



# FCC RF Test Report

**APPLICANT** : Xiaomi Communications Co., Ltd.  
**EQUIPMENT** : Mobile Phone  
**BRAND NAME** : MI  
**MODEL NAME** : M1803D5XA  
**FCC ID** : 2AFZZ-XMSD5X  
**STANDARD** : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(F),  
27(M), 27(H)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Feb. 08, 2018 and completely tested on Apr. 04, 2018. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Approved by: James Huang / Manager



**Sportun International (Kunshan) Inc.**  
No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335  
China



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## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FG820821B  | Rev. 01 | Initial issue of report | Apr. 08, 2018 |
|            |         |                         |               |
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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   | -      |
|                | §22.913(a)(2)  | Effective Radiated Power (Band 5) (Band 26)   | ERP < 7 Watt                        |        |        |
|                | §27.50(b)(10)<br>§27.50(c)(10)   | Effective Radiated Power (Band 12) (Band 13) (Band 17)  | ERP < 3 Watt                        |        |        |
|                | §24.232(c)<br>§27.50(h)(2)   | Equivalent Isotropic Radiated Power (Band 2)(Band 25) (Band 7) (Band 38) (Band 41)                          | EIRP < 2Watt                        |        |        |
|                | §27.50(d)(4)   | Equivalent Isotropic Radiated Power (Band 4)  | EIRP < 1Watt                        |        |        |
| 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 (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25)(Band 26) | < 43+10log10(P[Watts])              | PASS   | -      |
|                | §27.53(m)(4)   | Conducted Band Edge Measurement (Band 7) (Band 38) (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 (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26)    | < 43+10log10(P[Watts])              | PASS   | -      |
|                | §2.1051<br>§27.53(m)(4)  | Conducted Spurious Emission (Band 7) (Band 38)(Band 41)   | < 55+10log <sub>10</sub> (P[Watts]) |        |        |
| 3.9            | §2.1055<br>§22.355   | Frequency Stability Temperature & Voltage   | < 2.5 ppm for Part 22H              | PASS   | -      |
|                | §2.1055<br>§24.235<br>§27.54   |   | Within Authorized Band              |        |        |



| Report Section | FCC Rule  | Description  | Limit                               | Result | Remark                                     |
|----------------|---|--|-------------------------------------|--------|--|
| 4.4            | §2.1053<br>§22.917(a)<br>§24.238(a)<br>§27.53(c)(2)<br>§27.53(g)<br>§27.53(h) | Radiated Spurious Emission<br>(Band 2) (Band 4) (Band 5)<br>(Band 12) (Band 13) (Band 17)<br>(Band 25) (Band 26) | < 43+10log <sub>10</sub> (P[Watts]) | PASS   | Under limit<br>14.86 dB at<br>1560.000 MHz |
|                | §2.1053<br>§27.53(m)(4)   | Radiated Spurious Emission<br>(Band 7) (Band 38)(Band 41)  | < 55+10log <sub>10</sub> (P[Watts]) |        |  |



## 1 General Description

### 1.1 Applicant

**Xiaomi Communications Co., Ltd.**

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

### 1.2 Manufacturer

**Xiaomi Communications Co., Ltd.**

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

### 1.3 Product Feature of Equipment Under Test

| Product Feature                        |  |
|--|--|
| <b>Equipment</b>                       | Mobile Phone   |
| <b>Brand Name</b>                      | MI   |
| <b>Model Name</b>                      | M1803D5XA  |
| <b>FCC ID</b>                          | 2AFZZ-XMSD5X   |
| <b>EUT supports Radios application</b> | CDMA/EV-DO/GSM/GPRS/EGPRS/WCDMA/HSPA/<br>DC-HSDPA/HSPA+/LTE/NFC<br>WLAN 2.4GHz 802.11b/g/n HT20/HT40/<br>WLAN 5GHz 802.11a/n HT20/HT40/<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/<br>Bluetooth v3.0 + EDR/Bluetooth v4.0 LE/<br>Bluetooth v4.1 LE/Bluetooth v4.2 LE/Bluetooth v5.0 LE |
| <b>IMEI Code</b>                       | Conducted:<br>867601030223652/867601030223660 for LTE Band<br>2/4/5/12/13/17/38/41/7CA/38CA/41CA<br>867601030224817/867601030224825 for LTE Band 7/25/26<br>Radiation: 867601030222613/867601030222621   |
| <b>HW Version</b>                      | P3.0   |
| <b>SW Version</b>                      | MIUI 9   |
| <b>EUT Stage</b>                       | Pre-Production Unit  |

**Remark:** There are two types of EUT sample 1 and sample 2, the differences between two samples are only for Flash, sample 1 is 6GB+64GB, sample 2 is 6GB+128GB. We chose the sample 1 to perform all tests.



## 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification |  |
|---|--|
| <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 12 : 699.7 MHz ~ 715.3 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 26 : 824.7MHz ~ 848.3 MHz<br>LTE Band 38 : 2572.5MHz ~ 2617.5MHz<br>LTE Band 41 : 2498.5 MHz ~ 2687.5 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 : 2622.5 MHz ~ 2687.5 MHz<br>LTE Band 12 : 729.7 MHz ~ 745.3 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 : 1930.7 MHz ~ 1994.3 MHz<br>LTE Band 26 : 869.7 MHz ~ 893.3 MHz<br>LTE Band 38 : 2572.5 MHz ~ 2617.5 MHz<br>LTE Band 41 : 2498.5 MHz ~ 2687.5 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 12 : 1.4MHz / 3MHz / 5MHz / 10MHz<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 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz<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 : 22.90 dBm<br>LTE Band 4 : 23.09 dBm<br>LTE Band 5 : 22.67 dBm<br>LTE Band 7 : 22.84 dBm/LTE Band 7_CA : 23.35 dBm<br>LTE Band 12 : 22.67 dBm<br>LTE Band 13 : 22.61 dBm<br>LTE Band 17 : 22.69 dBm<br>LTE Band 25 : 22.90 dBm<br>LTE Band 26 : 22.95 dBm<br>LTE Band 38 : 22.89 dBm/LTE Band 38_CA : 23.29 dBm<br>LTE Band 41 : 22.91 dBm/LTE Band 41_CA : 23.22 dBm  |
| <b>Antenna Gain</b>                     | LTE Band 2 : 1.61 dBi<br>LTE Band 4 : 0.15 dBi<br>LTE Band 5 : 0.37 dBi<br>LTE Band 7 : -0.76 dBi<br>LTE Band 12 : -4.68 dBi<br>LTE Band 13 : -3.94 dBi  |



|                    |  |
|--------------------|--|
|                    | LTE Band 17 : -4.68 dBi<br>LTE Band 25 : 1.61 dBi<br>LTE Band 26 : 0.37 dBi<br>LTE Band 38 : -0.54 dBi<br>LTE Band 41 : 0.12 dBi |
| Type of Modulation | QPSK / 16QAM / 64QAM   |

## 1.5 Modification of EUT

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



## 1.6 Maximum EIRP Power, Frequency Tolerance, and Emission Designator

| LTE Band 2  |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|-----------------|
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1850.7 ~ 1909.3       | 1M09G7D                      | -                         | 0.2582                    | 1M10W7D                      | -                         | 0.2339          |
| 3           | 1851.5 ~ 1908.5       | 2M72G7D                      | -                         | 0.2786                    | 2M73W7D                      | -                         | 0.2415          |
| 5           | 1852.5 ~ 1907.5       | 4M49G7D                      | -                         | 0.2742                    | 4M51W7D                      | -                         | 0.2344          |
| 10          | 1855.0 ~ 1905.0       | 9M05G7D                      | 0.0022                    | 0.2818                    | 9M03W7D                      | -                         | 0.2427          |
| 15          | 1857.5 ~ 1902.5       | 13M5G7D                      | -                         | 0.2780                    | 13M5W7D                      | -                         | 0.2399          |
| 20          | 1860.0 ~ 1900.0       | 18M4G7D                      | -                         | 0.2825                    | 18M4W7D                      | -                         | 0.2393          |
| LTE Band 2  |                       | 64QAM                        |                           |                           |                              |                           |                 |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum EIRP(W)           |                 |
| 1.4         | 1850.7 ~ 1909.3       | 1M10W7D                      |                           | -                         |                              | 0.1828                    |                 |
| 3           | 1851.5 ~ 1908.5       | 2M72W7D                      |                           | -                         |                              | 0.1841                    |                 |
| 5           | 1852.5 ~ 1907.5       | 4M50W7D                      |                           | -                         |                              | 0.1841                    |                 |
| 10          | 1855.0 ~ 1905.0       | 9M03W7D                      |                           | -                         |                              | 0.1879                    |                 |
| 15          | 1857.5 ~ 1902.5       | 13M5W7D                      |                           | -                         |                              | 0.1879                    |                 |
| 20          | 1860.0 ~ 1900.0       | 18M5W7D                      |                           | -                         |                              | 0.1875                    |                 |
| LTE Band 25 |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1850.7 ~ 1914.3       | 1M09G7D                      | -                         | 0.2716                    | 1M09W7D                      | -                         | 0.2344          |
| 3           | 1851.5 ~ 1913.5       | 2M72G7D                      | -                         | 0.2723                    | 2M72W7D                      | -                         | 0.2339          |
| 5           | 1852.5 ~ 1912.5       | 4M48G7D                      | -                         | 0.2754                    | 4M51W7D                      | -                         | 0.2355          |
| 10          | 1855.0 ~ 1910.0       | 9M07G7D                      | 0.0029                    | 0.2754                    | 9M03W7D                      | -                         | 0.2388          |
| 15          | 1857.5 ~ 1907.5       | 13M4G7D                      | -                         | 0.2818                    | 13M5W7D                      | -                         | 0.2438          |
| 20          | 1860.0 ~ 1905.0       | 18M3G7D                      | -                         | 0.2825                    | 18M4W7D                      | -                         | 0.2455          |



| LTE Band 25 |                       | 64QAM                        |                           |                           |                              |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|-----------------|
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum EIRP(W)           |                 |
| 1.4         | 1850.7 ~ 1914.3       | 1M09W7D                      |                           | -                         |                              | 0.1811                    |                 |
| 3           | 1851.5 ~ 1913.5       | 2M72W7D                      |                           | -                         |                              | 0.1816                    |                 |
| 5           | 1852.5 ~ 1912.5       | 4M49W7D                      |                           | -                         |                              | 0.1841                    |                 |
| 10          | 1855.0 ~ 1910.0       | 9M03W7D                      |                           | -                         |                              | 0.1862                    |                 |
| 15          | 1857.5 ~ 1907.5       | 13M5W7D                      |                           | -                         |                              | 0.1901                    |                 |
| 20          | 1860.0 ~ 1905.0       | 18M4W7D                      |                           | -                         |                              | 0.1919                    |                 |
| LTE Band 4  |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1710.7 ~ 1754.3       | 1M09G7D                      | -                         | 0.1995                    | 1M09W7D                      | -                         | 0.1714          |
| 3           | 1711.5 ~ 1753.5       | 2M72G7D                      | -                         | 0.1986                    | 2M73W7D                      | -                         | 0.1722          |
| 5           | 1712.5 ~ 1752.5       | 4M50G7D                      | -                         | 0.2056                    | 4M49W7D                      | -                         | 0.1786          |
| 10          | 1715.0 ~ 1750.0       | 9M03G7D                      | 0.0029                    | 0.2028                    | 9M05W7D                      | -                         | 0.1750          |
| 15          | 1717.5 ~ 1747.5       | 13M5G7D                      | -                         | 0.2075                    | 13M5W7D                      | -                         | 0.1799          |
| 20          | 1720.0 ~ 1745.0       | 18M4G7D                      | -                         | 0.2109                    | 18M4W7D                      | -                         | 0.1816          |
| LTE Band 4  |                       | 64QAM                        |                           |                           |                              |                           |                 |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum EIRP(W)           |                 |
| 1.4         | 1710.7 ~ 1754.3       | 1M10W7D                      |                           | -                         |                              | 0.1330                    |                 |
| 3           | 1711.5 ~ 1753.5       | 2M75W7D                      |                           | -                         |                              | 0.1340                    |                 |
| 5           | 1712.5 ~ 1752.5       | 4M51W7D                      |                           | -                         |                              | 0.1371                    |                 |
| 10          | 1715.0 ~ 1750.0       | 9M09W7D                      |                           | -                         |                              | 0.1358                    |                 |
| 15          | 1717.5 ~ 1747.5       | 13M5W7D                      |                           | -                         |                              | 0.1413                    |                 |
| 20          | 1720.0 ~ 1745.0       | 18M4W7D                      |                           | -                         |                              | 0.1403                    |                 |
| LTE Band 5  |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)            | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)  |
| 1.4         | 824.7 ~ 848.3         | 1M10G7D                      | -                         | 0.1216                    | 1M09W7D                      | -                         | 0.1052          |
| 3           | 825.5 ~ 847.5         | 2M72G7D                      | -                         | 0.1225                    | 2M72W7D                      | -                         | 0.1054          |
| 5           | 826.5 ~ 846.5         | 4M50G7D                      | -                         | 0.1222                    | 4M50W7D                      | -                         | 0.1054          |
| 10          | 829.0 ~ 844.0         | 9M03G7D                      | 0.0060                    | 0.1227                    | 9M01W7D                      | -                         | 0.1047          |



| LTE Band 5    |                       | 64QAM                        |                           |                           |                              |                           |
|---------------|-----------------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) | Maximum ERP(W)               |                           |
| 1.4           | 824.7 ~ 848.3         | 1M09W7D                      |                           | -                         | 0.0807                       |                           |
| 3             | 825.5 ~ 847.5         | 2M73W7D                      |                           | -                         | 0.0822                       |                           |
| 5             | 826.5 ~ 846.5         | 4M50W7D                      |                           | -                         | 0.0820                       |                           |
| 10            | 829.0 ~ 844.0         | 9M07W7D                      |                           | -                         | 0.0817                       |                           |
| LTE Band 7    |                       | QPSK                         |                           |                           | 16QAM                        |                           |
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) |
| 5             | 2502.5 ~ 2567.5       | 4M49G7D                      | -                         | 0.1567                    | 4M49W7D                      | -                         |
| 10            | 2505.0 ~ 2565.0       | 9M05G7D                      | 0.0032                    | 0.1574                    | 9M03W7D                      | -                         |
| 15            | 2507.5 ~ 2562.5       | 13M4G7D                      | -                         | 0.1563                    | 13M5W7D                      | -                         |
| 20            | 2510.0 ~ 2560.0       | 18M3G7D                      | -                         | 0.1614                    | 18M4W7D                      | -                         |
| LTE Band 7    |                       | 64QAM                        |                           |                           |                              |                           |
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) | Maximum EIRP(W)              |                           |
| 5             | 2502.5 ~ 2567.5       | 4M50W7D                      |                           | -                         | 0.1052                       |                           |
| 10            | 2505.0 ~ 2565.0       | 9M03W7D                      |                           | -                         | 0.1062                       |                           |
| 15            | 2507.5 ~ 2562.5       | 13M5W7D                      |                           | -                         | 0.1052                       |                           |
| 20            | 2510.0 ~ 2560.0       | 18M4W7D                      |                           | -                         | 0.1074                       |                           |
| LTE Band 7 CA |                       | QPSK                         |                           |                           | 16QAM                        |                           |
| BW (MHz)      |                       | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) |
| 10MHz+20MHz   |                       | 28M1G7D                      | -                         | 0.1791                    | 27M9W7D                      | -                         |
| 15MHz+15MHz   |                       | 28M7G7D                      | -                         | 0.1770                    | 28M6W7D                      | -                         |
| 15MHz+20MHz   |                       | 32M8G7D                      | -                         | 0.1795                    | 32M9W7D                      | -                         |
| 15MHz+10MHz   |                       | 23M5G7D                      | -                         | 0.1799                    | 23M6W7D                      | -                         |
| 20MHz+10MHz   |                       | 28M1G7D                      | -                         | 0.1774                    | 28M1W7D                      | -                         |
| 20MHz+15MHz   |                       | 32M9G7D                      | -                         | 0.1758                    | 32M9W7D                      | -                         |
| 20MHz+20MHz   |                       | 37M6G7D                      | -                         | 0.1816                    | 37M8W7D                      | -                         |



| LTE Band 7 CA |                       | 64QAM                           |                           |                              |                              |                           |                |
|---------------|-----------------------|---------------------------------|---------------------------|------------------------------|------------------------------|---------------------------|----------------|
| BW (MHz)      |                       | Emission Designator<br>(99%OBW) |                           | Frequency Tolerance<br>(ppm) |                              | Maximum<br>EIRP(W)        |                |
| 10MHz+20MHz   |                       | 27M9W7D                         |                           | -                            |                              | 0.1409                    |                |
| 15MHz+15MHz   |                       | 28M6W7D                         |                           | -                            |                              | 0.0991                    |                |
| 15MHz+20MHz   |                       | 32M8W7D                         |                           | -                            |                              | 0.0995                    |                |
| 15MHz+10MHz   |                       | 23M5W7D                         |                           | -                            |                              | 0.0975                    |                |
| 20MHz+10MHz   |                       | 28M1W7D                         |                           | -                            |                              | 0.1400                    |                |
| 20MHz+15MHz   |                       | 32M8W7D                         |                           | -                            |                              | 0.0982                    |                |
| 20MHz+20MHz   |                       | 37M6W7D                         |                           | -                            |                              | 0.1199                    |                |
| LTE Band 12   |                       | QPSK                            |                           |                              | 16QAM                        |                           |                |
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW)    | Frequency Tolerance (ppm) | Maximum ERP(W)               | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 1.4           | 699.7 ~ 715.3         | 1M09G7D                         | -                         | 0.0378                       | 1M09W7D                      | -                         | 0.0320         |
| 3             | 700.5 ~ 714.5         | 2M75G7D                         | -                         | 0.0378                       | 2M72W7D                      | -                         | 0.0326         |
| 5             | 701.5 ~ 713.5         | 4M52G7D                         | -                         | 0.0380                       | 4M49W7D                      | -                         | 0.0324         |
| 10            | 704.0 ~ 711.0         | 9M01G7D                         | 0.0112                    | 0.0384                       | 9M05W7D                      | -                         | 0.0327         |
| LTE Band 12   |                       | 64QAM                           |                           |                              |                              |                           |                |
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW)    |                           | Frequency Tolerance (ppm)    |                              | Maximum ERP(W)            |                |
| 1.4           | 699.7 ~ 715.3         | 1M09W7D                         |                           | -                            |                              | 0.0251                    |                |
| 3             | 700.5 ~ 714.5         | 2M72W7D                         |                           | -                            |                              | 0.0254                    |                |
| 5             | 701.5 ~ 713.5         | 4M50W7D                         |                           | -                            |                              | 0.0256                    |                |
| 10            | 704.0 ~ 711.0         | 9M07W7D                         |                           | -                            |                              | 0.0259                    |                |
| LTE Band 13   |                       | QPSK                            |                           |                              | 16QAM                        |                           |                |
| BW (MHz)      | Frequency Range (MHz) | Emission Designator (99%OBW)    | Frequency Tolerance (ppm) | Maximum ERP(W)               | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 5             | 779.5 ~ 784.5         | 4M50G7D                         | -                         | 0.0448                       | 4M50W7D                      | -                         | 0.0383         |
| 10            | 782.0                 | 9M01G7D                         | 0.0090                    | 0.0449                       | 8M93W7D                      | -                         | 0.0383         |



| LTE Band 13 |                       | 64QAM                        |                           |                           |                              |                           |                |
|-------------|-----------------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|----------------|
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum ERP(W)            |                |
| 5           | 779.5 ~ 784.5         | 4M49W7D                      |                           | -                         |                              | 0.0298                    |                |
| 10          | 782.0                 | 8M99W7D                      |                           | -                         |                              | 0.0297                    |                |
| LTE Band 17 |                       | QPSK                         |                           |                           | 16QAM                        |                           |                |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)            | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 5           | 706.5 ~ 713.5         | 4M50G7D                      | -                         | 0.0385                    | 4M52W7D                      | -                         | 0.0328         |
| 10          | 709.0 ~ 711.0         | 9M07G7D                      | 0.0066                    | 0.0385                    | 8M99W7D                      | -                         | 0.0328         |
| LTE Band 17 |                       | 64QAM                        |                           |                           |                              |                           |                |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum ERP(W)            |                |
| 5           | 706.5 ~ 713.5         | 4M49W7D                      |                           | -                         |                              | 0.0258                    |                |
| 10          | 709.0 ~ 711.0         | 9M03W7D                      |                           | -                         |                              | 0.0255                    |                |
| LTE Band 26 |                       | QPSK                         |                           |                           | 16QAM                        |                           |                |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W)            | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum ERP(W) |
| 1.4         | 824.7 ~ 848.3         | 1M09G7D                      | -                         | 0.1161                    | 1M09W7D                      | -                         | 0.0989         |
| 3           | 825.5 ~ 847.5         | 2M73G7D                      | -                         | 0.1169                    | 2M75W7D                      | -                         | 0.1002         |
| 5           | 826.5 ~ 846.5         | 4M50G7D                      | -                         | 0.1186                    | 4M51W7D                      | -                         | 0.1014         |
| 10          | 829.0 ~ 844.0         | 9M05G7D                      | 0.0096                    | 0.1186                    | 9M03W7D                      | -                         | 0.1021         |
| 15          | 831.5 ~ 841.5         | 13M5G7D                      | -                         | 0.1312                    | 13M5W7D                      | -                         | 0.1127         |
| CH26765     | 821.5                 | 13M4G7D                      | -                         | 0.1312                    | 13M4W7D                      | -                         | 0.1122         |
| LTE Band 26 |                       | 64QAM                        |                           |                           |                              |                           |                |
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum ERP(W)            |                |
| 1.4         | 824.7 ~ 848.3         | 1M09W7D                      |                           | -                         |                              | 0.0783                    |                |
| 3           | 825.5 ~ 847.5         | 2M73W7D                      |                           | -                         |                              | 0.0783                    |                |
| 5           | 826.5 ~ 846.5         | 4M51W7D                      |                           | -                         |                              | 0.0789                    |                |
| 10          | 829.0 ~ 844.0         | 9M03W7D                      |                           | -                         |                              | 0.0794                    |                |
| 15          | 831.5 ~ 841.5         | 13M5W7D                      |                           | -                         |                              | 0.0871                    |                |
| CH26765     | 821.5                 | 13M5W7D                      |                           | -                         |                              | 0.0875                    |                |



| LTE Band 38    |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
|----------------|-----------------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|-----------------|
| BW (MHz)       | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5              | 2572.5 ~ 2617.5       | 4M51G7D                      | -                         | 0.1648                    | 4M50W7D                      | -                         | 0.1349          |
| 10             | 2575.0 ~ 2615.0       | 9M03G7D                      | 0.0027                    | 0.1683                    | 9M07W7D                      | -                         | 0.1380          |
| 15             | 2577.5 ~ 2612.5       | 13M4G7D                      | -                         | 0.1714                    | 13M5W7D                      | -                         | 0.1393          |
| 20             | 2580.0 ~ 2610.0       | 18M3G7D                      | -                         | 0.1718                    | 18M4W7D                      | -                         | 0.1406          |
| LTE Band 38    |                       | 64QAM                        |                           |                           |                              |                           |                 |
| BW (MHz)       | Frequency Range (MHz) | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum EIRP(W)           |                 |
| 5              | 2572.5 ~ 2617.5       | 4M50W7D                      |                           | -                         |                              | 0.1016                    |                 |
| 10             | 2575.0 ~ 2615.0       | 9M03W7D                      |                           | -                         |                              | 0.1030                    |                 |
| 15             | 2577.5 ~ 2612.5       | 13M5W7D                      |                           | -                         |                              | 0.1042                    |                 |
| 20             | 2580.0 ~ 2610.0       | 18M4W7D                      |                           | -                         |                              | 0.1045                    |                 |
| LTE Band 38 CA |                       | QPSK                         |                           |                           | 16QAM                        |                           |                 |
| BW (MHz)       |                       | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 15MHz+15MHz    |                       | 28M6G7D                      | -                         | 0.1871                    | 28M7W7D                      | -                         | 0.1496          |
| 20MHz+20MHz    |                       | 37M7G7D                      | -                         | 0.1884                    | 37M8W7D                      | -                         | 0.1581          |
| LTE Band 38 CA |                       | 64QAM                        |                           |                           |                              |                           |                 |
| BW (MHz)       |                       | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) |                              | Maximum EIRP(W)           |                 |
| 15MHz+15MHz    |                       | 28M6W7D                      |                           | -                         |                              | 0.0938                    |                 |
| 20MHz+20MHz    |                       | 37M6W7D                      |                           | -                         |                              | 0.1156                    |                 |



| LTE Band 41 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 2498.5 ~ 2687.5       | 4M50G7D                      | -                         | 0.1932          | 4M51W7D                      | -                         | 0.1567          |
| 10          | 2501.0 ~ 2685.0       | 9M13G7D                      | 0.0022                    | 0.1959          | 9M03W7D                      | -                         | 0.1611          |
| 15          | 2503.5 ~ 2682.5       | 13M5G7D                      | -                         | 0.2000          | 13M5W7D                      | -                         | 0.1629          |
| 20          | 2506.0 ~ 2680.0       | 18M4G7D                      | -                         | 0.2009          | 18M3W7D                      | -                         | 0.1648          |

| LTE Band 41 |                       | 64QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|-----------------|
| BW (MHz)    | Frequency Range (MHz) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 2498.5 ~ 2687.5       | 4M50W7D                      | -                         | 0.1175          |
| 10          | 2501.0 ~ 2685.0       | 9M05W7D                      | -                         | 0.1211          |
| 15          | 2503.5 ~ 2682.5       | 13M4W7D                      | -                         | 0.1222          |
| 20          | 2506.0 ~ 2680.0       | 18M4W7D                      | -                         | 0.1233          |



| LTE Band 41 CA |                              | QPSK                      |                           |                              | 16QAM                     |                 |  |
|----------------|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|-----------------|--|
| BW (MHz)       | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W)           | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |  |
| 5MHz+20MHz     | 23M2G7D                      | -                         | 0.2089                    | 23M3W7D                      | -                         | 0.1652          |  |
| 10MHz+20MHz    | 28M0G7D                      | -                         | 0.2153                    | 28M1W7D                      | -                         | 0.1644          |  |
| 10MHz+15MHz    | 23M5G7D                      | -                         | 0.2099                    | 23M5W7D                      | -                         | 0.1675          |  |
| 15MHz+15MHz    | 28M6G7D                      | -                         | 0.2109                    | 28M6W7D                      | -                         | 0.1683          |  |
| 15MHz+20MHz    | 32M9G7D                      | -                         | 0.2084                    | 32M9W7D                      | -                         | 0.1675          |  |
| 15MHz+10MHz    | 23M5G7D                      | -                         | 0.2153                    | 23M5W7D                      | -                         | 0.1734          |  |
| 20MHz+5MHz     | 23M2G7D                      | -                         | 0.2138                    | 23M3W7D                      | -                         | 0.1637          |  |
| 20MHz+10MHz    | 28M1G7D                      | -                         | 0.2104                    | 28M1W7D                      | -                         | 0.1679          |  |
| 20MHz+15MHz    | 32M9G7D                      | -                         | 0.2080                    | 32M8W7D                      | -                         | 0.1660          |  |
| 20MHz+20MHz    | 37M6G7D                      | -                         | 0.2158                    | 37M7W7D                      | -                         | 0.1687          |  |
| LTE Band 41 CA |                              | 64QAM                     |                           |                              |                           |                 |  |
| BW (MHz)       | Emission Designator (99%OBW) |                           | Frequency Tolerance (ppm) | Maximum EIRP(W)              |                           |                 |  |
| 5MHz+20MHz     | 23M3W7D                      |                           | -                         | 0.1094                       |                           |                 |  |
| 10MHz+20MHz    | 28M0W7D                      |                           | -                         | 0.1059                       |                           |                 |  |
| 10MHz+15MHz    | 23M4W7D                      |                           | -                         | 0.1074                       |                           |                 |  |
| 15MHz+15MHz    | 28M5W7D                      |                           | -                         | 0.1079                       |                           |                 |  |
| 15MHz+20MHz    | 32M7W7D                      |                           | -                         | 0.1067                       |                           |                 |  |
| 15MHz+10MHz    | 23M5W7D                      |                           | -                         | 0.1081                       |                           |                 |  |
| 20MHz+5MHz     | 23M3W7D                      |                           | -                         | 0.1067                       |                           |                 |  |
| 20MHz+10MHz    | 28M1W7D                      |                           | -                         | 0.1067                       |                           |                 |  |
| 20MHz+15MHz    | 32M8W7D                      |                           | -                         | 0.1064                       |                           |                 |  |
| 20MHz+20MHz    | 37M6W7D                      |                           | -                         | 0.1213                       |                           |                 |  |



## 1.7 Testing Location

Sportun International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No is CN5013.

|                           |   |           |                                       |
|---------------------------|---|-----------|---------------------------------------|
| <b>Test Site</b>          | Sportun International (Kunshan) Inc.  |           |                                       |
| <b>Test Site Location</b> | No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China<br>TEL : +86-512-57900158<br>FAX : +86-512-57900958 |           |                                       |
| <b>Test Site No.</b>      | <b>Sportun Site No.</b>   |           | <b>FCC Test Firm Registration No.</b> |
|                           | TH01-KS   | 03CH03-KS | 630927                                |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

## 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(L), 27(F), 27(M), 27(H)
- ♦ ANSI / TIA-603-E
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

### 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, 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 v03 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 | 64QAM | 1    | Half | Full | L            | M | H |
| Max. Output Power     | 2    | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 4    | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 5    | v               | v | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 7    | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 38   | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 12   | v               | v | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 13   | -               | - | v |    | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 13   | -               | - |   | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v |   |
|                       | 17   | -               | - | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 25   | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 26   | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 41   | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
| Peak-to-Average Ratio | 4    |                 |   |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 7    | -               | - |   |    | v  | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 12   |                 |   | v | -  | -  | v  | v          | v     | v     |      | v    | v    | v            | v | v |
|                       | 13   | -               | - | v | -  | -  | v  | v          | v     | v     |      | v    |      | v            |   |   |
|                       | 25   |                 |   |   |    | v  | v  | v          | v     | v     |      | v    | v    | v            | v | v |
|                       | 26   |                 |   |   |    | v  | -  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 41   | -               | - |   |    | v  | v  | v          | v     | v     | v    |      | v    | v            | v | v |



| Test Items             | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       |        | RB # |       | Test Channel |   |   |   |
|------------------------|------|-----------------|---|---|----|----|----|------------|-------|--------|------|-------|--------------|---|---|---|
|                        |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 64Q AM | 1    | Ha If | Full         | L | M | H |
| 26dB and 99% Bandwidth | 2    | v               | v | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 4    | v               | v | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 5    | v               | v | v | v  | -  | -  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 7    | -               | - | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 38   | -               | - | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 12   | v               | v | v | v  | -  | -  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 13   | -               | - | v |    | -  | -  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 13   | -               | - |   | v  | -  | -  | v          | v     | v      |      |       | v            |   | v |   |
|                        | 17   | -               | - | v | v  | -  | -  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 25   | v               | v | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 26   | v               | v | v | v  | v  | -  | v          | v     | v      |      |       | v            | v | v | v |
|                        | 41   | -               | - | v | v  | v  | v  | v          | v     | v      |      |       | v            | v | v | v |
| Conducted Band Edge    | 4    | v               | v | v | v  | v  | v  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 7    | -               | - | v | v  | v  | v  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 12   | v               | v | v | v  | -  | -  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 13   | -               | - | v |    | -  | -  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 13   | -               | - |   | v  | -  | -  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 25   | v               | v | v | v  | v  | v  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 26   | v               | v | v | v  | v  | -  | v          | v     | v      | v    | v     | v            | v |   | v |
|                        | 41   | -               | - | v | v  | v  | v  | v          | v     | v      | v    | v     | v            | v |   | v |



| Test Items                  | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       |       | RB # |      |      | Test Channel |   |   |
|-----------------------------|------|-----------------|---|---|----|----|----|------------|-------|-------|------|------|------|--------------|---|---|
|                             |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 64QAM | 1    | Half | Full | L            | M | H |
| Conducted Spurious Emission | 4    | v               | v | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 7    | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 12   | v               | v | v | v  | -  | -  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 13   | -               | - | v |    | -  | -  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 13   | -               | - |   | v  | -  | -  | v          | v     | v     | v    |      |      | v            |   |   |
|                             | 25   | v               | v | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 26   | v               | v | v | v  | v  | -  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 41   | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
| Frequency Stability         | 2    |                 |   |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |
|                             | 4    |                 |   |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |
|                             | 5    |                 |   |   | v  | -  | -  | v          |       |       |      |      |      | v            |   | v |
|                             | 7    | -               | - |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |
|                             | 38   | -               | - |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |
|                             | 12   |                 |   |   | v  | -  | -  | v          |       |       |      |      |      | v            |   | v |
|                             | 13   | -               | - |   | v  | -  | -  | v          |       |       |      |      |      | v            |   | v |
|                             | 17   | -               | - |   | v  | -  | -  | v          |       |       |      |      |      | v            |   | v |
|                             | 25   |                 |   |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |
|                             | 26   |                 |   |   | v  |    | -  | v          |       |       |      |      |      | v            |   | v |
|                             | 41   | -               | - |   | v  |    |    | v          |       |       |      |      |      | v            |   | v |

