

TEST REPORT

of

FCC Part 2 Subpart J, Part 22 Subpart C/H,
Part 24 Subpart E and Part 27 Subpart C

FCC ID: XHG-R717V

Equipment Under Test : Mobile Hotspot
Model Name : R717V
Variant Model Name(s) : -
Applicant : Franklin Technology Inc.
Manufacturer : Franklin Technology Inc.
Date of Receipt : 2020.11.25
Date of Test(s) : 2020.11.30 ~ 2021.01.07
Date of Issue : 2021.01.12

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

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- 2) The SGS Korea is not responsible for the sampling, the results of this test report apply to the sample as received.
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Tested by:



Nancy Park

Technical
Manager:



Jungmin Yang

SGS Korea Co., Ltd. Gunpo Laboratory



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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

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1.2. Details of Applicant

Applicant : Franklin Technology Inc.
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 Contact Person : Lee, James
 Phone No. : +82 70 8228 6445

1.3. Details of Manufacturer

Company : Same as applicant
 Address : Same as applicant

1.4. Description of EUT

| | |
|-----------------------------|---|
| Kind of Product | Mobile Hotspot |
| Model Name | R717V |
| Power Supply | DC 3.8 V |
| Rated Power | LTE Band 2: 21.8 dB m LTE Band 4, 66: 21.5 dB m LTE Band 5: 23.0 dB m LTE Band 13: 22.5 dB m |
| 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 13: 777 MHz ~ 787 MHz LTE Band 66: 1 710 MHz ~ 1 780 MHz |
| Modulation Technique | QPSK, 16QAM |
| Antenna Type | FPCB antenna |
| Antenna Gain | 777 MHz ~ 787 MHz: 1.77 dB i 824 MHz ~ 849 MHz: 0.96 dB i 1 710 MHz ~ 1 780 MHz: 2.96 dB i 1 850 MHz ~ 1 910 MHz: 3.12 dB i |
| H/W Version | P2 |
| S/W Version | R717F21.VZ.2076 |

1.5. Test Equipment List

| Equipment | Manufacturer | Model | S/N | Cal. Date | Cal. Interval | Cal. Due |
|---------------------|-----------------------------|-----------------------------------|------------------------|---------------|---------------|---------------|
| Signal Generator | R&S | SMR40 | 100272 | Jun. 18, 2020 | Annual | Jun. 18, 2021 |
| Signal Generator | R&S | SMBV100A | 255834 | Jun. 03, 2020 | Annual | Jun. 03, 2021 |
| Spectrum Analyzer | R&S | FSV30 | 100768 | Mar. 04, 2020 | Annual | Mar. 04, 2021 |
| Spectrum Analyzer | Agilent | N9020A | MY53421758 | Sep. 04, 2020 | Annual | Sep. 04, 2021 |
| Mobile Test Unit | R&S | CMW500 | 144035 | Feb. 17, 2020 | Annual | Feb. 17, 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 | Nov. 06, 2020 | Annual | Nov. 06, 2021 |
| Low Pass Filter | Mini-Circuits | NLP-1200+ | V9500401023-2 | Jun. 01, 2020 | Annual | Jun. 01, 2021 |
| 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 | MY49030063 | Feb. 03, 2020 | Annual | Feb. 03, 2021 |
| Preamplifier | H.P. | 8447F | 2944A03909 | Aug. 06, 2020 | Annual | Aug. 06, 2021 |
| Preamplifier | R&S | SCU 18 | 10117 | Jun. 10, 2020 | Annual | Jun. 10, 2021 |
| Preamplifier | MITEQ Inc. | JS44-18004000-35-8P | 1546891 | May 08, 2020 | Annual | May 08, 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 | BBHA9170223 | Sep. 16, 2020 | Annual | Sep. 16, 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 x W x H (9.6 m x 6.4 m x 6.4 m) | N/A | N.C.R. | N/A | N.C.R. |
| Coaxial Cable | RFONE | MWX221-NMSNMS (4 m) | J1023142 | Dec. 01, 2020 | Semi-annual | Jun. 01, 2021 |
| Coaxial Cable | RFONE | PL520-NMNM-10M (10 m) | 20200324001 | Dec. 01, 2020 | Semi-annual | Jun. 01, 2021 |
| Coaxial Cable | Rosenberger | LA1-C006-1500 | 131014 01/20 | Aug. 21, 2020 | Semi-annual | Feb. 21, 2021 |
| Coaxial Cable | Rosenberger | LA1-C006-1500 | 131014 05/20 | Aug. 21, 2020 | Semi-annual | Feb. 21, 2021 |
| Coaxial Cable | Rosenberger | LA1-C006-1500 | 131014 10/20 | Aug. 21, 2020 | Semi-annual | Feb. 21, 2021 |

► **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 | | |
|--|---------------------------------------|-------------------|
| Section | Test Item(s) | Result |
| §22.913(a)(5) §24.232(c) §27.50(b)(10) §27.50(d)(4) | RF Radiated Output Power | Complied |
| §22.917(a) §24.238(a) §27.53(c)(2) §27.53(h)(1) | Spurious Radiated Emission | Complied |
| §2.1046 | Conducted Output Power | N/A ¹⁾ |
| §2.1049 | Occupied Bandwidth | Complied |
| §22.913(d) §24.232(d) §27.50(d)(5) | Peak-Average Ratio | Complied |
| §22.917(a) §24.238(a) §27.53(c)(2) §27.53(h)(1) | Spurious Emission at Antenna Terminal | Complied |
| §22.917(a) §24.238(a) §27.53(c)(2) §27.53(h)(1) | Band Edge | Complied |
| §2.1055 §22.355 §24.235 §27.54 | Frequency Stability | Complied |

Note;

1) Refer to SAR report.

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 (dB μ V) + Antenna factor (dB/m) + 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 4 (1 710 MHz ~ 1 755 MHz) is covered by LTE Band 66 (1 710 MHz ~ 1 780 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth. Therefore test data provided in this report covers LTE Band 4 as well as Band 66.

1.9. Worst Case Configuration and Mode

All testing was performed using QPSK and 16QAM modulations, except radiated spurious emissions, peak-average ratio, conducted spurious emissions and band-edge were tested only QPSK modulation as worst case. The worst-case is based on the conducted output power measurement investigation results.

The radiation test of the EUT was investigated in three orthogonal orientations X, Y, and Z, and the worst case data is reported.

1.10. 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 %.

1.11. Test Report Revision

| Revision | Report Number | Date of Issue | Description |
|----------|------------------------|---------------|--|
| 0 | F690501-RF-RTL001489 | 2020.12.18 | Initial |
| 1 | F690501-RF-RTL001489-1 | 2021.01.12 | Added the band edge test results of LTE Band 13 and retested Radiated test of 1 GHz above. |

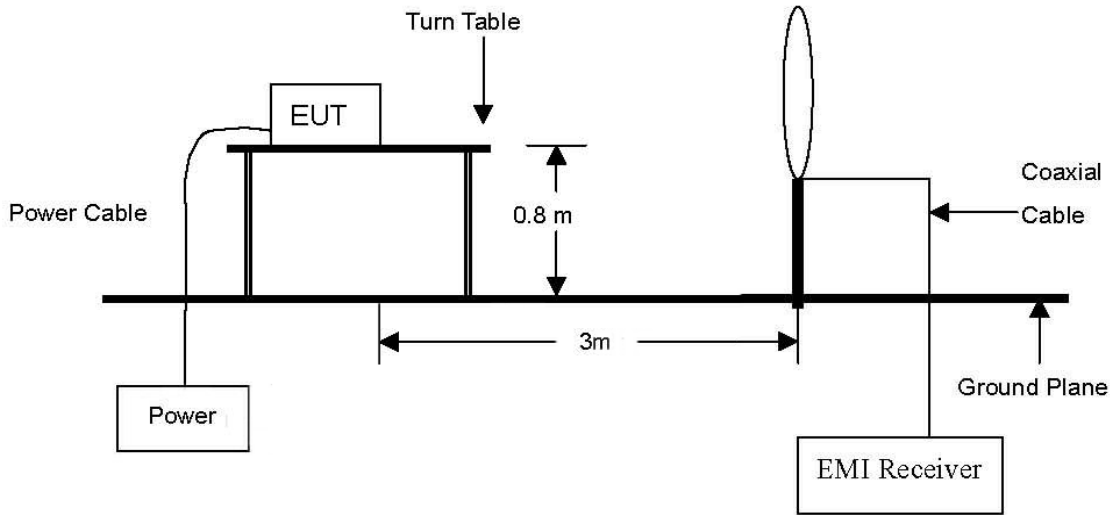
1.12. Emission Designator and Max Power

| Mode | Frequency Range (MHz) | Modulation | Emission Designator | E.R.P. / E.I.R.P. | | |
|---------------|-----------------------|---------------|---------------------|-------------------|---------------|-------|
| | | | | Max power (dB m) | Max power (W) | |
| LTE Band 2 | 1 850.7 ~ 1 909.3 | QPSK | 1M11G7D | 29.24 | 0.839 | |
| | | 16QAM | 1M10D7D | 28.54 | 0.714 | |
| | 1 851.5 ~ 1 908.5 | QPSK | 2M69G7D | 29.32 | 0.855 | |
| | | 16QAM | 2M69D7D | 28.61 | 0.726 | |
| | 1 852.5 ~ 1 907.5 | QPSK | 4M54G7D | 29.23 | 0.838 | |
| | | 16QAM | 4M50D7D | 27.88 | 0.614 | |
| | 1 855 ~ 1 905 | QPSK | 8M94G7D | 29.08 | 0.809 | |
| | | 16QAM | 8M94D7D | 28.18 | 0.658 | |
| | 1 857.5 ~ 1 902.5 | QPSK | 13M5G7D | 29.21 | 0.834 | |
| | | 16QAM | 13M5D7D | 28.09 | 0.644 | |
| | 1 860 ~ 1 900 | QPSK | 17M9G7D | 29.28 | 0.847 | |
| | | 16QAM | 17M9D7D | 28.45 | 0.700 | |
| | LTE Band 5 | 824.7 ~ 848.3 | QPSK | 1M10G7D | 25.89 | 0.388 |
| | | | 16QAM | 1M10D7D | 24.78 | 0.301 |
| 825.5 ~ 847.5 | | QPSK | 2M69G7D | 25.63 | 0.366 | |
| | | 16QAM | 2M68D7D | 24.65 | 0.292 | |
| 826.5 ~ 836.5 | | QPSK | 4M53G7D | 25.38 | 0.345 | |
| | | 16QAM | 4M52D7D | 24.36 | 0.273 | |
| 829 ~ 844 | | QPSK | 8M94G7D | 25.38 | 0.345 | |
| | | 16QAM | 8M97D7D | 24.61 | 0.289 | |
| LTE Band 13 | | 779.5 ~ 784.5 | QPSK | 4M53G7D | 26.34 | 0.431 |
| | | | 16QAM | 4M52D7D | 25.78 | 0.378 |
| | 782 | QPSK | 8M97G7D | 26.41 | 0.438 | |
| | | 16QAM | 8M94D7D | 25.34 | 0.342 | |
| LTE Band 66/4 | 1 710.7 ~ 1 779.3 | QPSK | 1M10G7D | 27.38 | 0.547 | |
| | | 16QAM | 1M10D7D | 26.66 | 0.463 | |
| | 1 711.5 ~ 1 778.5 | QPSK | 2M69G7D | 27.43 | 0.553 | |
| | | 16QAM | 2M68D7D | 26.86 | 0.485 | |
| | 1 712.5 ~ 1 777.5 | QPSK | 4M52G7D | 27.36 | 0.545 | |
| | | 16QAM | 4M52D7D | 26.75 | 0.473 | |
| | 1 715 ~ 1 775 | QPSK | 8M94G7D | 27.78 | 0.600 | |
| | | 16QAM | 8M92D7D | 27.05 | 0.507 | |
| | 1 717.5 ~ 1 772.5 | QPSK | 13M5G7D | 27.70 | 0.589 | |
| | | 16QAM | 13M5D7D | 26.59 | 0.456 | |
| | 1 720 ~ 1 770 | QPSK | 17M9G7D | 28.37 | 0.687 | |
| | | 16QAM | 17M8D7D | 27.66 | 0.583 | |

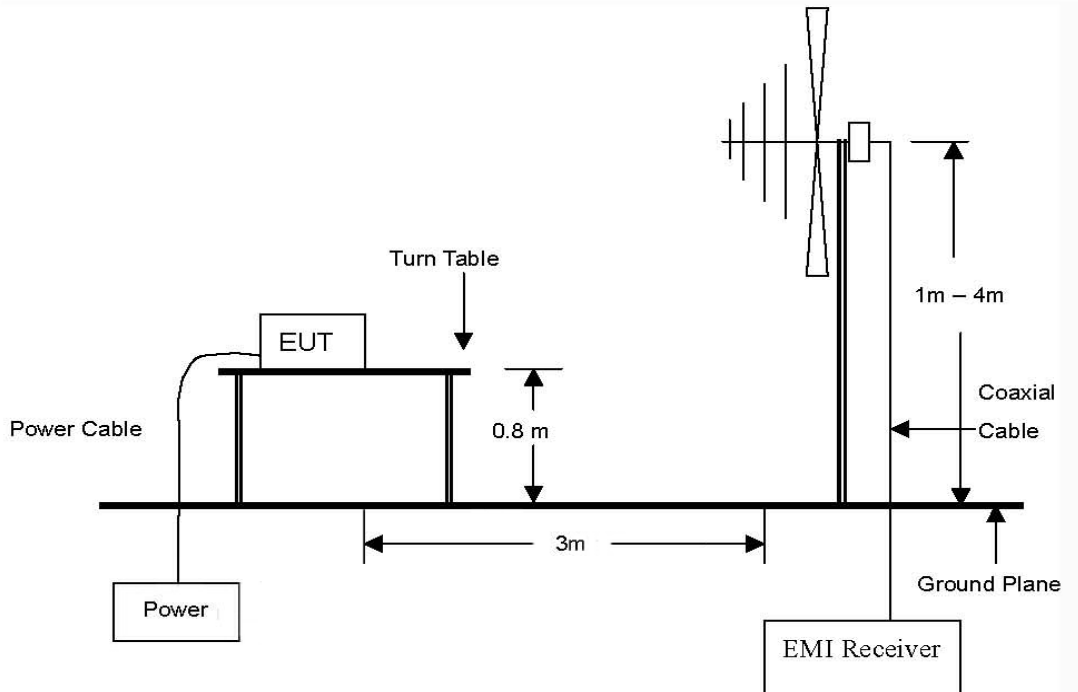
2. RF Radiated Output Power & Spurious Radiated Emission

2.1. Test setup

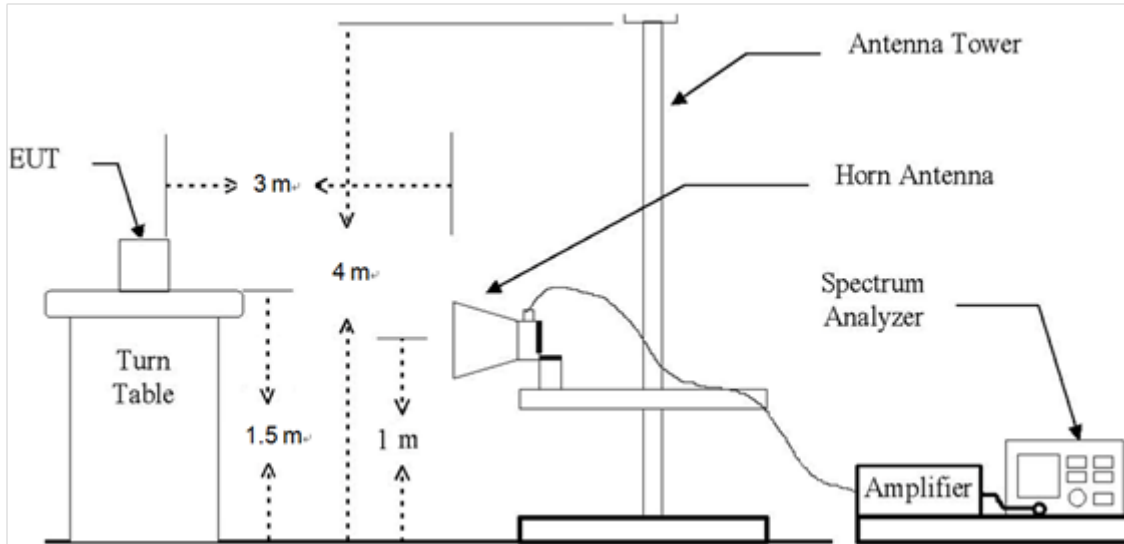
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz.



