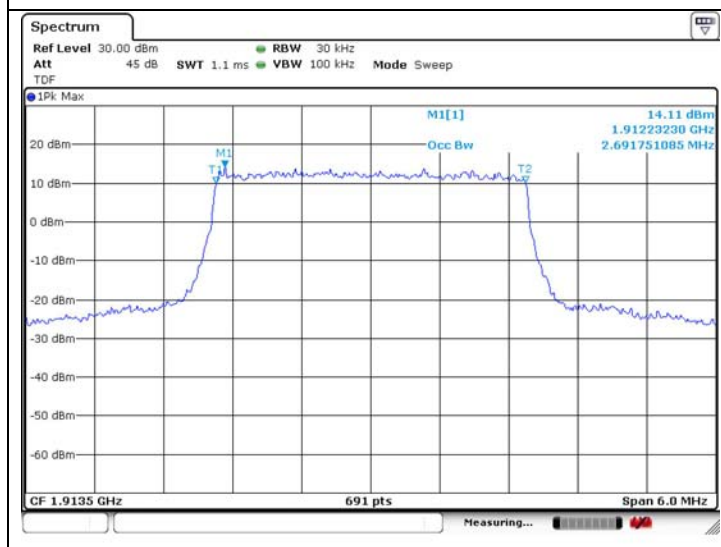
Low Channel



Middle Channel

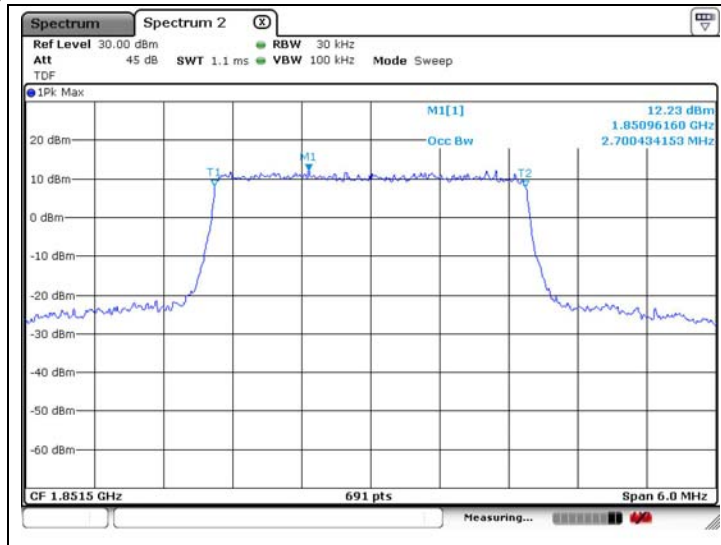


High Channel

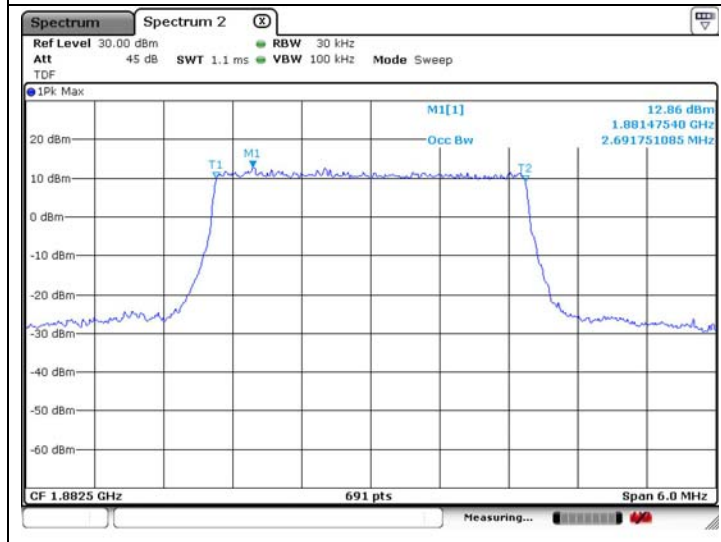


LTE band 25/2 (3 MHz – 16QAM)