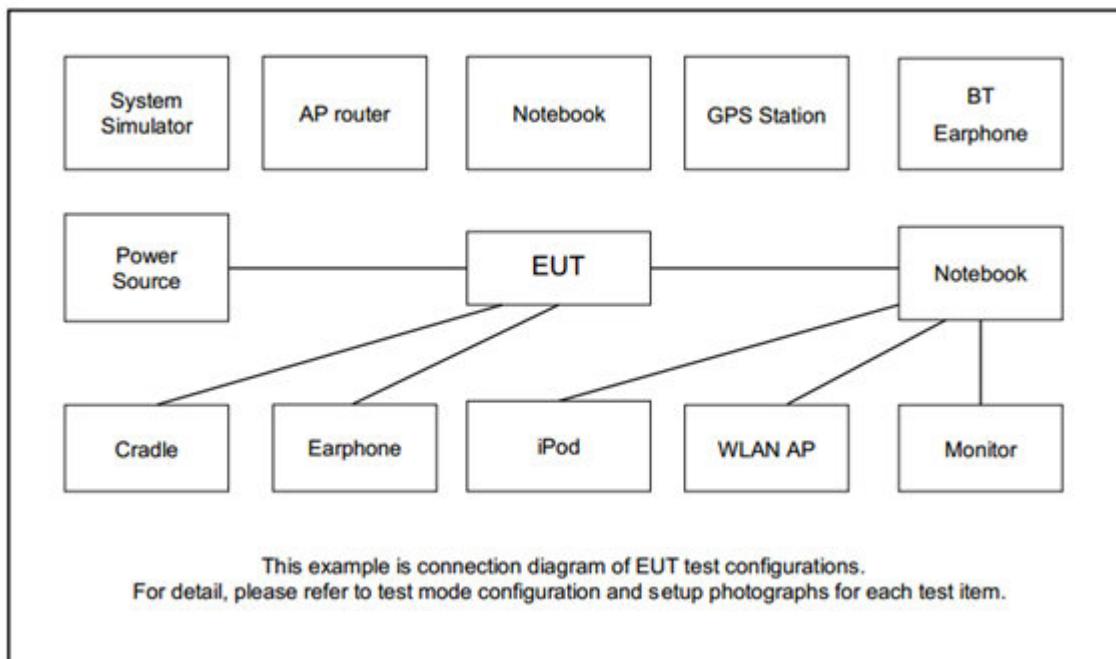


| Test Items                       | Band   | Bandwidth (MHz) |   |   |    |    |    | Modulation |       |       | RB # |      |      | Test Channel |   |   |
|----------------------------------|--|-----------------|---|---|----|----|----|------------|-------|-------|------|------|------|--------------|---|---|
|                                  |  | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 64QAM | 1    | Half | Full | L            | M | H |
| E.R.P./<br>E.I.R.P.              | 2  | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 4  | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 5  | v               | v | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 7  | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 38   | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 12   | v               | v | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 13   | -               | - | v |    | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 13   | -               | - |   | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v |   |
|                                  | 17   | -               | - | v | v  | -  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 25   | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 26   | v               | v | v | v  | v  | -  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                                  | 41   | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
| Radiated<br>Spurious<br>Emission | 4  | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 7  | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 12   | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 13   | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 25   | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 26   | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
|                                  | 41   | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            |   |   |
| Note                             | 1. The mark "v" means that this configuration is chosen for testing<br>2. The mark "-" means that this bandwidth is not supported.<br>3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different BW/RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.<br>4. The frequency range of LTE Band 2/5/17/38 is covered by LTE Band 25/26/12/41 |                 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |



| Test Items                  | Band  | Bandwidth (MHz) |       |       |       |       |      |      |       |       |       | Modulation |       |       | RB # |      |      | Test Channel |   |   |
|-----------------------------|---|-----------------|-------|-------|-------|-------|------|------|-------|-------|-------|------------|-------|-------|------|------|------|--------------|---|---|
|                             |   | 20+20           | 20+15 | 15+20 | 20+10 | 10+20 | 20+5 | 5+20 | 15+15 | 15+10 | 10+15 | QPSK       | 16QAM | 64QAM | 1    | Half | Full | L            | M | H |
| 26dB and 99% Bandwidth      | 7_CA  | v               | v     | v     | v     | v     | -    | -    | v     | v     | -     | v          | v     | v     |      |      | v    | v            | v | v |
|                             | 38_CA   | v               |       |       |       |       |      |      | v     |       |       | v          | v     | v     |      |      | v    | v            | v | v |
|                             | 41_CA   | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     |      |      | v    | v            | v | v |
| Conducted Band Edge         | 7_CA  | v               | v     | v     | v     | v     | -    | -    | v     | v     | -     | v          | v     | v     | v    | v    | v    | v            | v | v |
|                             | 41_CA   | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    | v    | v    | v            | v | v |
| Conducted Spurious Emission | 7_CA  | v               | v     | v     | v     | v     | -    | -    | v     | v     | -     | v          | v     | v     | v    | v    | v    | v            | v | v |
|                             | 41_CA   | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    | v    | v    | v            | v | v |
| E.I.R.P.                    | 7_CA  | v               | v     | v     | v     | v     | -    | -    | v     | v     | -     | v          | v     | v     | v    | v    | v    | v            | v | v |
|                             | 38_CA   | v               |       |       |       |       |      |      | v     |       |       | v          | v     | v     | v    | v    | v    | v            | v | v |
|                             | 41_CA   | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    | v    | v    | v            | v | v |
| Radiated Spurious Emission  | 7_CA  | v               |       |       |       |       |      |      |       |       |       | v          |       |       | v    |      |      | v            |   | v |
|                             | 38_CA   | v               |       |       |       |       |      |      |       |       |       | v          |       |       | v    |      |      | v            |   | v |
|                             | 41_CA   | v               |       |       |       |       |      |      |       |       |       | v          |       |       | v    |      |      | v            |   | v |
| Note                        | <ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different BW/RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.</li> <li>The frequency range of LTE Band 38_CA is covered by LTE Band 41_CA.</li> </ol> |                 |       |       |       |       |      |      |       |       |       |            |       |       |      |      |      |              |   |   |

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

| Item | Equipment        | Trade Name | Model No. | FCC ID | Data Cable        | Power Cord        |
|------|------------------|------------|-----------|--------|-------------------|-------------------|
| 1.   | DC Power Supply  | GW         | GPS-3030D | N/A    | N/A               | Unshielded, 1.8 m |
| 2.   | LTE Base Station | Anritsu    | MT8820C   | N/A    | N/A               | Unshielded, 1.8 m |
| 3.   | Earphone         | Lenovo     | SH100     | N/A    | Unshielded, 1.0 m | N/A               |

## 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 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.

*Offset = RF cable loss.*

Following shows an offset computation example with cable loss 5.0 dB.

Example :

$$\text{Offset(dB)} = \text{RF cable loss(dB)}.$$

$$= 5.0 \text{ (dB)}$$



## 2.5 Frequency List of Low/Middle/High Channels

| LTE Band 2 Channel and Frequency List |                        |        |        |         |
|---------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                              | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                    | Channel                | 18700  | 18900  | 19100   |
|                                       | Frequency              | 1860   | 1880   | 1900    |
| 15                                    | Channel                | 18675  | 18900  | 19125   |
|                                       | Frequency              | 1857.5 | 1880   | 1902.5  |
| 10                                    | Channel                | 18650  | 18900  | 19150   |
|                                       | Frequency              | 1855   | 1880   | 1905    |
| 5                                     | Channel                | 18625  | 18900  | 19175   |
|                                       | Frequency              | 1852.5 | 1880   | 1907.5  |
| 3                                     | Channel                | 18615  | 18900  | 19185   |
|                                       | Frequency              | 1851.5 | 1880   | 1908.5  |
| 1.4                                   | Channel                | 18607  | 18900  | 19193   |
|                                       | Frequency              | 1850.7 | 1880   | 1909.3  |

| LTE Band 4 Channel and Frequency List |                        |        |        |         |
|---------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                              | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                    | Channel                | 20050  | 20175  | 20300   |
|                                       | Frequency              | 1720   | 1732.5 | 1745    |
| 15                                    | Channel                | 20025  | 20175  | 20325   |
|                                       | Frequency              | 1717.5 | 1732.5 | 1747.5  |
| 10                                    | Channel                | 20000  | 20175  | 20350   |
|                                       | Frequency              | 1715   | 1732.5 | 1750    |
| 5                                     | Channel                | 19975  | 20175  | 20375   |
|                                       | Frequency              | 1712.5 | 1732.5 | 1752.5  |
| 3                                     | Channel                | 19965  | 20175  | 20385   |
|                                       | Frequency              | 1711.5 | 1732.5 | 1753.5  |
| 1.4                                   | Channel                | 19957  | 20175  | 20393   |
|                                       | Frequency              | 1710.7 | 1732.5 | 1754.3  |



| LTE Band 5 Channel and Frequency List |                        |        |        |         |
|---------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                              | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 10                                    | Channel                | 20450  | 20525  | 20600   |
|                                       | Frequency              | 829    | 836.5  | 844     |
| 5                                     | Channel                | 20425  | 20525  | 20625   |
|                                       | Frequency              | 826.5  | 836.5  | 846.5   |
| 3                                     | Channel                | 20415  | 20525  | 20635   |
|                                       | Frequency              | 825.5  | 836.5  | 847.5   |
| 1.4                                   | Channel                | 20407  | 20525  | 20643   |
|                                       | Frequency              | 824.7  | 836.5  | 848.3   |

| LTE Band 7 Channel and Frequency List |                        |        |        |         |
|---------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                              | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                    | Channel                | 20850  | 21100  | 21350   |
|                                       | Frequency              | 2510   | 2535   | 2560    |
| 15                                    | Channel                | 20825  | 21100  | 21375   |
|                                       | Frequency              | 2507.5 | 2535   | 2562.5  |
| 10                                    | Channel                | 20800  | 21100  | 21400   |
|                                       | Frequency              | 2505   | 2535   | 2565    |
| 5                                     | Channel                | 20775  | 21100  | 21425   |
|                                       | Frequency              | 2502.5 | 2535   | 2567.5  |

| LTE Band 12 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 10                                     | Channel                | 23060  | 23095  | 23130   |
|  | Frequency              | 704    | 707.5  | 711     |
| 5                                      | Channel                | 23035  | 23095  | 23155   |
|  | Frequency              | 701.5  | 707.5  | 713.5   |
| 3                                      | Channel                | 23025  | 23095  | 23165   |
|  | Frequency              | 700.5  | 707.5  | 714.5   |
| 1.4                                    | Channel                | 23017  | 23095  | 23173   |
|  | Frequency              | 699.7  | 707.5  | 715.3   |



| LTE Band 13 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 10                                     | Channel                | -      | 23230  | -       |
|  | Frequency              | -      | 782    | -       |
| 5                                      | Channel                | 23205  | 23230  | 23255   |
|  | Frequency              | 779.5  | 782    | 784.5   |

| LTE Band 17 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 10                                     | Channel                | 23780  | 23790  | 23800   |
|  | Frequency              | 709    | 710    | 711     |
| 5                                      | Channel                | 23755  | 23790  | 23825   |
|  | Frequency              | 706.5  | 710    | 713.5   |

| LTE Band 25 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 26140  | 26340  | 26590   |
|  | Frequency              | 1860   | 1880   | 1905    |
| 15                                     | Channel                | 26115  | 26340  | 26615   |
|  | Frequency              | 1857.5 | 1880   | 1907.5  |
| 10                                     | Channel                | 26090  | 26340  | 26640   |
|  | Frequency              | 1855   | 1880   | 1910    |
| 5                                      | Channel                | 26065  | 26340  | 26665   |
|  | Frequency              | 1852.5 | 1880   | 1912.5  |
| 3                                      | Channel                | 26055  | 26340  | 26675   |
|  | Frequency              | 1851.5 | 1880   | 1913.5  |
| 1.4                                    | Channel                | 26047  | 26340  | 26683   |
|  | Frequency              | 1850.7 | 1880   | 1914.3  |



| LTE Band 26 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 15                                     | Channel                | 26865  | 26915  | 26965   |
|  | Frequency              | 831.5  | 836.5  | 841.5   |
| 10                                     | Channel                | 26840  | 26915  | 26990   |
|  | Frequency              | 829    | 836.5  | 844     |
| 5                                      | Channel                | 26815  | 26915  | 27015   |
|  | Frequency              | 826.5  | 836.5  | 846.5   |
| 3                                      | Channel                | 26805  | 26915  | 27025   |
|  | Frequency              | 825.5  | 836.5  | 847.5   |
| 1.4                                    | Channel                | 26797  | 26915  | 27033   |
|  | Frequency              | 824.7  | 836.5  | 848.3   |

| LTE Band 38 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 37850  | 38000  | 38150   |
|  | Frequency              | 2580   | 2595   | 2610    |
| 15                                     | Channel                | 37825  | 38000  | 38175   |
|  | Frequency              | 2577.5 | 2595   | 2612.5  |
| 10                                     | Channel                | 37800  | 38000  | 38200   |
|  | Frequency              | 2575   | 2595   | 2615    |
| 5                                      | Channel                | 37775  | 38000  | 38225   |
|  | Frequency              | 2572.5 | 2595   | 2617.5  |

| LTE Band 41 Channel and Frequency List |                        |        |        |         |
|--|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 39750  | 40620  | 41490   |
|  | Frequency              | 2506   | 2593   | 2680    |
| 15                                     | Channel                | 39725  | 40620  | 41515   |
|  | Frequency              | 2503.5 | 2593   | 2682.5  |
| 10                                     | Channel                | 39700  | 40620  | 41540   |
|  | Frequency              | 2501   | 2593   | 2685    |
| 5                                      | Channel                | 39675  | 40620  | 41565   |
|  | Frequency              | 2498.5 | 2593   | 2687.5  |



| LTE Band 7 Channel and Frequency List_CA |                        |           |        |        |         |
|--|------------------------|-----------|--------|--------|---------|
| BW [MHz]                                 | Channel/Frequency(MHz) |           | Lowest | Middle | Highest |
| 20 + 20                                  | PCC                    | Channel   | 20850  | 21001  | 21152   |
|  |                        | Frequency | 2510.0 | 2525.1 | 2540.2  |
|  | SCC                    | Channel   | 21048  | 21199  | 21350   |
|  |                        | Frequency | 2529.8 | 2544.9 | 2560.0  |
| 20 + 15                                  | PCC                    | Channel   | 20850  | 21026  | 21201   |
|  |                        | Frequency | 2510.0 | 2527.6 | 2545.1  |
|  | SCC                    | Channel   | 21021  | 21197  | 21372   |
|  |                        | Frequency | 2527.1 | 2544.7 | 2562.2  |
| 15 + 20                                  | PCC                    | Channel   | 20828  | 21003  | 21179   |
|  |                        | Frequency | 2507.8 | 2525.3 | 2542.9  |
|  | SCC                    | Channel   | 20999  | 21174  | 21350   |
|  |                        | Frequency | 2524.9 | 2542.4 | 2560.0  |
| 20 + 10                                  | PCC                    | Channel   | 20850  | 21051  | 21251   |
|  |                        | Frequency | 2510.0 | 2530.1 | 2550.1  |
|  | SCC                    | Channel   | 20994  | 21195  | 21395   |
|  |                        | Frequency | 2524.4 | 2544.5 | 2564.5  |
| 10 + 20                                  | PCC                    | Channel   | 20805  | 21006  | 21206   |
|  |                        | Frequency | 2505.5 | 2525.6 | 2545.6  |
|  | SCC                    | Channel   | 20949  | 21150  | 21350   |
|  |                        | Frequency | 2519.9 | 2540.0 | 2560.0  |
| 15 + 15                                  | PCC                    | Channel   | 20825  | 21025  | 21225   |
|  |                        | Frequency | 2507.5 | 2527.5 | 2547.5  |
|  | SCC                    | Channel   | 20975  | 21175  | 21375   |
|  |                        | Frequency | 2522.5 | 2542.5 | 2562.5  |
| 15 + 10                                  | PCC                    | Channel   | 20825  | 21051  | 21277   |
|  |                        | Frequency | 2507.5 | 2530.1 | 2552.7  |
|  | SCC                    | Channel   | 20945  | 21171  | 21397   |
|  |                        | Frequency | 2519.5 | 2542.1 | 2564.7  |



| LTE Band 38 Channel and Frequency List |                        |           |        |        |         |
|--|------------------------|-----------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) |           | Lowest | Middle | Highest |
| 20 + 20                                | PCC                    | Channel   | 37850  | 37901  | 37952   |
|  |                        | Frequency | 2580.0 | 2585.1 | 2590.2  |
|  | SCC                    | Channel   | 38048  | 38099  | 38150   |
|  |                        | Frequency | 2599.8 | 2604.9 | 2610.0  |
| 15+ 15                                 | PCC                    | Channel   | 37825  | 37925  | 38025   |
|  |                        | Frequency | 2577.5 | 2587.5 | 2597.5  |
|  | SCC                    | Channel   | 37975  | 38075  | 38175   |
|  |                        | Frequency | 2592.5 | 2602.5 | 2612.5  |

| LTE Band 41 Channel and Frequency List |                        |           |        |        |         |
|--|------------------------|-----------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) |           | Lowest | Middle | Highest |
| 20 + 20                                | PCC                    | Channel   | 39750  | 40521  | 41292   |
|  |                        | Frequency | 2506.0 | 2583.1 | 2660.2  |
|  | SCC                    | Channel   | 39948  | 40719  | 41490   |
|  |                        | Frequency | 2525.8 | 2602.9 | 2680.0  |
| 20 + 15                                | PCC                    | Channel   | 39750  | 40546  | 41341   |
|  |                        | Frequency | 2506.0 | 2585.6 | 2665.1  |
|  | SCC                    | Channel   | 39921  | 40717  | 41512   |
|  |                        | Frequency | 2523.1 | 2602.7 | 2682.2  |
| 15 + 20                                | PCC                    | Channel   | 39728  | 40523  | 41319   |
|  |                        | Frequency | 2503.8 | 2593.3 | 2662.9  |
|  | SCC                    | Channel   | 39899  | 40694  | 41490   |
|  |                        | Frequency | 2520.9 | 2600.4 | 2680.0  |
| 20 + 10                                | PCC                    | Channel   | 39750  | 40571  | 41391   |
|  |                        | Frequency | 2506.0 | 2588.1 | 2670.1  |
|  | SCC                    | Channel   | 39894  | 40715  | 41535   |
|  |                        | Frequency | 2520.4 | 2602.5 | 2684.5  |
| 10 + 20                                | PCC                    | Channel   | 39705  | 40526  | 41346   |
|  |                        | Frequency | 2501.5 | 2583.6 | 2665.6  |
|  | SCC                    | Channel   | 39849  | 40670  | 41490   |
|  |                        | Frequency | 2515.9 | 2598.0 | 2680.0  |



| LTE Band 41 Channel and Frequency List |     |           |        |        |        |
|--|-----|-----------|--------|--------|--------|
| 20 + 5                                 | PCC | Channel   | 39750  | 40595  | 41440  |
|  |     | Frequency | 2506.0 | 2590.5 | 2675.0 |
|  | SCC | Channel   | 39867  | 40712  | 41557  |
|  |     | Frequency | 2517.7 | 2602.2 | 2686.7 |
| 5 + 20                                 | PCC | Channel   | 39683  | 40528  | 41373  |
|  |     | Frequency | 2499.3 | 2583.8 | 2668.3 |
|  | SCC | Channel   | 39800  | 40645  | 41490  |
|  |     | Frequency | 2511.0 | 2595.5 | 2680.0 |
| 15 + 15                                | PCC | Channel   | 39725  | 40545  | 41365  |
|  |     | Frequency | 2503.5 | 2585.5 | 2667.5 |
|  | SCC | Channel   | 39875  | 40695  | 41515  |
|  |     | Frequency | 2518.5 | 2600.5 | 2682.5 |
| 10 + 15                                | PCC | Channel   | 39703  | 40549  | 41395  |
|  |     | Frequency | 2501.3 | 2585.9 | 2670.5 |
|  | SCC | Channel   | 39823  | 40669  | 41515  |
|  |     | Frequency | 2513.3 | 2597.9 | 2682.5 |
| 15 + 10                                | PCC | Channel   | 39725  | 40571  | 41417  |
|  |     | Frequency | 2503.5 | 2588.1 | 2672.7 |
|  | SCC | Channel   | 39845  | 40691  | 41537  |
|  |     | Frequency | 2515.5 | 2600.1 | 2684.7 |

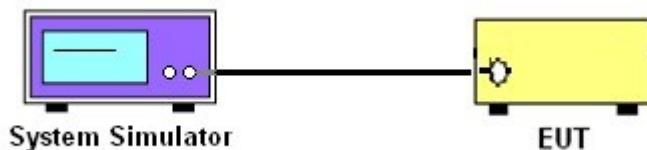
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

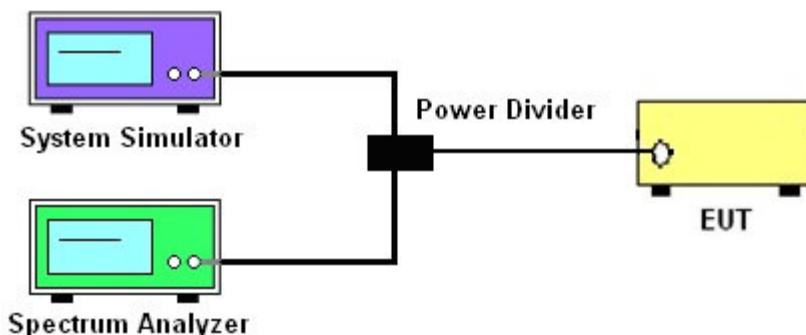
See list of measuring instruments of this test report.

#### 3.2 Test Setup

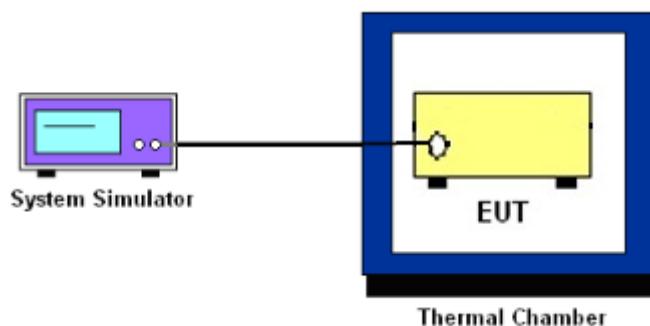
##### 3.2.1 Conducted Output Power



##### 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 and ERP/EIRP

### 3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP 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.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 17.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25 and Band 7 and Band 38 and Band 41.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

### 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

The testing follows FCC KDB 971168 v03 Section 5.7.1

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. 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

The testing follows FCC KDB 971168 v03 Section 4.2

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. 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.
4. Set the detection mode to peak, and the trace mode to max hold.
5. 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)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. 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.
8. 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 operations in the 824 – 849 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(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 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(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 operations in the 776-788 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(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 operations in the 698 -746 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(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 operations in the 1710 – 1755 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(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 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

The testing follows FCC KDB 971168 v03 Section 6.0.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW  $\geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
5. Set spectrum analyzer with RMS detector.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. Offset has included the duty factor for LTE Band 38/41. Duty factor = $10 \log (1/x)$ , where x is the measured duty cycle
8. Checked that all the results comply with the emission limit line.  
The limit line is derived from  $43 + 10\log(P)\text{dB}$  below the transmitter power P(Watts)
9. 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

The testing follows FCC KDB 971168 v03 Section 6.0.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer with RMS detector.
7. Offset has included the duty factor for LTE Band 38/41. Duty factor = $10 \log(1/x)$ , where x is the measured duty cycle
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)
11. For Band 7, 38, 41  
The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)



## 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

The testing follows FCC KDB 971168 v03 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. 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.
3. 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

The testing follows FCC KDB 971168 v03 Section 9.0.

1. The EUT was placed in a temperature chamber at  $20 \pm 5^\circ\text{C}$  and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

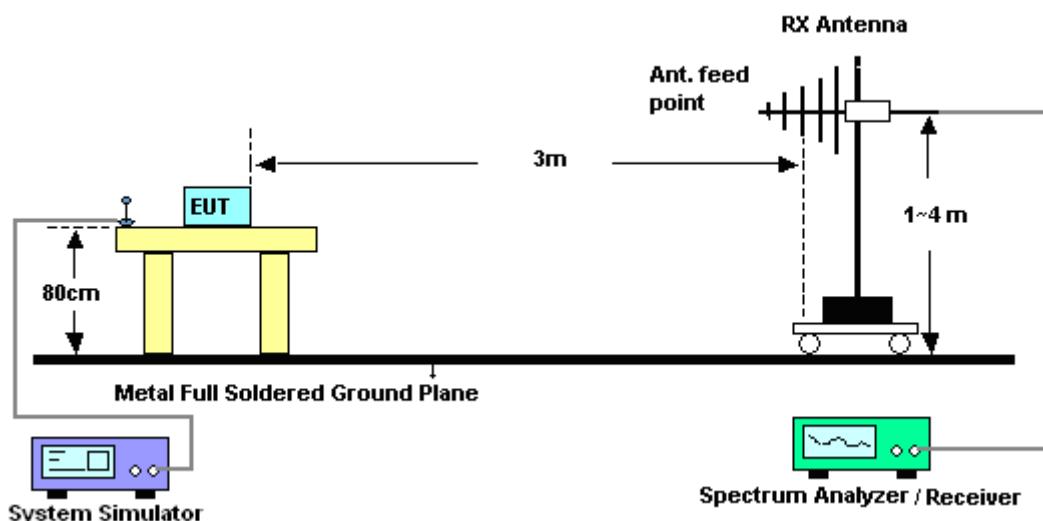
## 4 Radiated Test Items

### 4.1 Measuring Instruments

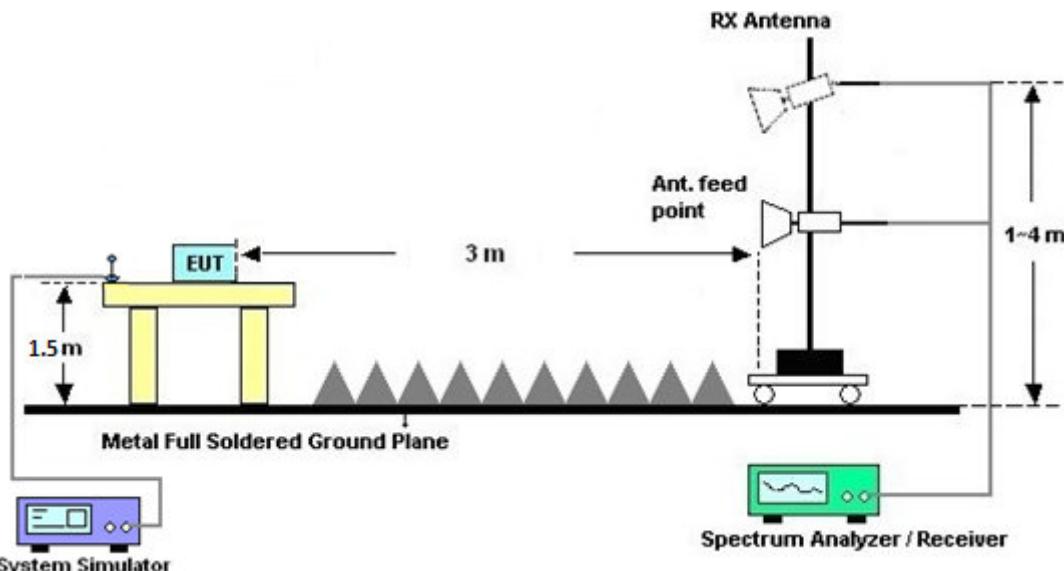
See list of measuring instruments of this test report.

### 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 Radiated Spurious Emission

### 4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E.

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.

