| | |
|---|---|
| **Report No.:** | RF180307E03A-3 |
| **FCC ID:** | KA2CHG601A1 |
| **Test Model:** | DCH-G601 |
| **Received Date:** | Mar. 12, 2018 |
| **Test Date:** | Mar. 20 to Apr. 25, 2018 |
| **Issued Date:** | May 03, 2018 |
| **Applicant:** | D-Link Corporation |
| **Address:** | No.289, Xinhu 3rd Rd., Neihu District, Tapei City 11494, Taiwan |
| **Issued By:** | Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory |
| **Lab Address:** | E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C. |
| **Test Location:** | E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C. |
| **FCC Registration / Designation Number:** | 723255 / TW2022 |

## Table of Contents

## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| RF180307E03A-3 | Original release. | May 03, 2018 |

## 1 Certificate of Conformity

| | |
|---|---|
| **Product:** | LTE Bluetooth Hub |
| **Brand:** | D-Link |
| **Test Model:** | DCH-G601 |
| **Sample Status:** | ENGINEERING SAMPLE |
| **Applicant:** | D-Link Corporation |
| **Test Date:** | Mar. 20 to Apr. 25, 2018 |
| **Standards:** | FCC Part 22 |

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Wendy Wu , **Date:** May 03, 2018

Wendy Wu / Specialist

**Approved by :** , **Date:** May 03, 2018

May Chen / Manager

## 2 Summary of Test Results

| Applied Standard: FCC Part 22 & Part 2 | | | |
|---|---|---|---|
| FCC Clause | Test Item | Result | Remarks |
| 2.1046<br>22.913 (a) | Effective radiated power | PASS | Meet the requirement of limit. |
| --- | Peak to Average Ratio | PASS | Meet the requirement of limit. |
| 2.1055<br>22.355 | Frequency Stability | PASS | Meet the requirement of limit. |
| 2.1049 | Occupied Bandwidth | PASS | Meet the requirement of limit. |
| 22.917 | Band Edge Measurements | PASS | Meet the requirement of limit. |
| 2.1051<br>22.917 | Conducted Spurious Emissions | PASS | Meet the requirement of limit. |
| 2.1053<br>22.917 | Radiated Spurious Emissions | PASS | Meet the requirement of limit.<br>Minimum passing margin is -14.16dB at 1673MHz. |

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Frequency | Expanded Uncertainty (k=2) (±) |
|---|---|---|
| Radiated Emissions up to 1 GHz | 30MHz ~ 1GHz | 5.33 dB |
| Radiated Emissions above 1 GHz | 1GHz ~ 6GHz | 5.10 dB |
| | 6GHz ~ 18GHz | 4.85 dB |
| | 18GHz ~ 40GHz | 5.24 dB |

## 2.2 Test Site and Instruments

**For WCDMA Band 5 radiated spurious emissions test:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver<br>Keysight | N9038A | MY54450088 | July 08, 2017 | July 07, 2018 |
| Pre-Amplifier<br>EMCI | EMC001340 | 980142 | Feb. 09, 2018 | Feb. 08, 2019 |
| Loop Antenna(*)<br>Electro-Metrics | EM-6879 | 264 | Dec. 16, 2016 | Dec. 15, 2018 |
| RF Cable | NA | LOOPCAB-001<br>LOOPCAB-002 | Jan. 15, 2018 | Jan. 14, 2019 |
| Pre-Amplifier<br>Mini-Circuits | ZFL-1000VH2B | AMP-ZFL-01 | Nov. 09, 2017 | Nov. 08, 2018 |
| Trilog Broadband Antenna<br>SCHWARZBECK | VULB 9168 | 9168-406 | Nov. 29, 2017 | Nov. 28, 2018 |
| RF Cable | 8D | 966-4-1<br>966-4-2<br>966-4-3 | Mar. 21, 2018 | Mar. 20, 2019 |
| Fixed attenuator<br>Mini-Circuits | UNAT-5+ | PAD-3m-4-01 | Oct. 03, 2017 | Oct. 02, 2018 |
| Horn_Antenna<br>SCHWARZBECK | BBHA 9120D | 9120D-783 | Dec. 12, 2017 | Dec. 11, 2018 |
| Pre-Amplifier<br>EMCI | EMC12630SE | 980385 | Jan. 29, 2018 | Jan. 28, 2019 |
| RF Cable | EMC104-SM-SM-1200<br>EMC104-SM-SM-2000<br>EMC104-SM-SM-5000 | 160923<br>150318<br>150321 | Jan. 29, 2018 | Jan. 28, 2019 |
| Pre-Amplifier<br>EMCI | EMC184045SE | 980387 | Jan. 29, 2018 | Jan. 28, 2019 |
| Horn_Antenna<br>SCHWARZBECK | BBHA 9170 | BBHA9170608 | Dec. 14, 2017 | Dec. 13, 2018 |
| RF Cable | EMC102-KM-KM-1200 | 160925 | Jan. 29, 2018 | Jan. 28, 2019 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Antenna Tower & Turn Table<br>Max-Full | MF-7802 | MF780208410 | NA | NA |
| Boresight Antenna Fixture | FBA-01 | FBA-SIP02 | NA | NA |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 4.
4. The CANADA Site Registration No. is 20331-2
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Apr. 25, 2018

**For other radiated spurious emissions test:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver<br>Keysight | N9038A | MY54450088 | July 08, 2017 | July 07, 2018 |
| Pre-Amplifier<br>EMCI | EMC001340 | 980142 | Feb. 09, 2018 | Feb. 08, 2019 |
| Loop Antenna(*)<br>Electro-Metrics | EM-6879 | 264 | Dec. 16, 2016 | Dec. 15, 2018 |
| RF Cable | 5D-FB | LOOPCAB-001<br>LOOPCAB-002 | Jan. 15, 2018 | Jan. 14, 2019 |
| Pre-Amplifier<br>EMCI | EMC001340 | 980142 | Feb. 09, 2018 | Feb. 08, 2019 |
| Trilog Broadband Antenna<br>SCHWARZBECK | VULB 9168 | 9168-406 | Nov. 29, 2017 | Nov. 28, 2018 |
| RF Cable | 8D | 966-4-1<br>966-4-2<br>966-4-3 | Apr. 01, 2017 | Mar. 31, 2018 |
| Fixed attenuator<br>Mini-Circuits | UNAT-5+ | PAD-3m-4-01 | Oct. 03, 2017 | Oct. 02, 2018 |
| Horn_Antenna<br>SCHWARZBECK | BBHA 9120D | 9120D-783 | Dec. 12, 2017 | Dec. 11, 2018 |
| Pre-Amplifier<br>EMCI | EMC12630SE | 980385 | Jan. 29, 2018 | Jan. 28, 2019 |
| RF Cable | EMC104-SM-SM-1200<br>EMC104-SM-SM-2000<br>EMC104-SM-SM-5000 | 160923<br>150318<br>150321 | Jan. 29, 2018 | Jan. 28, 2019 |
| Pre-Amplifier<br>EMCI | EMC184045SE | 980387 | Jan. 29, 2018 | Jan. 28, 2019 |
| Horn_Antenna<br>SCHWARZBECK | BBHA 9170 | BBHA9170608 | Dec. 14, 2017 | Dec. 13, 2018 |
| RF Cable | EMC102-KM-KM-1200 | 160925 | Jan. 29, 2018 | Jan. 28, 2019 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Antenna Tower & Turn Table<br>Max-Full | MF-7802 | MF780208410 | NA | NA |
| Boresight Antenna Fixture | FBA-01 | FBA-SIP02 | NA | NA |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 4.
4. The CANADA Site Registration No. is 20331-2
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Mar. 21, 2018

**For other test items:**

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Spectrum Analyzer R&S | FSV40 | 100964 | July 01, 2017 | June 30, 2018 |
| Spectrum Analyzer Agilent | E4446A | MY48250254 | Nov. 21, 2017 | Nov. 20, 2018 |
| Power meter Anritsu | ML2495A | 1014008 | May 11, 2017 | May 10, 2018 |
| Power sensor Anritsu | MA2411B | 0917122 | May 11, 2017 | May 10, 2018 |
| AC Power Source Extech Electronics | 6205 | 1440452 | NA | NA |
| Temperature & Humidity Chamber Giant Force | GTH-150-40-SP-AR | MAA0812-008 | Jan. 10, 2018 | Jan. 09, 2019 |
| DC Power Supply Topward | 6603D | 795558 | NA | NA |
| True RMS Clamp Meter FLUKE | 325 | 31130711WS | May 29, 2017 | May 28, 2018 |
| ESG Vector signal generator Agilent | E4438C | MY45094468/005 506 602 UK6 UNJ | Nov. 26, 2017 | Nov. 25, 2018 |
| ESG Vector signal generator Agilent | E4438C | MY47271330 506 602 UNJ | Oct. 11, 2017 | Oct. 10, 2018 |
| Mech Switch Absorptive Mini-Circuits | MSP4TA-18+ | 0140 | Feb. 12, 2018 | Feb. 11, 2019 |
| FXD ATTEN Mini-Circuits | BW-S3W2+ | MN71981 | Feb. 12, 2018 | Feb. 11, 2019 |
| Software | ADT_RF Test Software V6.6.5.4 | NA | NA | NA |

**NOTE:** 1. The test was performed in Oven room 2.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Mar. 27 to Apr. 25, 2018

## 3 General Information

### 3.1 General Description of EUT

| | | |
|---|---|---|
| Product | LTE Bluetooth Hub | |
| Brand | D-Link | |
| Test Model | DCH-G601 | |
| Status of EUT | ENGINEERING SAMPLE | |
| Power Supply Rating | 5Vdc from power adapter or 3.7Vdc from battery | |
| Modulation Type | WCDMA, HSDPA, HSUPA | BPSK |
| | LTE Band 5 | QPSK, 16QAM |
| Operating Frequency | WCDMA, HSDPA, HSUPA | 826.4MHz ~ 846.6MHz |
| | LTE Band 5 | 824.7MHz ~ 848.3MHz |
| Max. ERP Power | WCDMA Band 5 | 189.23mW (22.77dBm) |
| | LTE Band 5<br>(Channel Bandwidth 1.4MHz) | 209.89mW (23.22dBm) |
| | LTE Band 5<br>(Channel Bandwidth 3MHz) | 209.89mW (23.22dBm) |
| | LTE Band 5<br>(Channel Bandwidth 5MHz) | 205.59mW (23.13dBm) |
| | LTE Band 5<br>(Channel Bandwidth 10MHz) | 208.45mW (23.19dBm) |
| Emission Designator | WCDMA Band 5 | 4M08F9W |
| | LTE Band 5<br>(Channel Bandwidth 1.4MHz) | QPSK: 1M09G7D<br>16QAM: 1M09D7W |
| | LTE Band 5<br>(Channel Bandwidth 3MHz) | QPSK: 2M70G7D<br>16QAM: 2M70D7W |
| | LTE Band 5<br>(Channel Bandwidth 5MHz) | QPSK: 4M49G7D<br>16QAM: 4M49D7W |
| | LTE Band 5<br>(Channel Bandwidth 10MHz) | QPSK: 8M98G7D<br>16QAM: 8M98D7W |
| Antenna Type | Refer to Note | |
| Antenna Connector | Refer to Note | |
| Accessory Device | Adapter x 1 | |
| Data Cable Supplied | NA | |

Note:

1. Simultaneously transmission condition.

| Condition | Technology | |
|---|---|---|
| 1 | WLAN 2.4GHz | 3G/LTE |
| 2 | Bluetooth | 3G/LTE |
| Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found. | | |

2. The EUT must be supplied with a power adapter or battery as following table:

| Adapter | | |
|---|---|---|
| Brand | Model No. | Spec. |
| Asian Power Device Inc | WB-10E05R | Input: 100-240Vac, 0.4A, 50/60Hz<br>Output: 5Vdc, 2A<br>DC output cable (Unshielded, 1.2m) |
| **Battery** | | |
| Brand | Model No. | Spec. |
| GPI International Limited | NTA3555 | 3.7Vdc / 1490mAh |

3. For the radiated emissions, the EUT was pre-tested under the following modes:

| Test Mode | Description |
|---|---|
| **Mode A** | **Power from adapter** |
| Mode B | Power from battery |

From the above modes, the worst case was found in **Mode A**. Therefore only the test data of the mode was recorded in this report.

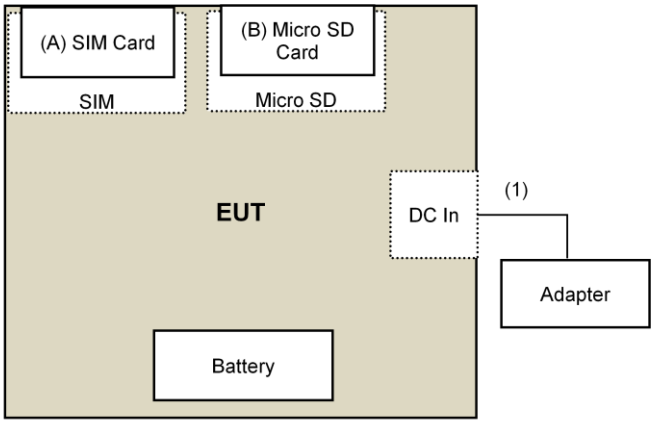
4. The antennas provided to the EUT, please refer to the following table:

| **WLAN & Bluetooth** | | | | | |
|---|---|---|---|---|---|
| Ant No. | Model | Antenna Gain (dBi) | Frequency rang (GHz) | Antenna type | Connector type |
| 1 | 290-20327 | 1.6 | 2.4~2.4835 | PIFA | NA |
| 2 | C037-511302-A | 4.55 | 2.4~2.4835 | PIFA | NA |
| Note: Ant No. 2 was selected as representative antenna for the final test. | | | | | |

| **WWAN** | | | | | | |
|---|---|---|---|---|---|---|
| Ant No. | Model | Antenna Gain (dBi) | Frequency rang | Antenna type | Connector type | *Cable Length (mm) |
| 1 (Aux) | 290-328 | 0.15 | 699~894MHz | PCB | i-pex(MHF) | 88.7 |
| | | 5.58 | 1.71~2.16GHz | | | |
| 2 (Main) | 290-329 | 0.39 | 699~894MHz | PCB | i-pex(MHF) | 43.7 |
| | | 4.38 | 1.71~2.16GHz | | | |
| Note: The WWAN mode will fix transmission on Antenna No.: 2. | | | | | | |

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

## 3.2 Configuration of System under Test




### 3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|---|---|---|---|---|---|---|
| A. | SIM Card | NA | NA | NA | NA | Provided by Lab |
| B. | MicroSD Card | Transcend | 8GB | NA | NA | Provided by Lab |
| C. | Simulator | R&S | CMW500 | 151084 | NA | Provided by Lab |

Note:

1. All power cords of the above support units are non-shielded (1.8m).

| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks |
|---|---|---|---|---|---|---|
| 1. | DC Cable | 1 | 1.2 | No | 0 | Supplied by client |

### 3.3 Test Mode Applicability and Tested Channel Detail

**WCDMA Band 5**

| Test Item | Available Channel | Tested Channel | Mode |
|---|---|---|---|
| ERP | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |
| Frequency Stability | 4132 to 4233 | 4182 | WCDMA |
| Occupied Bandwidth | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |
| Band Edge | 4132 to 4233 | 4132, 4233 | WCDMA |
| Peak to Average Ratio | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |
| Conducted Emission | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |
| Radiated Emission Below 1GHz | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |
| Radiated Emission Above 1GHz | 4132 to 4233 | 4132, 4182, 4233 | WCDMA |

**Test Condition:**

| Test Item | Environmental Conditions | Input Power | Tested By |
|---|---|---|---|
| ERP | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chung |
| Frequency Stability | 23deg. C, 68%RH | 120Vac, 60Hz | Allen Chung |
| Occupied Bandwidth | 23deg. C, 68%RH | 120Vac, 60Hz | Allen Chung |
| Band Edge | 23deg. C, 68%RH | 120Vac, 60Hz | Allen Chung |
| Peak to Average Ratio | 23deg. C, 68%RH | 120Vac, 60Hz | Allen Chung |
| Conducted Emission | 23deg. C, 68%RH | 120Vac, 60Hz | Allen Chung |
| Radiated Emission Below 1GHz | 25deg. C, 66%RH | 120Vac, 60Hz | Steven Chiang |
| Radiated Emission Above 1GHz | 25deg. C, 66%RH | 120Vac, 60Hz | Steven Chiang |

