



# FCC RF Test Report

**APPLICANT** : VERTU Corporation Limited  
**EQUIPMENT** : Cellular Telephone  
**BRAND NAME** : VERTU  
**MODEL NAME** : SIGNATURE TOUCH  
**TYPE NAME** : VM-03  
**FCC ID** : P7QVM-03  
**STANDARD** : 47 CFR Part 2, 22(H), 24(E), 27  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jul. 02, 2015 and completely tested on Aug. 29, 2015. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

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Reviewed by: Joseph Lin / Supervisor

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Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

**No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.**



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## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION                                | ISSUED DATE   |
|------------|---------|--------------------------------------------|---------------|
| FG570205B  | Rev. 01 | Initial issue of report                    | Sep. 03, 2015 |
| FG570205B  | Rev. 02 | Revising Bluetooth version in section 1.3. | Sep. 07, 2015 |
|            |         |                                            |               |
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|            |         |                                            |               |

**SUMMARY OF TEST RESULT**

| Report Section | FCC Rule                                                                         | Description                                                                                    | Limit                               | Result | Remark |
|----------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------|--------|--------|
| 3.4            | §2.1046                                                                          | Conducted Output Power                                                                         | Reporting Only                      | PASS   | -      |
| 3.5            | §24.232(d)                                                                       | Peak-to-Average Ratio                                                                          | <13 dB                              | PASS   | -      |
| 3.6            | §2.1049                                                                          | Occupied Bandwidth                                                                             | Reporting Only                      | PASS   | -      |
| 3.7            | §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(c)(2)(4)<br>§27.53(g)<br>§27.53(h) | Conducted Band Edge Measurement<br>(Band 2) (Band 4) (Band 5)<br>(Band 13) (Band 17) (Band 25) | < 43+10log <sub>10</sub> (P[Watts]) | PASS   | -      |
|                | §27.53(m)(4)                                                                     | Conducted Band Edge Measurement<br>(Band 7) (Band38) (Band 41)                                 | §27.53(m)(4)                        |        |        |
| 3.8            | §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(c)(2)<br>§27.53(g)<br>§27.53(h)    | Conducted Spurious Emission<br>(Band 2) (Band 4) (Band 5)<br>(Band 13) (Band 17) (Band 25)     | < 43+10log <sub>10</sub> (P[Watts]) | PASS   | -      |
|                | §2.1051<br>§27.53(m)(4)                                                          | Conducted Spurious Emission<br>(Band 7) (Band38) (Band 41)                                     | < 55+10log <sub>10</sub> (P[Watts]) |        |        |



| Report Section | FCC Rule                                                                                   | Description                                                                                | Limit                                           | Result | Remark                                     |
|----------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------|--------|--------------------------------------------|
| 3.9            | §2.1055<br>§22.355<br>§24.235<br>§27.54                                                    | Frequency Stability<br>Temperature & Voltage                                               | < 2.5 ppm for Part 22<br>Within Authorized Band | PASS   | -                                          |
| 4.4            | §22.913(a)(2)                                                                              | Effective Radiated Power<br>(Band 5)                                                       | ERP < 7 Watt                                    | PASS   | -                                          |
|                | §27.50(b)(10)<br>§27.50(c)(10)                                                             | Effective Radiated Power<br>(Band 13) (Band 17)                                            | ERP < 3 Watt                                    |        |                                            |
|                | §24.232(c)<br>§27.50(h)(2)                                                                 | Equivalent Isotropic Radiated<br>Power<br>(Band 2)(Band 25)<br>(Band 7) (Band38) (Band 41) | EIRP < 2Watt                                    |        |                                            |
|                | §27.50(d)(4)                                                                               | Equivalent Isotropic Radiated<br>Power<br>(Band 4)                                         | EIRP < 1Watt                                    |        |                                            |
| 4.5            | §2.1053<br>§22.917(a)<br>§24.238(a)<br>§27.53(c)(2)<br>§27.53(f)<br>§27.53(g)<br>§27.53(h) | Radiated Spurious Emission<br>(Band 2) (Band 4) (Band 5)<br>(Band 13) (Band 17) (Band 25)  | < 43+10log <sub>10</sub> (P[Watts])             | PASS   | Under limit<br>14.85 dB at<br>4992.000 MHz |
|                | §2.1053<br>§27.53(m)(4)                                                                    | Radiated Spurious Emission<br>(Band 7) (Band38) (Band 41)                                  | < 55+10log <sub>10</sub> (P[Watts])             |        |                                            |



# 1 General Description

## 1.1 Applicant

**VERTU Corporation Limited**

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

## 1.2 Manufacturer

**VERTU Corporation Limited**

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

## 1.3 Product Feature of Equipment Under Test

| Product Feature                 |                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Cellular Telephone                                                                                                  |
| Brand Name                      | VERTU                                                                                                               |
| Model Name                      | SIGNATURE TOUCH                                                                                                     |
| Type Name                       | VM-03                                                                                                               |
| FCC ID                          | P7QVM-03                                                                                                            |
| EUT supports Radios application | GSM/EGPRS/WCDMA/HSPA/LTE/NFC<br>WLAN 11a/b/g/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth v4.1 BR/EDR/LE |
| EUT Stage                       | Identical Prototype                                                                                                 |

## 1.4 Product Specification subjective to this standard

| Product Specification subjective to this standard |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tx Frequency</b>                               | LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz<br>LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz<br>LTE Band 5 : 824.7 MHz ~ 848.3 MHz<br>LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz<br>LTE Band 13 : 779.5 MHz ~ 784.5 MHz<br>LTE Band 17 : 706.5 MHz ~ 713.5 MHz<br>LTE Band 25 : 1850.7MHz ~ 1914.3 MHz<br>LTE Band 38 : 2572.5MHz ~ 2617.5 MHz<br>LTE Band 41 : 2503.5 MHz ~ 2682.5 MHz                                                                    |
| <b>Rx Frequency</b>                               | LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz<br>LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz<br>LTE Band 5 : 869.7 MHz ~ 893.3 MHz<br>LTE Band 7 : 2622.5MHz ~ 2687.5 MHz<br>LTE Band 13 : 748.5 MHz ~ 753.5 MHz<br>LTE Band 17 : 736.5 MHz ~ 743.5 MHz<br>LTE Band 25 : 1930.7MHz ~ 1994.3 MHz<br>LTE Band 38 : 2572.5MHz ~ 2617.5 MHz<br>LTE Band 41 : 2503.5 MHz ~ 2682.5 MHz                                                                     |
| <b>Bandwidth</b>                                  | LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz<br>LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz<br>LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz<br>LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz<br>LTE Band 13 : 5MHz / 10MHz<br>LTE Band 17 : 5MHz / 10MHz<br>LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz<br>LTE Band 38 : 5MHz/ 10MHz / 15MHz / 20MHz<br>LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz |
| <b>Maximum Output Power to Antenna</b>            | LTE Band 2 : 23.18 dBm<br>LTE Band 4 : 23.58 dBm<br>LTE Band 5 : 23.70 dBm<br>LTE Band 7 : 22.10 dBm<br>LTE Band 13 : 23.55 dBm<br>LTE Band 17 : 22.77 dBm<br>LTE Band 25 : 23.45 dBm<br>LTE Band 38 : 22.88 dBm<br>LTE Band 41 : 22.61 dBm                                                                                                                                                                                          |
| <b>Type of Modulation</b>                         | QPSK / 16QAM                                                                                                                                                                                                                                                                                                                                                                                                                         |

## 1.5 Modification of EUT

No modifications are made to the EUT during all test items.



## 1.6 Emission Designator

| LTE Band 2  | QPSK                         |                           |                 | 16QAM                        |                           |                 |
|-------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1M09G7D                      | -                         | 0.1603          | 1M09W7D                      | -                         | 0.1358          |
| 3           | 2M73G7D                      | -                         | 0.1637          | 2M73W7D                      | -                         | 0.1380          |
| 5           | 4M50G7D                      | -                         | 0.1622          | 4M52W7D                      | -                         | 0.1429          |
| 10          | 9M07G7D                      | 0.0018                    | 0.1660          | 9M05W7D                      | -                         | 0.1442          |
| 15          | 13M5G7D                      | -                         | 0.1726          | 13M5W7D                      | -                         | 0.1489          |
| 20          | 18M5G7D                      | -                         | 0.1799          | 18M5W7D                      | -                         | 0.1552          |
| LTE Band 25 | QPSK                         |                           |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1M09G7D                      | -                         | 0.2077          | 1M09G7D                      | -                         | 0.1660          |
| 3           | 2M73G7D                      | -                         | 0.1982          | 2M73G7D                      | -                         | 0.1660          |
| 5           | 4M50G7D                      | -                         | 0.1963          | 4M52G7D                      | -                         | 0.1714          |
| 10          | 9M07G7D                      | 0.0018                    | 0.1930          | 9M05G7D                      | -                         | 0.1808          |
| 15          | 13M5G7D                      | -                         | 0.2128          | 13M5G7D                      | -                         | 0.1816          |
| 20          | 18M3G7D                      | -                         | 0.2138          | 18M5G7D                      | -                         | 0.1837          |
| LTE Band 4  | QPSK                         |                           |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1M10G7D                      | -                         | 0.1300          | 1M10W7D                      | -                         | 0.1047          |
| 3           | 2M72G7D                      | -                         | 0.1285          | 2M73W7D                      | -                         | 0.1084          |
| 5           | 4M49G7D                      | -                         | 0.1274          | 4M52W7D                      | -                         | 0.1096          |
| 10          | 9M05G7D                      | 0.0067                    | 0.1276          | 9M03W7D                      | -                         | 0.1054          |
| 15          | 13M5G7D                      | -                         | 0.1432          | 13M5W7D                      | -                         | 0.1213          |
| 20          | 18M5G7D                      | -                         | 0.1452          | 18M5W7D                      | -                         | 0.1225          |





| LTE Band 5  |                              | QPSK                      |                 | 16QAM                        |                           |                 |
|-------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  |
| 1.4         | 1M10G7D                      | -                         | 0.0914          | 1M09W7D                      | -                         | 0.0764          |
| 3           | 2M72G7D                      | -                         | 0.0942          | 2M73W7D                      | -                         | 0.0804          |
| 5           | 4M50G7D                      | -                         | 0.0935          | 4M49W7D                      | -                         | 0.0810          |
| 10          | 9M05G7D                      | 0.0068                    | 0.0948          | 9M09W7D                      | -                         | 0.0798          |
| LTE Band 7  |                              | QPSK                      |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
|             |                              |                           | AVG.            |                              |                           | AVG.            |
| 5           | 4M52G7D                      | -                         | 0.0593          | 4M51W7D                      | -                         | 0.0497          |
| 10          | 9M03G7D                      | 0.0101                    | 0.0798          | 9M03W7D                      | -                         | 0.0622          |
| 15          | 13M5G7D                      | -                         | 0.0767          | 13M5W7D                      | -                         | 0.0661          |
| 20          | 18M4G7D                      | -                         | 0.0571          | 18M5W7D                      | -                         | 0.0537          |
| LTE Band 13 |                              | QPSK                      |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  |
| 5           | 4M51G7D                      | -                         | 0.0650          | 4M51W7D                      | -                         | 0.0514          |
| 10          | 8M97G7D                      | 0.0054                    | 0.0626          | 8M99W7D                      | -                         | 0.0522          |
| LTE Band 17 |                              | QPSK                      |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  |
| 5           | 4M50G7D                      | -                         | 0.0585          | 4M51W7D                      | -                         | 0.0540          |
| 10          | 9M03G7D                      | 0.0087                    | 0.0562          | 9M05W7D                      | -                         | 0.0522          |
| LTE Band 38 |                              | QPSK                      |                 | 16QAM                        |                           |                 |
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
|             |                              |                           | AVG.            |                              |                           | AVG.            |
| 5           | 4M51G7D                      | -                         | 0.1169          | 4M52W7D                      | -                         | 0.0984          |
| 10          | 9M05G7D                      | 0.0079                    | 0.1138          | 9M07W7D                      | -                         | 0.1011          |
| 15          | 13M5G7D                      | -                         | 0.1099          | 13M5W7D                      | -                         | 0.0935          |
| 20          | 18M5G7D                      | -                         | 0.1222          | 18M5W7D                      | -                         | 0.1042          |

| LTE Band 41 | QPSK                         |                           |                 | 16QAM                        |                           |                 |
|-------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| BW(MHz)     | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 4M50G7D                      | -                         | 0.1140          | 4M50W7D                      | -                         | 0.0998          |
| 10          | 9M11G7D                      | 0.0012                    | 0.0966          | 9M07W7D                      | -                         | 0.0834          |
| 15          | 13M6G7D                      | -                         | 0.1035          | 13M6W7D                      | -                         | 0.0964          |
| 20          | 18M6G7D                      | -                         | 0.1202          | 18M6W7D                      | -                         | 0.1028          |

## 1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

|                           |                                                                                                                                                                  |           |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC.                                                                                                                                       |           |
| <b>Test Site Location</b> | No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park,<br>Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |           |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                                                                                                          |           |
|                           | TH02-HY                                                                                                                                                          | 03CH07-HY |

## 1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22(H), 24(E), 27
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- KDB 648474 D03 Handset Wireless Chargers Battery Covers v01r02

### Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

| Test Items            | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       | RB # |      |      | Test Channel |   |   |
|-----------------------|------|-----------------|---|---|----|----|----|------------|-------|------|------|------|--------------|---|---|
|                       |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 1    | Half | Full | L            | M | H |
| Max. Output Power     | 2    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 4    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 5    | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 7    | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 13   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 17   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 25   | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 38   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
|                       | 41   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    | ✓    | ✓            | ✓ | ✓ |
| Peak-to-Average Ratio | 2    |                 |   |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 4    |                 |   |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 5    |                 |   |   | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 7    | -               | - |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 13   | -               | - |   | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 17   | -               | - |   | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 25   |                 |   |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 38   | -               | - |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |
|                       | 41   | -               | - |   |    |    | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            | ✓ | ✓ |



| Test Items             | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       | RB # |      |      | Test Channel |   |   |
|------------------------|------|-----------------|---|---|----|----|----|------------|-------|------|------|------|--------------|---|---|
|                        |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 1    | Half | Full | L            | M | H |
| 26dB and 99% Bandwidth | 2    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 4    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 5    | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 7    | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 13   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 17   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 25   | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 38   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
|                        | 41   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     |      |      | ✓    | ✓            | ✓ | ✓ |
| Conducted Band Edge    | 2    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 4    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 5    | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 7    | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 13   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 17   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 25   | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 38   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |
|                        | 41   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      | ✓    | ✓            |   | ✓ |



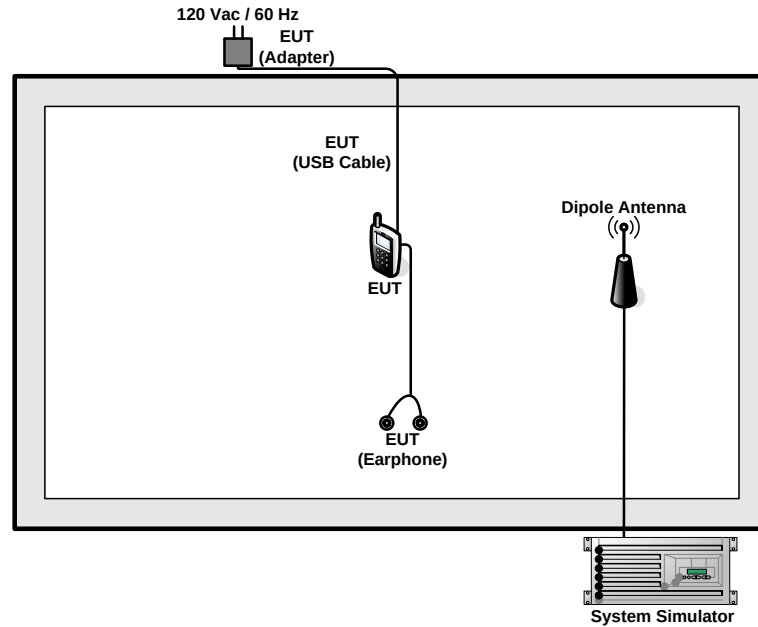
| Test Items                        | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       | RB # |      |      | Test Channel |   |   |
|-----------------------------------|------|-----------------|---|---|----|----|----|------------|-------|------|------|------|--------------|---|---|
|                                   |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 1    | Half | Full | L            | M | H |
| Conducted<br>Spurious<br>Emission | 2    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 4    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 5    | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 7    | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 13   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 17   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 25   | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 38   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 41   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
| Frequency<br>Stability            | 2    |                 |   |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 4    |                 |   |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 5    |                 |   |   | ✓  | -  | -  | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 7    | -               | - |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 13   | -               | - |   | ✓  | -  | -  | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 17   | -               | - |   | ✓  | -  | -  | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 25   |                 |   |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 38   | -               | - |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
|                                   | 41   | -               | - |   | ✓  |    |    | ✓          |       |      |      | ✓    |              | ✓ |   |
| E.R.P./ E.I.R.P.                  | 2    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 4    | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    |      | ✓            | ✓ | ✓ |
|                                   | 5    | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 7    | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    |      | ✓            | ✓ | ✓ |
|                                   | 13   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 17   | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 25   | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    | ✓    |      | ✓            | ✓ | ✓ |
|                                   | 38   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                   | 41   | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |



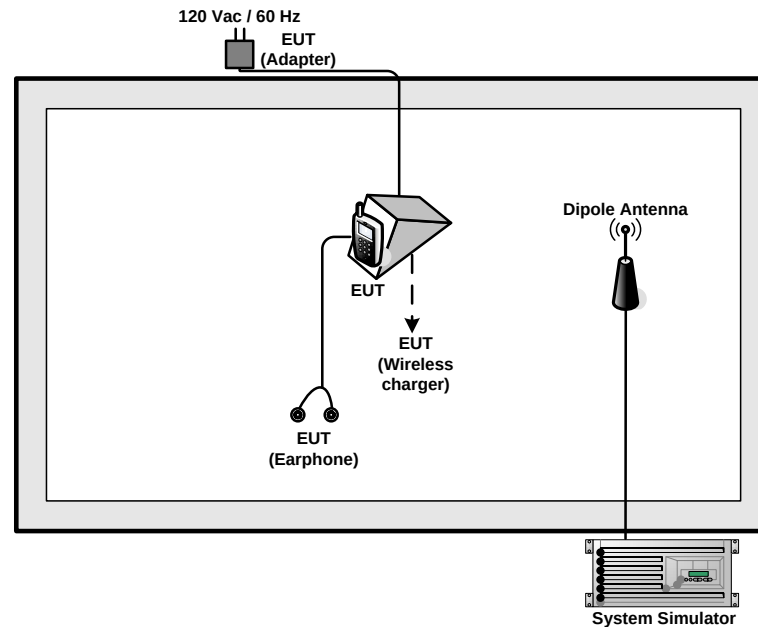
| Test Items                                | Band                                                                                                                                                                                                                                                                                                                                                                                              | Bandwidth (MHz) |   |   |    |    |    | Modulation |       | RB # |      |      | Test Channel |   |   |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---|---|----|----|----|------------|-------|------|------|------|--------------|---|---|
|                                           |                                                                                                                                                                                                                                                                                                                                                                                                   | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 1    | Half | Full | L            | M | H |
| <b>Radiated<br/>Spurious<br/>Emission</b> | 2                                                                                                                                                                                                                                                                                                                                                                                                 | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 4                                                                                                                                                                                                                                                                                                                                                                                                 | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 5                                                                                                                                                                                                                                                                                                                                                                                                 | ✓               | ✓ | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 7                                                                                                                                                                                                                                                                                                                                                                                                 | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 13                                                                                                                                                                                                                                                                                                                                                                                                | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 17                                                                                                                                                                                                                                                                                                                                                                                                | -               | - | ✓ | ✓  | -  | -  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 25                                                                                                                                                                                                                                                                                                                                                                                                | ✓               | ✓ | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 38                                                                                                                                                                                                                                                                                                                                                                                                | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 41                                                                                                                                                                                                                                                                                                                                                                                                | -               | - | ✓ | ✓  | ✓  | ✓  | ✓          | ✓     | ✓    |      |      | ✓            | ✓ | ✓ |
|                                           | 41<br>WPC                                                                                                                                                                                                                                                                                                                                                                                         | -               | - |   | ✓  |    |    | ✓          |       | ✓    |      |      | ✓            |   |   |
| <b>Note</b>                               | <p>1. The mark “✓” means that this configuration is chosen for testing</p> <p>2. The mark “-” means that this bandwidth is not supported.</p> <p>3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.</p> |                 |   |   |    |    |    |            |       |      |      |      |              |   |   |

## 2.2 Connection Diagram of Test System

### <EUT with Adapter Mode>



### <EUT with Wireless charger Mode>



## 2.3 Support Unit used in test configuration and system

| Item | Equipment        | Trade Name | Model No. | FCC ID | Data Cable | Power Cord        |
|------|------------------|------------|-----------|--------|------------|-------------------|
| 1.   | System Simulator | Anritsu    | MT8820C   | N/A    | N/A        | Unshielded, 1.8 m |

## 2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

*Offset(dB) = RF cable loss(dB) + attenuator factor(dB).*

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$



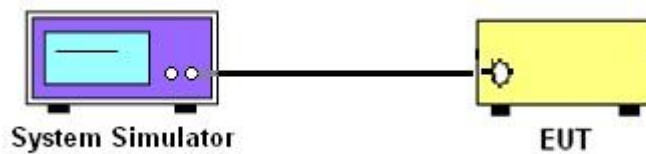
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

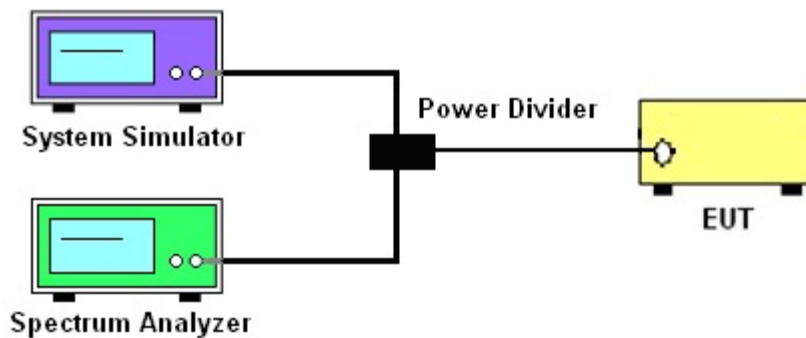
See list of measuring instruments of this test report.

#### 3.2 Test Setup

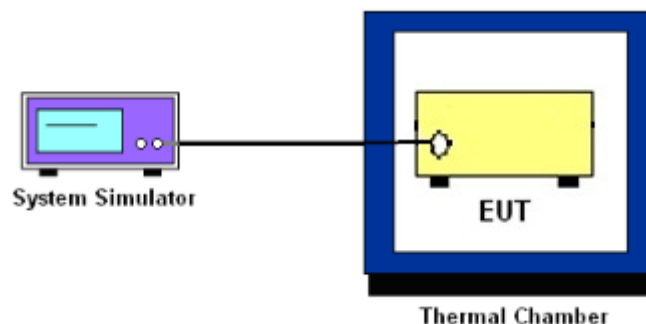
##### 3.2.1 Conducted Output Power



##### 3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



##### 3.2.3 Frequency Stability



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



### **3.4 Conducted Output Power**

#### **3.4.1 Description of the Conducted Output Power Measurement**

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

#### **3.4.2 Test Procedures**

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



## **3.5 Peak-to-Average Ratio**

### **3.5.1 Description of the PAR Measurement**

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. 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.

### **3.5.2 Test Procedures**

1. The testing follows FCC KDB 971168 v02r02 Section 5.7.1.
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

## 3.6 Occupied Bandwidth

### 3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

### 3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.  
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



### **3.7 Conducted Band Edge**

#### **3.7.1 Description of Conducted Band Edge Measurement**

22.917(a) for Band 5

For operations in the 824 – 849 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a) for Band 2, 25

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1MHz bandwidth. However, 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.

27.53 (c) for Band 13

For operations in the 776-788 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power,  $P$  (dBW), by at least  $65 + 10 \log_{10} p(\text{watts})$ , dB, for mobile and portable equipment.

27.53 (g) for Band 17

For operations in the 698 -746 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h) for Band 4

For operations in the 1710 – 1755 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(m)(4) for FCC Band 7, 38, 41:

For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

### 3.7.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW  $\geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB) = -13dBm.

For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.

### 3.8 Conducted Spurious Emission

#### 3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

For Band 7,38,41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> harmonic.

#### 3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.  
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
 $= -13$ dBm.
11. For Band 7, 38, 41  
The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [55 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
 $= -25$ dBm.

### 3.9 Frequency Stability

#### 3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

#### 3.9.2 Test Procedures for Temperature Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

#### 3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at  $25\pm 5^{\circ}\text{C}$  and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.