### 4.4.2 Test Procedures

The testing follows FCC KDB 971168 v03 Section 5.8 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. 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.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. 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)

11. For Band 7, 38, 41:

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

EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

ERP (dBm) = EIRP - 2.15



## 5 List of Measuring Equipment

| Instrument                   | Manufacturer | Model No.                  | Serial No. | Characteristics       | Calibration Date | Test Date                   | Due Date      | Remark                |
|------------------------------|--------------|----------------------------|------------|-----------------------|------------------|-----------------------------|---------------|-----------------------|
| Spectrum Analyzer            | R&S          | FSV40                      | 101040     | 10Hz~40GHz            | Aug. 08, 2017    | Mar. 05, 2018~Apr. 04, 2018 | Aug. 07, 2018 | Conducted (TH01-KS)   |
| Radio communication analyzer | Anritsu      | MT8820C                    | 6201300652 | 2G/3G/LTE_full band   | Aug. 08, 2017    | Mar. 05, 2018~Apr. 04, 2018 | Aug. 07, 2018 | Conducted (TH01-KS)   |
| Thermal Chamber              | Ten Billion  | TTC-B3S                    | TBN-960502 | -40~+150°C            | Oct. 12, 2017    | Mar. 05, 2018~Apr. 04, 2018 | Oct. 11, 2018 | Conducted (TH01-KS)   |
| EXA Spectrum Analyzer        | Keysight     | N9010A                     | MY55150244 | 10Hz-44GHz            | Apr. 18, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| Bilog Antenna                | TeseQ        | CBL6112D                   | 35406      | 25MHz-2GHz            | Apr. 22, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Apr. 21, 2018 | Radiation (03CH03-KS) |
| Horn Antenna                 | Schwarzbeck  | BBHA9120D                  | 9120D-1356 | 1GHz~18GHz            | Apr. 22, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Apr. 21, 2018 | Radiation (03CH03-KS) |
| SHF-EHF Horn                 | Schwarzbeck  | BBHA 9170                  | BBHA170249 | 15GHz~40GHz           | Feb. 07, 2018    | Mar. 23, 2018~Mar. 30, 2018 | Feb. 06, 2019 | Radiation (03CH03-KS) |
| Amplifier                    | com-power    | PA-103A                    | 161069     | 1MHz ~1000MHz / 32 dB | Apr. 18, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| high gain Amplifier          | MITEQ        | AMF-7D-00<br>101800-30-10P | 2025788    | 1Ghz-18Ghz            | Apr. 18, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| Amplifier                    | MITEQ        | TTA1840-35-HG              | 1887435    | 18~40GHz              | Oct. 12, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Oct. 11, 2018 | Radiation (03CH03-KS) |
| Amplifier                    | Agilent      | 8449B                      | 3008A02370 | 1GHz~26.5GHz          | Oct. 12, 2017    | Mar. 23, 2018~Mar. 30, 2018 | Oct. 11, 2018 | Radiation (03CH03-KS) |
| AC Power Source              | Chroma       | 61601                      | F104090004 | N/A                   | NCR              | Mar. 23, 2018~Mar. 30, 2018 | NCR           | Radiation (03CH03-KS) |
| Turn Table                   | ChamPro      | EM 1000-T                  | 060762-T   | 0~360 degree          | NCR              | Mar. 23, 2018~Mar. 30, 2018 | NCR           | Radiation (03CH03-KS) |
| Antenna Mast                 | ChamPro      | EM 1000-A                  | 060762-A   | 1 m~4 m               | NCR              | Mar. 23, 2018~Mar. 30, 2018 | NCR           | Radiation (03CH03-KS) |

NCR: No Calibration Required



## 6 Uncertainty of Evaluation

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

|  |       |
|--|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2U_c(y)$ ) | 2.8dB |
|--|-------|

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

|  |       |
|--|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2U_c(y)$ ) | 3.3dB |
|--|-------|



## 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 |
| 20                                     | 1       | 0         | QPSK   | 22.76  | 22.63  | 22.90   |
| 20                                     | 1       | 49        |        | 22.58  | 22.48  | 22.75   |
| 20                                     | 1       | 99        |        | 22.27  | 22.40  | 22.67   |
| 20                                     | 50      | 0         |        | 21.74  | 21.58  | 21.82   |
| 20                                     | 50      | 24        |        | 21.66  | 21.52  | 21.74   |
| 20                                     | 50      | 50        |        | 21.51  | 21.46  | 21.70   |
| 20                                     | 100     | 0         |        | 21.56  | 21.54  | 21.76   |
| 20                                     | 1       | 0         |        | 22.12  | 21.97  | 22.18   |
| 20                                     | 1       | 49        | 16-QAM | 21.99  | 21.81  | 22.11   |
| 20                                     | 1       | 99        |        | 21.69  | 21.74  | 22.04   |
| 20                                     | 50      | 0         |        | 20.84  | 20.71  | 20.89   |
| 20                                     | 50      | 24        |        | 20.77  | 20.66  | 20.86   |
| 20                                     | 50      | 50        |        | 20.61  | 20.60  | 20.82   |
| 20                                     | 100     | 0         |        | 20.66  | 20.65  | 20.87   |
| 20                                     | 1       | 0         | 64QAM  | 21.05  | 20.91  | 21.12   |
| 20                                     | 1       | 49        |        | 20.81  | 20.73  | 21.01   |
| 20                                     | 1       | 99        |        | 20.59  | 20.68  | 20.91   |
| 20                                     | 50      | 0         |        | 19.85  | 19.72  | 19.91   |
| 20                                     | 50      | 24        |        | 19.78  | 19.66  | 19.87   |
| 20                                     | 50      | 50        |        | 19.60  | 19.57  | 19.83   |
| 20                                     | 100     | 0         |        | 19.68  | 19.66  | 19.88   |
| 15                                     | 1       | 0         | QPSK   | 22.69  | 22.65  | 22.83   |
| 15                                     | 1       | 37        |        | 22.64  | 22.50  | 22.68   |
| 15                                     | 1       | 74        |        | 22.47  | 22.47  | 22.70   |
| 15                                     | 36      | 0         |        | 21.61  | 21.56  | 21.79   |
| 15                                     | 36      | 20        |        | 21.58  | 21.52  | 21.75   |
| 15                                     | 36      | 39        |        | 21.50  | 21.50  | 21.75   |
| 15                                     | 75      | 0         |        | 21.57  | 21.56  | 21.78   |
| 15                                     | 1       | 0         | 16-QAM | 22.05  | 22.01  | 22.19   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 1  | 37 | 64QAM | 21.97 | 21.85 | 22.04 |
| 15 | 1  | 74 |       | 21.82 | 21.81 | 22.05 |
| 15 | 36 | 0  |       | 20.72 | 20.70 | 20.86 |
| 15 | 36 | 20 |       | 20.66 | 20.64 | 20.84 |
| 15 | 36 | 39 |       | 20.58 | 20.58 | 20.81 |
| 15 | 75 | 0  |       | 20.66 | 20.61 | 20.85 |
| 15 | 1  | 0  |       | 20.95 | 20.91 | 21.13 |
| 15 | 1  | 37 |       | 20.87 | 20.78 | 20.99 |
| 15 | 1  | 74 |       | 20.70 | 20.76 | 20.99 |
| 15 | 36 | 0  |       | 19.73 | 19.70 | 19.90 |
| 15 | 36 | 20 |       | 19.67 | 19.65 | 19.87 |
| 15 | 36 | 39 |       | 19.62 | 19.64 | 19.83 |
| 15 | 75 | 0  |       | 19.67 | 19.60 | 19.84 |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.64  | 22.56  | 22.89   |
|  | 1       | 25        |        | 22.62  | 22.49  | 22.73   |
|  | 1       | 49        |        | 22.47  | 22.48  | 22.73   |
|  | 25      | 0         |        | 21.60  | 21.57  | 21.80   |
|  | 25      | 12        |        | 21.58  | 21.55  | 21.78   |
|  | 25      | 25        |        | 21.53  | 21.49  | 21.78   |
|  | 50      | 0         |        | 21.59  | 21.57  | 21.77   |
| 10                                     | 1       | 0         | 16-QAM | 21.95  | 21.98  | 22.24   |
|  | 1       | 25        |        | 22.01  | 21.89  | 22.06   |
|  | 1       | 49        |        | 21.85  | 21.81  | 22.07   |
|  | 25      | 0         |        | 20.71  | 20.70  | 20.90   |
|  | 25      | 12        |        | 20.69  | 20.67  | 20.87   |
|  | 25      | 25        |        | 20.63  | 20.61  | 20.85   |
|  | 50      | 0         |        | 20.69  | 20.64  | 20.85   |
| 10                                     | 1       | 0         | 64QAM  | 20.84  | 20.81  | 21.13   |
|  | 1       | 25        |        | 20.86  | 20.73  | 20.99   |
|  | 1       | 49        |        | 20.71  | 20.71  | 21.01   |
|  | 25      | 0         |        | 19.72  | 19.68  | 19.88   |
|  | 25      | 12        |        | 19.70  | 19.68  | 19.89   |
|  | 25      | 25        |        | 19.65  | 19.64  | 19.86   |
|  | 50      | 0         |        | 19.69  | 19.67  | 19.90   |
| 5                                      | 1       | 0         | QPSK   | 22.56  | 22.52  | 22.77   |
|  | 1       | 12        |        | 22.53  | 22.51  | 22.72   |
|  | 1       | 24        |        | 22.58  | 22.47  | 22.74   |
|  | 12      | 0         |        | 21.58  | 21.56  | 21.77   |
|  | 12      | 7         |        | 21.61  | 21.55  | 21.80   |
|  | 12      | 13        |        | 21.57  | 21.50  | 21.76   |
|  | 25      | 0         |        | 21.52  | 21.55  | 21.74   |
| 5                                      | 1       | 0         | 16-QAM | 21.93  | 21.89  | 22.09   |
|  | 1       | 12        |        | 21.90  | 21.88  | 22.09   |
|  | 1       | 24        |        | 21.95  | 21.83  | 22.06   |
|  | 12      | 0         |        | 20.70  | 20.66  | 20.87   |
|  | 12      | 7         |        | 20.68  | 20.68  | 20.90   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.61 | 20.63 | 20.84 |
| 5 | 25 | 0  |       | 20.64 | 20.63 | 20.85 |
| 5 | 1  | 0  |       | 20.83 | 20.85 | 21.04 |
| 5 | 1  | 12 |       | 20.83 | 20.80 | 21.00 |
| 5 | 1  | 24 |       | 20.83 | 20.75 | 20.99 |
| 5 | 12 | 0  |       | 19.69 | 19.71 | 19.92 |
| 5 | 12 | 7  |       | 19.75 | 19.70 | 19.96 |
| 5 | 12 | 13 |       | 19.68 | 19.66 | 19.92 |
| 5 | 25 | 0  |       | 19.66 | 19.61 | 19.87 |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.53  | 22.51  | 22.74   |
|  | 1       | 8         |        | 22.62  | 22.61  | 22.84   |
|  | 1       | 14        |        | 22.49  | 22.49  | 22.73   |
|  | 8       | 0         |        | 21.58  | 21.54  | 21.74   |
|  | 8       | 4         |        | 21.60  | 21.56  | 21.79   |
|  | 8       | 7         |        | 21.56  | 21.52  | 21.73   |
|  | 15      | 0         |        | 21.57  | 21.49  | 21.76   |
| 3                                      | 1       | 0         | 16-QAM | 21.89  | 21.88  | 22.05   |
|  | 1       | 8         |        | 22.00  | 21.98  | 22.22   |
|  | 1       | 14        |        | 21.87  | 21.86  | 22.03   |
|  | 8       | 0         |        | 20.69  | 20.70  | 20.88   |
|  | 8       | 4         |        | 20.74  | 20.69  | 20.92   |
|  | 8       | 7         |        | 20.70  | 20.68  | 20.88   |
|  | 15      | 0         |        | 20.67  | 20.63  | 20.86   |
| 3                                      | 1       | 0         | 64QAM  | 20.83  | 20.76  | 21.04   |
|  | 1       | 8         |        | 20.49  | 20.80  | 20.86   |
|  | 1       | 14        |        | 20.83  | 20.45  | 20.99   |
|  | 8       | 0         |        | 19.69  | 19.71  | 19.76   |
|  | 8       | 4         |        | 19.67  | 19.53  | 19.76   |
|  | 8       | 7         |        | 19.78  | 19.66  | 19.92   |
|  | 15      | 0         |        | 19.66  | 19.61  | 19.87   |
| 1.4                                    | 1       | 0         | QPSK   | 22.48  | 22.44  | 22.66   |
|  | 1       | 3         |        | 22.51  | 22.51  | 22.75   |
|  | 1       | 5         |        | 22.45  | 22.40  | 22.65   |
|  | 3       | 0         |        | 22.50  | 22.46  | 22.70   |
|  | 3       | 1         |        | 22.52  | 22.50  | 22.73   |
|  | 3       | 3         |        | 22.47  | 22.46  | 22.71   |
|  | 6       | 0         |        | 21.48  | 21.43  | 21.68   |
| 1.4                                    | 1       | 0         | 16-QAM | 21.81  | 21.79  | 21.96   |
|  | 1       | 3         |        | 21.90  | 21.88  | 22.08   |
|  | 1       | 5         |        | 21.80  | 21.79  | 21.97   |
|  | 3       | 0         |        | 21.59  | 21.59  | 21.79   |
|  | 3       | 1         |        | 21.66  | 21.63  | 21.81   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.59 | 21.56 | 21.76 |
| 1.4 | 6 | 0 |       | 20.65 | 20.62 | 20.84 |
| 1.4 | 1 | 0 |       | 20.72 | 20.75 | 20.92 |
| 1.4 | 1 | 3 |       | 20.82 | 20.81 | 21.01 |
| 1.4 | 1 | 5 |       | 20.69 | 20.71 | 20.94 |
| 1.4 | 3 | 0 |       | 20.70 | 20.69 | 20.91 |
| 1.4 | 3 | 1 |       | 20.78 | 20.73 | 20.98 |
| 1.4 | 3 | 3 |       | 20.71 | 20.70 | 20.93 |
| 1.4 | 6 | 0 |       | 19.57 | 19.53 | 19.79 |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                     | 1       | 0         | QPSK   | 22.76  | 22.93  | 23.09   |
|  | 1       | 49        |        | 22.75  | 22.67  | 22.82   |
|  | 1       | 99        |        | 22.62  | 22.73  | 22.77   |
|  | 50      | 0         |        | 21.91  | 21.88  | 22.00   |
|  | 50      | 24        |        | 21.87  | 21.87  | 21.89   |
|  | 50      | 50        |        | 21.80  | 21.81  | 21.82   |
|  | 100     | 0         |        | 21.85  | 21.87  | 21.93   |
| 20                                     | 1       | 0         | 16-QAM | 22.11  | 22.21  | 22.44   |
|  | 1       | 49        |        | 22.13  | 22.06  | 22.18   |
|  | 1       | 99        |        | 21.97  | 22.09  | 22.12   |
|  | 50      | 0         |        | 21.01  | 20.95  | 21.10   |
|  | 50      | 24        |        | 20.93  | 20.95  | 21.01   |
|  | 50      | 50        |        | 20.89  | 20.90  | 20.95   |
|  | 100     | 0         |        | 20.93  | 20.96  | 20.99   |
| 20                                     | 1       | 0         | 64QAM  | 21.04  | 21.11  | 21.32   |
|  | 1       | 49        |        | 20.98  | 20.95  | 21.12   |
|  | 1       | 99        |        | 20.80  | 20.97  | 21.08   |
|  | 50      | 0         |        | 20.02  | 19.98  | 20.09   |
|  | 50      | 24        |        | 19.95  | 19.99  | 20.03   |
|  | 50      | 50        |        | 19.88  | 19.92  | 19.97   |
|  | 100     | 0         |        | 19.95  | 20.00  | 20.02   |
| 15                                     | 1       | 0         | QPSK   | 22.73  | 22.87  | 23.02   |
|  | 1       | 37        |        | 22.76  | 22.80  | 22.95   |
|  | 1       | 74        |        | 22.76  | 22.80  | 22.81   |
|  | 36      | 0         |        | 21.79  | 21.81  | 21.94   |
|  | 36      | 20        |        | 21.84  | 21.85  | 21.91   |
|  | 36      | 39        |        | 21.77  | 21.78  | 21.84   |
|  | 75      | 0         |        | 21.84  | 21.85  | 21.89   |
| 15                                     | 1       | 0         | 16-QAM | 22.10  | 22.16  | 22.40   |
|  | 1       | 37        |        | 22.13  | 22.15  | 22.31   |
|  | 1       | 74        |        | 22.02  | 22.12  | 22.18   |
|  | 36      | 0         |        | 20.90  | 20.92  | 21.05   |
|  | 36      | 20        |        | 20.93  | 20.95  | 20.99   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 36 | 39 | 64QAM | 20.84 | 20.91 | 20.96 |
| 15 | 75 | 0  |       | 20.93 | 20.97 | 21.01 |
| 15 | 1  | 0  |       | 21.00 | 21.09 | 21.35 |
| 15 | 1  | 37 |       | 21.04 | 21.08 | 21.24 |
| 15 | 1  | 74 |       | 20.94 | 21.02 | 21.11 |
| 15 | 36 | 0  |       | 19.95 | 19.97 | 20.09 |
| 15 | 36 | 20 |       | 19.96 | 20.00 | 20.04 |
| 15 | 36 | 39 |       | 19.89 | 19.94 | 19.97 |
| 15 | 75 | 0  |       | 19.92 | 19.94 | 20.01 |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.66  | 22.67  | 22.92   |
|  | 1       | 25        |        | 22.65  | 22.66  | 22.91   |
|  | 1       | 49        |        | 22.73  | 22.72  | 22.78   |
|  | 25      | 0         |        | 21.76  | 21.77  | 21.90   |
|  | 25      | 12        |        | 21.71  | 21.81  | 21.90   |
|  | 25      | 25        |        | 21.76  | 21.80  | 21.85   |
|  | 50      | 0         |        | 21.80  | 21.82  | 21.89   |
| 10                                     | 1       | 0         | 16-QAM | 22.00  | 21.94  | 22.27   |
|  | 1       | 25        |        | 21.99  | 22.04  | 22.28   |
|  | 1       | 49        |        | 22.07  | 22.05  | 22.15   |
|  | 25      | 0         |        | 20.83  | 20.88  | 21.00   |
|  | 25      | 12        |        | 20.82  | 20.92  | 20.99   |
|  | 25      | 25        |        | 20.85  | 20.87  | 20.92   |
|  | 50      | 0         |        | 20.89  | 20.96  | 20.96   |
| 10                                     | 1       | 0         | 64QAM  | 20.95  | 20.93  | 21.18   |
|  | 1       | 25        |        | 20.95  | 20.96  | 21.18   |
|  | 1       | 49        |        | 21.01  | 21.02  | 21.05   |
|  | 25      | 0         |        | 19.84  | 19.89  | 20.01   |
|  | 25      | 12        |        | 19.82  | 19.96  | 19.99   |
|  | 25      | 25        |        | 19.89  | 19.89  | 19.94   |
|  | 50      | 0         |        | 19.89  | 19.95  | 19.96   |
| 5                                      | 1       | 0         | QPSK   | 22.58  | 22.74  | 22.98   |
|  | 1       | 12        |        | 22.63  | 22.79  | 22.84   |
|  | 1       | 24        |        | 22.62  | 22.77  | 22.81   |
|  | 12      | 0         |        | 21.70  | 21.73  | 21.89   |
|  | 12      | 7         |        | 21.71  | 21.82  | 21.89   |
|  | 12      | 13        |        | 21.67  | 21.80  | 21.83   |
|  | 25      | 0         |        | 21.67  | 21.81  | 21.83   |
| 5                                      | 1       | 0         | 16-QAM | 21.95  | 22.11  | 22.37   |
|  | 1       | 12        |        | 22.00  | 22.19  | 22.21   |
|  | 1       | 24        |        | 22.01  | 22.16  | 22.18   |
|  | 12      | 0         |        | 20.82  | 20.85  | 20.97   |
|  | 12      | 7         |        | 20.82  | 20.93  | 20.99   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.76 | 20.89 | 20.96 |
| 5 | 25 | 0  |       | 20.75 | 20.90 | 20.96 |
| 5 | 1  | 0  |       | 20.87 | 21.04 | 21.22 |
| 5 | 1  | 12 |       | 20.94 | 21.05 | 21.12 |
| 5 | 1  | 24 |       | 20.91 | 21.05 | 21.07 |
| 5 | 12 | 0  |       | 19.87 | 19.89 | 20.01 |
| 5 | 12 | 7  |       | 19.88 | 19.99 | 20.03 |
| 5 | 12 | 13 |       | 19.83 | 19.95 | 20.00 |
| 5 | 25 | 0  |       | 19.80 | 19.91 | 19.98 |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.54  | 22.68  | 22.83   |
|  | 1       | 8         |        | 22.62  | 22.79  | 22.83   |
|  | 1       | 14        |        | 22.59  | 22.74  | 22.79   |
|  | 8       | 0         |        | 21.70  | 21.80  | 21.82   |
|  | 8       | 4         |        | 21.67  | 21.83  | 21.87   |
|  | 8       | 7         |        | 21.64  | 21.77  | 21.84   |
|  | 15      | 0         |        | 21.66  | 21.78  | 21.80   |
| 3                                      | 1       | 0         | 16-QAM | 21.88  | 22.05  | 22.16   |
|  | 1       | 8         |        | 22.01  | 22.18  | 22.19   |
|  | 1       | 14        |        | 21.96  | 22.13  | 22.21   |
|  | 8       | 0         |        | 20.84  | 20.93  | 20.98   |
|  | 8       | 4         |        | 20.84  | 20.99  | 21.02   |
|  | 8       | 7         |        | 20.83  | 20.92  | 20.98   |
|  | 15      | 0         |        | 20.77  | 20.90  | 20.95   |
| 3                                      | 1       | 0         | 64QAM  | 20.82  | 20.97  | 21.12   |
|  | 1       | 8         |        | 20.87  | 21.08  | 21.09   |
|  | 1       | 14        |        | 20.91  | 21.04  | 21.06   |
|  | 8       | 0         |        | 19.84  | 19.95  | 19.99   |
|  | 8       | 4         |        | 19.85  | 19.96  | 20.01   |
|  | 8       | 7         |        | 19.81  | 19.96  | 19.98   |
|  | 15      | 0         |        | 19.79  | 19.91  | 19.95   |
| 1.4                                    | 1       | 0         | QPSK   | 22.46  | 22.59  | 22.76   |
|  | 1       | 3         |        | 22.51  | 22.79  | 22.85   |
|  | 1       | 5         |        | 22.43  | 22.66  | 22.71   |
|  | 3       | 0         |        | 22.52  | 22.63  | 22.82   |
|  | 3       | 1         |        | 22.51  | 22.77  | 22.82   |
|  | 3       | 3         |        | 22.47  | 22.74  | 22.78   |
|  | 6       | 0         |        | 21.49  | 21.74  | 21.78   |
| 1.4                                    | 1       | 0         | 16-QAM | 21.82  | 21.98  | 22.10   |
|  | 1       | 3         |        | 21.89  | 22.14  | 22.19   |
|  | 1       | 5         |        | 21.80  | 22.06  | 22.09   |
|  | 3       | 0         |        | 21.59  | 21.78  | 21.91   |
|  | 3       | 1         |        | 21.63  | 21.90  | 21.95   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.59 | 21.86 | 21.88 |
| 1.4 | 6 | 0 |       | 20.63 | 20.90 | 20.92 |
| 1.4 | 1 | 0 |       | 20.73 | 20.93 | 21.05 |
| 1.4 | 1 | 3 |       | 20.78 | 21.08 | 21.09 |
| 1.4 | 1 | 5 |       | 20.69 | 21.00 | 21.00 |
| 1.4 | 3 | 0 |       | 20.72 | 20.85 | 21.02 |
| 1.4 | 3 | 1 |       | 20.79 | 21.02 | 21.07 |
| 1.4 | 3 | 3 |       | 20.73 | 20.96 | 21.03 |
| 1.4 | 6 | 0 |       | 19.58 | 19.82 | 19.86 |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.67  | 22.56  | 22.62   |
|  | 1       | 25        |        | 22.50  | 22.45  | 22.51   |
|  | 1       | 49        |        | 22.62  | 22.51  | 22.54   |
|  | 25      | 0         |        | 21.59  | 21.51  | 21.55   |
|  | 25      | 12        |        | 21.62  | 21.51  | 21.53   |
|  | 25      | 25        |        | 21.63  | 21.46  | 21.48   |
|  | 50      | 0         |        | 21.68  | 21.50  | 21.56   |
| 10                                     | 1       | 0         | 16-QAM | 21.98  | 21.91  | 21.92   |
|  | 1       | 25        |        | 21.86  | 21.71  | 21.78   |
|  | 1       | 49        |        | 21.97  | 21.80  | 21.90   |
|  | 25      | 0         |        | 20.72  | 20.62  | 20.68   |
|  | 25      | 12        |        | 20.68  | 20.61  | 20.66   |
|  | 25      | 25        |        | 20.75  | 20.55  | 20.58   |
|  | 50      | 0         |        | 20.76  | 20.60  | 20.62   |
| 10                                     | 1       | 0         | 64QAM  | 20.90  | 20.81  | 20.82   |
|  | 1       | 25        |        | 20.78  | 20.66  | 20.74   |
|  | 1       | 49        |        | 20.87  | 20.72  | 20.77   |
|  | 25      | 0         |        | 19.71  | 19.60  | 19.64   |
|  | 25      | 12        |        | 19.69  | 19.61  | 19.66   |
|  | 25      | 25        |        | 19.74  | 19.55  | 19.62   |
|  | 50      | 0         |        | 19.77  | 19.60  | 19.62   |
| 5                                      | 1       | 0         | QPSK   | 22.63  | 22.50  | 22.63   |
|  | 1       | 12        |        | 22.54  | 22.45  | 22.65   |
|  | 1       | 24        |        | 22.56  | 22.41  | 22.62   |
|  | 12      | 0         |        | 21.65  | 21.50  | 21.61   |
|  | 12      | 7         |        | 21.61  | 21.49  | 21.61   |
|  | 12      | 13        |        | 21.60  | 21.46  | 21.68   |
|  | 25      | 0         |        | 21.62  | 21.46  | 21.59   |
| 5                                      | 1       | 0         | 16-QAM | 21.88  | 21.87  | 21.97   |
|  | 1       | 12        |        | 21.85  | 21.74  | 22.01   |
|  | 1       | 24        |        | 21.89  | 21.73  | 22.00   |
|  | 12      | 0         |        | 20.67  | 20.56  | 20.75   |
|  | 12      | 7         |        | 20.70  | 20.59  | 20.71   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.68 | 20.53 | 20.78 |
| 5 | 25 | 0  |       | 20.68 | 20.56 | 20.69 |
| 5 | 1  | 0  |       | 20.87 | 20.71 | 20.83 |
| 5 | 1  | 12 |       | 20.87 | 20.66 | 20.92 |
| 5 | 1  | 24 |       | 20.80 | 20.65 | 20.87 |
| 5 | 12 | 0  |       | 19.77 | 19.61 | 19.72 |
| 5 | 12 | 7  |       | 19.76 | 19.62 | 19.77 |
| 5 | 12 | 13 |       | 19.72 | 19.60 | 19.84 |
| 5 | 25 | 0  |       | 19.68 | 19.59 | 19.66 |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.57  | 22.42  | 22.66   |
|  | 1       | 8         |        | 22.44  | 22.43  | 22.64   |
|  | 1       | 14        |        | 22.51  | 22.41  | 22.62   |
|  | 8       | 0         |        | 21.61  | 21.49  | 21.68   |
|  | 8       | 4         |        | 21.51  | 21.48  | 21.72   |
|  | 8       | 7         |        | 21.57  | 21.43  | 21.69   |
|  | 15      | 0         |        | 21.59  | 21.47  | 21.67   |
| 3                                      | 1       | 0         | 16-QAM | 21.83  | 21.71  | 22.01   |
|  | 1       | 8         |        | 21.70  | 21.71  | 22.00   |
|  | 1       | 14        |        | 21.86  | 21.73  | 21.95   |
|  | 8       | 0         |        | 20.72  | 20.60  | 20.85   |
|  | 8       | 4         |        | 20.63  | 20.60  | 20.85   |
|  | 8       | 7         |        | 20.68  | 20.56  | 20.82   |
|  | 15      | 0         |        | 20.69  | 20.56  | 20.78   |
| 3                                      | 1       | 0         | 64QAM  | 20.80  | 20.64  | 20.93   |
|  | 1       | 8         |        | 20.67  | 20.66  | 20.85   |
|  | 1       | 14        |        | 20.84  | 20.65  | 20.89   |
|  | 8       | 0         |        | 19.73  | 19.61  | 19.81   |
|  | 8       | 4         |        | 19.61  | 19.64  | 19.84   |
|  | 8       | 7         |        | 19.69  | 19.55  | 19.82   |
|  | 15      | 0         |        | 19.70  | 19.57  | 19.80   |
| 1.4                                    | 1       | 0         | QPSK   | 22.48  | 22.34  | 22.55   |
|  | 1       | 3         |        | 22.56  | 22.41  | 22.63   |
|  | 1       | 5         |        | 22.36  | 22.32  | 22.53   |
|  | 3       | 0         |        | 22.53  | 22.38  | 22.59   |
|  | 3       | 1         |        | 22.54  | 22.42  | 22.62   |
|  | 3       | 3         |        | 22.52  | 22.38  | 22.59   |
|  | 6       | 0         |        | 21.54  | 21.39  | 21.61   |
| 1.4                                    | 1       | 0         | 16-QAM | 21.76  | 21.62  | 21.92   |
|  | 1       | 3         |        | 21.84  | 21.70  | 22.00   |
|  | 1       | 5         |        | 21.63  | 21.62  | 21.92   |
|  | 3       | 0         |        | 21.57  | 21.45  | 21.64   |
|  | 3       | 1         |        | 21.60  | 21.52  | 21.71   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.61 | 21.45 | 21.67 |
| 1.4 | 6 | 0 |       | 20.69 | 20.54 | 20.78 |
| 1.4 | 1 | 0 |       | 20.75 | 20.59 | 20.75 |
| 1.4 | 1 | 3 |       | 20.78 | 20.70 | 20.84 |
| 1.4 | 1 | 5 |       | 20.63 | 20.55 | 20.75 |
| 1.4 | 3 | 0 |       | 20.71 | 20.57 | 20.81 |
| 1.4 | 3 | 1 |       | 20.76 | 20.64 | 20.85 |
| 1.4 | 3 | 3 |       | 20.71 | 20.57 | 20.79 |
| 1.4 | 6 | 0 |       | 19.61 | 19.47 | 19.71 |



| LTE Band 7 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                     | 1       | 0         | QPSK   | 22.64  | 22.70  | 22.84   |
|  | 1       | 49        |        | 22.37  | 22.55  | 22.64   |
|  | 1       | 99        |        | 22.41  | 22.62  | 22.60   |
|  | 50      | 0         |        | 21.48  | 21.69  | 21.72   |
|  | 50      | 24        |        | 21.45  | 21.66  | 21.62   |
|  | 50      | 50        |        | 21.43  | 21.61  | 21.62   |
|  | 100     | 0         |        | 21.50  | 21.63  | 21.58   |
| 20                                     | 1       | 0         | 16-QAM | 21.99  | 22.03  | 22.14   |
|  | 1       | 49        |        | 21.75  | 21.91  | 21.95   |
|  | 1       | 99        |        | 21.78  | 21.91  | 21.92   |
|  | 50      | 0         |        | 20.59  | 20.76  | 20.79   |
|  | 50      | 24        |        | 20.56  | 20.76  | 20.68   |
|  | 50      | 50        |        | 20.54  | 20.68  | 20.69   |
|  | 100     | 0         |        | 20.54  | 20.73  | 20.71   |
| 20                                     | 1       | 0         | 64QAM  | 20.92  | 20.98  | 21.07   |
|  | 1       | 49        |        | 20.70  | 20.83  | 20.92   |
|  | 1       | 99        |        | 20.73  | 20.87  | 20.82   |
|  | 50      | 0         |        | 19.62  | 19.81  | 19.81   |
|  | 50      | 24        |        | 19.58  | 19.76  | 19.70   |
|  | 50      | 50        |        | 19.54  | 19.71  | 19.73   |
|  | 100     | 0         |        | 19.61  | 19.76  | 19.69   |
| 15                                     | 1       | 0         | QPSK   | 22.61  | 22.68  | 22.70   |
|  | 1       | 37        |        | 22.38  | 22.59  | 22.57   |
|  | 1       | 74        |        | 22.42  | 22.63  | 22.58   |
|  | 36      | 0         |        | 21.44  | 21.68  | 21.64   |
|  | 36      | 20        |        | 21.49  | 21.66  | 21.67   |
|  | 36      | 39        |        | 21.38  | 21.60  | 21.54   |
|  | 75      | 0         |        | 21.46  | 21.62  | 21.67   |
| 15                                     | 1       | 0         | 16-QAM | 21.92  | 22.04  | 22.08   |
|  | 1       | 37        |        | 21.72  | 21.93  | 21.92   |
|  | 1       | 74        |        | 21.74  | 22.01  | 21.91   |
|  | 36      | 0         |        | 20.58  | 20.75  | 20.76   |
|  | 36      | 20        |        | 20.55  | 20.77  | 20.76   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 36 | 39 | 64QAM | 20.51 | 20.72 | 20.64 |
| 15 | 75 | 0  |       | 20.54 | 20.72 | 20.77 |
| 15 | 1  | 0  |       | 20.93 | 20.98 | 20.95 |
| 15 | 1  | 37 |       | 20.69 | 20.88 | 20.82 |
| 15 | 1  | 74 |       | 20.69 | 20.93 | 20.83 |
| 15 | 36 | 0  |       | 19.60 | 19.82 | 19.75 |
| 15 | 36 | 20 |       | 19.62 | 19.79 | 19.80 |
| 15 | 36 | 39 |       | 19.56 | 19.75 | 19.72 |
| 15 | 75 | 0  |       | 19.54 | 19.75 | 19.78 |