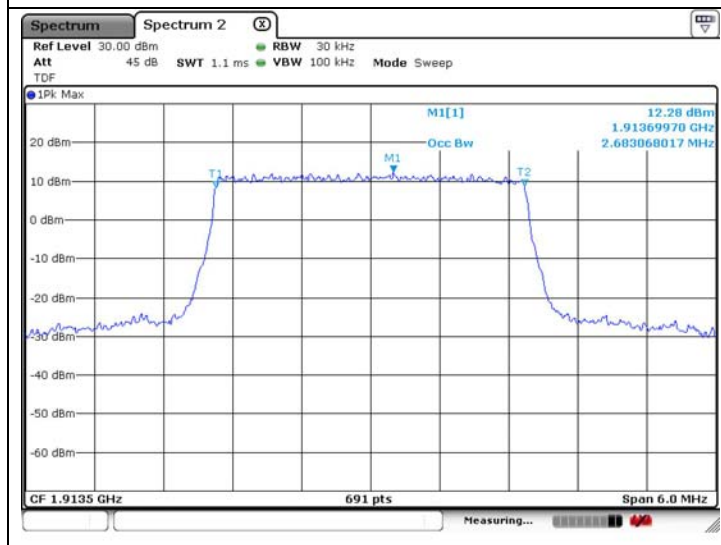
Low Channel



Middle Channel

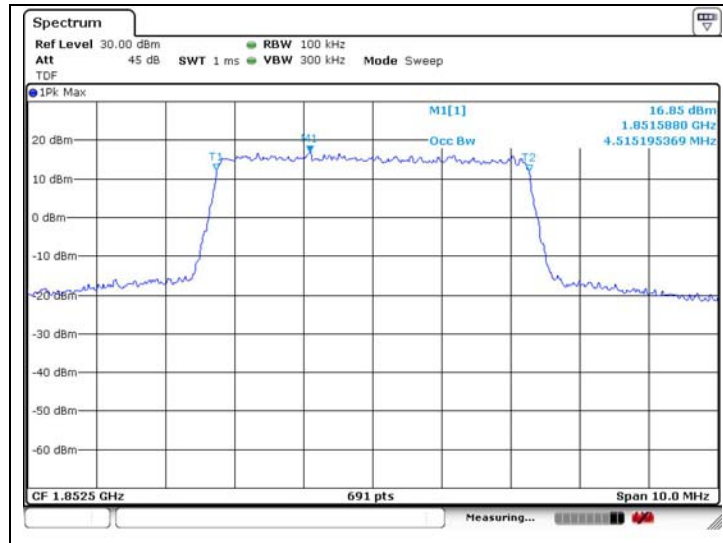


High Channel

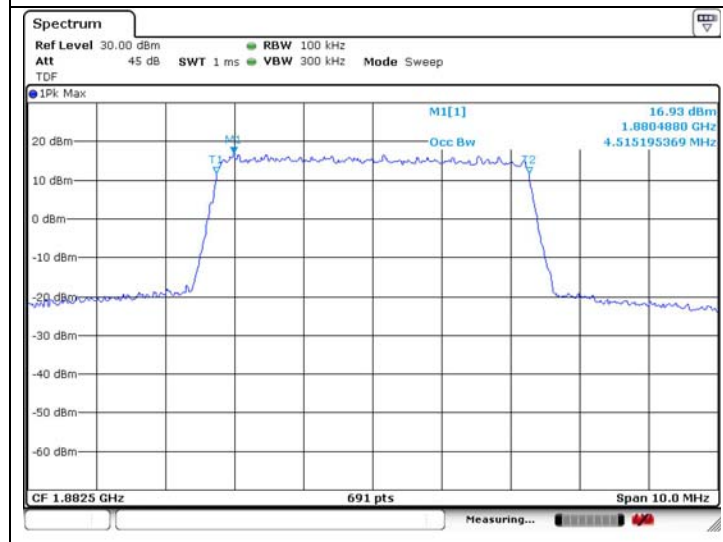


LTE band 25/2 (5 MHz – QPSK)