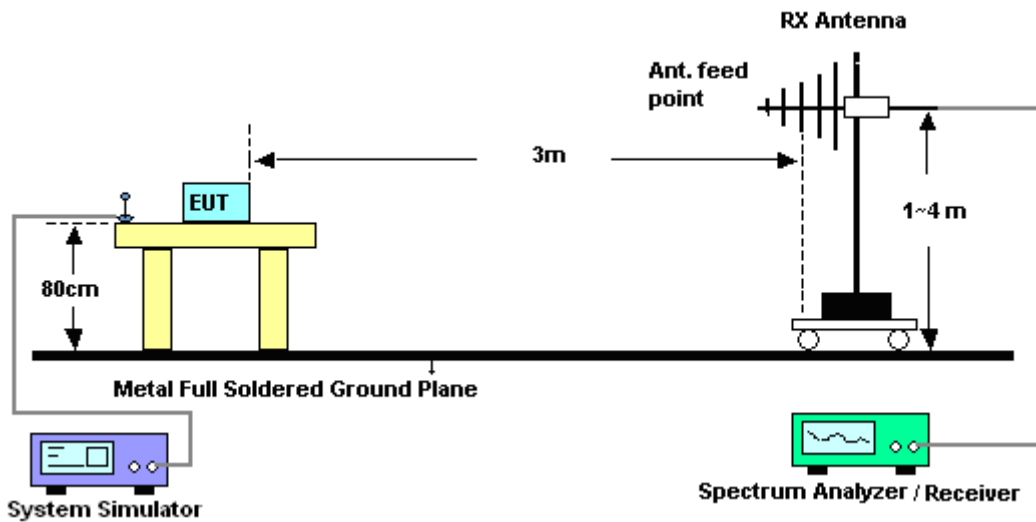
## 4 Radiated Test Items

### 4.1 Measuring Instruments

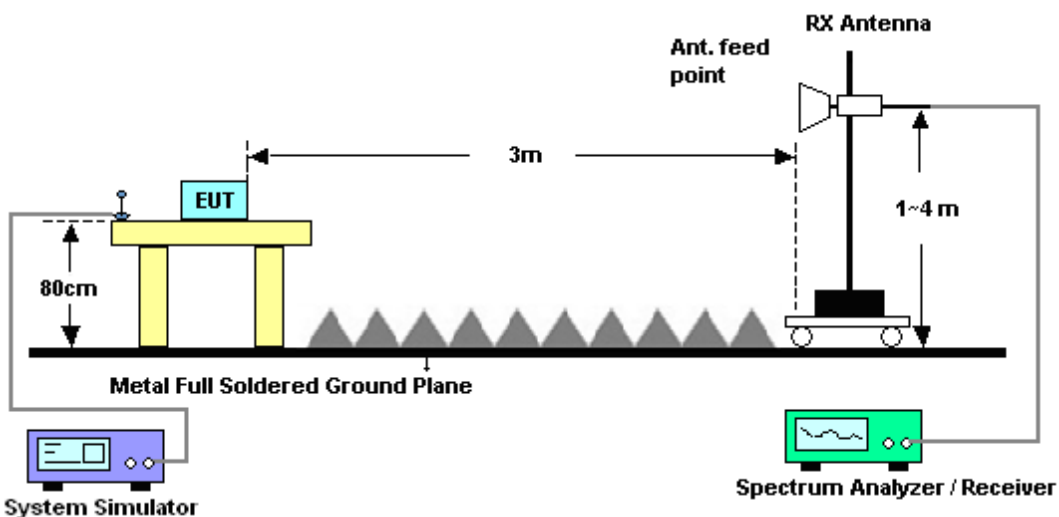
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test from 30MHz to 1GHz



#### 4.2.2 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

Please refer to Appendix B.



## **4.4 Effective Radiated Power and Effective Isotropic Radiated Power**

### **4.4.1 Description of the ERP/EIRP Measurement**

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 and 3 watts with LTE band 13 / 17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 25 / 7 and 1 watt with LTE band 4.

### **4.4.2 Test Procedures**

1. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
2. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor,  $EIRP = LVL + \text{Correction factor}$  and  $ERP = EIRP - 2.15$ . Take the record of the output power at substitution antenna.



|              | LTE Average |         |         |         |         |         |
|--------------|-------------|---------|---------|---------|---------|---------|
| LTE BW       | 1.4M        | 3M      | 5M      | 10M     | 15M     | 20M     |
| Span         | 3MHz        | 6MHz    | 10MHz   | 20MHz   | 30MHz   | 40MHz   |
| RBW          | 30kHz       | 100kHz  | 100kHz  | 300kHz  | 300kHz  | 300kHz  |
| VBW          | 100kHz      | 300kHz  | 300kHz  | 1MHz    | 1MHz    | 1MHz    |
| Detector     | RMS         | RMS     | RMS     | RMS     | RMS     | RMS     |
| Trace        | Average     | Average | Average | Average | Average | Average |
| Average Type | Power       | Power   | Power   | Power   | Power   | Power   |
| Sweep Count  | 100         | 100     | 100     | 100     | 100     | 100     |

|          | LTE Peak |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| LTE BW   | 1.4M     | 3M       | 5M       | 10M      | 15M      | 20M      |
| Span     | 3MHz     | 6MHz     | 10MHz    | 20MHz    | 30MHz    | 40MHz    |
| RBW      | 30kHz    | 100kHz   | 100kHz   | 300kHz   | 300kHz   | 300kHz   |
| VBW      | 100kHz   | 300kHz   | 300kHz   | 1MHz     | 1MHz     | 1MHz     |
| Detector | Peak     | Peak     | Peak     | Peak     | Peak     | Peak     |
| Trace    | Max Hold | Max Hold | Max Hold | Max Hold | Max Hold | Max Hold |
| Power    | Channel  | Channel  | Channel  | Channel  | Channel  | Channel  |



## **4.5 Radiated Spurious Emission**

### **4.5.1 Description of Radiated Spurious Emission**

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

For Band 7, 38, 41

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

For LTE Band 13,17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to  $-70$  dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and  $-80$  dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### **4.5.2 Test Procedures**

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm.}$$

For Band 7, 38, 41:

The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)

$$12. \text{ EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$

$$13. \text{ ERP (dBm)} = \text{EIRP} - 2.15$$



## 5 List of Measuring Equipment

| Instrument                | Manufacturer    | Model No.     | Serial No.  | Characteristics    | Calibration Date | Test Date                     | Due Date      | Remark                |
|---------------------------|-----------------|---------------|-------------|--------------------|------------------|-------------------------------|---------------|-----------------------|
| Signal Analyzer           | Rohde & Schwarz | FSV40         | 101397      | 10Hz~40GHz         | Sep. 17, 2014    | Aug. 01, 2015 ~ Aug. 24, 2015 | Sep. 16, 2015 | Conducted (TH05-HY)   |
| Temperature Chamber       | ESPEC           | SU-241        | 92003713    | -30℃~95℃           | Jun. 15, 2015    | Aug. 01, 2015 ~ Aug. 24, 2015 | Jun. 14, 2016 | Conducted (TH05-HY)   |
| Programmable Power Supply | GW Instek       | PSS-2005      | EL890094    | 1V~20V 0.5A~5A     | Oct. 17, 2014    | Aug. 01, 2015 ~ Aug. 24, 2015 | Oct. 16, 2015 | Conducted (TH05-HY)   |
| Base Station (Measure)    | Anritsu         | MT8820C       | 6201432821  | GSM/GPRS/WCDMA/LTE | Oct. 27, 2014    | Aug. 01, 2015 ~ Aug. 24, 2015 | Oct. 26, 2015 | Conducted (TH05-HY)   |
| Horn Antenna              | SCHWARZBECK     | BBHA 9120 D   | 9120D-1241  | 1GHz ~ 18GHz       | Apr. 22, 2015    | Aug. 01, 2015 ~ Aug. 29, 2015 | Apr. 21, 2016 | Radiation (03CH07-HY) |
| Bilog Antenna             | Schaffner       | CBL6111C      | 2726        | 30MHz ~ 1GHz       | Sep. 27, 2014    | Aug. 01, 2015 ~ Aug. 29, 2015 | Sep. 26, 2015 | Radiation (03CH07-HY) |
| Double Ridge Horn Antenna | ESCO            | 3117          | 00075962    | 1GHz ~ 18GHz       | Aug. 19, 2014    | Aug. 01, 2015 ~ Aug. 16, 2015 | Aug. 18, 2015 | Radiation (03CH07-HY) |
| Double Ridge Horn Antenna | ESCO            | 3117          | 00075962    | 1GHz ~ 18GHz       | Aug. 21, 2015    | Aug. 29, 2015                 | Aug. 20, 2016 | Radiation (03CH07-HY) |
| Horn Antenna              | SCHWARZBECK     | BBHA 9170     | BBHA9170584 | 18GHz- 40GHz       | Nov. 03, 2014    | Aug. 01, 2015 ~ Aug. 29, 2015 | Nov. 02, 2015 | Radiation (03CH07-HY) |
| Hygrometer                | Testo           | 608-H1        | 34897197    | N/A                | May 04, 2015     | Aug. 01, 2015 ~ Aug. 29, 2015 | May 03, 2016  | Radiation (03CH07-HY) |
| Preamplifier              | COM-POWER       | PA-103A       | 161241      | 10MHz-1000MHz      | Mar. 12, 2015    | Aug. 01, 2015 ~ Aug. 29, 2015 | Mar. 11, 2016 | Radiation (03CH07-HY) |
| Preamplifier              | Agilent         | 8449B         | 3008A02362  | 1GHz~ 26.5GHz      | Oct. 21, 2014    | Aug. 01, 2015 ~ Aug. 29, 2015 | Oct. 20, 2015 | Radiation (03CH07-HY) |
| Signal Analyzer           | Rohde & Schwarz | FSV 30        | 101749      | 10Hz~30GHz         | Mar. 10, 2015    | Aug. 01, 2015 ~ Aug. 29, 2015 | Mar. 09, 2016 | Radiation (03CH07-HY) |
| RF Cable                  | HUBER + SUHNER  | SUCOFLEX 104  | MY84209521  | 1GHz~40GHz         | Dec. 04, 2014    | Aug. 01, 2015 ~ Aug. 29, 2015 | Dec. 03, 2015 | Radiation (03CH07-HY) |
| RF Cable                  | HUBER + SUHNER  | SUCOFLEX 104  | MY84209521  | 9kHz~1GHz          | Dec. 04, 2014    | Aug. 01, 2015 ~ Aug. 29, 2015 | Dec. 03, 2015 | Radiation (03CH07-HY) |
| Controller                | ChainTek        | Chaintek 3000 | N/A         | Control Turn table | N/A              | Aug. 01, 2015 ~ Aug. 29, 2015 | N/A           | Radiation (03CH07-HY) |
| Controller                | Max-Full        | MF7802        | MF780208368 | Control Ant Mast   | N/A              | Aug. 01, 2015 ~ Aug. 29, 2015 | N/A           | Radiation (03CH07-HY) |
| Antenna Mast              | Max-Full        | MFA520BS      | N/A         | 1m~4m              | N/A              | Aug. 01, 2015 ~ Aug. 29, 2015 | N/A           | Radiation (03CH07-HY) |
| Turn Table                | ChainTek        | Chaintek 3000 | N/A         | 0~360 degree       | N/A              | Aug. 01, 2015 ~ Aug. 29, 2015 | N/A           | Radiation (03CH07-HY) |
| Signal Generator          | Rohde & Schwarz | SMF100A       | 101107      | 100kHz~40GHz       | May 22, 2015     | Aug. 01, 2015 ~ Aug. 29, 2015 | May 21, 2016  | Radiation (03CH07-HY) |



## 6 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.20 |
|-------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.10 |
|-------------------------------------------------------------------------|------|



## **Appendix A. Test Results of Conducted Test**

### **Conducted Output Power(Average power)**



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 22.63  | 22.53  | 22.51   |
| 1.4                                    | 1       | 2         |        | 22.55  | 22.31  | 22.27   |
| 1.4                                    | 1       | 5         |        | 22.57  | 22.65  | 22.56   |
| 1.4                                    | 3       | 0         |        | 22.43  | 22.30  | 22.58   |
| 1.4                                    | 3       | 1         |        | 22.55  | 22.45  | 22.56   |
| 1.4                                    | 3       | 2         |        | 22.63  | 22.47  | 22.51   |
| 1.4                                    | 6       | 0         | 16-QAM | 21.92  | 21.48  | 21.66   |
| 1.4                                    | 1       | 0         |        | 21.57  | 21.91  | 21.55   |
| 1.4                                    | 1       | 2         |        | 21.48  | 21.44  | 21.40   |
| 1.4                                    | 1       | 5         |        | 21.69  | 21.51  | 21.69   |
| 1.4                                    | 3       | 0         |        | 21.59  | 21.60  | 21.48   |
| 1.4                                    | 3       | 1         |        | 21.56  | 21.64  | 21.56   |
| 1.4                                    | 3       | 2         |        | 21.61  | 21.59  | 21.50   |
| 1.4                                    | 6       | 0         |        | 20.58  | 20.55  | 20.60   |
| 3                                      | 1       | 0         | QPSK   | 22.92  | 22.72  | 22.71   |
| 3                                      | 1       | 7         |        | 22.46  | 22.56  | 22.58   |
| 3                                      | 1       | 14        |        | 22.45  | 22.78  | 22.16   |
| 3                                      | 8       | 0         |        | 21.63  | 21.68  | 21.60   |
| 3                                      | 8       | 4         |        | 21.78  | 21.45  | 21.20   |
| 3                                      | 8       | 7         |        | 21.58  | 21.57  | 21.89   |
| 3                                      | 15      | 0         | 16-QAM | 21.58  | 21.81  | 21.40   |
| 3                                      | 1       | 0         |        | 22.20  | 22.19  | 21.92   |
| 3                                      | 1       | 7         |        | 22.05  | 21.88  | 21.83   |
| 3                                      | 1       | 14        |        | 21.78  | 22.05  | 21.72   |
| 3                                      | 8       | 0         |        | 20.81  | 20.91  | 20.65   |
| 3                                      | 8       | 4         |        | 20.62  | 20.74  | 20.24   |
| 3                                      | 8       | 7         |        | 20.67  | 20.43  | 20.49   |
| 3                                      | 15      | 0         |        | 20.82  | 20.76  | 20.37   |





| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 22.92  | 22.82  | 22.91   |
| 5                                      | 1       | 12        |        | 22.48  | 22.71  | 22.59   |
| 5                                      | 1       | 24        |        | 22.40  | 22.52  | 22.24   |
| 5                                      | 12      | 0         |        | 21.50  | 21.79  | 21.60   |
| 5                                      | 12      | 6         |        | 21.65  | 21.46  | 21.55   |
| 5                                      | 12      | 11        |        | 21.61  | 21.50  | 21.71   |
| 5                                      | 25      | 0         |        | 21.54  | 21.78  | 21.63   |
| 5                                      | 1       | 0         | 16-QAM | 21.77  | 22.50  | 22.07   |
| 5                                      | 1       | 12        |        | 21.63  | 21.97  | 21.77   |
| 5                                      | 1       | 24        |        | 21.66  | 22.06  | 21.79   |
| 5                                      | 12      | 0         |        | 20.77  | 20.67  | 20.97   |
| 5                                      | 12      | 6         |        | 20.82  | 20.74  | 20.34   |
| 5                                      | 12      | 11        |        | 20.88  | 20.64  | 20.52   |
| 5                                      | 25      | 0         |        | 20.67  | 20.78  | 20.44   |
| 10                                     | 1       | 0         | QPSK   | 22.76  | 22.76  | 22.75   |
| 10                                     | 1       | 24        |        | 22.64  | 22.77  | 22.64   |
| 10                                     | 1       | 49        |        | 22.60  | 22.49  | 22.53   |
| 10                                     | 25      | 0         |        | 21.82  | 21.89  | 21.71   |
| 10                                     | 25      | 12        |        | 22.02  | 22.09  | 21.72   |
| 10                                     | 25      | 24        |        | 21.58  | 21.62  | 21.79   |
| 10                                     | 50      | 0         |        | 21.79  | 22.05  | 21.60   |
| 10                                     | 1       | 0         | 16-QAM | 22.24  | 22.45  | 22.21   |
| 10                                     | 1       | 24        |        | 21.86  | 21.99  | 21.89   |
| 10                                     | 1       | 49        |        | 22.00  | 21.96  | 21.79   |
| 10                                     | 25      | 0         |        | 21.06  | 20.74  | 20.90   |
| 10                                     | 25      | 12        |        | 20.70  | 21.02  | 20.55   |
| 10                                     | 25      | 24        |        | 21.04  | 20.74  | 20.82   |
| 10                                     | 50      | 0         |        | 20.86  | 20.85  | 20.71   |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 22.86  | 23.08  | 23.13   |
| 15                                     | 1       | 37        |        | 22.85  | 22.78  | 22.90   |
| 15                                     | 1       | 74        |        | 22.89  | 22.71  | 22.52   |
| 15                                     | 36      | 0         |        | 22.13  | 22.08  | 21.92   |
| 15                                     | 36      | 18        |        | 22.06  | 22.09  | 21.59   |
| 15                                     | 36      | 37        |        | 21.98  | 21.81  | 21.98   |
| 15                                     | 75      | 0         |        | 22.18  | 22.06  | 21.75   |
| 15                                     | 1       | 0         | 16-QAM | 22.33  | 22.20  | 22.22   |
| 15                                     | 1       | 37        |        | 22.03  | 22.15  | 22.33   |
| 15                                     | 1       | 74        |        | 22.14  | 22.17  | 22.05   |
| 15                                     | 36      | 0         |        | 20.92  | 20.95  | 21.20   |
| 15                                     | 36      | 18        |        | 20.97  | 21.18  | 20.57   |
| 15                                     | 36      | 37        |        | 21.09  | 21.15  | 21.16   |
| 15                                     | 75      | 0         |        | 21.10  | 21.00  | 20.87   |
| 20                                     | 1       | 0         | QPSK   | 23.18  | 23.16  | 22.97   |
| 20                                     | 1       | 49        |        | 22.72  | 23.13  | 22.75   |
| 20                                     | 1       | 99        |        | 22.71  | 22.81  | 22.88   |
| 20                                     | 50      | 0         |        | 22.40  | 22.04  | 21.63   |
| 20                                     | 50      | 24        |        | 22.24  | 22.23  | 21.62   |
| 20                                     | 50      | 49        |        | 22.08  | 22.05  | 21.89   |
| 20                                     | 100     | 0         |        | 22.41  | 22.39  | 21.86   |
| 20                                     | 1       | 0         | 16-QAM | 22.50  | 21.97  | 21.88   |
| 20                                     | 1       | 49        |        | 22.48  | 22.17  | 21.51   |
| 20                                     | 1       | 99        |        | 22.08  | 22.34  | 22.39   |
| 20                                     | 50      | 0         |        | 21.39  | 21.04  | 20.58   |
| 20                                     | 50      | 24        |        | 21.36  | 21.39  | 20.65   |
| 20                                     | 50      | 49        |        | 20.99  | 21.23  | 20.82   |
| 20                                     | 100     | 0         |        | 21.35  | 21.49  | 20.61   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                     | 1       | 0         | QPSK   | 22.89  | 22.78  | 22.79   |
| 1.4                                     | 1       | 2         |        | 22.80  | 22.55  | 22.51   |
| 1.4                                     | 1       | 5         |        | 22.85  | 22.87  | 22.78   |
| 1.4                                     | 3       | 0         |        | 22.71  | 22.50  | 22.85   |
| 1.4                                     | 3       | 1         |        | 22.75  | 22.74  | 22.80   |
| 1.4                                     | 3       | 2         |        | 22.91  | 22.77  | 22.78   |
| 1.4                                     | 6       | 0         |        | 22.13  | 21.76  | 21.92   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.78  | 22.13  | 21.83   |
| 1.4                                     | 1       | 2         |        | 21.73  | 21.71  | 21.64   |
| 1.4                                     | 1       | 5         |        | 21.92  | 21.77  | 21.99   |
| 1.4                                     | 3       | 0         |        | 21.82  | 21.81  | 21.74   |
| 1.4                                     | 3       | 1         |        | 21.80  | 21.87  | 21.78   |
| 1.4                                     | 3       | 2         |        | 21.84  | 21.85  | 21.74   |
| 1.4                                     | 6       | 0         |        | 20.87  | 20.76  | 20.90   |
| 3                                       | 1       | 0         | QPSK   | 23.17  | 22.93  | 22.98   |
| 3                                       | 1       | 7         |        | 22.70  | 22.85  | 22.78   |
| 3                                       | 1       | 14        |        | 22.72  | 23.06  | 22.39   |
| 3                                       | 8       | 0         |        | 21.89  | 21.89  | 21.87   |
| 3                                       | 8       | 4         |        | 21.98  | 21.66  | 21.49   |
| 3                                       | 8       | 7         |        | 21.81  | 21.85  | 22.12   |
| 3                                       | 15      | 0         |        | 21.80  | 22.03  | 21.62   |
| 3                                       | 1       | 0         | 16-QAM | 22.50  | 22.49  | 22.20   |
| 3                                       | 1       | 7         |        | 22.34  | 22.09  | 22.10   |
| 3                                       | 1       | 14        |        | 21.99  | 22.31  | 21.94   |
| 3                                       | 8       | 0         |        | 21.01  | 21.20  | 20.87   |
| 3                                       | 8       | 4         |        | 20.91  | 20.94  | 20.54   |
| 3                                       | 8       | 7         |        | 20.88  | 20.66  | 20.72   |
| 3                                       | 15      | 0         |        | 21.03  | 21.06  | 20.63   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 23.18  | 23.07  | 23.16   |
| 5                                       | 1       | 12        |        | 22.76  | 22.92  | 22.80   |
| 5                                       | 1       | 24        |        | 22.70  | 22.76  | 22.49   |
| 5                                       | 12      | 0         |        | 21.78  | 22.03  | 21.86   |
| 5                                       | 12      | 6         |        | 21.93  | 21.66  | 21.75   |
| 5                                       | 12      | 11        |        | 21.89  | 21.77  | 21.99   |
| 5                                       | 25      | 0         |        | 21.82  | 22.04  | 21.89   |
| 5                                       | 1       | 0         | 16-QAM | 22.00  | 22.91  | 22.33   |
| 5                                       | 1       | 12        |        | 21.91  | 22.17  | 21.97   |
| 5                                       | 1       | 24        |        | 21.90  | 22.33  | 22.03   |
| 5                                       | 12      | 0         |        | 21.06  | 20.87  | 21.27   |
| 5                                       | 12      | 6         |        | 21.04  | 21.02  | 20.54   |
| 5                                       | 12      | 11        |        | 21.17  | 20.84  | 20.76   |
| 5                                       | 25      | 0         |        | 20.93  | 21.00  | 20.73   |
| 10                                      | 1       | 0         | QPSK   | 23.03  | 23.03  | 23.00   |
| 10                                      | 1       | 24        |        | 22.89  | 23.05  | 22.84   |
| 10                                      | 1       | 49        |        | 22.81  | 22.76  | 22.74   |
| 10                                      | 25      | 0         |        | 22.05  | 22.19  | 21.99   |
| 10                                      | 25      | 12        |        | 22.28  | 22.36  | 21.92   |
| 10                                      | 25      | 24        |        | 21.79  | 21.87  | 22.02   |
| 10                                      | 50      | 0         |        | 21.99  | 22.33  | 21.89   |
| 10                                      | 1       | 0         | 16-QAM | 22.53  | 22.74  | 22.46   |
| 10                                      | 1       | 24        |        | 22.08  | 22.20  | 22.19   |
| 10                                      | 1       | 49        |        | 22.28  | 22.24  | 22.02   |
| 10                                      | 25      | 0         |        | 21.35  | 20.94  | 21.17   |
| 10                                      | 25      | 12        |        | 20.94  | 21.30  | 20.84   |
| 10                                      | 25      | 24        |        | 21.32  | 20.99  | 21.02   |
| 10                                      | 50      | 0         |        | 21.13  | 21.12  | 20.98   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 23.13  | 23.38  | 23.35   |
| 15                                      | 1       | 37        |        | 23.13  | 23.02  | 23.19   |
| 15                                      | 1       | 74        |        | 23.15  | 22.98  | 22.72   |
| 15                                      | 36      | 0         |        | 22.43  | 22.29  | 22.14   |
| 15                                      | 36      | 18        |        | 22.32  | 22.37  | 21.86   |
| 15                                      | 36      | 37        |        | 22.22  | 22.11  | 22.20   |
| 15                                      | 75      | 0         |        | 22.41  | 22.30  | 22.03   |
| 15                                      | 1       | 0         | 16-QAM | 22.56  | 22.42  | 22.45   |
| 15                                      | 1       | 37        |        | 22.31  | 22.38  | 22.61   |
| 15                                      | 1       | 74        |        | 22.40  | 22.44  | 22.35   |
| 15                                      | 36      | 0         |        | 21.18  | 21.19  | 21.44   |
| 15                                      | 36      | 18        |        | 21.25  | 21.39  | 20.77   |
| 15                                      | 36      | 37        |        | 21.31  | 21.39  | 21.37   |
| 15                                      | 75      | 0         |        | 21.39  | 21.21  | 21.17   |
| 20                                      | 1       | 0         | QPSK   | 23.39  | 23.45  | 23.25   |
| 20                                      | 1       | 49        |        | 22.96  | 23.40  | 23.05   |
| 20                                      | 1       | 99        |        | 23.01  | 23.11  | 23.11   |
| 20                                      | 50      | 0         |        | 22.80  | 22.28  | 21.86   |
| 20                                      | 50      | 24        |        | 22.45  | 22.52  | 21.91   |
| 20                                      | 50      | 49        |        | 22.30  | 22.33  | 22.18   |
| 20                                      | 100     | 0         |        | 22.61  | 22.67  | 22.10   |
| 20                                      | 1       | 0         | 16-QAM | 22.92  | 22.24  | 22.16   |
| 20                                      | 1       | 49        |        | 22.68  | 22.38  | 21.77   |
| 20                                      | 1       | 99        |        | 22.32  | 22.79  | 22.61   |
| 20                                      | 50      | 0         |        | 21.64  | 21.34  | 20.82   |
| 20                                      | 50      | 24        |        | 21.64  | 21.66  | 20.93   |
| 20                                      | 50      | 49        |        | 21.26  | 21.45  | 21.06   |
| 20                                      | 100     | 0         |        | 21.62  | 21.75  | 20.88   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 23.52  | 23.48  | 23.46   |
| 1.4                                    | 1       | 2         |        | 23.47  | 23.44  | 23.52   |
| 1.4                                    | 1       | 5         |        | 23.52  | 23.43  | 23.40   |
| 1.4                                    | 3       | 0         |        | 23.49  | 23.56  | 23.48   |
| 1.4                                    | 3       | 1         |        | 23.47  | 23.43  | 23.47   |
| 1.4                                    | 3       | 2         |        | 23.51  | 23.39  | 23.51   |
| 1.4                                    | 6       | 0         | 16-QAM | 22.50  | 22.45  | 22.53   |
| 1.4                                    | 1       | 0         |        | 22.45  | 22.34  | 22.54   |
| 1.4                                    | 1       | 2         |        | 22.46  | 22.41  | 22.49   |
| 1.4                                    | 1       | 5         |        | 22.49  | 22.44  | 22.36   |
| 1.4                                    | 3       | 0         |        | 22.58  | 22.58  | 22.58   |
| 1.4                                    | 3       | 1         |        | 22.56  | 22.54  | 22.54   |
| 1.4                                    | 3       | 2         |        | 22.46  | 22.49  | 22.51   |
| 1.4                                    | 6       | 0         |        | 21.47  | 21.60  | 21.57   |
| 3                                      | 1       | 0         | QPSK   | 23.47  | 23.51  | 23.51   |
| 3                                      | 1       | 7         |        | 23.49  | 23.43  | 23.49   |
| 3                                      | 1       | 14        |        | 23.41  | 23.39  | 23.48   |
| 3                                      | 8       | 0         |        | 22.62  | 22.57  | 22.72   |
| 3                                      | 8       | 4         |        | 22.49  | 22.58  | 22.61   |
| 3                                      | 8       | 7         |        | 22.55  | 22.51  | 22.59   |
| 3                                      | 15      | 0         | 16-QAM | 22.46  | 22.58  | 22.55   |
| 3                                      | 1       | 0         |        | 22.42  | 22.54  | 22.52   |
| 3                                      | 1       | 7         |        | 22.56  | 22.44  | 22.49   |
| 3                                      | 1       | 14        |        | 22.60  | 22.35  | 22.47   |
| 3                                      | 8       | 0         |        | 21.40  | 21.42  | 21.64   |
| 3                                      | 8       | 4         |        | 21.54  | 21.45  | 21.58   |
| 3                                      | 8       | 7         |        | 21.53  | 21.42  | 21.45   |
| 3                                      | 15      | 0         |        | 21.48  | 21.50  | 21.48   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 23.48  | 23.43  | 23.49   |
| 5                                      | 1       | 12        |        | 23.50  | 23.34  | 23.46   |
| 5                                      | 1       | 24        |        | 23.45  | 23.41  | 23.40   |
| 5                                      | 12      | 0         |        | 22.52  | 22.49  | 22.66   |
| 5                                      | 12      | 6         |        | 22.54  | 22.43  | 22.61   |
| 5                                      | 12      | 11        |        | 22.50  | 22.52  | 22.70   |
| 5                                      | 25      | 0         |        | 22.49  | 22.47  | 22.64   |
| 5                                      | 1       | 0         | 16-QAM | 22.47  | 22.51  | 22.57   |
| 5                                      | 1       | 12        |        | 22.57  | 22.49  | 22.59   |
| 5                                      | 1       | 24        |        | 22.55  | 22.39  | 22.47   |
| 5                                      | 12      | 0         |        | 21.57  | 21.50  | 21.57   |
| 5                                      | 12      | 6         |        | 21.53  | 21.53  | 21.62   |
| 5                                      | 12      | 11        |        | 21.52  | 21.47  | 21.57   |
| 5                                      | 25      | 0         |        | 21.48  | 21.49  | 21.60   |
| 10                                     | 1       | 0         | QPSK   | 23.43  | 23.51  | 23.47   |
| 10                                     | 1       | 24        |        | 23.51  | 23.43  | 23.52   |
| 10                                     | 1       | 49        |        | 23.39  | 23.38  | 23.49   |
| 10                                     | 25      | 0         |        | 22.53  | 22.54  | 22.57   |
| 10                                     | 25      | 12        |        | 22.52  | 22.43  | 22.55   |
| 10                                     | 25      | 24        |        | 22.51  | 22.42  | 22.49   |
| 10                                     | 50      | 0         |        | 22.48  | 22.30  | 22.54   |
| 10                                     | 1       | 0         | 16-QAM | 22.45  | 22.46  | 22.46   |
| 10                                     | 1       | 24        |        | 22.60  | 22.38  | 22.41   |
| 10                                     | 1       | 49        |        | 22.32  | 22.48  | 22.44   |
| 10                                     | 25      | 0         |        | 21.62  | 21.49  | 21.60   |
| 10                                     | 25      | 12        |        | 21.49  | 21.40  | 21.55   |
| 10                                     | 25      | 24        |        | 21.42  | 21.34  | 21.51   |
| 10                                     | 50      | 0         |        | 21.49  | 21.43  | 21.44   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 23.52  | 23.47  | 23.52   |
| 15                                     | 1       | 37        |        | 23.49  | 23.39  | 23.51   |
| 15                                     | 1       | 74        |        | 23.50  | 23.33  | 23.42   |
| 15                                     | 36      | 0         |        | 22.50  | 22.49  | 22.51   |
| 15                                     | 36      | 18        |        | 22.47  | 22.44  | 22.50   |
| 15                                     | 36      | 37        |        | 22.43  | 22.46  | 22.59   |
| 15                                     | 75      | 0         |        | 22.35  | 22.42  | 22.44   |
| 15                                     | 1       | 0         | 16-QAM | 22.57  | 22.52  | 22.53   |
| 15                                     | 1       | 37        |        | 22.47  | 22.54  | 22.49   |
| 15                                     | 1       | 74        |        | 22.37  | 22.45  | 22.39   |
| 15                                     | 36      | 0         |        | 21.61  | 21.49  | 21.54   |
| 15                                     | 36      | 18        |        | 21.51  | 21.40  | 21.51   |
| 15                                     | 36      | 37        |        | 21.43  | 21.29  | 21.42   |
| 15                                     | 75      | 0         |        | 21.34  | 21.28  | 21.33   |
| 20                                     | 1       | 0         | QPSK   | 23.36  | 23.46  | 23.58   |
| 20                                     | 1       | 49        |        | 23.07  | 23.02  | 23.25   |
| 20                                     | 1       | 99        |        | 23.29  | 23.33  | 23.08   |
| 20                                     | 50      | 0         |        | 22.46  | 22.37  | 22.53   |
| 20                                     | 50      | 24        |        | 22.07  | 22.11  | 22.24   |
| 20                                     | 50      | 49        |        | 21.99  | 22.19  | 22.13   |
| 20                                     | 100     | 0         |        | 22.18  | 22.22  | 22.37   |
| 20                                     | 1       | 0         | 16-QAM | 22.60  | 22.73  | 22.76   |
| 20                                     | 1       | 49        |        | 22.25  | 22.32  | 22.46   |
| 20                                     | 1       | 99        |        | 22.45  | 22.53  | 22.34   |
| 20                                     | 50      | 0         |        | 21.32  | 21.32  | 21.48   |
| 20                                     | 50      | 24        |        | 21.01  | 21.09  | 21.22   |
| 20                                     | 50      | 49        |        | 20.97  | 21.16  | 21.13   |
| 20                                     | 100     | 0         |        | 21.19  | 21.21  | 21.37   |





| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 23.41  | 23.47  | 23.16   |
| 1.4                                    | 1       | 2         |        | 23.39  | 23.38  | 23.23   |
| 1.4                                    | 1       | 5         |        | 23.38  | 23.31  | 23.19   |
| 1.4                                    | 3       | 0         |        | 23.09  | 23.28  | 22.99   |
| 1.4                                    | 3       | 1         |        | 23.26  | 23.25  | 23.22   |
| 1.4                                    | 3       | 2         |        | 23.24  | 23.31  | 23.24   |
| 1.4                                    | 6       | 0         | 16-QAM | 22.09  | 22.24  | 22.00   |
| 1.4                                    | 1       | 0         |        | 22.70  | 22.68  | 22.41   |
| 1.4                                    | 1       | 2         |        | 22.57  | 22.61  | 22.50   |
| 1.4                                    | 1       | 5         |        | 22.59  | 22.56  | 22.50   |
| 1.4                                    | 3       | 0         |        | 22.25  | 22.27  | 22.20   |
| 1.4                                    | 3       | 1         |        | 22.32  | 22.40  | 22.06   |
| 1.4                                    | 3       | 2         |        | 22.18  | 22.41  | 22.16   |
| 1.4                                    | 6       | 0         |        | 21.14  | 21.30  | 21.11   |
| 3                                      | 1       | 0         | QPSK   | 23.50  | 23.43  | 23.18   |
| 3                                      | 1       | 7         |        | 23.41  | 23.56  | 23.42   |
| 3                                      | 1       | 14        |        | 23.22  | 23.21  | 23.06   |
| 3                                      | 8       | 0         |        | 22.22  | 22.31  | 22.15   |
| 3                                      | 8       | 4         |        | 22.30  | 22.45  | 22.19   |
| 3                                      | 8       | 7         |        | 22.40  | 22.32  | 22.07   |
| 3                                      | 15      | 0         | 16-QAM | 22.43  | 22.21  | 22.15   |
| 3                                      | 1       | 0         |        | 22.70  | 22.67  | 22.36   |
| 3                                      | 1       | 7         |        | 22.71  | 22.75  | 22.54   |
| 3                                      | 1       | 14        |        | 22.47  | 22.33  | 22.44   |
| 3                                      | 8       | 0         |        | 21.27  | 21.25  | 21.21   |
| 3                                      | 8       | 4         |        | 21.37  | 21.32  | 21.22   |
| 3                                      | 8       | 7         |        | 21.31  | 21.22  | 21.18   |
| 3                                      | 15      | 0         |        | 21.33  | 21.16  | 21.14   |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 23.45  | 23.45  | 23.26   |
| 5                                      | 1       | 12        |        | 23.29  | 23.44  | 23.27   |
| 5                                      | 1       | 24        |        | 23.22  | 23.32  | 23.23   |
| 5                                      | 12      | 0         |        | 22.35  | 22.37  | 22.12   |
| 5                                      | 12      | 6         |        | 22.22  | 22.41  | 22.15   |
| 5                                      | 12      | 11        |        | 22.20  | 22.19  | 22.20   |
| 5                                      | 25      | 0         |        | 22.26  | 22.28  | 22.15   |
| 5                                      | 1       | 0         | 16-QAM | 22.62  | 22.59  | 22.65   |
| 5                                      | 1       | 12        |        | 22.63  | 22.59  | 22.52   |
| 5                                      | 1       | 24        |        | 22.59  | 22.60  | 22.39   |
| 5                                      | 12      | 0         |        | 21.42  | 21.41  | 21.32   |
| 5                                      | 12      | 6         |        | 21.35  | 21.33  | 21.13   |
| 5                                      | 12      | 11        |        | 21.35  | 21.06  | 21.13   |
| 5                                      | 25      | 0         |        | 21.20  | 21.36  | 21.19   |
| 10                                     | 1       | 0         | QPSK   | 23.44  | 23.70  | 23.36   |
| 10                                     | 1       | 24        |        | 23.37  | 23.47  | 23.33   |
| 10                                     | 1       | 49        |        | 23.33  | 23.29  | 23.16   |
| 10                                     | 25      | 0         |        | 22.34  | 22.42  | 22.24   |
| 10                                     | 25      | 12        |        | 22.41  | 22.30  | 22.20   |
| 10                                     | 25      | 24        |        | 22.32  | 22.24  | 22.18   |
| 10                                     | 50      | 0         |        | 22.38  | 22.32  | 22.13   |
| 10                                     | 1       | 0         | 16-QAM | 22.78  | 22.86  | 22.79   |
| 10                                     | 1       | 24        |        | 22.75  | 22.66  | 22.53   |
| 10                                     | 1       | 49        |        | 22.64  | 22.62  | 22.48   |
| 10                                     | 25      | 0         |        | 21.36  | 21.32  | 21.29   |
| 10                                     | 25      | 12        |        | 21.45  | 21.45  | 21.23   |
| 10                                     | 25      | 24        |        | 21.22  | 21.30  | 21.11   |
| 10                                     | 50      | 0         |        | 21.21  | 21.26  | 21.24   |



| LTE Band 7 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 22.01  | 21.94  | 22.05   |
| 5                                      | 1       | 12        |        | 22.08  | 22.08  | 22.04   |
| 5                                      | 1       | 24        |        | 22.03  | 21.96  | 22.03   |
| 5                                      | 12      | 0         |        | 20.99  | 20.96  | 21.06   |
| 5                                      | 12      | 6         |        | 20.97  | 20.95  | 21.02   |
| 5                                      | 12      | 11        |        | 20.96  | 20.98  | 21.05   |
| 5                                      | 25      | 0         |        | 21.15  | 20.85  | 21.08   |
| 5                                      | 1       | 0         | 16-QAM | 20.98  | 20.96  | 21.02   |
| 5                                      | 1       | 12        |        | 21.03  | 21.04  | 21.04   |
| 5                                      | 1       | 24        |        | 20.94  | 21.03  | 21.03   |
| 5                                      | 12      | 0         |        | 21.10  | 21.03  | 21.09   |
| 5                                      | 12      | 6         |        | 21.06  | 21.05  | 21.13   |
| 5                                      | 12      | 11        |        | 21.10  | 21.07  | 21.10   |
| 5                                      | 25      | 0         |        | 20.05  | 20.11  | 20.14   |
| 10                                     | 1       | 0         | QPSK   | 22.02  | 22.05  | 21.97   |
| 10                                     | 1       | 24        |        | 22.08  | 22.02  | 21.90   |
| 10                                     | 1       | 49        |        | 22.01  | 22.01  | 21.89   |
| 10                                     | 25      | 0         |        | 21.08  | 21.09  | 21.19   |
| 10                                     | 25      | 12        |        | 21.00  | 21.04  | 21.18   |
| 10                                     | 25      | 24        |        | 21.06  | 20.98  | 21.13   |
| 10                                     | 50      | 0         |        | 21.05  | 21.07  | 21.16   |
| 10                                     | 1       | 0         | 16-QAM | 20.97  | 21.06  | 21.15   |
| 10                                     | 1       | 24        |        | 21.14  | 21.03  | 21.06   |
| 10                                     | 1       | 49        |        | 21.13  | 20.98  | 20.94   |
| 10                                     | 25      | 0         |        | 20.06  | 20.07  | 20.17   |
| 10                                     | 25      | 12        |        | 20.07  | 20.03  | 20.17   |
| 10                                     | 25      | 24        |        | 20.09  | 19.94  | 20.05   |
| 10                                     | 50      | 0         |        | 20.00  | 19.96  | 20.16   |



| LTE Band 7 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 22.02  | 22.00  | 22.03   |
| 15                                     | 1       | 37        |        | 22.08  | 21.98  | 22.00   |
| 15                                     | 1       | 74        |        | 22.04  | 22.02  | 22.01   |
| 15                                     | 36      | 0         |        | 21.03  | 21.00  | 21.18   |
| 15                                     | 36      | 18        |        | 21.14  | 21.09  | 21.08   |
| 15                                     | 36      | 37        |        | 21.05  | 21.00  | 21.23   |
| 15                                     | 75      | 0         |        | 21.09  | 21.04  | 21.21   |
| 15                                     | 1       | 0         | 16-QAM | 20.98  | 21.06  | 21.12   |
| 15                                     | 1       | 37        |        | 21.03  | 21.00  | 21.15   |
| 15                                     | 1       | 74        |        | 21.06  | 21.02  | 21.06   |
| 15                                     | 36      | 0         |        | 20.12  | 20.09  | 20.13   |
| 15                                     | 36      | 18        |        | 20.19  | 20.14  | 20.11   |
| 15                                     | 36      | 37        |        | 20.10  | 20.02  | 20.12   |
| 15                                     | 75      | 0         |        | 19.98  | 20.02  | 20.11   |
| 20                                     | 1       | 0         | QPSK   | 22.10  | 22.04  | 22.05   |
| 20                                     | 1       | 49        |        | 22.04  | 22.00  | 21.98   |
| 20                                     | 1       | 99        |        | 21.94  | 22.01  | 22.02   |
| 20                                     | 50      | 0         |        | 21.07  | 21.05  | 21.12   |
| 20                                     | 50      | 24        |        | 21.02  | 21.04  | 21.11   |
| 20                                     | 50      | 49        |        | 20.95  | 20.94  | 21.03   |
| 20                                     | 100     | 0         |        | 21.01  | 20.96  | 21.02   |
| 20                                     | 1       | 0         | 16-QAM | 21.05  | 21.03  | 21.07   |
| 20                                     | 1       | 49        |        | 21.03  | 20.95  | 21.04   |
| 20                                     | 1       | 99        |        | 20.90  | 21.05  | 21.01   |
| 20                                     | 50      | 0         |        | 20.07  | 20.08  | 20.13   |
| 20                                     | 50      | 24        |        | 20.04  | 20.02  | 20.04   |
| 20                                     | 50      | 49        |        | 20.03  | 19.92  | 20.06   |
| 20                                     | 100     | 0         |        | 20.05  | 19.92  | 20.00   |



| LTE Band 13 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 23.51  | 23.27  | 23.52   |
| 5                                       | 1       | 12        |        | 23.47  | 23.37  | 23.48   |
| 5                                       | 1       | 24        |        | 23.27  | 23.25  | 23.27   |
| 5                                       | 12      | 0         |        | 22.28  | 22.18  | 22.20   |
| 5                                       | 12      | 6         |        | 22.28  | 22.47  | 22.35   |
| 5                                       | 12      | 11        |        | 22.25  | 22.39  | 22.45   |
| 5                                       | 25      | 0         |        | 22.22  | 22.39  | 22.29   |
| 5                                       | 1       | 0         | 16-QAM | 22.71  | 22.60  | 22.58   |
| 5                                       | 1       | 12        |        | 22.69  | 22.76  | 22.83   |
| 5                                       | 1       | 24        |        | 22.58  | 22.70  | 22.77   |
| 5                                       | 12      | 0         |        | 21.50  | 21.20  | 21.12   |
| 5                                       | 12      | 6         |        | 21.24  | 21.31  | 21.25   |
| 5                                       | 12      | 11        |        | 21.21  | 21.30  | 21.33   |
| 5                                       | 25      | 0         |        | 21.35  | 21.36  | 21.37   |
| 10                                      | 1       | 0         | QPSK   |        | 23.55  |         |
| 10                                      | 1       | 24        |        |        | 23.45  |         |
| 10                                      | 1       | 49        |        |        | 23.42  |         |
| 10                                      | 25      | 0         |        |        | 22.38  |         |
| 10                                      | 25      | 12        |        |        | 22.31  |         |
| 10                                      | 25      | 24        |        |        | 22.25  |         |
| 10                                      | 50      | 0         |        |        | 22.38  |         |
| 10                                      | 1       | 0         | 16-QAM |        | 22.55  |         |
| 10                                      | 1       | 24        |        |        | 22.64  |         |
| 10                                      | 1       | 49        |        |        | 22.67  |         |
| 10                                      | 25      | 0         |        |        | 21.39  |         |
| 10                                      | 25      | 12        |        |        | 21.37  |         |
| 10                                      | 25      | 24        |        |        | 21.35  |         |
| 10                                      | 50      | 0         |        |        | 21.26  |         |



| LTE Band 17 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.65  | 22.66  | 22.56   |
| 5                                       | 1       | 12        |        | 22.64  | 22.58  | 22.61   |
| 5                                       | 1       | 24        |        | 22.61  | 22.54  | 22.64   |
| 5                                       | 12      | 0         |        | 21.70  | 21.71  | 21.64   |
| 5                                       | 12      | 6         |        | 21.71  | 21.77  | 21.80   |
| 5                                       | 12      | 11        |        | 21.60  | 21.72  | 21.78   |
| 5                                       | 25      | 0         | 16-QAM | 21.65  | 21.60  | 21.71   |
| 5                                       | 1       | 0         |        | 21.93  | 21.94  | 21.94   |
| 5                                       | 1       | 12        |        | 21.95  | 22.03  | 22.03   |
| 5                                       | 1       | 24        |        | 21.98  | 21.89  | 21.85   |
| 5                                       | 12      | 0         |        | 20.67  | 20.63  | 20.76   |
| 5                                       | 12      | 6         |        | 20.71  | 20.52  | 20.78   |
| 5                                       | 12      | 11        |        | 20.69  | 20.46  | 20.63   |
| 5                                       | 25      | 0         |        | 20.66  | 20.67  | 20.73   |
| 10                                      | 1       | 0         | QPSK   | 22.69  | 22.77  | 22.63   |
| 10                                      | 1       | 24        |        | 22.58  | 22.59  | 22.66   |
| 10                                      | 1       | 49        |        | 22.51  | 22.54  | 22.50   |
| 10                                      | 25      | 0         |        | 21.82  | 21.76  | 21.66   |
| 10                                      | 25      | 12        |        | 21.72  | 21.65  | 21.80   |
| 10                                      | 25      | 24        |        | 21.55  | 21.55  | 21.47   |
| 10                                      | 50      | 0         |        | 21.72  | 21.71  | 21.62   |
| 10                                      | 1       | 0         | 16-QAM | 22.05  | 22.04  | 21.90   |
| 10                                      | 1       | 24        |        | 22.01  | 22.00  | 22.00   |
| 10                                      | 1       | 49        |        | 22.07  | 22.01  | 21.88   |
| 10                                      | 25      | 0         |        | 20.68  | 20.77  | 20.68   |
| 10                                      | 25      | 12        |        | 20.54  | 20.71  | 20.73   |
| 10                                      | 25      | 24        |        | 20.65  | 20.46  | 20.49   |
| 10                                      | 50      | 0         |        | 20.60  | 20.68  | 20.66   |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.71  | 22.85  | 22.48   |
| 5                                       | 1       | 12        |        | 22.69  | 22.84  | 22.39   |
| 5                                       | 1       | 24        |        | 22.58  | 22.75  | 22.29   |
| 5                                       | 12      | 0         |        | 21.83  | 22.03  | 21.68   |
| 5                                       | 12      | 6         |        | 21.89  | 22.14  | 21.66   |
| 5                                       | 12      | 11        |        | 21.85  | 22.19  | 21.68   |
| 5                                       | 25      | 0         |        | 21.87  | 22.13  | 21.60   |
| 5                                       | 1       | 0         | 16-QAM | 21.99  | 22.22  | 21.73   |
| 5                                       | 1       | 12        |        | 22.02  | 22.23  | 21.68   |
| 5                                       | 1       | 24        |        | 21.96  | 22.18  | 21.60   |
| 5                                       | 12      | 0         |        | 20.84  | 21.06  | 20.77   |
| 5                                       | 12      | 6         |        | 20.91  | 21.17  | 20.74   |
| 5                                       | 12      | 11        |        | 20.86  | 21.18  | 20.76   |
| 5                                       | 25      | 0         |        | 20.88  | 21.10  | 20.70   |
| 10                                      | 1       | 0         | QPSK   | 22.80  | 22.54  | 22.16   |
| 10                                      | 1       | 24        |        | 22.75  | 22.64  | 22.12   |
| 10                                      | 1       | 49        |        | 22.76  | 22.43  | 22.08   |
| 10                                      | 25      | 0         |        | 21.91  | 21.79  | 21.21   |
| 10                                      | 25      | 12        |        | 21.85  | 21.83  | 21.22   |
| 10                                      | 25      | 24        |        | 21.76  | 21.71  | 21.05   |
| 10                                      | 50      | 0         |        | 21.79  | 21.74  | 21.15   |
| 10                                      | 1       | 0         | 16-QAM | 21.87  | 21.67  | 21.31   |
| 10                                      | 1       | 24        |        | 21.92  | 21.81  | 21.23   |
| 10                                      | 1       | 49        |        | 21.80  | 21.47  | 21.17   |
| 10                                      | 25      | 0         |        | 20.96  | 20.85  | 20.38   |
| 10                                      | 25      | 12        |        | 20.89  | 20.91  | 20.34   |
| 10                                      | 25      | 24        |        | 20.81  | 20.79  | 20.16   |
| 10                                      | 50      | 0         |        | 20.85  | 20.83  | 20.26   |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.70  | 22.71  | 22.61   |
| 15                                      | 1       | 37        |        | 22.81  | 22.64  | 22.21   |
| 15                                      | 1       | 74        |        | 22.63  | 22.57  | 22.18   |
| 15                                      | 36      | 0         |        | 21.79  | 21.87  | 21.52   |
| 15                                      | 36      | 18        |        | 21.87  | 21.79  | 21.34   |
| 15                                      | 36      | 37        |        | 21.71  | 21.65  | 21.23   |
| 15                                      | 75      | 0         |        | 21.66  | 21.72  | 21.38   |
| 15                                      | 1       | 0         | 16-QAM | 21.56  | 21.70  | 21.67   |
| 15                                      | 1       | 37        |        | 21.75  | 21.72  | 21.33   |
| 15                                      | 1       | 74        |        | 21.42  | 21.67  | 21.27   |
| 15                                      | 36      | 0         |        | 20.66  | 20.76  | 20.57   |
| 15                                      | 36      | 18        |        | 20.72  | 20.78  | 20.41   |
| 15                                      | 36      | 37        |        | 20.56  | 20.73  | 20.29   |
| 15                                      | 75      | 0         |        | 20.66  | 20.87  | 20.40   |
| 20                                      | 1       | 0         | QPSK   | 22.85  | 22.88  | 22.65   |
| 20                                      | 1       | 49        |        | 22.58  | 22.71  | 22.34   |
| 20                                      | 1       | 99        |        | 22.47  | 22.42  | 22.22   |
| 20                                      | 50      | 0         |        | 21.82  | 21.83  | 21.55   |
| 20                                      | 50      | 24        |        | 21.76  | 21.75  | 21.40   |
| 20                                      | 50      | 49        |        | 21.62  | 21.65  | 21.23   |
| 20                                      | 100     | 0         |        | 21.69  | 21.67  | 21.41   |
| 20                                      | 1       | 0         | 16-QAM | 21.50  | 21.61  | 21.78   |
| 20                                      | 1       | 49        |        | 21.76  | 21.71  | 21.39   |
| 20                                      | 1       | 99        |        | 21.37  | 21.52  | 21.15   |
| 20                                      | 50      | 0         |        | 20.82  | 20.91  | 20.61   |
| 20                                      | 50      | 24        |        | 20.82  | 20.82  | 20.45   |
| 20                                      | 50      | 49        |        | 20.65  | 20.81  | 20.29   |
| 20                                      | 100     | 0         |        | 20.70  | 20.83  | 20.42   |





| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.39  | 22.50  | 22.00   |
| 5                                       | 1       | 12        |        | 22.28  | 22.40  | 22.02   |
| 5                                       | 1       | 24        |        | 22.20  | 22.39  | 22.03   |
| 5                                       | 12      | 0         |        | 21.50  | 21.48  | 21.27   |
| 5                                       | 12      | 6         |        | 21.52  | 21.59  | 21.28   |
| 5                                       | 12      | 11        |        | 21.41  | 21.51  | 21.20   |
| 5                                       | 25      | 0         |        | 21.53  | 21.58  | 21.20   |
| 5                                       | 1       | 0         | 16-QAM | 21.75  | 21.81  | 21.24   |
| 5                                       | 1       | 12        |        | 21.60  | 21.71  | 21.31   |
| 5                                       | 1       | 24        |        | 21.59  | 21.74  | 21.05   |
| 5                                       | 12      | 0         |        | 20.57  | 20.54  | 20.08   |
| 5                                       | 12      | 6         |        | 20.59  | 20.66  | 20.05   |
| 5                                       | 12      | 11        |        | 20.55  | 20.59  | 20.02   |
| 5                                       | 25      | 0         |        | 20.50  | 20.59  | 20.05   |
| 10                                      | 1       | 0         | QPSK   | 22.32  | 22.30  | 22.00   |
| 10                                      | 1       | 24        |        | 22.28  | 22.61  | 22.01   |
| 10                                      | 1       | 49        |        | 22.23  | 22.36  | 22.00   |
| 10                                      | 25      | 0         |        | 21.38  | 21.51  | 21.27   |
| 10                                      | 25      | 12        |        | 21.39  | 21.57  | 21.30   |
| 10                                      | 25      | 24        |        | 21.37  | 21.52  | 21.17   |
| 10                                      | 50      | 0         |        | 21.40  | 21.51  | 21.27   |
| 10                                      | 1       | 0         | 16-QAM | 21.65  | 21.77  | 21.20   |
| 10                                      | 1       | 24        |        | 21.61  | 21.83  | 21.26   |
| 10                                      | 1       | 49        |        | 21.50  | 21.70  | 21.00   |
| 10                                      | 25      | 0         |        | 20.46  | 20.58  | 20.13   |
| 10                                      | 25      | 12        |        | 20.47  | 20.65  | 20.10   |
| 10                                      | 25      | 24        |        | 20.43  | 20.59  | 20.02   |
| 10                                      | 50      | 0         |        | 20.43  | 20.53  | 20.11   |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.36  | 22.26  | 22.13   |
| 15                                      | 1       | 37        |        | 22.32  | 22.41  | 22.07   |
| 15                                      | 1       | 74        |        | 22.04  | 22.21  | 22.00   |
| 15                                      | 36      | 0         |        | 21.50  | 21.38  | 21.30   |
| 15                                      | 36      | 18        |        | 21.50  | 21.40  | 21.31   |
| 15                                      | 36      | 37        |        | 21.40  | 21.25  | 21.22   |
| 15                                      | 75      | 0         |        | 21.44  | 21.33  | 21.30   |
| 15                                      | 1       | 0         | 16-QAM | 21.68  | 21.69  | 21.42   |
| 15                                      | 1       | 37        |        | 21.54  | 21.60  | 21.34   |
| 15                                      | 1       | 74        |        | 21.36  | 21.49  | 21.25   |
| 15                                      | 36      | 0         |        | 20.54  | 20.37  | 20.09   |
| 15                                      | 36      | 18        |        | 20.49  | 20.38  | 20.05   |
| 15                                      | 36      | 37        |        | 20.43  | 20.25  | 20.03   |
| 15                                      | 75      | 0         |        | 20.50  | 20.32  | 20.12   |
| 20                                      | 1       | 0         | QPSK   | 22.34  | 22.38  | 22.00   |
| 20                                      | 1       | 49        |        | 22.31  | 22.18  | 22.01   |
| 20                                      | 1       | 99        |        | 22.09  | 22.15  | 22.00   |
| 20                                      | 50      | 0         |        | 21.44  | 21.24  | 21.27   |
| 20                                      | 50      | 24        |        | 21.59  | 21.40  | 21.28   |
| 20                                      | 50      | 49        |        | 21.37  | 21.29  | 21.39   |
| 20                                      | 100     | 0         |        | 21.43  | 21.30  | 21.24   |
| 20                                      | 1       | 0         | 16-QAM | 21.63  | 21.73  | 21.19   |
| 20                                      | 1       | 49        |        | 21.58  | 21.47  | 21.25   |
| 20                                      | 1       | 99        |        | 21.27  | 21.32  | 21.27   |
| 20                                      | 50      | 0         |        | 20.49  | 20.30  | 20.13   |
| 20                                      | 50      | 24        |        | 20.64  | 20.40  | 20.02   |
| 20                                      | 50      | 49        |        | 20.37  | 20.33  | 20.17   |
| 20                                      | 100     | 0         |        | 20.49  | 20.34  | 20.03   |



## **Appendix B. Test Results of Radiated Test**

**ERP/EIRP**



| LTE Band 2 / 1.4MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 5      | 22.05      | 0.1603  | 20.29     | 0.1069  |
| Middle                        |            | 1    | 5      | 21.95      | 0.1567  | 20.12     | 0.1028  |
| Highest                       |            | 1    | 5      | 21.15      | 0.1303  | 19.48     | 0.0887  |
| Lowest                        | 16QAM      | 1    | 0      | 21.09      | 0.1285  | 19.37     | 0.0865  |
| Middle                        |            | 1    | 0      | 21.33      | 0.1358  | 19.54     | 0.0899  |
| Highest                       |            | 1    | 0      | 20.48      | 0.1117  | 18.80     | 0.0759  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 2 / 3MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 0      | 21.86      | 0.1535  | 20.22     | 0.1052  |
| Middle                      |            | 1    | 0      | 22.14      | 0.1637  | 20.37     | 0.1089  |
| Highest                     |            | 1    | 0      | 21.30      | 0.1349  | 19.65     | 0.0923  |
| Lowest                      | 16QAM      | 1    | 0      | 21.08      | 0.1282  | 19.45     | 0.0881  |
| Middle                      |            | 1    | 0      | 21.40      | 0.1380  | 19.58     | 0.0908  |
| Highest                     |            | 1    | 0      | 20.54      | 0.1132  | 18.91     | 0.0778  |
| Limit                       | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 2 / 5MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 0      | 21.81      | 0.1517  | 20.20     | 0.1047  |
| Middle                      |            | 1    | 0      | 22.10      | 0.1622  | 20.28     | 0.1067  |
| Highest                     |            | 1    | 0      | 20.93      | 0.1239  | 19.23     | 0.0838  |
| Lowest                      | 16QAM      | 1    | 0      | 21.01      | 0.1262  | 19.40     | 0.0871  |
| Middle                      |            | 1    | 0      | 21.55      | 0.1429  | 19.74     | 0.0942  |
| Highest                     |            | 1    | 0      | 20.17      | 0.1040  | 18.46     | 0.0701  |
| Limit                       | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 2 / 10MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 24     | 22.20      | 0.1660  | 20.47     | 0.1114  |
| Middle                       |            | 1    | 24     | 21.89      | 0.1545  | 20.04     | 0.1009  |
| Highest                      |            | 1    | 24     | 20.75      | 0.1189  | 19.02     | 0.0798  |
| Lowest                       | 16QAM      | 1    | 0      | 20.98      | 0.1253  | 19.30     | 0.0851  |
| Middle                       |            | 1    | 0      | 21.59      | 0.1442  | 19.62     | 0.0916  |
| Highest                      |            | 1    | 0      | 19.67      | 0.0927  | 17.85     | 0.0610  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 2 / 15MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 22.18      | 0.1652  | 20.34     | 0.1081  |
| Middle                       |            | 1    | 0      | 22.37      | 0.1726  | 20.40     | 0.1096  |
| Highest                      |            | 1    | 0      | 21.00      | 0.1259  | 19.15     | 0.0822  |
| Lowest                       | 16QAM      | 1    | 0      | 21.39      | 0.1377  | 19.55     | 0.0902  |
| Middle                       |            | 1    | 0      | 21.73      | 0.1489  | 19.82     | 0.0959  |
| Highest                      |            | 1    | 0      | 20.27      | 0.1064  | 18.43     | 0.0697  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 2 / 20MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 22.16      | 0.1644  | 20.35     | 0.1084  |
| Middle                       |            | 1    | 0      | 22.55      | 0.1799  | 20.69     | 0.1172  |
| Highest                      |            | 1    | 0      | 21.51      | 0.1416  | 19.81     | 0.0957  |
| Lowest                       | 16QAM      | 1    | 0      | 21.38      | 0.1374  | 19.60     | 0.0912  |
| Middle                       |            | 1    | 0      | 21.91      | 0.1552  | 20.03     | 0.1007  |
| Highest                      |            | 1    | 0      | 20.78      | 0.1197  | 19.08     | 0.0809  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 25 / 1.4MHz (Average) |            |      |        |            |         |           |         |
|--------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                        | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                                |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                         | QPSK       | 3    | 2      | 23.17      | 0.2077  | 22.43     | 0.1751  |
| Middle                         |            | 3    | 2      | 22.61      | 0.1825  | 21.73     | 0.1490  |
| Highest                        |            | 3    | 2      | 20.86      | 0.1219  | 20.26     | 0.1063  |
| Lowest                         | 16QAM      | 1    | 0      | 22.20      | 0.1660  | 21.69     | 0.1476  |
| Middle                         |            | 1    | 0      | 22.11      | 0.1626  | 21.49     | 0.1409  |
| Highest                        |            | 1    | 0      | 20.62      | 0.1153  | 20.32     | 0.1076  |
| Limit                          | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 25 / 3MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 22.97      | 0.1982  | 22.50     | 0.1778  |
| Middle                       |            | 1    | 0      | 22.77      | 0.1892  | 22.20     | 0.1660  |
| Highest                      |            | 1    | 0      | 21.80      | 0.1514  | 21.45     | 0.1396  |
| Lowest                       | 16QAM      | 1    | 0      | 22.20      | 0.1660  | 21.74     | 0.1493  |
| Middle                       |            | 1    | 0      | 22.15      | 0.1641  | 21.58     | 0.1439  |
| Highest                      |            | 1    | 0      | 21.14      | 0.1300  | 20.77     | 0.1194  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 25 / 5MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 22.93      | 0.1963  | 22.45     | 0.1758  |
| Middle                       |            | 1    | 0      | 22.77      | 0.1892  | 22.22     | 0.1667  |
| Highest                      |            | 1    | 0      | 22.11      | 0.1626  | 21.61     | 0.1449  |
| Lowest                       | 16QAM      | 1    | 0      | 22.16      | 0.1644  | 21.70     | 0.1479  |
| Middle                       |            | 1    | 0      | 22.34      | 0.1714  | 21.78     | 0.1507  |
| Highest                      |            | 1    | 0      | 21.39      | 0.1377  | 20.90     | 0.1230  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 25 / 10MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 24     | 22.86      | 0.1930  | 22.45     | 0.1756  |
| Middle                        |            | 1    | 24     | 22.38      | 0.1729  | 22.00     | 0.1583  |
| Highest                       |            | 1    | 24     | 21.69      | 0.1474  | 21.55     | 0.1429  |
| Lowest                        | 16QAM      | 1    | 0      | 22.35      | 0.1718  | 21.69     | 0.1475  |
| Middle                        |            | 1    | 0      | 22.57      | 0.1808  | 21.98     | 0.1576  |
| Highest                       |            | 1    | 0      | 20.99      | 0.1255  | 20.74     | 0.1185  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 25 / 15MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 0      | 23.28      | 0.2128  | 22.62     | 0.1828  |
| Middle                        |            | 1    | 0      | 23.08      | 0.2032  | 22.60     | 0.1820  |
| Highest                       |            | 1    | 0      | 21.31      | 0.1352  | 20.70     | 0.1175  |
| Lowest                        | 16QAM      | 1    | 37     | 22.59      | 0.1816  | 22.09     | 0.1618  |
| Middle                        |            | 1    | 37     | 22.34      | 0.1714  | 21.86     | 0.1535  |
| Highest                       |            | 1    | 37     | 21.27      | 0.1340  | 20.89     | 0.1227  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 25 / 20MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 0      | 23.22      | 0.2099  | 22.67     | 0.1849  |
| Middle                        |            | 1    | 0      | 23.30      | 0.2138  | 22.67     | 0.1849  |
| Highest                       |            | 1    | 0      | 21.69      | 0.1476  | 20.98     | 0.1253  |
| Lowest                        | 16QAM      | 1    | 0      | 22.45      | 0.1758  | 21.90     | 0.1549  |
| Middle                        |            | 1    | 0      | 22.64      | 0.1837  | 22.04     | 0.1600  |
| Highest                       |            | 1    | 0      | 20.95      | 0.1245  | 20.24     | 0.1057  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 4 / 1.4MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 3    | 0      | 20.52      | 0.1127  | 18.70     | 0.0741  |
| Middle                        |            | 3    | 0      | 21.00      | 0.1259  | 18.99     | 0.0793  |
| Highest                       |            | 3    | 0      | 21.14      | 0.1300  | 19.29     | 0.0849  |
| Lowest                        | 16QAM      | 3    | 0      | 19.73      | 0.0940  | 17.88     | 0.0614  |
| Middle                        |            | 3    | 0      | 19.97      | 0.0993  | 17.95     | 0.0624  |
| Highest                       |            | 3    | 0      | 20.20      | 0.1047  | 18.38     | 0.0689  |
| Limit                         | EIRP < 1W  |      |        | Result     |         | PASS      |         |

| LTE Band 4 / 3MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 0      | 20.61      | 0.1151  | 19.09     | 0.0811  |
| Middle                      |            | 1    | 0      | 20.85      | 0.1216  | 19.00     | 0.0794  |
| Highest                     |            | 1    | 0      | 21.09      | 0.1285  | 19.36     | 0.0863  |
| Lowest                      | 16QAM      | 1    | 14     | 19.99      | 0.0998  | 18.19     | 0.0659  |
| Middle                      |            | 1    | 14     | 20.14      | 0.1033  | 18.25     | 0.0668  |
| Highest                     |            | 1    | 14     | 20.35      | 0.1084  | 18.66     | 0.0735  |
| Limit                       | EIRP < 1W  |      |        | Result     |         | PASS      |         |

| LTE Band 4 / 5MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 12     | 20.72      | 0.1180  | 18.79     | 0.0757  |
| Middle                      |            | 1    | 12     | 20.68      | 0.1169  | 18.84     | 0.0766  |
| Highest                     |            | 1    | 12     | 21.05      | 0.1274  | 19.35     | 0.0861  |
| Lowest                      | 16QAM      | 1    | 12     | 20.16      | 0.1038  | 18.37     | 0.0687  |
| Middle                      |            | 1    | 12     | 20.31      | 0.1074  | 18.40     | 0.0692  |
| Highest                     |            | 1    | 12     | 20.40      | 0.1096  | 18.70     | 0.0741  |
| Limit                       | EIRP < 1W  |      |        | Result     |         | PASS      |         |





| LTE Band 4/ 10MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 24     | 20.88      | 0.1225  | 18.95     | 0.0785  |
| Middle                      |            | 1    | 24     | 20.94      | 0.1242  | 19.11     | 0.0815  |
| Highest                     |            | 1    | 24     | 21.06      | 0.1276  | 19.33     | 0.0857  |
| Lowest                      | 16QAM      | 1    | 24     | 20.06      | 0.1014  | 18.08     | 0.0643  |
| Middle                      |            | 1    | 24     | 20.11      | 0.1026  | 18.31     | 0.0678  |
| Highest                     |            | 1    | 24     | 20.23      | 0.1054  | 18.52     | 0.0711  |
| Limit                       | EIRP < 1W  |      |        | Result     |         | PASS      |         |

| LTE Band 4 / 15MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 21.16      | 0.1306  | 19.46     | 0.0883  |
| Middle                       |            | 1    | 0      | 21.47      | 0.1403  | 19.61     | 0.0914  |
| Highest                      |            | 1    | 0      | 21.56      | 0.1432  | 19.71     | 0.0935  |
| Lowest                       | 16QAM      | 1    | 0      | 20.31      | 0.1074  | 18.59     | 0.0723  |
| Middle                       |            | 1    | 0      | 20.73      | 0.1183  | 18.86     | 0.0769  |
| Highest                      |            | 1    | 0      | 20.84      | 0.1213  | 18.98     | 0.0791  |
| Limit                        | EIRP < 1W  |      |        | Result     |         | PASS      |         |

| LTE Band 4 / 20MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 21.30      | 0.1349  | 19.54     | 0.0899  |
| Middle                       |            | 1    | 0      | 21.23      | 0.1327  | 19.37     | 0.0865  |
| Highest                      |            | 1    | 0      | 21.62      | 0.1452  | 19.76     | 0.0946  |
| Lowest                       | 16QAM      | 1    | 0      | 20.53      | 0.1130  | 18.76     | 0.0752  |
| Middle                       |            | 1    | 0      | 20.49      | 0.1119  | 18.62     | 0.0728  |
| Highest                      |            | 1    | 0      | 20.88      | 0.1225  | 19.02     | 0.0798  |
| Limit                        | EIRP < 1W  |      |        | Result     |         | PASS      |         |



| LTE Band 5 / 1.4MHz (Average) |            |      |        |            |        |          |        |
|-------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                       | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                               |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                        | QPSK       | 1    | 0      | 19.47      | 0.0885 | 11.01    | 0.0126 |
| Middle                        |            | 1    | 0      | 19.61      | 0.0914 | 11.92    | 0.0156 |
| Highest                       |            | 1    | 0      | 19.08      | 0.0809 | 11.29    | 0.0135 |
| Lowest                        | 16QAM      | 1    | 0      | 18.83      | 0.0764 | 9.90     | 0.0098 |
| Middle                        |            | 1    | 0      | 18.74      | 0.0748 | 10.54    | 0.0113 |
| Highest                       |            | 1    | 0      | 18.24      | 0.0667 | 10.42    | 0.0110 |
| Limit                         | ERP < 7W   |      |        | Result     |        | PASS     |        |

| LTE Band 5 / 3MHz (Average) |            |      |        |            |        |          |        |
|-----------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                     | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                             |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                      | QPSK       | 1    | 7      | 19.69      | 0.0931 | 11.21    | 0.0132 |
| Middle                      |            | 1    | 7      | 19.74      | 0.0942 | 11.86    | 0.0153 |
| Highest                     |            | 1    | 7      | 19.39      | 0.0868 | 12.33    | 0.0171 |
| Lowest                      | 16QAM      | 1    | 7      | 19.01      | 0.0796 | 10.87    | 0.0122 |
| Middle                      |            | 1    | 7      | 19.06      | 0.0804 | 10.92    | 0.0124 |
| Highest                     |            | 1    | 7      | 18.63      | 0.0729 | 10.84    | 0.0121 |
| Limit                       | ERP < 7W   |      |        | Result     |        | PASS     |        |



| LTE Band 5 / 5MHz (Average) |            |      |        |            |        |          |        |
|-----------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                     | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                             |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                      | QPSK       | 1    | 0      | 19.57      | 0.0906 | 11.26    | 0.0134 |
| Middle                      |            | 1    | 0      | 19.71      | 0.0935 | 11.85    | 0.0153 |
| Highest                     |            | 1    | 0      | 19.69      | 0.0931 | 11.96    | 0.0157 |
| Lowest                      | 16QAM      | 1    | 0      | 18.94      | 0.0783 | 10.12    | 0.0103 |
| Middle                      |            | 1    | 0      | 19.09      | 0.0810 | 10.75    | 0.0119 |
| Highest                     |            | 1    | 0      | 18.85      | 0.0768 | 11.12    | 0.0129 |
| Limit                       | ERP < 7W   |      |        | Result     |        | PASS     |        |

| LTE Band 5 / 10MHz (Average) |            |      |        |            |        |          |        |
|------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                      | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                              |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                       | QPSK       | 1    | 0      | 19.67      | 0.0928 | 11.18    | 0.0131 |
| Middle                       |            | 1    | 0      | 19.77      | 0.0948 | 11.74    | 0.0149 |
| Highest                      |            | 1    | 0      | 19.67      | 0.0927 | 11.58    | 0.0144 |
| Lowest                       | 16QAM      | 1    | 0      | 18.81      | 0.0760 | 10.29    | 0.0107 |
| Middle                       |            | 1    | 0      | 19.02      | 0.0798 | 10.34    | 0.0108 |
| Highest                      |            | 1    | 0      | 18.94      | 0.0784 | 10.76    | 0.0119 |
| Limit                        | ERP < 7W   |      |        | Result     |        | PASS     |        |



| LTE Band 7 / 5MHz (Average) |            |      |        |            |         |           |         |
|-----------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                     | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                             |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                      | QPSK       | 1    | 12     | 16.54      | 0.0451  | 15.94     | 0.0393  |
| Middle                      |            | 1    | 12     | 17.20      | 0.0525  | 16.56     | 0.0453  |
| Highest                     |            | 1    | 12     | 17.73      | 0.0593  | 16.30     | 0.0427  |
| Lowest                      | 16QAM      | 12   | 6      | 15.66      | 0.0368  | 15.52     | 0.0356  |
| Middle                      |            | 12   | 6      | 16.40      | 0.0437  | 15.71     | 0.0372  |
| Highest                     |            | 12   | 6      | 16.96      | 0.0497  | 15.81     | 0.0381  |
| Limit                       | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 7 / 10MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 24     | 17.37      | 0.0546  | 16.84     | 0.0483  |
| Middle                       |            | 1    | 24     | 17.98      | 0.0628  | 17.66     | 0.0583  |
| Highest                      |            | 1    | 24     | 19.02      | 0.0798  | 17.82     | 0.0606  |
| Lowest                       | 16QAM      | 1    | 0      | 16.44      | 0.0440  | 16.41     | 0.0437  |
| Middle                       |            | 1    | 0      | 17.34      | 0.0543  | 17.06     | 0.0508  |
| Highest                      |            | 1    | 0      | 17.94      | 0.0622  | 16.72     | 0.0470  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 7 / 15MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 37     | 17.18      | 0.0522  | 16.88     | 0.0488  |
| Middle                       |            | 1    | 37     | 17.98      | 0.0628  | 17.77     | 0.0598  |
| Highest                      |            | 1    | 37     | 18.85      | 0.0767  | 17.81     | 0.0604  |
| Lowest                       | 16QAM      | 1    | 37     | 16.37      | 0.0434  | 15.71     | 0.0372  |
| Middle                       |            | 1    | 37     | 17.35      | 0.0543  | 17.15     | 0.0519  |
| Highest                      |            | 1    | 37     | 18.20      | 0.0661  | 17.17     | 0.0521  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 7 / 20MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 17.24      | 0.0530  | 17.06     | 0.0508  |
| Middle                       |            | 1    | 0      | 17.57      | 0.0571  | 17.25     | 0.0531  |
| Highest                      |            | 1    | 0      | 17.32      | 0.0540  | 16.31     | 0.0428  |
| Lowest                       | 16QAM      | 1    | 0      | 17.30      | 0.0536  | 16.82     | 0.0481  |
| Middle                       |            | 1    | 0      | 17.30      | 0.0537  | 16.75     | 0.0473  |
| Highest                      |            | 1    | 0      | 16.73      | 0.0471  | 15.72     | 0.0373  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 13 / 5MHz (Average) |            |      |        |            |        |          |        |
|------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                      | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                              |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                       | QPSK       | 1    | 0      | 17.34      | 0.0543 | 8.22     | 0.0066 |
| Middle                       |            | 1    | 0      | 17.88      | 0.0614 | 8.49     | 0.0071 |
| Highest                      |            | 1    | 0      | 18.13      | 0.0650 | 8.48     | 0.0070 |
| Lowest                       | 16QAM      | 1    | 12     | 16.87      | 0.0486 | 7.42     | 0.0055 |
| Middle                       |            | 1    | 12     | 17.11      | 0.0514 | 7.64     | 0.0058 |
| Highest                      |            | 1    | 12     | 17.10      | 0.0513 | 7.58     | 0.0057 |
| Limit                        | ERP < 3W   |      |        | Result     |        | PASS     |        |