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



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to 20 GHz Emissions.



2.2. Limit

2.2.1. Limit of Radiated Output Power

- §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(b)(10), Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands 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.

2.2.2. Limit of Spurious Radiated Emission

- §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(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.

2.3. Test Procedure: Based on ANSI/TIA 603E: 2016 and ANSI C63.26-2015, KDB 971168 D01 Power Meas License Digital Systems v03r01.

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 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.

LTE band 2 (1.4 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 850.70 | QPSK | 89.89 | H | 27.51 | 5.59 | 122.99 | -95.26 | 27.73 | 0.593 |
| 1 850.70 | | 89.06 | V | 27.51 | 5.59 | 122.16 | -95.26 | 26.90 | 0.490 |
| 1 880.00 | | 91.19 | H | 27.74 | 5.57 | 124.50 | -95.26 | 29.24 | 0.839 |
| 1 880.00 | | 89.21 | V | 27.74 | 5.57 | 122.52 | -95.26 | 27.26 | 0.532 |
| 1 909.30 | | 87.98 | H | 27.83 | 5.41 | 121.22 | -95.26 | 25.96 | 0.394 |
| 1 909.30 | | 87.59 | V | 27.83 | 5.41 | 120.83 | -95.26 | 25.57 | 0.361 |
| 1 850.70 | 16QAM | 88.85 | H | 27.51 | 5.59 | 121.95 | -95.26 | 26.69 | 0.467 |
| 1 850.70 | | 87.96 | V | 27.51 | 5.59 | 121.06 | -95.26 | 25.80 | 0.380 |
| 1 880.00 | | 90.49 | H | 27.74 | 5.57 | 123.80 | -95.26 | 28.54 | 0.714 |
| 1 880.00 | | 87.68 | V | 27.74 | 5.57 | 120.99 | -95.26 | 25.73 | 0.374 |
| 1 909.30 | | 88.12 | H | 27.83 | 5.41 | 121.36 | -95.26 | 26.10 | 0.407 |
| 1 909.30 | | 86.45 | V | 27.83 | 5.41 | 119.69 | -95.26 | 24.43 | 0.277 |

* 1 RB size / 0 Offset

LTE band 2 (3 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 851.50 | QPSK | 89.72 | H | 27.51 | 5.59 | 122.82 | -95.26 | 27.56 | 0.570 |
| 1 851.50 | | 88.29 | V | 27.51 | 5.59 | 121.39 | -95.26 | 26.13 | 0.410 |
| 1 880.00 | | 91.27 | H | 27.74 | 5.57 | 124.58 | -95.26 | 29.32 | 0.855 |
| 1 880.00 | | 89.08 | V | 27.74 | 5.57 | 122.39 | -95.26 | 27.13 | 0.516 |
| 1 908.50 | | 88.48 | H | 27.83 | 5.41 | 121.72 | -95.26 | 26.46 | 0.443 |
| 1 908.50 | | 87.52 | V | 27.83 | 5.41 | 120.76 | -95.26 | 25.50 | 0.355 |
| 1 851.50 | 16QAM | 88.83 | H | 27.51 | 5.59 | 121.93 | -95.26 | 26.67 | 0.465 |
| 1 851.50 | | 87.79 | V | 27.51 | 5.59 | 120.89 | -95.26 | 25.63 | 0.366 |
| 1 880.00 | | 90.56 | H | 27.74 | 5.57 | 123.87 | -95.26 | 28.61 | 0.726 |
| 1 880.00 | | 88.40 | V | 27.74 | 5.57 | 121.71 | -95.26 | 26.45 | 0.442 |
| 1 908.50 | | 87.61 | H | 27.83 | 5.41 | 120.85 | -95.26 | 25.59 | 0.362 |
| 1 908.50 | | 86.60 | V | 27.83 | 5.41 | 119.84 | -95.26 | 24.58 | 0.287 |

* 1 RB size / 0 Offset

LTE band 2 (5 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 852.50 | QPSK | 89.64 | H | 27.52 | 5.59 | 122.75 | -95.26 | 27.49 | 0.561 |
| 1 852.50 | | 88.62 | V | 27.52 | 5.59 | 121.73 | -95.26 | 26.47 | 0.444 |
| 1 880.00 | | 91.18 | H | 27.74 | 5.57 | 124.49 | -95.26 | 29.23 | 0.838 |
| 1 880.00 | | 88.89 | V | 27.74 | 5.57 | 122.20 | -95.26 | 26.94 | 0.494 |
| 1 907.50 | | 88.40 | H | 27.84 | 5.41 | 121.65 | -95.26 | 26.39 | 0.436 |
| 1 907.50 | | 87.79 | V | 27.84 | 5.41 | 121.04 | -95.26 | 25.78 | 0.378 |
| 1 852.50 | 16QAM | 88.55 | H | 27.52 | 5.59 | 121.66 | -95.26 | 26.40 | 0.437 |
| 1 852.50 | | 87.50 | V | 27.52 | 5.59 | 120.61 | -95.26 | 25.35 | 0.343 |
| 1 880.00 | | 89.83 | H | 27.74 | 5.57 | 123.14 | -95.26 | 27.88 | 0.614 |
| 1 880.00 | | 88.10 | V | 27.74 | 5.57 | 121.41 | -95.26 | 26.15 | 0.412 |
| 1 907.50 | | 87.95 | H | 27.84 | 5.41 | 121.20 | -95.26 | 25.94 | 0.393 |
| 1 907.50 | | 87.10 | V | 27.84 | 5.41 | 120.35 | -95.26 | 25.09 | 0.323 |

* 1 RB size / 0 Offset

LTE band 2 (10 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 855.00 | QPSK | 89.76 | H | 27.54 | 5.59 | 122.89 | -95.26 | 27.63 | 0.579 |
| 1 855.00 | | 88.34 | V | 27.54 | 5.59 | 121.47 | -95.26 | 26.21 | 0.418 |
| 1 880.00 | | 91.03 | H | 27.74 | 5.57 | 124.34 | -95.26 | 29.08 | 0.809 |
| 1 880.00 | | 88.97 | V | 27.74 | 5.57 | 122.28 | -95.26 | 27.02 | 0.504 |
| 1 905.00 | | 89.38 | H | 27.86 | 5.40 | 122.64 | -95.26 | 27.38 | 0.547 |
| 1 905.00 | | 88.43 | V | 27.86 | 5.40 | 121.69 | -95.26 | 26.43 | 0.440 |
| 1 855.00 | 16QAM | 88.89 | H | 27.54 | 5.59 | 122.02 | -95.26 | 26.76 | 0.474 |
| 1 855.00 | | 87.42 | V | 27.54 | 5.59 | 120.55 | -95.26 | 25.29 | 0.338 |
| 1 880.00 | | 90.13 | H | 27.74 | 5.57 | 123.44 | -95.26 | 28.18 | 0.658 |
| 1 880.00 | | 88.02 | V | 27.74 | 5.57 | 121.33 | -95.26 | 26.07 | 0.405 |
| 1 905.00 | | 88.18 | H | 27.86 | 5.40 | 121.44 | -95.26 | 26.18 | 0.415 |
| 1 905.00 | | 87.32 | V | 27.86 | 5.40 | 120.58 | -95.26 | 25.32 | 0.340 |

* 1 RB size / 0 Offset

LTE band 2 (15 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 857.50 | QPSK | 89.65 | H | 27.56 | 5.60 | 122.81 | -95.26 | 27.55 | 0.569 |
| 1 857.50 | | 88.65 | V | 27.56 | 5.60 | 121.81 | -95.26 | 26.55 | 0.452 |
| 1 880.00 | | 91.16 | H | 27.74 | 5.57 | 124.47 | -95.26 | 29.21 | 0.834 |
| 1 880.00 | | 88.65 | V | 27.74 | 5.57 | 121.96 | -95.26 | 26.70 | 0.468 |
| 1 902.50 | | 90.17 | H | 27.88 | 5.40 | 123.45 | -95.26 | 28.19 | 0.659 |
| 1 902.50 | | 89.05 | V | 27.88 | 5.40 | 122.33 | -95.26 | 27.07 | 0.509 |
| 1 857.50 | 16QAM | 88.53 | H | 27.56 | 5.60 | 121.69 | -95.26 | 26.43 | 0.440 |
| 1 857.50 | | 87.31 | V | 27.56 | 5.60 | 120.47 | -95.26 | 25.21 | 0.332 |
| 1 880.00 | | 90.04 | H | 27.74 | 5.57 | 123.35 | -95.26 | 28.09 | 0.644 |
| 1 880.00 | | 87.43 | V | 27.74 | 5.57 | 120.74 | -95.26 | 25.48 | 0.353 |
| 1 902.50 | | 89.27 | H | 27.88 | 5.40 | 122.55 | -95.26 | 27.29 | 0.536 |
| 1 902.50 | | 88.15 | V | 27.88 | 5.40 | 121.43 | -95.26 | 26.17 | 0.414 |

* 1 RB size / 0 Offset

LTE band 2 (20 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 860.00 | QPSK | 89.83 | H | 27.58 | 5.60 | 123.01 | -95.26 | 27.75 | 0.596 |
| 1 860.00 | | 88.51 | V | 27.58 | 5.60 | 121.69 | -95.26 | 26.43 | 0.440 |
| 1 880.00 | | 90.76 | H | 27.74 | 5.57 | 124.07 | -95.26 | 28.81 | 0.760 |
| 1 880.00 | | 88.14 | V | 27.74 | 5.57 | 121.45 | -95.26 | 26.19 | 0.416 |
| 1 900.00 | | 91.24 | H | 27.90 | 5.40 | 124.54 | -95.26 | 29.28 | 0.847 |
| 1 900.00 | | 90.12 | V | 27.90 | 5.40 | 123.42 | -95.26 | 28.16 | 0.655 |
| 1 860.00 | 16QAM | 88.99 | H | 27.58 | 5.60 | 122.17 | -95.26 | 26.91 | 0.491 |
| 1 860.00 | | 87.62 | V | 27.58 | 5.60 | 120.80 | -95.26 | 25.54 | 0.358 |
| 1 880.00 | | 89.83 | H | 27.74 | 5.57 | 123.14 | -95.26 | 27.88 | 0.614 |
| 1 880.00 | | 87.26 | V | 27.74 | 5.57 | 120.57 | -95.26 | 25.31 | 0.340 |
| 1 900.00 | | 90.41 | H | 27.90 | 5.40 | 123.71 | -95.26 | 28.45 | 0.700 |
| 1 900.00 | | 89.24 | V | 27.90 | 5.40 | 122.54 | -95.26 | 27.28 | 0.535 |

* 1 RB size / 0 Offset

LTE band 5 (1.4 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 824.70 | QPSK | 91.71 | H | 26.89 | 3.59 | 122.19 | -97.41 | 24.78 | 0.301 |
| 824.70 | | 88.11 | V | 26.89 | 3.59 | 118.59 | -97.41 | 21.18 | 0.131 |
| 836.50 | | 91.47 | H | 27.30 | 3.60 | 122.37 | -97.41 | 24.96 | 0.313 |
| 836.50 | | 86.55 | V | 27.30 | 3.60 | 117.45 | -97.41 | 20.04 | 0.101 |
| 848.30 | | 92.16 | H | 27.43 | 3.71 | 123.30 | -97.41 | 25.89 | 0.388 |
| 848.30 | | 86.74 | V | 27.43 | 3.71 | 117.88 | -97.41 | 20.47 | 0.111 |
| 824.70 | 16QAM | 90.66 | H | 26.89 | 3.59 | 121.14 | -97.41 | 23.73 | 0.236 |
| 824.70 | | 87.82 | V | 26.89 | 3.59 | 118.30 | -97.41 | 20.89 | 0.123 |
| 836.50 | | 90.88 | H | 27.30 | 3.60 | 121.78 | -97.41 | 24.37 | 0.274 |
| 836.50 | | 85.96 | V | 27.30 | 3.60 | 116.86 | -97.41 | 19.45 | 0.088 |
| 848.30 | | 91.05 | H | 27.43 | 3.71 | 122.19 | -97.41 | 24.78 | 0.301 |
| 848.30 | | 85.75 | V | 27.43 | 3.71 | 116.89 | -97.41 | 19.48 | 0.089 |

* 1 RB size / 0 Offset

LTE band 5 (3 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 825.50 | QPSK | 91.94 | H | 26.92 | 3.59 | 122.45 | -97.41 | 25.04 | 0.319 |
| 825.50 | | 88.21 | V | 26.92 | 3.59 | 118.72 | -97.41 | 21.31 | 0.135 |
| 836.50 | | 91.40 | H | 27.30 | 3.60 | 122.30 | -97.41 | 24.89 | 0.308 |
| 836.50 | | 86.72 | V | 27.30 | 3.60 | 117.62 | -97.41 | 20.21 | 0.105 |
| 847.50 | | 91.94 | H | 27.40 | 3.70 | 123.04 | -97.41 | 25.63 | 0.366 |
| 847.50 | | 86.54 | V | 27.40 | 3.70 | 117.64 | -97.41 | 20.23 | 0.105 |
| 825.50 | 16QAM | 90.95 | H | 26.92 | 3.59 | 121.46 | -97.41 | 24.05 | 0.254 |
| 825.50 | | 87.90 | V | 26.92 | 3.59 | 118.41 | -97.41 | 21.00 | 0.126 |
| 836.50 | | 90.44 | H | 27.30 | 3.60 | 121.34 | -97.41 | 23.93 | 0.247 |
| 836.50 | | 85.81 | V | 27.30 | 3.60 | 116.71 | -97.41 | 19.30 | 0.085 |
| 847.50 | | 90.96 | H | 27.40 | 3.70 | 122.06 | -97.41 | 24.65 | 0.292 |
| 847.50 | | 85.88 | V | 27.40 | 3.70 | 116.98 | -97.41 | 19.57 | 0.091 |

*1 RB size / 0 Offset

LTE band 5 (5 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 826.50 | QPSK | 91.69 | H | 26.96 | 3.59 | 122.24 | -97.41 | 24.83 | 0.304 |
| 826.50 | | 88.06 | V | 26.96 | 3.59 | 118.61 | -97.41 | 21.20 | 0.132 |
| 836.50 | | 91.15 | H | 27.30 | 3.60 | 122.05 | -97.41 | 24.64 | 0.291 |
| 836.50 | | 86.28 | V | 27.30 | 3.60 | 117.18 | -97.41 | 19.77 | 0.095 |
| 846.50 | | 91.74 | H | 27.36 | 3.69 | 122.79 | -97.41 | 25.38 | 0.345 |
| 846.50 | | 86.05 | V | 27.36 | 3.69 | 117.10 | -97.41 | 19.69 | 0.093 |
| 826.50 | 16QAM | 90.90 | H | 26.96 | 3.59 | 121.45 | -97.41 | 24.04 | 0.254 |
| 826.50 | | 87.23 | V | 26.96 | 3.59 | 117.78 | -97.41 | 20.37 | 0.109 |
| 836.50 | | 90.19 | H | 27.30 | 3.60 | 121.09 | -97.41 | 23.68 | 0.233 |
| 836.50 | | 85.29 | V | 27.30 | 3.60 | 116.19 | -97.41 | 18.78 | 0.076 |
| 846.50 | | 90.72 | H | 27.36 | 3.69 | 121.77 | -97.41 | 24.36 | 0.273 |
| 846.50 | | 85.62 | V | 27.36 | 3.69 | 116.67 | -97.41 | 19.26 | 0.084 |