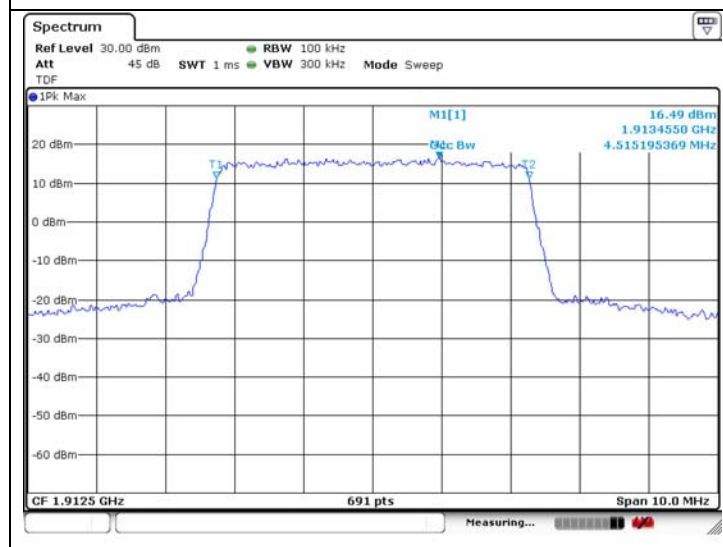
Low Channel



Middle Channel



High Channel

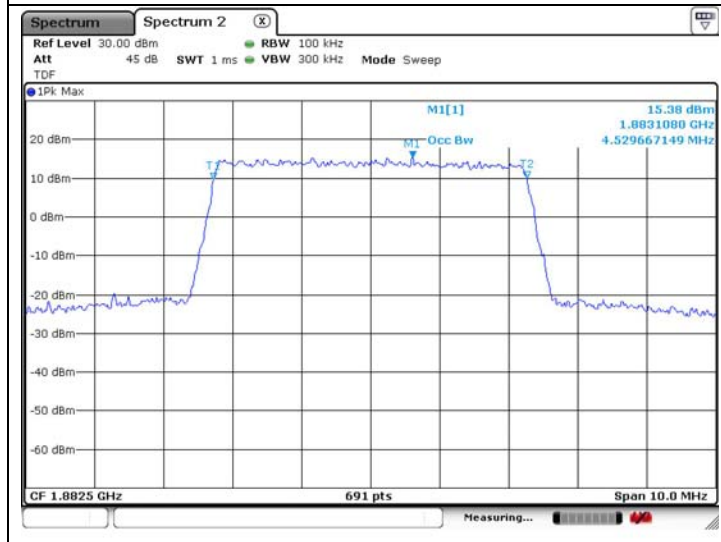


LTE band 25/2 (5 MHz – 16QAM)