| LTE Band 13 / 10MHz (Average) |            |      |        |            |        |          |        |
|-------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                       | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                               |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                        | QPSK       | 1    | 0      | -          | -      | -        | -      |
| Middle                        |            | 1    | 0      | 17.97      | 0.0626 | 8.72     | 0.0074 |
| Highest                       |            | 1    | 0      | -          | -      | -        | -      |
| Lowest                        | 16QAM      | 1    | 49     | -          | -      | -        | -      |
| Middle                        |            | 1    | 49     | 17.18      | 0.0522 | 7.94     | 0.0062 |
| Highest                       |            | 1    | 49     | -          | -      | -        | -      |
| Limit                         | ERP < 3W   |      |        | Result     |        | PASS     |        |



| LTE Band 17 / 5MHz (Average) |            |      |        |            |        |          |        |
|------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                      | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                              |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                       | QPSK       | 1    | 0      | 17.33      | 0.0541 | 6.11     | 0.0041 |
| Middle                       |            | 1    | 0      | 17.67      | 0.0585 | 7.53     | 0.0057 |
| Highest                      |            | 1    | 0      | 17.65      | 0.0582 | 6.51     | 0.0045 |
| Lowest                       | 16QAM      | 1    | 12     | 16.54      | 0.0451 | 4.31     | 0.0027 |
| Middle                       |            | 1    | 12     | 16.97      | 0.0498 | 6.42     | 0.0044 |
| Highest                      |            | 1    | 12     | 17.32      | 0.0540 | 6.26     | 0.0042 |
| Limit                        | ERP < 3W   |      |        | Result     |        | PASS     |        |

| LTE Band 17 / 10MHz (Average) |            |      |        |            |        |          |        |
|-------------------------------|------------|------|--------|------------|--------|----------|--------|
| Channel                       | Modulation | RB   |        | Horizontal |        | Vertical |        |
|                               |            | Size | Offset | ERP(dBm)   | ERP(W) | ERP(dBm) | ERP(W) |
| Lowest                        | QPSK       | 1    | 0      | 17.44      | 0.0555 | 6.74     | 0.0047 |
| Middle                        |            | 1    | 0      | 17.49      | 0.0562 | 7.16     | 0.0052 |
| Highest                       |            | 1    | 0      | 17.46      | 0.0558 | 7.22     | 0.0053 |
| Lowest                        | 16QAM      | 1    | 49     | 17.13      | 0.0516 | 6.36     | 0.0043 |
| Middle                        |            | 1    | 49     | 17.17      | 0.0522 | 6.87     | 0.0049 |
| Highest                       |            | 1    | 49     | 17.07      | 0.0510 | 6.86     | 0.0049 |
| Limit                         | ERP < 3W   |      |        | Result     |        | PASS     |        |

| LTE Band 38 / 5MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 20.68      | 0.1169  | 19.79     | 0.0953  |
| Middle                       |            | 1    | 0      | 19.28      | 0.0847  | 18.91     | 0.0778  |
| Highest                      |            | 1    | 0      | 19.81      | 0.0957  | 19.73     | 0.0940  |
| Lowest                       | 16QAM      | 1    | 12     | 19.93      | 0.0984  | 19.02     | 0.0798  |
| Middle                       |            | 1    | 12     | 18.63      | 0.0729  | 18.26     | 0.0670  |
| Highest                      |            | 1    | 12     | 19.22      | 0.0836  | 19.02     | 0.0798  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 38 / 10MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 0      | 20.56      | 0.1138  | 19.66     | 0.0924  |
| Middle                        |            | 1    | 0      | 19.11      | 0.0815  | 18.64     | 0.0732  |
| Highest                       |            | 1    | 0      | 19.60      | 0.0913  | 19.31     | 0.0853  |
| Lowest                        | 16QAM      | 1    | 24     | 20.05      | 0.1011  | 19.10     | 0.0814  |
| Middle                        |            | 1    | 24     | 18.73      | 0.0747  | 18.38     | 0.0689  |
| Highest                       |            | 1    | 24     | 19.07      | 0.0807  | 18.89     | 0.0775  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |





| LTE Band 38 / 15MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 37     | 20.41      | 0.1099  | 19.41     | 0.0873  |
| Middle                        |            | 1    | 37     | 19.25      | 0.0841  | 18.92     | 0.0780  |
| Highest                       |            | 1    | 37     | 19.62      | 0.0916  | 19.17     | 0.0826  |
| Lowest                        | 16QAM      | 1    | 37     | 19.71      | 0.0935  | 18.69     | 0.0740  |
| Middle                        |            | 1    | 37     | 18.56      | 0.0718  | 18.19     | 0.0659  |
| Highest                       |            | 1    | 37     | 18.99      | 0.0793  | 18.46     | 0.0701  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 38 / 20MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 0      | 20.87      | 0.1222  | 19.98     | 0.0995  |
| Middle                        |            | 1    | 0      | 19.65      | 0.0923  | 19.25     | 0.0841  |
| Highest                       |            | 1    | 0      | 19.64      | 0.0920  | 19.12     | 0.0817  |
| Lowest                        | 16QAM      | 1    | 0      | 20.18      | 0.1042  | 19.27     | 0.0845  |
| Middle                        |            | 1    | 0      | 18.98      | 0.0791  | 18.55     | 0.0716  |
| Highest                       |            | 1    | 0      | 19.00      | 0.0794  | 18.46     | 0.0701  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 41 / 5MHz (Average) |            |      |        |            |         |           |         |
|------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                      | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                              |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                       | QPSK       | 1    | 0      | 20.57      | 0.1140  | 19.96     | 0.0991  |
| Middle                       |            | 1    | 0      | 19.52      | 0.0895  | 19.43     | 0.0877  |
| Highest                      |            | 1    | 0      | 19.13      | 0.0818  | 18.75     | 0.0750  |
| Lowest                       | 16QAM      | 1    | 0      | 19.99      | 0.0998  | 19.46     | 0.0883  |
| Middle                       |            | 1    | 0      | 18.43      | 0.0697  | 18.22     | 0.0664  |
| Highest                      |            | 1    | 0      | 18.44      | 0.0698  | 18.04     | 0.0637  |
| Limit                        | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 41 / 10MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 24     | 19.85      | 0.0966  | 19.66     | 0.0924  |
| Middle                        |            | 1    | 24     | 19.39      | 0.0869  | 19.23     | 0.0838  |
| Highest                       |            | 1    | 24     | 18.97      | 0.0789  | 18.58     | 0.0722  |
| Lowest                        | 16QAM      | 1    | 24     | 19.21      | 0.0834  | 19.05     | 0.0803  |
| Middle                        |            | 1    | 24     | 18.65      | 0.0733  | 18.51     | 0.0709  |
| Highest                       |            | 1    | 24     | 18.08      | 0.0643  | 17.65     | 0.0582  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |



| LTE Band 41 / 15MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 37     | 20.15      | 0.1035  | 19.94     | 0.0986  |
| Middle                        |            | 1    | 37     | 19.48      | 0.0887  | 19.31     | 0.0853  |
| Highest                       |            | 1    | 37     | 19.18      | 0.0828  | 18.66     | 0.0735  |
| Lowest                        | 16QAM      | 1    | 0      | 19.84      | 0.0964  | 19.35     | 0.0861  |
| Middle                        |            | 1    | 0      | 19.23      | 0.0838  | 18.81     | 0.0760  |
| Highest                       |            | 1    | 0      | 19.29      | 0.0849  | 18.87     | 0.0771  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |

| LTE Band 41 / 20MHz (Average) |            |      |        |            |         |           |         |
|-------------------------------|------------|------|--------|------------|---------|-----------|---------|
| Channel                       | Modulation | RB   |        | Horizontal |         | Vertical  |         |
|                               |            | Size | Offset | EIRP(dBm)  | EIRP(W) | EIRP(dBm) | EIRP(W) |
| Lowest                        | QPSK       | 1    | 0      | 20.58      | 0.1143  | 19.92     | 0.0982  |
| Middle                        |            | 1    | 0      | 19.99      | 0.0998  | 19.80     | 0.0955  |
| Highest                       |            | 1    | 0      | 20.80      | 0.1202  | 20.33     | 0.1079  |
| Lowest                        | 16QAM      | 1    | 0      | 19.86      | 0.0968  | 19.27     | 0.0845  |
| Middle                        |            | 1    | 0      | 19.36      | 0.0863  | 18.92     | 0.0780  |
| Highest                       |            | 1    | 0      | 20.12      | 0.1028  | 19.65     | 0.0923  |
| Limit                         | EIRP < 2W  |      |        | Result     |         | PASS      |         |



## **Radiated Spurious Emission**



| LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 3700              | -49.75       | -13           | -36.75            | -68.93            | -56.32             | 1.67                 | 8.24                  | H                  |
|                                                 | 5548              | -54.99       | -13           | -41.99            | -79.7             | -62.06             | 2.65                 | 9.72                  | H                  |
|                                                 | 7400              | -47.07       | -13           | -34.07            | -73.57            | -56.21             | 2.46                 | 11.60                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3700              | -46.65       | -13           | -33.65            | -66.72            | -53.22             | 1.67                 | 8.24                  | V                  |
|                                                 | 5548              | -53.74       | -13           | -40.74            | -79.32            | -60.81             | 2.65                 | 9.72                  | V                  |
|                                                 | 7400              | -43.15       | -13           | -30.15            | -71.29            | -52.29             | 2.46                 | 11.60                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 3759              | -50.39       | -13           | -37.39            | -69.75            | -57.02             | 1.69                 | 8.31                  | H                  |
|                                                 | 5639              | -54.24       | -13           | -41.24            | -78.96            | -61.29             | 2.71                 | 9.76                  | H                  |
|                                                 | 7517              | -48.69       | -13           | -35.69            | -75.77            | -58.08             | 2.42                 | 11.81                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3759              | -44.59       | -13           | -31.59            | -65.12            | -51.22             | 1.69                 | 8.31                  | V                  |
|                                                 | 5639              | -53.06       | -13           | -40.06            | -78.77            | -60.11             | 2.71                 | 9.76                  | V                  |
|                                                 | 7517              | -43.69       | -13           | -30.69            | -72.46            | -53.08             | 2.42                 | 11.81                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 3819              | -48.49       | -13           | -35.49            | -69.23            | -53.02             | 1.70                 | 8.38                  | H                  |
|                                                 | 5726              | -53.22       | -13           | -40.22            | -78.1             | -58.11             | 2.76                 | 9.79                  | H                  |
|                                                 | 7634              | -48.09       | -13           | -35.09            | -75.68            | -55.43             | 2.39                 | 11.88                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3819              | -45.48       | -13           | -32.48            | -66.6             | -50.01             | 1.70                 | 8.38                  | V                  |
|                                                 | 5726              | -52.22       | -13           | -39.22            | -78               | -57.11             | 2.76                 | 9.79                  | V                  |
|                                                 | 7634              | -43.68       | -13           | -30.68            | -72.78            | -51.02             | 2.39                 | 11.88                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-----------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                       | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                        | 3700              | -49.45       | -13           | -36.45            | -68.65            | -56.02             | 1.67                 | 8.24                  | H                  |
|                                               | 5550              | -54.71       | -13           | -41.71            | -79.36            | -61.78             | 2.65                 | 9.72                  | H                  |
|                                               | 7400              | -47.19       | -13           | -34.19            | -73.64            | -56.33             | 2.46                 | 11.60                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3700              | -46.65       | -13           | -33.65            | -66.78            | -53.22             | 1.67                 | 8.24                  | V                  |
|                                               | 5550              | -53.95       | -13           | -40.95            | -79.76            | -61.02             | 2.65                 | 9.72                  | V                  |
|                                               | 7400              | -43.52       | -13           | -30.52            | -71.49            | -52.66             | 2.46                 | 11.60                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                        | 3756              | -49.41       | -13           | -36.41            | -68.71            | -56.03             | 1.68                 | 8.31                  | H                  |
|                                               | 5636              | -54.28       | -13           | -41.28            | -78.85            | -61.33             | 2.70                 | 9.75                  | H                  |
|                                               | 7514              | -48.64       | -13           | -35.64            | -75.36            | -58.02             | 2.42                 | 11.81                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3756              | -45.07       | -13           | -32.07            | -65.33            | -51.69             | 1.68                 | 8.31                  | V                  |
|                                               | 5636              | -52.62       | -13           | -39.62            | -78.18            | -59.67             | 2.70                 | 9.75                  | V                  |
|                                               | 7514              | -44.28       | -13           | -31.28            | -72.71            | -53.66             | 2.42                 | 11.81                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                       | 3812              | -48.03       | -13           | -35.03            | -68.73            | -52.55             | 1.70                 | 8.37                  | H                  |
|                                               | 5721              | -53.76       | -13           | -40.76            | -78.58            | -58.65             | 2.75                 | 9.79                  | H                  |
|                                               | 7628              | -48.39       | -13           | -35.39            | -75.92            | -55.73             | 2.39                 | 11.88                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3812              | -45.03       | -13           | -32.03            | -66.13            | -49.55             | 1.70                 | 8.37                  | V                  |
|                                               | 5721              | -53.33       | -13           | -40.33            | -78.97            | -58.22             | 2.75                 | 9.79                  | V                  |
|                                               | 7628              | -44.67       | -13           | -31.67            | -73.77            | -52.01             | 2.39                 | 11.88                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-----------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                       | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                        | 3700              | -50.54       | -13           | -37.54            | -69.77            | -57.11             | 1.67                 | 8.24                  | H                  |
|                                               | 5548              | -54.74       | -13           | -41.74            | -79.33            | -61.81             | 2.65                 | 9.72                  | H                  |
|                                               | 7403              | -47.07       | -13           | -34.07            | -73.59            | -56.22             | 2.46                 | 11.61                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3700              | -47.58       | -13           | -34.58            | -67.66            | -54.15             | 1.67                 | 8.24                  | V                  |
|                                               | 5548              | -53.81       | -13           | -40.81            | -79.41            | -60.88             | 2.65                 | 9.72                  | V                  |
|                                               | 7403              | -43.91       | -13           | -30.91            | -71.97            | -53.06             | 2.46                 | 11.61                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                        | 3756              | -48.96       | -13           | -35.96            | -68.28            | -55.58             | 1.68                 | 8.31                  | H                  |
|                                               | 5632              | -54.17       | -13           | -41.17            | -78.92            | -61.22             | 2.70                 | 9.75                  | H                  |
|                                               | 7508              | -48.65       | -13           | -35.65            | -75.47            | -58.03             | 2.43                 | 11.80                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3756              | -44.91       | -13           | -31.91            | -65.08            | -51.53             | 1.68                 | 8.31                  | V                  |
|                                               | 5632              | -53.06       | -13           | -40.06            | -78.72            | -60.11             | 2.70                 | 9.75                  | V                  |
|                                               | 7508              | -43.39       | -13           | -30.39            | -71.77            | -52.77             | 2.43                 | 11.80                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                       | 3812              | -46.64       | -13           | -33.64            | -67.42            | -51.16             | 1.70                 | 8.37                  | H                  |
|                                               | 5716              | -54.17       | -13           | -41.17            | -79.04            | -59.06             | 2.75                 | 9.79                  | H                  |
|                                               | 7620              | -48.21       | -13           | -35.21            | -75.77            | -55.54             | 2.39                 | 11.87                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3812              | -44.03       | -13           | -31.03            | -65.22            | -48.55             | 1.70                 | 8.37                  | V                  |
|                                               | 5716              | -52.99       | -13           | -39.99            | -78.64            | -57.88             | 2.75                 | 9.79                  | V                  |
|                                               | 7620              | -44.33       | -13           | -31.33            | -73.52            | -51.66             | 2.39                 | 11.87                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3700              | -50.02       | -13           | -37.02            | -69.18            | -56.59             | 1.67                 | 8.24                  | H                  |
|                                                | 5548              | -54.81       | -13           | -41.81            | -79.36            | -61.88             | 2.65                 | 9.72                  | H                  |
|                                                | 7403              | -47.66       | -13           | -34.66            | -74.08            | -56.81             | 2.46                 | 11.61                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3700              | -46.24       | -13           | -33.24            | -66.3             | -52.81             | 1.67                 | 8.24                  | V                  |
|                                                | 5548              | -53.59       | -13           | -40.59            | -79.29            | -60.66             | 2.65                 | 9.72                  | V                  |
|                                                | 7403              | -44.56       | -13           | -31.56            | -72.69            | -53.71             | 2.46                 | 11.61                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3749              | -49.39       | -13           | -36.39            | -68.63            | -56.01             | 1.68                 | 8.30                  | H                  |
|                                                | 5625              | -53.97       | -13           | -40.97            | -78.6             | -61.02             | 2.70                 | 9.75                  | H                  |
|                                                | 7501              | -49.44       | -13           | -36.44            | -76.24            | -58.81             | 2.43                 | 11.80                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3749              | -44.97       | -13           | -31.97            | -65.23            | -51.59             | 1.68                 | 8.30                  | V                  |
|                                                | 5625              | -52.76       | -13           | -39.76            | -78.3             | -59.81             | 2.70                 | 9.75                  | V                  |
|                                                | 7501              | -44.02       | -13           | -31.02            | -72.65            | -53.39             | 2.43                 | 11.80                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3798              | -46.08       | -13           | -33.08            | -66.69            | -50.59             | 1.70                 | 8.36                  | H                  |
|                                                | 5702              | -54.33       | -13           | -41.33            | -79.13            | -59.22             | 2.74                 | 9.78                  | H                  |
|                                                | 7599              | -48.91       | -13           | -35.91            | -76.29            | -56.22             | 2.40                 | 11.86                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3798              | -43.15       | -13           | -30.15            | -64.35            | -47.66             | 1.70                 | 8.36                  | V                  |
|                                                | 5702              | -52.89       | -13           | -39.89            | -78.59            | -57.78             | 2.74                 | 9.78                  | V                  |
|                                                | 7599              | -45.85       | -13           | -32.85            | -74.89            | -53.16             | 2.40                 | 11.86                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





| LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3700              | -50.76       | -13           | -37.76            | -69.93            | -57.33             | 1.67                 | 8.24                  | H                  |
|                                                | 5550              | -55.02       | -13           | -42.02            | -79.78            | -62.09             | 2.65                 | 9.72                  | H                  |
|                                                | 7400              | -47.88       | -13           | -34.88            | -74.25            | -57.02             | 2.46                 | 11.60                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3700              | -46.87       | -13           | -33.87            | -66.93            | -53.44             | 1.67                 | 8.24                  | V                  |
|                                                | 5550              | -53.81       | -13           | -40.81            | -79.55            | -60.88             | 2.65                 | 9.72                  | V                  |
|                                                | 7400              | -43.57       | -13           | -30.57            | -71.73            | -52.71             | 2.46                 | 11.60                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3749              | -48.54       | -13           | -35.54            | -67.88            | -55.16             | 1.68                 | 8.30                  | H                  |
|                                                | 5623              | -54.97       | -13           | -41.97            | -79.56            | -62.02             | 2.70                 | 9.75                  | H                  |
|                                                | 7494              | -49.63       | -13           | -36.63            | -76.16            | -58.99             | 2.43                 | 11.79                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3749              | -42.94       | -13           | -29.94            | -63.11            | -49.56             | 1.68                 | 8.30                  | V                  |
|                                                | 5623              | -53.83       | -13           | -40.83            | -79.4             | -60.88             | 2.70                 | 9.75                  | V                  |
|                                                | 7494              | -43.86       | -13           | -30.86            | -72.33            | -53.22             | 2.43                 | 11.79                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3791              | -47.61       | -13           | -34.61            | -67.64            | -52.11             | 1.70                 | 8.35                  | H                  |
|                                                | 5685              | -53.09       | -13           | -40.09            | -77.78            | -57.98             | 2.73                 | 9.77                  | H                  |
|                                                | 7585              | -49.72       | -13           | -36.72            | -76.97            | -57.02             | 2.40                 | 11.85                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3791              | -43.72       | -13           | -30.72            | -64.5             | -48.22             | 1.70                 | 8.35                  | V                  |
|                                                | 5685              | -52.13       | -13           | -39.13            | -77.9             | -57.02             | 2.73                 | 9.77                  | V                  |
|                                                | 7585              | -44.92       | -13           | -31.92            | -74.1             | -52.22             | 2.40                 | 11.85                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3700              | -49.72       | -13           | -36.72            | -68.9             | -56.29             | 1.67                 | 8.24                  | H                  |
|                                                | 5550              | -54.95       | -13           | -41.95            | -79.58            | -62.02             | 2.65                 | 9.72                  | H                  |
|                                                | 7400              | -46.97       | -13           | -33.97            | -73.29            | -56.11             | 2.46                 | 11.60                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3700              | -46.06       | -13           | -33.06            | -66.22            | -52.63             | 1.67                 | 8.24                  | V                  |
|                                                | 5550              | -53.95       | -13           | -40.95            | -79.61            | -61.02             | 2.65                 | 9.72                  | V                  |
|                                                | 7400              | -43.63       | -13           | -30.63            | -71.73            | -52.77             | 2.46                 | 11.60                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3742              | -49.61       | -13           | -36.61            | -68.97            | -56.22             | 1.68                 | 8.29                  | H                  |
|                                                | 5610              | -54.38       | -13           | -41.38            | -78.91            | -61.44             | 2.69                 | 9.74                  | H                  |
|                                                | 7487              | -48.65       | -13           | -35.65            | -75.24            | -57.99             | 2.43                 | 11.77                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3742              | -44.27       | -13           | -31.27            | -64.45            | -50.88             | 1.68                 | 8.29                  | V                  |
|                                                | 5610              | -53.49       | -13           | -40.49            | -79.22            | -60.55             | 2.69                 | 9.74                  | V                  |
|                                                | 7487              | -43.05       | -13           | -30.05            | -71.5             | -52.39             | 2.43                 | 11.77                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3784              | -48.99       | -13           | -35.99            | -69.3             | -53.49             | 1.69                 | 8.34                  | H                  |
|                                                | 5674              | -52.39       | -13           | -39.39            | -77.22            | -57.28             | 2.73                 | 9.77                  | H                  |
|                                                | 7564              | -49.16       | -13           | -36.16            | -76.48            | -56.44             | 2.41                 | 11.84                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3784              | -43.52       | -13           | -30.52            | -64.43            | -48.02             | 1.69                 | 8.34                  | V                  |
|                                                | 5674              | -51.69       | -13           | -38.69            | -77.43            | -56.58             | 2.73                 | 9.77                  | V                  |
|                                                | 7564              | -44.74       | -13           | -31.74            | -73.76            | -52.02             | 2.41                 | 11.84                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|--------------------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                          | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                           | 3700                 | -49.75          | -13              | -36.75                  | -68.93                  | -56.32                   | 1.67                       | 8.24                        | H                     |
|                                                  | 5548                 | -54.99          | -13              | -41.99                  | -79.7                   | -62.06                   | 2.65                       | 9.72                        | H                     |
|                                                  | 7400                 | -47.07          | -13              | -34.07                  | -73.57                  | -56.21                   | 2.46                       | 11.60                       | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  | 3700                 | -46.65          | -13              | -33.65                  | -66.72                  | -53.22                   | 1.67                       | 8.24                        | V                     |
|                                                  | 5548                 | -53.74          | -13              | -40.74                  | -79.32                  | -60.81                   | 2.65                       | 9.72                        | V                     |
|                                                  | 7400                 | -43.15          | -13              | -30.15                  | -71.29                  | -52.29                   | 2.46                       | 11.60                       | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Middle                                           | 3759                 | -50.39          | -13              | -37.39                  | -69.75                  | -57.02                   | 1.69                       | 8.31                        | H                     |
|                                                  | 5639                 | -54.24          | -13              | -41.24                  | -78.96                  | -61.29                   | 2.71                       | 9.76                        | H                     |
|                                                  | 7517                 | -48.69          | -13              | -35.69                  | -75.77                  | -58.08                   | 2.42                       | 11.81                       | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  | 3759                 | -44.59          | -13              | -31.59                  | -65.12                  | -51.22                   | 1.69                       | 8.31                        | V                     |
|                                                  | 5639                 | -53.06          | -13              | -40.06                  | -78.77                  | -60.11                   | 2.71                       | 9.76                        | V                     |
|                                                  | 7517                 | -43.69          | -13              | -30.69                  | -72.46                  | -53.08                   | 2.42                       | 11.81                       | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Highest                                          | 3826                 | -45.92          | -13              | -32.92                  | -66.94                  | -52.6                    | 1.71                       | 8.39                        | H                     |
|                                                  | 5744                 | -51.27          | -13              | -38.27                  | -76.12                  | -58.3                    | 2.77                       | 9.80                        | H                     |
|                                                  | 7655                 | -47.09          | -13              | -34.09                  | -75.09                  | -56.6                    | 2.38                       | 11.89                       | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                  | 3826                 | -43.82          | -13              | -30.82                  | -65.35                  | -50.5                    | 1.71                       | 8.39                        | V                     |
|                                                  | 5744                 | -52.17          | -13              | -39.17                  | -77.42                  | -59.2                    | 2.77                       | 9.80                        | V                     |
|                                                  | 7655                 | -42.69          | -13              | -29.69                  | -71.78                  | -52.2                    | 2.38                       | 11.89                       | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                  |                      |                 |                  |                         |                         |                          |                            |                             | V                     |