* 1 RB size / 0 Offset

LTE band 5 (10 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 829.00 | QPSK | 91.74 | H | 27.06 | 3.60 | 122.40 | -97.41 | 24.99 | 0.316 |
| 829.00 | | 88.26 | V | 27.06 | 3.60 | 118.92 | -97.41 | 21.51 | 0.142 |
| 836.50 | | 91.71 | H | 27.30 | 3.60 | 122.61 | -97.41 | 25.20 | 0.331 |
| 836.50 | | 86.63 | V | 27.30 | 3.60 | 117.53 | -97.41 | 20.12 | 0.103 |
| 844.00 | | 91.84 | H | 27.30 | 3.65 | 122.79 | -97.41 | 25.38 | 0.345 |
| 844.00 | | 86.83 | V | 27.30 | 3.65 | 117.78 | -97.41 | 20.37 | 0.109 |
| 829.00 | 16QAM | 91.09 | H | 27.06 | 3.60 | 121.75 | -97.41 | 24.34 | 0.272 |
| 829.00 | | 87.47 | V | 27.06 | 3.60 | 118.13 | -97.41 | 20.72 | 0.118 |
| 836.50 | | 90.77 | H | 27.30 | 3.60 | 121.67 | -97.41 | 24.26 | 0.267 |
| 836.50 | | 85.82 | V | 27.30 | 3.60 | 116.72 | -97.41 | 19.31 | 0.085 |
| 844.00 | | 91.07 | H | 27.30 | 3.65 | 122.02 | -97.41 | 24.61 | 0.289 |
| 844.00 | | 86.10 | V | 27.30 | 3.65 | 117.05 | -97.41 | 19.64 | 0.092 |

* 1 RB size / 0 Offset

LTE band 13 (5 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 779.50 | QPSK | 93.56 | H | 26.61 | 3.45 | 123.62 | -97.41 | 26.21 | 0.418 |
| 779.50 | | 88.92 | V | 26.61 | 3.45 | 118.98 | -97.41 | 21.57 | 0.144 |
| 782.00 | | 93.66 | H | 26.60 | 3.45 | 123.71 | -97.41 | 26.30 | 0.427 |
| 782.00 | | 89.14 | V | 26.60 | 3.45 | 119.19 | -97.41 | 21.78 | 0.151 |
| 784.50 | | 93.69 | H | 26.60 | 3.46 | 123.75 | -97.41 | 26.34 | 0.431 |
| 784.50 | | 88.76 | V | 26.60 | 3.46 | 118.82 | -97.41 | 21.41 | 0.138 |
| 779.50 | 16QAM | 92.25 | H | 26.61 | 3.45 | 122.31 | -97.41 | 24.90 | 0.309 |
| 779.50 | | 87.91 | V | 26.61 | 3.45 | 117.97 | -97.41 | 20.56 | 0.114 |
| 782.00 | | 92.74 | H | 26.60 | 3.45 | 122.79 | -97.41 | 25.38 | 0.345 |
| 782.00 | | 88.31 | V | 26.60 | 3.45 | 118.36 | -97.41 | 20.95 | 0.124 |
| 784.50 | | 93.13 | H | 26.60 | 3.46 | 123.19 | -97.41 | 25.78 | 0.378 |
| 784.50 | | 87.72 | V | 26.60 | 3.46 | 117.78 | -97.41 | 20.37 | 0.109 |

* 1 RB size / 0 Offset

LTE band 13 (10 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|--------|-------|
| | | | | | | | | (dB m) | (W) |
| 782.00 | QPSK | 93.77 | H | 26.60 | 3.45 | 123.82 | -97.41 | 26.41 | 0.438 |
| 782.00 | | 89.35 | V | 26.60 | 3.45 | 119.40 | -97.41 | 21.99 | 0.158 |
| 782.00 | 16QAM | 92.70 | H | 26.60 | 3.45 | 122.75 | -97.41 | 25.34 | 0.342 |
| 782.00 | | 88.51 | V | 26.60 | 3.45 | 118.56 | -97.41 | 21.15 | 0.130 |

* 1 RB size / 0 Offset

LTE band 66/4 (1.4 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 710.70 | QPSK | 88.71 | H | 26.96 | 5.27 | 120.94 | -95.26 | 25.68 | 0.370 |
| 1 710.70 | | 87.71 | V | 26.96 | 5.27 | 119.94 | -95.26 | 24.68 | 0.294 |
| 1 745.00 | | 90.64 | H | 26.82 | 5.18 | 122.64 | -95.26 | 27.38 | 0.547 |
| 1 745.00 | | 90.18 | V | 26.82 | 5.18 | 122.18 | -95.26 | 26.92 | 0.492 |
| 1 779.30 | | 88.30 | H | 26.80 | 5.26 | 120.36 | -95.26 | 25.10 | 0.324 |
| 1 779.30 | | 90.31 | V | 26.80 | 5.26 | 122.37 | -95.26 | 27.11 | 0.514 |
| 1 710.70 | 16QAM | 88.23 | H | 26.96 | 5.27 | 120.46 | -95.26 | 25.20 | 0.331 |
| 1 710.70 | | 86.05 | V | 26.96 | 5.27 | 118.28 | -95.26 | 23.02 | 0.200 |
| 1 745.00 | | 89.92 | H | 26.82 | 5.18 | 121.92 | -95.26 | 26.66 | 0.463 |
| 1 745.00 | | 89.63 | V | 26.82 | 5.18 | 121.63 | -95.26 | 26.37 | 0.434 |
| 1 779.30 | | 87.72 | H | 26.80 | 5.26 | 119.78 | -95.26 | 24.52 | 0.283 |
| 1 779.30 | | 89.28 | V | 26.80 | 5.26 | 121.34 | -95.26 | 26.08 | 0.406 |

* 1 RB size / 0 Offset

LTE band 66/4 (3 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 711.50 | QPSK | 88.85 | H | 26.95 | 5.26 | 121.06 | -95.26 | 25.80 | 0.380 |
| 1 711.50 | | 87.71 | V | 26.95 | 5.26 | 119.92 | -95.26 | 24.66 | 0.292 |
| 1 745.00 | | 90.69 | H | 26.82 | 5.18 | 122.69 | -95.26 | 27.43 | 0.553 |
| 1 745.00 | | 90.10 | V | 26.82 | 5.18 | 122.10 | -95.26 | 26.84 | 0.483 |
| 1 778.50 | | 88.67 | H | 26.80 | 5.25 | 120.72 | -95.26 | 25.46 | 0.352 |
| 1 778.50 | | 90.32 | V | 26.80 | 5.25 | 122.37 | -95.26 | 27.11 | 0.514 |
| 1 711.50 | 16QAM | 87.88 | H | 26.95 | 5.26 | 120.09 | -95.26 | 24.83 | 0.304 |
| 1 711.50 | | 86.83 | V | 26.95 | 5.26 | 119.04 | -95.26 | 23.78 | 0.239 |
| 1 745.00 | | 90.12 | H | 26.82 | 5.18 | 122.12 | -95.26 | 26.86 | 0.485 |
| 1 745.00 | | 89.31 | V | 26.82 | 5.18 | 121.31 | -95.26 | 26.05 | 0.403 |
| 1 778.50 | | 87.50 | H | 26.80 | 5.25 | 119.55 | -95.26 | 24.29 | 0.269 |
| 1 778.50 | | 89.43 | V | 26.80 | 5.25 | 121.48 | -95.26 | 26.22 | 0.419 |

* 1 RB size / 0 Offset

LTE band 66/4 (5 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 712.50 | QPSK | 88.67 | H | 26.95 | 5.26 | 120.88 | -95.26 | 25.62 | 0.365 |
| 1 712.50 | | 87.38 | V | 26.95 | 5.26 | 119.59 | -95.26 | 24.33 | 0.271 |
| 1 745.00 | | 90.01 | H | 26.82 | 5.18 | 122.01 | -95.26 | 26.75 | 0.473 |
| 1 745.00 | | 90.14 | V | 26.82 | 5.18 | 122.14 | -95.26 | 26.88 | 0.488 |
| 1 777.50 | | 88.96 | H | 26.80 | 5.25 | 121.01 | -95.26 | 25.75 | 0.376 |
| 1 777.50 | | 90.57 | V | 26.80 | 5.25 | 122.62 | -95.26 | 27.36 | 0.545 |
| 1 712.50 | 16QAM | 87.38 | H | 26.95 | 5.26 | 119.59 | -95.26 | 24.33 | 0.271 |
| 1 712.50 | | 86.01 | V | 26.95 | 5.26 | 118.22 | -95.26 | 22.96 | 0.198 |
| 1 745.00 | | 89.75 | H | 26.82 | 5.18 | 121.75 | -95.26 | 26.49 | 0.446 |
| 1 745.00 | | 89.26 | V | 26.82 | 5.18 | 121.26 | -95.26 | 26.00 | 0.398 |
| 1 777.50 | | 87.73 | H | 26.80 | 5.25 | 119.78 | -95.26 | 24.52 | 0.283 |
| 1 777.50 | | 89.96 | V | 26.80 | 5.25 | 122.01 | -95.26 | 26.75 | 0.473 |

* 1 RB size / 0 Offset

LTE band 66/4 (10 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 715.00 | QPSK | 88.89 | H | 26.94 | 5.24 | 121.07 | -95.26 | 25.81 | 0.381 |
| 1 715.00 | | 87.52 | V | 26.94 | 5.24 | 119.70 | -95.26 | 24.44 | 0.278 |
| 1 745.00 | | 90.79 | H | 26.82 | 5.18 | 122.79 | -95.26 | 27.53 | 0.566 |
| 1 745.00 | | 90.01 | V | 26.82 | 5.18 | 122.01 | -95.26 | 26.75 | 0.473 |
| 1 775.00 | | 89.01 | H | 26.80 | 5.24 | 121.05 | -95.26 | 25.79 | 0.379 |
| 1 775.00 | | 91.00 | V | 26.80 | 5.24 | 123.04 | -95.26 | 27.78 | 0.600 |
| 1 715.00 | 16QAM | 88.01 | H | 26.94 | 5.24 | 120.19 | -95.26 | 24.93 | 0.311 |
| 1 715.00 | | 86.76 | V | 26.94 | 5.24 | 118.94 | -95.26 | 23.68 | 0.233 |
| 1 745.00 | | 90.11 | H | 26.82 | 5.18 | 122.11 | -95.26 | 26.85 | 0.484 |
| 1 745.00 | | 89.23 | V | 26.82 | 5.18 | 121.23 | -95.26 | 25.97 | 0.395 |
| 1 775.00 | | 88.31 | H | 26.80 | 5.24 | 120.35 | -95.26 | 25.09 | 0.323 |
| 1 775.00 | | 90.27 | V | 26.80 | 5.24 | 122.31 | -95.26 | 27.05 | 0.507 |

* 1 RB size / 0 Offset

LTE band 66/4 (15 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 717.50 | QPSK | 88.99 | H | 26.93 | 5.22 | 121.14 | -95.26 | 25.88 | 0.387 |
| 1 717.50 | | 87.47 | V | 26.93 | 5.22 | 119.62 | -95.26 | 24.36 | 0.273 |
| 1 745.00 | | 90.48 | H | 26.82 | 5.18 | 122.48 | -95.26 | 27.22 | 0.527 |
| 1 745.00 | | 90.33 | V | 26.82 | 5.18 | 122.33 | -95.26 | 27.07 | 0.509 |
| 1 772.50 | | 88.98 | H | 26.80 | 5.24 | 121.02 | -95.26 | 25.76 | 0.377 |
| 1 772.50 | | 90.92 | V | 26.80 | 5.24 | 122.96 | -95.26 | 27.70 | 0.589 |
| 1 717.50 | 16QAM | 88.13 | H | 26.93 | 5.22 | 120.28 | -95.26 | 25.02 | 0.318 |
| 1 717.50 | | 86.86 | V | 26.93 | 5.22 | 119.01 | -95.26 | 23.75 | 0.237 |
| 1 745.00 | | 89.51 | H | 26.82 | 5.18 | 121.51 | -95.26 | 26.25 | 0.422 |
| 1 745.00 | | 89.43 | V | 26.82 | 5.18 | 121.43 | -95.26 | 26.17 | 0.414 |
| 1 772.50 | | 88.02 | H | 26.80 | 5.24 | 120.06 | -95.26 | 24.80 | 0.302 |
| 1 772.50 | | 89.81 | V | 26.80 | 5.24 | 121.85 | -95.26 | 26.59 | 0.456 |

* 1 RB size / 0 Offset

LTE band 66/4 (20 MHz)

| Frequency (MHz) | Mode | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. | |
|-----------------|-------|-----------------------------|-----------|-----------|---------|------------------|---------|----------|-------|
| | | | | | | | | (dB m) | (W) |
| 1 720.00 | QPSK | 88.73 | H | 26.92 | 5.20 | 120.85 | -95.26 | 25.59 | 0.362 |
| 1 720.00 | | 87.55 | V | 26.92 | 5.20 | 119.67 | -95.26 | 24.41 | 0.276 |
| 1 745.00 | | 90.45 | H | 26.82 | 5.18 | 122.45 | -95.26 | 27.19 | 0.524 |
| 1 745.00 | | 90.05 | V | 26.82 | 5.18 | 122.05 | -95.26 | 26.79 | 0.478 |
| 1 770.00 | | 89.45 | H | 26.80 | 5.23 | 121.48 | -95.26 | 26.22 | 0.419 |
| 1 770.00 | | 91.60 | V | 26.80 | 5.23 | 123.63 | -95.26 | 28.37 | 0.687 |
| 1 720.00 | 16QAM | 87.96 | H | 26.92 | 5.20 | 120.08 | -95.26 | 24.82 | 0.303 |
| 1 720.00 | | 86.64 | V | 26.92 | 5.20 | 118.76 | -95.26 | 23.50 | 0.224 |
| 1 745.00 | | 89.67 | H | 26.82 | 5.18 | 121.67 | -95.26 | 26.41 | 0.438 |
| 1 745.00 | | 89.24 | V | 26.82 | 5.18 | 121.24 | -95.26 | 25.98 | 0.396 |
| 1 770.00 | | 88.61 | H | 26.80 | 5.23 | 120.64 | -95.26 | 25.38 | 0.345 |
| 1 770.00 | | 90.89 | V | 26.80 | 5.23 | 122.92 | -95.26 | 27.66 | 0.583 |

* 1 RB size / 0 Offset

Remark;

1. AF = Antenna Factor, CL = Cable Loss, CF = Conversion Factor.
2. E (dB μ V/m) = Measured Level (dB μ V) + Antenna Factor (dB/m) + Cable Loss (dB).
3. E.I.R.P. (dB m) = E (dB μ V/m) + CF (dB).
4. E.R.P. (dB m) = E (dB μ V/m) + CF (dB) - 2.15 (dB); where E.R.P. and E.I.R.P. are expressed in consistent units.
5. CF (dB) = 20 log D - 104.8; where D is the measurement distance in meters, According to KDB 971168 D01 v03r01 5.8.4.