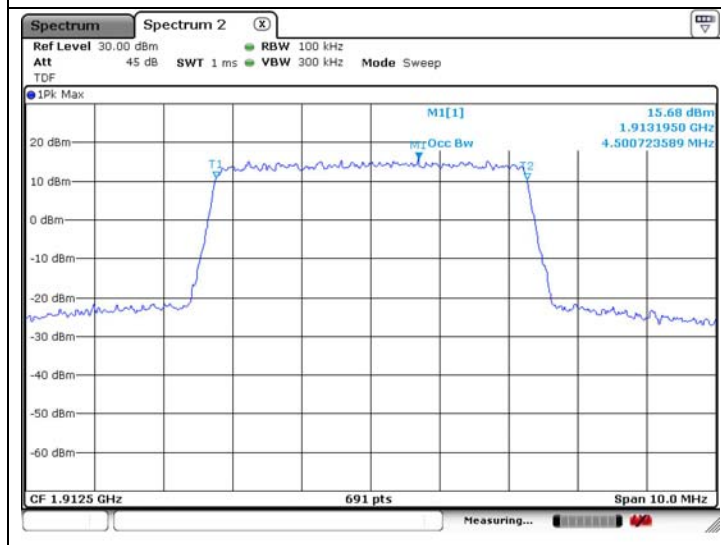
Low Channel



Middle Channel

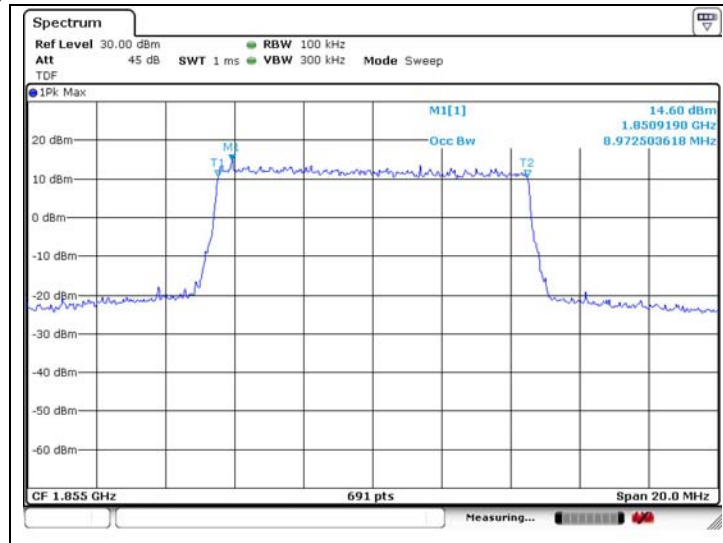


High Channel

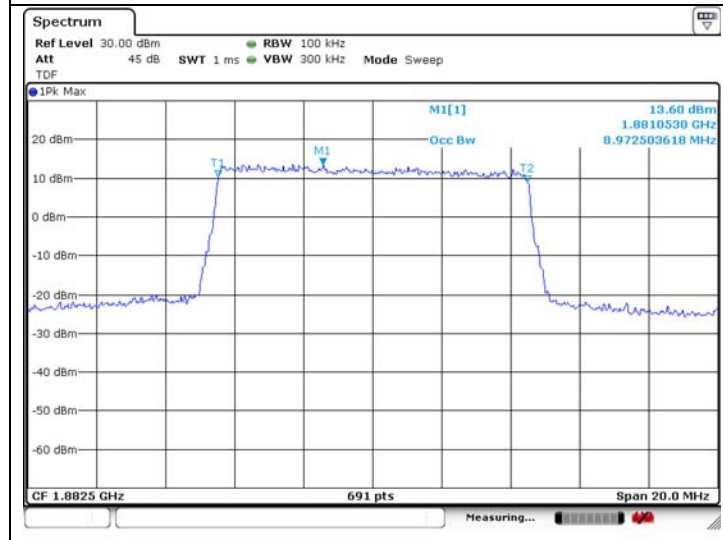


LTE band 25/2 (10 MHz – QPSK)