## LTE Band 5

| TEST ITEM | AVAILABLE CHANNEL | TESTED CHANNEL | CHANNEL BANDWIDTH | MODULATION | MODE |
|---|---|---|---|---|---|
| ERP | 20407 to 20643 | 20407, 20525, 20643 | 1.4MHz | QPSK/16QAM | 1RB / 0 RB offset |
| | 20145 to 20635 | 20145, 20525, 20635 | 3MHz | QPSK/16QAM | 1RB / 0 RB offset |
| | 20425 to 20625 | 20425, 20525, 20625 | 5MHz | QPSK/16QAM | 1RB / 0 RB offset |
| | 20450 to 20600 | 20450, 20525, 20600 | 10MHz | QPSK/16QAM | 1RB / 0 RB offset |
| Frequency Stability | 20407 to 20643 | 20525 | 1.4MHz | QPSK | - |
| | 20145 to 20635 | 20525 | 3MHz | QPSK | - |
| | 20425 to 20625 | 20525 | 5MHz | QPSK | - |
| | 20450 to 20600 | 20525 | 10MHz | QPSK | - |
| Occupied Bandwidth | 20407 to 20643 | 20407, 20525, 20643 | 1.4MHz | QPSK/16QAM | Full RB |
| | 20145 to 20635 | 20145, 20525, 20635 | 3MHz | QPSK/16QAM | Full RB |
| | 20425 to 20625 | 20425, 20525, 20625 | 5MHz | QPSK/16QAM | Full RB |
| | 20450 to 20600 | 20450, 20525, 20600 | 10MHz | QPSK/16QAM | Full RB |
| Band Edge | 20407 to 20643 | 20407 | 1.4MHz | QPSK | 1 RB / 0 RB Offset |
| | | 20643 | | | 1 RB / 5 RB Offset |
| | | 20407, 20643 | | | 6 RB / 0 RB Offset |
| | 20145 to 20635 | 20145 | 3MHz | QPSK | 1 RB / 0 RB Offset |
| | | 20635 | | | 1 RB / 14 RB Offset |
| | | 20145, 20635 | | | 15 RB / 0 RB Offset |
| | 20425 to 20625 | 20425 | 5MHz | QPSK | 1 RB / 0 RB Offset |
| | | 20625 | | | 1 RB / 24 RB Offset |
| | | 20425, 20625 | | | 25 RB / 0 RB Offset |
| | 20450 to 20600 | 20450 | 10MHz | QPSK | 1 RB / 0 RB Offset |
| | | 20600 | | | 1 RB / 49 RB Offset |
| | | 20450, 20600 | | | 50 RB / 0 RB Offset |
| Peak to Average Ratio | 20407 to 20643 | 20407, 20525, 20643 | 1.4MHz | QPSK/16QAM | Full RB |
| | 20145 to 20635 | 20145, 20525, 20635 | 3MHz | QPSK/16QAM | Full RB |
| | 20425 to 20625 | 20425, 20525, 20625 | 5MHz | QPSK/16QAM | Full RB |
| | 20450 to 20600 | 20450, 20525, 20600 | 10MHz | QPSK/16QAM | Full RB |
| Condcudeted Emission | 20407 to 20643 | 20407, 20525, 20643 | 1.4MHz | QPSK | 1RB / 0 RB offset |
| | 20145 to 20635 | 20145, 20525, 20635 | 3MHz | QPSK | 1RB / 0 RB offset |
| | 20425 to 20625 | 20425, 20525, 20625 | 5MHz | QPSK | 1RB / 0 RB offset |
| | 20450 to 20600 | 20450, 20525, 20600 | 10MHz | QPSK | 1RB / 0 RB offset |
| Radiated Emission | 20407 to 20643 | 20407, 20525, 20643 | 1.4MHz | QPSK | 1RB / 0 RB offset |
| | 20145 to 20635 | 20145, 20525, 20635 | 3MHz | QPSK | 1RB / 0 RB offset |
| | 20425 to 20625 | 20425, 20525, 20625 | 5MHz | QPSK | 1RB / 0 RB offset |
| | 20450 to 20600 | 20450, 20525, 20600 | 10MHz | QPSK | 1RB / 0 RB offset |

**Test Condition:**

| Test Item | Environmental Conditions | Input Power | Tested By |
|---|---|---|---|
| ERP | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Frequency Stability | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Occupied Bandwidth | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Band Edge | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Peak to Average Ratio | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Conducted Emission | 25deg. C, 63%RH | 120Vac, 60Hz | Allen Chuang |
| Radiated Emission Below 1GHz | 25deg. C, 66%RH | 120Vac, 60Hz | Eason Tseng |
| Radiated Emission Above 1GHz | 25deg. C, 70%RH | 120Vac, 60Hz | Eason Tseng |

### 3.4 EUT Operating Conditions

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

### 3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 22**

**KDB 971168 D01 Power Meas License Digital Systems v03**

**ANSI/TIA/EIA-603-E 2016**

**ANSI 63.26-2015**

**NOTE:** All test items have been performed and recorded as per the above standards.

# 4 Test Types and Results

## 4.1 Output Power Measurement

### 4.1.1 Limits of Output Power Measurement

Mobile / Portable station are limited to 7 watts e.r.p.

### 4.1.2 Test Procedures

The EUT was set up for the maximum power with WCDMA/LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

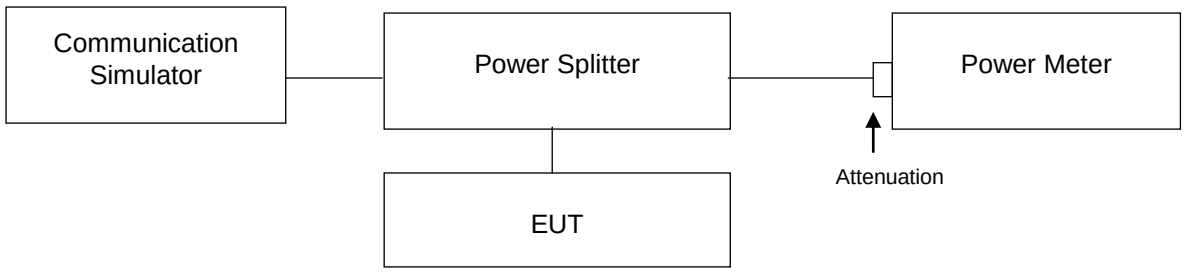
**Conducted Power Measurement:**

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

**EIRP / ERP Measurement:**

1. EIRP = Conducted output power level + Antenna gain
2. ERP power = EIRP power - 2.15dBi.

### 4.1.3 Test Setup




For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.4 Test Results

## CONDUCTED OUTPUT POWER (dBm)

### WCDMA Band 5

| Band | WCDMA B5 | | |
|---|---|---|---|
| Channel | 4132 | 4182 | 4233 |
| Frequency (MHz) | 826.4 | 836.4 | 846.6 |
| RMC | 24.42 | 24.53 | 24.38 |
| HSDPA Subtest-1 | 23.89 | 24.22 | 23.86 |
| HSDPA Subtest-2 | 23.66 | 24.16 | 23.74 |
| HSDPA Subtest-3 | 24.02 | 23.91 | 23.68 |
| HSDPA Subtest-4 | 23.81 | 24.28 | 24.06 |
| HSUPA Subtest-1 | 23.87 | 23.91 | 23.75 |
| HSUPA Subtest-2 | 23.58 | 24.29 | 24.01 |
| HSUPA Subtest-3 | 23.67 | 23.93 | 23.70 |
| HSUPA Subtest-4 | 23.90 | 24.32 | 23.95 |
| HSUPA Subtest-5 | 24.02 | 24.15 | 23.80 |

### LTE Band 5

| Band / BW | RB Size | RB Offset | QPSK | | | 3GPP MPR (dB) | 16QAM | | | 3GPP MPR (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low CH | Mid CH | High CH | | Low CH | Mid CH | High CH | |
| | | | 20407 | 20525 | 20643 | | 20407 | 20525 | 20643 | |
| | | | 824.7 | 836.5 | 848.3 | | 824.7 | 836.5 | 848.3 | |
| | | | MHz | MHz | MHz | | MHz | MHz | MHz | |
| 5 / 1.4M | 1 | 0 | 24.98 | 24.67 | 24.62 | 0 | 24.33 | 23.69 | 23.96 | 1 |
| | 1 | 2 | 24.91 | 24.55 | 24.53 | 0 | 23.85 | 23.95 | 23.73 | 1 |
| | 1 | 5 | 24.95 | 24.53 | 24.53 | 0 | 24.30 | 23.70 | 23.76 | 1 |
| | 3 | 0 | 24.90 | 24.52 | 24.34 | 0 | 24.02 | 23.65 | 23.56 | 1 |
| | 3 | 1 | 24.94 | 24.49 | 24.57 | 0 | 23.89 | 23.62 | 23.61 | 1 |
| | 3 | 3 | 24.92 | 24.43 | 24.54 | 0 | 24.05 | 23.60 | 23.64 | 1 |
| | 6 | 0 | 23.92 | 23.60 | 23.55 | 1 | 22.94 | 22.75 | 22.56 | 2 |

| Band / BW | RB Size | RB Offset | QPSK | | | 3GPP MPR (dB) | 16QAM | | | 3GPP MPR (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low CH | Mid CH | High CH | | Low CH | Mid CH | High CH | |
| | | | 20415 | 20525 | 20635 | | 20415 | 20525 | 20635 | |
| | | | 825.5 | 836.5 | 847.5 | | 825.5 | 836.5 | 847.5 | |
| | | | MHz | MHz | MHz | | MHz | MHz | MHz | |
| 5 / 3M | 1 | 0 | 24.98 | 24.50 | 24.50 | 0 | 24.38 | 23.86 | 23.65 | 1 |
| | 1 | 7 | 24.90 | 24.44 | 24.40 | 0 | 24.26 | 23.63 | 23.59 | 1 |
| | 1 | 14 | 24.78 | 24.60 | 24.46 | 0 | 23.94 | 23.75 | 23.60 | 1 |
| | 8 | 0 | 23.83 | 23.57 | 23.49 | 1 | 23.06 | 22.56 | 22.52 | 2 |
| | 8 | 3 | 23.93 | 23.60 | 23.52 | 1 | 23.05 | 22.55 | 22.50 | 2 |
| | 8 | 7 | 23.89 | 23.61 | 23.48 | 1 | 23.00 | 22.49 | 22.54 | 2 |
| | 15 | 0 | 24.00 | 23.41 | 23.48 | 1 | 22.99 | 22.68 | 22.54 | 2 |

| Band / BW | RB Size | RB Offset | QPSK | | | 3GPP MPR (dB) | 16QAM | | | 3GPP MPR (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low CH | Mid CH | High CH | | Low CH | Mid CH | High CH | |
| | | | 20425 | 20525 | 20625 | | 20425 | 20525 | 20625 | |
| | | | 826.5 | 836.5 | 846.5 | | 826.5 | 836.5 | 846.5 | |
| | | | MHz | MHz | MHz | | MHz | MHz | MHz | |
| 5 / 5M | 1 | 0 | 24.89 | 24.57 | 24.43 | 0 | 24.32 | 23.84 | 23.96 | 1 |
| | 1 | 12 | 24.78 | 24.50 | 24.38 | 0 | 24.16 | 23.72 | 23.74 | 1 |
| | 1 | 24 | 24.75 | 24.48 | 24.40 | 0 | 24.03 | 23.81 | 23.60 | 1 |
| | 12 | 0 | 23.96 | 23.58 | 23.56 | 1 | 23.01 | 22.66 | 22.66 | 2 |
| | 12 | 6 | 23.86 | 23.54 | 23.49 | 1 | 22.96 | 22.52 | 22.47 | 2 |
| | 12 | 13 | 23.76 | 23.50 | 23.53 | 1 | 22.91 | 22.62 | 22.52 | 2 |
| | 25 | 0 | 23.83 | 23.59 | 23.45 | 1 | 22.96 | 22.57 | 22.54 | 2 |

| Band / BW | RB Size | RB Offset | QPSK | | | 3GPP MPR (dB) | 16QAM | | | 3GPP MPR (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low CH | Mid CH | High CH | | Low CH | Mid CH | High CH | |
| | | | 20450 | 20525 | 20600 | | 20450 | 20525 | 20600 | |
| | | | 829 | 836.5 | 844 | | 829 | 836.5 | 844 | |
| | | | MHz | MHz | MHz | | MHz | MHz | MHz | |
| 5 / 10M | 1 | 0 | 24.95 | 24.73 | 24.62 | 0 | 24.21 | 24.05 | 23.80 | 1 |
| | 1 | 24 | 24.70 | 24.43 | 24.37 | 0 | 24.12 | 23.71 | 23.74 | 1 |
| | 1 | 49 | 24.56 | 24.44 | 24.41 | 0 | 23.84 | 24.03 | 23.36 | 1 |
| | 25 | 0 | 23.75 | 23.54 | 23.49 | 1 | 22.77 | 22.79 | 22.62 | 2 |
| | 25 | 12 | 23.71 | 23.48 | 23.47 | 1 | 22.83 | 22.58 | 22.64 | 2 |
| | 25 | 25 | 23.60 | 23.48 | 23.49 | 1 | 22.70 | 22.45 | 22.49 | 2 |
| | 50 | 0 | 23.64 | 23.55 | 23.51 | 1 | 22.71 | 22.73 | 22.65 | 2 |

## ERP POWER

### WCDMA B5

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 4132 | 826.4 | 24.42 | 0.39 | 22.66 | 184.50 | Pass | Max |
| 4182 | 836.4 | 24.53 | 0.39 | 22.77 | 189.23 | Pass | Max |
| 4233 | 846.6 | 24.38 | 0.39 | 22.62 | 182.81 | Pass | Max |

### LTE Band 5

### QPSK

#### 1.4M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20407 | 824.7 | 24.98 | 0.39 | 23.22 | 209.89 | Pass | Max |
| 20525 | 836.5 | 24.67 | 0.39 | 22.91 | 195.43 | Pass | Max |
| 20643 | 848.3 | 24.62 | 0.39 | 22.86 | 193.20 | Pass | Max |

#### 3M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20415 | 825.5 | 24.98 | 0.39 | 23.22 | 209.89 | Pass | Max |
| 20525 | 836.5 | 24.50 | 0.39 | 22.74 | 187.93 | Pass | Max |
| 20635 | 847.5 | 24.50 | 0.39 | 22.74 | 187.93 | Pass | Max |

#### 5M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20425 | 826.5 | 24.89 | 0.39 | 23.13 | 205.59 | Pass | Max |
| 20525 | 836.5 | 24.57 | 0.39 | 22.81 | 190.99 | Pass | Max |
| 20625 | 846.5 | 24.43 | 0.39 | 22.67 | 184.93 | Pass | Max |

#### 10M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20450 | 829 | 24.95 | 0.39 | 23.19 | 208.45 | Pass | Max |
| 20525 | 836.5 | 24.73 | 0.39 | 22.97 | 198.15 | Pass | Max |
| 20600 | 844 | 24.62 | 0.39 | 22.86 | 193.20 | Pass | Max |

## 16QAM

### 1.4M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20407 | 824.7 | 24.33 | 0.39 | 22.57 | 180.72 | Pass | Max |
| 20525 | 836.5 | 23.69 | 0.39 | 21.93 | 155.96 | Pass | Max |
| 20643 | 848.3 | 23.96 | 0.39 | 22.20 | 165.96 | Pass | Max |

### 3M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20415 | 825.5 | 24.34 | 0.39 | 22.58 | 181.05 | Pass | Max |
| 20525 | 836.5 | 23.86 | 0.39 | 22.10 | 162.18 | Pass | Max |
| 20635 | 847.5 | 23.65 | 0.39 | 21.89 | 154.53 | Pass | Max |

### 5M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20425 | 826.5 | 24.32 | 0.39 | 22.56 | 180.30 | Pass | Max |
| 20525 | 836.5 | 23.84 | 0.39 | 22.08 | 161.44 | Pass | Max |
| 20625 | 846.5 | 23.96 | 0.39 | 22.20 | 165.96 | Pass | Max |

### 10M

| Channel Number | Freq. (MHz) | Conducted Average Power (dBm) | Gain | ERP(dBm) | ERP(mW) | Pass /Fail | Setting |
|---|---|---|---|---|---|---|---|
| 20450 | 829 | 24.21 | 0.39 | 22.45 | 175.79 | Pass | Max |
| 20525 | 836.5 | 24.05 | 0.39 | 22.29 | 169.43 | Pass | Max |
| 20600 | 844 | 23.80 | 0.39 | 22.04 | 159.96 | Pass | Max |

## 4.2 Frequency Stability Measurement

4.2.1 Limits of Frequency Stabiliity Measurement

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.2.2 Test Procedure

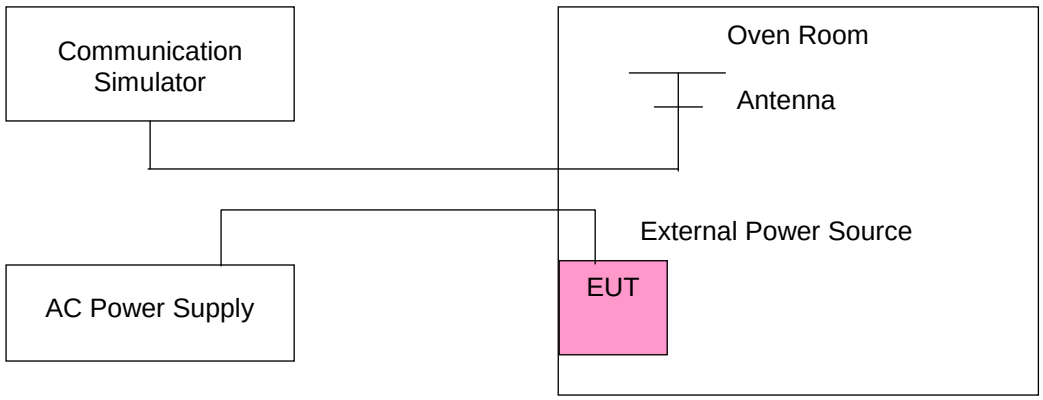
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the AC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 ℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

**NOTE:** The frequency error was recorded frequency error from the communication simulator.

4.2.3 Test Setup



4.2.4 Test Results

**WCDMA**

Frequency Error vs. Voltage

| Voltage (Volts) | Frequency Error (ppm) | Limit (ppm) |
|---|---|---|
| | WCDMA | |
| 102 | 0.049 | 2.5 |
| 138 | 0.048 | 2.5 |

Frequency Error vs. Temperature.

| TEMP. (℃) | Frequency Error (ppm) | Limit (ppm) |
|---|---|---|
| | WCDMA | |
| 75 | 0.035 | 2.5 |
| 70 | 0.032 | 2.5 |
| 60 | 0.037 | 2.5 |
| 50 | 0.036 | 2.5 |
| 40 | 0.041 | 2.5 |
| 30 | 0.043 | 2.5 |
| 20 | 0.025 | 2.5 |
| 10 | 0.036 | 2.5 |
| 0 | 0.030 | 2.5 |
| -10 | 0.025 | 2.5 |
| -20 | 0.032 | 2.5 |
| -30 | 0.045 | 2.5 |

## LTE

Frequency Error vs. Voltage

| Voltage (Volts) | Frequency Error (ppm) | | | | Limit (ppm) |
|---|---|---|---|---|---|
| | LTE Band 5 | | | | |
| | 1.4MHz | 3MHz | 5MHz | 10MHz | |
| 102 | 0.036 | 0.033 | 0.044 | 0.030 | 2.5 |
| 138 | 0.038 | 0.029 | 0.037 | 0.047 | 2.5 |