2.5. Spurious radiated emission

LTE band 2 (1.4 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 850.7 MHz) | | | | | | | | | |
| 3 700.39 | 49.24 | H | 32.30 | -37.08 | 44.46 | -95.26 | -50.80 | -13 | 37.80 |
| 3 700.20 | 46.33 | V | 32.30 | -37.08 | 41.55 | -95.26 | -53.71 | -13 | 40.71 |
| 5 550.79 | 64.17 | H | 34.00 | -34.60 | 63.57 | -95.26 | -31.69 | -13 | 18.69 |
| 5 550.86 | 59.11 | V | 34.00 | -34.60 | 58.51 | -95.26 | -36.75 | -13 | 23.75 |
| 7 402.83 | 49.10 | H | 36.00 | -34.11 | 50.99 | -95.26 | -44.27 | -13 | 31.27 |
| 7 401.04 | 50.58 | V | 36.00 | -34.10 | 52.48 | -95.26 | -42.78 | -13 | 29.78 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 759.07 | 50.35 | H | 32.22 | -37.19 | 45.38 | -95.26 | -49.88 | -13 | 36.88 |
| 3 759.10 | 47.13 | V | 32.22 | -37.19 | 42.16 | -95.26 | -53.10 | -13 | 40.10 |
| 5 638.68 | 64.06 | H | 34.00 | -34.73 | 63.33 | -95.26 | -31.93 | -13 | 18.93 |
| 5 638.62 | 58.92 | V | 34.00 | -34.73 | 58.19 | -95.26 | -37.07 | -13 | 24.07 |
| 7 520.08 | 52.12 | H | 36.00 | -34.19 | 53.93 | -95.26 | -41.33 | -13 | 28.33 |
| 7 518.22 | 57.74 | V | 36.00 | -34.20 | 59.54 | -95.26 | -35.72 | -13 | 22.72 |
| High Channel (1 909.3 MHz) | | | | | | | | | |
| 3 817.87 | 49.77 | H | 32.30 | -36.95 | 45.12 | -95.26 | -50.14 | -13 | 37.14 |
| 3 817.54 | 47.60 | V | 32.30 | -36.95 | 42.95 | -95.26 | -52.31 | -13 | 39.31 |
| 5 726.54 | 59.97 | H | 34.05 | -34.56 | 59.46 | -95.26 | -35.80 | -13 | 22.80 |
| 5 726.57 | 58.35 | V | 34.05 | -34.56 | 57.84 | -95.26 | -37.42 | -13 | 24.42 |
| 7 637.19 | 51.70 | H | 36.00 | -33.85 | 53.85 | -95.26 | -41.41 | -13 | 28.41 |
| 7 635.51 | 54.43 | V | 36.00 | -33.84 | 56.59 | -95.26 | -38.67 | -13 | 25.67 |

* 1 RB size / 0 Offset

LTE band 2 (3 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 851.5 MHz) | | | | | | | | | |
| 3 700.53 | 49.51 | H | 32.30 | -37.08 | 44.73 | -95.26 | -50.53 | -13 | 37.53 |
| 3 700.41 | 46.02 | V | 32.30 | -37.08 | 41.24 | -95.26 | -54.02 | -13 | 41.02 |
| 5 550.65 | 63.78 | H | 34.00 | -34.60 | 63.18 | -95.26 | -32.08 | -13 | 19.08 |
| 5 550.82 | 59.12 | V | 34.00 | -34.60 | 58.52 | -95.26 | -36.74 | -13 | 23.74 |
| 7 406.09 | 48.21 | H | 36.00 | -34.13 | 50.08 | -95.26 | -45.18 | -13 | 32.18 |
| 7 400.93 | 50.72 | V | 36.00 | -34.10 | 52.62 | -95.26 | -42.64 | -13 | 29.64 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 757.44 | 50.24 | H | 32.21 | -37.19 | 45.26 | -95.26 | -50.00 | -13 | 37.00 |
| 3 757.74 | 46.11 | V | 32.22 | -37.19 | 41.14 | -95.26 | -54.12 | -13 | 41.12 |
| 5 636.31 | 63.85 | H | 34.00 | -34.72 | 63.13 | -95.26 | -32.13 | -13 | 19.13 |
| 5 636.22 | 58.62 | V | 34.00 | -34.72 | 57.90 | -95.26 | -37.36 | -13 | 24.36 |
| 7 519.98 | 52.23 | H | 36.00 | -34.19 | 54.04 | -95.26 | -41.22 | -13 | 28.22 |
| 7 514.95 | 57.71 | V | 36.00 | -34.22 | 59.49 | -95.26 | -35.77 | -13 | 22.77 |
| High Channel (1 908.5 MHz) | | | | | | | | | |
| 3 814.80 | 49.74 | H | 32.30 | -36.96 | 45.08 | -95.26 | -50.18 | -13 | 37.18 |
| 3 814.45 | 47.57 | V | 32.30 | -36.96 | 42.91 | -95.26 | -52.35 | -13 | 39.35 |
| 5 721.74 | 61.40 | H | 34.06 | -34.56 | 60.90 | -95.26 | -34.36 | -13 | 21.36 |
| 5 721.85 | 57.11 | V | 34.06 | -34.56 | 56.61 | -95.26 | -38.65 | -13 | 25.65 |
| 7 633.93 | 50.86 | H | 36.00 | -33.82 | 53.04 | -95.26 | -42.22 | -13 | 29.22 |
| 7 628.95 | 54.36 | V | 36.00 | -33.78 | 56.58 | -95.26 | -38.68 | -13 | 25.68 |

* 1 RB size / 0 Offset

LTE band 2 (5 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 852.5 MHz) | | | | | | | | | |
| 3 700.69 | 49.84 | H | 32.30 | -37.08 | 45.06 | -95.26 | -50.20 | -13 | 37.20 |
| 3 702.35 | 45.14 | V | 32.30 | -37.06 | 40.38 | -95.26 | -54.88 | -13 | 41.88 |
| 5 551.05 | 63.66 | H | 34.00 | -34.61 | 63.05 | -95.26 | -32.21 | -13 | 19.21 |
| 5 551.00 | 58.92 | V | 34.00 | -34.61 | 58.31 | -95.26 | -36.95 | -13 | 23.95 |
| 7 409.92 | 48.86 | H | 36.00 | -34.16 | 50.70 | -95.26 | -44.56 | -13 | 31.56 |
| 7 401.37 | 50.75 | V | 36.00 | -34.10 | 52.65 | -95.26 | -42.61 | -13 | 29.61 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 755.60 | 50.27 | H | 32.21 | -37.18 | 45.30 | -95.26 | -49.96 | -13 | 36.96 |
| 3 755.74 | 46.34 | V | 32.21 | -37.18 | 41.37 | -95.26 | -53.89 | -13 | 40.89 |
| 5 633.62 | 62.81 | H | 34.00 | -34.71 | 62.10 | -95.26 | -33.16 | -13 | 20.16 |
| 5 633.44 | 57.78 | V | 34.00 | -34.71 | 57.07 | -95.26 | -38.19 | -13 | 25.19 |
| 7 520.12 | 51.25 | H | 36.00 | -34.19 | 53.06 | -95.26 | -42.20 | -13 | 29.20 |
| 7 511.27 | 56.78 | V | 36.00 | -34.24 | 58.54 | -95.26 | -36.72 | -13 | 23.72 |
| High Channel (1 907.5 MHz) | | | | | | | | | |
| 3 810.74 | 50.35 | H | 32.30 | -36.98 | 45.67 | -95.26 | -49.59 | -13 | 36.59 |
| 3 810.60 | 47.24 | V | 32.30 | -36.98 | 42.56 | -95.26 | -52.70 | -13 | 39.70 |
| 5 716.07 | 61.51 | H | 34.07 | -34.61 | 60.97 | -95.26 | -34.29 | -13 | 21.29 |
| 5 716.04 | 57.36 | V | 34.07 | -34.61 | 56.82 | -95.26 | -38.44 | -13 | 25.44 |
| 7 630.01 | 50.63 | H | 36.00 | -33.79 | 52.84 | -95.26 | -42.42 | -13 | 29.42 |
| 7 621.48 | 53.53 | V | 36.00 | -33.72 | 55.81 | -95.26 | -39.45 | -13 | 26.45 |

* 1 RB size / 0 Offset

LTE band 2 (10 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 855.0 MHz) | | | | | | | | | |
| 3 701.19 | 49.89 | H | 32.30 | -37.07 | 45.12 | -95.26 | -50.14 | -13 | 37.14 |
| 3 701.13 | 45.85 | V | 32.30 | -37.07 | 41.08 | -95.26 | -54.18 | -13 | 41.18 |
| 5 551.70 | 63.61 | H | 34.00 | -34.62 | 62.99 | -95.26 | -32.27 | -13 | 19.27 |
| 5 551.82 | 59.02 | V | 34.00 | -34.62 | 58.40 | -95.26 | -36.86 | -13 | 23.86 |
| 7 419.95 | 49.13 | H | 36.00 | -34.23 | 50.90 | -95.26 | -44.36 | -13 | 31.36 |
| 7 402.35 | 51.70 | V | 36.00 | -34.11 | 53.59 | -95.26 | -41.67 | -13 | 28.67 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 751.13 | 50.36 | H | 32.20 | -37.17 | 45.39 | -95.26 | -49.87 | -13 | 36.87 |
| 3 751.20 | 46.39 | V | 32.20 | -37.17 | 41.42 | -95.26 | -53.84 | -13 | 40.84 |
| 5 626.83 | 62.16 | H | 34.00 | -34.68 | 61.48 | -95.26 | -33.78 | -13 | 20.78 |
| 5 626.66 | 58.19 | V | 34.00 | -34.68 | 57.51 | -95.26 | -37.75 | -13 | 24.75 |
| 7 519.99 | 52.40 | H | 36.00 | -34.19 | 54.21 | -95.26 | -41.05 | -13 | 28.05 |
| 7 502.32 | 57.81 | V | 36.00 | -34.30 | 59.51 | -95.26 | -35.75 | -13 | 22.75 |
| High Channel (1 905.0 MHz) | | | | | | | | | |
| 3 801.29 | 50.63 | H | 32.30 | -37.01 | 45.92 | -95.26 | -49.34 | -13 | 36.34 |
| 3 801.26 | 47.21 | V | 32.30 | -37.01 | 42.50 | -95.26 | -52.76 | -13 | 39.76 |
| 5 701.83 | 63.02 | H | 34.10 | -34.71 | 62.41 | -95.26 | -32.85 | -13 | 19.85 |
| 5 701.76 | 58.09 | V | 34.10 | -34.71 | 57.48 | -95.26 | -37.78 | -13 | 24.78 |
| 7 619.89 | 50.15 | H | 36.00 | -33.70 | 52.45 | -95.26 | -42.81 | -13 | 29.81 |
| 7 602.24 | 55.29 | V | 36.00 | -33.54 | 57.75 | -95.26 | -37.51 | -13 | 24.51 |

* 1 RB size / 0 Offset

LTE band 2 (15 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 857.5 MHz) | | | | | | | | | |
| 3 701.60 | 49.57 | H | 32.30 | -37.07 | 44.80 | -95.26 | -50.46 | -13 | 37.46 |
| 3 701.89 | 45.85 | V | 32.30 | -37.07 | 41.08 | -95.26 | -54.18 | -13 | 41.18 |
| 5 552.54 | 63.35 | H | 34.00 | -34.63 | 62.72 | -95.26 | -32.54 | -13 | 19.54 |
| 5 552.56 | 58.92 | V | 34.00 | -34.63 | 58.29 | -95.26 | -36.97 | -13 | 23.97 |
| 7 430.04 | 49.43 | H | 36.00 | -34.30 | 51.13 | -95.26 | -44.13 | -13 | 31.13 |
| 7 403.42 | 52.31 | V | 36.00 | -34.12 | 54.19 | -95.26 | -41.07 | -13 | 28.07 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 746.51 | 50.39 | H | 32.21 | -37.12 | 45.48 | -95.26 | -49.78 | -13 | 36.78 |
| 3 746.69 | 46.86 | V | 32.21 | -37.12 | 41.95 | -95.26 | -53.31 | -13 | 40.31 |
| 5 620.06 | 61.20 | H | 34.00 | -34.71 | 60.49 | -95.26 | -34.77 | -13 | 21.77 |
| 5 620.05 | 58.72 | V | 34.00 | -34.71 | 58.01 | -95.26 | -37.25 | -13 | 24.25 |
| 7 519.92 | 52.28 | H | 36.00 | -34.19 | 54.09 | -95.26 | -41.17 | -13 | 28.17 |
| 7 493.33 | 57.73 | V | 36.00 | -34.33 | 59.40 | -95.26 | -35.86 | -13 | 22.86 |
| High Channel (1 902.5 MHz) | | | | | | | | | |
| 3 791.63 | 50.42 | H | 32.28 | -37.10 | 45.60 | -95.26 | -49.66 | -13 | 36.66 |
| 3 791.83 | 46.24 | V | 32.28 | -37.09 | 41.43 | -95.26 | -53.83 | -13 | 40.83 |
| 5 687.62 | 63.05 | H | 34.08 | -34.63 | 62.50 | -95.26 | -32.76 | -13 | 19.76 |
| 5 687.63 | 58.17 | V | 34.08 | -34.63 | 57.62 | -95.26 | -37.64 | -13 | 24.64 |
| 7 609.96 | 50.91 | H | 36.00 | -33.61 | 53.30 | -95.26 | -41.96 | -13 | 28.96 |
| 7 583.47 | 56.25 | V | 36.00 | -33.67 | 58.58 | -95.26 | -36.68 | -13 | 23.68 |

* 1 RB size / 0 Offset

LTE band 2 (20 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 860.0 MHz) | | | | | | | | | |
| 3 702.15 | 50.03 | H | 32.30 | -37.07 | 45.26 | -95.26 | -50.00 | -13 | 37.00 |
| 3 702.25 | 45.89 | V | 32.30 | -37.07 | 41.12 | -95.26 | -54.14 | -13 | 41.14 |
| 5 553.28 | 63.21 | H | 34.00 | -34.64 | 62.57 | -95.26 | -32.69 | -13 | 19.69 |
| 5 553.40 | 58.71 | V | 34.00 | -34.64 | 58.07 | -95.26 | -37.19 | -13 | 24.19 |
| 7 440.06 | 50.56 | H | 36.00 | -34.36 | 52.20 | -95.26 | -43.06 | -13 | 30.06 |
| 7 404.32 | 53.13 | V | 36.00 | -34.13 | 55.00 | -95.26 | -40.26 | -13 | 27.26 |
| Middle Channel (1 880.0 MHz) | | | | | | | | | |
| 3 742.33 | 50.20 | H | 32.22 | -37.07 | 45.35 | -95.26 | -49.91 | -13 | 36.91 |
| 3 742.11 | 47.28 | V | 32.22 | -37.07 | 42.43 | -95.26 | -52.83 | -13 | 39.83 |
| 5 613.27 | 59.51 | H | 34.00 | -34.77 | 58.74 | -95.26 | -36.52 | -13 | 23.52 |
| 5 613.37 | 58.64 | V | 34.00 | -34.77 | 57.87 | -95.26 | -37.39 | -13 | 24.39 |
| 7 520.03 | 52.22 | H | 36.00 | -34.19 | 54.03 | -95.26 | -41.23 | -13 | 28.23 |
| 7 484.32 | 57.79 | V | 36.00 | -34.34 | 59.45 | -95.26 | -35.81 | -13 | 22.81 |
| High Channel (1 900.0 MHz) | | | | | | | | | |
| 3 782.29 | 49.75 | H | 32.26 | -37.17 | 44.84 | -95.26 | -50.42 | -13 | 37.42 |
| 3 782.35 | 46.95 | V | 32.26 | -37.17 | 42.04 | -95.26 | -53.22 | -13 | 40.22 |
| 5 673.33 | 61.42 | H | 34.05 | -34.56 | 60.91 | -95.26 | -34.35 | -13 | 21.35 |
| 5 673.29 | 59.37 | V | 34.05 | -34.56 | 58.86 | -95.26 | -36.40 | -13 | 23.40 |
| 7 599.96 | 52.37 | H | 36.00 | -33.52 | 54.85 | -95.26 | -40.41 | -13 | 27.41 |
| 7 564.29 | 56.48 | V | 36.00 | -33.86 | 58.62 | -95.26 | -36.64 | -13 | 23.64 |

* 1 RB size / 0 Offset

LTE band 5 (1.4 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|----------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|---------------|--------------|-------------|
| Low Channel (824.7 MHz) | | | | | | | | | |
| 2 472.80 | 63.05 | H | 28.41 | -38.65 | 52.81 | -97.41 | -44.60 | -13 | 31.60 |
| 2 472.83 | 63.33 | V | 28.41 | -38.65 | 53.09 | -97.41 | -44.32 | -13 | 31.32 |
| Middle Channel (836.5 MHz) | | | | | | | | | |
| 2 507.97 | 64.82 | H | 28.30 | -38.50 | 54.62 | -97.41 | -42.79 | -13 | 29.79 |
| 2 508.21 | 65.40 | V | 28.30 | -38.50 | 55.20 | -97.41 | -42.21 | -13 | 29.21 |
| High Channel (848.3 MHz) | | | | | | | | | |
| 2 543.62 | 62.04 | H | 28.30 | -38.39 | 51.95 | -97.41 | -45.46 | -13 | 32.46 |
| 2 543.57 | 64.39 | V | 28.30 | -38.39 | 54.30 | -97.41 | -43.11 | -13 | 30.11 |