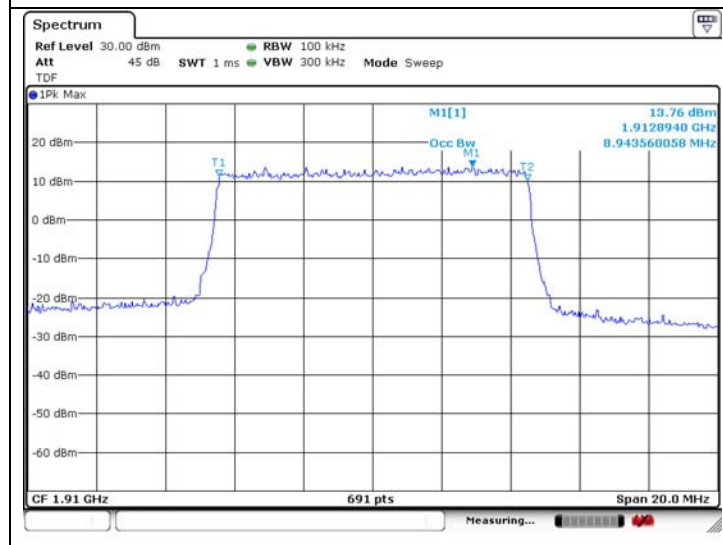
Low Channel



Middle Channel

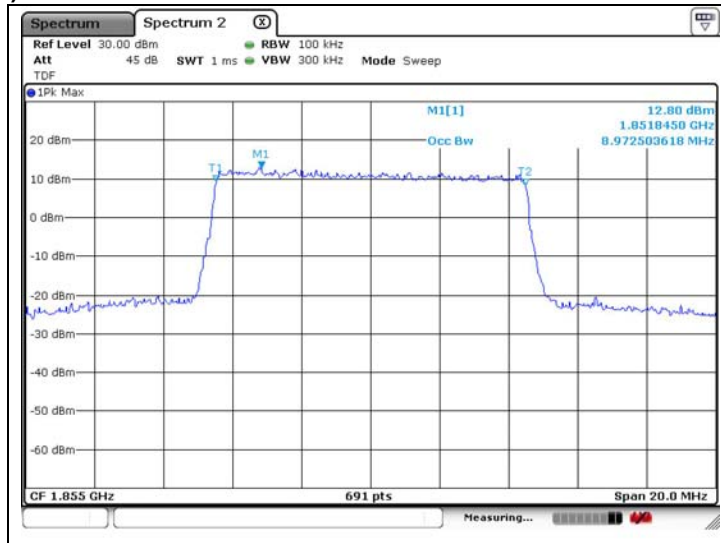


High Channel

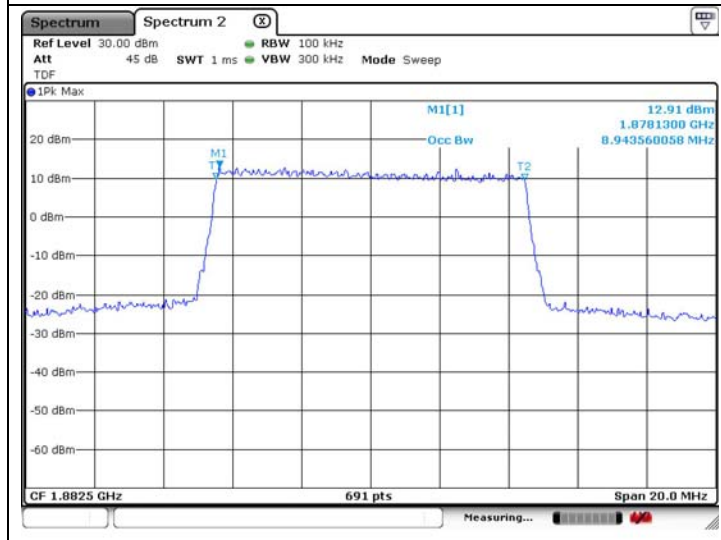


LTE band 25/2 (10 MHz – 16QAM)