Frequency Error vs. Temperature

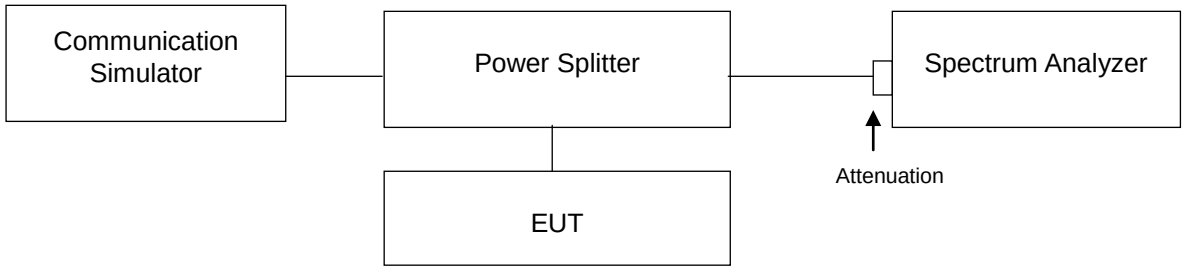
| Temp. (℃) | Frequency Error (ppm) | | | | Limit (ppm) |
|---|---|---|---|---|---|
| | LTE Band 5 | | | | |
| | 1.4MHz | 3MHz | 5MHz | 10MHz | |
| 75 | 0.000 | 0.033 | 0.033 | 0.045 | 2.5 |
| 70 | 0.029 | 0.059 | 0.033 | 0.036 | 2.5 |
| 60 | 0.049 | 0.037 | 0.045 | 0.024 | 2.5 |
| 50 | 0.044 | 0.044 | 0.026 | 0.043 | 2.5 |
| 40 | 0.055 | 0.045 | 0.038 | 0.024 | 2.5 |
| 30 | 0.050 | 0.027 | 0.049 | 0.033 | 2.5 |
| 20 | 0.042 | 0.039 | 0.038 | 0.035 | 2.5 |
| 10 | 0.043 | 0.032 | 0.027 | 0.035 | 2.5 |
| 0 | 0.027 | 0.036 | 0.033 | 0.044 | 2.5 |
| -10 | 0.033 | 0.029 | 0.050 | 0.050 | 2.5 |
| -20 | 0.051 | 0.049 | 0.043 | 0.056 | 2.5 |
| -30 | 0.032 | 0.025 | 0.035 | 0.031 | 2.5 |

## 4.3 Occupied Bandwidth Measurement

### 4.3.1 Test Procedure

All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

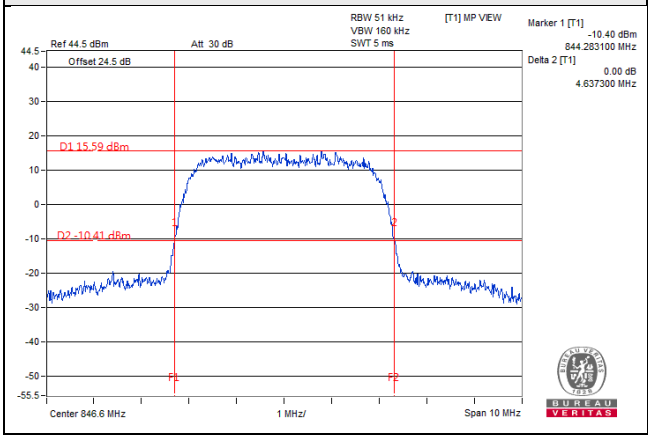
### 4.3.2 Test Setup



### 4.3.3 Test Result (-26dB Bandwidth)

| Channel | FREQ. (MHz) | -26dB Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 4132 | 826.4 | 4.62 |
| 4182 | 836.4 | 4.62 |
| 4233 | 846.6 | 4.64 |

| Spectrum Plot of Worst Value |
|---|
| WCDMA |



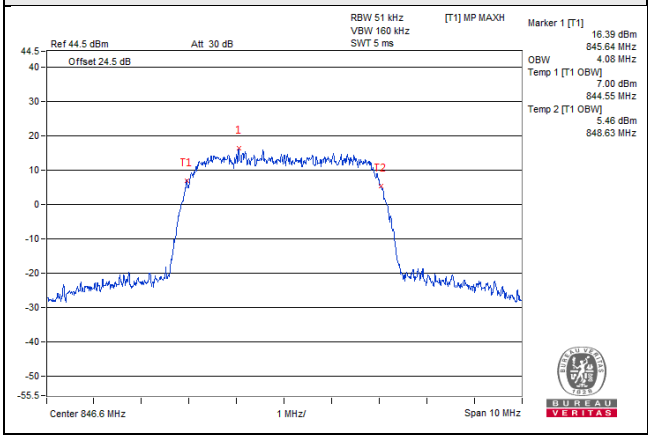
| LTE Band 5 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel Bandwidth 1.4MHz | | | | Channel Bandwidth 3MHz | | | |
| Channel | Frequency (MHz) | -26dB Bandwidth (MHz) | | Channel | Frequency (MHz) | -26dB Bandwidth (MHz) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20407 | 824.7 | 1.29 | 1.29 | 20415 | 825.5 | 2.92 | 2.94 |
| 20525 | 836.5 | 1.30 | 1.28 | 20525 | 836.5 | 2.92 | 2.94 |
| 20643 | 848.3 | 1.28 | 1.29 | 20635 | 847.5 | 2.93 | 2.92 |
| Channel Bandwidth 5MHz | | | | Channel Bandwidth 10MHz | | | |
| Channel | Frequency (MHz) | -26dB Bandwidth (MHz) | | Channel | Frequency (MHz) | -26dB Bandwidth (MHz) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20425 | 826.5 | 4.82 | 4.81 | 20450 | 829 | 9.54 | 9.58 |
| 20525 | 836.5 | 4.82 | 4.83 | 20525 | 836.5 | 9.57 | 9.56 |
| 20625 | 846.5 | 4.77 | 4.80 | 20600 | 844 | 9.53 | 9.55 |

| Spectrum Plot of Worst Value | |
|---|---|
| 1.4MHz / QPSK | 3MHz / 16QAM |
|  |  |
| 5MHz / 16QAM | 10MHz / 16QAM |
|  |  |

## 4.3.4 Test Result (Occupied Bandwidth)

| Channel | FREQ. (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|
| | | WCDMA |
| 4132 | 826.4 | 4.07 |
| 4182 | 836.4 | 4.08 |
| 4233 | 846.6 | 4.08 |

| Spectrum Plot of Worst Value |
|---|
| WCDMA |



| LTE Band 5 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel Bandwidth 1.4MHz | | | | Channel Bandwidth 3MHz | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20407 | 824.7 | 1.09 | 1.09 | 20415 | 825.5 | 2.70 | 2.70 |
| 20525 | 836.5 | 1.09 | 1.09 | 20525 | 836.5 | 2.70 | 2.70 |
| 20643 | 848.3 | 1.09 | 1.09 | 20635 | 847.5 | 2.70 | 2.70 |
| Channel Bandwidth 5MHz | | | | Channel Bandwidth 10MHz | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20425 | 826.5 | 4.48 | 4.49 | 20450 | 829 | 8.96 | 8.97 |
| 20525 | 836.5 | 4.49 | 4.49 | 20525 | 836.5 | 8.98 | 8.98 |
| 20625 | 846.5 | 4.48 | 4.48 | 20600 | 844 | 8.95 | 8.96 |

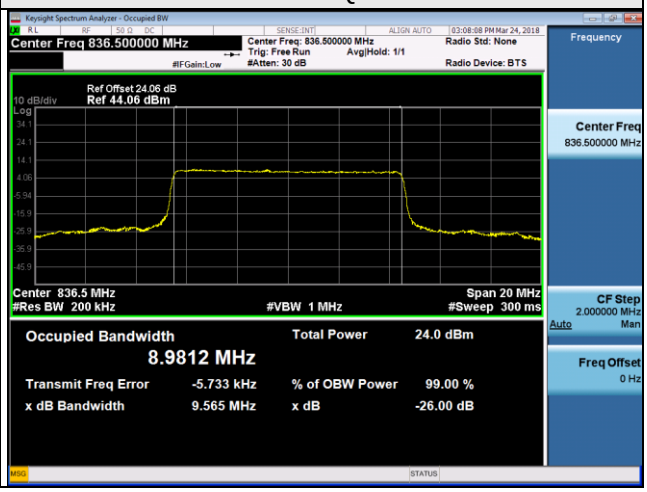
Spectrum Plot of Worst Value

1.4MHz / QPSK


3MHz / QPSK


5MHz / QPSK


10MHz / QPSK

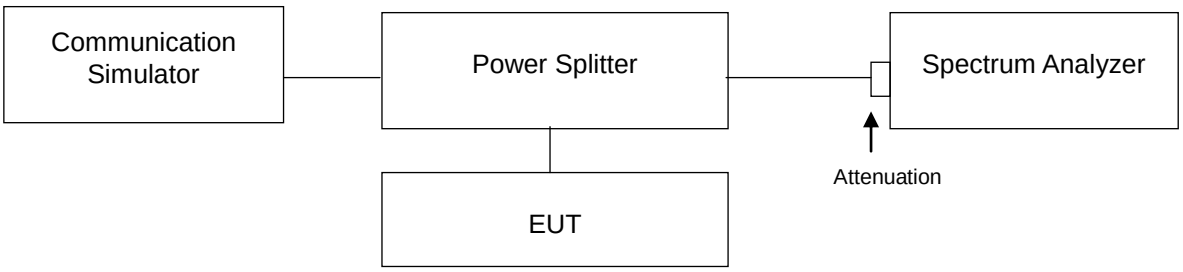


## 4.4 Band Edge Measurement

### 4.4.1 Limits of Band Edge Measurement

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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

### 4.4.2 Test Setup

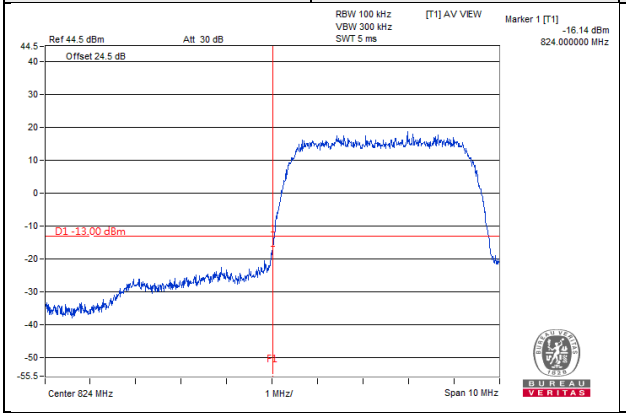


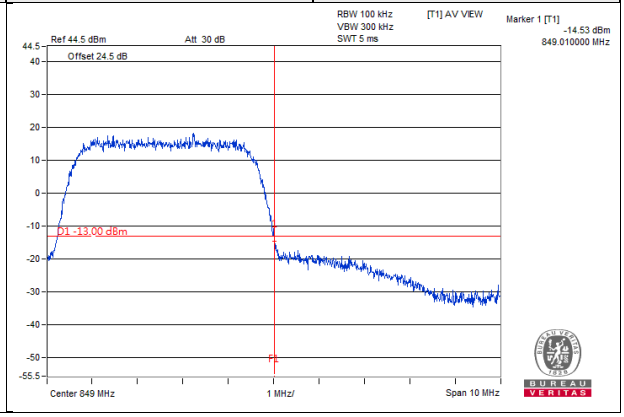

### 4.4.3 Test Procedures

a. All measurements were done at low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and s RB of the spectrum is >1% EMISSION BANDWIDTH and VB of the spectrum is $\geqq$ 3*RB.
c. Record the max trace plot into the test report.

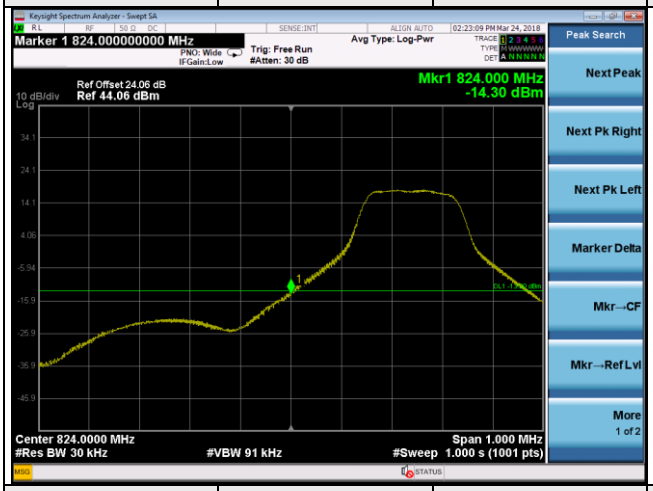
## 4.4.4 Test Results

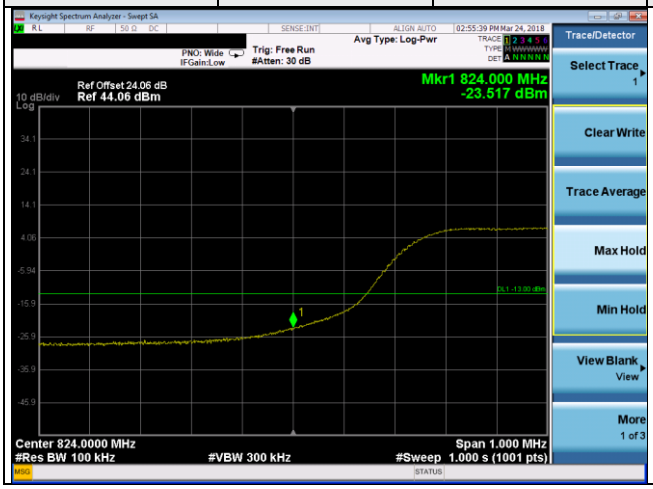
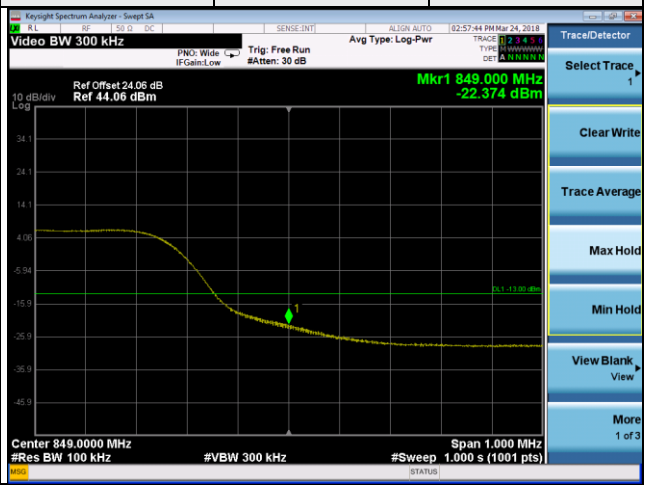
| WCDMA | | | |
|---|---|---|---|
| Channel | 4132 | Channel | 4233 |

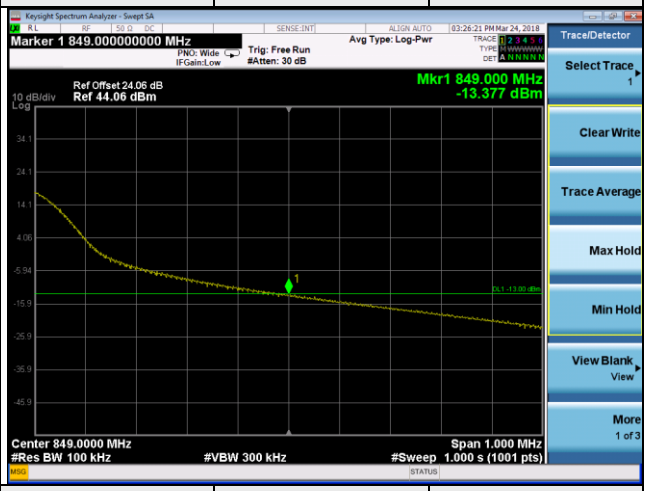


| LTE Band 5 | | | | | |
|---|---|---|---|---|---|
| Channel Bandwidth 1.4MHz | | | | | |
| Channel | 20407 | 1 RB | Channel | 20643 | 1 RB |
|  | | |  | | |
| Channel | 20407 | 6 RB | Channel | 20643 | 6 RB |
|  | | |  | | |

| LTE Band 5 | | | | | |
|---|---|---|---|---|---|
| Channel Bandwidth 3MHz | | | | | |
| Channel | 20415 | 1 RB | Channel | 20635 | 1 RB |
|  | | |  | | |
| Channel | 20415 | 15 RB | Channel | 20635 | 15 RB |
|  | | |  | | |

| LTE Band 5 | | | | | |
|---|---|---|---|---|---|
| Channel Bandwidth 5MHz | | | | | |
| Channel | 20425 | 1 RB | Channel | 20625 | 1 RB |
|  | | |  | | |
| Channel | 20425 | 25 RB | Channel | 20625 | 25 RB |
|  | | |  | | |

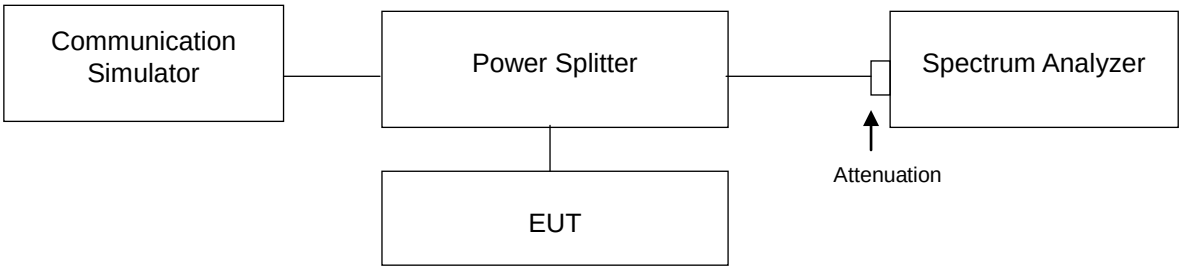
| LTE Band 5 | | | | | |
|---|---|---|---|---|---|
| Channel Bandwidth 10MHz | | | | | |
| Channel | 20450 | 1 RB | Channel | 20600 | 1 RB |
|  | | |  | | | |
| Channel | 20450 | 50 RB | Channel | 20600 | 50 RB |
|  | | |  | | | |

## 4.5 Peak to Average Ratio

### 4.5.1 Limits of Peak to Average Ratio Measurement

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.