* 1 RB size / 0 Offset

LTE band 5 (3 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|----------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|---------------|--------------|-------------|
| Low Channel (825.5 MHz) | | | | | | | | | |
| 2 472.70 | 63.13 | H | 28.41 | -38.65 | 52.89 | -97.41 | -44.52 | -13 | 31.52 |
| 2 472.77 | 63.40 | V | 28.41 | -38.65 | 53.16 | -97.41 | -44.25 | -13 | 31.25 |
| Middle Channel (836.5 MHz) | | | | | | | | | |
| 2 505.78 | 65.18 | H | 28.30 | -38.52 | 54.96 | -97.41 | -42.45 | -13 | 29.45 |
| 2 505.65 | 64.70 | V | 28.30 | -38.52 | 54.48 | -97.41 | -42.93 | -13 | 29.93 |
| High Channel (847.5 MHz) | | | | | | | | | |
| 2 538.79 | 62.12 | H | 28.30 | -38.38 | 52.04 | -97.41 | -45.37 | -13 | 32.37 |
| 2 538.80 | 64.19 | V | 28.30 | -38.38 | 54.11 | -97.41 | -43.30 | -13 | 30.30 |

* 1 RB size / 0 Offset

LTE band 5 (5 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|----------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|---------------|--------------|-------------|
| Low Channel (826.5 MHz) | | | | | | | | | |
| 2 473.05 | 62.86 | H | 28.41 | -38.65 | 52.62 | -97.41 | -44.79 | -13 | 31.79 |
| 2 473.08 | 62.56 | V | 28.41 | -38.65 | 52.32 | -97.41 | -45.09 | -13 | 32.09 |
| Middle Channel (836.5 MHz) | | | | | | | | | |
| 2 503.08 | 65.44 | H | 28.30 | -38.54 | 55.20 | -97.41 | -42.21 | -13 | 29.21 |
| 2 502.89 | 64.50 | V | 28.30 | -38.54 | 54.26 | -97.41 | -43.15 | -13 | 30.15 |
| High Channel (846.5 MHz) | | | | | | | | | |
| 2 532.99 | 62.93 | H | 28.30 | -38.38 | 52.85 | -97.41 | -44.56 | -13 | 31.56 |
| 2 533.13 | 64.56 | V | 28.30 | -38.38 | 54.48 | -97.41 | -42.93 | -13 | 29.93 |

* 1 RB size / 0 Offset

LTE band 5 (10 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|----------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|---------------|--------------|-------------|
| Low Channel (829.0 MHz) | | | | | | | | | |
| 2 473.81 | 63.39 | H | 28.40 | -38.65 | 53.14 | -97.41 | -44.27 | -13 | 31.27 |
| 2 473.77 | 62.71 | V | 28.40 | -38.65 | 52.46 | -97.41 | -44.95 | -13 | 31.95 |
| Middle Channel (836.5 MHz) | | | | | | | | | |
| 2 496.26 | 67.50 | H | 28.31 | -38.57 | 57.24 | -97.41 | -40.17 | -13 | 27.17 |
| 2 496.29 | 65.05 | V | 28.31 | -38.57 | 54.79 | -97.41 | -42.62 | -13 | 29.62 |
| High Channel (844.0 MHz) | | | | | | | | | |
| 2 518.91 | 63.30 | H | 28.30 | -38.42 | 53.18 | -97.41 | -44.23 | -13 | 31.23 |
| 2 518.79 | 63.89 | V | 28.30 | -38.42 | 53.77 | -97.41 | -43.64 | -13 | 30.64 |

* 1 RB size / 0 Offset

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) | | | | | | | | | |
| 1 554.72 | 72.61 | H | 25.09 | -40.07 | 57.63 | -97.41 | -39.78 | -13 | 26.78 |
| 1 554.66 | 72.64 | V | 25.09 | -40.07 | 57.66 | -97.41 | -39.75 | -13 | 26.75 |
| 2 332.01 | 82.79 | H | 27.87 | -38.82 | 71.84 | -97.41 | -25.57 | -13 | 12.57 |
| 2 331.97 | 79.13 | V | 27.87 | -38.82 | 68.18 | -97.41 | -29.23 | -13 | 16.23 |
| 3 886.73 | 54.64 | H | 32.45 | -37.01 | 50.08 | -97.41 | -47.33 | -13 | 34.33 |
| 3 886.90 | 57.62 | V | 32.45 | -37.01 | 53.06 | -97.41 | -44.35 | -13 | 31.35 |
| Middle Channel (782.0 MHz) | | | | | | | | | |
| 1 559.65 | 69.62 | H | 25.08 | -40.08 | 54.62 | -97.41 | -42.79 | -13 | 29.79 |
| 1 559.78 | 68.56 | V | 25.08 | -40.08 | 53.56 | -97.41 | -43.85 | -13 | 30.85 |
| 2 339.55 | 81.85 | H | 27.84 | -38.79 | 70.90 | -97.41 | -26.51 | -13 | 13.51 |
| 2 339.52 | 79.76 | V | 27.84 | -38.79 | 68.81 | -97.41 | -28.60 | -13 | 15.60 |
| 3 899.32 | 54.53 | H | 32.50 | -36.95 | 50.08 | -97.41 | -47.33 | -13 | 34.33 |
| 3 899.32 | 58.22 | V | 32.50 | -36.95 | 53.77 | -97.41 | -43.64 | -13 | 30.64 |
| High Channel (784.5 MHz) | | | | | | | | | |
| 1 564.61 | 69.92 | H | 25.07 | -40.08 | 54.91 | -97.41 | -42.50 | -13 | 29.50 |
| 1 564.63 | 68.78 | V | 25.07 | -40.08 | 53.77 | -97.41 | -43.64 | -13 | 30.64 |
| 2 347.05 | 81.57 | H | 27.81 | -38.75 | 70.63 | -97.41 | -26.78 | -13 | 13.78 |
| 2 347.06 | 79.97 | V | 27.81 | -38.75 | 69.03 | -97.41 | -28.38 | -13 | 15.38 |
| 3 911.63 | 55.12 | H | 32.45 | -36.84 | 50.73 | -97.41 | -46.68 | -13 | 33.68 |
| 3 911.72 | 58.20 | V | 32.45 | -36.84 | 53.81 | -97.41 | -43.60 | -13 | 30.60 |

* 1 RB size / 0 Offset

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) | | | | | | | | | |
| 1 555.29 | 72.39 | H | 25.09 | -40.07 | 57.41 | -97.41 | -40.00 | -13 | 27.00 |
| 1 555.22 | 71.80 | V | 25.09 | -40.07 | 56.82 | -97.41 | -40.59 | -13 | 27.59 |
| 2 332.79 | 82.98 | H | 27.87 | -38.82 | 72.03 | -97.41 | -25.38 | -13 | 12.38 |
| 2 332.81 | 79.53 | V | 27.87 | -38.82 | 68.58 | -97.41 | -28.83 | -13 | 15.83 |
| 3 887.79 | 55.09 | H | 32.45 | -37.01 | 50.53 | -97.41 | -46.88 | -13 | 33.88 |
| 3 888.07 | 57.77 | V | 32.45 | -37.01 | 53.21 | -97.41 | -44.20 | -13 | 31.20 |

* 1 RB size / 0 Offset

LTE band 66/4 (1.4 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 710.7 MHz) | | | | | | | | | |
| 3 420.40 | 55.26 | H | 31.02 | -37.67 | 48.61 | -95.26 | -46.65 | -13 | 33.65 |
| 3 420.56 | 52.09 | V | 31.02 | -37.67 | 45.44 | -95.26 | -49.82 | -13 | 36.82 |
| 5 130.79 | 48.93 | H | 33.46 | -35.59 | 46.80 | -95.26 | -48.46 | -13 | 35.46 |
| 5 130.74 | 54.58 | V | 33.46 | -35.59 | 52.45 | -95.26 | -42.81 | -13 | 29.81 |
| 6 842.95 | 48.28 | H | 35.39 | -33.79 | 49.88 | -95.26 | -45.38 | -13 | 32.38 |
| 6 842.78 | 49.44 | V | 35.39 | -33.79 | 51.04 | -95.26 | -44.22 | -13 | 31.22 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 489.09 | 53.01 | H | 31.20 | -37.45 | 46.76 | -95.26 | -48.50 | -13 | 35.50 |
| 3 489.13 | 52.04 | V | 31.20 | -37.45 | 45.79 | -95.26 | -49.47 | -13 | 36.47 |
| 5 233.61 | 52.64 | H | 33.67 | -35.06 | 51.25 | -95.26 | -44.01 | -13 | 31.01 |
| 5 233.68 | 56.59 | V | 33.67 | -35.06 | 55.20 | -95.26 | -40.06 | -13 | 27.06 |
| 6 980.06 | 49.12 | H | 35.50 | -33.51 | 51.11 | -95.26 | -44.15 | -13 | 31.15 |
| 6 980.01 | 49.78 | V | 35.50 | -33.51 | 51.77 | -95.26 | -43.49 | -13 | 30.49 |
| High Channel (1 779.3 MHz) | | | | | | | | | |
| 3 557.59 | 51.53 | H | 31.13 | -36.98 | 45.68 | -95.26 | -49.58 | -13 | 36.58 |
| 3 557.80 | 51.88 | V | 31.13 | -36.98 | 46.03 | -95.26 | -49.23 | -13 | 36.23 |
| 5 336.47 | 56.53 | H | 33.87 | -35.24 | 55.16 | -95.26 | -40.10 | -13 | 27.10 |
| 5 336.66 | 51.85 | V | 33.87 | -35.23 | 50.49 | -95.26 | -44.77 | -13 | 31.77 |
| 7 117.26 | 49.43 | H | 35.63 | -33.73 | 51.33 | -95.26 | -43.93 | -13 | 30.93 |
| 7 117.28 | 48.11 | V | 35.63 | -33.73 | 50.01 | -95.26 | -45.25 | -13 | 32.25 |

* 1 RB size / 0 Offset

LTE band 66/4 (3 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 711.5 MHz) | | | | | | | | | |
| 3 420.46 | 55.45 | H | 31.02 | -37.67 | 48.80 | -95.26 | -46.46 | -13 | 33.46 |
| 3 420.51 | 52.39 | V | 31.02 | -37.67 | 45.74 | -95.26 | -49.52 | -13 | 36.52 |
| 5 130.61 | 49.07 | H | 33.46 | -35.59 | 46.94 | -95.26 | -48.32 | -13 | 35.32 |
| 5 130.83 | 54.63 | V | 33.46 | -35.59 | 52.50 | -95.26 | -42.76 | -13 | 29.76 |
| 6 845.86 | 48.93 | H | 35.39 | -33.78 | 50.54 | -95.26 | -44.72 | -13 | 31.72 |
| 6 846.06 | 49.31 | V | 35.39 | -33.78 | 50.92 | -95.26 | -44.34 | -13 | 31.34 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 487.36 | 52.90 | H | 31.20 | -37.45 | 46.65 | -95.26 | -48.61 | -13 | 35.61 |
| 3 487.51 | 51.66 | V | 31.20 | -37.45 | 45.41 | -95.26 | -49.85 | -13 | 36.85 |
| 5 231.31 | 51.68 | H | 33.66 | -35.09 | 50.25 | -95.26 | -45.01 | -13 | 32.01 |
| 5 231.36 | 56.20 | V | 33.66 | -35.09 | 54.77 | -95.26 | -40.49 | -13 | 27.49 |
| 6 979.97 | 48.98 | H | 35.50 | -33.51 | 50.97 | -95.26 | -44.29 | -13 | 31.29 |
| 6 980.03 | 49.24 | V | 35.50 | -33.51 | 51.23 | -95.26 | -44.03 | -13 | 31.03 |
| High Channel (1 778.5 MHz) | | | | | | | | | |
| 3 554.49 | 51.36 | H | 31.12 | -36.96 | 45.52 | -95.26 | -49.74 | -13 | 36.74 |
| 3 554.39 | 51.48 | V | 31.12 | -36.96 | 45.64 | -95.26 | -49.62 | -13 | 36.62 |
| 5 331.68 | 55.79 | H | 33.86 | -35.28 | 54.37 | -95.26 | -40.89 | -13 | 27.89 |
| 5 331.90 | 50.95 | V | 33.86 | -35.28 | 49.53 | -95.26 | -45.73 | -13 | 32.73 |
| 7 113.88 | 48.73 | H | 35.63 | -33.74 | 50.62 | -95.26 | -44.64 | -13 | 31.64 |
| 7 113.95 | 48.31 | V | 35.63 | -33.74 | 50.20 | -95.26 | -45.06 | -13 | 32.06 |

* 1 RB size / 0 Offset

LTE band 66/4 (5 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 712.5 MHz) | | | | | | | | | |
| 3 420.68 | 55.67 | H | 31.02 | -37.67 | 49.02 | -95.26 | -46.24 | -13 | 33.24 |
| 3 420.75 | 52.32 | V | 31.02 | -37.67 | 45.67 | -95.26 | -49.59 | -13 | 36.59 |
| 5 130.99 | 49.15 | H | 33.46 | -35.59 | 47.02 | -95.26 | -48.24 | -13 | 35.24 |
| 5 131.03 | 54.47 | V | 33.46 | -35.59 | 52.34 | -95.26 | -42.92 | -13 | 29.92 |
| 6 850.01 | 49.58 | H | 35.40 | -33.77 | 51.21 | -95.26 | -44.05 | -13 | 31.05 |
| 6 849.94 | 49.14 | V | 35.40 | -33.77 | 50.77 | -95.26 | -44.49 | -13 | 31.49 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 485.70 | 52.74 | H | 31.20 | -37.46 | 46.48 | -95.26 | -48.78 | -13 | 35.78 |
| 3 485.51 | 51.90 | V | 31.20 | -37.46 | 45.64 | -95.26 | -49.62 | -13 | 36.62 |
| 5 228.49 | 51.57 | H | 33.66 | -35.12 | 50.11 | -95.26 | -45.15 | -13 | 32.15 |
| 5 228.71 | 55.65 | V | 33.66 | -35.12 | 54.19 | -95.26 | -41.07 | -13 | 28.07 |
| 6 979.92 | 49.05 | H | 35.50 | -33.51 | 51.04 | -95.26 | -44.22 | -13 | 31.22 |
| 6 980.00 | 49.21 | V | 35.50 | -33.51 | 51.20 | -95.26 | -44.06 | -13 | 31.06 |
| High Channel (1 777.5 MHz) | | | | | | | | | |
| 3 550.66 | 51.86 | H | 31.10 | -36.93 | 46.03 | -95.26 | -49.23 | -13 | 36.23 |
| 3 550.63 | 51.46 | V | 31.10 | -36.93 | 45.63 | -95.26 | -49.63 | -13 | 36.63 |
| 5 326.13 | 55.08 | H | 33.85 | -35.33 | 53.60 | -95.26 | -41.66 | -13 | 28.66 |
| 5 326.14 | 50.40 | V | 33.85 | -35.33 | 48.92 | -95.26 | -46.34 | -13 | 33.34 |
| 7 109.95 | 49.35 | H | 35.62 | -33.76 | 51.21 | -95.26 | -44.05 | -13 | 31.05 |
| 7 110.02 | 48.47 | V | 35.62 | -33.76 | 50.33 | -95.26 | -44.93 | -13 | 31.93 |