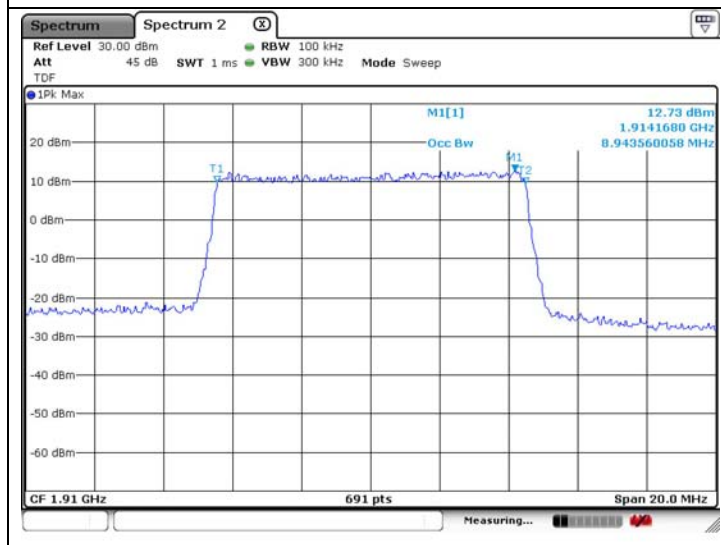
Low Channel



Middle Channel

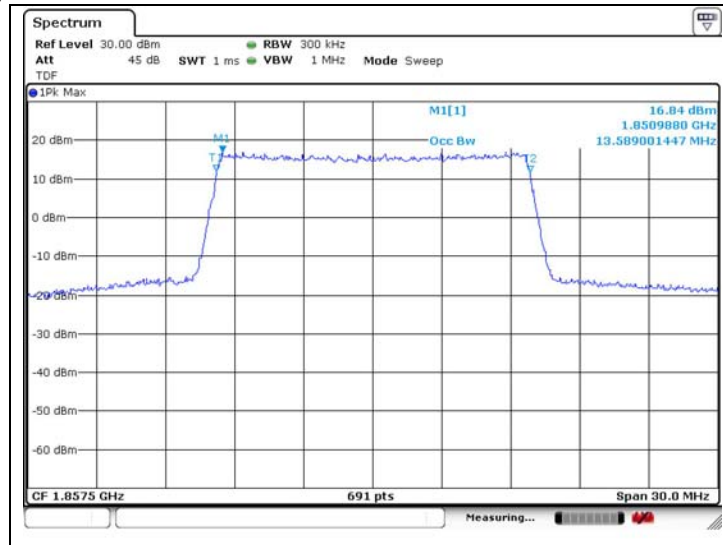


High Channel

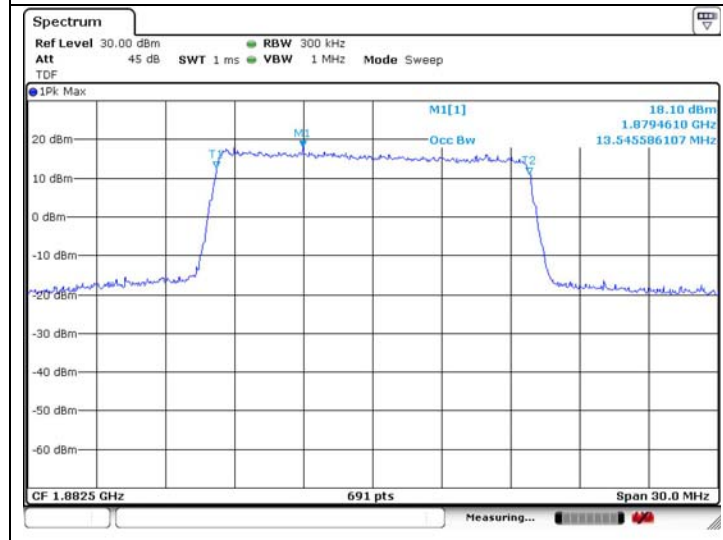


LTE band 25/2 (15 MHz – QPSK)

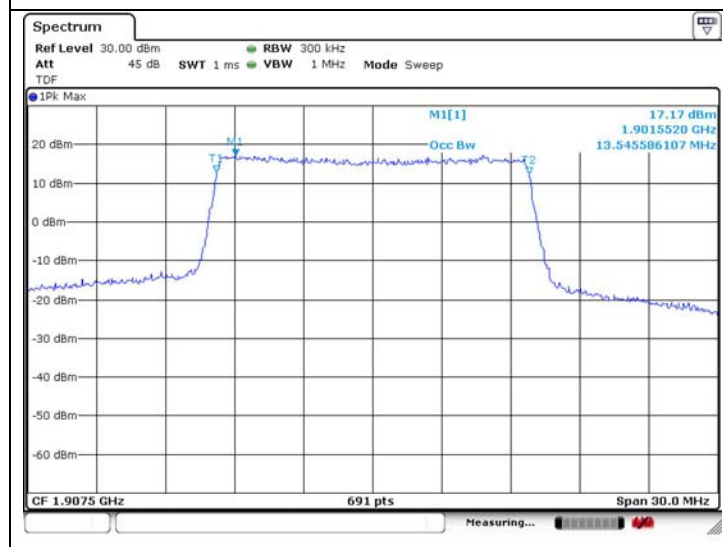
Low Channel



Middle Channel

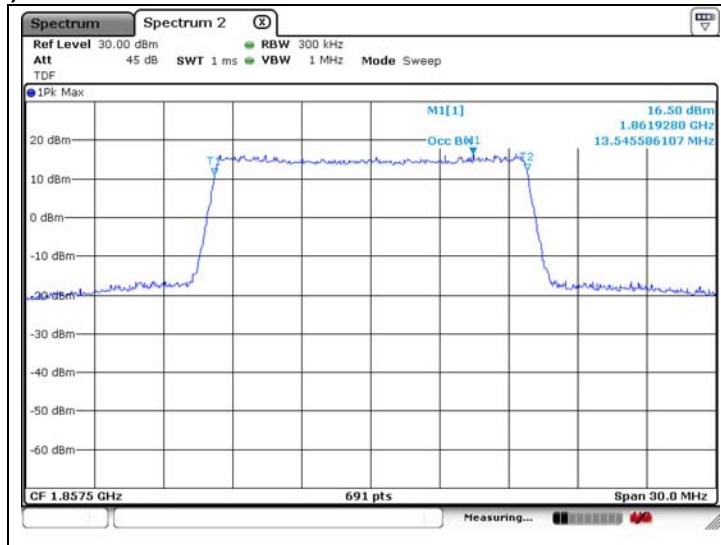


High Channel

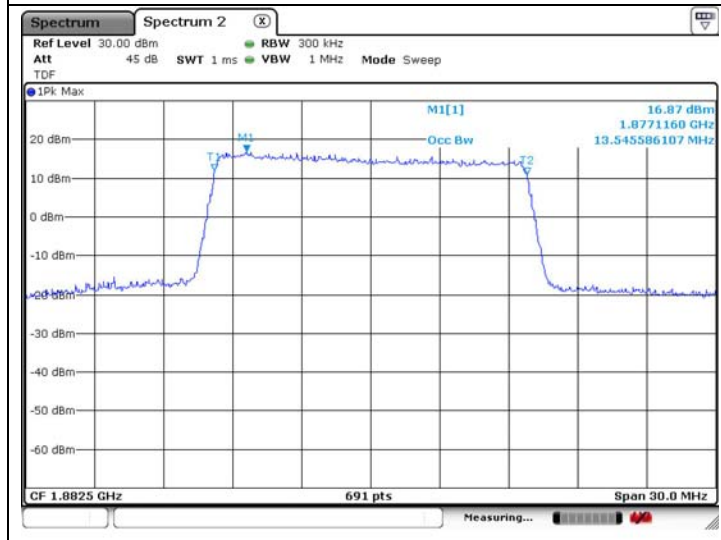


LTE band 25/2 (15 MHz – 16QAM)