### 4.5.2 Test Setup



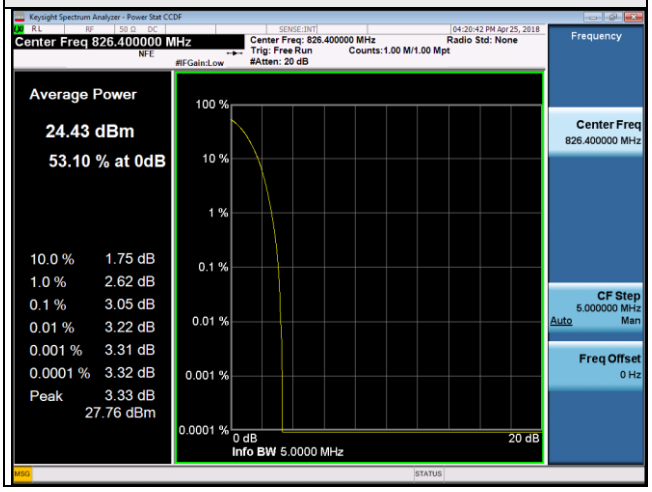

### 4.5.3 Test Procedures

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

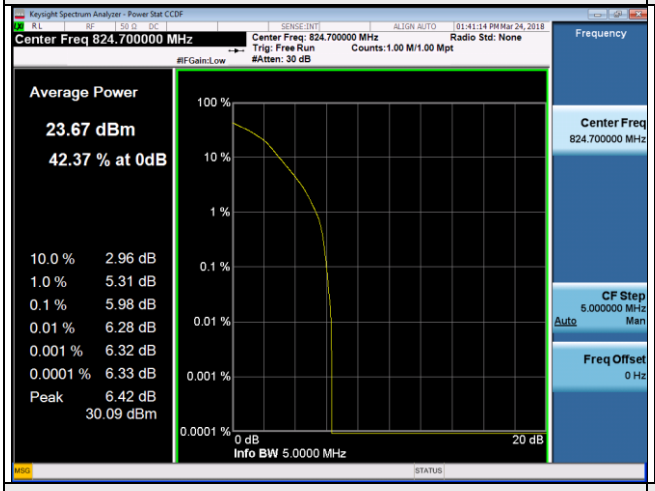
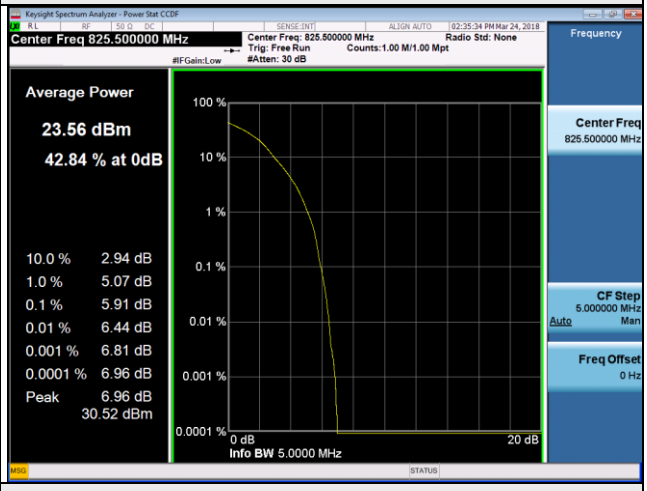
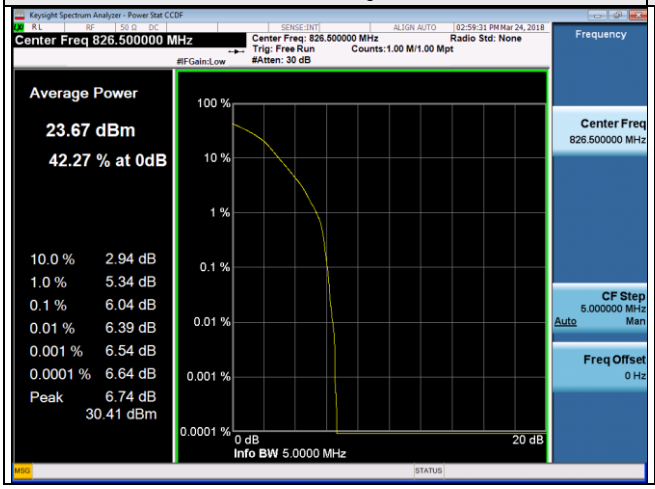
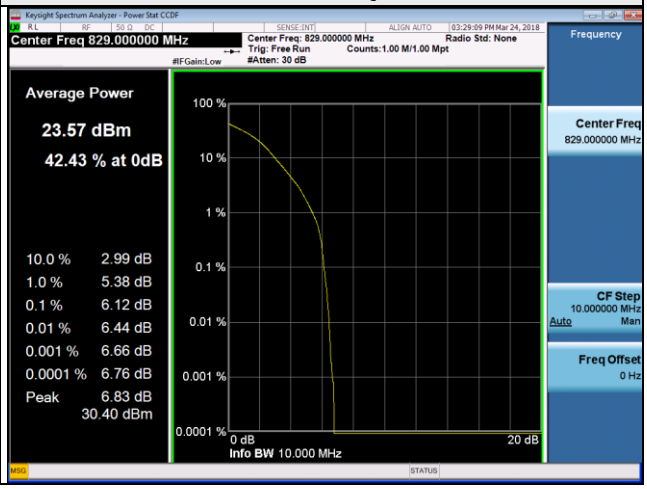
4.5.4 Test Results

| Channel | Freq. (MHz) | Peak to Average Ratio (dB) |
|---|---|---|
| | | WCDMA |
| 4132 | 826.4 | 3.05 |
| 4183 | 836.6 | 2.43 |
| 4233 | 846.6 | 2.65 |

| Spectrum Plot of Worst Value |
|---|
| WCDMA |



| LTE Band 5 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel Bandwidth 1.4MHz | | | | Channel Bandwidth 3MHz | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | Channel | Frequency (MHz) | Peak To Average Ratio (dB) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20407 | 824.7 | 5.19 | 5.98 | 20415 | 825.5 | 5.25 | 5.91 |
| 20525 | 836.5 | 3.54 | 4.33 | 20525 | 836.5 | 4.84 | 4.30 |
| 20643 | 848.3 | 4.68 | 5.46 | 20635 | 847.5 | 4.64 | 5.49 |
| Channel Bandwidth 5MHz | | | | Channel Bandwidth 10MHz | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | Channel | Frequency (MHz) | Peak To Average Ratio (dB) | |
| | | QPSK | 16QAM | | | QPSK | 16QAM |
| 20425 | 826.5 | 5.20 | 6.04 | 20450 | 829 | 5.16 | 6.12 |
| 20525 | 836.5 | 3.32 | 4.10 | 20525 | 836.5 | 3.18 | 4.11 |
| 20625 | 846.5 | 5.22 | 6.03 | 20600 | 844 | 4.66 | 5.51 |

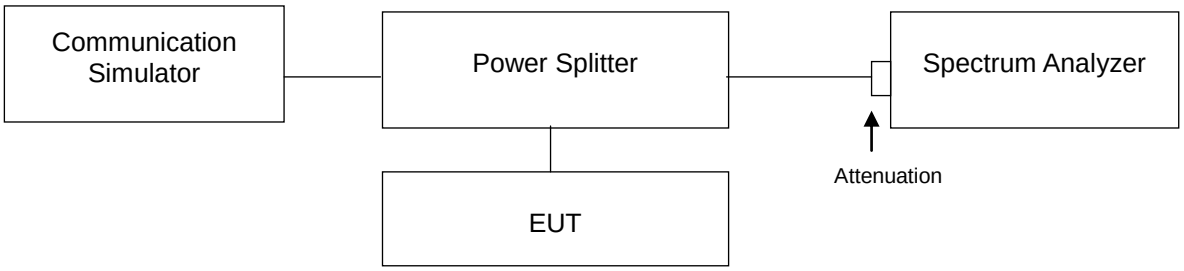
| Spectrum Plot of Worst Value | |
|---|---|
| 1.4MHz / 16QAM | 3MHz / 16QAM |
|  |  |
| 5MHz / 16QAM | 10MHz / 16QAM |
|  |  |

## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

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. The emission limit equal to –13dBm.

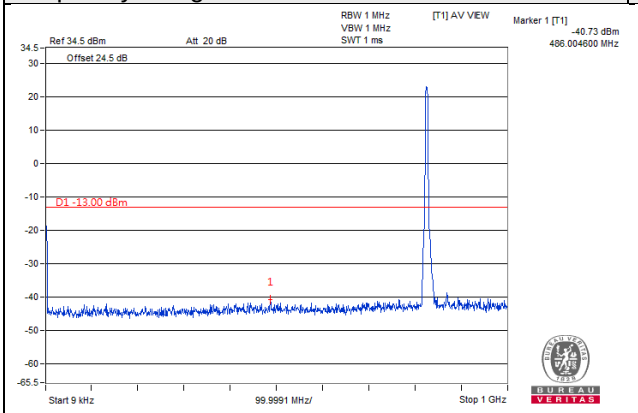
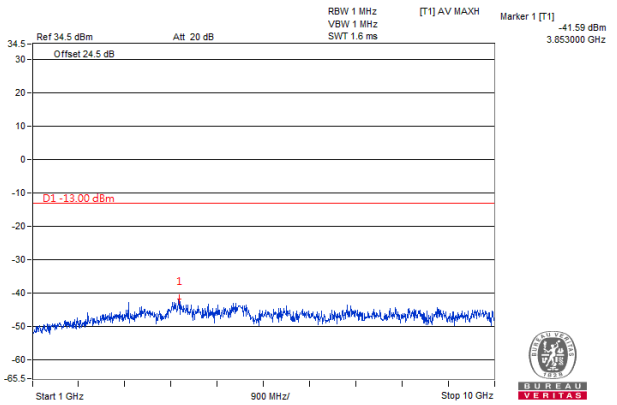
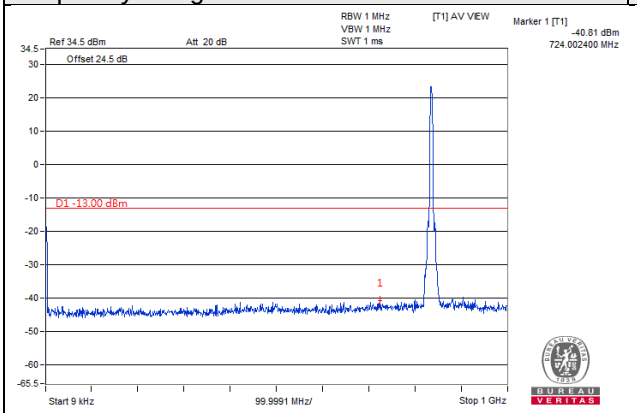
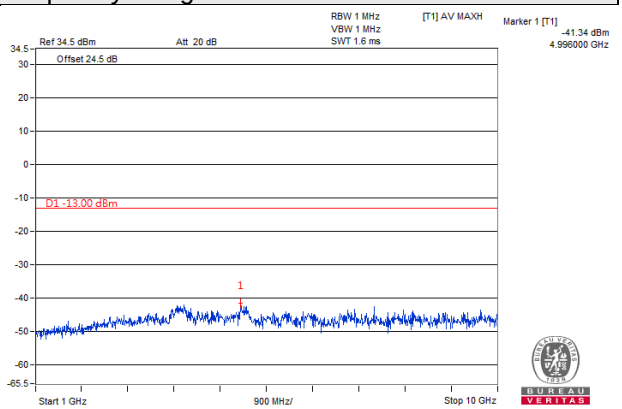
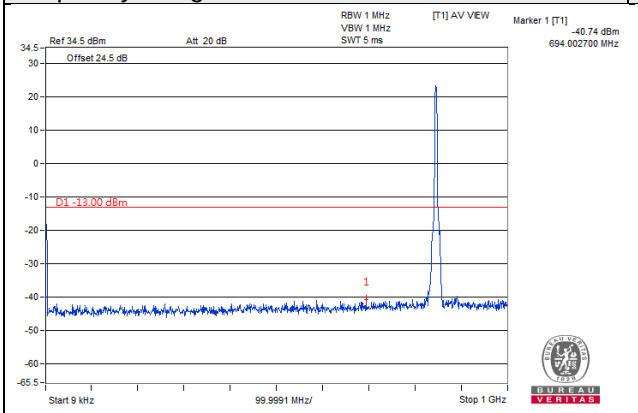
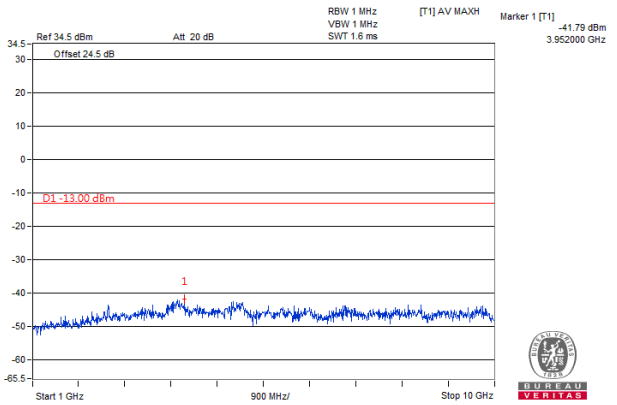
### 4.6.2 Test Setup

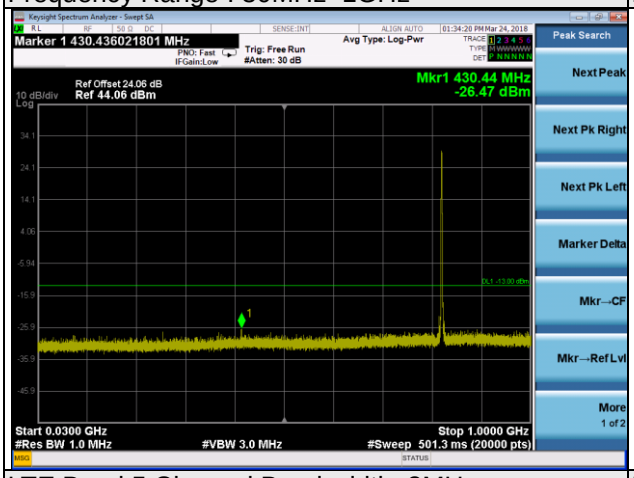
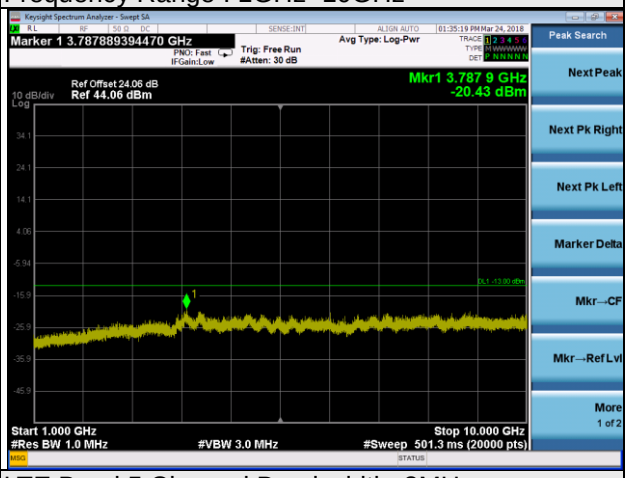
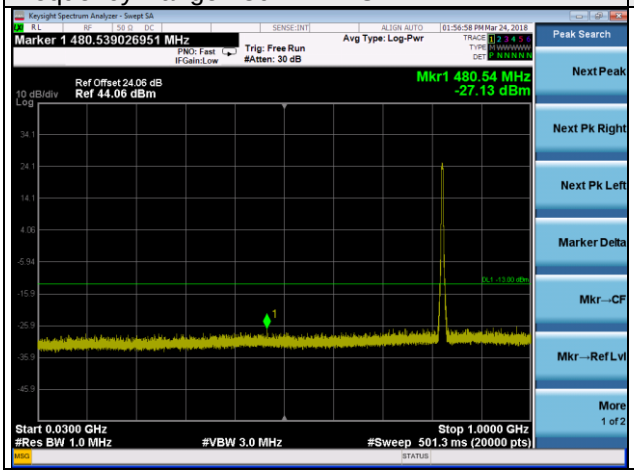
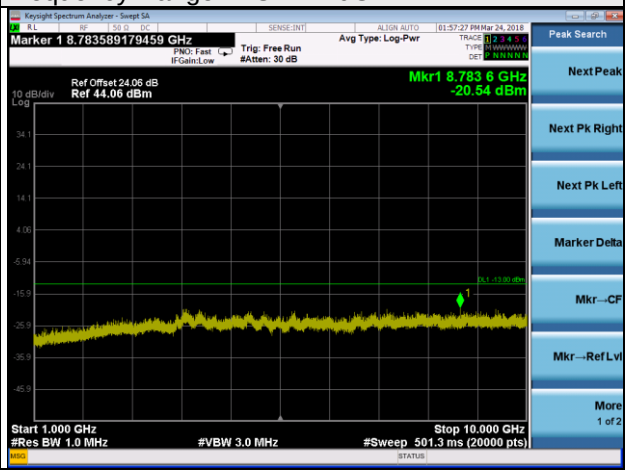