* 1 RB size / 0 Offset

LTE band 66/4 (10 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 715.0 MHz) | | | | | | | | | |
| 3 421.22 | 55.41 | H | 31.03 | -37.68 | 48.76 | -95.26 | -46.50 | -13 | 33.50 |
| 3 421.30 | 52.76 | V | 31.03 | -37.68 | 46.11 | -95.26 | -49.15 | -13 | 36.15 |
| 5 131.81 | 48.74 | H | 33.46 | -35.58 | 46.62 | -95.26 | -48.64 | -13 | 35.64 |
| 5 131.84 | 54.71 | V | 33.46 | -35.58 | 52.59 | -95.26 | -42.67 | -13 | 29.67 |
| 6 860.09 | 50.34 | H | 35.42 | -33.80 | 51.96 | -95.26 | -43.30 | -13 | 30.30 |
| 6 859.97 | 49.89 | V | 35.42 | -33.80 | 51.51 | -95.26 | -43.75 | -13 | 30.75 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 481.19 | 53.53 | H | 31.20 | -37.49 | 47.24 | -95.26 | -48.02 | -13 | 35.02 |
| 3 481.19 | 52.35 | V | 31.20 | -37.49 | 46.06 | -95.26 | -49.20 | -13 | 36.20 |
| 5 221.81 | 51.84 | H | 33.64 | -35.22 | 50.26 | -95.26 | -45.00 | -13 | 32.00 |
| 5 221.91 | 55.55 | V | 33.64 | -35.22 | 53.97 | -95.26 | -41.29 | -13 | 28.29 |
| 6 980.03 | 49.46 | H | 35.50 | -33.51 | 51.45 | -95.26 | -43.81 | -13 | 30.81 |
| 6 980.14 | 49.37 | V | 35.50 | -33.51 | 51.36 | -95.26 | -43.90 | -13 | 30.90 |
| High Channel (1 775.0 MHz) | | | | | | | | | |
| 3 541.24 | 51.65 | H | 31.12 | -36.98 | 45.79 | -95.26 | -49.47 | -13 | 36.47 |
| 3 541.37 | 51.24 | V | 31.12 | -36.98 | 45.38 | -95.26 | -49.88 | -13 | 36.88 |
| 5 311.80 | 54.90 | H | 33.82 | -35.21 | 53.51 | -95.26 | -41.75 | -13 | 28.75 |
| 5 311.77 | 48.95 | V | 33.82 | -35.21 | 47.56 | -95.26 | -47.70 | -13 | 34.70 |
| 7 100.07 | 49.57 | H | 35.60 | -33.79 | 51.38 | -95.26 | -43.88 | -13 | 30.88 |
| 7 099.98 | 48.90 | V | 35.60 | -33.79 | 50.71 | -95.26 | -44.55 | -13 | 31.55 |

* 1 RB size / 0 Offset

LTE band 66/4 (15 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 717.5 MHz) | | | | | | | | | |
| 3 421.69 | 57.33 | H | 31.03 | -37.68 | 50.68 | -95.26 | -44.58 | -13 | 31.58 |
| 3 421.55 | 52.49 | V | 31.03 | -37.68 | 45.84 | -95.26 | -49.42 | -13 | 36.42 |
| 5 132.57 | 48.80 | H | 33.47 | -35.58 | 46.69 | -95.26 | -48.57 | -13 | 35.57 |
| 5 132.59 | 54.38 | V | 33.47 | -35.58 | 52.27 | -95.26 | -42.99 | -13 | 29.99 |
| 6 869.99 | 51.40 | H | 35.44 | -33.85 | 52.99 | -95.26 | -42.27 | -13 | 29.27 |
| 6 870.03 | 49.56 | V | 35.44 | -33.85 | 51.15 | -95.26 | -44.11 | -13 | 31.11 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 476.57 | 57.64 | H | 31.20 | -37.51 | 51.33 | -95.26 | -43.93 | -13 | 30.93 |
| 3 476.68 | 51.88 | V | 31.20 | -37.51 | 45.57 | -95.26 | -49.69 | -13 | 36.69 |
| 5 215.02 | 52.17 | H | 33.63 | -35.31 | 50.49 | -95.26 | -44.77 | -13 | 31.77 |
| 5 215.19 | 56.34 | V | 33.63 | -35.31 | 54.66 | -95.26 | -40.60 | -13 | 27.60 |
| 6 980.08 | 50.39 | H | 35.50 | -33.51 | 52.38 | -95.26 | -42.88 | -13 | 29.88 |
| 6 979.97 | 49.41 | V | 35.50 | -33.51 | 51.40 | -95.26 | -43.86 | -13 | 30.86 |
| High Channel (1 772.5 MHz) | | | | | | | | | |
| 3 531.75 | 55.11 | H | 31.14 | -37.04 | 49.21 | -95.26 | -46.05 | -13 | 33.05 |
| 3 531.69 | 51.24 | V | 31.14 | -37.04 | 45.34 | -95.26 | -49.92 | -13 | 36.92 |
| 5 297.40 | 56.73 | H | 33.79 | -35.00 | 55.52 | -95.26 | -39.74 | -13 | 26.74 |
| 5 297.41 | 51.34 | V | 33.79 | -35.00 | 50.13 | -95.26 | -45.13 | -13 | 32.13 |
| 7 090.03 | 49.54 | H | 35.58 | -33.76 | 51.36 | -95.26 | -43.90 | -13 | 30.90 |
| 7 089.98 | 48.74 | V | 35.58 | -33.76 | 50.56 | -95.26 | -44.70 | -13 | 31.70 |

* 1 RB size / 0 Offset

LTE band 66/4 (20 MHz - QPSK)

| Frequency (MHz) | Measured Level (dB μ V) | Ant. Pol. | AF (dB/m) | AMP+CL (dB) | E (dB μ V/m) | CF (dB) | E.I.R.P. (dB m) | Limit (dB m) | Margin (dB) |
|------------------------------|-----------------------------|-----------|-----------|-------------|------------------|---------|-----------------|--------------|-------------|
| Low Channel (1 720.0 MHz) | | | | | | | | | |
| 3 422.12 | 57.61 | H | 31.03 | -37.68 | 50.96 | -95.26 | -44.30 | -13 | 31.30 |
| 3 422.20 | 52.78 | V | 31.03 | -37.68 | 46.13 | -95.26 | -49.13 | -13 | 36.13 |
| 5 133.04 | 49.95 | H | 33.47 | -35.58 | 47.84 | -95.26 | -47.42 | -13 | 34.42 |
| 5 133.33 | 54.21 | V | 33.47 | -35.58 | 52.10 | -95.26 | -43.16 | -13 | 30.16 |
| 6 880.12 | 50.93 | H | 35.46 | -33.88 | 52.51 | -95.26 | -42.75 | -13 | 29.75 |
| 6 879.91 | 49.76 | V | 35.46 | -33.88 | 51.34 | -95.26 | -43.92 | -13 | 30.92 |
| Middle Channel (1 745.0 MHz) | | | | | | | | | |
| 3 472.06 | 58.72 | H | 31.20 | -37.54 | 52.38 | -95.26 | -42.88 | -13 | 29.88 |
| 3 472.29 | 52.51 | V | 31.20 | -37.54 | 46.17 | -95.26 | -49.09 | -13 | 36.09 |
| 5 208.22 | 52.59 | H | 33.62 | -35.41 | 50.80 | -95.26 | -44.46 | -13 | 31.46 |
| 5 208.41 | 57.34 | V | 33.62 | -35.40 | 55.56 | -95.26 | -39.70 | -13 | 26.70 |
| 6 979.94 | 50.88 | H | 35.50 | -33.51 | 52.87 | -95.26 | -42.39 | -13 | 29.39 |
| 6 980.03 | 49.91 | V | 35.50 | -33.51 | 51.90 | -95.26 | -43.36 | -13 | 30.36 |
| High Channel (1 770.0 MHz) | | | | | | | | | |
| 3 522.11 | 54.34 | H | 31.16 | -37.12 | 48.38 | -95.26 | -46.88 | -13 | 33.88 |
| 3 522.16 | 50.40 | V | 31.16 | -37.12 | 44.44 | -95.26 | -50.82 | -13 | 37.82 |
| 5 283.15 | 58.35 | H | 33.77 | -34.59 | 57.53 | -95.26 | -37.73 | -13 | 24.73 |
| 5 283.25 | 56.78 | V | 33.77 | -34.59 | 55.96 | -95.26 | -39.30 | -13 | 26.30 |
| 7 080.02 | 50.03 | H | 35.56 | -33.73 | 51.86 | -95.26 | -43.40 | -13 | 30.40 |
| 7 080.07 | 49.46 | V | 35.56 | -33.73 | 51.29 | -95.26 | -43.97 | -13 | 30.97 |

* 1 RB size / 0 Offset

Remark;

1. AF = Antenna Factor, AMP= Amplifier Gain, CL = Cable Loss, CF = Conversion Factor.
2. E (dB μ V/m) = Measured Level (dB μ V) + Antenna Factor (dB/m) + AMP (dB) + Cable Loss (dB).
3. E.I.R.P. (dB m) = E (dB μ V/m) + CF (dB).
4. E.R.P. (dB m) = E (dB μ V/m) + CF (dB) - 2.15 (dB); where E.R.P. and E.I.R.P. are expressed in consistent units.
5. CF (dB) = 20 log D - 104.8; where D is the measurement distance in meters, According to KDB 971168 D01 v03r01 5.8.4.

3. Occupied Bandwidth

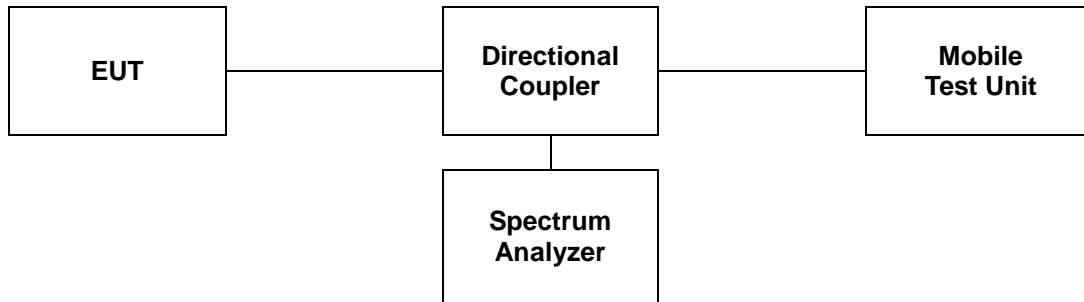
3.1. Limit

CFR 47, Section FCC §2.1049.

3.2. Test Procedure

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).



3.3 Test Results

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

| Band | Bandwidth (MHz) | Frequency (MHz) | Occupied Bandwidth (MHz) | |
|------|-----------------|-----------------|--------------------------|--------|
| | | | QPSK | 16QAM |
| 2 | 1.4 | 1 880.0 | 1.107 | 1.103 |
| | 3 | | 2.692 | 2.692 |
| | 5 | | 4.544 | 4.501 |
| | 10 | | 8.944 | 8.944 |
| | 15 | | 13.502 | 13.459 |
| | 20 | | 17.887 | 17.945 |

| Band | Bandwidth (MHz) | Frequency (MHz) | Occupied Bandwidth (MHz) | |
|------|-----------------|-----------------|--------------------------|-------|
| | | | QPSK | 16QAM |
| 5 | 1.4 | 836.5 | 1.103 | 1.103 |
| | 3 | | 2.692 | 2.683 |
| | 5 | | 4.530 | 4.515 |
| | 10 | | 8.944 | 8.973 |

| Band | Bandwidth (MHz) | Frequency (MHz) | Occupied Bandwidth (MHz) | |
|------|-----------------|-----------------|--------------------------|-------|
| | | | QPSK | 16QAM |
| 13 | 5 | 782.0 | 4.530 | 4.515 |
| | 10 | | 8.973 | 8.944 |

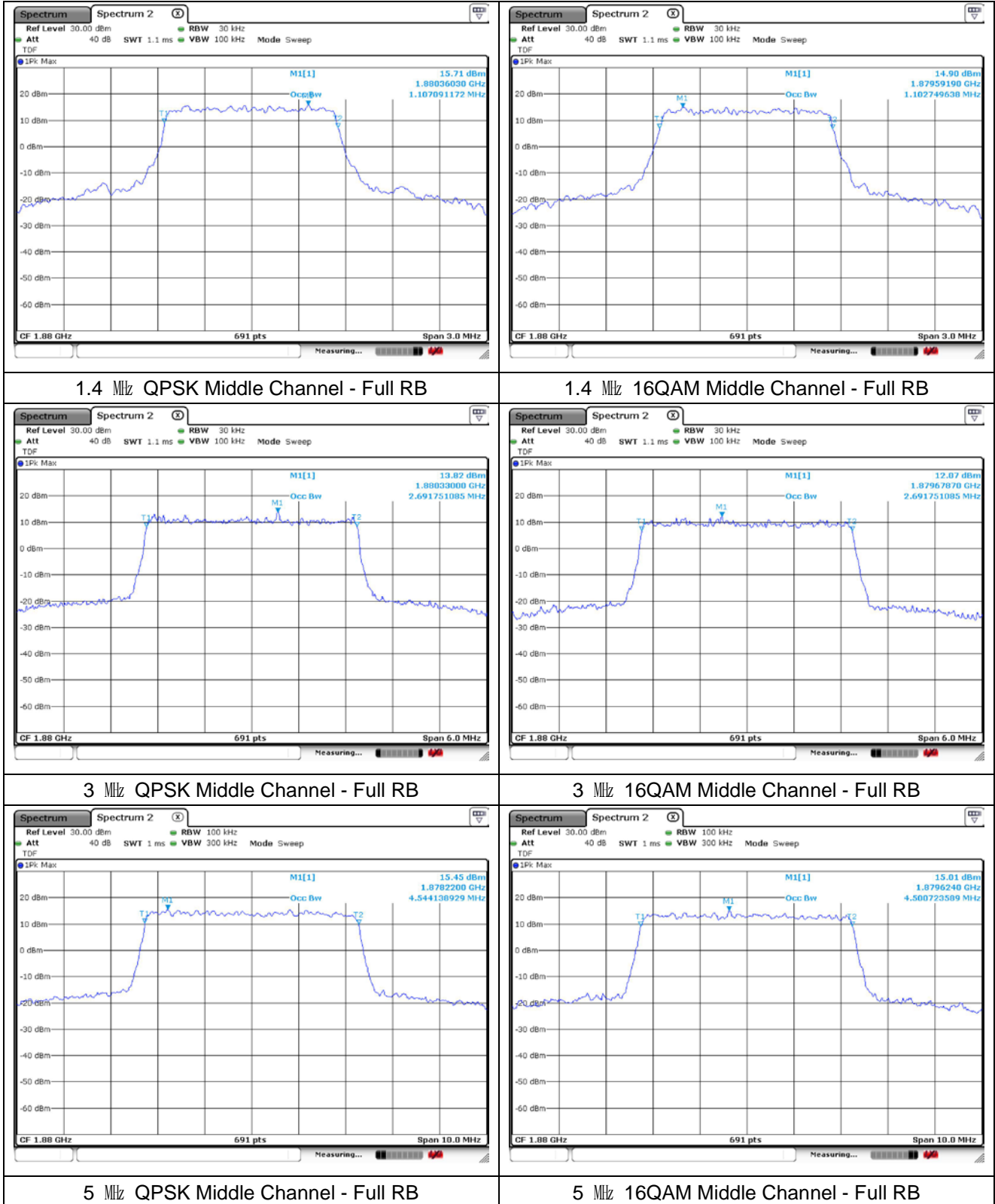
| Band | Bandwidth (MHz) | Frequency (MHz) | Occupied Bandwidth (MHz) | |
|------|-----------------|-----------------|--------------------------|--------|
| | | | QPSK | 16QAM |
| 66/4 | 1.4 | 1 745.0 | 1.098 | 1.098 |
| | 3 | | 2.692 | 2.683 |
| | 5 | | 4.515 | 4.515 |
| | 10 | | 8.944 | 8.915 |
| | 15 | | 13.459 | 13.459 |
| | 20 | | 17.887 | 17.829 |

Note;