| LTE Band 7 Maximum Average Power [dBm] |         |           |        |        |        |         |
|--|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.52  | 22.73  | 22.69   |
|  | 1       | 25        |        | 22.48  | 22.58  | 22.66   |
|  | 1       | 49        |        | 22.33  | 22.65  | 22.58   |
|  | 25      | 0         |        | 21.55  | 21.65  | 21.64   |
|  | 25      | 12        |        | 21.46  | 21.66  | 21.63   |
|  | 25      | 25        |        | 21.41  | 21.58  | 21.62   |
|  | 50      | 0         |        | 21.44  | 21.60  | 21.59   |
| 10                                     | 1       | 0         | 16-QAM | 21.88  | 22.07  | 22.02   |
|  | 1       | 25        |        | 21.82  | 21.94  | 22.02   |
|  | 1       | 49        |        | 21.69  | 21.98  | 21.93   |
|  | 25      | 0         |        | 20.63  | 20.74  | 20.78   |
|  | 25      | 12        |        | 20.54  | 20.73  | 20.72   |
|  | 25      | 25        |        | 20.50  | 20.68  | 20.74   |
|  | 50      | 0         |        | 20.54  | 20.74  | 20.69   |
| 10                                     | 1       | 0         | 64QAM  | 20.84  | 21.02  | 20.89   |
|  | 1       | 25        |        | 20.77  | 20.89  | 20.89   |
|  | 1       | 49        |        | 20.65  | 20.86  | 20.77   |
|  | 25      | 0         |        | 19.62  | 19.73  | 19.74   |
|  | 25      | 12        |        | 19.53  | 19.77  | 19.73   |
|  | 25      | 25        |        | 19.52  | 19.69  | 19.75   |
|  | 50      | 0         |        | 19.52  | 19.72  | 19.74   |
| 5                                      | 1       | 0         | QPSK   | 22.48  | 22.71  | 22.66   |
|  | 1       | 12        |        | 22.46  | 22.57  | 22.64   |
|  | 1       | 24        |        | 22.47  | 22.54  | 22.59   |
|  | 12      | 0         |        | 21.49  | 21.62  | 21.70   |
|  | 12      | 7         |        | 21.56  | 21.68  | 21.68   |
|  | 12      | 13        |        | 21.48  | 21.63  | 21.66   |
|  | 25      | 0         |        | 21.51  | 21.65  | 21.65   |
| 5                                      | 1       | 0         | 16-QAM | 21.83  | 22.00  | 22.03   |
|  | 1       | 12        |        | 21.83  | 21.95  | 21.96   |
|  | 1       | 24        |        | 21.76  | 21.91  | 21.90   |
|  | 12      | 0         |        | 20.61  | 20.70  | 20.78   |
|  | 12      | 7         |        | 20.65  | 20.72  | 20.79   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.58 | 20.70 | 20.71 |
| 5 | 25 | 0  |       | 20.59 | 20.70 | 20.72 |
| 5 | 1  | 0  |       | 20.80 | 20.97 | 20.98 |
| 5 | 1  | 12 |       | 20.73 | 20.87 | 20.90 |
| 5 | 1  | 24 |       | 20.70 | 20.83 | 20.85 |
| 5 | 12 | 0  |       | 19.67 | 19.80 | 19.84 |
| 5 | 12 | 7  |       | 19.70 | 19.84 | 19.83 |
| 5 | 12 | 13 |       | 19.66 | 19.80 | 19.78 |
| 5 | 25 | 0  |       | 19.59 | 19.71 | 19.74 |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.50  | 22.48  | 22.66   |
|   | 1       | 25        |        | 22.53  | 22.50  | 22.58   |
|   | 1       | 49        |        | 22.53  | 22.50  | 22.67   |
|   | 25      | 0         |        | 21.62  | 21.57  | 21.63   |
|   | 25      | 12        |        | 21.62  | 21.57  | 21.63   |
|   | 25      | 25        |        | 21.54  | 21.52  | 21.59   |
|   | 50      | 0         |        | 21.58  | 21.55  | 21.61   |
| 10                                      | 1       | 0         | 16-QAM | 21.87  | 21.87  | 21.92   |
|   | 1       | 25        |        | 21.87  | 21.81  | 21.93   |
|   | 1       | 49        |        | 21.90  | 21.90  | 21.97   |
|   | 25      | 0         |        | 20.69  | 20.66  | 20.68   |
|   | 25      | 12        |        | 20.71  | 20.64  | 20.71   |
|   | 25      | 25        |        | 20.63  | 20.63  | 20.69   |
|   | 50      | 0         |        | 20.68  | 20.65  | 20.72   |
| 10                                      | 1       | 0         | 64QAM  | 20.77  | 20.79  | 20.91   |
|   | 1       | 25        |        | 20.76  | 20.68  | 20.86   |
|   | 1       | 49        |        | 20.75  | 20.80  | 20.97   |
|   | 25      | 0         |        | 19.72  | 19.66  | 19.74   |
|   | 25      | 12        |        | 19.72  | 19.66  | 19.72   |
|   | 25      | 25        |        | 19.67  | 19.64  | 19.71   |
|   | 50      | 0         |        | 19.68  | 19.67  | 19.70   |
| 5                                       | 1       | 0         | QPSK   | 22.49  | 22.45  | 22.56   |
|   | 1       | 12        |        | 22.47  | 22.49  | 22.55   |
|   | 1       | 24        |        | 22.57  | 22.51  | 22.63   |
|   | 12      | 0         |        | 21.51  | 21.56  | 21.59   |
|   | 12      | 7         |        | 21.51  | 21.55  | 21.61   |
|   | 12      | 13        |        | 21.62  | 21.52  | 21.57   |
|   | 25      | 0         |        | 21.59  | 21.52  | 21.58   |
| 5                                       | 1       | 0         | 16-QAM | 21.85  | 21.73  | 21.91   |
|   | 1       | 12        |        | 21.76  | 21.76  | 21.89   |
|   | 1       | 24        |        | 21.85  | 21.81  | 21.94   |
|   | 12      | 0         |        | 20.60  | 20.65  | 20.67   |
|   | 12      | 7         |        | 20.63  | 20.65  | 20.71   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.70 | 20.62 | 20.65 |
| 5 | 25 | 0  |       | 20.68 | 20.64 | 20.69 |
| 5 | 1  | 0  |       | 20.74 | 20.69 | 20.86 |
| 5 | 1  | 12 |       | 20.68 | 20.71 | 20.85 |
| 5 | 1  | 24 |       | 20.76 | 20.80 | 20.91 |
| 5 | 12 | 0  |       | 19.67 | 19.71 | 19.73 |
| 5 | 12 | 7  |       | 19.67 | 19.71 | 19.78 |
| 5 | 12 | 13 |       | 19.73 | 19.66 | 19.73 |
| 5 | 25 | 0  |       | 19.71 | 19.64 | 19.68 |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.46  | 22.39  | 22.53   |
|   | 1       | 8         |        | 22.45  | 22.47  | 22.51   |
|   | 1       | 14        |        | 22.46  | 22.49  | 22.60   |
|   | 8       | 0         |        | 21.50  | 21.55  | 21.55   |
|   | 8       | 4         |        | 21.50  | 21.53  | 21.59   |
|   | 8       | 7         |        | 21.49  | 21.53  | 21.54   |
|   | 15      | 0         |        | 21.48  | 21.54  | 21.55   |
| 3                                       | 1       | 0         | 16-QAM | 21.82  | 21.71  | 21.92   |
|   | 1       | 8         |        | 21.78  | 21.77  | 21.84   |
|   | 1       | 14        |        | 21.76  | 21.83  | 21.96   |
|   | 8       | 0         |        | 20.63  | 20.64  | 20.71   |
|   | 8       | 4         |        | 20.68  | 20.69  | 20.68   |
|   | 8       | 7         |        | 20.62  | 20.63  | 20.68   |
|   | 15      | 0         |        | 20.59  | 20.63  | 20.65   |
| 3                                       | 1       | 0         | 64QAM  | 20.75  | 20.62  | 20.81   |
|   | 1       | 8         |        | 20.73  | 20.71  | 20.77   |
|   | 1       | 14        |        | 20.70  | 20.76  | 20.87   |
|   | 8       | 0         |        | 19.63  | 19.65  | 19.67   |
|   | 8       | 4         |        | 19.66  | 19.71  | 19.69   |
|   | 8       | 7         |        | 19.61  | 19.69  | 19.69   |
|   | 15      | 0         |        | 19.59  | 19.62  | 19.68   |
| 1.4                                     | 1       | 0         | QPSK   | 22.39  | 22.40  | 22.44   |
|   | 1       | 3         |        | 22.46  | 22.47  | 22.61   |
|   | 1       | 5         |        | 22.37  | 22.38  | 22.51   |
|   | 3       | 0         |        | 22.44  | 22.43  | 22.47   |
|   | 3       | 1         |        | 22.48  | 22.51  | 22.50   |
|   | 3       | 3         |        | 22.44  | 22.43  | 22.58   |
|   | 6       | 0         |        | 21.43  | 21.46  | 21.45   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.77  | 21.69  | 21.72   |
|   | 1       | 3         |        | 21.87  | 21.76  | 21.87   |
|   | 1       | 5         |        | 21.78  | 21.73  | 21.88   |
|   | 3       | 0         |        | 21.53  | 21.46  | 21.53   |
|   | 3       | 1         |        | 21.58  | 21.53  | 21.56   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.53 | 21.47 | 21.65 |
| 1.4 | 6 | 0 |       | 20.58 | 20.63 | 20.61 |
| 1.4 | 1 | 0 |       | 20.64 | 20.63 | 20.65 |
| 1.4 | 1 | 3 |       | 20.70 | 20.78 | 20.83 |
| 1.4 | 1 | 5 |       | 20.62 | 20.61 | 20.78 |
| 1.4 | 3 | 0 |       | 20.66 | 20.61 | 20.69 |
| 1.4 | 3 | 1 |       | 20.73 | 20.68 | 20.73 |
| 1.4 | 3 | 3 |       | 20.64 | 20.64 | 20.74 |
| 1.4 | 6 | 0 |       | 19.52 | 19.55 | 19.56 |



| LTE Band 13 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   |        | 22.54  |         |
| 10                                      | 1       | 25        |        |        | 22.50  |         |
| 10                                      | 1       | 49        |        |        | 22.61  |         |
| 10                                      | 25      | 0         |        |        | 21.61  |         |
| 10                                      | 25      | 12        |        |        | 21.58  |         |
| 10                                      | 25      | 25        |        |        | 21.51  |         |
| 10                                      | 50      | 0         |        |        | 21.58  |         |
| 10                                      | 1       | 0         |        |        | 21.87  |         |
| 10                                      | 1       | 25        |        |        | 21.85  |         |
| 10                                      | 1       | 49        |        |        | 21.92  |         |
| 10                                      | 25      | 0         |        |        | 20.68  |         |
| 10                                      | 25      | 12        |        |        | 20.63  |         |
| 10                                      | 25      | 25        |        |        | 20.60  |         |
| 10                                      | 50      | 0         |        |        | 20.64  |         |
| 10                                      | 1       | 0         | 16-QAM |        | 20.81  |         |
| 10                                      | 1       | 25        |        |        | 20.76  |         |
| 10                                      | 1       | 49        |        |        | 20.82  |         |
| 10                                      | 25      | 0         |        |        | 19.72  |         |
| 10                                      | 25      | 12        |        |        | 19.69  |         |
| 10                                      | 25      | 25        |        |        | 19.65  |         |
| 10                                      | 50      | 0         |        |        | 19.65  |         |
| 5                                       | 1       | 0         | 64QAM  | 22.52  | 22.58  | 22.53   |
| 5                                       | 1       | 12        |        | 22.45  | 22.51  | 22.60   |
| 5                                       | 1       | 24        |        | 22.52  | 22.51  | 22.59   |
| 5                                       | 12      | 0         |        | 21.54  | 21.57  | 21.56   |
| 5                                       | 12      | 7         |        | 21.64  | 21.57  | 21.55   |
| 5                                       | 12      | 13        |        | 21.59  | 21.54  | 21.61   |
| 5                                       | 25      | 0         |        | 21.58  | 21.54  | 21.53   |
| 5                                       | 1       | 0         |        | 21.88  | 21.92  | 21.83   |
| 5                                       | 1       | 12        |        | 21.84  | 21.88  | 21.90   |
| 5                                       | 1       | 24        |        | 21.88  | 21.83  | 21.88   |
| 5                                       | 12      | 0         |        | 20.60  | 20.65  | 20.63   |
| 5                                       | 12      | 7         |        | 20.73  | 20.68  | 20.66   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.70 | 20.63 | 20.71 |
| 5 | 25 | 0  |       | 20.69 | 20.64 | 20.60 |
| 5 | 1  | 0  |       | 20.79 | 20.83 | 20.80 |
| 5 | 1  | 12 |       | 20.72 | 20.76 | 20.82 |
| 5 | 1  | 24 |       | 20.80 | 20.72 | 20.80 |
| 5 | 12 | 0  |       | 19.65 | 19.75 | 19.68 |
| 5 | 12 | 7  |       | 19.78 | 19.71 | 19.69 |
| 5 | 12 | 13 |       | 19.75 | 19.69 | 19.74 |
| 5 | 25 | 0  |       | 19.70 | 19.64 | 19.60 |



| LTE Band 17 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.47  | 22.46  | 22.69   |
|   | 1       | 25        |        | 22.51  | 22.48  | 22.57   |
|   | 1       | 49        |        | 22.53  | 22.50  | 22.60   |
|   | 25      | 0         |        | 21.54  | 21.52  | 21.64   |
|   | 25      | 12        |        | 21.56  | 21.54  | 21.63   |
|   | 25      | 25        |        | 21.50  | 21.52  | 21.62   |
|   | 50      | 0         |        | 21.54  | 21.56  | 21.63   |
| 10                                      | 1       | 0         | 16-QAM | 21.79  | 21.78  | 21.99   |
|   | 1       | 25        |        | 21.78  | 21.77  | 21.96   |
|   | 1       | 49        |        | 21.81  | 21.80  | 21.91   |
|   | 25      | 0         |        | 20.67  | 20.62  | 20.71   |
|   | 25      | 12        |        | 20.65  | 20.61  | 20.74   |
|   | 25      | 25        |        | 20.62  | 20.58  | 20.67   |
|   | 50      | 0         |        | 20.63  | 20.61  | 20.69   |
| 10                                      | 1       | 0         | 64QAM  | 20.71  | 20.76  | 20.89   |
|   | 1       | 25        |        | 20.74  | 20.76  | 20.80   |
|   | 1       | 49        |        | 20.73  | 20.80  | 20.83   |
|   | 25      | 0         |        | 19.66  | 19.61  | 19.72   |
|   | 25      | 12        |        | 19.65  | 19.65  | 19.72   |
|   | 25      | 25        |        | 19.61  | 19.60  | 19.71   |
|   | 50      | 0         |        | 19.64  | 19.62  | 19.74   |
| 5                                       | 1       | 0         | QPSK   | 22.68  | 22.52  | 22.59   |
|   | 1       | 12        |        | 22.63  | 22.49  | 22.55   |
|   | 1       | 24        |        | 22.65  | 22.50  | 22.55   |
|   | 12      | 0         |        | 21.66  | 21.51  | 21.60   |
|   | 12      | 7         |        | 21.66  | 21.52  | 21.61   |
|   | 12      | 13        |        | 21.64  | 21.52  | 21.58   |
|   | 25      | 0         |        | 21.66  | 21.52  | 21.58   |
| 5                                       | 1       | 0         | 16-QAM | 21.99  | 21.85  | 21.90   |
|   | 1       | 12        |        | 21.96  | 21.85  | 21.84   |
|   | 1       | 24        |        | 21.91  | 21.86  | 21.85   |
|   | 12      | 0         |        | 20.78  | 20.61  | 20.67   |
|   | 12      | 7         |        | 20.76  | 20.62  | 20.72   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.74 | 20.63 | 20.64 |
| 5 | 25 | 0  |       | 20.76 | 20.60 | 20.66 |
| 5 | 1  | 0  |       | 20.95 | 20.76 | 20.87 |
| 5 | 1  | 12 |       | 20.89 | 20.79 | 20.79 |
| 5 | 1  | 24 |       | 20.85 | 20.75 | 20.79 |
| 5 | 12 | 0  |       | 19.82 | 19.65 | 19.75 |
| 5 | 12 | 7  |       | 19.85 | 19.67 | 19.76 |
| 5 | 12 | 13 |       | 19.79 | 19.64 | 19.71 |
| 5 | 25 | 0  |       | 19.75 | 19.61 | 19.68 |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 22.87  | 22.74  | 22.90   |
|   | 1       | 49        |        | 22.62  | 22.57  | 22.70   |
|   | 1       | 99        |        | 22.48  | 22.47  | 22.71   |
|   | 50      | 0         |        | 21.76  | 21.71  | 21.81   |
|   | 50      | 24        |        | 21.71  | 21.65  | 21.76   |
|   | 50      | 50        |        | 21.60  | 21.56  | 21.73   |
|   | 100     | 0         |        | 21.70  | 21.63  | 21.78   |
| 20                                      | 1       | 0         | 16-QAM | 22.24  | 22.13  | 22.29   |
|   | 1       | 49        |        | 21.97  | 21.97  | 22.09   |
|   | 1       | 99        |        | 21.87  | 21.91  | 22.10   |
|   | 50      | 0         |        | 20.88  | 20.82  | 20.92   |
|   | 50      | 24        |        | 20.84  | 20.77  | 20.88   |
|   | 50      | 50        |        | 20.74  | 20.71  | 20.85   |
|   | 100     | 0         |        | 20.79  | 20.75  | 20.88   |
| 20                                      | 1       | 0         | 64QAM  | 21.22  | 20.97  | 21.20   |
|   | 1       | 49        |        | 20.93  | 20.83  | 21.00   |
|   | 1       | 99        |        | 20.84  | 20.74  | 21.00   |
|   | 50      | 0         |        | 19.87  | 19.82  | 19.95   |
|   | 50      | 24        |        | 19.81  | 19.76  | 19.90   |
|   | 50      | 50        |        | 19.73  | 19.70  | 19.85   |
|   | 100     | 0         |        | 19.83  | 19.78  | 19.89   |
| 15                                      | 1       | 0         | QPSK   | 22.89  | 22.73  | 22.85   |
|   | 1       | 37        |        | 22.63  | 22.59  | 22.71   |
|   | 1       | 74        |        | 22.59  | 22.55  | 22.73   |
|   | 36      | 0         |        | 21.75  | 21.69  | 21.81   |
|   | 36      | 20        |        | 21.68  | 21.64  | 21.76   |
|   | 36      | 39        |        | 21.61  | 21.61  | 21.75   |
|   | 75      | 0         |        | 21.67  | 21.63  | 21.76   |
| 15                                      | 1       | 0         | 16-QAM | 22.26  | 22.09  | 22.22   |
|   | 1       | 37        |        | 22.02  | 21.96  | 22.06   |
|   | 1       | 74        |        | 21.95  | 21.91  | 22.09   |
|   | 36      | 0         |        | 20.86  | 20.77  | 20.92   |
|   | 36      | 20        |        | 20.79  | 20.76  | 20.88   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 36 | 39 | 64QAM | 20.76 | 20.68 | 20.84 |
| 15 | 75 | 0  |       | 20.80 | 20.76 | 20.87 |
| 15 | 1  | 0  |       | 21.18 | 21.05 | 21.12 |
| 15 | 1  | 37 |       | 20.96 | 20.91 | 20.99 |
| 15 | 1  | 74 |       | 20.91 | 20.88 | 20.97 |
| 15 | 36 | 0  |       | 19.89 | 19.84 | 19.96 |
| 15 | 36 | 20 |       | 19.83 | 19.78 | 19.92 |
| 15 | 36 | 39 |       | 19.77 | 19.76 | 19.87 |
| 15 | 75 | 0  |       | 19.80 | 19.75 | 19.87 |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.77  | 22.63  | 22.79   |
|   | 1       | 25        |        | 22.70  | 22.53  | 22.71   |
|   | 1       | 49        |        | 22.56  | 22.49  | 22.71   |
|   | 25      | 0         |        | 21.77  | 21.61  | 21.78   |
|   | 25      | 12        |        | 21.66  | 21.60  | 21.74   |
|   | 25      | 25        |        | 21.61  | 21.59  | 21.74   |
|   | 50      | 0         |        | 21.64  | 21.61  | 21.76   |
| 10                                      | 1       | 0         | 16-QAM | 22.11  | 21.98  | 22.17   |
|   | 1       | 25        |        | 22.06  | 21.92  | 22.09   |
|   | 1       | 49        |        | 21.91  | 21.88  | 22.07   |
|   | 25      | 0         |        | 20.89  | 20.74  | 20.86   |
|   | 25      | 12        |        | 20.79  | 20.71  | 20.86   |
|   | 25      | 25        |        | 20.72  | 20.68  | 20.82   |
|   | 50      | 0         |        | 20.75  | 20.73  | 20.85   |
| 10                                      | 1       | 0         | 64QAM  | 21.09  | 20.93  | 21.03   |
|   | 1       | 25        |        | 21.02  | 20.89  | 20.96   |
|   | 1       | 49        |        | 20.86  | 20.82  | 20.93   |
|   | 25      | 0         |        | 19.89  | 19.74  | 19.87   |
|   | 25      | 12        |        | 19.79  | 19.72  | 19.89   |
|   | 25      | 25        |        | 19.72  | 19.68  | 19.86   |
|   | 50      | 0         |        | 19.77  | 19.73  | 19.88   |
| 5                                       | 1       | 0         | QPSK   | 22.62  | 22.59  | 22.79   |
|   | 1       | 12        |        | 22.61  | 22.56  | 22.73   |
|   | 1       | 24        |        | 22.56  | 22.52  | 22.73   |
|   | 12      | 0         |        | 21.66  | 21.62  | 21.76   |
|   | 12      | 7         |        | 21.65  | 21.64  | 21.78   |
|   | 12      | 13        |        | 21.64  | 21.61  | 21.72   |
|   | 25      | 0         |        | 21.61  | 21.55  | 21.74   |
| 5                                       | 1       | 0         | 16-QAM | 21.97  | 21.94  | 22.11   |
|   | 1       | 12        |        | 21.95  | 21.92  | 22.10   |
|   | 1       | 24        |        | 21.93  | 21.90  | 22.06   |
|   | 12      | 0         |        | 20.78  | 20.72  | 20.87   |
|   | 12      | 7         |        | 20.77  | 20.73  | 20.88   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.73 | 20.70 | 20.85 |
| 5 | 25 | 0  |       | 20.73 | 20.69 | 20.85 |
| 5 | 1  | 0  |       | 20.92 | 20.88 | 21.04 |
| 5 | 1  | 12 |       | 20.88 | 20.85 | 21.03 |
| 5 | 1  | 24 |       | 20.87 | 20.81 | 21.01 |
| 5 | 12 | 0  |       | 19.81 | 19.76 | 19.91 |
| 5 | 12 | 7  |       | 19.82 | 19.78 | 19.94 |
| 5 | 12 | 13 |       | 19.79 | 19.74 | 19.91 |
| 5 | 25 | 0  |       | 19.73 | 19.71 | 19.87 |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.61  | 22.57  | 22.74   |
|   | 1       | 8         |        | 22.58  | 22.54  | 22.70   |
|   | 1       | 14        |        | 22.60  | 22.53  | 22.69   |
|   | 8       | 0         |        | 21.64  | 21.58  | 21.72   |
|   | 8       | 4         |        | 21.64  | 21.59  | 21.76   |
|   | 8       | 7         |        | 21.63  | 21.57  | 21.72   |
|   | 15      | 0         |        | 21.61  | 21.56  | 21.75   |
| 3                                       | 1       | 0         | 16-QAM | 21.95  | 21.88  | 22.08   |
|   | 1       | 8         |        | 21.99  | 21.94  | 22.07   |
|   | 1       | 14        |        | 21.92  | 21.90  | 22.01   |
|   | 8       | 0         |        | 20.81  | 20.76  | 20.87   |
|   | 8       | 4         |        | 20.83  | 20.75  | 20.90   |
|   | 8       | 7         |        | 20.78  | 20.73  | 20.85   |
|   | 15      | 0         |        | 20.76  | 20.68  | 20.85   |
| 3                                       | 1       | 0         | 64QAM  | 20.88  | 20.85  | 20.96   |
|   | 1       | 8         |        | 20.86  | 20.85  | 20.98   |
|   | 1       | 14        |        | 20.90  | 20.81  | 20.98   |
|   | 8       | 0         |        | 19.81  | 19.77  | 19.89   |
|   | 8       | 4         |        | 19.82  | 19.77  | 19.92   |
|   | 8       | 7         |        | 19.79  | 19.76  | 19.91   |
|   | 15      | 0         |        | 19.77  | 19.71  | 19.87   |
| 1.4                                     | 1       | 0         | QPSK   | 22.52  | 22.51  | 22.65   |
|   | 1       | 3         |        | 22.61  | 22.54  | 22.73   |
|   | 1       | 5         |        | 22.52  | 22.48  | 22.64   |
|   | 3       | 0         |        | 22.56  | 22.50  | 22.70   |
|   | 3       | 1         |        | 22.59  | 22.55  | 22.73   |
|   | 3       | 3         |        | 22.55  | 22.50  | 22.70   |
|   | 6       | 0         |        | 21.54  | 21.49  | 21.71   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.91  | 21.88  | 21.98   |
|   | 1       | 3         |        | 21.96  | 21.94  | 22.09   |
|   | 1       | 5         |        | 21.88  | 21.87  | 22.01   |
|   | 3       | 0         |        | 21.69  | 21.62  | 21.80   |
|   | 3       | 1         |        | 21.71  | 21.67  | 21.84   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.66 | 21.61 | 21.80 |
| 1.4 | 6 | 0 |       | 20.72 | 20.68 | 20.85 |
| 1.4 | 1 | 0 |       | 20.80 | 20.71 | 20.91 |
| 1.4 | 1 | 3 |       | 20.90 | 20.83 | 20.97 |
| 1.4 | 1 | 5 |       | 20.77 | 20.79 | 20.88 |
| 1.4 | 3 | 0 |       | 20.82 | 20.75 | 20.92 |
| 1.4 | 3 | 1 |       | 20.85 | 20.81 | 20.96 |
| 1.4 | 3 | 3 |       | 20.82 | 20.77 | 20.90 |
| 1.4 | 6 | 0 |       | 19.66 | 19.60 | 19.80 |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.93  | 22.93  | 22.95   |
|   | 1       | 37        |        | 22.42  | 22.40  | 22.42   |
|   | 1       | 74        |        | 22.93  | 22.89  | 22.89   |
|   | 36      | 0         |        | 21.71  | 21.66  | 21.56   |
|   | 36      | 20        |        | 21.50  | 21.53  | 21.52   |
|   | 36      | 39        |        | 21.70  | 21.56  | 21.53   |
|   | 75      | 0         |        | 21.60  | 21.59  | 21.57   |
| 15                                      | 1       | 0         | 16-QAM | 22.25  | 22.25  | 22.30   |
|   | 1       | 37        |        | 21.79  | 21.73  | 21.75   |
|   | 1       | 74        |        | 22.24  | 22.22  | 22.21   |
|   | 36      | 0         |        | 20.78  | 20.75  | 20.69   |
|   | 36      | 20        |        | 20.59  | 20.59  | 20.59   |
|   | 36      | 39        |        | 20.77  | 20.65  | 20.65   |
|   | 75      | 0         |        | 20.68  | 20.69  | 20.69   |
| 15                                      | 1       | 0         | 64QAM  | 21.17  | 21.18  | 21.18   |
|   | 1       | 37        |        | 20.73  | 20.69  | 20.67   |
|   | 1       | 74        |        | 21.16  | 21.15  | 21.11   |
|   | 36      | 0         |        | 19.80  | 19.80  | 19.69   |
|   | 36      | 20        |        | 19.64  | 19.63  | 19.61   |
|   | 36      | 39        |        | 19.81  | 19.67  | 19.65   |
|   | 75      | 0         |        | 19.71  | 19.72  | 19.70   |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.44  | 22.38  | 22.52   |
|   | 1       | 25        |        | 22.42  | 22.40  | 22.47   |
|   | 1       | 49        |        | 22.40  | 22.45  | 22.43   |
|   | 25      | 0         |        | 21.50  | 21.46  | 21.49   |
|   | 25      | 12        |        | 21.46  | 21.48  | 21.45   |
|   | 25      | 25        |        | 21.44  | 21.40  | 21.47   |
|   | 50      | 0         |        | 21.47  | 21.40  | 21.45   |
| 10                                      | 1       | 0         | 16-QAM | 21.76  | 21.76  | 21.87   |
|   | 1       | 25        |        | 21.78  | 21.75  | 21.80   |
|   | 1       | 49        |        | 21.75  | 21.84  | 21.77   |
|   | 25      | 0         |        | 20.58  | 20.57  | 20.57   |
|   | 25      | 12        |        | 20.58  | 20.58  | 20.54   |
|   | 25      | 25        |        | 20.52  | 20.51  | 20.57   |
|   | 50      | 0         |        | 20.53  | 20.51  | 20.51   |
| 10                                      | 1       | 0         | 64QAM  | 20.67  | 20.64  | 20.78   |
|   | 1       | 25        |        | 20.66  | 20.64  | 20.72   |
|   | 1       | 49        |        | 20.66  | 20.70  | 20.67   |
|   | 25      | 0         |        | 19.60  | 19.59  | 19.54   |
|   | 25      | 12        |        | 19.58  | 19.54  | 19.52   |
|   | 25      | 25        |        | 19.53  | 19.50  | 19.58   |
|   | 50      | 0         |        | 19.57  | 19.56  | 19.54   |
| 5                                       | 1       | 0         | QPSK   | 22.38  | 22.45  | 22.52   |
|   | 1       | 12        |        | 22.35  | 22.41  | 22.44   |
|   | 1       | 24        |        | 22.43  | 22.39  | 22.42   |
|   | 12      | 0         |        | 21.38  | 21.41  | 21.51   |
|   | 12      | 7         |        | 21.42  | 21.42  | 21.49   |
|   | 12      | 13        |        | 21.37  | 21.40  | 21.48   |
|   | 25      | 0         |        | 21.49  | 21.42  | 21.48   |
| 5                                       | 1       | 0         | 16-QAM | 21.72  | 21.78  | 21.84   |
|   | 1       | 12        |        | 21.70  | 21.76  | 21.79   |
|   | 1       | 24        |        | 21.81  | 21.76  | 21.78   |
|   | 12      | 0         |        | 20.51  | 20.56  | 20.59   |
|   | 12      | 7         |        | 20.50  | 20.58  | 20.63   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.46 | 20.52 | 20.57 |
| 5 | 25 | 0  |       | 20.56 | 20.51 | 20.58 |
| 5 | 1  | 0  |       | 20.65 | 20.72 | 20.74 |
| 5 | 1  | 12 |       | 20.63 | 20.66 | 20.75 |
| 5 | 1  | 24 |       | 20.72 | 20.65 | 20.67 |
| 5 | 12 | 0  |       | 19.55 | 19.61 | 19.64 |
| 5 | 12 | 7  |       | 19.55 | 19.58 | 19.63 |
| 5 | 12 | 13 |       | 19.52 | 19.56 | 19.61 |
| 5 | 25 | 0  |       | 19.57 | 19.56 | 19.58 |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.36  | 22.39  | 22.46   |
|   | 1       | 8         |        | 22.32  | 22.39  | 22.43   |
|   | 1       | 14        |        | 22.33  | 22.35  | 22.43   |
|   | 8       | 0         |        | 21.40  | 21.42  | 21.48   |
|   | 8       | 4         |        | 21.40  | 21.45  | 21.48   |
|   | 8       | 7         |        | 21.38  | 21.40  | 21.45   |
|   | 15      | 0         |        | 21.36  | 21.39  | 21.45   |
| 3                                       | 1       | 0         | 16-QAM | 21.63  | 21.73  | 21.78   |
|   | 1       | 8         |        | 21.63  | 21.70  | 21.79   |
|   | 1       | 14        |        | 21.62  | 21.69  | 21.76   |
|   | 8       | 0         |        | 20.51  | 20.54  | 20.59   |
|   | 8       | 4         |        | 20.53  | 20.59  | 20.63   |
|   | 8       | 7         |        | 20.51  | 20.56  | 20.59   |
|   | 15      | 0         |        | 20.48  | 20.49  | 20.58   |
| 3                                       | 1       | 0         | 64QAM  | 20.60  | 20.63  | 20.72   |
|   | 1       | 8         |        | 20.61  | 20.64  | 20.69   |
|   | 1       | 14        |        | 20.60  | 20.63  | 20.66   |
|   | 8       | 0         |        | 19.50  | 19.58  | 19.61   |
|   | 8       | 4         |        | 19.55  | 19.54  | 19.62   |
|   | 8       | 7         |        | 19.49  | 19.53  | 19.60   |
|   | 15      | 0         |        | 19.49  | 19.50  | 19.59   |
| 1.4                                     | 1       | 0         | QPSK   | 22.27  | 22.30  | 22.36   |
|   | 1       | 3         |        | 22.34  | 22.38  | 22.42   |
|   | 1       | 5         |        | 22.26  | 22.28  | 22.33   |
|   | 3       | 0         |        | 22.33  | 22.36  | 22.42   |
|   | 3       | 1         |        | 22.36  | 22.39  | 22.43   |
|   | 3       | 3         |        | 22.34  | 22.33  | 22.39   |
|   | 6       | 0         |        | 21.32  | 21.34  | 21.38   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.60  | 21.64  | 21.67   |
|   | 1       | 3         |        | 21.70  | 21.71  | 21.73   |
|   | 1       | 5         |        | 21.59  | 21.61  | 21.66   |
|   | 3       | 0         |        | 21.42  | 21.44  | 21.49   |
|   | 3       | 1         |        | 21.46  | 21.46  | 21.51   |