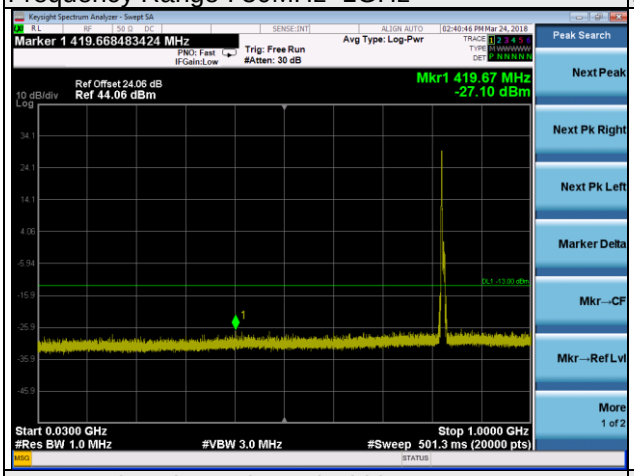
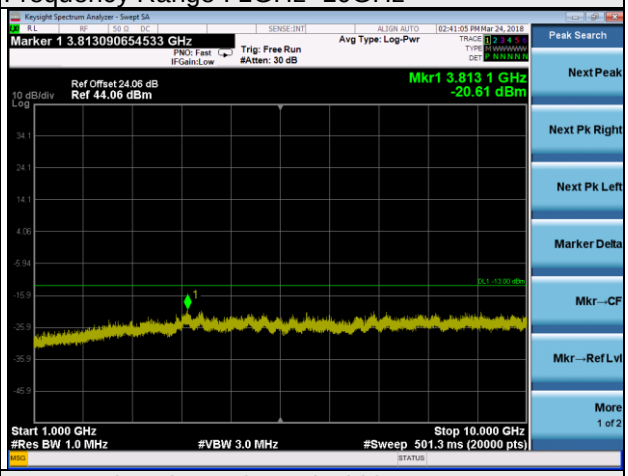
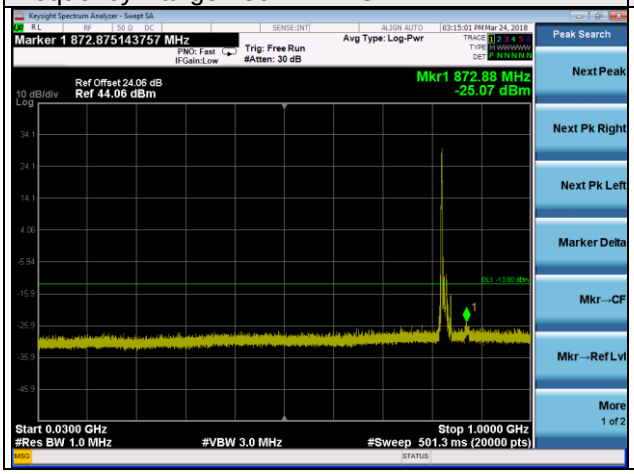
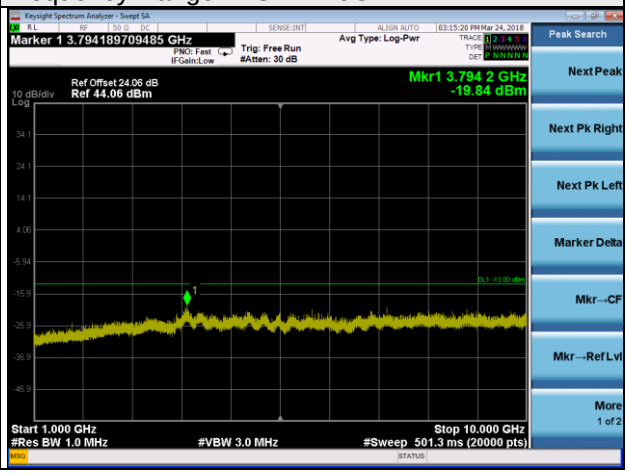

### 4.6.3 Test Procedure

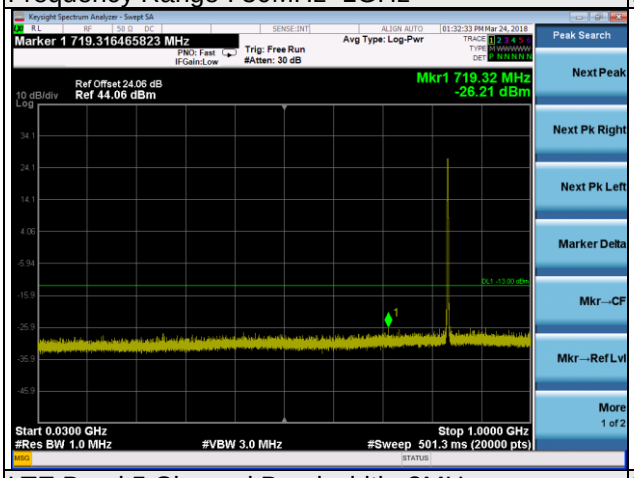
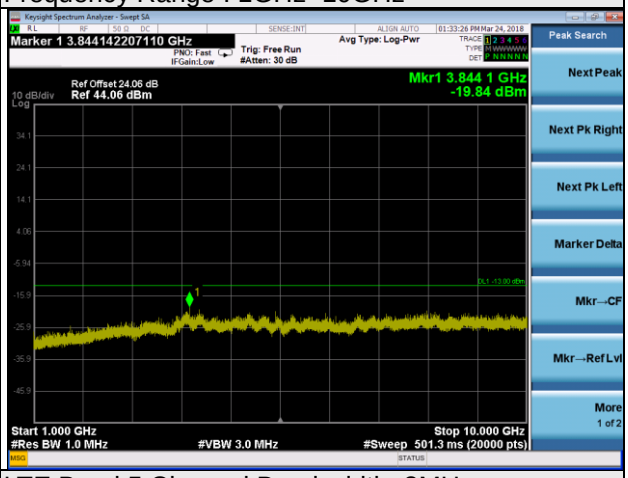
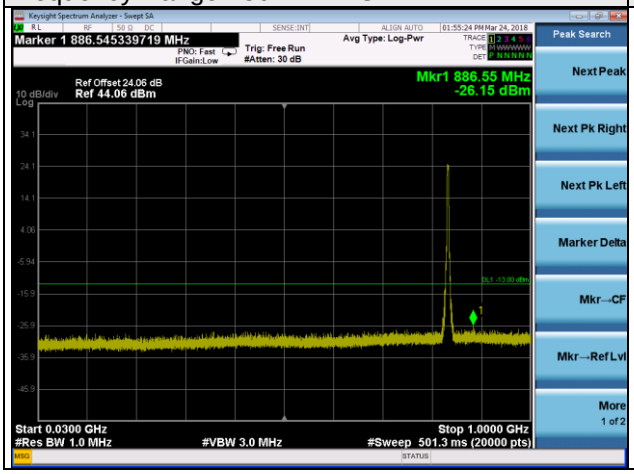
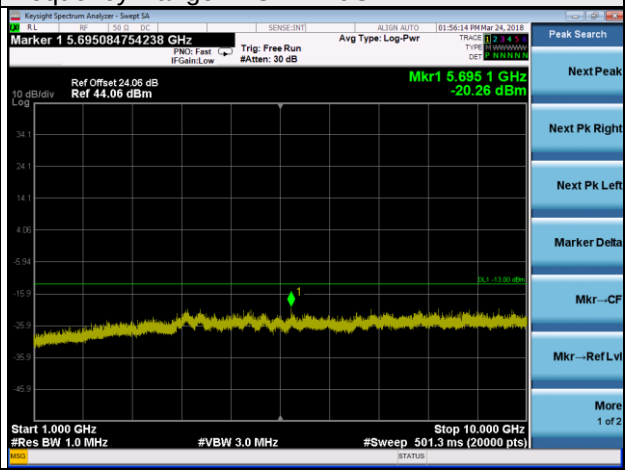
a. All measurements were done at middle operational frequency range.
b. Measuring frequency range is from 9 kHz to 10GHz. RBW:1 MHz and VBW=1 MHz is used for measurement.

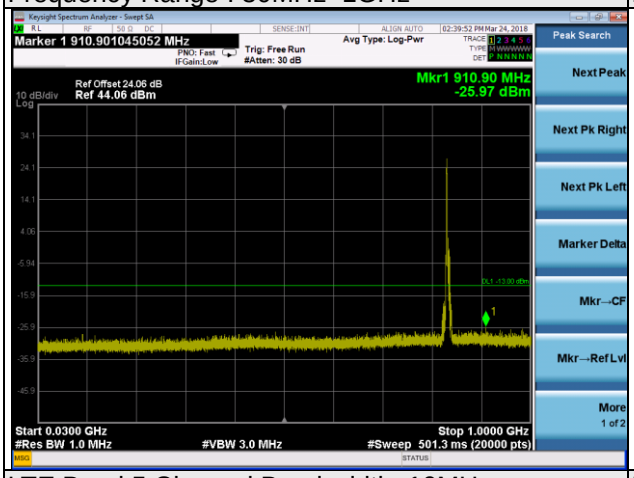
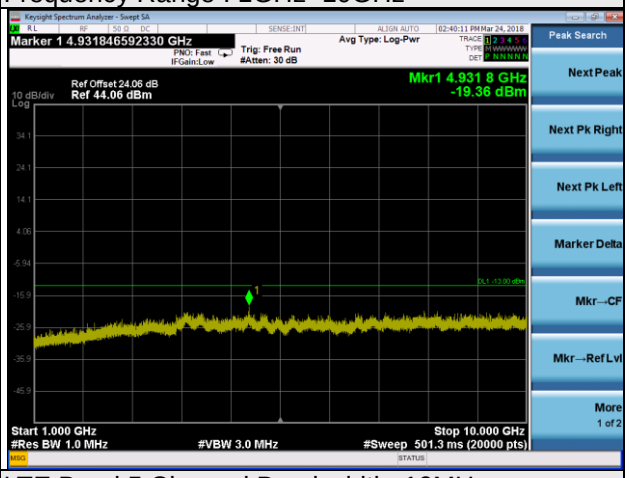
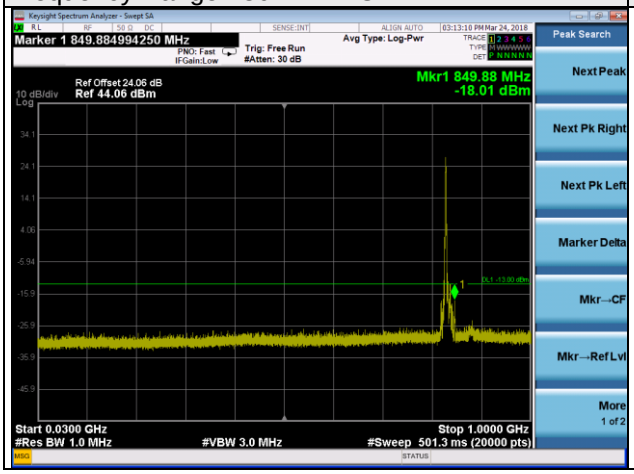
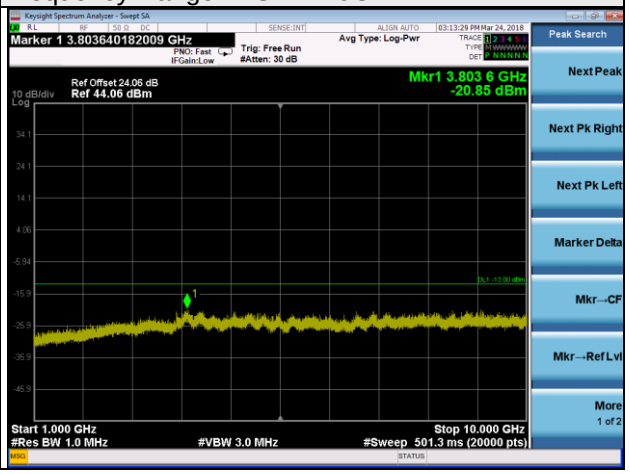
## 4.6.4 Test Results

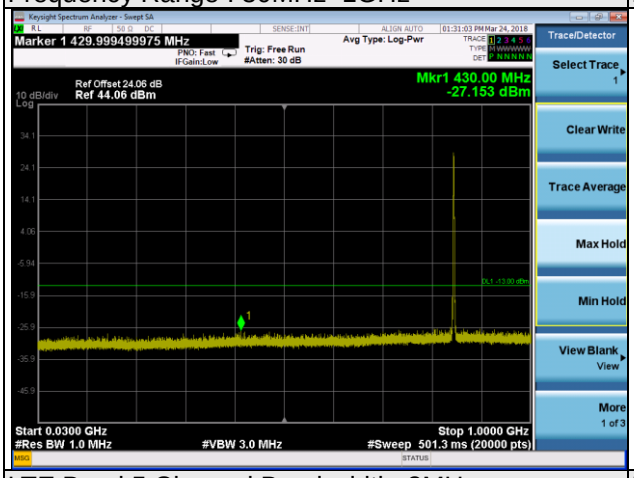
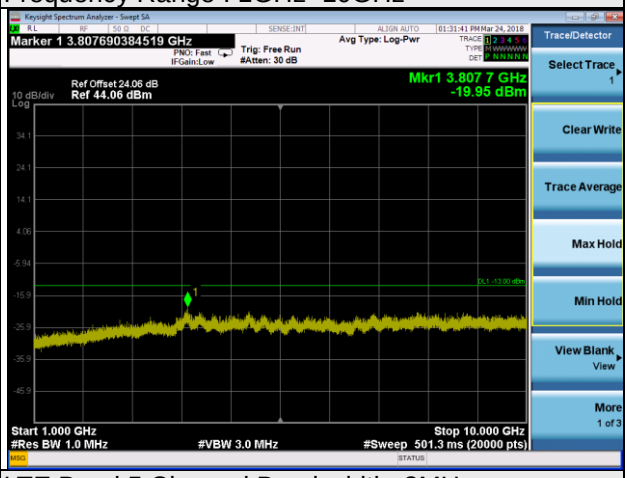
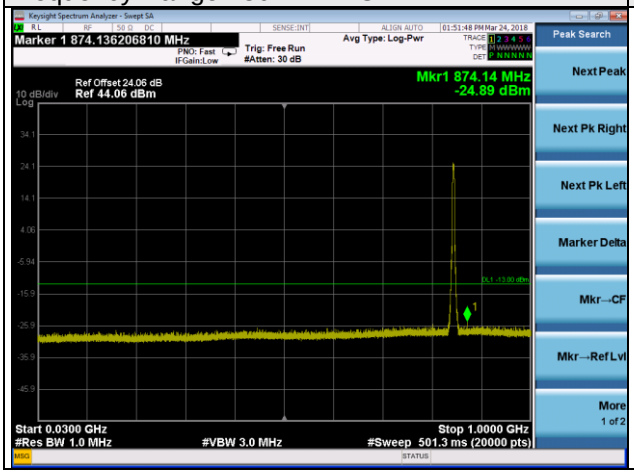
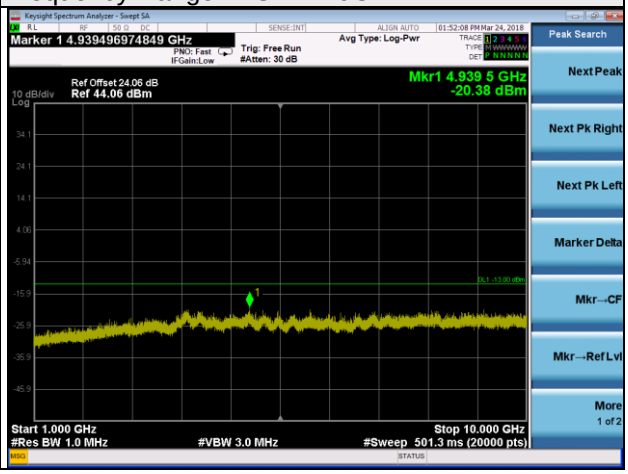
| WCDMA | |
|---|---|
| Channel 4132 | |
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| Channel 4182 | |
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| Channel 4233 | |
| Frequency Range : 9kHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

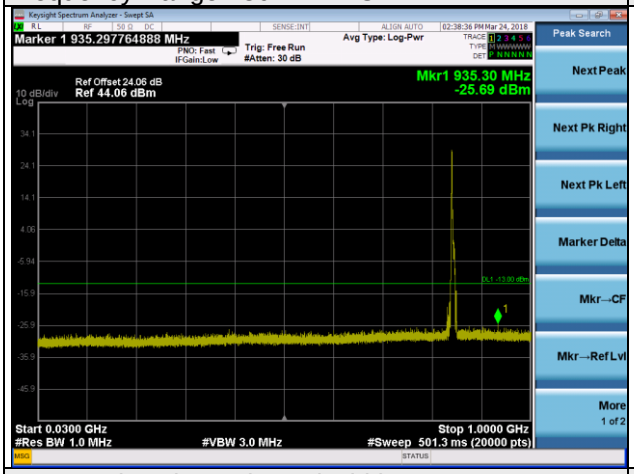
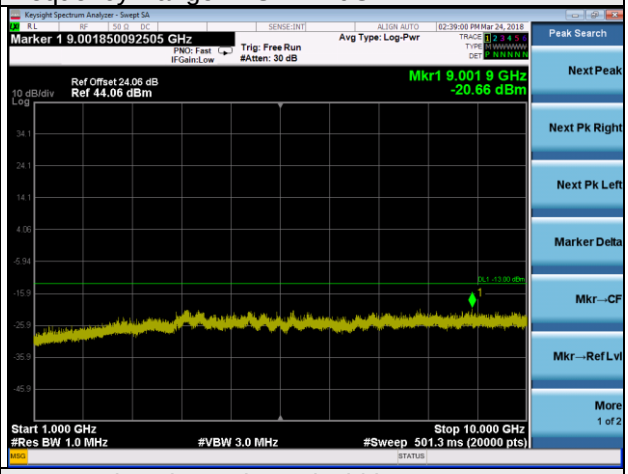
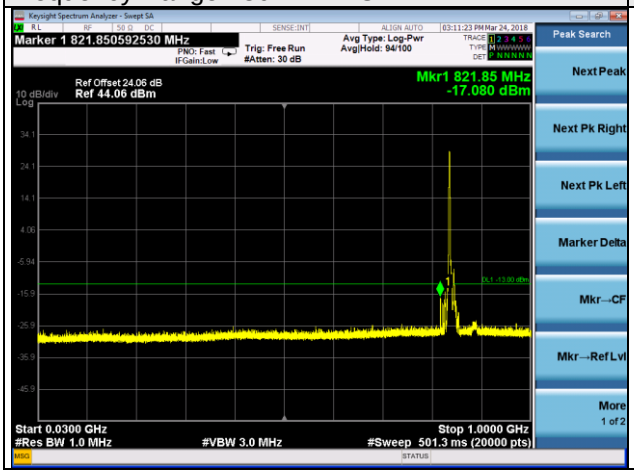
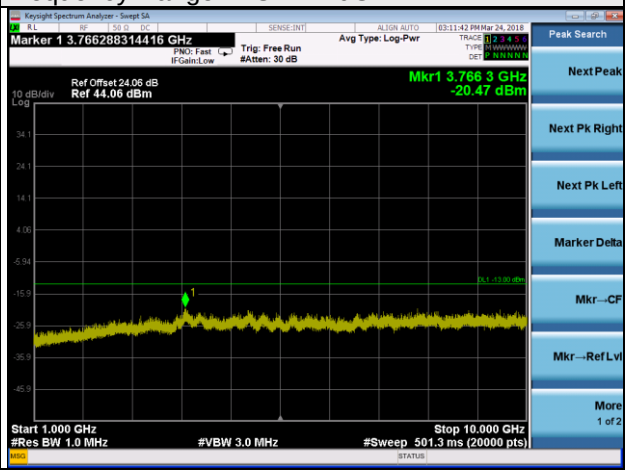
| LTE Band 5 Channel Band width: 1.4MHz | |
|---|---|
| Channel 20407 | Channel 20407 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 3MHz | LTE Band 5 Channel Band width: 3MHz |
| Channel 20415 | Channel 20415 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