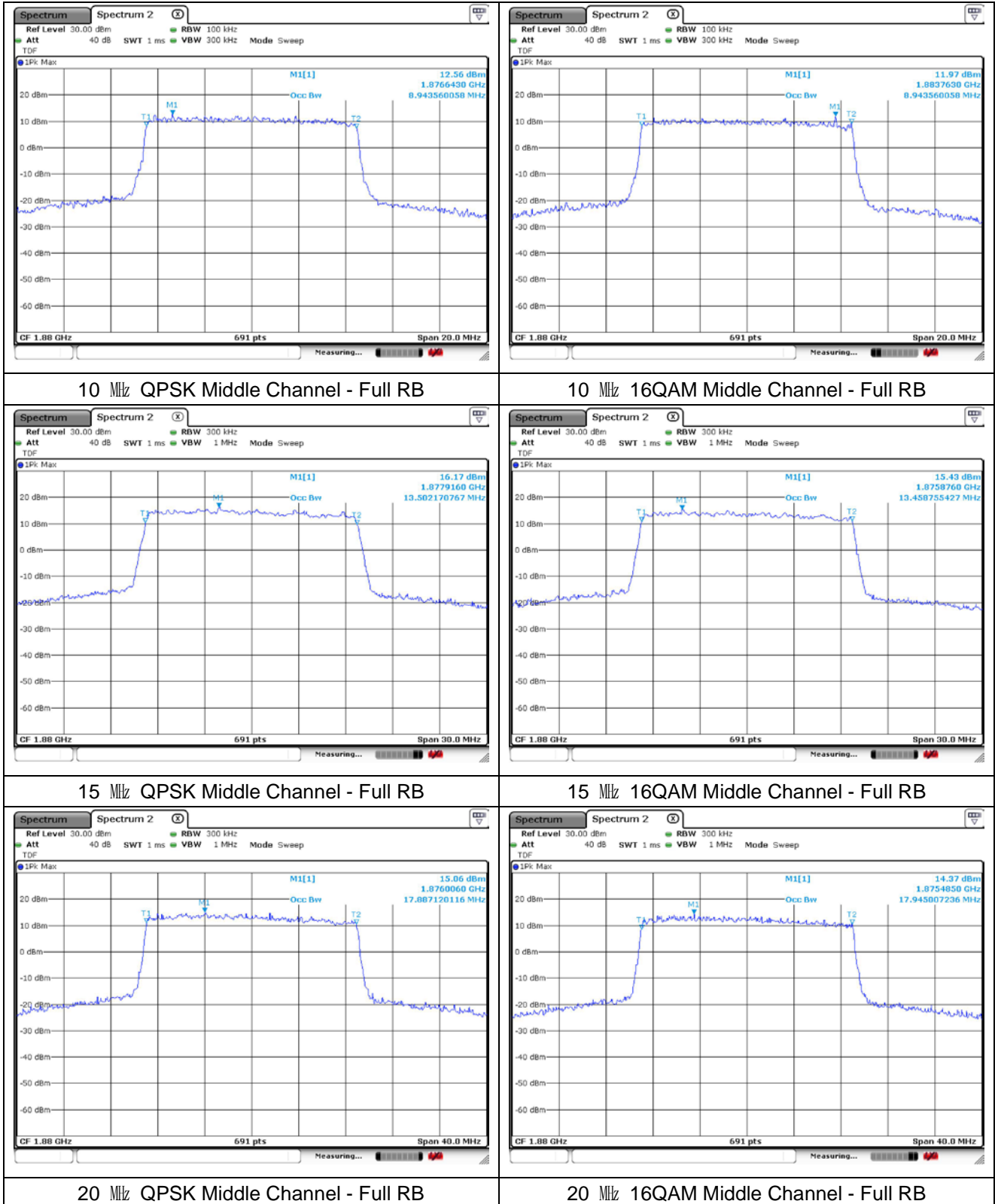
There is no limit required and power is the same for low, middle and high channel; therefore, all channels were tested but only middle channel was reported.

- Test plots

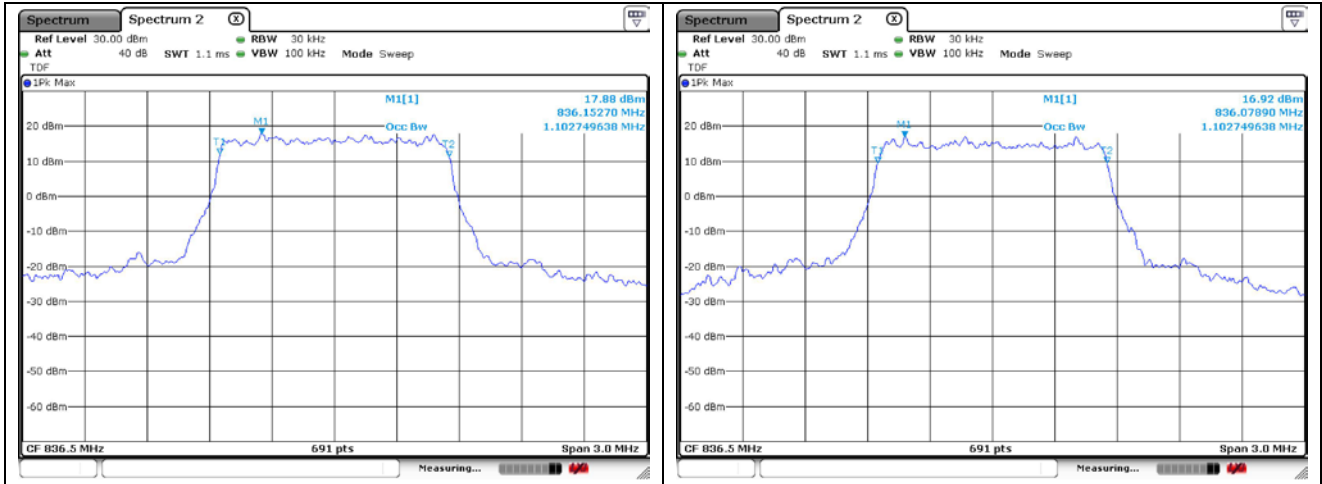
LTE band 2



LTE band 2

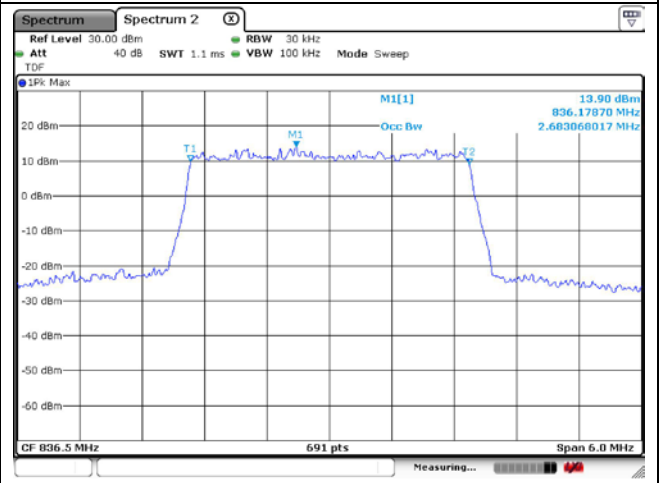
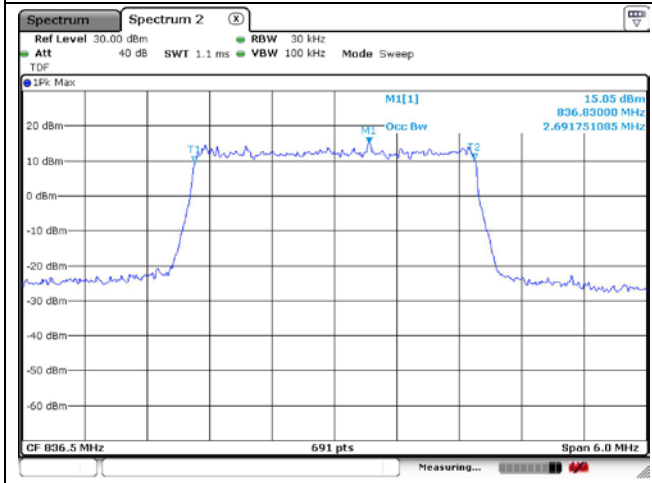


LTE band 5



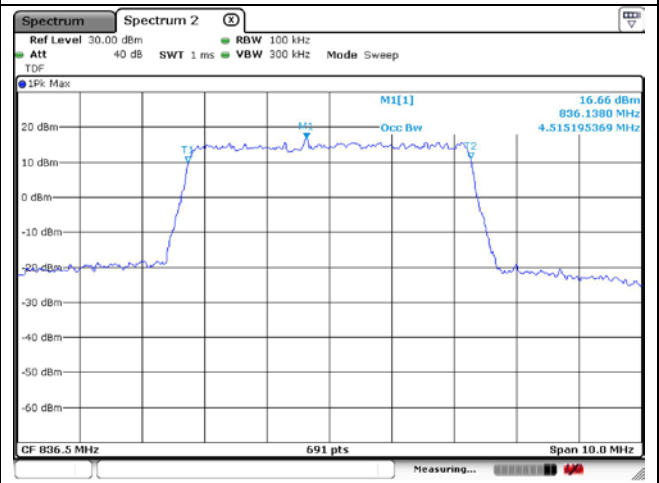
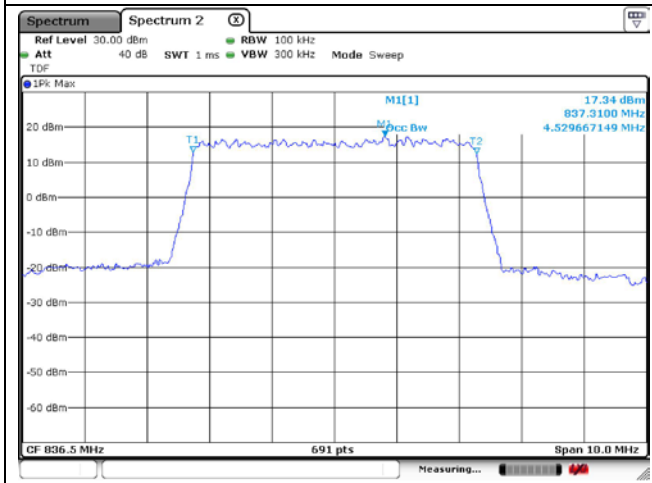
1.4 MHz QPSK Middle Channel - Full RB