|     |   |   |       |       |       |       |
|-----|---|---|-------|-------|-------|-------|
| 1.4 | 3 | 3 | 64QAM | 21.40 | 21.41 | 21.48 |
| 1.4 | 6 | 0 |       | 20.48 | 20.50 | 20.55 |
| 1.4 | 1 | 0 |       | 20.55 | 20.57 | 20.62 |
| 1.4 | 1 | 3 |       | 20.63 | 20.66 | 20.72 |
| 1.4 | 1 | 5 |       | 20.51 | 20.56 | 20.62 |
| 1.4 | 3 | 0 |       | 20.53 | 20.58 | 20.61 |
| 1.4 | 3 | 1 |       | 20.56 | 20.60 | 20.65 |
| 1.4 | 3 | 3 |       | 20.54 | 20.56 | 20.62 |
| 1.4 | 6 | 0 |       | 19.43 | 19.43 | 19.49 |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 22.89  | 22.78  | 22.80   |
|   | 1       | 49        |        | 22.57  | 22.66  | 22.70   |
|   | 1       | 99        |        | 22.60  | 22.68  | 22.70   |
|   | 50      | 0         |        | 21.82  | 21.84  | 21.73   |
|   | 50      | 24        |        | 21.76  | 21.75  | 21.77   |
|   | 50      | 50        |        | 21.67  | 21.69  | 21.68   |
|   | 100     | 0         |        | 21.73  | 21.75  | 21.77   |
| 20                                      | 1       | 0         | 16-QAM | 22.02  | 21.90  | 21.92   |
|   | 1       | 49        |        | 21.68  | 21.76  | 21.82   |
|   | 1       | 99        |        | 21.73  | 21.77  | 21.80   |
|   | 50      | 0         |        | 20.89  | 20.91  | 20.87   |
|   | 50      | 24        |        | 20.85  | 20.87  | 20.87   |
|   | 50      | 50        |        | 20.75  | 20.78  | 20.76   |
|   | 100     | 0         |        | 20.80  | 20.83  | 20.87   |
| 20                                      | 1       | 0         | 64QAM  | 20.73  | 20.69  | 20.72   |
|   | 1       | 49        |        | 20.46  | 20.56  | 20.58   |
|   | 1       | 99        |        | 20.43  | 20.57  | 20.55   |
|   | 50      | 0         |        | 19.90  | 19.91  | 19.85   |
|   | 50      | 24        |        | 19.83  | 19.83  | 19.89   |
|   | 50      | 50        |        | 19.77  | 19.75  | 19.79   |
|   | 100     | 0         |        | 19.82  | 19.86  | 19.88   |
| 15                                      | 1       | 0         | QPSK   | 22.84  | 22.74  | 22.88   |
|   | 1       | 37        |        | 22.56  | 22.67  | 22.70   |
|   | 1       | 74        |        | 22.65  | 22.74  | 22.71   |
|   | 36      | 0         |        | 21.76  | 21.78  | 21.81   |
|   | 36      | 20        |        | 21.64  | 21.74  | 21.77   |
|   | 36      | 39        |        | 21.65  | 21.64  | 21.63   |
|   | 75      | 0         |        | 21.72  | 21.72  | 21.78   |
| 15                                      | 1       | 0         | 16-QAM | 21.95  | 21.84  | 21.98   |
|   | 1       | 37        |        | 21.69  | 21.77  | 21.79   |
|   | 1       | 74        |        | 21.73  | 21.84  | 21.83   |
|   | 36      | 0         |        | 20.79  | 20.84  | 20.84   |
|   | 36      | 20        |        | 20.72  | 20.79  | 20.78   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 36 | 39 | 64QAM | 20.74 | 20.70 | 20.72 |
| 15 | 75 | 0  |       | 20.81 | 20.82 | 20.84 |
| 15 | 1  | 0  |       | 20.70 | 20.60 | 20.72 |
| 15 | 1  | 37 |       | 20.44 | 20.56 | 20.54 |
| 15 | 1  | 74 |       | 20.55 | 20.60 | 20.60 |
| 15 | 36 | 0  |       | 19.83 | 19.88 | 19.92 |
| 15 | 36 | 20 |       | 19.77 | 19.84 | 19.85 |
| 15 | 36 | 39 |       | 19.73 | 19.76 | 19.77 |
| 15 | 75 | 0  |       | 19.83 | 19.78 | 19.85 |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.75  | 22.67  | 22.80   |
|   | 1       | 25        |        | 22.59  | 22.66  | 22.72   |
|   | 1       | 49        |        | 22.53  | 22.63  | 22.75   |
|   | 25      | 0         |        | 21.70  | 21.73  | 21.77   |
|   | 25      | 12        |        | 21.65  | 21.73  | 21.74   |
|   | 25      | 25        |        | 21.58  | 21.66  | 21.68   |
|   | 50      | 0         |        | 21.74  | 21.72  | 21.75   |
| 10                                      | 1       | 0         | 16-QAM | 21.89  | 21.81  | 21.94   |
|   | 1       | 25        |        | 21.70  | 21.80  | 21.82   |
|   | 1       | 49        |        | 21.63  | 21.74  | 21.81   |
|   | 25      | 0         |        | 20.82  | 20.84  | 20.89   |
|   | 25      | 12        |        | 20.74  | 20.82  | 20.84   |
|   | 25      | 25        |        | 20.68  | 20.78  | 20.79   |
|   | 50      | 0         |        | 20.81  | 20.82  | 20.83   |
| 10                                      | 1       | 0         | 64QAM  | 20.65  | 20.56  | 20.67   |
|   | 1       | 25        |        | 20.43  | 20.55  | 20.58   |
|   | 1       | 49        |        | 20.38  | 20.47  | 20.58   |
|   | 25      | 0         |        | 19.86  | 19.89  | 19.89   |
|   | 25      | 12        |        | 19.76  | 19.86  | 19.89   |
|   | 25      | 25        |        | 19.72  | 19.82  | 19.80   |
|   | 50      | 0         |        | 19.83  | 19.82  | 19.82   |
| 5                                       | 1       | 0         | QPSK   | 22.70  | 22.69  | 22.71   |
|   | 1       | 12        |        | 22.58  | 22.66  | 22.71   |
|   | 1       | 24        |        | 22.51  | 22.61  | 22.68   |
|   | 12      | 0         |        | 21.72  | 21.70  | 21.74   |
|   | 12      | 7         |        | 21.74  | 21.74  | 21.73   |
|   | 12      | 13        |        | 21.62  | 21.70  | 21.69   |
|   | 25      | 0         |        | 21.70  | 21.71  | 21.69   |
| 5                                       | 1       | 0         | 16-QAM | 21.81  | 21.80  | 21.80   |
|   | 1       | 12        |        | 21.67  | 21.79  | 21.78   |
|   | 1       | 24        |        | 21.67  | 21.73  | 21.84   |
|   | 12      | 0         |        | 20.77  | 20.77  | 20.77   |
|   | 12      | 7         |        | 20.81  | 20.80  | 20.77   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.67 | 20.73 | 20.75 |
| 5 | 25 | 0  |       | 20.81 | 20.84 | 20.81 |
| 5 | 1  | 0  |       | 20.58 | 20.58 | 20.59 |
| 5 | 1  | 12 |       | 20.46 | 20.52 | 20.54 |
| 5 | 1  | 24 |       | 20.44 | 20.52 | 20.61 |
| 5 | 12 | 0  |       | 19.84 | 19.84 | 19.84 |
| 5 | 12 | 7  |       | 19.83 | 19.83 | 19.83 |
| 5 | 12 | 13 |       | 19.73 | 19.81 | 19.79 |
| 5 | 25 | 0  |       | 19.85 | 19.85 | 19.82 |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 22.73  | 22.91  | 22.56   |
|   | 1       | 49        |        | 22.49  | 22.71  | 22.40   |
|   | 1       | 99        |        | 22.46  | 22.64  | 22.19   |
|   | 50      | 0         |        | 21.72  | 21.88  | 21.48   |
|   | 50      | 24        |        | 21.58  | 21.81  | 21.47   |
|   | 50      | 50        |        | 21.54  | 21.72  | 21.37   |
|   | 100     | 0         |        | 21.56  | 21.80  | 21.32   |
| 20                                      | 1       | 0         | 16-QAM | 21.87  | 22.05  | 20.71   |
|   | 1       | 49        |        | 21.64  | 21.83  | 21.52   |
|   | 1       | 99        |        | 21.56  | 21.75  | 21.31   |
|   | 50      | 0         |        | 20.78  | 20.96  | 20.53   |
|   | 50      | 24        |        | 20.69  | 20.90  | 20.56   |
|   | 50      | 50        |        | 20.65  | 20.81  | 20.44   |
|   | 100     | 0         |        | 20.67  | 20.87  | 20.42   |
| 20                                      | 1       | 0         | 64QAM  | 20.63  | 20.79  | 20.44   |
|   | 1       | 49        |        | 20.37  | 20.55  | 20.28   |
|   | 1       | 99        |        | 20.29  | 20.51  | 20.06   |
|   | 50      | 0         |        | 19.79  | 19.97  | 19.59   |
|   | 50      | 24        |        | 19.70  | 19.87  | 19.55   |
|   | 50      | 50        |        | 19.64  | 19.81  | 19.43   |
|   | 100     | 0         |        | 19.68  | 19.89  | 19.46   |
| 15                                      | 1       | 0         | QPSK   | 22.71  | 22.89  | 22.56   |
|   | 1       | 37        |        | 22.44  | 22.72  | 22.35   |
|   | 1       | 74        |        | 22.46  | 22.66  | 22.27   |
|   | 36      | 0         |        | 21.57  | 21.82  | 21.51   |
|   | 36      | 20        |        | 21.62  | 21.78  | 21.48   |
|   | 36      | 39        |        | 21.48  | 21.69  | 21.42   |
|   | 75      | 0         |        | 21.60  | 21.78  | 21.43   |
| 15                                      | 1       | 0         | 16-QAM | 21.80  | 22.00  | 21.63   |
|   | 1       | 37        |        | 21.55  | 21.81  | 21.47   |
|   | 1       | 74        |        | 21.52  | 21.78  | 21.38   |
|   | 36      | 0         |        | 20.62  | 20.88  | 20.52   |
|   | 36      | 20        |        | 20.66  | 20.83  | 20.56   |



|    |    |    |       |       |       |       |
|----|----|----|-------|-------|-------|-------|
| 15 | 36 | 39 | 64QAM | 20.52 | 20.75 | 20.46 |
| 15 | 75 | 0  |       | 20.68 | 20.86 | 20.50 |
| 15 | 1  | 0  |       | 20.58 | 20.75 | 20.42 |
| 15 | 1  | 37 |       | 20.30 | 20.60 | 20.22 |
| 15 | 1  | 74 |       | 20.29 | 20.51 | 20.13 |
| 15 | 36 | 0  |       | 19.68 | 19.91 | 19.59 |
| 15 | 36 | 20 |       | 19.65 | 19.85 | 19.58 |
| 15 | 36 | 39 |       | 19.57 | 19.79 | 19.51 |
| 15 | 75 | 0  |       | 19.69 | 19.86 | 19.51 |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|---|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.62  | 22.80  | 22.64   |
|   | 1       | 25        |        | 22.51  | 22.73  | 22.36   |
|   | 1       | 49        |        | 22.47  | 22.68  | 22.40   |
|   | 25      | 0         |        | 21.56  | 21.76  | 21.51   |
|   | 25      | 12        |        | 21.50  | 21.78  | 21.43   |
|   | 25      | 25        |        | 21.53  | 21.73  | 21.40   |
|   | 50      | 0         |        | 21.62  | 21.78  | 21.46   |
| 10                                      | 1       | 0         | 16-QAM | 21.75  | 21.95  | 21.76   |
|   | 1       | 25        |        | 21.57  | 21.84  | 21.47   |
|   | 1       | 49        |        | 21.59  | 21.76  | 21.47   |
|   | 25      | 0         |        | 20.65  | 20.90  | 20.63   |
|   | 25      | 12        |        | 20.62  | 20.87  | 20.53   |
|   | 25      | 25        |        | 20.65  | 20.83  | 20.48   |
|   | 50      | 0         |        | 20.70  | 20.85  | 20.55   |
| 10                                      | 1       | 0         | 64QAM  | 20.53  | 20.71  | 20.52   |
|   | 1       | 25        |        | 20.35  | 20.61  | 20.21   |
|   | 1       | 49        |        | 20.34  | 20.54  | 20.23   |
|   | 25      | 0         |        | 19.71  | 19.92  | 19.64   |
|   | 25      | 12        |        | 19.68  | 19.93  | 19.56   |
|   | 25      | 25        |        | 19.68  | 19.87  | 19.51   |
|   | 50      | 0         |        | 19.72  | 19.87  | 19.56   |
| 5                                       | 1       | 0         | QPSK   | 22.55  | 22.74  | 22.40   |
|   | 1       | 12        |        | 22.47  | 22.71  | 22.33   |
|   | 1       | 24        |        | 22.39  | 22.64  | 22.23   |
|   | 12      | 0         |        | 21.54  | 21.78  | 21.40   |
|   | 12      | 7         |        | 21.56  | 21.77  | 21.41   |
|   | 12      | 13        |        | 21.50  | 21.74  | 21.38   |
|   | 25      | 0         |        | 21.51  | 21.75  | 21.39   |
| 5                                       | 1       | 0         | 16-QAM | 21.64  | 21.83  | 21.49   |
|   | 1       | 12        |        | 21.61  | 21.82  | 21.42   |
|   | 1       | 24        |        | 21.55  | 21.78  | 21.40   |
|   | 12      | 0         |        | 20.60  | 20.81  | 20.47   |
|   | 12      | 7         |        | 20.59  | 20.84  | 20.46   |



|   |    |    |       |       |       |       |
|---|----|----|-------|-------|-------|-------|
| 5 | 12 | 13 | 64QAM | 20.54 | 20.79 | 20.41 |
| 5 | 25 | 0  |       | 20.62 | 20.85 | 20.46 |
| 5 | 1  | 0  |       | 20.43 | 20.40 | 20.26 |
| 5 | 1  | 12 |       | 20.37 | 20.58 | 20.22 |
| 5 | 1  | 24 |       | 20.32 | 20.56 | 20.17 |
| 5 | 12 | 0  |       | 19.67 | 19.86 | 19.51 |
| 5 | 12 | 7  |       | 19.62 | 19.87 | 19.52 |
| 5 | 12 | 13 |       | 19.58 | 19.80 | 19.44 |
| 5 | 25 | 0  |       | 19.66 | 19.88 | 19.51 |



## LTE CA

| CA_7C          |                |            |         |           |         |           |                            |
|----------------|----------------|------------|---------|-----------|---------|-----------|----------------------------|
| PCC<br>Channel | SCC<br>Channel | Modulation | PCC     |           | SCC     |           | Measured<br>Power<br>(dBm) |
|                |                |            | RB Size | RB offset | RB Size | RB offset |                            |
| 20850          | 21048          | QPSK       | 0       | 0         | 1       | 99        | 1 22.58                    |
|                |                |            | 1       | 0         | 0       | 0         | 1 23.02                    |
|                |                |            | 100     | 0         | 0       | 0         | 100 22.28                  |
|                |                |            | 100     | 0         | 100     | 0         | 200 21.21                  |
|                |                |            | 1       | 0         | 1       | 99        | 2 14.56                    |
|                |                |            | 1       | 0         | 1       | 0         | 2 18.59                    |
|                |                |            | 1       | 99        | 1       | 0         | 2 23.01                    |
|                |                |            | 100     | 0         | 1       | 99        | 101 19.64                  |
|                |                | 16QAM      | 0       | 0         | 1       | 99        | 1 22.29                    |
|                |                |            | 1       | 0         | 0       | 0         | 1 22.61                    |
|                |                |            | 100     | 0         | 0       | 0         | 100 21.35                  |
|                |                |            | 100     | 0         | 100     | 0         | 200 20.29                  |
|                |                |            | 1       | 0         | 1       | 99        | 2 15.07                    |
|                |                |            | 1       | 0         | 1       | 0         | 2 19.3                     |
|                |                |            | 1       | 99        | 1       | 0         | 2 22.84                    |
|                |                |            | 100     | 0         | 1       | 99        | 101 19.72                  |
|                |                | 64QAM      | 0       | 0         | 1       | 99        | 1 20.97                    |
|                |                |            | 1       | 0         | 0       | 0         | 1 21.48                    |
|                |                |            | 100     | 0         | 0       | 0         | 100 20.34                  |
|                |                |            | 100     | 0         | 100     | 0         | 200 20.26                  |
|                |                |            | 1       | 0         | 1       | 99        | 2 14.98                    |
|                |                |            | 1       | 0         | 1       | 0         | 2 19.06                    |
|                |                |            | 1       | 99        | 1       | 0         | 2 20.53                    |
|                |                |            | 100     | 0         | 1       | 99        | 101 19.73                  |



|       |       |      |     |    |     |    |     |       |  |  |
|-------|-------|------|-----|----|-----|----|-----|-------|--|--|
| 21001 | 21199 | QPSK | 0   | 0  | 1   | 99 | 1   | 22.57 |  |  |
|       |       |      | 1   | 0  | 0   | 0  | 1   | 23.35 |  |  |
|       |       |      | 100 | 0  | 0   | 0  | 100 | 22.05 |  |  |
|       |       |      | 100 | 0  | 100 | 0  | 200 | 20.99 |  |  |
|       |       |      | 1   | 0  | 1   | 99 | 2   | 14.55 |  |  |
|       |       |      | 1   | 0  | 1   | 0  | 2   | 18.54 |  |  |
|       |       |      | 1   | 99 | 1   | 0  | 2   | 22.97 |  |  |
|       |       |      | 100 | 0  | 1   | 99 | 101 | 19.41 |  |  |
| 16QAM |       |      | 0   | 0  | 1   | 99 | 1   | 22.25 |  |  |
|       |       |      | 1   | 0  | 0   | 0  | 1   | 22.78 |  |  |
|       |       |      | 100 | 0  | 0   | 0  | 100 | 21.13 |  |  |
|       |       |      | 100 | 0  | 100 | 0  | 200 | 20.05 |  |  |
|       |       |      | 1   | 0  | 1   | 99 | 2   | 15.01 |  |  |
|       |       |      | 1   | 0  | 1   | 0  | 2   | 19.13 |  |  |
|       |       |      | 1   | 99 | 1   | 0  | 2   | 22.51 |  |  |
|       |       |      | 100 | 0  | 1   | 99 | 101 | 19.58 |  |  |
| 64QAM |       |      | 0   | 0  | 1   | 99 | 1   | 20.93 |  |  |
|       |       |      | 1   | 0  | 0   | 0  | 1   | 21.55 |  |  |
|       |       |      | 100 | 0  | 0   | 0  | 100 | 20.14 |  |  |
|       |       |      | 100 | 0  | 100 | 0  | 200 | 20.08 |  |  |
|       |       |      | 1   | 0  | 1   | 99 | 2   | 14.92 |  |  |
|       |       |      | 1   | 0  | 1   | 0  | 2   | 18.89 |  |  |
|       |       |      | 1   | 99 | 1   | 0  | 2   | 20.13 |  |  |
|       |       |      | 100 | 0  | 1   | 99 | 101 | 19.53 |  |  |



|       |       |       |     |    |     |    |     |       |
|-------|-------|-------|-----|----|-----|----|-----|-------|
| 21152 | 21350 | QPSK  | 0   | 0  | 1   | 99 | 1   | 22.74 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.85 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 21.78 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.76 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.23 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.23 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 23.01 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.22 |
| 21152 | 21350 | 16QAM | 0   | 0  | 1   | 99 | 1   | 22.23 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.15 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 20.83 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 19.84 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.72 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.85 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 22.31 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.36 |
| 21152 | 21350 | 64QAM | 0   | 0  | 1   | 99 | 1   | 21.1  |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 21.14 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 19.88 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 19.89 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.51 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.57 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 20.19 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.34 |



| CA_7C          |                |            |         |           |         |           |               |                            |
|----------------|----------------|------------|---------|-----------|---------|-----------|---------------|----------------------------|
| PCC<br>Channel | SCC<br>Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Measured<br>Power<br>(dBm) |
|                |                |            | RB Size | RB offset | RB Size | RB offset |               |                            |
| 20850          | 21021          | QPSK       | 100     | 0         | 75      | 0         | 175           | 21.25                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.64                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 23.21                      |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 20.35                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 15.2                       |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 22.82                      |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 20.36                      |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 15.09                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 20.68                      |
| 21026          | 21197          | QPSK       | 100     | 0         | 75      | 0         | 175           | 20.84                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.52                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 22.9                       |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 19.94                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 15.15                      |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 22.4                       |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 19.96                      |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 14.88                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 20.23                      |
| 21201          | 21372          | QPSK       | 100     | 0         | 75      | 0         | 175           | 20.71                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.15                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 22.83                      |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 19.78                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 14.57                      |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 22.26                      |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 19.8                       |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 14.45                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 20.12                      |



| Combination 15MHz+20MHz (75RB+100RB) |             |            |         |           |         |           |               |                      |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Measured Power (dBm) |
|                                      |             |            | RB Size | RB offset | RB Size | RB offset |               |                      |
| 20828                                | 20999       | QPSK       | 75      | 0         | 100     | 0         | 175           | 21.35                |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.63                |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 23.3                 |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 20.45                |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 15.25                |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 22.84                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 20.47                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 15.13                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 20.74                |
| 21003                                | 21174       | QPSK       | 75      | 0         | 100     | 0         | 175           | 20.79                |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.46                |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 22.92                |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 19.95                |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 15.11                |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 22.39                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 19.92                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 14.85                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 20.19                |
| 21179                                | 21350       | QPSK       | 75      | 0         | 100     | 0         | 175           | 20.69                |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.12                |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 22.79                |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 19.65                |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 14.49                |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 22.21                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 19.75                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 14.42                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 20.09                |



| Combination 20MHz+10MHz (100RB+50RB) |         |            |         |           |         |           |                      |       |
|--------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                  | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                              | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 20850                                | 20994   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 21.27 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.7  |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 23.25 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 20.4  |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 15.26 |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.86 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 20.42 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 15.12 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 20.72 |
| 21051                                | 21195   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 20.83 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.49 |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 22.86 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 19.91 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 15.1  |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.31 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 19.91 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 12.81 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 22.22 |
| 21251                                | 21395   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 20.78 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.19 |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 22.86 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 19.83 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.58 |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.28 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 19.84 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.48 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 20.16 |



| Combination 10MHz+20MHz (50RB+100RB) |         |            |         |           |         |           |                      |       |
|--------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                  | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                              | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 20805                                | 20949   | QPSK       | 50      | 0         | 100     | 0         | 150                  | 21.38 |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 21.72 |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 23.29 |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  | 20.45 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 15.21 |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 22.85 |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  | 20.44 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 15.16 |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 20.75 |
| 21006                                | 21150   | QPSK       | 50      | 0         | 100     | 0         | 150                  | 20.86 |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 14.53 |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 22.96 |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  | 19.97 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 15.18 |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 22.43 |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  | 19.96 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 14.87 |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 22.25 |
| 21206                                | 21350   | QPSK       | 50      | 0         | 100     | 0         | 150                  | 20.6  |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 14.1  |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 22.79 |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  | 19.67 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 14.52 |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 22.21 |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  | 19.7  |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 14.41 |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 20.09 |



| Combination 15MHz+15MHz (75RB+75RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 20825                               | 20975   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.33 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.71 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.24 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.45 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 15.26 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.92 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.46 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 15.14 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.72 |
| 21025                               | 21175   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 20.81 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.53 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.91 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 19.94 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 15.13 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.38 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 19.93 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.83 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.21 |
| 21225                               | 21375   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 20.69 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.13 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.79 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 19.73 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.53 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.24 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 19.73 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.41 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.13 |



| Combination 15MHz+10MHz (75RB+50RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 20825                               | 20945   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 21.29 |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.66 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.31 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 20.36 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 15.21 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.83 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 20.35 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 18.12 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.65 |
| 21051                               | 21171   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 20.78 |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.51 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.86 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 19.94 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 15.12 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.36 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 19.96 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.85 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.21 |
| 21277                               | 21397   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 20.7  |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.14 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.82 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 19.81 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.53 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.27 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 19.8  |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.44 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.16 |



| CA_38C                                |                |            |         |           |         |           |                            |
|---------------------------------------|----------------|------------|---------|-----------|---------|-----------|----------------------------|
| Combination 20MHz+20MHz (100RB+100RB) |                |            |         |           |         |           |                            |
| PCC<br>Channel                        | SCC<br>Channel | Modulation | PCC     |           | SCC     |           | Measured<br>Power<br>(dBm) |
|                                       |                |            | RB Size | RB offset | RB Size | RB offset |                            |
| 37850                                 | 38048          | QPSK       | 0       | 0         | 1       | 99        | 1 23.12                    |
|                                       |                |            | 1       | 0         | 0       | 0         | 1 23.11                    |
|                                       |                |            | 100     | 0         | 0       | 0         | 100 22.23                  |
|                                       |                |            | 100     | 0         | 100     | 0         | 200 21.26                  |
|                                       |                |            | 1       | 0         | 1       | 99        | 2 14.82                    |
|                                       |                |            | 1       | 0         | 1       | 0         | 2 18.68                    |
|                                       |                |            | 1       | 99        | 1       | 0         | 2 23.16                    |
|                                       |                |            | 100     | 0         | 1       | 99        | 101 19.84                  |
|                                       |                | 16QAM      | 0       | 0         | 1       | 99        | 1 22.53                    |
|                                       |                |            | 1       | 0         | 0       | 0         | 1 22.24                    |
|                                       |                |            | 100     | 0         | 0       | 0         | 100 21.34                  |
|                                       |                |            | 100     | 0         | 100     | 0         | 200 20.33                  |
|                                       |                |            | 1       | 0         | 1       | 99        | 2 14.93                    |
|                                       |                |            | 1       | 0         | 1       | 0         | 2 18.81                    |
|                                       |                |            | 1       | 99        | 1       | 0         | 2 22.2                     |
|                                       |                |            | 100     | 0         | 1       | 99        | 101 19.96                  |
|                                       |                | 64QAM      | 0       | 0         | 1       | 99        | 1 21.17                    |
|                                       |                |            | 1       | 0         | 0       | 0         | 1 20.83                    |
|                                       |                |            | 100     | 0         | 0       | 0         | 100 20.31                  |
|                                       |                |            | 100     | 0         | 100     | 0         | 200 20.28                  |
|                                       |                |            | 1       | 0         | 1       | 99        | 2 14.53                    |
|                                       |                |            | 1       | 0         | 1       | 0         | 2 18.41                    |
|                                       |                |            | 1       | 99        | 1       | 0         | 2 19.88                    |
|                                       |                |            | 100     | 0         | 1       | 99        | 101 19.73                  |



|       |       |       |     |    |     |    |     |       |
|-------|-------|-------|-----|----|-----|----|-----|-------|
| 37901 | 38099 | QPSK  | 0   | 0  | 1   | 99 | 1   | 23.29 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 23.11 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 22.25 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 21.27 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.86 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.74 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 23.11 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.8  |
|       |       | 16QAM | 0   | 0  | 1   | 99 | 1   | 22.37 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.35 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 21.33 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.33 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.92 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.88 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 22.15 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.91 |
|       |       | 64QAM | 0   | 0  | 1   | 99 | 1   | 20.99 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 20.94 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 20.31 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.29 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.52 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.46 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 19.83 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.68 |



|       |       |       |     |    |     |    |     |       |
|-------|-------|-------|-----|----|-----|----|-----|-------|
| 37952 | 38150 | QPSK  | 0   | 0  | 1   | 99 | 1   | 23.16 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 23.15 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 22.28 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 21.21 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.82 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.7  |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 23.2  |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.85 |
| 37952 | 38150 | 16QAM | 0   | 0  | 1   | 99 | 1   | 22.47 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.23 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 21.35 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.39 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.93 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.84 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 22.22 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.94 |
| 37952 | 38150 | 64QAM | 0   | 0  | 1   | 99 | 1   | 21.07 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 20.87 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 20.36 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.36 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.53 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.42 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 19.89 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.72 |



| CA_38C                              |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| Combination 15MHz+15MHz (75RB+75RB) |         |            |         |           |         |           |                      |       |
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 37825                               | 37975   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.15 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.53 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.04 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.13 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.66 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.07 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.12 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.28 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.76 |
| 37925                               | 38075   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.21 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.83 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.13 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.21 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.73 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.13 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.23 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.32 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.83 |
| 38025                               | 38175   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.23 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.77 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.26 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 14.79 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 22.15 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.29 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.26 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.66 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.98 |



| CA_41C                                |             |            |         |           |         |           |                      |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|----------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |                      |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |                      |
| 39750                                 | 39948       | QPSK       | 0       | 0         | 1       | 99        | 1 22.83              |
|                                       |             |            | 1       | 0         | 0       | 0         | 1 22.86              |
|                                       |             |            | 100     | 0         | 0       | 0         | 100 21.93            |
|                                       |             |            | 100     | 0         | 100     | 0         | 200 21.02            |
|                                       |             |            | 1       | 0         | 1       | 99        | 2 14.45              |
|                                       |             |            | 1       | 0         | 1       | 0         | 2 18.59              |
|                                       |             |            | 1       | 99        | 1       | 0         | 2 23.09              |
|                                       |             |            | 100     | 0         | 1       | 99        | 101 19.35            |
|                                       |             | 16QAM      | 0       | 0         | 1       | 99        | 1 21.95              |
|                                       |             |            | 1       | 0         | 0       | 0         | 1 22.09              |
|                                       |             |            | 100     | 0         | 0       | 0         | 100 21.15            |
|                                       |             |            | 100     | 0         | 100     | 0         | 200 20.17            |
|                                       |             |            | 1       | 0         | 1       | 99        | 2 14.57              |
|                                       |             |            | 1       | 0         | 1       | 0         | 2 18.75              |
|                                       |             |            | 1       | 99        | 1       | 0         | 2 22.14              |
|                                       |             |            | 100     | 0         | 1       | 99        | 101 19.59            |
|                                       |             | 64QAM      | 0       | 0         | 1       | 99        | 1 20.56              |
|                                       |             |            | 1       | 0         | 0       | 0         | 1 20.69              |
|                                       |             |            | 100     | 0         | 0       | 0         | 100 20.11            |
|                                       |             |            | 100     | 0         | 100     | 0         | 200 20.17            |
|                                       |             |            | 1       | 0         | 1       | 99        | 2 14.16              |
|                                       |             |            | 1       | 0         | 1       | 0         | 2 18.32              |
|                                       |             |            | 1       | 99        | 1       | 0         | 2 19.81              |
|                                       |             |            | 100     | 0         | 1       | 99        | 101 19.38            |



|       |       |       |     |    |     |    |     |       |
|-------|-------|-------|-----|----|-----|----|-----|-------|
| 40521 | 40719 | QPSK  | 0   | 0  | 1   | 99 | 1   | 22.58 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 23.01 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 22.12 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 21.05 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.32 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.61 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 23.05 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.41 |
| 40521 | 40719 | 16QAM | 0   | 0  | 1   | 99 | 1   | 21.85 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.12 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 21.08 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.05 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.58 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.62 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 22.08 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.58 |
| 40521 | 40719 | 64QAM | 0   | 0  | 1   | 99 | 1   | 20.35 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 20.71 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 20.05 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.08 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.01 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.32 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 19.81 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.32 |



|       |       |       |     |    |     |    |     |       |
|-------|-------|-------|-----|----|-----|----|-----|-------|
| 41292 | 41490 | QPSK  | 0   | 0  | 1   | 99 | 1   | 22.66 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 23.22 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 22.24 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 21.03 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.48 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.72 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 23.08 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.47 |
| 41292 | 41490 | 16QAM | 0   | 0  | 1   | 99 | 1   | 21.85 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 22.12 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 21.16 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.06 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.61 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.69 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 22.15 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.62 |
| 41292 | 41490 | 64QAM | 0   | 0  | 1   | 99 | 1   | 20.49 |
|       |       |       | 1   | 0  | 0   | 0  | 1   | 20.72 |
|       |       |       | 100 | 0  | 0   | 0  | 100 | 20.15 |
|       |       |       | 100 | 0  | 100 | 0  | 200 | 20.02 |
|       |       |       | 1   | 0  | 1   | 99 | 2   | 14.09 |
|       |       |       | 1   | 0  | 1   | 0  | 2   | 18.34 |
|       |       |       | 1   | 99 | 1   | 0  | 2   | 19.82 |
|       |       |       | 100 | 0  | 1   | 99 | 101 | 19.36 |