| LTE Band 25 / 3MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3700              | -49.45       | -13           | -36.45            | -68.65            | -56.02             | 1.67                 | 8.24                  | H                  |
|                                                | 5550              | -54.71       | -13           | -41.71            | -79.36            | -61.78             | 2.65                 | 9.72                  | H                  |
|                                                | 7400              | -47.19       | -13           | -34.19            | -73.64            | -56.33             | 2.46                 | 11.60                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3700              | -46.65       | -13           | -33.65            | -66.78            | -53.22             | 1.67                 | 8.24                  | V                  |
|                                                | 5550              | -53.95       | -13           | -40.95            | -79.76            | -61.02             | 2.65                 | 9.72                  | V                  |
|                                                | 7400              | -43.52       | -13           | -30.52            | -71.49            | -52.66             | 2.46                 | 11.60                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3756              | -49.41       | -13           | -36.41            | -68.71            | -56.03             | 1.68                 | 8.31                  | H                  |
|                                                | 5636              | -54.28       | -13           | -41.28            | -78.85            | -61.33             | 2.70                 | 9.75                  | H                  |
|                                                | 7514              | -48.64       | -13           | -35.64            | -75.36            | -58.02             | 2.42                 | 11.81                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3756              | -45.07       | -13           | -32.07            | -65.33            | -51.69             | 1.68                 | 8.31                  | V                  |
|                                                | 5636              | -52.62       | -13           | -39.62            | -78.18            | -59.67             | 2.70                 | 9.75                  | V                  |
|                                                | 7514              | -44.28       | -13           | -31.28            | -72.71            | -53.66             | 2.42                 | 11.81                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3826              | -45.52       | -13           | -32.52            | -66.43            | -52.2              | 1.71                 | 8.39                  | H                  |
|                                                | 5737              | -51.47       | -13           | -38.47            | -76.41            | -58.5              | 2.76                 | 9.79                  | H                  |
|                                                | 7648              | -47.09       | -13           | -34.09            | -74.4             | -56.6              | 2.38                 | 11.89                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3826              | -44.72       | -13           | -31.72            | -66.14            | -51.4              | 1.71                 | 8.39                  | V                  |
|                                                | 5737              | -52.17       | -13           | -39.17            | -77.81            | -59.2              | 2.76                 | 9.79                  | V                  |
|                                                | 7648              | -42.39       | -13           | -29.39            | -71.52            | -51.9              | 2.38                 | 11.89                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 25 / 5MHz / QPSK / RB Size 1 Offset 0 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|------------------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                        | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                         | 3700                 | -50.54          | -13              | -37.54                  | -69.77                  | -57.11                   | 1.67                       | 8.24                        | H                     |
|                                                | 5548                 | -54.74          | -13              | -41.74                  | -79.33                  | -61.81                   | 2.65                       | 9.72                        | H                     |
|                                                | 7403                 | -47.07          | -13              | -34.07                  | -73.59                  | -56.22                   | 2.46                       | 11.61                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 3700                 | -47.58          | -13              | -34.58                  | -67.66                  | -54.15                   | 1.67                       | 8.24                        | V                     |
|                                                | 5548                 | -53.81          | -13              | -40.81                  | -79.41                  | -60.88                   | 2.65                       | 9.72                        | V                     |
|                                                | 7403                 | -43.91          | -13              | -30.91                  | -71.97                  | -53.06                   | 2.46                       | 11.61                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Middle                                         | 3756                 | -48.96          | -13              | -35.96                  | -68.28                  | -55.58                   | 1.68                       | 8.31                        | H                     |
|                                                | 5632                 | -54.17          | -13              | -41.17                  | -78.92                  | -61.22                   | 2.70                       | 9.75                        | H                     |
|                                                | 7508                 | -48.65          | -13              | -35.65                  | -75.47                  | -58.03                   | 2.43                       | 11.80                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 3756                 | -44.91          | -13              | -31.91                  | -65.08                  | -51.53                   | 1.68                       | 8.31                        | V                     |
|                                                | 5632                 | -53.06          | -13              | -40.06                  | -78.72                  | -60.11                   | 2.70                       | 9.75                        | V                     |
|                                                | 7508                 | -43.39          | -13              | -30.39                  | -71.77                  | -52.77                   | 2.43                       | 11.80                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Highest                                        | 3819                 | -47.52          | -13              | -34.52                  | -68.42                  | -54.2                    | 1.70                       | 8.38                        | H                     |
|                                                | 5730                 | -52.47          | -13              | -39.47                  | -77.38                  | -59.5                    | 2.76                       | 9.79                        | H                     |
|                                                | 7641                 | -47.90          | -13              | -34.90                  | -75.29                  | -57.4                    | 2.38                       | 11.88                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 3819                 | -47.02          | -13              | -34.02                  | -68.58                  | -53.7                    | 1.70                       | 8.38                        | V                     |
|                                                | 5730                 | -51.67          | -13              | -38.67                  | -77.66                  | -58.7                    | 2.76                       | 9.79                        | V                     |
|                                                | 7641                 | -42.10          | -13              | -29.10                  | -71.32                  | -51.6                    | 2.38                       | 11.88                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |



| LTE Band 25 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 3700              | -50.02       | -13           | -37.02            | -69.18            | -56.59             | 1.67                 | 8.24                  | H                  |
|                                                 | 5548              | -54.81       | -13           | -41.81            | -79.36            | -61.88             | 2.65                 | 9.72                  | H                  |
|                                                 | 7403              | -47.66       | -13           | -34.66            | -74.08            | -56.81             | 2.46                 | 11.61                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3700              | -46.24       | -13           | -33.24            | -66.3             | -52.81             | 1.67                 | 8.24                  | V                  |
|                                                 | 5548              | -53.59       | -13           | -40.59            | -79.29            | -60.66             | 2.65                 | 9.72                  | V                  |
|                                                 | 7403              | -44.56       | -13           | -31.56            | -72.69            | -53.71             | 2.46                 | 11.61                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 3749              | -49.39       | -13           | -36.39            | -68.63            | -56.01             | 1.68                 | 8.30                  | H                  |
|                                                 | 5625              | -53.97       | -13           | -40.97            | -78.6             | -61.02             | 2.70                 | 9.75                  | H                  |
|                                                 | 7501              | -49.44       | -13           | -36.44            | -76.24            | -58.81             | 2.43                 | 11.80                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3749              | -44.97       | -13           | -31.97            | -65.23            | -51.59             | 1.68                 | 8.30                  | V                  |
|                                                 | 5625              | -52.76       | -13           | -39.76            | -78.3             | -59.81             | 2.70                 | 9.75                  | V                  |
|                                                 | 7501              | -44.02       | -13           | -31.02            | -72.65            | -53.39             | 2.43                 | 11.80                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 3812              | -45.53       | -13           | -32.53            | -66.53            | -52.2              | 1.70                 | 8.37                  | H                  |
|                                                 | 5716              | -54.56       | -13           | -41.56            | -79.03            | -61.6              | 2.75                 | 9.79                  | H                  |
|                                                 | 7620              | -47.62       | -13           | -34.62            | -75.31            | -57.1              | 2.39                 | 11.87                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3812              | -45.63       | -13           | -32.63            | -67.17            | -52.3              | 1.70                 | 8.37                  | V                  |
|                                                 | 5715              | -53.26       | -13           | -40.26            | -79.37            | -60.3              | 2.75                 | 9.79                  | V                  |
|                                                 | 7620              | -42.62       | -13           | -29.62            | -72.17            | -52.1              | 2.39                 | 11.87                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 25 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 3700              | -50.76       | -13           | -37.76            | -69.93            | -57.33             | 1.67                 | 8.24                  | H                  |
|                                                 | 5550              | -55.02       | -13           | -42.02            | -79.78            | -62.09             | 2.65                 | 9.72                  | H                  |
|                                                 | 7400              | -47.88       | -13           | -34.88            | -74.25            | -57.02             | 2.46                 | 11.60                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3700              | -46.87       | -13           | -33.87            | -66.93            | -53.44             | 1.67                 | 8.24                  | V                  |
|                                                 | 5550              | -53.81       | -13           | -40.81            | -79.55            | -60.88             | 2.65                 | 9.72                  | V                  |
|                                                 | 7400              | -43.57       | -13           | -30.57            | -71.73            | -52.71             | 2.46                 | 11.60                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 3749              | -48.54       | -13           | -35.54            | -67.88            | -55.16             | 1.68                 | 8.30                  | H                  |
|                                                 | 5623              | -54.97       | -13           | -41.97            | -79.56            | -62.02             | 2.70                 | 9.75                  | H                  |
|                                                 | 7494              | -49.63       | -13           | -36.63            | -76.16            | -58.99             | 2.43                 | 11.79                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3749              | -42.94       | -13           | -29.94            | -63.11            | -49.56             | 1.68                 | 8.30                  | V                  |
|                                                 | 5623              | -53.83       | -13           | -40.83            | -79.4             | -60.88             | 2.70                 | 9.75                  | V                  |
|                                                 | 7494              | -43.86       | -13           | -30.86            | -72.33            | -53.22             | 2.43                 | 11.79                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 3798              | -44.54       | -13           | -31.54            | -65.56            | -51.2              | 1.70                 | 8.36                  | H                  |
|                                                 | 5702              | -53.36       | -13           | -40.36            | -78.32            | -60.4              | 2.74                 | 9.78                  | H                  |
|                                                 | 7606              | -48.63       | -13           | -35.63            | -76.27            | -58.1              | 2.40                 | 11.86                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3798              | -44.14       | -13           | -31.14            | -65.7             | -50.8              | 1.70                 | 8.36                  | V                  |
|                                                 | 5700              | -53.56       | -13           | -40.56            | -79.41            | -60.6              | 2.74                 | 9.78                  | V                  |
|                                                 | 7606              | -43.73       | -13           | -30.73            | -73.26            | -53.2              | 2.40                 | 11.86                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |



| LTE Band 25 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 3700              | -49.72       | -13           | -36.72            | -68.9             | -56.29             | 1.67                 | 8.24                  | H                  |
|                                                 | 5550              | -54.95       | -13           | -41.95            | -79.58            | -62.02             | 2.65                 | 9.72                  | H                  |
|                                                 | 7400              | -46.97       | -13           | -33.97            | -73.29            | -56.11             | 2.46                 | 11.60                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3700              | -46.06       | -13           | -33.06            | -66.22            | -52.63             | 1.67                 | 8.24                  | V                  |
|                                                 | 5550              | -53.95       | -13           | -40.95            | -79.61            | -61.02             | 2.65                 | 9.72                  | V                  |
|                                                 | 7400              | -43.63       | -13           | -30.63            | -71.73            | -52.77             | 2.46                 | 11.60                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 3742              | -49.61       | -13           | -36.61            | -68.97            | -56.22             | 1.68                 | 8.29                  | H                  |
|                                                 | 5610              | -54.38       | -13           | -41.38            | -78.91            | -61.44             | 2.69                 | 9.74                  | H                  |
|                                                 | 7487              | -48.65       | -13           | -35.65            | -75.24            | -57.99             | 2.43                 | 11.77                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3742              | -44.27       | -13           | -31.27            | -64.45            | -50.88             | 1.68                 | 8.29                  | V                  |
|                                                 | 5610              | -53.49       | -13           | -40.49            | -79.22            | -60.55             | 2.69                 | 9.74                  | V                  |
|                                                 | 7487              | -43.05       | -13           | -30.05            | -71.5             | -52.39             | 2.43                 | 11.77                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 3791              | -44.75       | -13           | -31.75            | -65.29            | -51.4              | 1.70                 | 8.35                  | H                  |
|                                                 | 5688              | -52.36       | -13           | -39.36            | -77.45            | -59.4              | 2.73                 | 9.78                  | H                  |
|                                                 | 7585              | -48.15       | -13           | -35.15            | -75.81            | -57.6              | 2.40                 | 11.85                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3791              | -44.25       | -13           | -31.25            | -65.06            | -50.9              | 1.70                 | 8.35                  | V                  |
|                                                 | 5688              | -53.46       | -13           | -40.46            | -79.03            | -60.5              | 2.73                 | 9.78                  | V                  |
|                                                 | 7585              | -43.25       | -13           | -30.25            | -72.82            | -52.7              | 2.40                 | 11.85                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





| LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 3420              | -51.73       | -13           | -38.73            | -69.24            | -57.8              | 1.58                 | 7.65                  | H                  |
|                                                 | 5128              | -54.71       | -13           | -41.71            | -78.15            | -62                | 2.41                 | 9.70                  | H                  |
|                                                 | 6843              | -46.13       | -13           | -33.13            | -71.98            | -54.1              | 2.64                 | 10.61                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3420              | -52.33       | -13           | -39.33            | -71.21            | -58.4              | 1.58                 | 7.65                  | V                  |
|                                                 | 5128              | -54.21       | -13           | -41.21            | -78.95            | -61.5              | 2.41                 | 9.70                  | V                  |
|                                                 | 6843              | -48.63       | -13           | -35.63            | -75.64            | -56.6              | 2.64                 | 10.61                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 3462              | -49.06       | -13           | -36.06            | -67.01            | -55.3              | 1.59                 | 7.83                  | H                  |
|                                                 | 5198              | -52.65       | -13           | -39.65            | -76.28            | -59.9              | 2.45                 | 9.70                  | H                  |
|                                                 | 6927              | -46.80       | -13           | -33.80            | -73.41            | -54.9              | 2.61                 | 10.71                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3462              | -50.66       | -13           | -37.66            | -69.59            | -56.9              | 1.59                 | 7.83                  | V                  |
|                                                 | 5198              | -52.65       | -13           | -39.65            | -76.88            | -59.9              | 2.45                 | 9.70                  | V                  |
|                                                 | 6927              | -50.00       | -13           | -37.00            | -77.56            | -58.1              | 2.61                 | 10.71                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 3504              | -49.20       | -13           | -36.20            | -66.95            | -55.6              | 1.61                 | 8.00                  | H                  |
|                                                 | 5261              | -51.59       | -13           | -38.59            | -76.06            | -58.8              | 2.49                 | 9.70                  | H                  |
|                                                 | 7018              | -43.95       | -13           | -30.95            | -70.59            | -52.2              | 2.58                 | 10.84                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 3504              | -51.00       | -13           | -38.00            | -70.11            | -57.4              | 1.61                 | 8.00                  | V                  |
|                                                 | 5261              | -51.09       | -13           | -38.09            | -76.22            | -58.3              | 2.49                 | 9.70                  | V                  |
|                                                 | 7018              | -47.85       | -13           | -34.85            | -75.53            | -56.1              | 2.58                 | 10.84                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-----------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                       | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                        | 3420              | -51.03       | -13           | -38.03            | -68.3             | -57.1              | 1.58                 | 7.65                  | H                  |
|                                               | 5128              | -54.61       | -13           | -41.61            | -78.09            | -61.9              | 2.41                 | 9.70                  | H                  |
|                                               | 6843              | -44.43       | -13           | -31.43            | -70.99            | -52.4              | 2.64                 | 10.61                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3420              | -52.13       | -13           | -39.13            | -71.42            | -58.2              | 1.58                 | 7.65                  | V                  |
|                                               | 5130              | -54.21       | -13           | -41.21            | -79.11            | -61.5              | 2.41                 | 9.70                  | V                  |
|                                               | 6843              | -48.13       | -13           | -35.13            | -75.93            | -56.1              | 2.64                 | 10.61                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                        | 3462              | -49.66       | -13           | -36.66            | -67.19            | -55.9              | 1.59                 | 7.83                  | H                  |
|                                               | 5191              | -52.55       | -13           | -39.55            | -76.27            | -59.8              | 2.45                 | 9.70                  | H                  |
|                                               | 6927              | -46.90       | -13           | -33.90            | -73.1             | -55                | 2.61                 | 10.71                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3462              | -50.86       | -13           | -37.86            | -69.88            | -57.1              | 1.59                 | 7.83                  | V                  |
|                                               | 5191              | -52.35       | -13           | -39.35            | -77.04            | -59.6              | 2.45                 | 9.70                  | V                  |
|                                               | 6927              | -49.50       | -13           | -36.50            | -76.91            | -57.6              | 2.61                 | 10.71                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                       | 3504              | -48.80       | -13           | -35.80            | -66.68            | -55.2              | 1.61                 | 8.00                  | H                  |
|                                               | 5254              | -50.58       | -13           | -37.58            | -75.05            | -57.8              | 2.48                 | 9.70                  | H                  |
|                                               | 7011              | -44.56       | -13           | -31.56            | -71.02            | -52.8              | 2.59                 | 10.82                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 3504              | -50.50       | -13           | -37.50            | -69.27            | -56.9              | 1.61                 | 8.00                  | V                  |
|                                               | 5254              | -50.98       | -13           | -37.98            | -76.19            | -58.2              | 2.48                 | 9.70                  | V                  |
|                                               | 7011              | -47.96       | -13           | -34.96            | -75.43            | -56.2              | 2.59                 | 10.82                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-----------------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                       | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                        | 3420                 | -51.73          | -13              | -38.73                  | -69.12                  | -57.8                    | 1.58                       | 7.65                        | H                     |
|                                               | 5128                 | -54.41          | -13              | -41.41                  | -78.09                  | -61.7                    | 2.41                       | 9.70                        | H                     |
|                                               | 6843                 | -45.63          | -13              | -32.63                  | -72.03                  | -53.6                    | 2.64                       | 10.61                       | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               | 3420                 | -53.13          | -13              | -40.13                  | -72.14                  | -59.2                    | 1.58                       | 7.65                        | V                     |
|                                               | 5130                 | -54.51          | -13              | -41.51                  | -79.14                  | -61.8                    | 2.41                       | 9.70                        | V                     |
|                                               | 6843                 | -47.83          | -13              | -34.83                  | -75.42                  | -55.8                    | 2.64                       | 10.61                       | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Middle                                        | 3462                 | -50.16          | -13              | -37.16                  | -67.98                  | -56.4                    | 1.59                       | 7.83                        | H                     |
|                                               | 5191                 | -52.55          | -13              | -39.55                  | -76.23                  | -59.8                    | 2.45                       | 9.70                        | H                     |
|                                               | 6920                 | -47.11          | -13              | -34.11                  | -73.42                  | -55.2                    | 2.62                       | 10.70                       | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               | 3462                 | -51.26          | -13              | -38.26                  | -70.26                  | -57.5                    | 1.59                       | 7.83                        | V                     |
|                                               | 5191                 | -52.35          | -13              | -39.35                  | -77.28                  | -59.6                    | 2.45                       | 9.70                        | V                     |
|                                               | 6920                 | -49.31          | -13              | -36.31                  | -76.72                  | -57.4                    | 2.62                       | 10.70                       | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Highest                                       | 3497                 | -49.32          | -13              | -36.32                  | -66.91                  | -55.7                    | 1.60                       | 7.99                        | H                     |
|                                               | 5254                 | -51.68          | -13              | -38.68                  | -76.05                  | -58.9                    | 2.48                       | 9.70                        | H                     |
|                                               | 7004                 | -45.38          | -13              | -32.38                  | -71.57                  | -53.6                    | 2.59                       | 10.81                       | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                               | 3497                 | -50.52          | -13              | -37.52                  | -69.59                  | -56.9                    | 1.60                       | 7.99                        | V                     |
|                                               | 5247                 | -51.98          | -13              | -38.98                  | -77.11                  | -59.2                    | 2.48                       | 9.70                        | V                     |
|                                               | 7004                 | -48.38          | -13              | -35.38                  | -75.75                  | -56.6                    | 2.59                       | 10.81                       | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                               |                      |                 |                  |                         |                         |                          |                            |                             | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3420              | -49.63       | -13           | -36.63            | -67.48            | -55.7              | 1.58                 | 7.65                  | H                  |
|                                                | 5128              | -54.51       | -13           | -41.51            | -77.64            | -61.8              | 2.41                 | 9.70                  | H                  |
|                                                | 6843              | -45.13       | -13           | -32.13            | -71.7             | -53.1              | 2.64                 | 10.61                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3420              | -52.63       | -13           | -39.63            | -71.33            | -58.7              | 1.58                 | 7.65                  | V                  |
|                                                | 5128              | -54.11       | -13           | -41.11            | -78.76            | -61.4              | 2.41                 | 9.70                  | V                  |
|                                                | 6843              | -49.03       | -13           | -36.03            | -76.38            | -57                | 2.64                 | 10.61                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3455              | -50.39       | -13           | -37.39            | -67.84            | -56.6              | 1.59                 | 7.80                  | H                  |
|                                                | 5184              | -52.34       | -13           | -39.34            | -75.79            | -59.6              | 2.44                 | 9.70                  | H                  |
|                                                | 6913              | -46.12       | -13           | -33.12            | -72.6             | -54.2              | 2.62                 | 10.70                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3455              | -50.29       | -13           | -37.29            | -69.55            | -56.5              | 1.59                 | 7.80                  | V                  |
|                                                | 5184              | -51.54       | -13           | -38.54            | -76.19            | -58.8              | 2.44                 | 9.70                  | V                  |
|                                                | 6913              | -49.32       | -13           | -36.32            | -76.98            | -57.4              | 2.62                 | 10.70                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3490              | -50.25       | -13           | -37.25            | -67.13            | -56.6              | 1.60                 | 7.96                  | H                  |
|                                                | 5233              | -52.57       | -13           | -39.57            | -76.21            | -59.8              | 2.47                 | 9.70                  | H                  |
|                                                | 6983              | -46.42       | -13           | -33.42            | -72.68            | -54.6              | 2.60                 | 10.78                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3490              | -50.85       | -13           | -37.85            | -69.8             | -57.2              | 1.60                 | 7.96                  | V                  |
|                                                | 5233              | -51.37       | -13           | -38.37            | -76.32            | -58.6              | 2.47                 | 9.70                  | V                  |
|                                                | 6983              | -48.92       | -13           | -35.92            | -76.47            | -57.1              | 2.60                 | 10.78                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3420              | -51.53       | -13           | -38.53            | -69.26            | -57.6              | 1.58                 | 7.65                  | H                  |
|                                                | 5135              | -54.31       | -13           | -41.31            | -77.58            | -61.6              | 2.41                 | 9.70                  | H                  |
|                                                | 6843              | -45.33       | -13           | -32.33            | -71.98            | -53.3              | 2.64                 | 10.61                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3420              | -53.63       | -13           | -40.63            | -72.16            | -59.7              | 1.58                 | 7.65                  | V                  |
|                                                | 5135              | -54.11       | -13           | -41.11            | -78.94            | -61.4              | 2.41                 | 9.70                  | V                  |
|                                                | 6843              | -48.33       | -13           | -35.33            | -76.13            | -56.3              | 2.64                 | 10.61                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3448              | -49.82       | -13           | -36.82            | -67.61            | -56                | 1.59                 | 7.77                  | H                  |
|                                                | 5177              | -51.64       | -13           | -38.64            | -75.41            | -58.9              | 2.44                 | 9.70                  | H                  |
|                                                | 6906              | -45.73       | -13           | -32.73            | -72.01            | -53.8              | 2.62                 | 10.69                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3448              | -50.92       | -13           | -37.92            | -69.71            | -57.1              | 1.59                 | 7.77                  | V                  |
|                                                | 5177              | -51.64       | -13           | -38.64            | -76.17            | -58.9              | 2.44                 | 9.70                  | V                  |
|                                                | 6906              | -49.23       | -13           | -36.23            | -76.41            | -57.3              | 2.62                 | 10.69                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3483              | -50.77       | -13           | -37.77            | -68.14            | -57.1              | 1.60                 | 7.93                  | H                  |
|                                                | 5219              | -52.56       | -13           | -39.56            | -76.48            | -59.8              | 2.46                 | 9.70                  | H                  |
|                                                | 6962              | -46.55       | -13           | -33.55            | -72.71            | -54.7              | 2.60                 | 10.75                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3483              | -51.47       | -13           | -38.47            | -70.18            | -57.8              | 1.60                 | 7.93                  | V                  |
|                                                | 5219              | -52.16       | -13           | -39.16            | -77.3             | -59.4              | 2.46                 | 9.70                  | V                  |
|                                                | 6962              | -48.15       | -13           | -35.15            | -75.72            | -56.3              | 2.60                 | 10.75                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 3420              | -50.43       | -13           | -37.43            | -68.33            | -56.5              | 1.58                 | 7.65                  | H                  |
|                                                | 5135              | -53.91       | -13           | -40.91            | -77.56            | -61.2              | 2.41                 | 9.70                  | H                  |
|                                                | 6843              | -45.83       | -13           | -32.83            | -72.06            | -53.8              | 2.64                 | 10.61                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3420              | -52.03       | -13           | -39.03            | -71.04            | -58.1              | 1.58                 | 7.65                  | V                  |
|                                                | 5135              | -53.61       | -13           | -40.61            | -78.6             | -60.9              | 2.41                 | 9.70                  | V                  |
|                                                | 6843              | -48.63       | -13           | -35.63            | -75.96            | -56.6              | 2.64                 | 10.61                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 3448              | -49.32       | -13           | -36.32            | -67.36            | -55.5              | 1.59                 | 7.77                  | H                  |
|                                                | 5170              | -50.53       | -13           | -37.53            | -73.79            | -57.8              | 2.43                 | 9.70                  | H                  |
|                                                | 6892              | -46.75       | -13           | -33.75            | -72.97            | -54.8              | 2.63                 | 10.67                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3448              | -50.92       | -13           | -37.92            | -69.68            | -57.1              | 1.59                 | 7.77                  | V                  |
|                                                | 5170              | -51.63       | -13           | -38.63            | -75.77            | -58.9              | 2.43                 | 9.70                  | V                  |
|                                                | 6892              | -48.75       | -13           | -35.75            | -76.12            | -56.8              | 2.63                 | 10.67                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 3469              | -49.93       | -13           | -36.93            | -67.92            | -56.2              | 1.59                 | 7.86                  | H                  |
|                                                | 5205              | -53.56       | -13           | -40.56            | -77.3             | -60.8              | 2.46                 | 9.70                  | H                  |
|                                                | 6941              | -46.68       | -13           | -33.68            | -72.66            | -54.8              | 2.61                 | 10.73                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 3469              | -50.83       | -13           | -37.83            | -69.89            | -57.1              | 1.59                 | 7.86                  | V                  |
|                                                | 5205              | -52.56       | -13           | -39.56            | -77.15            | -59.8              | 2.46                 | 9.70                  | V                  |
|                                                | 6941              | -48.68       | -13           | -35.68            | -75.95            | -56.8              | 2.61                 | 10.73                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 5 / 1.4MHz / QPSK / RB Size 25 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|--------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                          | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                           | 1648              | -64.74      | -13           | -51.74            | -75.56            | -66.5              | 0.98                 | 4.89                  | H                  |
|                                                  | 2474              | -60.31      | -13           | -47.31            | -76.51            | -62.2              | 1.28                 | 5.32                  | H                  |
|                                                  | 3298              | -60.48      | -13           | -47.48            | -77.6             | -63.9              | 1.54                 | 7.11                  | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  | 1648              | -63.74      | -13           | -50.74            | -74.94            | -65.5              | 0.98                 | 4.89                  | V                  |
|                                                  | 2474              | -59.61      | -13           | -46.61            | -76.72            | -61.5              | 1.28                 | 5.32                  | V                  |
|                                                  | 3298              | -59.28      | -13           | -46.28            | -77.64            | -62.7              | 1.54                 | 7.11                  | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                           | 1672              | -64.82      | -13           | -51.82            | -75.75            | -66.5              | 0.99                 | 4.82                  | H                  |
|                                                  | 2509              | -60.24      | -13           | -47.24            | -76.74            | -62.2              | 1.29                 | 5.41                  | H                  |
|                                                  | 3346              | -60.28      | -13           | -47.28            | -77.59            | -63.9              | 1.56                 | 7.32                  | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  | 1672              | -63.42      | -13           | -50.42            | -74.74            | -65.1              | 0.99                 | 4.82                  | V                  |
|                                                  | 2509              | -59.44      | -13           | -46.44            | -76.69            | -61.4              | 1.29                 | 5.41                  | V                  |
|                                                  | 3346              | -58.48      | -13           | -45.48            | -77.5             | -62.1              | 1.56                 | 7.32                  | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                          | 1696              | -64.60      | -13           | -51.60            | -75.77            | -66.2              | 1.00                 | 4.75                  | H                  |
|                                                  | 2544              | -60.92      | -13           | -47.92            | -77.05            | -62.9              | 1.30                 | 5.44                  | H                  |
|                                                  | 3393              | -60.39      | -13           | -47.39            | -77.69            | -64.2              | 1.57                 | 7.53                  | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                  | 1696              | -62.20      | -13           | -49.20            | -74.36            | -63.8              | 1.00                 | 4.75                  | V                  |
|                                                  | 2544              | -59.52      | -13           | -46.52            | -76.95            | -61.5              | 1.30                 | 5.44                  | V                  |
|                                                  | 3393              | -59.29      | -13           | -46.29            | -77.59            | -63.1              | 1.57                 | 7.53                  | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                  |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 5 / 3MHz / QPSK / RB Size 25 Offset 0 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|------------------------------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                        | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                         | 1648                 | -64.74         | -13              | -51.74                  | -75.61                  | -66.5                    | 0.98                       | 4.89                        | H                     |
|                                                | 2476                 | -60.91         | -13              | -47.91                  | -76.83                  | -62.8                    | 1.28                       | 5.33                        | H                     |
|                                                | 3302                 | -60.06         | -13              | -47.06                  | -77.5                   | -63.5                    | 1.54                       | 7.13                        | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 1648                 | -64.14         | -13              | -51.14                  | -75.13                  | -65.9                    | 0.98                       | 4.89                        | V                     |
|                                                | 2476                 | -59.31         | -13              | -46.31                  | -76.57                  | -61.2                    | 1.28                       | 5.33                        | V                     |
|                                                | 3302                 | -58.46         | -13              | -45.46                  | -77.42                  | -61.9                    | 1.54                       | 7.13                        | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
| Middle                                         | 1672                 | -64.82         | -13              | -51.82                  | -75.69                  | -66.5                    | 0.99                       | 4.82                        | H                     |
|                                                | 2509                 | -60.24         | -13              | -47.24                  | -76.6                   | -62.2                    | 1.29                       | 5.41                        | H                     |
|                                                | 3346                 | -60.48         | -13              | -47.48                  | -77.59                  | -64.1                    | 1.56                       | 7.32                        | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 1672                 | -63.82         | -13              | -50.82                  | -75                     | -65.5                    | 0.99                       | 4.82                        | V                     |
|                                                | 2509                 | -59.14         | -13              | -46.14                  | -76.63                  | -61.1                    | 1.29                       | 5.41                        | V                     |
|                                                | 3346                 | -59.58         | -13              | -46.58                  | -77.68                  | -63.2                    | 1.56                       | 7.32                        | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
| Highest                                        | 1696                 | -64.80         | -13              | -51.80                  | -76.07                  | -66.4                    | 1.00                       | 4.75                        | H                     |
|                                                | 2542                 | -60.22         | -13              | -47.22                  | -76.91                  | -62.2                    | 1.30                       | 5.43                        | H                     |
|                                                | 3390                 | -60.00         | -13              | -47.00                  | -77.4                   | -63.8                    | 1.57                       | 7.52                        | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 1696                 | -62.60         | -13              | -49.60                  | -74.13                  | -64.2                    | 1.00                       | 4.75                        | V                     |
|                                                | 2542                 | -58.92         | -13              | -45.92                  | -76.66                  | -60.9                    | 1.30                       | 5.43                        | V                     |
|                                                | 3390                 | -59.10         | -13              | -46.10                  | -77.46                  | -62.9                    | 1.57                       | 7.52                        | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                |                  |                         |                         |                          |                            |                             | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