| | |
|---|---|
| LTE Band 5 Channel Band width: 5MHz | LTE Band 5 Channel Band width: 5MHz |
| Channel 20425 | Channel 20425 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 10MHz | LTE Band 5 Channel Band width: 10MHz |
| Channel 20450 | Channel 20450 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

| LTE Band 5 Channel Band width: 1.4MHz | |
|---|---|
| Channel 20525 | Channel 20525 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 3MHz | LTE Band 5 Channel Band width: 3MHz |
| Channel 20525 | Channel 20525 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

| | |
|---|---|
| LTE Band 5 Channel Band width: 5MHz | LTE Band 5 Channel Band width: 5MHz |
| Channel 20525 | Channel 20525 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 10MHz | LTE Band 5 Channel Band width: 10MHz |
| Channel 20525 | Channel 20525 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

| LTE Band 5 Channel Band width: 1.4MHz | |
|---|---|
| Channel 20643 | Channel 20643 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 3MHz | LTE Band 5 Channel Band width: 3MHz |
| Channel 20635 | Channel 20635 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

| LTE Band 5 Channel Band width: 5MHz | LTE Band 5 Channel Band width: 5MHz |
|---|---|
| Channel 20625 | Channel 20625 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |
| LTE Band 5 Channel Band width: 10MHz | LTE Band 5 Channel Band width: 10MHz |
| Channel 20600 | Channel 20600 |
| Frequency Range : 30MHz~1GHz | Frequency Range : 1GHz~10GHz |
|  |  |

## 4.7 Radiated Emission Measurement

### 4.7.1 Limits of Radiated Emission Measurement

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. The emission limit equal to –13dBm.

### 4.7.2 Test Procedure

a. The power was measured with Spectrum Analyzer.

b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m/1.5m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step b. Record the power level of S.G

d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution antenna.

e. ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIRP power - 2.15dBi.

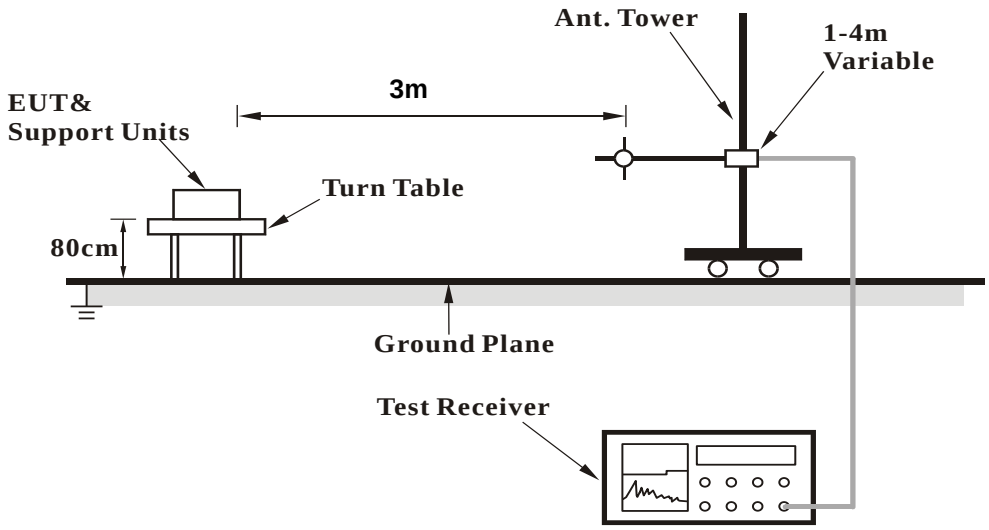
**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/1MHz.

### 4.7.3 Deviation from Test Standard

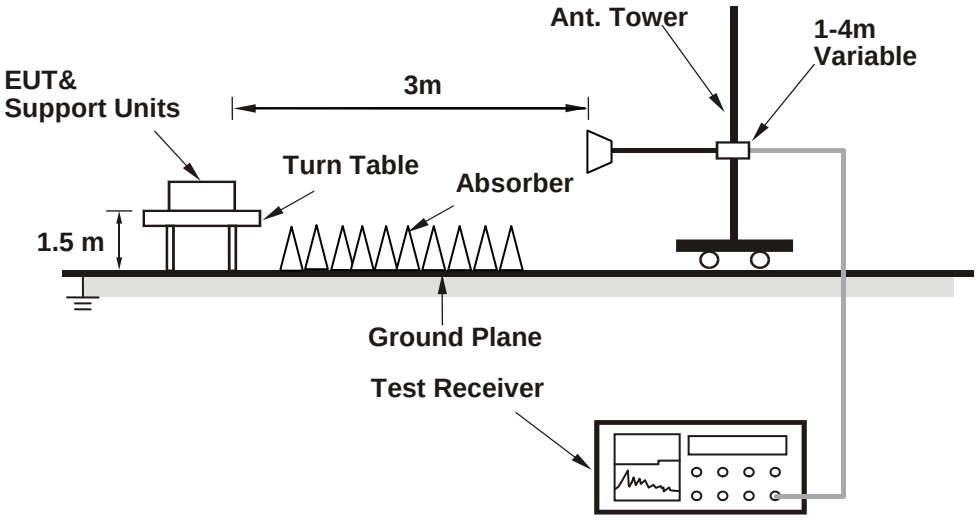
No deviation.

4.7.4 Test Setup

**For Below 1GHz**




**For Above 1GHz:**




For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.7.5 Test Results

BELOW 1GHz

**WCDMA:**

| Mode | TX channel 4132 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 91.86 | 34.48 | -57.59 | -1.10 | -58.69 | -13 | -45.69 |
| 2 | 236.66 | 34.06 | -61.31 | 3.86 | -57.45 | -13 | -44.45 |
| 3 | 290.7 | 32.89 | -62.61 | 3.77 | -58.84 | -13 | -45.84 |
| 4 | 344.88 | 32.99 | -64.66 | 3.61 | -61.05 | -13 | -48.05 |
| 5 | 469.53 | 35.32 | -61.87 | 2.84 | -59.03 | -13 | -46.03 |
| 6 | 736.72 | 29.58 | -66.79 | 1.03 | -65.76 | -13 | -52.76 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 69.87 | 29.72 | -58.32 | -4.72 | -63.03 | -13 | -50.03 |
| 2 | 94.75 | 32.83 | -58.75 | -0.93 | -59.67 | -13 | -46.67 |
| 3 | 130.79 | 27.75 | -64.19 | -1.25 | -65.44 | -13 | -52.44 |
| 4 | 240.17 | 30.51 | -64.84 | 3.81 | -61.03 | -13 | -48.03 |
| 5 | 507.19 | 32.39 | -63.04 | 2.84 | -60.21 | -13 | -47.21 |
| 6 | 609.41 | 31.24 | -63.45 | 1.78 | -61.67 | -13 | -48.67 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 4182 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 93.83 | 34.49 | -57.24 | -0.98 | -58.23 | -13 | -45.23 |
| 2 | 238.33 | 34.62 | -60.74 | 3.84 | -56.90 | -13 | -43.90 |
| 3 | 287.2 | 34.15 | -61.25 | 3.80 | -57.45 | -13 | -44.45 |
| 4 | 345.39 | 33.36 | -64.31 | 3.61 | -60.71 | -13 | -47.71 |
| 5 | 469.95 | 35.88 | -61.28 | 2.84 | -58.44 | -13 | -45.44 |
| 6 | 737.42 | 29.73 | -66.64 | 1.02 | -65.62 | -13 | -52.62 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 68.74 | 31.30 | -56.06 | -5.04 | -61.11 | -13 | -48.11 |
| 2 | 93.13 | 32.90 | -58.95 | -1.02 | -59.98 | -13 | -46.98 |
| 3 | 128.76 | 28.27 | -63.23 | -1.24 | -64.47 | -13 | -51.47 |
| 4 | 238.29 | 31.72 | -63.64 | 3.84 | -59.80 | -13 | -46.80 |
| 5 | 508.68 | 34.44 | -60.98 | 2.83 | -58.15 | -13 | -45.15 |
| 6 | 608.75 | 33.89 | -60.80 | 1.78 | -59.01 | -13 | -46.01 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 4233 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 91.93 | 33.57 | -58.49 | -1.09 | -59.58 | -13 | -46.58 |
| 2 | 236.87 | 32.69 | -62.68 | 3.86 | -58.82 | -13 | -45.82 |
| 3 | 286.8 | 32.61 | -62.77 | 3.80 | -58.97 | -13 | -45.97 |
| 4 | 344.65 | 33.15 | -64.49 | 3.61 | -60.88 | -13 | -47.88 |
| 5 | 469.49 | 35.20 | -61.99 | 2.84 | -59.15 | -13 | -46.15 |
| 6 | 737.78 | 28.56 | -67.81 | 1.01 | -66.79 | -13 | -53.79 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 68.81 | 30.95 | -56.45 | -5.02 | -61.48 | -13 | -48.48 |
| 2 | 94.35 | 32.25 | -59.39 | -0.95 | -60.35 | -13 | -47.35 |
| 3 | 128.59 | 26.21 | -65.25 | -1.24 | -66.49 | -13 | -53.49 |
| 4 | 236.7 | 30.51 | -64.86 | 3.86 | -61.00 | -13 | -48.00 |
| 5 | 509.9 | 32.21 | -63.19 | 2.82 | -60.38 | -13 | -47.38 |
| 6 | 608.68 | 32.06 | -62.63 | 1.78 | -60.84 | -13 | -47.84 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

### LTE Band 5: 1.4MHz

| Mode | TX channel 20407 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 71.12 | 29.97 | -62.82 | -1.33 | -64.15 | -13 | -51.15 |
| 2 | 136.82 | 29.49 | -65.76 | 3.43 | -62.33 | -13 | -49.33 |
| 3 | 301.72 | 28.37 | -67.55 | 3.68 | -63.86 | -13 | -50.86 |
| 4 | 332.51 | 30.93 | -65.45 | 3.68 | -61.77 | -13 | -48.77 |
| 5 | 347.89 | 39.26 | -64.83 | 2.63 | -62.20 | -13 | -49.20 |
| 6 | 914.41 | 33.88 | -62.20 | 7.14 | -55.06 | -13 | -42.06 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 36.3 | 28.81 | -36.76 | -15.59 | -52.34 | -13 | -39.34 |
| 2 | 71.87 | 28.49 | -66.60 | -2.11 | -68.70 | -13 | -55.70 |
| 3 | 351.49 | 33.62 | -86.61 | -2.08 | -88.69 | -13 | -75.69 |
| 4 | 467.41 | 30.14 | -64.83 | 2.33 | -62.50 | -13 | -49.50 |
| 5 | 491.95 | 29.40 | -67.05 | 3.48 | -63.58 | -13 | -50.58 |
| 6 | 883.97 | 30.89 | -62.74 | 1.92 | -60.82 | -13 | -47.82 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 71.34 | 29.02 | -63.77 | -1.33 | -65.10 | -13 | -52.10 |
| 2 | 136.64 | 26.71 | -68.54 | 3.43 | -65.11 | -13 | -52.11 |
| 3 | 302.18 | 26.98 | -68.94 | 3.68 | -65.25 | -13 | -52.25 |
| 4 | 331.71 | 30.35 | -66.03 | 3.68 | -62.35 | -13 | -49.35 |
| 5 | 349.19 | 38.44 | -65.65 | 2.63 | -63.02 | -13 | -50.02 |
| 6 | 914.29 | 32.94 | -63.14 | 7.14 | -56.00 | -13 | -43.00 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 35.86 | 28.22 | -37.35 | -15.59 | -52.93 | -13 | -39.93 |
| 2 | 70.13 | 28.31 | -66.78 | -2.11 | -68.88 | -13 | -55.88 |
| 3 | 351.57 | 33.72 | -86.51 | -2.08 | -88.59 | -13 | -75.59 |
| 4 | 467.34 | 30.10 | -64.87 | 2.33 | -62.54 | -13 | -49.54 |
| 5 | 491.73 | 29.02 | -67.43 | 3.48 | -63.96 | -13 | -50.96 |
| 6 | 882.02 | 29.75 | -63.88 | 1.92 | -61.96 | -13 | -48.96 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20643 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 70.23 | 26.57 | -66.22 | -1.33 | -67.55 | -13 | -54.55 |
| 2 | 137.21 | 26.43 | -68.82 | 3.43 | -65.39 | -13 | -52.39 |
| 3 | 301.61 | 28.89 | -67.03 | 3.68 | -63.34 | -13 | -50.34 |
| 4 | 331.4 | 31.03 | -65.35 | 3.68 | -61.67 | -13 | -48.67 |
| 5 | 349.13 | 38.14 | -65.95 | 2.63 | -63.32 | -13 | -50.32 |
| 6 | 914.97 | 32.52 | -63.56 | 7.14 | -56.42 | -13 | -43.42 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 36.97 | 25.38 | -40.19 | -15.59 | -55.77 | -13 | -42.77 |
| 2 | 70.75 | 25.25 | -69.84 | -2.11 | -71.94 | -13 | -58.94 |
| 3 | 351.06 | 32.74 | -87.49 | -2.08 | -89.57 | -13 | -76.57 |
| 4 | 468.06 | 29.11 | -65.86 | 2.33 | -63.53 | -13 | -50.53 |
| 5 | 493.05 | 28.65 | -67.80 | 3.48 | -64.33 | -13 | -51.33 |
| 6 | 882.69 | 30.31 | -63.32 | 1.92 | -61.40 | -13 | -48.40 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 3MHz

| Mode | TX channel 20415 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 71.17 | 28.44 | -64.35 | -1.33 | -65.68 | -13 | -52.68 |
| 2 | 135.95 | 28.76 | -66.49 | 3.43 | -63.06 | -13 | -50.06 |
| 3 | 301.66 | 29.28 | -66.64 | 3.68 | -62.95 | -13 | -49.95 |
| 4 | 331.03 | 31.43 | -64.95 | 3.68 | -61.27 | -13 | -48.27 |
| 5 | 346.72 | 38.09 | -66.00 | 2.63 | -63.37 | -13 | -50.37 |
| 6 | 915 | 33.81 | -62.27 | 7.14 | -55.13 | -13 | -42.13 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 37.8 | 26.62 | -38.95 | -15.59 | -54.53 | -13 | -41.53 |
| 2 | 72.76 | 27.48 | -67.61 | -2.11 | -69.71 | -13 | -56.71 |
| 3 | 349.96 | 31.37 | -88.86 | -2.08 | -90.94 | -13 | -77.94 |
| 4 | 467.58 | 27.73 | -67.24 | 2.33 | -64.91 | -13 | -51.91 |
| 5 | 491.75 | 26.76 | -69.69 | 3.48 | -66.22 | -13 | -53.22 |
| 6 | 884 | 28.75 | -64.88 | 1.92 | -62.96 | -13 | -49.96 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 72.85 | 28.68 | -64.11 | -1.33 | -65.44 | -13 | -52.44 |
| 2 | 136.34 | 29.23 | -66.02 | 3.43 | -62.59 | -13 | -49.59 |
| 3 | 302.35 | 26.55 | -69.37 | 3.68 | -65.68 | -13 | -52.68 |
| 4 | 331.25 | 29.35 | -67.03 | 3.68 | -63.35 | -13 | -50.35 |
| 5 | 348.03 | 37.90 | -66.19 | 2.63 | -63.56 | -13 | -50.56 |
| 6 | 914.98 | 32.79 | -63.29 | 7.14 | -56.15 | -13 | -43.15 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 35.38 | 28.16 | -37.41 | -15.59 | -52.99 | -13 | -39.99 |
| 2 | 72.29 | 26.95 | -68.14 | -2.11 | -70.24 | -13 | -57.24 |
| 3 | 351.13 | 32.15 | -88.08 | -2.08 | -90.16 | -13 | -77.16 |
| 4 | 467.16 | 27.32 | -67.65 | 2.33 | -65.32 | -13 | -52.32 |
| 5 | 492.07 | 28.23 | -68.22 | 3.48 | -64.75 | -13 | -51.75 |
| 6 | 884.15 | 29.14 | -64.49 | 1.92 | -62.57 | -13 | -49.57 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20635 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 37.97 | 27.40 | -38.17 | -15.59 | -53.75 | -13 | -40.75 |
| 2 | 71.78 | 26.93 | -68.16 | -2.11 | -70.26 | -13 | -57.26 |
| 3 | 350.82 | 31.76 | -88.47 | -2.08 | -90.55 | -13 | -77.55 |
| 4 | 465.76 | 26.84 | -68.13 | 2.33 | -65.80 | -13 | -52.80 |
| 5 | 491.99 | 27.17 | -69.28 | 3.48 | -65.81 | -13 | -52.81 |
| 6 | 882.8 | 28.02 | -65.61 | 1.92 | -63.69 | -13 | -50.69 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 71.9 | 26.39 | -66.40 | -1.33 | -67.73 | -13 | -54.73 |
| 2 | 134.96 | 26.96 | -68.29 | 3.43 | -64.86 | -13 | -51.86 |
| 3 | 302.47 | 27.45 | -68.47 | 3.68 | -64.78 | -13 | -51.78 |
| 4 | 332.89 | 28.28 | -68.10 | 3.68 | -64.42 | -13 | -51.42 |
| 5 | 348.04 | 36.34 | -67.75 | 2.63 | -65.12 | -13 | -52.12 |
| 6 | 914.32 | 32.07 | -64.01 | 7.14 | -56.87 | -13 | -43.87 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 5MHz