| CA_41C         |                |            |         |           |         |           |               |                            |
|----------------|----------------|------------|---------|-----------|---------|-----------|---------------|----------------------------|
| PCC<br>Channel | SCC<br>Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Measured<br>Power<br>(dBm) |
|                |                |            | RB Size | RB offset | RB Size | RB offset |               |                            |
| 39750          | 39921          | QPSK       | 100     | 0         | 75      | 0         | 175           | 21.07                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.46                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 23.04                      |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 20.17                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 14.59                      |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 22.08                      |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 20.15                      |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 14.19                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 19.79                      |
| 40546          | 40717          | QPSK       | 100     | 0         | 75      | 0         | 175           | 21.04                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.53                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 22.93                      |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 20.11                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 14.62                      |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 21.98                      |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 20.08                      |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 14.24                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 19.64                      |
| 41341          | 41512          | QPSK       | 100     | 0         | 75      | 0         | 175           | 21.03                      |
|                |                | QPSK       | 1       | 0         | 1       | 74        | 2             | 14.56                      |
|                |                | QPSK       | 1       | 99        | 1       | 0         | 2             | 23.06                      |
|                |                | 16QAM      | 100     | 0         | 75      | 0         | 175           | 20.03                      |
|                |                | 16QAM      | 1       | 0         | 1       | 74        | 2             | 14.57                      |
|                |                | 16QAM      | 1       | 99        | 1       | 0         | 2             | 22.02                      |
|                |                | 64QAM      | 100     | 0         | 75      | 0         | 175           | 20.04                      |
|                |                | 64QAM      | 1       | 0         | 1       | 74        | 2             | 14.18                      |
|                |                | 64QAM      | 1       | 99        | 1       | 0         | 2             | 20.05                      |



| Combination 15MHz+20MHz (75RB+100RB) |             |            |         |           |         |           |               |                      |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Measured Power (dBm) |
|                                      |             |            | RB Size | RB offset | RB Size | RB offset |               |                      |
| 39728                                | 39899       | QPSK       | 75      | 0         | 100     | 0         | 175           | 21.1                 |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.47                |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 23.07                |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 20.19                |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 14.6                 |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 22.07                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 20.16                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 14.21                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 19.81                |
| 40523                                | 40694       | QPSK       | 75      | 0         | 100     | 0         | 175           | 20.99                |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.5                 |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 22.86                |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 20.1                 |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 14.6                 |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 21.96                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 20.07                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 14.21                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 19.65                |
| 41319                                | 41490       | QPSK       | 75      | 0         | 100     | 0         | 175           | 21.01                |
|                                      |             | QPSK       | 1       | 0         | 1       | 99        | 2             | 14.57                |
|                                      |             | QPSK       | 1       | 74        | 1       | 0         | 2             | 23.01                |
|                                      |             | 16QAM      | 75      | 0         | 100     | 0         | 175           | 20.08                |
|                                      |             | 16QAM      | 1       | 0         | 1       | 99        | 2             | 14.55                |
|                                      |             | 16QAM      | 1       | 74        | 1       | 0         | 2             | 22.12                |
|                                      |             | 64QAM      | 75      | 0         | 100     | 0         | 175           | 20.02                |
|                                      |             | 64QAM      | 1       | 0         | 1       | 99        | 2             | 14.17                |
|                                      |             | 64QAM      | 1       | 74        | 1       | 0         | 2             | 20.1                 |



| Combination 20MHz+10MHz (100RB+50RB) |         |            |         |           |         |           |                      |       |
|--------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                  | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                              | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39750                                | 39894   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 21.12 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.41 |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 23.08 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 20.19 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.6  |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.13 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 20.16 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.21 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 19.82 |
| 40571                                | 40715   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 21.05 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.52 |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 22.92 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 20.13 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.67 |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 21.95 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 20.13 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.26 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 19.62 |
| 41391                                | 41535   | QPSK       | 100     | 0         | 50      | 0         | 150                  | 21.06 |
|                                      |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.58 |
|                                      |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 23.11 |
|                                      |         | 16QAM      | 100     | 0         | 50      | 0         | 150                  | 20.04 |
|                                      |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.56 |
|                                      |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.04 |
|                                      |         | 64QAM      | 100     | 0         | 50      | 0         | 150                  | 20.05 |
|                                      |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.16 |
|                                      |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 20.09 |



| Combination 10MHz+20MHz (50RB+100RB) |         |            |         |           |         |           |                      |
|--------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|
| PCC                                  | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |
| Channel                              | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |
| 39705                                | 39849   | QPSK       | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    |
| 40526                                | 40670   | QPSK       | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    |
| 41346                                | 41490   | QPSK       | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | QPSK       | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | QPSK       | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 16QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    |
|                                      |         | 64QAM      | 50      | 0         | 100     | 0         | 150                  |
|                                      |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    |
|                                      |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    |



| Combination 20MHz+5MHz (100RB+25RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39750                               | 39867   | QPSK       | 100     | 0         | 25      | 0         | 125                  | 21.11 |
|                                     |         | QPSK       | 1       | 0         | 1       | 24        | 2                    | 14.55 |
|                                     |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 23.05 |
|                                     |         | 16QAM      | 100     | 0         | 25      | 0         | 125                  | 20.15 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 24        | 2                    | 14.56 |
|                                     |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.01 |
|                                     |         | 64QAM      | 100     | 0         | 25      | 0         | 125                  | 20.12 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 24        | 2                    | 14.21 |
|                                     |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 19.82 |
| 40595                               | 40712   | QPSK       | 100     | 0         | 25      | 0         | 125                  | 21.06 |
|                                     |         | QPSK       | 1       | 0         | 1       | 24        | 2                    | 14.56 |
|                                     |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 22.91 |
|                                     |         | 16QAM      | 100     | 0         | 25      | 0         | 125                  | 20.15 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 24        | 2                    | 14.62 |
|                                     |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.02 |
|                                     |         | 64QAM      | 100     | 0         | 25      | 0         | 125                  | 20.16 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 24        | 2                    | 14.29 |
|                                     |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 19.71 |
| 41440                               | 41557   | QPSK       | 100     | 0         | 25      | 0         | 125                  | 21.03 |
|                                     |         | QPSK       | 1       | 0         | 1       | 24        | 2                    | 14.5  |
|                                     |         | QPSK       | 1       | 99        | 1       | 0         | 2                    | 23.18 |
|                                     |         | 16QAM      | 100     | 0         | 25      | 0         | 125                  | 20.09 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 24        | 2                    | 14.63 |
|                                     |         | 16QAM      | 1       | 99        | 1       | 0         | 2                    | 22.01 |
|                                     |         | 64QAM      | 100     | 0         | 25      | 0         | 125                  | 20.01 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 24        | 2                    | 14.29 |
|                                     |         | 64QAM      | 1       | 99        | 1       | 0         | 2                    | 20.06 |



| Combination 5MHz+20MHz (25RB+100RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39683                               | 39800   | QPSK       | 25      | 0         | 100     | 0         | 125                  | 21.01 |
|                                     |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 14.45 |
|                                     |         | QPSK       | 1       | 24        | 1       | 0         | 2                    | 23.08 |
|                                     |         | 16QAM      | 25      | 0         | 100     | 0         | 125                  | 20.15 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 14.56 |
|                                     |         | 16QAM      | 1       | 24        | 1       | 0         | 2                    | 21.98 |
|                                     |         | 64QAM      | 25      | 0         | 100     | 0         | 125                  | 20.13 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 14.21 |
|                                     |         | 64QAM      | 1       | 24        | 1       | 0         | 2                    | 19.78 |
| 40528                               | 40645   | QPSK       | 25      | 0         | 100     | 0         | 125                  | 21.18 |
|                                     |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 14.52 |
|                                     |         | QPSK       | 1       | 24        | 1       | 0         | 2                    | 22.88 |
|                                     |         | 16QAM      | 25      | 0         | 100     | 0         | 125                  | 20.15 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 14.69 |
|                                     |         | 16QAM      | 1       | 24        | 1       | 0         | 2                    | 22.01 |
|                                     |         | 64QAM      | 25      | 0         | 100     | 0         | 125                  | 20.16 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 14.29 |
|                                     |         | 64QAM      | 1       | 24        | 1       | 0         | 2                    | 19.68 |
| 41373                               | 41490   | QPSK       | 25      | 0         | 100     | 0         | 125                  | 21.09 |
|                                     |         | QPSK       | 1       | 0         | 1       | 99        | 2                    | 14.52 |
|                                     |         | QPSK       | 1       | 24        | 1       | 0         | 2                    | 23.05 |
|                                     |         | 16QAM      | 25      | 0         | 100     | 0         | 125                  | 20.24 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 99        | 2                    | 14.53 |
|                                     |         | 16QAM      | 1       | 24        | 1       | 0         | 2                    | 22.06 |
|                                     |         | 64QAM      | 25      | 0         | 100     | 0         | 125                  | 20.27 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 99        | 2                    | 14.16 |
|                                     |         | 64QAM      | 1       | 24        | 1       | 0         | 2                    | 20.08 |



| Combination 15MHz+15MHz (75RB+75RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39725                               | 39875   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.13 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.52 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.1  |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.23 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.65 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.14 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.21 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.25 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.85 |
| 40545                               | 40695   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.1  |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.59 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.99 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.17 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.68 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.04 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.14 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.3  |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.7  |
| 41365                               | 41515   | QPSK       | 75      | 0         | 75      | 0         | 150                  | 21.09 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 14.62 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.12 |
|                                     |         | 16QAM      | 75      | 0         | 75      | 0         | 150                  | 20.09 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 14.63 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.08 |
|                                     |         | 64QAM      | 75      | 0         | 75      | 0         | 150                  | 20.1  |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 14.24 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.11 |



| Combination 15MHz+10MHz (75RB+50RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39725                               | 39845   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 21.1  |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.47 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.05 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 20.24 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.62 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.12 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 20.22 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.21 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.82 |
| 40571                               | 40691   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 21.06 |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.5  |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 22.94 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 20.17 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.65 |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.03 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 20.11 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.27 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 19.67 |
| 41417                               | 41537   | QPSK       | 75      | 0         | 50      | 0         | 125                  | 21.16 |
|                                     |         | QPSK       | 1       | 0         | 1       | 49        | 2                    | 14.59 |
|                                     |         | QPSK       | 1       | 74        | 1       | 0         | 2                    | 23.21 |
|                                     |         | 16QAM      | 75      | 0         | 50      | 0         | 125                  | 20.06 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 49        | 2                    | 14.6  |
|                                     |         | 16QAM      | 1       | 74        | 1       | 0         | 2                    | 22.27 |
|                                     |         | 64QAM      | 75      | 0         | 50      | 0         | 125                  | 20.07 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 49        | 2                    | 14.21 |
|                                     |         | 64QAM      | 1       | 74        | 1       | 0         | 2                    | 20.08 |



| Combination 10MHz+15MHz (50RB+75RB) |         |            |         |           |         |           |                      |       |
|-------------------------------------|---------|------------|---------|-----------|---------|-----------|----------------------|-------|
| PCC                                 | SCC     | Modulation | PCC     |           | SCC     |           | Measured Power (dBm) |       |
| Channel                             | Channel |            | RB Size | RB offset | RB Size | RB offset |                      |       |
| 39703                               | 39823   | QPSK       | 50      | 0         | 75      | 0         | 125                  | 21.11 |
|                                     |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 14.5  |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 23.08 |
|                                     |         | 16QAM      | 50      | 0         | 75      | 0         | 125                  | 20.21 |
|                                     |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 14.63 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 22.12 |
|                                     |         | 64QAM      | 50      | 0         | 75      | 0         | 125                  | 20.19 |
|                                     |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 14.23 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 19.83 |
| 40549                               | 40669   | QPSK       | 50      | 0         | 75      | 0         | 125                  | 21.08 |
|                                     |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 14.57 |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 22.97 |
|                                     |         | 16QAM      | 50      | 0         | 75      | 0         | 125                  | 20.15 |
|                                     |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 14.66 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 22.02 |
|                                     |         | 64QAM      | 50      | 0         | 75      | 0         | 125                  | 20.12 |
|                                     |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 14.28 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 19.68 |
| 41395                               | 41515   | QPSK       | 50      | 0         | 75      | 0         | 125                  | 21.07 |
|                                     |         | QPSK       | 1       | 49        | 1       | 0         | 2                    | 14.6  |
|                                     |         | QPSK       | 1       | 0         | 1       | 74        | 2                    | 23.1  |
|                                     |         | 16QAM      | 50      | 0         | 75      | 0         | 125                  | 20.07 |
|                                     |         | 16QAM      | 1       | 49        | 1       | 0         | 2                    | 14.61 |
|                                     |         | 16QAM      | 1       | 0         | 1       | 74        | 2                    | 22.06 |
|                                     |         | 64QAM      | 50      | 0         | 75      | 0         | 125                  | 20.08 |
|                                     |         | 64QAM      | 1       | 49        | 1       | 0         | 2                    | 14.22 |
|                                     |         | 64QAM      | 1       | 0         | 1       | 74        | 2                    | 20.09 |

**ERP/EIRP**

| LTE Band 2 ( $G_T - L_c = 1.61 \text{ dB}$ ) QPSK |                 |                |                 |                |                |                 |                |                |                 |
|---|-----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 1.4M            |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel   | 18607<br>(Low)  | 18900<br>(Mid) | 19193<br>(High) | 18615<br>(Low) | 18900<br>(Mid) | 19185<br>(High) | 18625<br>(Low) | 18900<br>(Mid) | 19175<br>(High) |
|   | 1850.7<br>(MHz) | 1880           | 1909.3          | 1851.5         | 1880           | 1908.5          | 1852.5         | 1880           | 1907.5          |
| Conducted Power (dBm)                             | 22.51           | 22.51          | 22.75           | 22.62          | 22.61          | 22.84           | 22.56          | 22.52          | 22.77           |
| Conducted Power (Watts)                           | 0.1782          | 0.1782         | 0.1884          | 0.1828         | 0.1824         | 0.1923          | 0.1803         | 0.1786         | 0.1892          |
| EIRP(dBm)   | 24.12           | 24.12          | 24.36           | 24.23          | 24.22          | 24.45           | 24.17          | 24.13          | 24.38           |
| EIRP(Watts)                                       | 0.2582          | 0.2582         | 0.2729          | 0.2649         | 0.2642         | 0.2786          | 0.2612         | 0.2588         | 0.2742          |

| LTE Band 2 ( $G_T - L_c = 1.61 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel   | 18650<br>(Low) | 18900<br>(Mid) | 19150<br>(High) | 18675<br>(Low) | 18900<br>(Mid) | 19125<br>(High) | 18650<br>(Low) | 18900<br>(Mid) | 19100<br>(High) |
|   | 1855<br>(MHz)  | 1880           | 1905            | 1857.5         | 1880           | 1902.5          | 1860           | 1880           | 1900            |
| Conducted Power (dBm)                             | 22.64          | 22.56          | 22.89           | 22.69          | 22.65          | 22.83           | 22.76          | 22.63          | 22.90           |
| Conducted Power (Watts)                           | 0.1837         | 0.1803         | 0.1945          | 0.1858         | 0.1841         | 0.1919          | 0.1888         | 0.1832         | 0.1950          |
| EIRP(dBm)   | 24.25          | 24.17          | 24.50           | 24.30          | 24.26          | 24.44           | 24.37          | 24.24          | 24.51           |
| EIRP(Watts)                                       | 0.2661         | 0.2612         | 0.2818          | 0.2692         | 0.2667         | 0.2780          | 0.2735         | 0.2655         | 0.2825          |



| LTE Band 2 ( $G_T - L_C = 1.61 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel  | 18607<br>(Low) | 18900<br>(Mid) | 19193<br>(High) | 18615<br>(Low) | 18900<br>(Mid) | 19185<br>(High) | 18625<br>(Low) | 18900<br>(Mid) | 19175<br>(High) |
|  | 1850.7         | 1880           | 1909.3          | 1851.5         | 1880           | 1908.5          | 1852.5         | 1880           | 1907.5          |
| Conducted Power (dBm)                              | 21.90          | 21.88          | 22.08           | 22.00          | 21.98          | 22.22           | 21.93          | 21.89          | 22.09           |
| Conducted Power (Watts)                            | 0.1549         | 0.1542         | 0.1614          | 0.1585         | 0.1578         | 0.1667          | 0.1560         | 0.1545         | 0.1618          |
| EIRP(dBm)  | 23.51          | 23.49          | 23.69           | 23.61          | 23.59          | 23.83           | 23.54          | 23.50          | 23.70           |
| EIRP(Watts)  | 0.2244         | 0.2234         | 0.2339          | 0.2296         | 0.2286         | 0.2415          | 0.2259         | 0.2239         | 0.2344          |

| LTE Band 2 ( $G_T - L_C = 1.61 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel  | 18650<br>(Low) | 18900<br>(Mid) | 19150<br>(High) | 18675<br>(Low) | 18900<br>(Mid) | 19125<br>(High) | 18650<br>(Low) | 18900<br>(Mid) | 19100<br>(High) |
|  | 1855           | 1880           | 1905            | 1857.5         | 1880           | 1902.5          | 1860           | 1880           | 1900            |
| Conducted Power (dBm)                              | 21.95          | 21.98          | 22.24           | 22.05          | 22.01          | 22.19           | 22.12          | 21.97          | 22.18           |
| Conducted Power (Watts)                            | 0.1567         | 0.1578         | 0.1675          | 0.1603         | 0.1589         | 0.1656          | 0.1629         | 0.1574         | 0.1652          |
| EIRP(dBm)  | 23.56          | 23.59          | 23.85           | 23.66          | 23.62          | 23.80           | 23.73          | 23.58          | 23.79           |
| EIRP(Watts)  | 0.2270         | 0.2286         | 0.2427          | 0.2323         | 0.2301         | 0.2399          | 0.2360         | 0.2280         | 0.2393          |



| LTE Band 2 ( $G_T - L_C = 1.61 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel  | 18607<br>(Low) | 18900<br>(Mid) | 19193<br>(High) | 18615<br>(Low) | 18900<br>(Mid) | 19185<br>(High) | 18625<br>(Low) | 18900<br>(Mid) | 19175<br>(High) |
|  | 1850.7         | 1880           | 1909.3          | 1851.5         | 1880           | 1908.5          | 1852.5         | 1880           | 1907.5          |
| Conducted Power (dBm)                              | 20.82          | 20.81          | 21.01           | 20.83          | 20.76          | 21.04           | 20.83          | 20.85          | 21.04           |
| Conducted Power (Watts)                            | 0.1208         | 0.1205         | 0.1262          | 0.1211         | 0.1191         | 0.1271          | 0.1211         | 0.1216         | 0.1271          |
| EIRP(dBm)  | 22.43          | 22.42          | 22.62           | 22.44          | 22.37          | 22.65           | 22.44          | 22.46          | 22.65           |
| EIRP(Watts)  | 0.1750         | 0.1746         | 0.1828          | 0.1754         | 0.1726         | 0.1841          | 0.1754         | 0.1762         | 0.1841          |

| LTE Band 2 ( $G_T - L_C = 1.61 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel  | 18650<br>(Low) | 18900<br>(Mid) | 19150<br>(High) | 18675<br>(Low) | 18900<br>(Mid) | 19125<br>(High) | 18650<br>(Low) | 18900<br>(Mid) | 19100<br>(High) |
|  | 1855           | 1880           | 1905            | 1857.5         | 1880           | 1902.5          | 1860           | 1880           | 1900            |
| Conducted Power (dBm)                              | 20.84          | 20.81          | 21.13           | 20.95          | 20.91          | 21.13           | 21.05          | 20.91          | 21.12           |
| Conducted Power (Watts)                            | 0.1213         | 0.1205         | 0.1297          | 0.1245         | 0.1233         | 0.1297          | 0.1274         | 0.1233         | 0.1294          |
| EIRP(dBm)  | 22.45          | 22.42          | 22.74           | 22.56          | 22.52          | 22.74           | 22.66          | 22.52          | 22.73           |
| EIRP(Watts)  | 0.1758         | 0.1746         | 0.1879          | 0.1803         | 0.1786         | 0.1879          | 0.1845         | 0.1786         | 0.1875          |



| LTE Band 4 ( $G_T - L_c = 0.15 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel   | 19957  | 20175  | 20393  | 19965  | 20175  | 20385  | 19975  | 20175  | 20375  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                | 1710.7 | 1732.5 | 1754.3 | 1711.5 | 1732.5 | 1753.5 | 1712.5 | 1732.5 | 1752.5 |
| Conducted Power (dBm)                             | 22.51  | 22.79  | 22.85  | 22.62  | 22.79  | 22.83  | 22.58  | 22.74  | 22.98  |
| Conducted Power (Watts)                           | 0.1782 | 0.1901 | 0.1928 | 0.1828 | 0.1901 | 0.1919 | 0.1811 | 0.1879 | 0.1986 |
| EIRP(dBm)   | 22.66  | 22.94  | 23.00  | 22.77  | 22.94  | 22.98  | 22.73  | 22.89  | 23.13  |
| EIRP(Watts)                                       | 0.1845 | 0.1968 | 0.1995 | 0.1892 | 0.1968 | 0.1986 | 0.1875 | 0.1945 | 0.2056 |

| LTE Band 4 ( $G_T - L_c = 0.15 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 10M    |        |        | 15M    |        |        | 20M    |        |        |
| Channel   | 20000  | 20175  | 20350  | 20025  | 20175  | 20325  | 20050  | 20175  | 20300  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                | 1715   | 1732.5 | 1750   | 1717.5 | 1732.5 | 1747.5 | 1720   | 1732.5 | 1745   |
| Conducted Power (dBm)                             | 22.66  | 22.67  | 22.92  | 22.73  | 22.87  | 23.02  | 22.76  | 22.93  | 23.09  |
| Conducted Power (Watts)                           | 0.1845 | 0.1849 | 0.1959 | 0.1875 | 0.1936 | 0.2004 | 0.1888 | 0.1963 | 0.2037 |
| EIRP(dBm)   | 22.81  | 22.82  | 23.07  | 22.88  | 23.02  | 23.17  | 22.91  | 23.08  | 23.24  |
| EIRP(Watts)                                       | 0.1910 | 0.1914 | 0.2028 | 0.1941 | 0.2004 | 0.2075 | 0.1954 | 0.2032 | 0.2109 |



| LTE Band 4 ( $G_T - L_C = 0.15 \text{ dB}$ ) 16QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 19957  | 20175  | 20393  | 19965  | 20175  | 20385  | 19975  | 20175  | 20375  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 1710.7 | 1732.5 | 1754.3 | 1711.5 | 1732.5 | 1753.5 | 1712.5 | 1732.5 | 1752.5 |
| Conducted Power (dBm)                              | 21.89  | 22.14  | 22.19  | 21.96  | 22.13  | 22.21  | 21.95  | 22.11  | 22.37  |
| Conducted Power (Watts)                            | 0.1545 | 0.1637 | 0.1656 | 0.1570 | 0.1633 | 0.1663 | 0.1567 | 0.1626 | 0.1726 |
| EIRP(dBm)  | 22.04  | 22.29  | 22.34  | 22.11  | 22.28  | 22.36  | 22.10  | 22.26  | 22.52  |
| EIRP(Watts)  | 0.1600 | 0.1694 | 0.1714 | 0.1626 | 0.1690 | 0.1722 | 0.1622 | 0.1683 | 0.1786 |

| LTE Band 4 ( $G_T - L_C = 0.15 \text{ dB}$ ) 16QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 10M    |        |        | 15M    |        |        | 20M    |        |        |
| Channel  | 20000  | 20175  | 20350  | 20025  | 20175  | 20325  | 20050  | 20175  | 20300  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 1715   | 1732.5 | 1750   | 1717.5 | 1732.5 | 1747.5 | 1720   | 1732.5 | 1745   |
| Conducted Power (dBm)                              | 21.99  | 22.04  | 22.28  | 22.10  | 22.16  | 22.40  | 22.11  | 22.21  | 22.44  |
| Conducted Power (Watts)                            | 0.1581 | 0.1600 | 0.1690 | 0.1622 | 0.1644 | 0.1738 | 0.1626 | 0.1663 | 0.1754 |
| EIRP(dBm)  | 22.14  | 22.19  | 22.43  | 22.25  | 22.31  | 22.55  | 22.26  | 22.36  | 22.59  |
| EIRP(Watts)  | 0.1637 | 0.1656 | 0.1750 | 0.1679 | 0.1702 | 0.1799 | 0.1683 | 0.1722 | 0.1816 |



| LTE Band 4 ( $G_T - L_C = 0.15 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel  | 19957<br>(Low) | 20175<br>(Mid) | 20393<br>(High) | 19965<br>(Low) | 20175<br>(Mid) | 20385<br>(High) | 19975<br>(Low) | 20175<br>(Mid) | 20375<br>(High) |
|  | 1710.7         | 1732.5         | 1754.3          | 1711.5         | 1732.5         | 1753.5          | 1712.5         | 1732.5         | 1752.5          |
| Conducted Power (dBm)                              | 20.78          | 21.08          | 21.09           | 20.82          | 20.97          | 21.12           | 20.87          | 21.04          | 21.22           |
| Conducted Power (Watts)                            | 0.1197         | 0.1282         | 0.1285          | 0.1208         | 0.1250         | 0.1294          | 0.1222         | 0.1271         | 0.1324          |
| EIRP(dBm)  | 20.93          | 21.23          | 21.24           | 20.97          | 21.12          | 21.27           | 21.02          | 21.19          | 21.37           |
| EIRP(Watts)  | 0.1239         | 0.1327         | 0.1330          | 0.1250         | 0.1294         | 0.1340          | 0.1265         | 0.1315         | 0.1371          |

| LTE Band 4 ( $G_T - L_C = 0.15 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel  | 20000<br>(Low) | 20175<br>(Mid) | 20350<br>(High) | 20025<br>(Low) | 20175<br>(Mid) | 20325<br>(High) | 20050<br>(Low) | 20175<br>(Mid) | 20300<br>(High) |
|  | 1715           | 1732.5         | 1750            | 1717.5         | 1732.5         | 1747.5          | 1720           | 1732.5         | 1745            |
| Conducted Power (dBm)                              | 20.95          | 20.96          | 21.18           | 21.00          | 21.09          | 21.35           | 21.04          | 21.11          | 21.32           |
| Conducted Power (Watts)                            | 0.1245         | 0.1247         | 0.1312          | 0.1259         | 0.1285         | 0.1365          | 0.1271         | 0.1291         | 0.1355          |
| EIRP(dBm)  | 21.10          | 21.11          | 21.33           | 21.15          | 21.24          | 21.50           | 21.19          | 21.26          | 21.47           |
| EIRP(Watts)  | 0.1288         | 0.1291         | 0.1358          | 0.1303         | 0.1330         | 0.1413          | 0.1315         | 0.1337         | 0.1403          |



| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel   | 20407  | 20525  | 20643  | 20415  | 20525  | 20635  | 20425  | 20525  | 20625  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                | 824.7  | 836.5  | 848.3  | 825.5  | 836.5  | 847.5  | 826.5  | 836.5  | 846.5  |
| Conducted Power (dBm)                             | 22.56  | 22.41  | 22.63  | 22.57  | 22.42  | 22.66  | 22.54  | 22.45  | 22.65  |
| Conducted Power (Watts)                           | 0.1803 | 0.1742 | 0.1832 | 0.1807 | 0.1746 | 0.1845 | 0.1795 | 0.1758 | 0.1841 |
| ERP(dBm)  | 20.78  | 20.63  | 20.85  | 20.79  | 20.64  | 20.88  | 20.76  | 20.67  | 20.87  |
| ERP(Watts)  | 0.1197 | 0.1156 | 0.1216 | 0.1199 | 0.1159 | 0.1225 | 0.1191 | 0.1167 | 0.1222 |

| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) QPSK |        |        |        |
|---|--------|--------|--------|
| Bandwidth   | 10M    |        |        |
| Channel   | 20450  | 20525  | 20600  |
|   | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                | 829    | 836.5  | 844    |
| Conducted Power (dBm)                             | 22.67  | 22.56  | 22.62  |
| Conducted Power (Watts)                           | 0.1849 | 0.1803 | 0.1828 |
| ERP(dBm)  | 20.89  | 20.78  | 20.84  |
| ERP(Watts)  | 0.1227 | 0.1197 | 0.1213 |



| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) 16QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 20407  | 20525  | 20643  | 20415  | 20525  | 20635  | 20425  | 20525  | 20625  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 824.7  | 836.5  | 848.3  | 825.5  | 836.5  | 847.5  | 826.5  | 836.5  | 846.5  |
| Conducted Power (dBm)                              | 21.84  | 21.70  | 22.00  | 21.83  | 21.71  | 22.01  | 21.85  | 21.74  | 22.01  |
| Conducted Power (Watts)                            | 0.1528 | 0.1479 | 0.1585 | 0.1524 | 0.1483 | 0.1589 | 0.1531 | 0.1493 | 0.1589 |
| ERP(dBm)   | 20.06  | 19.92  | 20.22  | 20.05  | 19.93  | 20.23  | 20.07  | 19.96  | 20.23  |
| ERP(Watts)   | 0.1014 | 0.0982 | 0.1052 | 0.1012 | 0.0984 | 0.1054 | 0.1016 | 0.0991 | 0.1054 |

| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) 16QAM |        |        |        |
|--|--------|--------|--------|
| Bandwidth  | 10M    |        |        |
| Channel  | 20450  | 20525  | 20600  |
|  | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 829    | 836.5  | 844    |
| Conducted Power (dBm)                              | 21.98  | 21.91  | 21.92  |
| Conducted Power (Watts)                            | 0.1578 | 0.1552 | 0.1556 |
| ERP(dBm)   | 20.20  | 20.13  | 20.14  |
| ERP(Watts)   | 0.1047 | 0.1030 | 0.1033 |



| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) 64QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 20407  | 20525  | 20643  | 20415  | 20525  | 20635  | 20425  | 20525  | 20625  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 824.7  | 836.5  | 848.3  | 825.5  | 836.5  | 847.5  | 826.5  | 836.5  | 846.5  |
| Conducted Power (dBm)                              | 20.76  | 20.64  | 20.85  | 20.80  | 20.64  | 20.93  | 20.87  | 20.66  | 20.92  |
| Conducted Power (Watts)                            | 0.1191 | 0.1159 | 0.1216 | 0.1202 | 0.1159 | 0.1239 | 0.1222 | 0.1164 | 0.1236 |
| ERP(dBm)   | 18.98  | 18.86  | 19.07  | 19.02  | 18.86  | 19.15  | 19.09  | 18.88  | 19.14  |
| ERP(Watts)   | 0.0791 | 0.0769 | 0.0807 | 0.0798 | 0.0769 | 0.0822 | 0.0811 | 0.0773 | 0.0820 |

| LTE Band 5 ( $G_T - L_C = 0.37 \text{ dB}$ ) 64QAM |        |        |        |
|--|--------|--------|--------|
| Bandwidth  | 10M    |        |        |
| Channel  | 20450  | 20525  | 20600  |
|  | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 829    | 836.5  | 844    |
| Conducted Power (dBm)                              | 20.90  | 20.81  | 20.82  |
| Conducted Power (Watts)                            | 0.1230 | 0.1205 | 0.1208 |
| ERP(dBm)   | 19.12  | 19.03  | 19.04  |
| ERP(Watts)   | 0.0817 | 0.0800 | 0.0802 |



| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) QPSK |                |                |                 |
|--|----------------|----------------|-----------------|
| Bandwidth  | 5M             |                |                 |
| Channel  | 20775<br>(Low) | 21100<br>(Mid) | 21425<br>(High) |
|  | 2502.5         | 2535           | 2567.5          |
| Conducted Power (dBm)                              | 22.48          | 22.71          | 22.66           |
| Conducted Power (Watts)                            | 0.1770         | 0.1866         | 0.1845          |
| EIRP(dBm)  | 21.72          | 21.95          | 21.90           |
| EIRP(Watts)  | 0.1486         | 0.1567         | 0.1549          |

| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel  | 20800<br>(Low) | 21100<br>(Mid) | 21400<br>(High) | 20825<br>(Low) | 21100<br>(Mid) | 21375<br>(High) | 20850<br>(Low) | 21100<br>(Mid) | 21350<br>(High) |
|  | 2505           | 2535           | 2565            | 2507.5         | 2535           | 2562.5          | 2510           | 2535           | 2560            |
| Conducted Power (dBm)                              | 22.52          | 22.73          | 22.69           | 22.61          | 22.68          | 22.70           | 22.64          | 22.70          | 22.84           |
| Conducted Power (Watts)                            | 0.1786         | 0.1875         | 0.1858          | 0.1824         | 0.1854         | 0.1862          | 0.1837         | 0.1862         | 0.1923          |
| EIRP(dBm)  | 21.76          | 21.97          | 21.93           | 21.85          | 21.92          | 21.94           | 21.88          | 21.94          | 22.08           |
| EIRP(Watts)  | 0.1500         | 0.1574         | 0.1560          | 0.1531         | 0.1556         | 0.1563          | 0.1542         | 0.1563         | 0.1614          |



| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) 16QAM |                |                |                 |
|---|----------------|----------------|-----------------|
| Bandwidth   | 5M             |                |                 |
| Channel   | 20775<br>(Low) | 21100<br>(Mid) | 21425<br>(High) |
|   | 2502.5         | 2535           | 2567.5          |
| Conducted Power (dBm)                               | 21.83          | 22.00          | 22.03           |
| Conducted Power (Watts)                             | 0.1524         | 0.1585         | 0.1596          |
| EIRP(dBm)   | 21.07          | 21.24          | 21.27           |
| EIRP(Watts)   | 0.1279         | 0.1330         | 0.1340          |

| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel   | 20800<br>(Low) | 21100<br>(Mid) | 21400<br>(High) | 20825<br>(Low) | 21100<br>(Mid) | 21375<br>(High) | 20850<br>(Low) | 21100<br>(Mid) | 21350<br>(High) |
|   | 2505           | 2535           | 2565            | 2507.5         | 2535           | 2562.5          | 2510           | 2535           | 2560            |
| Conducted Power (dBm)                               | 21.88          | 22.07          | 22.02           | 21.92          | 22.04          | 22.08           | 21.99          | 22.03          | 22.14           |
| Conducted Power (Watts)                             | 0.1542         | 0.1611         | 0.1592          | 0.1556         | 0.1600         | 0.1614          | 0.1581         | 0.1596         | 0.1637          |
| EIRP(dBm)   | 21.12          | 21.31          | 21.26           | 21.16          | 21.28          | 21.32           | 21.23          | 21.27          | 21.38           |
| EIRP(Watts)   | 0.1294         | 0.1352         | 0.1337          | 0.1306         | 0.1343         | 0.1355          | 0.1327         | 0.1340         | 0.1374          |



| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) 64QAM |                |                |                 |
|---|----------------|----------------|-----------------|
| Bandwidth   | 5M             |                |                 |
| Channel   | 20775<br>(Low) | 21100<br>(Mid) | 21425<br>(High) |
|   | 2502.5         | 2535           | 2567.5          |
| Conducted Power (dBm)                               | 20.80          | 20.97          | 20.98           |
| Conducted Power (Watts)                             | 0.1202         | 0.1250         | 0.1253          |
| EIRP(dBm)   | 20.04          | 20.21          | 20.22           |
| EIRP(Watts)   | 0.1009         | 0.1050         | 0.1052          |

| LTE Band 7 ( $G_T - L_C = -0.76 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel   | 20800<br>(Low) | 21100<br>(Mid) | 21400<br>(High) | 20825<br>(Low) | 21100<br>(Mid) | 21375<br>(High) | 20850<br>(Low) | 21100<br>(Mid) | 21350<br>(High) |
|   | 2505           | 2535           | 2565            | 2507.5         | 2535           | 2562.5          | 2510           | 2535           | 2560            |
| Conducted Power (dBm)                               | 20.84          | 21.02          | 20.89           | 20.93          | 20.98          | 20.95           | 20.92          | 20.98          | 21.07           |
| Conducted Power (Watts)                             | 0.1213         | 0.1265         | 0.1227          | 0.1239         | 0.1253         | 0.1245          | 0.1236         | 0.1253         | 0.1279          |
| EIRP(dBm)   | 20.08          | 20.26          | 20.13           | 20.17          | 20.22          | 20.19           | 20.16          | 20.22          | 20.31           |
| EIRP(Watts)   | 0.1019         | 0.1062         | 0.1030          | 0.1040         | 0.1052         | 0.1045          | 0.1038         | 0.1052         | 0.1074          |



| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) QPSK |           |        |        |           |        |        |         |        |        |
|---|-----------|--------|--------|-----------|--------|--------|---------|--------|--------|
| Bandwidth   | 15M + 15M |        |        | 10M + 20M |        |        | 20M+10M |        |        |
| Channel PCC   | 20825     | 21025  | 21225  | 20805     | 21006  | 21206  | 20850   | 21051  | 21251  |
|   | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC   | 20975     | 21175  | 21375  | 20949     | 21150  | 21350  | 20994   | 21195  | 21395  |
|   | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                                 | 23.24     | 22.91  | 22.79  | 23.29     | 22.96  | 22.79  | 23.25   | 22.86  | 22.86  |
| Conducted Power (Watts)                               | 0.2109    | 0.1954 | 0.1901 | 0.2133    | 0.1977 | 0.1901 | 0.2113  | 0.1932 | 0.1932 |
| EIRP(dBm)   | 22.48     | 22.15  | 22.03  | 22.53     | 22.20  | 22.03  | 22.49   | 22.10  | 22.10  |
| EIRP(Watts)   | 0.1770    | 0.1641 | 0.1596 | 0.1791    | 0.1660 | 0.1596 | 0.1774  | 0.1622 | 0.1622 |

| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) QPSK |         |        |        |         |        |        |           |        |        |
|---|---------|--------|--------|---------|--------|--------|-----------|--------|--------|
| Bandwidth   | 15M+20M |        |        | 20M+15M |        |        | 20M + 20M |        |        |
| Channel PCC   | 20828   | 21003  | 21179  | 20850   | 21026  | 21201  | 20850     | 21001  | 21152  |
|   | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Channel SCC   | 20999   | 21174  | 21350  | 21021   | 21197  | 21372  | 21048     | 21199  | 21350  |
|   | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                 | 23.30   | 22.92  | 22.79  | 23.21   | 22.9   | 22.83  | 23.02     | 23.35  | 23.01  |
| Conducted Power (Watts)                               | 0.2138  | 0.1959 | 0.1901 | 0.2094  | 0.1950 | 0.1919 | 0.2004    | 0.2163 | 0.2000 |
| EIRP(dBm)   | 22.54   | 22.16  | 22.03  | 22.45   | 22.14  | 22.07  | 22.26     | 22.59  | 22.25  |
| EIRP(Watts)   | 0.1795  | 0.1644 | 0.1596 | 0.1758  | 0.1637 | 0.1611 | 0.1683    | 0.1816 | 0.1679 |



| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 16QAM |           |        |        |           |        |        |         |        |        |
|--|-----------|--------|--------|-----------|--------|--------|---------|--------|--------|
| Bandwidth  | 15M + 15M |        |        | 10M + 20M |        |        | 20M+10M |        |        |
| Channel PCC  | 20825     | 21025  | 21225  | 20805     | 21006  | 21206  | 20850   | 21051  | 21251  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC  | 20975     | 21175  | 21375  | 20949     | 21150  | 21350  | 20994   | 21195  | 21395  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 22.92     | 22.38  | 22.24  | 22.85     | 22.43  | 22.21  | 22.86   | 22.31  | 22.28  |
| Conducted Power (Watts)                                | 0.1959    | 0.1730 | 0.1675 | 0.1928    | 0.1750 | 0.1663 | 0.1932  | 0.1702 | 0.1690 |
| EIRP(dBm)  | 22.16     | 21.62  | 21.48  | 22.09     | 21.67  | 21.45  | 22.10   | 21.55  | 21.52  |
| EIRP(Watts)  | 0.1644    | 0.1452 | 0.1406 | 0.1618    | 0.1469 | 0.1396 | 0.1622  | 0.1429 | 0.1419 |

| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 16QAM |         |        |        |         |        |        |           |        |        |
|--|---------|--------|--------|---------|--------|--------|-----------|--------|--------|
| Bandwidth  | 15M+20M |        |        | 20M+15M |        |        | 20M + 20M |        |        |
| Channel PCC  | 20828   | 21003  | 21179  | 20850   | 21026  | 21201  | 20850     | 21001  | 21152  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Channel SCC  | 20999   | 21174  | 21350  | 21021   | 21197  | 21372  | 21048     | 21199  | 21350  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 22.84   | 22.39  | 22.21  | 22.82   | 22.4   | 22.26  | 22.84     | 22.78  | 22.31  |
| Conducted Power (Watts)                                | 0.1923  | 0.1734 | 0.1663 | 0.1914  | 0.1738 | 0.1683 | 0.1923    | 0.1897 | 0.1702 |
| EIRP(dBm)  | 22.08   | 21.63  | 21.45  | 22.06   | 21.64  | 21.50  | 22.08     | 22.02  | 21.55  |
| EIRP(Watts)  | 0.1614  | 0.1455 | 0.1396 | 0.1607  | 0.1459 | 0.1413 | 0.1614    | 0.1592 | 0.1429 |



| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 15M + 15M      |                |                 | 10M + 20M      |                |                 | 20M+10M        |                |                 |
| Channel PCC  | 20825<br>(Low) | 21025<br>(Mid) | 21225<br>(High) | 20805<br>(Low) | 21006<br>(Mid) | 21206<br>(High) | 20850<br>(Low) | 21051<br>(Mid) | 21251<br>(High) |
|  | 20975<br>(Low) | 21175<br>(Mid) | 21375<br>(High) | 20949<br>(Low) | 21150<br>(Mid) | 21350<br>(High) | 20994<br>(Low) | 21195<br>(Mid) | 21395<br>(High) |
| Conducted Power (dBm)                                  | 20.72          | 20.21          | 20.13           | 20.75          | 22.25          | 20.09           | 20.72          | 22.22          | 20.16           |
| Conducted Power (Watts)                                | 0.1180         | 0.1050         | 0.1030          | 0.1189         | 0.1679         | 0.1021          | 0.1180         | 0.1667         | 0.1038          |
| EIRP(dBm)  | 19.96          | 19.45          | 19.37           | 19.99          | 21.49          | 19.33           | 19.96          | 21.46          | 19.40           |
| EIRP(Watts)  | 0.0991         | 0.0881         | 0.0865          | 0.0998         | 0.1409         | 0.0857          | 0.0991         | 0.1400         | 0.0871          |

| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 15M+20M        |                |                 | 20M+15M        |                |                 | 20M + 20M      |                |                 |
| Channel PCC  | 20828<br>(Low) | 21003<br>(Mid) | 21179<br>(High) | 20850<br>(Low) | 21026<br>(Mid) | 21201<br>(High) | 20850<br>(Low) | 21001<br>(Mid) | 21152<br>(High) |
|  | 20999<br>(Low) | 21174<br>(Mid) | 21350<br>(High) | 21021<br>(Low) | 21197<br>(Mid) | 21372<br>(High) | 21048<br>(Low) | 21199<br>(Mid) | 21350<br>(High) |
| Conducted Power (dBm)                                  | 20.74          | 20.19          | 20.09           | 20.68          | 20.23          | 20.12           | 21.48          | 21.55          | 21.14           |
| Conducted Power (Watts)                                | 0.1186         | 0.1045         | 0.1021          | 0.1169         | 0.1054         | 0.1028          | 0.1406         | 0.1429         | 0.1300          |
| EIRP(dBm)  | 19.98          | 19.43          | 19.33           | 19.92          | 19.47          | 19.36           | 20.72          | 20.79          | 20.38           |
| EIRP(Watts)  | 0.0995         | 0.0877         | 0.0857          | 0.0982         | 0.0885         | 0.0863          | 0.1180         | 0.1199         | 0.1091          |



| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) QPSK |           |        |        |
|---|-----------|--------|--------|
| Bandwidth   | 15M + 10M |        |        |
| Channel PCC   | 20825     | 21025  | 21225  |
|   | (Low)     | (Mid)  | (High) |
| Channel SCC   | 20975     | 21175  | 21375  |
|   | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                 | 23.31     | 22.86  | 22.82  |
| Conducted Power (Watts)                               | 0.2143    | 0.1932 | 0.1914 |
| EIRP(dBm)   | 22.55     | 22.10  | 22.06  |
| EIRP(Watts)   | 0.1799    | 0.1622 | 0.1607 |

| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 16QAM |           |        |        |
|--|-----------|--------|--------|
| Bandwidth  | 15M + 10M |        |        |
| Channel PCC  | 20825     | 21025  | 21225  |
|  | (Low)     | (Mid)  | (High) |
| Channel SCC  | 20975     | 21175  | 21375  |
|  | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 22.83     | 22.36  | 22.27  |
| Conducted Power (Watts)                                | 0.1919    | 0.1722 | 0.1687 |
| EIRP(dBm)  | 22.07     | 21.60  | 21.51  |
| EIRP(Watts)  | 0.1611    | 0.1445 | 0.1416 |

| LTE Band 7 CA ( $G_T - L_C = -0.76 \text{ dB}$ ) 64QAM |           |        |        |
|--|-----------|--------|--------|
| Bandwidth  | 15M + 10M |        |        |
| Channel PCC  | 20825     | 21025  | 21225  |
|  | (Low)     | (Mid)  | (High) |
| Channel SCC  | 20975     | 21175  | 21375  |
|  | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 20.65     | 20.21  | 20.16  |
| Conducted Power (Watts)                                | 0.1161    | 0.1050 | 0.1038 |
| EIRP(dBm)  | 19.89     | 19.45  | 19.40  |
| EIRP(Watts)  | 0.0975    | 0.0881 | 0.0871 |



| LTE Band 12 ( $G_T - L_c = -4.68 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel   | 23017<br>(Low) | 23095<br>(Mid) | 23173<br>(High) | 23025<br>(Low) | 23095<br>(Mid) | 23165<br>(High) | 23035<br>(Low) | 23095<br>(Mid) | 23155<br>(High) |
|   | 699.7          | 707.5          | 715.3           | 700.5          | 707.5          | 714.5           | 701.5          | 707.5          | 713.5           |
| Frequency<br>(MHz)                                  | 22.46          | 22.47          | 22.61           | 22.46          | 22.49          | 22.60           | 22.57          | 22.51          | 22.63           |
| Conducted Power (dBm)                               | 0.1762         | 0.1766         | 0.1824          | 0.1762         | 0.1774         | 0.1820          | 0.1807         | 0.1782         | 0.1832          |
| ERP(dBm)  | 15.63          | 15.64          | 15.78           | 15.63          | 15.66          | 15.77           | 15.74          | 15.68          | 15.80           |
| ERP(Watts)  | 0.0366         | 0.0366         | 0.0378          | 0.0366         | 0.0368         | 0.0378          | 0.0375         | 0.0370         | 0.0380          |

| LTE Band 12 ( $G_T - L_c = -4.68 \text{ dB}$ ) QPSK |                |                |                 |
|---|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 |
| Channel   | 23060<br>(Low) | 23095<br>(Mid) | 23130<br>(High) |
|   | 704            | 707.5          | 711             |
| Conducted Power (dBm)                               | 22.53          | 22.50          | 22.67           |
| Conducted Power (Watts)                             | 0.1791         | 0.1778         | 0.1849          |
| ERP(dBm)  | 15.70          | 15.67          | 15.84           |
| ERP(Watts)  | 0.0372         | 0.0369         | 0.0384          |



| LTE Band 12 ( $G_T - L_C = -4.68 \text{ dB}$ ) 16QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 23017  | 23095  | 23173  | 23025  | 23095  | 23165  | 23035  | 23095  | 23155  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                   | 699.7  | 707.5  | 715.3  | 700.5  | 707.5  | 714.5  | 701.5  | 707.5  | 713.5  |
|  |        |        |        |        |        |        |        |        |        |
| Conducted Power (dBm)                                | 21.78  | 21.73  | 21.88  | 21.76  | 21.83  | 21.96  | 21.85  | 21.81  | 21.94  |
| Conducted Power (Watts)                              | 0.1507 | 0.1489 | 0.1542 | 0.1500 | 0.1524 | 0.1570 | 0.1531 | 0.1517 | 0.1563 |
| ERP(dBm)   | 14.95  | 14.90  | 15.05  | 14.93  | 15.00  | 15.13  | 15.02  | 14.98  | 15.11  |
| ERP(Watts)   | 0.0313 | 0.0309 | 0.0320 | 0.0311 | 0.0316 | 0.0326 | 0.0318 | 0.0315 | 0.0324 |

| LTE Band 12 ( $G_T - L_C = -4.68 \text{ dB}$ ) 16QAM |        |        |        |
|--|--------|--------|--------|
| Bandwidth  | 10M    |        |        |
| Channel  | 23060  | 23095  | 23130  |
|  | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                   | 704    | 707.5  | 711    |
|  |        |        |        |
| Conducted Power (dBm)                                | 21.90  | 21.90  | 21.97  |
| Conducted Power (Watts)                              | 0.1549 | 0.1549 | 0.1574 |
| ERP(dBm)   | 15.07  | 15.07  | 15.14  |
| ERP(Watts)   | 0.0321 | 0.0321 | 0.0327 |



| LTE Band 12 ( $G_T - L_C = -4.68 \text{ dB}$ ) 64QAM |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 23017  | 23095  | 23173  | 23025  | 23095  | 23165  | 23035  | 23095  | 23155  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                   | 699.7  | 707.5  | 715.3  | 700.5  | 707.5  | 714.5  | 701.5  | 707.5  | 713.5  |
|  |        |        |        |        |        |        |        |        |        |
| Conducted Power (dBm)                                | 20.70  | 20.78  | 20.83  | 20.70  | 20.76  | 20.87  | 20.76  | 20.80  | 20.91  |
| Conducted Power (Watts)                              | 0.1175 | 0.1197 | 0.1211 | 0.1175 | 0.1191 | 0.1222 | 0.1191 | 0.1202 | 0.1233 |
| ERP(dBm)   | 13.87  | 13.95  | 14.00  | 13.87  | 13.93  | 14.04  | 13.93  | 13.97  | 14.08  |
| ERP(Watts)   | 0.0244 | 0.0248 | 0.0251 | 0.0244 | 0.0247 | 0.0254 | 0.0247 | 0.0249 | 0.0256 |

| LTE Band 12 ( $G_T - L_C = -4.68 \text{ dB}$ ) 64QAM |        |        |        |
|--|--------|--------|--------|
| Bandwidth  | 10M    |        |        |
| Channel  | 23060  | 23095  | 23130  |
|  | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                   | 704    | 707.5  | 711    |
|  |        |        |        |
| Conducted Power (dBm)                                | 20.75  | 20.80  | 20.97  |
| Conducted Power (Watts)                              | 0.1189 | 0.1202 | 0.1250 |
| ERP(dBm)   | 13.92  | 13.97  | 14.14  |
| ERP(Watts)   | 0.0247 | 0.0249 | 0.0259 |



| LTE Band 13 ( $G_T - L_C = -3.94 \text{ dB}$ ) QPSK |                |                |                 |       |        |   |
|---|----------------|----------------|-----------------|-------|--------|---|
| Bandwidth   | 5M             |                |                 | 10M   |        |   |
| Channel   | 23205<br>(Low) | 23230<br>(Mid) | 23255<br>(High) | 23230 |        | - |
|   |                |                |                 | -     | (Mid)  | - |
| Frequency<br>(MHz)                                  | 779.5          | 782            | 784.5           | -     | 782    | - |
| Conducted Power (dBm)                               | 22.45          | 22.51          | 22.60           | -     | 22.61  | - |
| Conducted Power (Watts)                             | 0.1758         | 0.1782         | 0.1820          | -     | 0.1824 | - |
| ERP(dBm)  | 16.36          | 16.42          | 16.51           | -     | 16.52  | - |
| ERP(Watts)  | 0.0433         | 0.0439         | 0.0448          | -     | 0.0449 | - |

| LTE Band 13 ( $G_T - L_C = -3.94 \text{ dB}$ ) 16QAM |                |                |                 |       |        |   |
|--|----------------|----------------|-----------------|-------|--------|---|
| Bandwidth  | 5M             |                |                 | 10M   |        |   |
| Channel  | 23205<br>(Low) | 23230<br>(Mid) | 23255<br>(High) | 23230 |        | - |
|  |                |                |                 | -     | (Mid)  | - |
| Frequency<br>(MHz)                                   | 779.5          | 782            | 784.5           | -     | 782    | - |
| Conducted Power (dBm)                                | 21.88          | 21.92          | 21.83           | -     | 21.92  | - |
| Conducted Power (Watts)                              | 0.1542         | 0.1556         | 0.1524          | -     | 0.1556 | - |
| ERP(dBm)   | 15.79          | 15.83          | 15.74           | -     | 15.83  | - |
| ERP(Watts)   | 0.0379         | 0.0383         | 0.0375          | -     | 0.0383 | - |



| LTE Band 13 ( $G_T - L_C = -3.94 \text{ dB}$ ) 64QAM |                |                |                 |                |        |   |
|--|----------------|----------------|-----------------|----------------|--------|---|
| Bandwidth  | 5M             |                |                 | 10M            |        |   |
| Channel  | 23205<br>(Low) | 23230<br>(Mid) | 23255<br>(High) | 23230<br>(Mid) |        |   |
|  | 779.5          | 782            | 784.5           | -              | 782    | - |
| Frequency<br>(MHz)                                   | 20.79          | 20.83          | 20.80           | -              | 20.82  | - |
| Conducted<br>Power (dBm)                             | 0.1199         | 0.1211         | 0.1202          | -              | 0.1208 | - |
| Conducted<br>Power (Watts)                           | 14.70          | 14.74          | 14.71           | -              | 14.73  | - |
| ERP(dBm)   | 0.0295         | 0.0298         | 0.0296          | -              | 0.0297 | - |
| ERP(Watts)   |                |                |                 |                |        |   |



| LTE Band 17 ( $G_T - L_C = -4.68 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 5M             |                |                 | 10M            |                |                 |
| Channel   | 23755<br>(Low) | 23790<br>(Mid) | 23825<br>(High) | 23780<br>(Low) | 23790<br>(Mid) | 23800<br>(High) |
|   | 706.5          | 710            | 713.5           | 709            | 710            | 711             |
| Conducted Power (dBm)                               | 22.68          | 22.52          | 22.59           | 22.47          | 22.46          | 22.69           |
| Conducted Power (Watts)                             | 0.1854         | 0.1786         | 0.1816          | 0.1766         | 0.1762         | 0.1858          |
| ERP(dBm)  | 15.85          | 15.69          | 15.76           | 15.64          | 15.63          | 15.86           |
| ERP(Watts)  | 0.0385         | 0.0371         | 0.0377          | 0.0366         | 0.0366         | 0.0385          |

| LTE Band 17 ( $G_T - L_C = -4.68 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 5M             |                |                 | 10M            |                |                 |
| Channel  | 23755<br>(Low) | 23790<br>(Mid) | 23825<br>(High) | 23780<br>(Low) | 23790<br>(Mid) | 23800<br>(High) |
|  | 706.5          | 710            | 713.5           | 709            | 710            | 711             |
| Conducted Power (dBm)                                | 21.99          | 21.85          | 21.90           | 21.79          | 21.78          | 21.99           |
| Conducted Power (Watts)                              | 0.1581         | 0.1531         | 0.1549          | 0.1510         | 0.1507         | 0.1581          |
| ERP(dBm)   | 15.16          | 15.02          | 15.07           | 14.96          | 14.95          | 15.16           |
| ERP(Watts)   | 0.0328         | 0.0318         | 0.0321          | 0.0313         | 0.0313         | 0.0328          |



| LTE Band 17 ( $G_T - L_C = -4.68 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 5M             |                |                 | 10M            |                |                 |
| Channel  | 23755<br>(Low) | 23790<br>(Mid) | 23825<br>(High) | 23780<br>(Low) | 23790<br>(Mid) | 23800<br>(High) |
|  | 706.5          | 710            | 713.5           | 709            | 710            | 711             |
| Conducted Power (dBm)                                | 20.95          | 20.76          | 20.87           | 20.71          | 20.76          | 20.89           |
| Conducted Power (Watts)                              | 0.1245         | 0.1191         | 0.1222          | 0.1178         | 0.1191         | 0.1227          |
| ERP(dBm)   | 14.12          | 13.93          | 14.04           | 13.88          | 13.93          | 14.06           |
| ERP(Watts)   | 0.0258         | 0.0247         | 0.0254          | 0.0244         | 0.0247         | 0.0255          |



| LTE Band 25 ( $G_T - L_C = 1.61 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel  | 26407<br>(Low) | 26340<br>(Mid) | 26683<br>(High) | 26055<br>(Low) | 26340<br>(Mid) | 26675<br>(High) | 26065<br>(Low) | 26340<br>(Mid) | 26665<br>(High) |
|  | 1850.7         | 1880           | 1914.3          | 1851.5         | 1880           | 1913.5          | 1852.5         | 1880           | 1912.5          |
| Conducted Power (dBm)                              | 22.61          | 22.54          | 22.73           | 22.61          | 22.57          | 22.74           | 22.62          | 22.59          | 22.79           |
| Conducted Power (Watts)                            | 0.1824         | 0.1795         | 0.1875          | 0.1824         | 0.1807         | 0.1879          | 0.1828         | 0.1816         | 0.1901          |
| EIRP(dBm)  | 24.22          | 24.15          | 24.34           | 24.22          | 24.18          | 24.35           | 24.23          | 24.20          | 24.40           |
| EIRP(Watts)  | 0.2642         | 0.2600         | 0.2716          | 0.2642         | 0.2618         | 0.2723          | 0.2649         | 0.2630         | 0.2754          |

| LTE Band 25 ( $G_T - L_C = 1.61 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel  | 26090<br>(Low) | 26340<br>(Mid) | 26640<br>(High) | 26115<br>(Low) | 26340<br>(Mid) | 26615<br>(High) | 26140<br>(Low) | 26340<br>(Mid) | 26590<br>(High) |
|  | 1855           | 1880           | 1910            | 1857.5         | 1880           | 1907.5          | 1860           | 1880           | 1905            |
| Conducted Power (dBm)                              | 22.77          | 22.63          | 22.79           | 22.89          | 22.73          | 22.85           | 22.87          | 22.74          | 22.90           |
| Conducted Power (Watts)                            | 0.1892         | 0.1832         | 0.1901          | 0.1945         | 0.1875         | 0.1928          | 0.1936         | 0.1879         | 0.1950          |
| EIRP(dBm)  | 24.38          | 24.24          | 24.40           | 24.50          | 24.34          | 24.46           | 24.48          | 24.35          | 24.51           |
| EIRP(Watts)  | 0.2742         | 0.2655         | 0.2754          | 0.2818         | 0.2716         | 0.2793          | 0.2805         | 0.2723         | 0.2825          |



| LTE Band 25 ( $G_T - L_c = 1.61 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel   | 26407<br>(Low) | 26340<br>(Mid) | 26683<br>(High) | 26055<br>(Low) | 26340<br>(Mid) | 26675<br>(High) | 26065<br>(Low) | 26340<br>(Mid) | 26665<br>(High) |
|   | 1850.7         | 1880           | 1914.3          | 1851.5         | 1880           | 1913.5          | 1852.5         | 1880           | 1912.5          |
| Conducted Power (dBm)                               | 21.96          | 21.94          | 22.09           | 21.95          | 21.88          | 22.08           | 21.97          | 21.94          | 22.11           |
| Conducted Power (Watts)                             | 0.1570         | 0.1563         | 0.1618          | 0.1567         | 0.1542         | 0.1614          | 0.1574         | 0.1563         | 0.1626          |
| EIRP(dBm)   | 23.57          | 23.55          | 23.70           | 23.56          | 23.49          | 23.69           | 23.58          | 23.55          | 23.72           |
| EIRP(Watts)   | 0.2275         | 0.2265         | 0.2344          | 0.2270         | 0.2234         | 0.2339          | 0.2280         | 0.2265         | 0.2355          |

| LTE Band 25 ( $G_T - L_c = 1.61 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel   | 26090<br>(Low) | 26340<br>(Mid) | 26640<br>(High) | 26115<br>(Low) | 26340<br>(Mid) | 26615<br>(High) | 26140<br>(Low) | 26340<br>(Mid) | 26590<br>(High) |
|   | 1855           | 1880           | 1910            | 1857.5         | 1880           | 1907.5          | 1860           | 1880           | 1905            |
| Conducted Power (dBm)                               | 22.11          | 21.98          | 22.17           | 22.26          | 22.09          | 22.22           | 22.24          | 22.13          | 22.29           |
| Conducted Power (Watts)                             | 0.1626         | 0.1578         | 0.1648          | 0.1683         | 0.1618         | 0.1667          | 0.1675         | 0.1633         | 0.1694          |
| EIRP(dBm)   | 23.72          | 23.59          | 23.78           | 23.87          | 23.70          | 23.83           | 23.85          | 23.74          | 23.90           |
| EIRP(Watts)   | 0.2355         | 0.2286         | 0.2388          | 0.2438         | 0.2344         | 0.2415          | 0.2427         | 0.2366         | 0.2455          |



| LTE Band 25 ( $G_T - L_c = 1.61 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel   | 26407<br>(Low) | 26340<br>(Mid) | 26683<br>(High) | 26055<br>(Low) | 26340<br>(Mid) | 26675<br>(High) | 26065<br>(Low) | 26340<br>(Mid) | 26665<br>(High) |
|   | 1850.7         | 1880           | 1914.3          | 1851.5         | 1880           | 1913.5          | 1852.5         | 1880           | 1912.5          |
| Conducted Power (dBm)                               | 20.90          | 20.83          | 20.97           | 20.86          | 20.85          | 20.98           | 20.92          | 20.88          | 21.04           |
| Conducted Power (Watts)                             | 0.1230         | 0.1211         | 0.1250          | 0.1219         | 0.1216         | 0.1253          | 0.1236         | 0.1225         | 0.1271          |
| EIRP(dBm)   | 22.51          | 22.44          | 22.58           | 22.47          | 22.46          | 22.59           | 22.53          | 22.49          | 22.65           |
| EIRP(Watts)   | 0.1782         | 0.1754         | 0.1811          | 0.1766         | 0.1762         | 0.1816          | 0.1791         | 0.1774         | 0.1841          |

| LTE Band 25 ( $G_T - L_c = 1.61 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                 |
| Channel   | 26090<br>(Low) | 26340<br>(Mid) | 26640<br>(High) | 26115<br>(Low) | 26340<br>(Mid) | 26615<br>(High) | 26140<br>(Low) | 26340<br>(Mid) | 26590<br>(High) |
|   | 1855           | 1880           | 1910            | 1857.5         | 1880           | 1907.5          | 1860           | 1880           | 1905            |
| Conducted Power (dBm)                               | 21.09          | 20.93          | 21.03           | 21.18          | 21.05          | 21.12           | 21.22          | 20.97          | 21.20           |
| Conducted Power (Watts)                             | 0.1285         | 0.1239         | 0.1268          | 0.1312         | 0.1274         | 0.1294          | 0.1324         | 0.1250         | 0.1318          |
| EIRP(dBm)   | 22.70          | 22.54          | 22.64           | 22.79          | 22.66          | 22.73           | 22.83          | 22.58          | 22.81           |
| EIRP(Watts)   | 0.1862         | 0.1795         | 0.1837          | 0.1901         | 0.1845         | 0.1875          | 0.1919         | 0.1811         | 0.1910          |



| LTE Band 26 ( $G_T - L_C = 0.37 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel  | 26797  | 26915  | 27033  | 26805  | 26915  | 27025  | 26815  | 26915  | 27015  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 824.7  | 836.5  | 848.3  | 825.5  | 836.5  | 847.5  | 826.5  | 836.5  | 846.5  |
| Conducted Power (dBm)                              | 22.36  | 22.39  | 22.43  | 22.36  | 22.39  | 22.46  | 22.38  | 22.45  | 22.52  |
| Conducted Power (Watts)                            | 0.1722 | 0.1734 | 0.1750 | 0.1722 | 0.1734 | 0.1762 | 0.1730 | 0.1758 | 0.1786 |
| ERP(dBm)   | 20.58  | 20.61  | 20.65  | 20.58  | 20.61  | 20.68  | 20.60  | 20.67  | 20.74  |
| ERP(Watts)   | 0.1143 | 0.1151 | 0.1161 | 0.1143 | 0.1151 | 0.1169 | 0.1148 | 0.1167 | 0.1186 |

| LTE Band 26 ( $G_T - L_C = 0.37 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 10M    |        |        | 15M    |        |        | 15M    |
| Channel  | 26840  | 26915  | 26990  | 26865  | 26915  | 26965  | 26765  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  |
| Frequency<br>(MHz)                                 | 829    | 836.5  | 844    | 831.5  | 836.5  | 841.5  | 821.5  |
| Conducted Power (dBm)                              | 22.44  | 22.38  | 22.52  | 22.96  | 22.93  | 22.95  | 22.96  |
| Conducted Power (Watts)                            | 0.1754 | 0.1730 | 0.1786 | 0.1977 | 0.1963 | 0.1972 | 0.1977 |
| ERP(dBm)   | 20.66  | 20.60  | 20.74  | 21.18  | 21.15  | 21.17  | 21.18  |
| ERP(Watts)   | 0.1164 | 0.1148 | 0.1186 | 0.1312 | 0.1303 | 0.1309 | 0.1312 |