| LTE Band 5 / 5MHz / QPSK / RB Size 25 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 1656              | -65.17      | -13           | -52.17            | -75.36            | -66.9              | 0.98                 | 4.86                  | H                  |
|                                                | 2479              | -60.30      | -13           | -47.30            | -76.53            | -62.2              | 1.28                 | 5.34                  | H                  |
|                                                | 3306              | -60.45      | -13           | -47.45            | -77.52            | -63.9              | 1.54                 | 7.15                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1656              | -63.77      | -13           | -50.77            | -75.1             | -65.5              | 0.98                 | 4.86                  | V                  |
|                                                | 2479              | -59.30      | -13           | -46.30            | -76.5             | -61.2              | 1.28                 | 5.34                  | V                  |
|                                                | 3306              | -59.05      | -13           | -46.05            | -77.52            | -62.5              | 1.54                 | 7.15                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 1672              | -64.42      | -13           | -51.42            | -75.38            | -66.1              | 0.99                 | 4.82                  | H                  |
|                                                | 2509              | -60.24      | -13           | -47.24            | -76.49            | -62.2              | 1.29                 | 5.41                  | H                  |
|                                                | 3346              | -59.88      | -13           | -46.88            | -77.16            | -63.5              | 1.56                 | 7.32                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1672              | -63.82      | -13           | -50.82            | -75.19            | -65.5              | 0.99                 | 4.82                  | V                  |
|                                                | 2509              | -59.24      | -13           | -46.24            | -76.46            | -61.2              | 1.29                 | 5.41                  | V                  |
|                                                | 3346              | -58.58      | -13           | -45.58            | -77.46            | -62.2              | 1.56                 | 7.32                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 1696              | -64.90      | -13           | -51.90            | -76.02            | -66.5              | 1.00                 | 4.75                  | H                  |
|                                                | 2539              | -60.52      | -13           | -47.52            | -76.98            | -62.5              | 1.30                 | 5.43                  | H                  |
|                                                | 3386              | -60.12      | -13           | -47.12            | -77.48            | -63.9              | 1.57                 | 7.50                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1696              | -63.30      | -13           | -50.30            | -75.14            | -64.9              | 1.00                 | 4.75                  | V                  |
|                                                | 2539              | -59.52      | -13           | -46.52            | -76.83            | -61.5              | 1.30                 | 5.43                  | V                  |
|                                                | 3386              | -59.02      | -13           | -46.02            | -77.74            | -62.8              | 1.57                 | 7.50                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 5 / 10MHz / QPSK / RB Size 25 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 1658              | -64.77      | -13           | -51.77            | -75.45            | -66.5              | 0.98                 | 4.86                  | H                  |
|                                                 | 2487              | -60.58      | -13           | -47.58            | -76.48            | -62.5              | 1.29                 | 5.36                  | H                  |
|                                                 | 3316              | -60.01      | -13           | -47.01            | -77.12            | -63.5              | 1.55                 | 7.19                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1658              | -63.47      | -13           | -50.47            | -74.85            | -65.2              | 0.98                 | 4.86                  | V                  |
|                                                 | 2487              | -59.28      | -13           | -46.28            | -76.44            | -61.2              | 1.29                 | 5.36                  | V                  |
|                                                 | 3316              | -58.91      | -13           | -45.91            | -77.51            | -62.4              | 1.55                 | 7.19                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 1672              | -65.22      | -13           | -52.22            | -75.66            | -66.9              | 0.99                 | 4.82                  | H                  |
|                                                 | 2509              | -60.24      | -13           | -47.24            | -76.52            | -62.2              | 1.29                 | 5.41                  | H                  |
|                                                 | 3346              | -59.88      | -13           | -46.88            | -77.36            | -63.5              | 1.56                 | 7.32                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1672              | -64.12      | -13           | -51.12            | -75.2             | -65.8              | 0.99                 | 4.82                  | V                  |
|                                                 | 2509              | -58.94      | -13           | -45.94            | -76.22            | -60.9              | 1.29                 | 5.41                  | V                  |
|                                                 | 3346              | -58.58      | -13           | -45.58            | -77.26            | -62.2              | 1.56                 | 7.32                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 1688              | -64.77      | -13           | -51.77            | -75.51            | -66.4              | 1.00                 | 4.77                  | H                  |
|                                                 | 2532              | -60.23      | -13           | -47.23            | -76.68            | -62.2              | 1.30                 | 5.43                  | H                  |
|                                                 | 3376              | -59.76      | -13           | -46.76            | -77.45            | -63.5              | 1.57                 | 7.45                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1688              | -64.27      | -13           | -51.27            | -75.73            | -65.9              | 1.00                 | 4.77                  | V                  |
|                                                 | 2532              | -59.43      | -13           | -46.43            | -76.67            | -61.4              | 1.30                 | 5.43                  | V                  |
|                                                 | 3376              | -58.76      | -13           | -45.76            | -77.38            | -62.5              | 1.57                 | 7.45                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-----------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                       | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                        | 5004              | -47.66       | -25           | -22.66            | -70.98            | -55.02             | 2.34                 | 9.70                  | H                  |
|                                               | 7500              | -50.12       | -25           | -25.12            | -76.95            | -59.49             | 2.43                 | 11.80                 | H                  |
|                                               | 9996              | -48.51       | -25           | -23.51            | -76.4             | -58.02             | 2.70                 | 12.20                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 5004              | -50.41       | -25           | -25.41            | -74.87            | -57.77             | 2.34                 | 9.70                  | V                  |
|                                               | 7500              | -50.02       | -25           | -25.02            | -78.67            | -59.39             | 2.43                 | 11.80                 | V                  |
|                                               | 9996              | -47.51       | -25           | -22.51            | -77.94            | -57.02             | 2.70                 | 12.20                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                        | 5064              | -44.78       | -25           | -19.78            | -68.19            | -52.11             | 2.37                 | 9.70                  | H                  |
|                                               | 7596              | -48.93       | -25           | -23.93            | -76.51            | -58.39             | 2.40                 | 11.86                 | H                  |
|                                               | 10128             | -47.55       | -25           | -22.55            | -75.73            | -57.11             | 2.70                 | 12.25                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 5064              | -48.78       | -25           | -23.78            | -73.26            | -56.11             | 2.37                 | 9.70                  | V                  |
|                                               | 7596              | -48.83       | -25           | -23.83            | -78.16            | -58.29             | 2.40                 | 11.86                 | V                  |
|                                               | 10128             | -46.36       | -25           | -21.36            | -77.14            | -55.92             | 2.70                 | 12.25                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                       | 5136              | -45.78       | -25           | -20.78            | -69.29            | -53.06             | 2.42                 | 9.70                  | H                  |
|                                               | 7692              | -47.46       | -25           | -22.46            | -74.84            | -57.01             | 2.37                 | 11.92                 | H                  |
|                                               | 10260             | -49.72       | -25           | -24.72            | -78.51            | -59.33             | 2.69                 | 12.30                 | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                               | 5136              | -49.08       | -25           | -24.08            | -73.63            | -56.36             | 2.42                 | 9.70                  | V                  |
|                                               | 7692              | -48.67       | -25           | -23.67            | -77.74            | -58.22             | 2.37                 | 11.92                 | V                  |
|                                               | 10260             | -46.42       | -25           | -21.42            | -77.64            | -56.03             | 2.69                 | 12.30                 | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                               |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 5004              | -46.66       | -25           | -21.66            | -70.03            | -54.02             | 2.34                 | 9.70                  | H                  |
|                                                | 7500              | -50.41       | -25           | -25.41            | -77.07            | -59.78             | 2.43                 | 11.80                 | H                  |
|                                                | 10008             | -47.54       | -25           | -22.54            | -75.4             | -57.05             | 2.70                 | 12.20                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5004              | -50.86       | -25           | -25.86            | -75.26            | -58.22             | 2.34                 | 9.70                  | V                  |
|                                                | 7500              | -49.75       | -25           | -24.75            | -78.33            | -59.12             | 2.43                 | 11.80                 | V                  |
|                                                | 10008             | -47.62       | -25           | -22.62            | -78.04            | -57.13             | 2.70                 | 12.20                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 5064              | -43.78       | -25           | -18.78            | -67.19            | -51.11             | 2.37                 | 9.70                  | H                  |
|                                                | 7596              | -49.17       | -25           | -24.17            | -76.74            | -58.63             | 2.40                 | 11.86                 | H                  |
|                                                | 10128             | -47.66       | -25           | -22.66            | -75.97            | -57.22             | 2.70                 | 12.25                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5064              | -48.83       | -25           | -23.83            | -73.31            | -56.16             | 2.37                 | 9.70                  | V                  |
|                                                | 7596              | -48.56       | -25           | -23.56            | -77.76            | -58.02             | 2.40                 | 11.86                 | V                  |
|                                                | 10128             | -45.51       | -25           | -20.51            | -76.37            | -55.07             | 2.70                 | 12.25                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 5124              | -45.52       | -25           | -20.52            | -68.95            | -52.81             | 2.41                 | 9.70                  | H                  |
|                                                | 7680              | -49.52       | -25           | -24.52            | -77               | -59.06             | 2.37                 | 11.91                 | H                  |
|                                                | 10248             | -50.42       | -25           | -25.42            | -78.92            | -60.02             | 2.69                 | 12.30                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5124              | -48.04       | -25           | -23.04            | -72.58            | -55.33             | 2.41                 | 9.70                  | V                  |
|                                                | 7680              | -48.48       | -25           | -23.48            | -77.51            | -58.02             | 2.37                 | 11.91                 | V                  |
|                                                | 10248             | -47.51       | -25           | -22.51            | -78.87            | -57.11             | 2.69                 | 12.30                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 5004              | -47.66       | -25           | -22.66            | -70.9             | -55.02             | 2.34                 | 9.70                  | H                  |
|                                                | 7500              | -50.74       | -25           | -25.74            | -77.61            | -60.11             | 2.43                 | 11.80                 | H                  |
|                                                | 10008             | -48.71       | -25           | -23.71            | -76.69            | -58.22             | 2.70                 | 12.20                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5004              | -50.27       | -25           | -25.27            | -74.62            | -57.63             | 2.34                 | 9.70                  | V                  |
|                                                | 7500              | -49.74       | -25           | -24.74            | -78.32            | -59.11             | 2.43                 | 11.80                 | V                  |
|                                                | 10008             | -47.78       | -25           | -22.78            | -78.22            | -57.29             | 2.70                 | 12.20                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 5052              | -44.38       | -25           | -19.38            | -67.8             | -51.71             | 2.37                 | 9.70                  | H                  |
|                                                | 7584              | -50.61       | -25           | -25.61            | -78.02            | -60.06             | 2.40                 | 11.85                 | H                  |
|                                                | 10116             | -48.46       | -25           | -23.46            | -76.64            | -58.01             | 2.70                 | 12.25                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5052              | -47.96       | -25           | -22.96            | -72.39            | -55.29             | 2.37                 | 9.70                  | V                  |
|                                                | 7584              | -49.76       | -25           | -24.76            | -78.89            | -59.21             | 2.40                 | 11.85                 | V                  |
|                                                | 10116             | -47.06       | -25           | -22.06            | -77.88            | -56.61             | 2.70                 | 12.25                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 5112              | -45.92       | -25           | -20.92            | -69.4             | -53.22             | 2.40                 | 9.70                  | H                  |
|                                                | 7668              | -49.48       | -25           | -24.48            | -76.76            | -59.01             | 2.38                 | 11.90                 | H                  |
|                                                | 10224             | -50.52       | -25           | -25.52            | -79.01            | -60.11             | 2.69                 | 12.29                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5112              | -50.36       | -25           | -25.36            | -74.71            | -57.66             | 2.40                 | 9.70                  | V                  |
|                                                | 7668              | -48.96       | -25           | -23.96            | -78               | -58.49             | 2.38                 | 11.90                 | V                  |
|                                                | 10224             | -48.43       | -25           | -23.43            | -79.63            | -58.02             | 2.69                 | 12.29                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 5004              | -48.33       | -25           | -23.33            | -71.58            | -55.69             | 2.34                 | 9.70                  | H                  |
|                                                | 7500              | -50.02       | -25           | -25.02            | -76.95            | -59.39             | 2.43                 | 11.80                 | H                  |
|                                                | 10008             | -49.37       | -25           | -24.37            | -77.1             | -58.88             | 2.70                 | 12.20                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5004              | -50.93       | -25           | -25.93            | -75.4             | -58.29             | 2.34                 | 9.70                  | V                  |
|                                                | 7506              | -50.11       | -25           | -25.11            | -78.66            | -59.49             | 2.43                 | 11.80                 | V                  |
|                                                | 10008             | -48.04       | -25           | -23.04            | -78.47            | -57.55             | 2.70                 | 12.20                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 5052              | -43.55       | -25           | -18.55            | -66.95            | -50.88             | 2.37                 | 9.70                  | H                  |
|                                                | 7584              | -50.32       | -25           | -25.32            | -77.54            | -59.77             | 2.40                 | 11.85                 | H                  |
|                                                | 10104             | -48.56       | -25           | -23.56            | -76.81            | -58.11             | 2.70                 | 12.24                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5052              | -48.69       | -25           | -23.69            | -72.98            | -56.02             | 2.37                 | 9.70                  | V                  |
|                                                | 7584              | -49.74       | -25           | -24.74            | -78.92            | -59.19             | 2.40                 | 11.85                 | V                  |
|                                                | 10104             | -48.56       | -25           | -23.56            | -79.24            | -58.11             | 2.70                 | 12.24                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 5100              | -48.98       | -25           | -23.98            | -75.5             | -56.29             | 2.39                 | 9.70                  | H                  |
|                                                | 7656              | -49.37       | -25           | -24.37            | -76.81            | -58.88             | 2.38                 | 11.89                 | H                  |
|                                                | 10200             | -50.93       | -25           | -25.93            | -79.54            | -60.51             | 2.70                 | 12.28                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5100              | -50.81       | -25           | -25.81            | -75.25            | -58.12             | 2.39                 | 9.70                  | V                  |
|                                                | 7656              | -48.82       | -25           | -23.82            | -77.86            | -58.33             | 2.38                 | 11.89                 | V                  |
|                                                | 10200             | -48.64       | -25           | -23.64            | -79.72            | -58.22             | 2.70                 | 12.28                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 13 / 5MHz / QPSK / RB Size 1 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 1552              | -65.03      | -13           | -52.03            | -75.13            | -67.10             | 0.94                 | 5.15                  | H                  |
|                                                | 2332              | -62.29      | -13           | -49.29            | -76.46            | -63.80             | 1.24                 | 4.90                  | H                  |
|                                                | 3109              | -60.25      | -13           | -47.25            | -77.02            | -62.90             | 1.48                 | 6.28                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1552              | -64.43      | -13           | -51.43            | -75.15            | -66.50             | 0.94                 | 5.15                  | V                  |
|                                                | 2332              | -59.69      | -13           | -46.69            | -76.24            | -61.20             | 1.24                 | 4.90                  | V                  |
|                                                | 3109              | -58.55      | -13           | -45.55            | -76.90            | -61.20             | 1.48                 | 6.28                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 1560              | -64.46      | -42.15        | -22.31            | -74.97            | -66.50             | 0.94                 | 5.13                  | H                  |
|                                                | 2339              | -62.37      | -13           | -49.37            | -76.64            | -63.90             | 1.24                 | 4.92                  | H                  |
|                                                | 3119              | -60.11      | -13           | -47.11            | -77.07            | -62.80             | 1.48                 | 6.32                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1560              | -64.46      | -42.15        | -22.31            | -75.01            | -66.50             | 0.94                 | 5.13                  | V                  |
|                                                | 2339              | -59.97      | -13           | -46.97            | -76.46            | -61.50             | 1.24                 | 4.92                  | V                  |
|                                                | 3119              | -58.51      | -13           | -45.51            | -76.94            | -61.20             | 1.48                 | 6.32                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 1560              | -64.86      | -42.15        | -22.71            | -75.05            | -66.90             | 0.94                 | 5.13                  | H                  |
|                                                | 2347              | -61.85      | -13           | -48.85            | -76.18            | -63.40             | 1.24                 | 4.94                  | H                  |
|                                                | 3129              | -60.37      | -13           | -47.37            | -77.10            | -63.10             | 1.49                 | 6.37                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1560              | -64.06      | -42.15        | -21.91            | -75.01            | -66.10             | 0.94                 | 5.13                  | V                  |
|                                                | 2347              | -60.35      | -13           | -47.35            | -76.57            | -61.90             | 1.24                 | 4.94                  | V                  |
|                                                | 3129              | -58.77      | -13           | -45.77            | -77.04            | -61.50             | 1.49                 | 6.37                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 13 / 10MHz / QPSK / RB Size 1 Offset 0 |                      |                |                  |                         |                         |                          |                            |                             |                       |
|-------------------------------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                         | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                                          | 1552                 | -64.43         | -13              | -51.43                  | -74.97                  | -66.5                    | 0.94                       | 5.15                        | H                     |
|                                                 | 2332                 | -60.69         | -13              | -47.69                  | -75.13                  | -62.2                    | 1.24                       | 4.90                        | H                     |
|                                                 | 3110                 | -58.55         | -13              | -45.55                  | -74.97                  | -61.2                    | 1.48                       | 6.28                        | H                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                                                 | 1552                 | -64.43         | -13              | -51.43                  | -75.05                  | -66.5                    | 0.94                       | 5.15                        | V                     |
|                                                 | 2332                 | -59.29         | -13              | -46.29                  | -75.38                  | -60.8                    | 1.24                       | 4.90                        | V                     |
|                                                 | 3112                 | -56.54         | -13              | -43.54                  | -74.56                  | -59.2                    | 1.48                       | 6.29                        | V                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                                                 |                      |                |                  |                         |                         |                          |                            |                             | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





| LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 1408              | -64.79      | -13           | -51.79            | -74.66            | -66.50             | 0.87                 | 4.73                  | H                  |
|                                                | 2113              | -62.88      | -13           | -49.88            | -76.05            | -63.80             | 1.17                 | 4.24                  | H                  |
|                                                | 2817              | -60.09      | -13           | -47.09            | -76.61            | -62.20             | 1.39                 | 5.65                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1408              | -64.79      | -13           | -51.79            | -74.35            | -66.50             | 0.87                 | 4.73                  | V                  |
|                                                | 2113              | -60.58      | -13           | -47.58            | -75.90            | -61.50             | 1.17                 | 4.24                  | V                  |
|                                                | 2817              | -58.39      | -13           | -45.39            | -76.23            | -60.50             | 1.39                 | 5.65                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 1415              | -64.75      | -13           | -51.75            | -74.77            | -66.50             | 0.87                 | 4.77                  | H                  |
|                                                | 2123              | -62.95      | -13           | -49.95            | -76.12            | -63.90             | 1.17                 | 4.27                  | H                  |
|                                                | 2831              | -60.38      | -13           | -47.38            | -76.70            | -62.50             | 1.39                 | 5.66                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1415              | -64.75      | -13           | -51.75            | -74.80            | -66.50             | 0.87                 | 4.77                  | V                  |
|                                                | 2123              | -61.15      | -13           | -48.15            | -76.36            | -62.10             | 1.17                 | 4.27                  | V                  |
|                                                | 2831              | -57.78      | -13           | -44.78            | -75.21            | -59.90             | 1.39                 | 5.66                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 1424              | -53.34      | -13           | -40.34            | -59.06            | -55.14             | 0.88                 | 4.83                  | H                  |
|                                                | 2136              | -32.39      | -13           | -19.39            | -41.39            | -33.37             | 1.18                 | 4.31                  | H                  |
|                                                | 2848              | -55.28      | -13           | -42.28            | -66.34            | -57.41             | 1.40                 | 5.68                  | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                | 1424              | -54.54      | -13           | -41.54            | -58.49            | -56.34             | 0.88                 | 4.83                  | V                  |
|                                                | 2136              | -36.26      | -13           | -23.26            | -46.17            | -37.24             | 1.18                 | 4.31                  | V                  |
|                                                | 2848              | -54.28      | -13           | -41.28            | -66.11            | -56.41             | 1.40                 | 5.68                  | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |             |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 1400              | -65.24      | -13           | -52.24            | -75.10            | -66.90             | 0.87                 | 4.68                  | H                  |
|                                                 | 2106              | -62.60      | -13           | -49.60            | -75.91            | -63.50             | 1.17                 | 4.22                  | H                  |
|                                                 | 2808              | -60.39      | -13           | -47.39            | -77.14            | -62.50             | 1.39                 | 5.65                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1400              | -65.24      | -13           | -52.24            | -74.94            | -66.90             | 0.87                 | 4.68                  | V                  |
|                                                 | 2106              | -61.50      | -13           | -48.50            | -76.52            | -62.40             | 1.17                 | 4.22                  | V                  |
|                                                 | 2808              | -59.09      | -13           | -46.09            | -76.79            | -61.20             | 1.39                 | 5.65                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 1408              | -64.79      | -13           | -51.79            | -74.75            | -66.50             | 0.87                 | 4.73                  | H                  |
|                                                 | 2116              | -62.87      | -13           | -49.87            | -76.17            | -63.80             | 1.17                 | 4.25                  | H                  |
|                                                 | 2822              | -59.98      | -13           | -46.98            | -76.86            | -62.10             | 1.39                 | 5.66                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1408              | -64.79      | -13           | -51.79            | -74.59            | -66.50             | 0.87                 | 4.73                  | V                  |
|                                                 | 2116              | -60.97      | -13           | -47.97            | -76.37            | -61.90             | 1.17                 | 4.25                  | V                  |
|                                                 | 2822              | -58.08      | -13           | -45.08            | -75.94            | -60.20             | 1.39                 | 5.66                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 1416              | -64.75      | -13           | -51.75            | -74.72            | -66.50             | 0.87                 | 4.78                  | H                  |
|                                                 | 2119              | -62.96      | -13           | -49.96            | -76.54            | -63.90             | 1.17                 | 4.26                  | H                  |
|                                                 | 2826              | -60.08      | -13           | -47.08            | -76.60            | -62.20             | 1.39                 | 5.66                  | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 1416              | -64.75      | -13           | -51.75            | -74.53            | -66.50             | 0.87                 | 4.78                  | V                  |
|                                                 | 2119              | -61.56      | -13           | -48.56            | -76.46            | -62.50             | 1.17                 | 4.26                  | V                  |
|                                                 | 2826              | -57.98      | -13           | -44.98            | -75.35            | -60.10             | 1.39                 | 5.66                  | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |             |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 38 / 5MHz / QPSK / RB Size 1 Offset 0 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|------------------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                        | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                         | 5136                 | -49.62          | -25              | -24.62                  | -73.1                   | -56.9                    | 2.42                       | 9.70                        | H                     |
|                                                | 7716                 | -47.93          | -25              | -22.93                  | -75.75                  | -57.5                    | 2.36                       | 11.93                       | H                     |
|                                                | 10284                | -46.68          | -25              | -21.68                  | -75.88                  | -56.3                    | 2.69                       | 12.31                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 5136                 | -45.12          | -25              | -20.12                  | -69.94                  | -52.4                    | 2.42                       | 9.70                        | V                     |
|                                                | 7716                 | -48.73          | -25              | -23.73                  | -77.92                  | -58.3                    | 2.36                       | 11.93                       | V                     |
|                                                | 10284                | -45.98          | -25              | -20.98                  | -77.57                  | -55.6                    | 2.69                       | 12.31                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Middle                                         | 5184                 | -47.54          | -25              | -22.54                  | -70.62                  | -54.8                    | 2.44                       | 9.70                        | H                     |
|                                                | 7776                 | -48.97          | -25              | -23.97                  | -76.49                  | -58.6                    | 2.34                       | 11.97                       | H                     |
|                                                | 10368                | -46.45          | -25              | -21.45                  | -75.62                  | -56.1                    | 2.69                       | 12.35                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 5184                 | -42.34          | -25              | -17.34                  | -67.03                  | -49.6                    | 2.44                       | 9.70                        | V                     |
|                                                | 7776                 | -49.97          | -25              | -24.97                  | -78.87                  | -59.6                    | 2.34                       | 11.97                       | V                     |
|                                                | 10368                | -46.45          | -25              | -21.45                  | -78.23                  | -56.1                    | 2.69                       | 12.35                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
| Highest                                        | 5232                 | -45.17          | -25              | -20.17                  | -68.95                  | -52.4                    | 2.47                       | 9.70                        | H                     |
|                                                | 7845                 | -51.01          | -25              | -26.01                  | -78.4                   | -60.7                    | 2.32                       | 12.01                       | H                     |
|                                                | 10464                | -48.11          | -25              | -23.11                  | -77.87                  | -57.8                    | 2.69                       | 12.39                       | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                | 5232                 | -41.37          | -25              | -16.37                  | -66.1                   | -48.6                    | 2.47                       | 9.70                        | V                     |
|                                                | 7845                 | -50.11          | -25              | -25.11                  | -79.13                  | -59.8                    | 2.32                       | 12.01                       | V                     |
|                                                | 10464                | -45.51          | -25              | -20.51                  | -77.46                  | -55.2                    | 2.69                       | 12.39                       | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                |                      |                 |                  |                         |                         |                          |                            |                             | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 38 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 5136              | -47.92       | -25           | -22.92            | -71.5             | -55.2              | 2.42                 | 9.70                  | H                  |
|                                                 | 7716              | -47.23       | -25           | -22.23            | -74.97            | -56.8              | 2.36                 | 11.93                 | H                  |
|                                                 | 10284             | -46.58       | -25           | -21.58            | -75.77            | -56.2              | 2.69                 | 12.31                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5136              | -44.52       | -25           | -19.52            | -69.58            | -51.8              | 2.42                 | 9.70                  | V                  |
|                                                 | 7716              | -49.03       | -25           | -24.03            | -78.19            | -58.6              | 2.36                 | 11.93                 | V                  |
|                                                 | 10284             | -46.58       | -25           | -21.58            | -78.09            | -56.2              | 2.69                 | 12.31                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5184              | -47.54       | -25           | -22.54            | -71.06            | -54.8              | 2.44                 | 9.70                  | H                  |
|                                                 | 7776              | -48.57       | -25           | -23.57            | -76.34            | -58.2              | 2.34                 | 11.97                 | H                  |
|                                                 | 10368             | -48.15       | -25           | -23.15            | -77.6             | -57.8              | 2.69                 | 12.35                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5184              | -42.04       | -25           | -17.04            | -66.72            | -49.3              | 2.44                 | 9.70                  | V                  |
|                                                 | 7776              | -49.97       | -25           | -24.97            | -79.05            | -59.6              | 2.34                 | 11.97                 | V                  |
|                                                 | 10368             | -46.55       | -25           | -21.55            | -78.38            | -56.2              | 2.69                 | 12.35                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5220              | -44.56       | -25           | -19.56            | -68.2             | -51.8              | 2.46                 | 9.70                  | H                  |
|                                                 | 7836              | -49.22       | -25           | -24.22            | -76.81            | -58.9              | 2.32                 | 12.00                 | H                  |
|                                                 | 10440             | -48.52       | -25           | -23.52            | -77.9             | -58.2              | 2.69                 | 12.38                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5220              | -40.96       | -25           | -15.96            | -65.67            | -48.2              | 2.46                 | 9.70                  | V                  |
|                                                 | 7830              | -49.22       | -25           | -24.22            | -78.2             | -58.9              | 2.32                 | 12.00                 | V                  |
|                                                 | 10440             | -46.32       | -25           | -21.32            | -78.39            | -56                | 2.69                 | 12.38                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 38 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 5136              | -46.82       | -25           | -21.82            | -70.34            | -54.1              | 2.42                 | 9.70                  | H                  |
|                                                 | 7716              | -48.03       | -25           | -23.03            | -76.59            | -57.6              | 2.36                 | 11.93                 | H                  |
|                                                 | 10284             | -47.48       | -25           | -22.48            | -76.66            | -57.1              | 2.69                 | 12.31                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5136              | -44.22       | -25           | -19.22            | -69.2             | -51.5              | 2.42                 | 9.70                  | V                  |
|                                                 | 7716              | -48.33       | -25           | -23.33            | -77.72            | -57.9              | 2.36                 | 11.93                 | V                  |
|                                                 | 10284             | -45.18       | -25           | -20.18            | -76.75            | -54.8              | 2.69                 | 12.31                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5172              | -46.94       | -25           | -21.94            | -70.43            | -54.2              | 2.44                 | 9.70                  | H                  |
|                                                 | 7764              | -48.19       | -25           | -23.19            | -75.88            | -57.8              | 2.34                 | 11.96                 | H                  |
|                                                 | 10356             | -48.15       | -25           | -23.15            | -77.58            | -57.8              | 2.69                 | 12.34                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5172              | -43.54       | -25           | -18.54            | -68.04            | -50.8              | 2.44                 | 9.70                  | V                  |
|                                                 | 7764              | -49.29       | -25           | -24.29            | -78.67            | -58.9              | 2.34                 | 11.96                 | V                  |
|                                                 | 10356             | -46.45       | -25           | -21.45            | -78.14            | -56.1              | 2.69                 | 12.34                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5208              | -44.86       | -25           | -19.86            | -68.52            | -52.1              | 2.46                 | 9.70                  | H                  |
|                                                 | 7812              | -49.24       | -25           | -24.24            | -76.8             | -58.9              | 2.33                 | 11.99                 | H                  |
|                                                 | 10428             | -46.92       | -25           | -21.92            | -76.47            | -56.6              | 2.69                 | 12.37                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5208              | -41.96       | -25           | -16.96            | -66.63            | -49.2              | 2.46                 | 9.70                  | V                  |
|                                                 | 7812              | -50.64       | -25           | -25.64            | -79.39            | -60.3              | 2.33                 | 11.99                 | V                  |
|                                                 | 10428             | -45.62       | -25           | -20.62            | -77.96            | -55.3              | 2.69                 | 12.37                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 38 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 5136              | -48.32       | -25           | -23.32            | -71.6             | -55.6              | 2.42                 | 9.70                  | H                  |
|                                                 | 7716              | -47.33       | -25           | -22.33            | -74.73            | -56.9              | 2.36                 | 11.93                 | H                  |
|                                                 | 10284             | -47.88       | -25           | -22.88            | -76.76            | -57.5              | 2.69                 | 12.31                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5136              | -44.52       | -25           | -19.52            | -69.26            | -51.8              | 2.42                 | 9.70                  | V                  |
|                                                 | 7716              | -49.33       | -25           | -24.33            | -78.54            | -58.9              | 2.36                 | 11.93                 | V                  |
|                                                 | 10284             | -46.48       | -25           | -21.48            | -77.74            | -56.1              | 2.69                 | 12.31                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5172              | -44.34       | -25           | -19.34            | -68.47            | -51.6              | 2.44                 | 9.70                  | H                  |
|                                                 | 7752              | -49.00       | -25           | -24.00            | -76.62            | -58.6              | 2.35                 | 11.95                 | H                  |
|                                                 | 10344             | -48.86       | -25           | -23.86            | -78.08            | -58.5              | 2.69                 | 12.34                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5172              | -42.34       | -25           | -17.34            | -67.13            | -49.6              | 2.44                 | 9.70                  | V                  |
|                                                 | 7752              | -49.50       | -25           | -24.50            | -78.54            | -59.1              | 2.35                 | 11.95                 | V                  |
|                                                 | 10344             | -46.76       | -25           | -21.76            | -78.59            | -56.4              | 2.69                 | 12.34                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5204              | -51.35       | -25           | -26.35            | -75.06            | -58.6              | 2.45                 | 9.70                  | H                  |
|                                                 | 7800              | -52.65       | -25           | -27.65            | -80.27            | -62.3              | 2.33                 | 11.98                 | H                  |
|                                                 | 10400             | -51.93       | -25           | -26.93            | -81.32            | -61.6              | 2.69                 | 12.36                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5204              | -46.55       | -25           | -21.55            | -71.38            | -53.8              | 2.45                 | 9.70                  | V                  |
|                                                 | 7800              | -51.55       | -25           | -26.55            | -80.6             | -61.2              | 2.33                 | 11.98                 | V                  |
|                                                 | 10400             | -49.43       | -25           | -24.43            | -81.25            | -59.1              | 2.69                 | 12.36                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 41 / 5MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                        | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                         | 4992              | -46.75       | -25           | -21.75            | -70.05            | -54.1              | 2.33                 | 9.68                  | H                  |
|                                                | 7488              | -47.56       | -25           | -22.56            | -74.39            | -56.9              | 2.43                 | 11.78                 | H                  |
|                                                | 9984              | -47.08       | -25           | -22.08            | -75.13            | -56.6              | 2.69                 | 12.21                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 4992              | -40.85       | -25           | -15.85            | -65.38            | -48.2              | 2.33                 | 9.68                  | V                  |
|                                                | 7488              | -49.26       | -25           | -24.26            | -77.89            | -58.6              | 2.43                 | 11.78                 | V                  |
|                                                | 9984              | -46.58       | -25           | -21.58            | -77.01            | -56.1              | 2.69                 | 12.21                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                         | 5184              | -46.84       | -25           | -21.84            | -70.3             | -54.1              | 2.44                 | 9.70                  | H                  |
|                                                | 7776              | -48.07       | -25           | -23.07            | -75.7             | -57.7              | 2.34                 | 11.97                 | H                  |
|                                                | 10368             | -48.55       | -25           | -23.55            | -77.91            | -58.2              | 2.69                 | 12.35                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5184              | -41.84       | -25           | -16.84            | -66.45            | -49.1              | 2.44                 | 9.70                  | V                  |
|                                                | 7776              | -49.57       | -25           | -24.57            | -78.43            | -59.2              | 2.34                 | 11.97                 | V                  |
|                                                | 10368             | -46.35       | -25           | -21.35            | -78.22            | -56                | 2.69                 | 12.35                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                        | 5376              | -47.25       | -25           | -22.25            | -71.9             | -54.4              | 2.55                 | 9.70                  | H                  |
|                                                | 8052              | -51.04       | -25           | -26.04            | -78.78            | -60.9              | 2.28                 | 12.14                 | H                  |
|                                                | 10740             | -48.04       | -25           | -23.04            | -78.46            | -57.8              | 2.69                 | 12.45                 | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                | 5376              | -46.75       | -25           | -21.75            | -71.95            | -53.9              | 2.55                 | 9.70                  | V                  |
|                                                | 8055              | -49.04       | -25           | -24.04            | -78.82            | -58.9              | 2.28                 | 12.14                 | V                  |
|                                                | 10740             | -47.44       | -25           | -22.44            | -80               | -57.2              | 2.69                 | 12.45                 | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 41 / 10MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 4992              | -46.95       | -25           | -21.95            | -69.78            | -54.3              | 2.33                 | 9.68                  | H                  |
|                                                 | 7488              | -47.86       | -25           | -22.86            | -73.99            | -57.2              | 2.43                 | 11.78                 | H                  |
|                                                 | 9984              | -47.68       | -25           | -22.68            | -74.96            | -57.2              | 2.69                 | 12.21                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 4992              | -39.85       | -25           | -14.85            | -64.26            | -47.2              | 2.33                 | 9.68                  | V                  |
|                                                 | 7488              | -49.76       | -25           | -24.76            | -77.41            | -59.1              | 2.43                 | 11.78                 | V                  |
|                                                 | 9984              | -46.58       | -25           | -21.58            | -76.3             | -56.1              | 2.69                 | 12.21                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5172              | -45.94       | -25           | -20.94            | -68.59            | -53.2              | 2.44                 | 9.70                  | H                  |
|                                                 | 7765              | -49.88       | -25           | -24.88            | -76.9             | -59.5              | 2.34                 | 11.96                 | H                  |
|                                                 | 10354             | -48.25       | -25           | -23.25            | -77.07            | -57.9              | 2.69                 | 12.34                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5172              | -42.84       | -25           | -17.84            | -67.07            | -50.1              | 2.44                 | 9.70                  | V                  |
|                                                 | 7765              | -49.78       | -25           | -24.78            | -77.8             | -59.4              | 2.34                 | 11.96                 | V                  |
|                                                 | 10354             | -46.45       | -25           | -21.45            | -77.42            | -56.1              | 2.69                 | 12.34                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5364              | -48.05       | -25           | -23.05            | -71.96            | -55.2              | 2.55                 | 9.70                  | H                  |
|                                                 | 8041              | -51.94       | -25           | -26.94            | -78.95            | -61.8              | 2.28                 | 12.13                 | H                  |
|                                                 | 10722             | -48.85       | -25           | -23.85            | -78.46            | -58.6              | 2.69                 | 12.44                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5364              | -48.05       | -25           | -23.05            | -73.04            | -55.2              | 2.55                 | 9.70                  | V                  |
|                                                 | 8041              | -50.04       | -25           | -25.04            | -78.79            | -59.9              | 2.28                 | 12.13                 | V                  |
|                                                 | 10722             | -47.75       | -25           | -22.75            | -79.95            | -57.5              | 2.69                 | 12.44                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





| LTE Band 41 / 15MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 4992              | -55.15       | -25           | -30.15            | -78.44            | -62.5              | 2.33                 | 9.68                  | H                  |
|                                                 | 7490              | -52.95       | -25           | -27.95            | -78.86            | -62.3              | 2.43                 | 11.78                 | H                  |
|                                                 | 9987              | -51.69       | -25           | -26.69            | -79.5             | -61.2              | 2.69                 | 12.21                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 4992              | -52.85       | -25           | -27.85            | -77.12            | -60.2              | 2.33                 | 9.68                  | V                  |
|                                                 | 7490              | -50.85       | -25           | -25.85            | -78.78            | -60.2              | 2.43                 | 11.78                 | V                  |
|                                                 | 9987              | -49.89       | -25           | -24.89            | -79.64            | -59.4              | 2.69                 | 12.21                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5172              | -54.84       | -25           | -29.84            | -77.55            | -62.1              | 2.44                 | 9.70                  | H                  |
|                                                 | 7759              | -51.89       | -25           | -26.89            | -78.92            | -61.5              | 2.35                 | 11.96                 | H                  |
|                                                 | 10345             | -51.86       | -25           | -26.86            | -80.12            | -61.5              | 2.69                 | 12.34                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5172              | -52.94       | -25           | -27.94            | -77.13            | -60.2              | 2.44                 | 9.70                  | V                  |
|                                                 | 7759              | -50.29       | -25           | -25.29            | -78.9             | -59.9              | 2.35                 | 11.96                 | V                  |
|                                                 | 10345             | -48.86       | -25           | -23.86            | -79.9             | -58.5              | 2.69                 | 12.34                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5352              | -53.74       | -25           | -28.74            | -77.9             | -60.9              | 2.54                 | 9.70                  | H                  |
|                                                 | 8027              | -52.25       | -25           | -27.25            | -79.08            | -62.1              | 2.27                 | 12.12                 | H                  |
|                                                 | 10703             | -50.15       | -25           | -25.15            | -79.73            | -59.9              | 2.69                 | 12.44                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5352              | -52.94       | -25           | -27.94            | -77.85            | -60.1              | 2.54                 | 9.70                  | V                  |
|                                                 | 8027              | -50.05       | -25           | -25.05            | -79.16            | -59.9              | 2.27                 | 12.12                 | V                  |
|                                                 | 10703             | -47.75       | -25           | -22.75            | -79.61            | -57.5              | 2.69                 | 12.44                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 41 / 20MHz / QPSK / RB Size 1 Offset 0 |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                         | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                          | 4992              | -55.15       | -25           | -30.15            | -78.18            | -62.5              | 2.33                 | 9.68                  | H                  |
|                                                 | 7491              | -52.55       | -25           | -27.55            | -78.81            | -61.9              | 2.43                 | 11.78                 | H                  |
|                                                 | 9988              | -52.39       | -25           | -27.39            | -79.72            | -61.9              | 2.69                 | 12.21                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 4992              | -54.15       | -25           | -29.15            | -77.91            | -61.5              | 2.33                 | 9.68                  | V                  |
|                                                 | 7491              | -51.15       | -25           | -26.15            | -79.06            | -60.5              | 2.43                 | 11.78                 | V                  |
|                                                 | 9988              | -49.59       | -25           | -24.59            | -79.27            | -59.1              | 2.69                 | 12.21                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Middle                                          | 5172              | -54.64       | -25           | -29.64            | -77.46            | -61.9              | 2.44                 | 9.70                  | H                  |
|                                                 | 7752              | -51.70       | -25           | -26.70            | -78.85            | -61.3              | 2.35                 | 11.95                 | H                  |
|                                                 | 10336             | -51.56       | -25           | -26.56            | -80.08            | -61.2              | 2.69                 | 12.33                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5172              | -53.24       | -25           | -28.24            | -76.98            | -60.5              | 2.44                 | 9.70                  | V                  |
|                                                 | 7752              | -50.20       | -25           | -25.20            | -78.39            | -59.8              | 2.35                 | 11.95                 | V                  |
|                                                 | 10336             | -48.96       | -25           | -23.96            | -79.81            | -58.6              | 2.69                 | 12.33                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
| Highest                                         | 5340              | -54.63       | -25           | -29.63            | -78.39            | -61.8              | 2.53                 | 9.70                  | H                  |
|                                                 | 8013              | -52.66       | -25           | -27.66            | -79.54            | -62.5              | 2.27                 | 12.11                 | H                  |
|                                                 | 10684             | -50.05       | -25           | -25.05            | -79.27            | -59.8              | 2.69                 | 12.44                 | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | H                  |
|                                                 | 5340              | -53.33       | -25           | -28.33            | -78.33            | -60.5              | 2.53                 | 9.70                  | V                  |
|                                                 | 8013              | -50.36       | -25           | -25.36            | -79.38            | -60.2              | 2.27                 | 12.11                 | V                  |
|                                                 | 10684             | -47.45       | -25           | -22.45            | -79.43            | -57.2              | 2.69                 | 12.44                 | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |
|                                                 |                   |              |               |                   |                   |                    |                      |                       | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**<WPC Charging Mode>**

| LTE Band 41 / 10MHz / QPSK / RB Size 1 Offset 0 |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|-------------------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                         | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                          | 4992                 | -46.35          | -25              | -21.35                  | -70.18                  | -53.7                    | 2.33                       | 9.68                        | H                     |
|                                                 | 7488                 | -51.46          | -25              | -26.46                  | -78.53                  | -60.8                    | 2.43                       | 11.78                       | H                     |
|                                                 | 9984                 | -47.28          | -25              | -22.28                  | -75.25                  | -56.8                    | 2.69                       | 12.21                       | H                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | H                     |
|                                                 | 4992                 | -44.45          | -25              | -19.45                  | -69.33                  | -51.8                    | 2.33                       | 9.68                        | V                     |
|                                                 | 7488                 | -46.86          | -25              | -21.86                  | -75.47                  | -56.2                    | 2.43                       | 11.78                       | V                     |
|                                                 | 9984                 | -42.58          | -25              | -17.58                  | -73.2                   | -52.1                    | 2.69                       | 12.21                       | V                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | V                     |
|                                                 |                      |                 |                  |                         |                         |                          |                            |                             | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.