| Mode | TX channel 20425 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 71.26 | 26.87 | -65.92 | -1.33 | -67.25 | -13 | -54.25 |
| 2 | 133.68 | 27.43 | -67.82 | 3.43 | -64.39 | -13 | -51.39 |
| 3 | 301.72 | 28.44 | -67.48 | 3.68 | -63.79 | -13 | -50.79 |
| 4 | 331.95 | 28.29 | -68.09 | 3.68 | -64.41 | -13 | -51.41 |
| 5 | 348.03 | 37.90 | -66.19 | 2.63 | -63.56 | -13 | -50.56 |
| 6 | 915.28 | 32.51 | -63.57 | 7.14 | -56.43 | -13 | -43.43 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 36.97 | 27.42 | -38.15 | -15.59 | -53.73 | -13 | -40.73 |
| 2 | 72.93 | 28.83 | -66.26 | -2.11 | -68.36 | -13 | -55.36 |
| 3 | 351.56 | 29.77 | -90.46 | -2.08 | -92.54 | -13 | -79.54 |
| 4 | 465.56 | 27.71 | -67.26 | 2.33 | -64.93 | -13 | -51.93 |
| 5 | 491.92 | 27.49 | -68.96 | 3.48 | -65.49 | -13 | -52.49 |
| 6 | 883.59 | 28.63 | -65.00 | 1.92 | -63.08 | -13 | -50.08 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 73.42 | 28.77 | -64.02 | -1.33 | -65.35 | -13 | -52.35 |
| 2 | 133.82 | 28.93 | -66.32 | 3.43 | -62.89 | -13 | -49.89 |
| 3 | 302.5 | 29.33 | -66.59 | 3.68 | -62.90 | -13 | -49.90 |
| 4 | 331.15 | 27.46 | -68.92 | 3.68 | -65.24 | -13 | -52.24 |
| 5 | 350.04 | 35.28 | -68.81 | 2.63 | -66.18 | -13 | -53.18 |
| 6 | 914.75 | 30.74 | -65.34 | 7.14 | -58.20 | -13 | -45.20 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 37.88 | 27.07 | -38.50 | -15.59 | -54.08 | -13 | -41.08 |
| 2 | 73.37 | 26.47 | -68.62 | -2.11 | -70.72 | -13 | -57.72 |
| 3 | 351.56 | 29.85 | -90.38 | -2.08 | -92.46 | -13 | -79.46 |
| 4 | 465.68 | 26.34 | -68.63 | 2.33 | -66.30 | -13 | -53.30 |
| 5 | 493.49 | 25.68 | -70.77 | 3.48 | -67.30 | -13 | -54.30 |
| 6 | 882.88 | 26.88 | -66.75 | 1.92 | -64.83 | -13 | -51.83 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20625 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 72.34 | 27.82 | -64.97 | -1.33 | -66.30 | -13 | -53.30 |
| 2 | 133.24 | 28.13 | -67.12 | 3.43 | -63.69 | -13 | -50.69 |
| 3 | 302.17 | 28.14 | -67.78 | 3.68 | -64.09 | -13 | -51.09 |
| 4 | 333.26 | 28.69 | -67.69 | 3.68 | -64.01 | -13 | -51.01 |
| 5 | 349.91 | 36.14 | -67.95 | 2.63 | -65.32 | -13 | -52.32 |
| 6 | 914.93 | 29.73 | -66.36 | 7.14 | -59.22 | -13 | -46.22 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 36.43 | 27.19 | -38.38 | -15.59 | -53.96 | -13 | -40.96 |
| 2 | 72.58 | 26.86 | -68.23 | -2.11 | -70.33 | -13 | -57.33 |
| 3 | 353.31 | 29.77 | -90.46 | -2.08 | -92.54 | -13 | -79.54 |
| 4 | 465.43 | 26.59 | -68.38 | 2.33 | -66.05 | -13 | -53.05 |
| 5 | 494.33 | 27.19 | -69.26 | 3.48 | -65.79 | -13 | -52.79 |
| 6 | 883.37 | 28.14 | -65.49 | 1.92 | -63.57 | -13 | -50.57 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 10MHz

| Mode | TX channel 20450 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 72.38 | 28.49 | -64.30 | -1.33 | -65.63 | -13 | -52.63 |
| 2 | 132.42 | 28.51 | -66.74 | 3.43 | -63.31 | -13 | -50.31 |
| 3 | 300.36 | 27.78 | -68.14 | 3.68 | -64.45 | -13 | -51.45 |
| 4 | 332.72 | 26.98 | -69.40 | 3.68 | -65.72 | -13 | -52.72 |
| 5 | 348.69 | 36.12 | -67.97 | 2.63 | -65.34 | -13 | -52.34 |
| 6 | 916.29 | 29.52 | -66.56 | 7.14 | -59.42 | -13 | -46.42 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 37.01 | 26.49 | -39.08 | -15.59 | -54.66 | -13 | -41.66 |
| 2 | 72.03 | 27.05 | -68.04 | -2.11 | -70.14 | -13 | -57.14 |
| 3 | 352.9 | 28.19 | -92.04 | -2.08 | -94.12 | -13 | -81.12 |
| 4 | 466.09 | 26.74 | -68.23 | 2.33 | -65.90 | -13 | -52.90 |
| 5 | 493.43 | 26.93 | -69.52 | 3.48 | -66.05 | -13 | -53.05 |
| 6 | 884.82 | 25.47 | -68.16 | 1.92 | -66.24 | -13 | -53.24 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 73.28 | 28.52 | -64.27 | -1.33 | -65.60 | -13 | -52.60 |
| 2 | 132.24 | 28.11 | -67.14 | 3.43 | -63.71 | -13 | -50.71 |
| 3 | 300.7 | 27.71 | -68.21 | 3.68 | -64.52 | -13 | -51.52 |
| 4 | 332.63 | 26.97 | -69.41 | 3.68 | -65.73 | -13 | -52.73 |
| 5 | 348.2 | 37.12 | -66.97 | 2.63 | -64.34 | -13 | -51.34 |
| 6 | 915.85 | 29.31 | -66.77 | 7.14 | -59.63 | -13 | -46.63 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 36.49 | 27.32 | -38.25 | -15.59 | -53.83 | -13 | -40.83 |
| 2 | 73.55 | 26.72 | -68.37 | -2.11 | -70.47 | -13 | -57.47 |
| 3 | 352.31 | 29.59 | -90.64 | -2.08 | -92.72 | -13 | -79.72 |
| 4 | 465.82 | 28.93 | -66.04 | 2.33 | -63.71 | -13 | -50.71 |
| 5 | 493.51 | 28.47 | -67.98 | 3.48 | -64.51 | -13 | -51.51 |
| 6 | 885.65 | 26.79 | -66.84 | 1.92 | -64.92 | -13 | -51.92 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20600 | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 73.69 | 28.13 | -64.66 | -1.33 | -65.99 | -13 | -52.99 |
| 2 | 131.79 | 27.49 | -67.76 | 3.43 | -64.33 | -13 | -51.33 |
| 3 | 300.04 | 28.44 | -67.48 | 3.68 | -63.79 | -13 | -50.79 |
| 4 | 333.04 | 26.93 | -69.45 | 3.68 | -65.77 | -13 | -52.77 |
| 5 | 348.88 | 37.41 | -66.68 | 2.63 | -64.05 | -13 | -51.05 |
| 6 | 916.02 | 29.18 | -66.90 | 7.14 | -59.76 | -13 | -46.76 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 37.03 | 26.94 | -38.63 | -15.59 | -54.21 | -13 | -41.21 |
| 2 | 73.73 | 27.17 | -67.92 | -2.11 | -70.02 | -13 | -57.02 |
| 3 | 353.73 | 28.19 | -92.04 | -2.08 | -94.12 | -13 | -81.12 |
| 4 | 463.17 | 26.38 | -68.59 | 2.33 | -66.26 | -13 | -53.26 |
| 5 | 491.62 | 28.89 | -67.56 | 3.48 | -64.09 | -13 | -51.09 |
| 6 | 885.3 | 27.32 | -66.31 | 1.92 | -64.39 | -13 | -51.39 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

ABOVE 1GHz

**WCDMA:**

| Mode | TX channel 4132 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1652.8 | 36.57 | -66.16 | 6.27 | -59.89 | -13 | -46.89 |
| 2 | 2479.2 | 42.09 | -56.18 | 6.63 | -49.55 | -13 | -36.55 |
| 3 | 3305.6 | 47.54 | -42.82 | 13.37 | -29.45 | -13 | -16.45 |
| 4 | 4132 | 48.67 | -56.23 | 7.47 | -48.76 | -13 | -35.76 |
| 5 | 4958.4 | 47.33 | -56.84 | 7.00 | -49.84 | -13 | -36.84 |
| 6 | 5784.8 | 49.51 | -54.63 | 7.13 | -47.50 | -13 | -34.50 |
| 7 | 6611.2 | 52.29 | -51.38 | 5.71 | -45.66 | -13 | -32.66 |
| 8 | 7437.6 | 51.57 | -51.05 | 4.60 | -46.45 | -13 | -33.45 |
| 9 | 8264 | 53.78 | -48.71 | 4.17 | -44.54 | -13 | -31.54 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1652.8 | 34.3 | -68.43 | 6.27 | -62.16 | -13 | -49.16 |
| 2 | 2479.2 | 44.44 | -53.83 | 6.63 | -47.20 | -13 | -34.20 |
| 3 | 3305.6 | 45.55 | -56.94 | 7.97 | -48.96 | -13 | -35.96 |
| 4 | 4132 | 46.31 | -58.59 | 7.47 | -51.12 | -13 | -38.12 |
| 5 | 4958.4 | 49.26 | -54.91 | 7.00 | -47.91 | -13 | -34.91 |
| 6 | 5784.8 | 49.27 | -54.87 | 7.13 | -47.74 | -13 | -34.74 |
| 7 | 6611.2 | 55.09 | -48.58 | 5.71 | -42.86 | -13 | -29.86 |
| 8 | 7437.6 | 50.95 | -51.67 | 4.60 | -47.07 | -13 | -34.07 |
| 9 | 8264 | 52.47 | -50.02 | 4.17 | -45.85 | -13 | -32.85 |

Remarks:

1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 4182 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1672.8 | 39.16 | -63.47 | 6.31 | -57.16 | -13 | -44.16 |
| 2 | 2509.2 | 45.68 | -52.84 | 6.66 | -46.18 | -13 | -33.18 |
| 3 | 3345.6 | 45.59 | -44.77 | 13.37 | -31.40 | -13 | -18.40 |
| 4 | 4182 | 46.12 | -58.72 | 7.44 | -51.28 | -13 | -38.28 |
| 5 | 5018.4 | 48.33 | -55.93 | 7.01 | -48.92 | -13 | -35.92 |
| 6 | 5854.8 | 50.85 | -53.29 | 7.02 | -46.27 | -13 | -33.27 |
| 7 | 6691.2 | 55.96 | -47.37 | 5.56 | -41.81 | -13 | -28.81 |
| 8 | 7527.6 | 51.48 | -51.14 | 4.52 | -46.62 | -13 | -33.62 |
| 9 | 8364 | 53.84 | -48.71 | 4.19 | -44.52 | -13 | -31.52 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1672.8 | 34.3 | -68.33 | 6.31 | -62.02 | -13 | -49.02 |
| 2 | 2509.2 | 45.36 | -53.16 | 6.66 | -46.50 | -13 | -33.50 |
| 3 | 3345.6 | 46.51 | -56.12 | 7.95 | -48.18 | -13 | -35.18 |
| 4 | 4182 | 46.28 | -58.56 | 7.44 | -51.12 | -13 | -38.12 |
| 5 | 5018.4 | 48.46 | -55.80 | 7.01 | -48.79 | -13 | -35.79 |
| 6 | 5854.8 | 50.19 | -53.95 | 7.02 | -46.93 | -13 | -33.93 |
| 7 | 6691.2 | 55.35 | -47.98 | 5.56 | -42.42 | -13 | -29.42 |
| 8 | 7527.6 | 51.76 | -50.86 | 4.52 | -46.34 | -13 | -33.34 |
| 9 | 8364 | 54.01 | -48.54 | 4.19 | -44.35 | -13 | -31.35 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 4233 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1693.2 | 38.10 | -64.43 | 6.34 | -58.08 | -13 | -45.08 |
| 2 | 2539.8 | 42.66 | -56.11 | 6.69 | -49.42 | -13 | -36.42 |
| 3 | 3386.4 | 45.82 | -44.54 | 13.37 | -31.17 | -13 | -18.17 |
| 4 | 4233 | 47.14 | -57.65 | 7.42 | -50.23 | -13 | -37.23 |
| 5 | 5079.6 | 47.51 | -56.84 | 7.03 | -49.81 | -13 | -36.81 |
| 6 | 5926.2 | 50.2 | -53.94 | 6.89 | -47.05 | -13 | -34.05 |
| 7 | 6772.8 | 53.02 | -49.96 | 5.41 | -44.56 | -13 | -31.56 |
| 8 | 7619.4 | 49.93 | -52.69 | 4.44 | -48.25 | -13 | -35.25 |
| 9 | 8466 | 53 | -49.60 | 4.20 | -45.40 | -13 | -32.40 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1693.2 | 34.3 | -68.23 | 6.34 | -61.88 | -13 | -48.88 |
| 2 | 2539.8 | 44.95 | -53.82 | 6.69 | -47.13 | -13 | -34.13 |
| 3 | 3386.4 | 45.42 | -57.36 | 7.92 | -49.44 | -13 | -36.44 |
| 4 | 4233 | 48.55 | -56.24 | 7.42 | -48.82 | -13 | -35.82 |
| 5 | 5079.6 | 47.88 | -56.47 | 7.03 | -49.44 | -13 | -36.44 |
| 6 | 5926.2 | 51.6 | -52.54 | 6.89 | -45.65 | -13 | -32.65 |
| 7 | 6772.8 | 54.45 | -48.53 | 5.41 | -43.13 | -13 | -30.13 |
| 8 | 7619.4 | 49.71 | -52.91 | 4.44 | -48.47 | -13 | -35.47 |
| 9 | 8466 | 52.17 | -50.43 | 4.20 | -46.23 | -13 | -33.23 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 1.4 MHz

| Mode | TX channel 20407 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1649.4 | 58.91 | -43.84 | 6.27 | -37.57 | -13 | -24.57 |
| 2 | 2474.1 | 39.86 | -58.37 | 6.62 | -51.74 | -13 | -38.74 |
| 3 | 3298.8 | 45.80 | -57.15 | 7.56 | -49.59 | -13 | -36.59 |
| 4 | 4123.5 | 47.41 | -57.49 | 7.47 | -50.02 | -13 | -37.02 |
| 5 | 4948.2 | 48.64 | -55.51 | 7.00 | -48.52 | -13 | -35.52 |
| 6 | 5772.9 | 48.30 | -56.22 | 6.93 | -49.29 | -13 | -36.29 |
| 7 | 6597.6 | 48.65 | -55.08 | 5.74 | -49.34 | -13 | -36.34 |
| 8 | 7422.3 | 61.42 | -41.20 | 4.61 | -36.59 | -13 | -23.59 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1649.4 | 59.47 | -43.28 | 6.27 | -37.01 | -13 | -24.01 |
| 2 | 2474.1 | 44.35 | -53.88 | 6.62 | -47.25 | -13 | -34.25 |
| 3 | 3298.8 | 42.36 | -60.59 | 7.56 | -53.03 | -13 | -40.03 |
| 4 | 4123.5 | 47.09 | -57.81 | 7.47 | -50.34 | -13 | -37.34 |
| 5 | 4948.2 | 47.71 | -56.44 | 7.00 | -49.45 | -13 | -36.45 |
| 6 | 5772.9 | 47.25 | -57.27 | 6.93 | -50.34 | -13 | -37.34 |
| 7 | 6597.6 | 48.40 | -55.33 | 5.74 | -49.59 | -13 | -36.59 |
| 8 | 7422.3 | 59.67 | -42.95 | 4.61 | -38.34 | -13 | -25.34 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 58.71 | -37.80 | 9.04 | -28.77 | -13 | -15.77 |
| 2 | 2509.5 | 39.88 | -70.12 | 9.21 | -60.91 | -13 | -47.91 |
| 3 | 3346 | 46.63 | -55.99 | 8.10 | -47.89 | -13 | -34.89 |
| 4 | 4182.5 | 47.88 | -67.25 | 5.16 | -62.08 | -13 | -49.08 |
| 5 | 5019 | 48.62 | -54.13 | -5.28 | -59.41 | -13 | -46.41 |
| 6 | 5855.5 | 48.00 | -63.83 | 2.90 | -60.94 | -13 | -47.94 |
| 7 | 6692 | 48.77 | -61.37 | -8.52 | -69.89 | -13 | -56.89 |
| 8 | 7528.5 | 62.30 | -35.05 | 3.70 | -31.35 | -13 | -18.35 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 58.73 | -37.78 | 9.04 | -28.75 | -13 | -15.75 |
| 2 | 2509.5 | 44.90 | -65.10 | 9.21 | -55.89 | -13 | -42.89 |
| 3 | 3346 | 41.54 | -61.08 | 8.10 | -52.98 | -13 | -39.98 |
| 4 | 4182.5 | 47.73 | -67.40 | 5.16 | -62.23 | -13 | -49.23 |
| 5 | 5019 | 48.47 | -54.28 | -5.28 | -59.56 | -13 | -46.56 |
| 6 | 5855.5 | 46.58 | -65.25 | 2.90 | -62.36 | -13 | -49.36 |
| 7 | 6692 | 47.56 | -62.58 | -8.52 | -71.10 | -13 | -58.10 |
| 8 | 7528.5 | 60.33 | -37.02 | 3.70 | -33.32 | -13 | -20.32 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20643 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1696.6 | 59.10 | -37.50 | 9.02 | -28.48 | -13 | -15.48 |
| 2 | 2544.9 | 39.86 | -70.08 | 9.19 | -60.90 | -13 | -47.90 |
| 3 | 3393.2 | 45.80 | -56.82 | 4.43 | -52.39 | -13 | -39.39 |
| 4 | 4241.5 | 46.68 | -54.93 | 4.18 | -50.76 | -13 | -37.76 |
| 5 | 5089.8 | 49.42 | -53.31 | -5.18 | -58.49 | -13 | -45.49 |
| 6 | 5938.1 | 49.25 | -51.07 | 3.57 | -47.50 | -13 | -34.50 |
| 7 | 6786.4 | 48.63 | -48.72 | 3.70 | -45.02 | -13 | -32.02 |
| 8 | 7634.7 | 61.81 | -35.54 | 3.70 | -31.84 | -13 | -18.84 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1696.6 | 59.63 | -36.97 | 9.02 | -27.95 | -13 | -14.95 |
| 2 | 2544.9 | 43.77 | -66.17 | 9.19 | -56.99 | -13 | -43.99 |
| 3 | 3393.2 | 41.73 | -60.89 | 4.43 | -56.46 | -13 | -43.46 |
| 4 | 4241.5 | 47.46 | -54.15 | 4.18 | -49.98 | -13 | -36.98 |
| 5 | 5089.8 | 47.83 | -54.90 | -5.18 | -60.08 | -13 | -47.08 |
| 6 | 5938.1 | 47.14 | -53.18 | 3.57 | -49.61 | -13 | -36.61 |
| 7 | 6786.4 | 48.15 | -49.20 | 3.70 | -45.50 | -13 | -32.50 |
| 8 | 7634.7 | 60.63 | -36.72 | 3.70 | -33.02 | -13 | -20.02 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 3 MHz