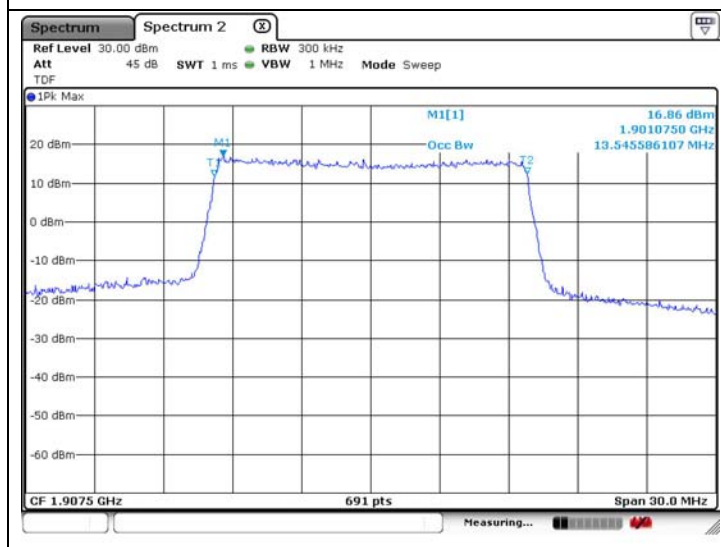
Low Channel



Middle Channel

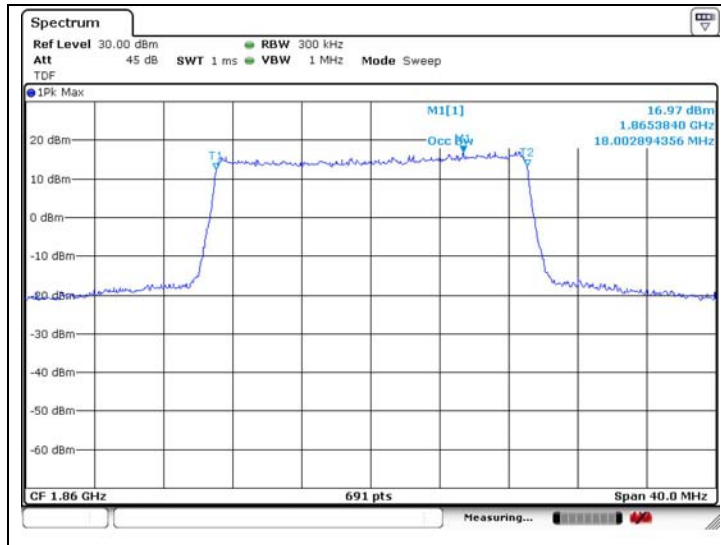


High Channel

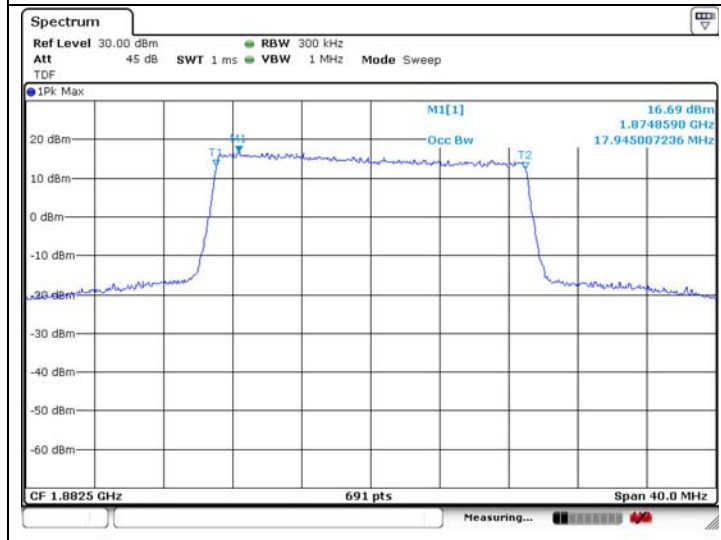


LTE band 25/2 (20 MHz – QPSK)