1.4 MHz 16QAM Middle Channel - Full RB



3 MHz QPSK Middle Channel - Full RB

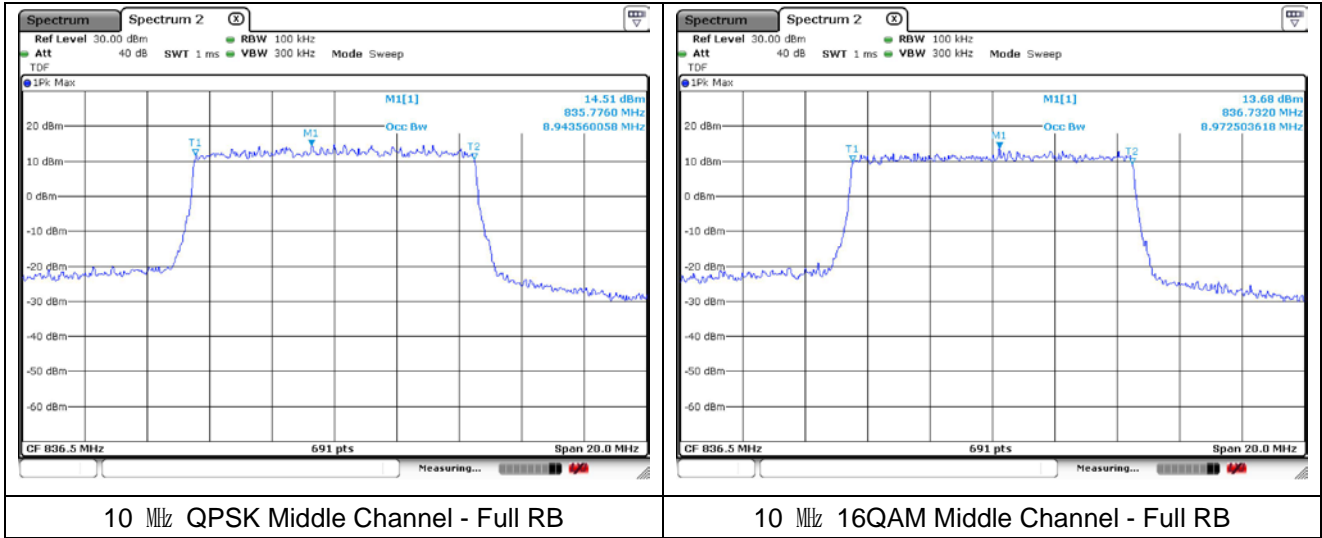
3 MHz 16QAM Middle Channel - Full RB



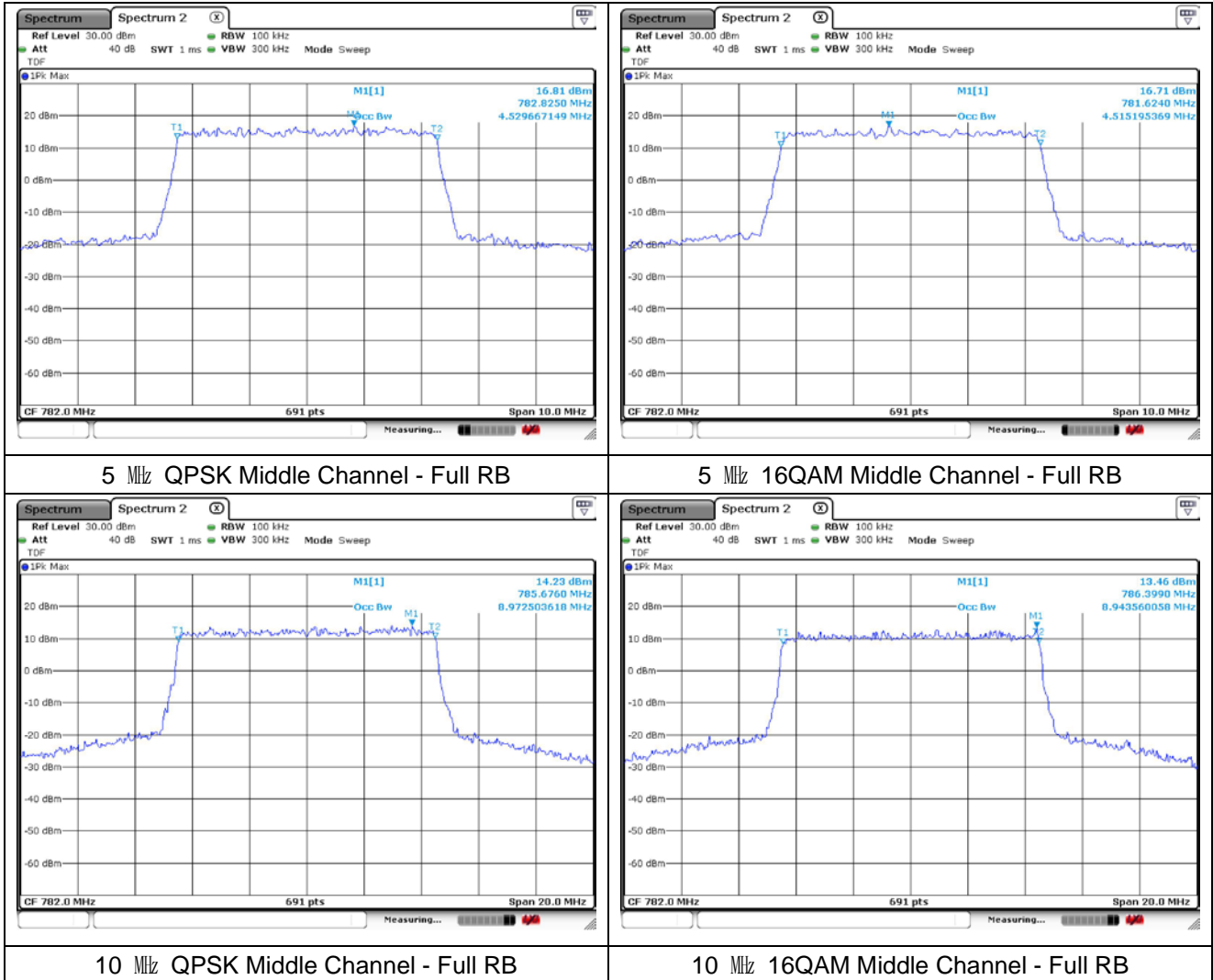
5 MHz QPSK Middle Channel - Full RB

5 MHz 16QAM Middle Channel - Full RB

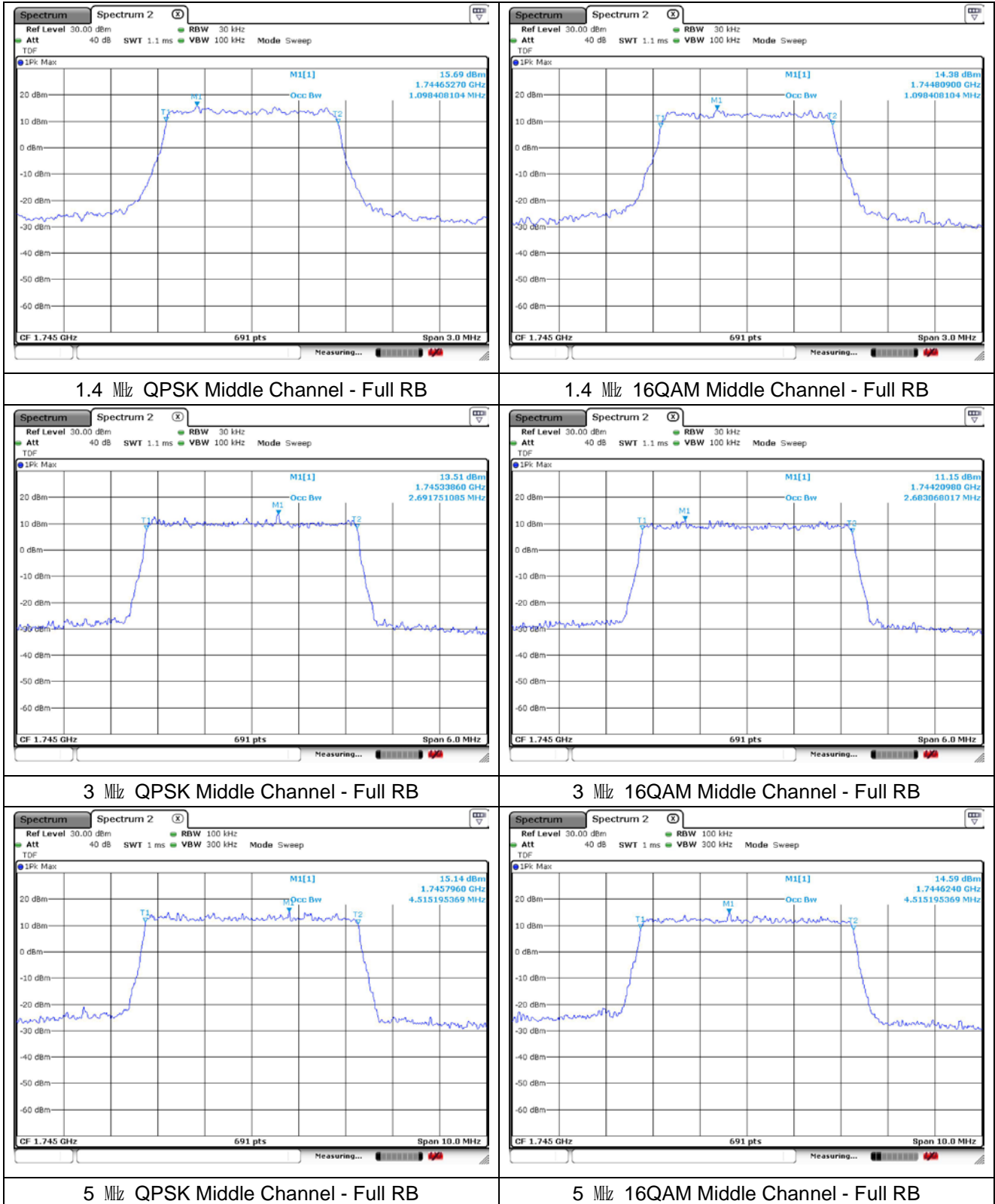
LTE band 5



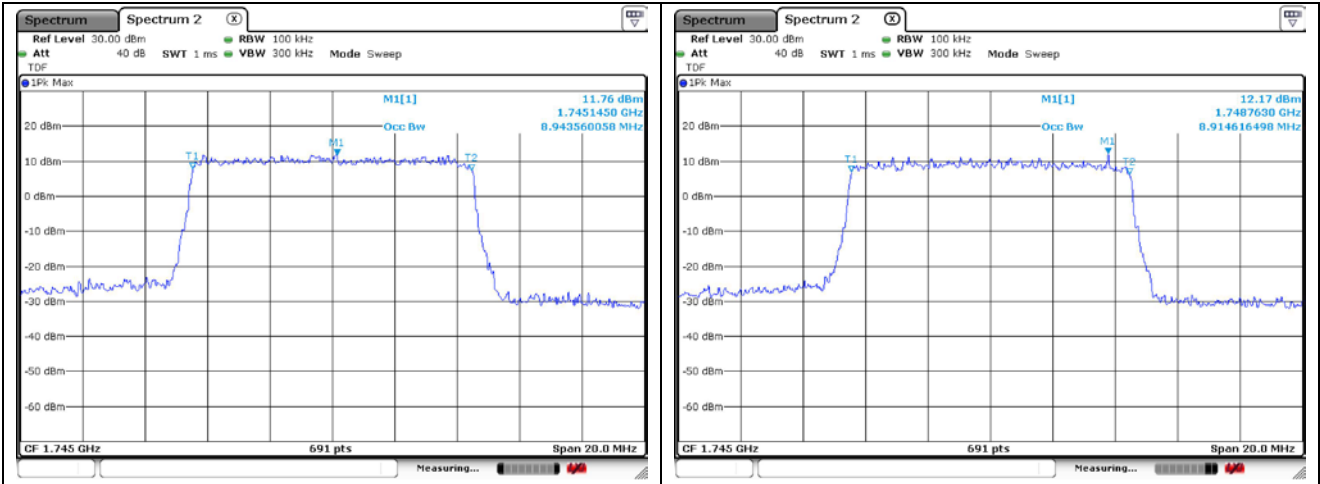
LTE band 13



LTE band 66/4

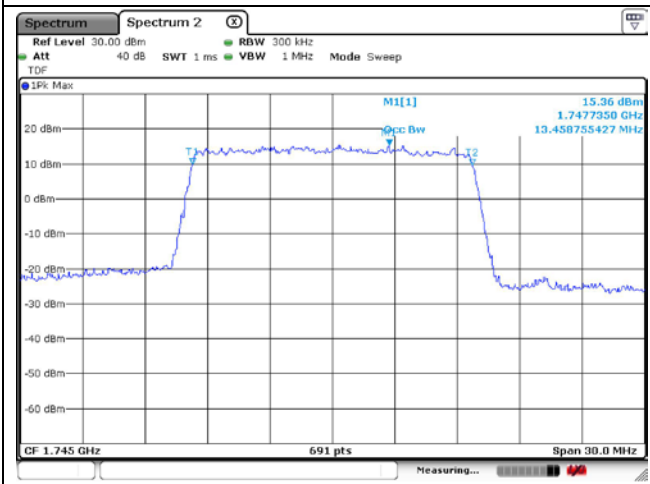


LTE band 66/4

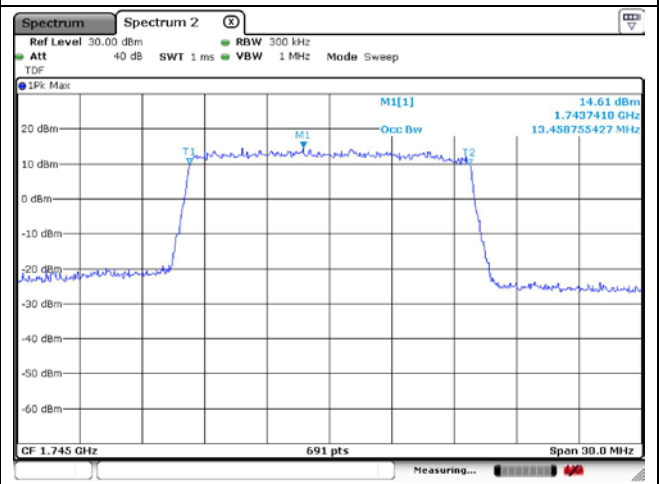


10 MHz QPSK Middle Channel - Full RB

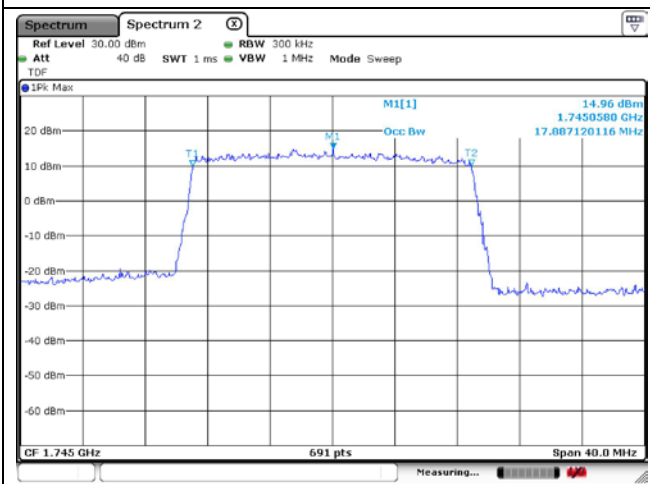
10 MHz 16QAM Middle Channel - Full RB



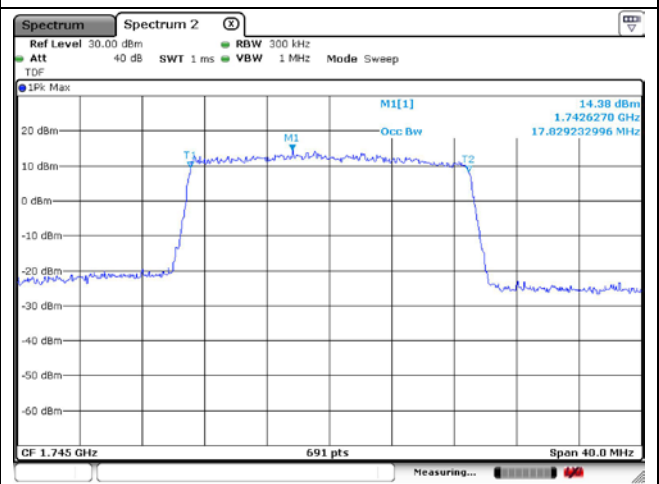
15 MHz QPSK Middle Channel - Full RB



15 MHz 16QAM Middle Channel - Full RB



20 MHz QPSK Middle Channel - Full RB



20 MHz 16QAM Middle Channel - Full RB

4. Peak-Average Ratio

4.1. Limit

- §22.913(d), Measurement of the ERP of Cellular base transmitters and repeaters must be made using an average power measurement technique. The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

- §24.232(d), Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

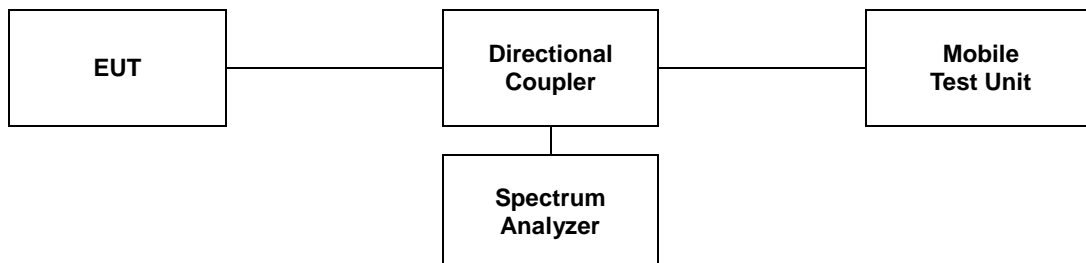
- §27.50(d)(5), Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

4.2. Test Procedure

The test follows section 5.2.3.4 of ANSI C63.26-2015.

See instrumentation-specific application literature for further guidance regarding use of the CCDF capability. The following guidelines are offered for performing a CCDF measurement.

- a. Set resolution/measurement bandwidth \geq OBW or specified reference bandwidth.
- b. Set the number of counts to a value that stabilizes the measured CCDF curve.
- c. Set the measurement interval as follows:
 - 1) For continuous transmissions, set to greater of $[10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ or 1 ms.
 - 2) For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
 - 3) If there are several carriers in a single antenna port, the peak power shall be determined for each individual carrier (by disabling the other carriers while measuring the required carrier) and the total peak power calculated from the sum of the individual carrier peak powers.
- d. Record the maximum PAPR level associated with a probability of 0.1 %.
- e. The peak power level is calculated from the sum of the PAPR value from step d) to the measured average power.



4.3 Test Results

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

| Band | Bandwidth (MHz) | Mode | Frequency (MHz) | PAR (dB) |
|------|-----------------|---------|-----------------|----------|
| 2 | 1.4 | QPSK | 1 850.7 | 3.94 |
| | | | 1 880.0 | 4.12 |
| | | | 1 909.3 | 4.49 |
| | 3 | QPSK | 1 851.5 | 3.97 |
| | | | 1 880.0 | 4.14 |
| | | | 1 908.5 | 4.29 |
| | 5 | QPSK | 1 852.5 | 4.14 |
| | | | 1 880.0 | 4.09 |
| | | | 1 907.5 | 4.26 |
| | 10 | QPSK | 1 855.0 | 4.29 |
| | | | 1 880.0 | 4.09 |
| | | | 1 905.0 | 4.17 |
| | 15 | QPSK | 1 857.5 | 4.67 |
| | | | 1 880.0 | 4.41 |
| | | | 1 902.5 | 4.41 |
| 20 | QPSK | 1 860.0 | 4.46 | |
| | | 1 880.0 | 4.23 | |
| | | 1 900.0 | 4.26 | |

| Band | Bandwidth (MHz) | Mode | Frequency (MHz) | PAR (dB) |
|------|-----------------|------|-----------------|----------|
| 5 | 1.4 | QPSK | 824.7 | 4.26 |
| | | | 836.5 | 4.90 |
| | | | 848.3 | 4.43 |
| | 3 | QPSK | 825.5 | 4.17 |
| | | | 836.5 | 4.75 |
| | | | 847.5 | 4.29 |
| | 5 | QPSK | 826.5 | 4.20 |
| | | | 836.5 | 4.72 |
| | | | 846.5 | 4.26 |
| | 10 | QPSK | 829.0 | 4.35 |
| | | | 836.5 | 4.72 |
| | | | 844.0 | 4.29 |

| Band | Bandwidth (MHz) | Mode | Frequency (MHz) | PAR (dB) |
|------|-----------------|------|-----------------|----------|
| 13 | 5 | QPSK | 779.5 | 4.61 |
| | | | 782.0 | 4.70 |
| | | | 784.5 | 4.67 |
| | 10 | QPSK | 782.0 | 4.81 |

| Band | Bandwidth (MHz) | Mode | Frequency (MHz) | PAR (dB) |
|------|-----------------|---------|-----------------|----------|
| 66/4 | 1.4 | QPSK | 1 710.7 | 4.72 |
| | | | 1 745.0 | 4.81 |
| | | | 1 779.3 | 4.55 |
| | 3 | QPSK | 1 711.5 | 4.64 |
| | | | 1 745.0 | 4.67 |
| | | | 1 778.5 | 4.49 |
| | 5 | QPSK | 1 712.5 | 4.67 |
| | | | 1 745.0 | 4.70 |
| | | | 1 777.5 | 4.52 |
| | 10 | QPSK | 1 715.0 | 4.64 |
| | | | 1 745.0 | 4.64 |
| | | | 1 775.0 | 4.35 |
| | 15 | QPSK | 1 717.5 | 4.96 |
| | | | 1 745.0 | 4.84 |
| | | | 1 772.5 | 4.64 |
| 20 | QPSK | 1 720.0 | 4.70 | |
| | | 1 745.0 | 4.61 | |
| | | 1 770.0 | 4.52 | |

- Test plots

LTE band 2