| Mode | TX channel 20415 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1651 | 59.46 | -43.29 | 6.27 | -37.02 | -13 | -24.02 |
| 2 | 2476.5 | 39.34 | -58.89 | 6.62 | -52.26 | -13 | -39.26 |
| 3 | 3302 | 44.92 | -58.03 | 7.56 | -50.47 | -13 | -37.47 |
| 4 | 4127.5 | 47.59 | -57.31 | 7.47 | -49.84 | -13 | -36.84 |
| 5 | 4953 | 49.01 | -55.14 | 7.00 | -48.15 | -13 | -35.15 |
| 6 | 5778.5 | 48.79 | -55.73 | 6.93 | -48.80 | -13 | -35.80 |
| 7 | 6604 | 48.73 | -55.00 | 5.74 | -49.26 | -13 | -36.26 |
| 8 | 7429.5 | 62.10 | -40.52 | 4.61 | -35.91 | -13 | -22.91 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1651 | 60.42 | -42.33 | 6.27 | -36.06 | -13 | -23.06 |
| 2 | 2476.5 | 44.41 | -53.82 | 6.62 | -47.19 | -13 | -34.19 |
| 3 | 3302 | 42.16 | -60.79 | 7.56 | -53.23 | -13 | -40.23 |
| 4 | 4127.5 | 48.11 | -56.79 | 7.47 | -49.32 | -13 | -36.32 |
| 5 | 4953 | 48.30 | -55.85 | 7.00 | -48.86 | -13 | -35.86 |
| 6 | 5778.5 | 47.78 | -56.74 | 6.93 | -49.81 | -13 | -36.81 |
| 7 | 6604 | 48.66 | -55.07 | 5.74 | -49.33 | -13 | -36.33 |
| 8 | 7429.5 | 59.71 | -42.91 | 4.61 | -38.30 | -13 | -25.30 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 59.57 | -36.94 | 9.04 | -27.91 | -13 | -14.91 |
| 2 | 2509.5 | 38.98 | -71.02 | 9.21 | -61.81 | -13 | -48.81 |
| 3 | 3346 | 46.39 | -56.23 | 8.10 | -48.13 | -13 | -35.13 |
| 4 | 4182.5 | 47.96 | -67.17 | 5.16 | -62.00 | -13 | -49.00 |
| 5 | 5019 | 48.10 | -54.65 | -5.28 | -59.93 | -13 | -46.93 |
| 6 | 5855.5 | 48.80 | -63.03 | 2.90 | -60.14 | -13 | -47.14 |
| 7 | 6692 | 48.02 | -62.12 | -8.52 | -70.64 | -13 | -57.64 |
| 8 | 7528.5 | 60.61 | -36.74 | 3.70 | -33.04 | -13 | -20.04 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 59.80 | -36.71 | 9.04 | -27.68 | -13 | -14.68 |
| 2 | 2509.5 | 44.63 | -65.37 | 9.21 | -56.16 | -13 | -43.16 |
| 3 | 3346 | 42.30 | -60.32 | 8.10 | -52.22 | -13 | -39.22 |
| 4 | 4182.5 | 46.82 | -68.31 | 5.16 | -63.14 | -13 | -50.14 |
| 5 | 5019 | 48.34 | -54.41 | -5.28 | -59.69 | -13 | -46.69 |
| 6 | 5855.5 | 47.40 | -64.43 | 2.90 | -61.54 | -13 | -48.54 |
| 7 | 6692 | 48.38 | -61.76 | -8.52 | -70.28 | -13 | -57.28 |
| 8 | 7528.5 | 60.15 | -37.20 | 3.70 | -33.50 | -13 | -20.50 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20635 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1695 | 59.90 | -36.69 | 9.02 | -27.67 | -13 | -14.67 |
| 2 | 2542.5 | 39.88 | -70.07 | 9.19 | -60.88 | -13 | -47.88 |
| 3 | 3390 | 45.21 | -57.41 | 4.43 | -52.98 | -13 | -39.98 |
| 4 | 4237.5 | 47.99 | -53.62 | 4.18 | -49.45 | -13 | -36.45 |
| 5 | 5085 | 49.48 | -53.25 | -5.19 | -58.44 | -13 | -45.44 |
| 6 | 5932.5 | 48.74 | -51.58 | 3.57 | -48.01 | -13 | -35.01 |
| 7 | 6780 | 48.47 | -48.88 | 3.70 | -45.18 | -13 | -32.18 |
| 8 | 7627.5 | 61.32 | -36.03 | 3.70 | -32.33 | -13 | -19.33 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1695 | 58.97 | -37.62 | 9.02 | -28.60 | -13 | -15.60 |
| 2 | 2542.5 | 44.12 | -65.83 | 9.19 | -56.64 | -13 | -43.64 |
| 3 | 3390 | 41.91 | -60.71 | 4.43 | -56.28 | -13 | -43.28 |
| 4 | 4237.5 | 46.58 | -55.03 | 4.18 | -50.86 | -13 | -37.86 |
| 5 | 5085 | 48.25 | -54.48 | -5.19 | -59.67 | -13 | -46.67 |
| 6 | 5932.5 | 46.52 | -53.80 | 3.57 | -50.23 | -13 | -37.23 |
| 7 | 6780 | 47.99 | -49.36 | 3.70 | -45.66 | -13 | -32.66 |
| 8 | 7627.5 | 61.16 | -36.19 | 3.70 | -32.49 | -13 | -19.49 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 5 MHz

| Mode | TX channel 20425 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1653 | 58.64 | -44.11 | 6.27 | -37.84 | -13 | -24.84 |
| 2 | 2479.5 | 39.68 | -58.55 | 6.62 | -51.92 | -13 | -38.92 |
| 3 | 3306 | 45.79 | -57.16 | 7.56 | -49.60 | -13 | -36.60 |
| 4 | 4132.5 | 47.38 | -57.52 | 7.47 | -50.05 | -13 | -37.05 |
| 5 | 4959 | 48.39 | -55.76 | 7.00 | -48.77 | -13 | -35.77 |
| 6 | 5785.5 | 48.27 | -56.25 | 6.93 | -49.32 | -13 | -36.32 |
| 7 | 6612 | 48.35 | -55.38 | 5.74 | -49.64 | -13 | -36.64 |
| 8 | 7438.5 | 61.89 | -40.73 | 4.61 | -36.12 | -13 | -23.12 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1653 | 60.31 | -42.44 | 6.27 | -36.17 | -13 | -23.17 |
| 2 | 2479.5 | 42.81 | -55.42 | 6.62 | -48.79 | -13 | -35.79 |
| 3 | 3306 | 41.31 | -61.64 | 7.56 | -54.08 | -13 | -41.08 |
| 4 | 4132.5 | 46.85 | -58.05 | 7.47 | -50.58 | -13 | -37.58 |
| 5 | 4959 | 47.80 | -56.35 | 7.00 | -49.36 | -13 | -36.36 |
| 6 | 5785.5 | 46.88 | -57.64 | 6.93 | -50.71 | -13 | -37.71 |
| 7 | 6612 | 48.12 | -55.61 | 5.74 | -49.87 | -13 | -36.87 |
| 8 | 7438.5 | 60.78 | -41.84 | 4.61 | -37.23 | -13 | -24.23 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 58.44 | -38.07 | 9.04 | -29.04 | -13 | -16.04 |
| 2 | 2509.5 | 38.90 | -71.10 | 9.21 | -61.89 | -13 | -48.89 |
| 3 | 3346 | 46.70 | -55.92 | 8.10 | -47.82 | -13 | -34.82 |
| 4 | 4182.5 | 47.32 | -67.81 | 5.16 | -62.64 | -13 | -49.64 |
| 5 | 5019 | 49.29 | -53.46 | -5.28 | -58.74 | -13 | -45.74 |
| 6 | 5855.5 | 48.15 | -63.68 | 2.90 | -60.79 | -13 | -47.79 |
| 7 | 6692 | 49.48 | -60.66 | -8.52 | -69.18 | -13 | -56.18 |
| 8 | 7528.5 | 60.75 | -36.60 | 3.70 | -32.90 | -13 | -19.90 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 59.91 | -36.60 | 9.04 | -27.57 | -13 | -14.57 |
| 2 | 2509.5 | 44.12 | -65.88 | 9.21 | -56.67 | -13 | -43.67 |
| 3 | 3346 | 42.10 | -60.52 | 8.10 | -52.42 | -13 | -39.42 |
| 4 | 4182.5 | 47.56 | -67.57 | 5.16 | -62.40 | -13 | -49.40 |
| 5 | 5019 | 48.26 | -54.49 | -5.28 | -59.77 | -13 | -46.77 |
| 6 | 5855.5 | 48.13 | -63.70 | 2.90 | -60.81 | -13 | -47.81 |
| 7 | 6692 | 47.75 | -62.39 | -8.52 | -70.91 | -13 | -57.91 |
| 8 | 7528.5 | 60.61 | -36.74 | 3.70 | -33.04 | -13 | -20.04 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20625 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1693 | 59.72 | -36.87 | 9.02 | -27.84 | -13 | -14.84 |
| 2 | 2539.5 | 40.59 | -69.36 | 9.19 | -60.17 | -13 | -47.17 |
| 3 | 3386 | 45.72 | -56.90 | 4.43 | -52.47 | -13 | -39.47 |
| 4 | 4232.5 | 46.84 | -54.77 | 4.18 | -50.60 | -13 | -37.60 |
| 5 | 5079 | 49.50 | -53.23 | -5.20 | -58.43 | -13 | -45.43 |
| 6 | 5925.5 | 48.27 | -52.05 | 3.57 | -48.48 | -13 | -35.48 |
| 7 | 6772 | 48.11 | -49.24 | 3.70 | -45.54 | -13 | -32.54 |
| 8 | 7618.5 | 61.49 | -35.86 | 3.70 | -32.16 | -13 | -19.16 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1693 | 58.66 | -37.93 | 9.02 | -28.90 | -13 | -15.90 |
| 2 | 2539.5 | 43.55 | -66.40 | 9.19 | -57.21 | -13 | -44.21 |
| 3 | 3386 | 40.85 | -61.77 | 4.43 | -57.34 | -13 | -44.34 |
| 4 | 4232.5 | 47.98 | -53.63 | 4.18 | -49.46 | -13 | -36.46 |
| 5 | 5079 | 48.34 | -54.39 | -5.20 | -59.59 | -13 | -46.59 |
| 6 | 5925.5 | 46.26 | -54.06 | 3.57 | -50.49 | -13 | -37.49 |
| 7 | 6772 | 48.48 | -48.87 | 3.70 | -45.17 | -13 | -32.17 |
| 8 | 7618.5 | 60.54 | -36.81 | 3.70 | -33.11 | -13 | -20.11 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## LTE Band 5: 10 MHz

| Mode | TX channel 20450 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1658 | 59.46 | -43.29 | 6.27 | -37.02 | -13 | -24.02 |
| 2 | 2487 | 39.84 | -58.39 | 6.62 | -51.76 | -13 | -38.76 |
| 3 | 3316 | 45.20 | -57.75 | 7.56 | -50.19 | -13 | -37.19 |
| 4 | 4145 | 47.34 | -57.56 | 7.47 | -50.09 | -13 | -37.09 |
| 5 | 4974 | 47.92 | -56.23 | 7.00 | -49.24 | -13 | -36.24 |
| 6 | 5803 | 47.70 | -56.82 | 6.93 | -49.89 | -13 | -36.89 |
| 7 | 6632 | 48.49 | -55.24 | 5.74 | -49.50 | -13 | -36.50 |
| 8 | 7461 | 62.11 | -40.51 | 4.61 | -35.90 | -13 | -22.90 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1658 | 60.31 | -42.44 | 6.27 | -36.17 | -13 | -23.17 |
| 2 | 2487 | 44.07 | -54.16 | 6.62 | -47.53 | -13 | -34.53 |
| 3 | 3316 | 42.50 | -60.45 | 7.56 | -52.89 | -13 | -39.89 |
| 4 | 4145 | 47.86 | -57.04 | 7.47 | -49.57 | -13 | -36.57 |
| 5 | 4974 | 48.12 | -56.03 | 7.00 | -49.04 | -13 | -36.04 |
| 6 | 5803 | 46.43 | -58.09 | 6.93 | -51.16 | -13 | -38.16 |
| 7 | 6632 | 48.98 | -54.75 | 5.74 | -49.01 | -13 | -36.01 |
| 8 | 7461 | 60.00 | -42.62 | 4.61 | -38.01 | -13 | -25.01 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20525 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1673 | 58.51 | -38.00 | 9.04 | -28.97 | -13 | -15.97 |
| **2** | 2509.5 | 39.49 | -70.51 | 9.21 | -61.30 | -13 | -48.30 |
| 3 | 3346 | 45.91 | -56.71 | 8.10 | -48.61 | -13 | -35.61 |
| 4 | 4182.5 | 48.00 | -67.13 | 5.16 | -61.96 | -13 | -48.96 |
| 5 | 5019 | 47.67 | -55.08 | -5.28 | -60.36 | -13 | -47.36 |
| 6 | 5855.5 | 48.25 | -63.58 | 2.90 | -60.69 | -13 | -47.69 |
| 7 | 6692 | 48.43 | -61.71 | -8.52 | -70.23 | -13 | -57.23 |
| 8 | 7528.5 | 60.94 | -36.41 | 3.70 | -32.71 | -13 | -19.71 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| **1** | **1673** | **60.32** | **-36.19** | **9.04** | **-27.16** | **-13** | **-14.16** |
| 2 | 2509.5 | 44.29 | -65.71 | 9.21 | -56.50 | -13 | -43.50 |
| 3 | 3346 | 41.27 | -61.35 | 8.10 | -53.25 | -13 | -40.25 |
| 4 | 4182.5 | 46.67 | -68.46 | 5.16 | -63.29 | -13 | -50.29 |
| 5 | 5019 | 47.54 | -55.21 | -5.28 | -60.49 | -13 | -47.49 |
| 6 | 5855.5 | 47.48 | -64.35 | 2.90 | -61.46 | -13 | -48.46 |
| 7 | 6692 | 48.82 | -61.32 | -8.52 | -69.84 | -13 | -56.84 |
| 8 | 7528.5 | 60.15 | -37.20 | 3.70 | -33.50 | -13 | -20.50 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

| Mode | TX channel 20600 | Frequency Range | Above 1000MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1688 | 59.43 | -37.14 | 9.03 | -28.11 | -13 | -15.11 |
| 2 | 2532 | 39.12 | -70.85 | 9.20 | -61.65 | -13 | -48.65 |
| 3 | 3376 | 45.48 | -57.14 | 4.43 | -52.71 | -13 | -39.71 |
| 4 | 4220 | 47.68 | -53.93 | 4.18 | -49.76 | -13 | -36.76 |
| 5 | 5064 | 48.45 | -54.29 | -5.22 | -59.50 | -13 | -46.50 |
| 6 | 5908 | 47.52 | -52.80 | 3.57 | -49.23 | -13 | -36.23 |
| 7 | 6752 | 47.82 | -49.53 | 3.70 | -45.83 | -13 | -32.83 |
| 8 | 7596 | 61.78 | -35.57 | 3.70 | -31.87 | -13 | -18.87 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 1688 | 58.89 | -37.68 | 9.03 | -28.65 | -13 | -15.65 |
| 2 | 2532 | 42.81 | -67.16 | 9.20 | -57.96 | -13 | -44.96 |
| 3 | 3376 | 42.42 | -60.20 | 4.43 | -55.77 | -13 | -42.77 |
| 4 | 4220 | 46.86 | -54.75 | 4.18 | -50.58 | -13 | -37.58 |
| 5 | 5064 | 46.88 | -55.86 | -5.22 | -61.07 | -13 | -48.07 |
| 6 | 5908 | 46.71 | -53.61 | 3.57 | -50.04 | -13 | -37.04 |
| 7 | 6752 | 48.83 | -48.52 | 3.70 | -44.82 | -13 | -31.82 |
| 8 | 7596 | 60.66 | -36.69 | 3.70 | -32.99 | -13 | -19.99 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

**Appendix – Information on the Testing Laboratories**

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following: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The address and road map of all our labs can be found in our web site also.

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