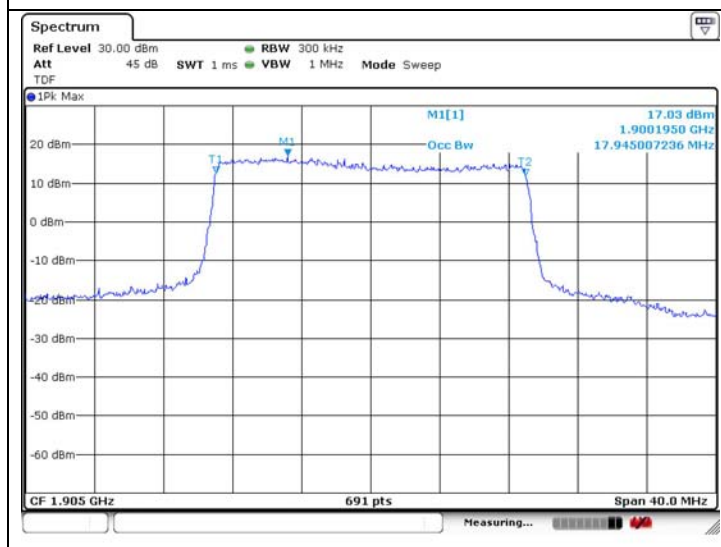
Low Channel



Middle Channel

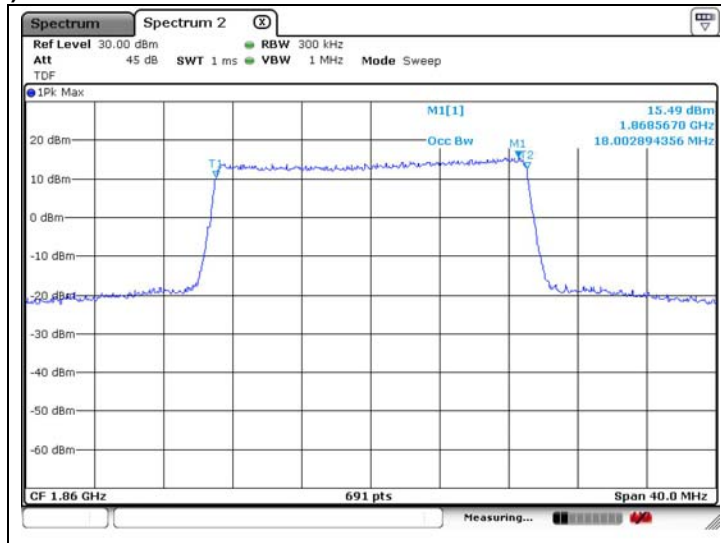


High Channel

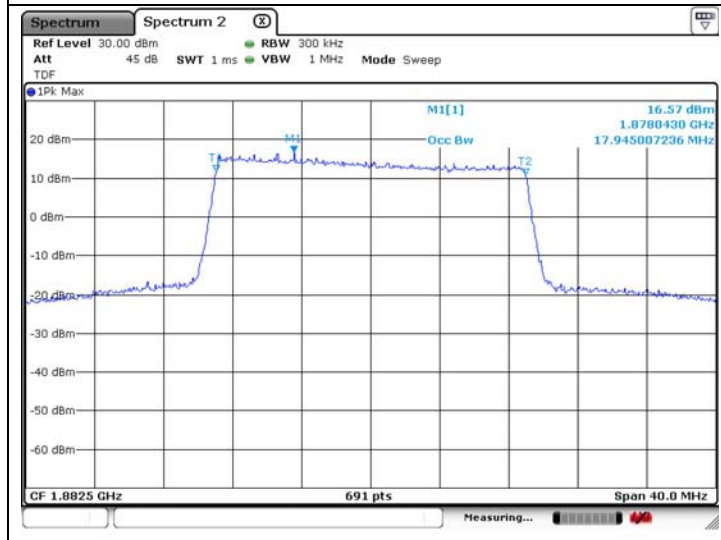


LTE band 25/2 (20 MHz – 16QAM)

Low Channel



Middle Channel



High Channel