| LTE Band 26 ( $G_T - L_c = 0.37 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 1.4M           |                |                 | 3M             |                |                 | 5M             |                |                 |
| Channel   | 26797<br>(Low) | 26915<br>(Mid) | 27033<br>(High) | 26805<br>(Low) | 26915<br>(Mid) | 27025<br>(High) | 26815<br>(Low) | 26915<br>(Mid) | 27015<br>(High) |
|   | 824.7          | 836.5          | 848.3           | 825.5          | 836.5          | 847.5           | 826.5          | 836.5          | 846.5           |
| Conducted Power (dBm)                               | 21.70          | 21.71          | 21.73           | 21.63          | 21.70          | 21.79           | 21.72          | 21.78          | 21.84           |
| Conducted Power (Watts)                             | 0.1479         | 0.1483         | 0.1489          | 0.1455         | 0.1479         | 0.1510          | 0.1486         | 0.1507         | 0.1528          |
| ERP(dBm)  | 19.92          | 19.93          | 19.95           | 19.85          | 19.92          | 20.01           | 19.94          | 20.00          | 20.06           |
| ERP(Watts)  | 0.0982         | 0.0984         | 0.0989          | 0.0966         | 0.0982         | 0.1002          | 0.0986         | 0.1000         | 0.1014          |

| LTE Band 26 ( $G_T - L_c = 0.37 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 15M            |
| Channel   | 26840<br>(Low) | 26915<br>(Mid) | 26990<br>(High) | 26865<br>(Low) | 26915<br>(Mid) | 26965<br>(High) | 26765<br>(Low) |
|   | 829            | 836.5          | 844             | 831.5          | 836.5          | 841.5           | 821.5          |
| Conducted Power (dBm)                               | 21.76          | 21.76          | 21.87           | 22.28          | 22.25          | 22.30           | 22.28          |
| Conducted Power (Watts)                             | 0.1500         | 0.1500         | 0.1538          | 0.1690         | 0.1679         | 0.1698          | 0.1690         |
| ERP(dBm)  | 19.98          | 19.98          | 20.09           | 20.50          | 20.47          | 20.52           | 20.50          |
| ERP(Watts)  | 0.0995         | 0.0995         | 0.1021          | 0.1122         | 0.1114         | 0.1127          | 0.1122         |



| LTE Band 26 ( $G_T - L_c = 0.37 \text{ dB}$ ) 64QAM |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 1.4M   |        |        | 3M     |        |        | 5M     |        |        |
| Channel   | 26797  | 26915  | 27033  | 26805  | 26915  | 27025  | 26815  | 26915  | 27015  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                  | 824.7  | 836.5  | 848.3  | 825.5  | 836.5  | 847.5  | 826.5  | 836.5  | 846.5  |
| Conducted Power (dBm)                               | 20.63  | 20.66  | 20.72  | 20.60  | 20.63  | 20.72  | 20.63  | 20.66  | 20.75  |
| Conducted Power (Watts)                             | 0.1156 | 0.1164 | 0.1180 | 0.1148 | 0.1156 | 0.1180 | 0.1156 | 0.1164 | 0.1189 |
| ERP(dBm)  | 18.85  | 18.88  | 18.94  | 18.82  | 18.85  | 18.94  | 18.85  | 18.88  | 18.97  |
| ERP(Watts)  | 0.0767 | 0.0773 | 0.0783 | 0.0762 | 0.0767 | 0.0783 | 0.0767 | 0.0773 | 0.0789 |

| LTE Band 26 ( $G_T - L_c = 0.37 \text{ dB}$ ) 64QAM |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 10M    |        |        | 15M    |        |        | 15M    |
| Channel   | 26840  | 26915  | 26990  | 26865  | 26915  | 26965  | 26765  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  |
| Frequency<br>(MHz)                                  | 829    | 836.5  | 844    | 831.5  | 836.5  | 841.5  | 821.5  |
| Conducted Power (dBm)                               | 20.67  | 20.64  | 20.78  | 21.17  | 21.18  | 21.18  | 21.20  |
| Conducted Power (Watts)                             | 0.1167 | 0.1159 | 0.1197 | 0.1309 | 0.1312 | 0.1312 | 0.1318 |
| ERP(dBm)  | 18.89  | 18.86  | 19.00  | 19.39  | 19.40  | 19.40  | 19.42  |
| ERP(Watts)  | 0.0774 | 0.0769 | 0.0794 | 0.0869 | 0.0871 | 0.0871 | 0.0875 |



| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) QPSK |                |  |                |  |                 |
|---|----------------|--|----------------|--|-----------------|
| Bandwidth   | 5M             |  |                |  |                 |
| Channel   | 37775<br>(Low) |  | 38000<br>(Mid) |  | 38225<br>(High) |
|   | 2572.5         |  | 2595           |  | 2617.5          |
| Frequency<br>(MHz)                                  |                |  |                |  |                 |
| Conducted Power (dBm)                               | 22.70          |  | 22.69          |  | 22.71           |
| Conducted Power (Watts)                             | 0.1862         |  | 0.1858         |  | 0.1866          |
| EIRP(dBm)   | 22.16          |  | 22.15          |  | 22.17           |
| EIRP(Watts)   | 0.1644         |  | 0.1641         |  | 0.1648          |

| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |                |                |                |  |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|----------------|--|
| Bandwidth   | 10M            |                |                 | 15M            |                |                 | 20M            |                |                |  |
| Channel   | 37800<br>(Low) | 38000<br>(Mid) | 38200<br>(High) | 37825<br>(Low) | 38000<br>(Mid) | 38175<br>(High) | 37850<br>(Low) | 38000<br>(Mid) | 38150<br>(Mid) |  |
|   | 2575           | 2595           | 2615            | 2577.5         | 2595           | 2612.5          | 2580           | 2595           | 2610           |  |
| Frequency<br>(MHz)                                  |                |                |                 |                |                |                 |                |                |                |  |
| Conducted Power (dBm)                               | 22.75          | 22.67          | 22.80           | 22.84          | 22.74          | 22.88           | 22.89          | 22.78          | 22.80          |  |
| Conducted Power (Watts)                             | 0.1884         | 0.1849         | 0.1905          | 0.1923         | 0.1879         | 0.1941          | 0.1945         | 0.1897         | 0.1905         |  |
| EIRP(dBm)   | 22.21          | 22.13          | 22.26           | 22.30          | 22.20          | 22.34           | 22.35          | 22.24          | 22.26          |  |
| EIRP(Watts)   | 0.1663         | 0.1633         | 0.1683          | 0.1698         | 0.1660         | 0.1714          | 0.1718         | 0.1675         | 0.1683         |  |



| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) 16QAM |                |                |                 |
|--|----------------|----------------|-----------------|
| Bandwidth  | 5M             |                |                 |
| Channel  | 37775<br>(Low) | 38000<br>(Mid) | 38225<br>(High) |
|  | 2572.5         | 2595           | 2617.5          |
| Conducted Power (dBm)                                | 21.67          | 21.73          | 21.84           |
| Conducted Power (Watts)                              | 0.1469         | 0.1489         | 0.1528          |
| EIRP(dBm)  | 21.13          | 21.19          | 21.30           |
| EIRP(Watts)  | 0.1297         | 0.1315         | 0.1349          |

| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |                |                |                |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                |
| Channel  | 37800<br>(Low) | 38000<br>(Mid) | 38200<br>(High) | 37825<br>(Low) | 38000<br>(Mid) | 38175<br>(High) | 37850<br>(Low) | 38000<br>(Mid) | 38150<br>(Mid) |
|  | 2575           | 2595           | 2615            | 2577.5         | 2595           | 2612.5          | 2580           | 2595           | 2610           |
| Conducted Power (dBm)                                | 21.89          | 21.81          | 21.94           | 21.95          | 21.84          | 21.98           | 22.02          | 21.90          | 21.92          |
| Conducted Power (Watts)                              | 0.1545         | 0.1517         | 0.1563          | 0.1567         | 0.1528         | 0.1578          | 0.1592         | 0.1549         | 0.1556         |
| EIRP(dBm)  | 21.35          | 21.27          | 21.40           | 21.41          | 21.30          | 21.44           | 21.48          | 21.36          | 21.38          |
| EIRP(Watts)  | 0.1365         | 0.1340         | 0.1380          | 0.1384         | 0.1349         | 0.1393          | 0.1406         | 0.1368         | 0.1374         |



| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) 64QAM |                |                |                 |  |
|--|----------------|----------------|-----------------|--|
| Bandwidth  | 5M             |                |                 |  |
| Channel  | 37775<br>(Low) | 38000<br>(Mid) | 38225<br>(High) |  |
|  | 2572.5         | 2595           | 2617.5          |  |
| Frequency<br>(MHz)                                   |                |                |                 |  |
| Conducted Power (dBm)                                | 20.44          | 20.52          | 20.61           |  |
| Conducted Power (Watts)                              | 0.1107         | 0.1127         | 0.1151          |  |
| EIRP(dBm)  | 19.90          | 19.98          | 20.07           |  |
| EIRP(Watts)  | 0.0977         | 0.0995         | 0.1016          |  |

| LTE Band 38 ( $G_T - L_C = -0.54 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |                |                |                |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|----------------|
| Bandwidth  | 10M            |                |                 | 15M            |                |                 | 20M            |                |                |
| Channel  | 37800<br>(Low) | 38000<br>(Mid) | 38200<br>(High) | 37825<br>(Low) | 38000<br>(Mid) | 38175<br>(High) | 37850<br>(Low) | 38000<br>(Mid) | 38150<br>(Mid) |
|  | 2575           | 2595           | 2615            | 2577.5         | 2595           | 2612.5          | 2580           | 2595           | 2610           |
| Frequency<br>(MHz)                                   | 20.65          | 20.56          | 20.67           | 20.70          | 20.60          | 20.72           | 20.73          | 20.69          | 20.72          |
| Conducted Power (dBm)                                | 20.65          | 20.56          | 20.67           | 20.70          | 20.60          | 20.72           | 20.73          | 20.69          | 20.72          |
| Conducted Power (Watts)                              | 0.1161         | 0.1138         | 0.1167          | 0.1175         | 0.1148         | 0.1180          | 0.1183         | 0.1172         | 0.1180         |
| EIRP(dBm)  | 20.11          | 20.02          | 20.13           | 20.16          | 20.06          | 20.18           | 20.19          | 20.15          | 20.18          |
| EIRP(Watts)  | 0.1026         | 0.1005         | 0.1030          | 0.1038         | 0.1014         | 0.1042          | 0.1045         | 0.1035         | 0.1042         |



| LTE Band 38 CA ( $G_T - L_C = -0.54$ dB) QPSK |           |        |        |         |        |        |
|---|-----------|--------|--------|---------|--------|--------|
| Bandwidth                                     | 15M + 15M |        |        | 20M+20M |        |        |
| Channel PCC                                   | 37825     | 37925  | 38025  | 37850   | 37901  | 37952  |
|   | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC                                   | 37975     | 38075  | 38175  | 38048   | 38099  | 38150  |
|   | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                         | 23.04     | 23.13  | 23.26  | 23.16   | 23.29  | 23.2   |
| Conducted Power (Watts)                       | 0.2014    | 0.2056 | 0.2118 | 0.2070  | 0.2133 | 0.2089 |
| EIRP(dBm)                                     | 22.50     | 22.59  | 22.72  | 22.62   | 22.75  | 22.66  |
| EIRP(Watts)                                   | 0.1778    | 0.1816 | 0.1871 | 0.1828  | 0.1884 | 0.1845 |

| LTE Band 38 CA ( $G_T - L_C = -0.54$ dB) 16QAM |           |        |        |         |        |        |
|--|-----------|--------|--------|---------|--------|--------|
| Bandwidth                                      | 15M + 15M |        |        | 20M+20M |        |        |
| Channel PCC                                    | 37825     | 37925  | 38025  | 37850   | 37901  | 37952  |
|  | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC                                    | 37975     | 38075  | 38175  | 38048   | 38099  | 38150  |
|  | (Low)     | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                          | 22.07     | 22.13  | 22.29  | 22.53   | 22.37  | 22.47  |
| Conducted Power (Watts)                        | 0.1611    | 0.1633 | 0.1694 | 0.1791  | 0.1726 | 0.1766 |
| EIRP(dBm)                                      | 21.53     | 21.59  | 21.75  | 21.99   | 21.83  | 21.93  |
| EIRP(Watts)                                    | 0.1422    | 0.1442 | 0.1496 | 0.1581  | 0.1524 | 0.1560 |



| LTE Band 38 CA ( $G_T - L_c = -0.54 \text{ dB}$ ) 64QAM |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 15M + 15M      |                |                 | 20M+20M        |                |                 |
| Channel PCC   | 37825<br>(Low) | 37925<br>(Mid) | 38025<br>(High) | 37850<br>(Low) | 37901<br>(Mid) | 37952<br>(High) |
|   | 37975<br>(Low) | 38075<br>(Mid) | 38175<br>(High) | 38048<br>(Low) | 38099<br>(Mid) | 38150<br>(High) |
| Conducted Power<br>(dBm)                                | 20.12          | 20.23          | 20.26           | 21.17          | 20.99          | 21.07           |
| Conducted Power<br>(Watts)                              | 0.1028         | 0.1054         | 0.1062          | 0.1309         | 0.1256         | 0.1279          |
| EIRP(dBm)   | 19.58          | 19.69          | 19.72           | 20.63          | 20.45          | 20.53           |
| EIRP(Watts)   | 0.0908         | 0.0931         | 0.0938          | 0.1156         | 0.1109         | 0.1130          |



| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) QPSK |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth  | 5M     |        |        | 10M    |        |        | 15M    |        |        |
| Channel  | 39675  | 40620  | 41565  | 39700  | 40620  | 41540  | 39725  | 40620  | 41515  |
|  | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 2498.5 | 2593   | 2687.5 | 2501   | 2593   | 2685   | 2503.5 | 2593   | 2682.5 |
| Conducted Power (dBm)                              | 22.55  | 22.74  | 22.40  | 22.62  | 22.80  | 22.64  | 22.71  | 22.89  | 22.56  |
| Conducted Power (Watts)                            | 0.1799 | 0.1879 | 0.1738 | 0.1828 | 0.1905 | 0.1837 | 0.1866 | 0.1945 | 0.1803 |
| EIRP(dBm)  | 22.67  | 22.86  | 22.52  | 22.74  | 22.92  | 22.76  | 22.83  | 23.01  | 22.68  |
| EIRP(Watts)  | 0.1849 | 0.1932 | 0.1786 | 0.1879 | 0.1959 | 0.1888 | 0.1919 | 0.2000 | 0.1854 |

| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) QPSK |        |        |        |
|--|--------|--------|--------|
| Bandwidth  | 20M    |        |        |
| Channel  | 39750  | 40620  | 41490  |
|  | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                 | 2506   | 2593   | 2680   |
| Conducted Power (dBm)                              | 22.73  | 22.91  | 22.56  |
| Conducted Power (Watts)                            | 0.1875 | 0.1954 | 0.1803 |
| EIRP(dBm)  | 22.85  | 23.03  | 22.68  |
| EIRP(Watts)  | 0.1928 | 0.2009 | 0.1854 |



| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 5M     |        |        | 10M    |        |        | 15M    |        |        |
| Channel   | 39675  | 40620  | 41565  | 39700  | 40620  | 41540  | 39725  | 40620  | 41515  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                  | 2498.5 | 2593   | 2687.5 | 2501   | 2593   | 2685   | 2503.5 | 2593   | 2682.5 |
| Conducted Power (dBm)                               | 21.64  | 21.83  | 21.49  | 21.75  | 21.95  | 21.76  | 21.80  | 22.00  | 21.63  |
| Conducted Power (Watts)                             | 0.1459 | 0.1524 | 0.1409 | 0.1496 | 0.1567 | 0.1500 | 0.1514 | 0.1585 | 0.1455 |
| EIRP(dBm)   | 21.76  | 21.95  | 21.61  | 21.87  | 22.07  | 21.88  | 21.92  | 22.12  | 21.75  |
| EIRP(Watts)   | 0.1500 | 0.1567 | 0.1449 | 0.1538 | 0.1611 | 0.1542 | 0.1556 | 0.1629 | 0.1496 |

| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |        |        |        |
|---|--------|--------|--------|
| Bandwidth   | 20M    |        |        |
| Channel   | 39750  | 40620  | 41490  |
|   | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                  | 2506   | 2593   | 2680   |
| Conducted Power (dBm)                               | 21.87  | 22.05  | 20.71  |
| Conducted Power (Watts)                             | 0.1538 | 0.1603 | 0.1178 |
| EIRP(dBm)   | 21.99  | 22.17  | 20.83  |
| EIRP(Watts)   | 0.1581 | 0.1648 | 0.1211 |



| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) 64QAM |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bandwidth   | 5M     |        |        | 10M    |        |        | 15M    |        |        |
| Channel   | 39675  | 40620  | 41565  | 39700  | 40620  | 41540  | 39725  | 40620  | 41515  |
|   | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                  | 2498.5 | 2593   | 2687.5 | 2501   | 2593   | 2685   | 2503.5 | 2593   | 2682.5 |
| Conducted Power (dBm)                               | 20.37  | 20.58  | 20.22  | 20.53  | 20.71  | 20.52  | 20.58  | 20.75  | 20.42  |
| Conducted Power (Watts)                             | 0.1089 | 0.1143 | 0.1052 | 0.1130 | 0.1178 | 0.1127 | 0.1143 | 0.1189 | 0.1102 |
| EIRP(dBm)   | 20.49  | 20.70  | 20.34  | 20.65  | 20.83  | 20.64  | 20.70  | 20.87  | 20.54  |
| EIRP(Watts)   | 0.1119 | 0.1175 | 0.1081 | 0.1161 | 0.1211 | 0.1159 | 0.1175 | 0.1222 | 0.1132 |

| LTE Band 41 ( $G_T - L_C = 0.12 \text{ dB}$ ) 64QAM |        |        |        |
|---|--------|--------|--------|
| Bandwidth   | 20M    |        |        |
| Channel   | 39750  | 40620  | 41490  |
|   | (Low)  | (Mid)  | (High) |
| Frequency<br>(MHz)                                  | 2506   | 2593   | 2680   |
| Conducted Power (dBm)                               | 20.63  | 20.79  | 20.44  |
| Conducted Power (Watts)                             | 0.1156 | 0.1199 | 0.1107 |
| EIRP(dBm)   | 20.75  | 20.91  | 20.56  |
| EIRP(Watts)   | 0.1189 | 0.1233 | 0.1138 |



| LTE Band 41 CA ( $G_T - L_c = 0.12 \text{ dB}$ ) QPSK |           |        |        |          |        |        |          |        |        |
|---|-----------|--------|--------|----------|--------|--------|----------|--------|--------|
| Bandwidth   | 15M + 15M |        |        | 5M + 20M |        |        | 20M + 5M |        |        |
| Channel PCC   | 39725     | 40545  | 41365  | 39683    | 40528  | 41373  | 39750    | 40595  | 41440  |
|   | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Channel SCC   | 39875     | 40695  | 41515  | 39800    | 40645  | 41490  | 39867    | 40712  | 41557  |
|   | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Conducted Power (dBm)                                 | 23.10     | 22.99  | 23.12  | 23.08    | 22.88  | 23.05  | 23.05    | 22.91  | 23.18  |
| Conducted Power (Watts)                               | 0.2042    | 0.1991 | 0.2051 | 0.2032   | 0.1941 | 0.2018 | 0.2018   | 0.1954 | 0.2080 |
| EIRP(dBm)   | 23.22     | 23.11  | 23.24  | 23.20    | 23.00  | 23.17  | 23.17    | 23.03  | 23.30  |
| EIRP(Watts)   | 0.2099    | 0.2046 | 0.2109 | 0.2089   | 0.1995 | 0.2075 | 0.2075   | 0.2009 | 0.2138 |

| LTE Band 41 CA ( $G_T - L_c = 0.12 \text{ dB}$ ) QPSK |           |        |        |           |        |        |           |        |        |
|---|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Bandwidth   | 10M + 20M |        |        | 20M + 10M |        |        | 15M + 20M |        |        |
| Channel PCC   | 39705     | 40526  | 41346  | 39750     | 40571  | 41391  | 39728     | 40523  | 41319  |
|   | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Channel SCC   | 39849     | 40670  | 41490  | 39894     | 40715  | 41535  | 39899     | 40694  | 41490  |
|   | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                 | 23.07     | 22.89  | 23.21  | 23.08     | 22.92  | 23.11  | 23.07     | 22.86  | 23.01  |
| Conducted Power (Watts)                               | 0.2028    | 0.1945 | 0.2094 | 0.2032    | 0.1959 | 0.2046 | 0.2028    | 0.1932 | 0.2000 |
| EIRP(dBm)   | 23.19     | 23.01  | 23.33  | 23.20     | 23.04  | 23.23  | 23.19     | 22.98  | 23.13  |
| EIRP(Watts)   | 0.2084    | 0.2000 | 0.2153 | 0.2089    | 0.2014 | 0.2104 | 0.2084    | 0.1986 | 0.2056 |



| LTE Band 41 CA ( $G_T - L_c = 0.12 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 20M+15M        |                |                 | 20M+20M        |                |                 |
| Channel PCC   | 39750<br>(Low) | 40546<br>(Mid) | 41341<br>(High) | 39750<br>(Low) | 40521<br>(Mid) | 41292<br>(High) |
|   | 39921<br>(Low) | 40717<br>(Mid) | 41512<br>(High) | 39948<br>(Low) | 40719<br>(Mid) | 41490<br>(High) |
| Conducted Power (dBm)                                 | 23.04          | 22.93          | 23.06           | 23.09          | 23.05          | 23.22           |
| Conducted Power (Watts)                               | 0.2014         | 0.1963         | 0.2023          | 0.2037         | 0.2018         | 0.2099          |
| EIRP(dBm)   | 23.16          | 23.05          | 23.18           | 23.21          | 23.17          | 23.34           |
| EIRP(Watts)   | 0.2070         | 0.2018         | 0.2080          | 0.2094         | 0.2075         | 0.2158          |

| LTE Band 41 CA ( $G_T - L_c = 0.12 \text{ dB}$ ) QPSK |                |                |                 |                |                |                 |
|---|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth   | 15M+10M        |                |                 | 10M+15M        |                |                 |
| Channel PCC   | 39725<br>(Low) | 40571<br>(Mid) | 41417<br>(High) | 39703<br>(Low) | 40549<br>(Mid) | 41395<br>(High) |
|   | 39845<br>(Low) | 40691<br>(Mid) | 41537<br>(High) | 39823<br>(Low) | 40669<br>(Mid) | 41490<br>(High) |
| Conducted Power (dBm)                                 | 23.05          | 22.94          | 23.21           | 23.08          | 22.97          | 23.1            |
| Conducted Power (Watts)                               | 0.2018         | 0.1968         | 0.2094          | 0.2032         | 0.1982         | 0.2042          |
| EIRP(dBm)   | 23.17          | 23.06          | 23.33           | 23.20          | 23.09          | 23.22           |
| EIRP(Watts)   | 0.2075         | 0.2023         | 0.2153          | 0.2089         | 0.2037         | 0.2099          |



| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |           |        |        |          |        |        |          |        |        |
|--|-----------|--------|--------|----------|--------|--------|----------|--------|--------|
| Bandwidth  | 15M + 15M |        |        | 5M + 20M |        |        | 20M + 5M |        |        |
| Channel PCC  | 39725     | 40545  | 41365  | 39683    | 40528  | 41373  | 39750    | 40595  | 41440  |
|  | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Channel SCC  | 39875     | 40695  | 41515  | 39800    | 40645  | 41490  | 39867    | 40712  | 41557  |
|  | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 22.14     | 22.04  | 22.08  | 21.98    | 22.01  | 22.06  | 22.01    | 22.02  | 22.01  |
| Conducted Power (Watts)                                | 0.1637    | 0.1600 | 0.1614 | 0.1578   | 0.1589 | 0.1607 | 0.1589   | 0.1592 | 0.1589 |
| EIRP(dBm)  | 22.26     | 22.16  | 22.20  | 22.10    | 22.13  | 22.18  | 22.13    | 22.14  | 22.13  |
| EIRP(Watts)  | 0.1683    | 0.1644 | 0.1660 | 0.1622   | 0.1633 | 0.1652 | 0.1633   | 0.1637 | 0.1633 |

| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |           |        |        |           |        |        |           |        |        |
|--|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Bandwidth  | 10M + 20M |        |        | 20M + 10M |        |        | 15M + 20M |        |        |
| Channel PCC  | 39705     | 40526  | 41346  | 39750     | 40571  | 41391  | 39728     | 40523  | 41319  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Channel SCC  | 39849     | 40670  | 41490  | 39894     | 40715  | 41535  | 39899     | 40694  | 41490  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 22.04     | 21.98  | 22.04  | 22.13     | 21.95  | 22.04  | 22.07     | 21.96  | 22.12  |
| Conducted Power (Watts)                                | 0.1600    | 0.1578 | 0.1600 | 0.1633    | 0.1567 | 0.1600 | 0.1611    | 0.1570 | 0.1629 |
| EIRP(dBm)  | 22.16     | 22.10  | 22.16  | 22.25     | 22.07  | 22.16  | 22.19     | 22.08  | 22.24  |
| EIRP(Watts)  | 0.1644    | 0.1622 | 0.1644 | 0.1679    | 0.1611 | 0.1644 | 0.1656    | 0.1614 | 0.1675 |



| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 20M+15M        |                |                 | 20M+20M        |                |                 |
| Channel PCC  | 39750<br>(Low) | 40546<br>(Mid) | 41341<br>(High) | 39750<br>(Low) | 40521<br>(Mid) | 41292<br>(High) |
|  | 39921<br>(Low) | 40717<br>(Mid) | 41512<br>(High) | 39948<br>(Low) | 40719<br>(Mid) | 41490<br>(High) |
| Conducted Power (dBm)                                  | 22.08          | 21.98          | 22.02           | 22.14          | 22.12          | 22.15           |
| Conducted Power (Watts)                                | 0.1614         | 0.1578         | 0.1592          | 0.1637         | 0.1629         | 0.1641          |
| EIRP(dBm)  | 22.20          | 22.10          | 22.14           | 22.26          | 22.24          | 22.27           |
| EIRP(Watts)  | 0.1660         | 0.1622         | 0.1637          | 0.1683         | 0.1675         | 0.1687          |

| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 16QAM |                |                |                 |                |                |                 |
|--|----------------|----------------|-----------------|----------------|----------------|-----------------|
| Bandwidth  | 15M+10M        |                |                 | 10M+15M        |                |                 |
| Channel PCC  | 39725<br>(Low) | 40571<br>(Mid) | 41417<br>(High) | 39703<br>(Low) | 40549<br>(Mid) | 41395<br>(High) |
|  | 39845<br>(Low) | 40691<br>(Mid) | 41537<br>(High) | 39823<br>(Low) | 40669<br>(Mid) | 41490<br>(High) |
| Conducted Power (dBm)                                  | 22.12          | 22.03          | 22.27           | 22.12          | 22.02          | 22.06           |
| Conducted Power (Watts)                                | 0.1629         | 0.1596         | 0.1687          | 0.1629         | 0.1592         | 0.1607          |
| EIRP(dBm)  | 22.24          | 22.15          | 22.39           | 22.24          | 22.14          | 22.18           |
| EIRP(Watts)  | 0.1675         | 0.1641         | 0.1734          | 0.1675         | 0.1637         | 0.1652          |



| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 64QAM |           |        |        |          |        |        |          |        |        |
|--|-----------|--------|--------|----------|--------|--------|----------|--------|--------|
| Bandwidth  | 15M + 15M |        |        | 5M + 20M |        |        | 20M + 5M |        |        |
| Channel PCC  | 39725     | 40545  | 41365  | 39683    | 40528  | 41373  | 39750    | 40595  | 41440  |
|  | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Channel SCC  | 39875     | 40695  | 41515  | 39800    | 40645  | 41490  | 39867    | 40712  | 41557  |
|  | (Low)     | (Mid)  | (High) | (Low)    | (Mid)  | (High) | (Low)    | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 20.21     | 20.14  | 20.11  | 20.13    | 20.16  | 20.27  | 20.12    | 20.16  | 20.06  |
| Conducted Power (Watts)                                | 0.1050    | 0.1033 | 0.1026 | 0.1030   | 0.1038 | 0.1064 | 0.1028   | 0.1038 | 0.1014 |
| EIRP(dBm)  | 20.33     | 20.26  | 20.23  | 20.25    | 20.28  | 20.39  | 20.24    | 20.28  | 20.18  |
| EIRP(Watts)  | 0.1079    | 0.1062 | 0.1054 | 0.1059   | 0.1067 | 0.1094 | 0.1057   | 0.1067 | 0.1042 |

| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 64QAM |           |        |        |           |        |        |           |        |        |
|--|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|
| Bandwidth  | 10M + 20M |        |        | 20M + 10M |        |        | 15M + 20M |        |        |
| Channel PCC  | 39705     | 40526  | 41346  | 39750     | 40571  | 41391  | 39728     | 40523  | 41319  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Channel SCC  | 39849     | 40670  | 41490  | 39894     | 40715  | 41535  | 39899     | 40694  | 41490  |
|  | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) | (Low)     | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 20.12     | 20.13  | 20.13  | 20.16     | 20.13  | 20.09  | 20.16     | 20.07  | 20.1   |
| Conducted Power (Watts)                                | 0.1028    | 0.1030 | 0.1030 | 0.1038    | 0.1030 | 0.1021 | 0.1038    | 0.1016 | 0.1023 |
| EIRP(dBm)  | 20.24     | 20.25  | 20.25  | 20.28     | 20.25  | 20.21  | 20.28     | 20.19  | 20.22  |
| EIRP(Watts)  | 0.1057    | 0.1059 | 0.1059 | 0.1067    | 0.1059 | 0.1050 | 0.1067    | 0.1045 | 0.1052 |

| LTE Band 41 CA ( $G_T - L_C = 0.12 \text{ dB}$ ) 64QAM |         |        |        |         |        |        |
|--|---------|--------|--------|---------|--------|--------|
| Bandwidth  | 20M+15M |        |        | 20M+20M |        |        |
| Channel PCC  | 39750   | 40546  | 41341  | 39750   | 40521  | 41292  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC  | 39921   | 40717  | 41512  | 39948   | 40719  | 41490  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 20.15   | 20.08  | 20.05  | 20.69   | 20.71  | 20.72  |
| Conducted Power (Watts)                                | 0.1035  | 0.1019 | 0.1012 | 0.1172  | 0.1178 | 0.1180 |
| EIRP(dBm)  | 20.27   | 20.20  | 20.17  | 20.81   | 20.83  | 20.84  |
| EIRP(Watts)  | 0.1064  | 0.1047 | 0.1040 | 0.1205  | 0.1211 | 0.1213 |



| LTE Band 41 CA ( $G_T - L_c = 0.12 \text{ dB}$ ) 64QAM |         |        |        |         |        |        |
|--|---------|--------|--------|---------|--------|--------|
| Bandwidth  | 15M+10M |        |        | 10M+15M |        |        |
| Channel PCC  | 39725   | 40571  | 41417  | 39703   | 40549  | 41395  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Channel SCC  | 39845   | 40691  | 41537  | 39823   | 40669  | 41490  |
|  | (Low)   | (Mid)  | (High) | (Low)   | (Mid)  | (High) |
| Conducted Power (dBm)                                  | 20.22   | 20.11  | 20.08  | 20.19   | 20.12  | 20.09  |
| Conducted Power (Watts)                                | 0.1052  | 0.1026 | 0.1019 | 0.1045  | 0.1028 | 0.1021 |
| EIRP(dBm)  | 20.34   | 20.23  | 20.20  | 20.31   | 20.24  | 20.21  |
| EIRP(Watts)  | 0.1081  | 0.1054 | 0.1047 | 0.1074  | 0.1057 | 0.1050 |



## Peak-to-Average Ratio

| Mode       | LTE Band 4 / 20MHz |         |             |         |             |  |
|------------|--------------------|---------|-------------|---------|-------------|--|
| Mod.       | QPSK               |         | 16QAM       |         | Limit: 13dB |  |
| RB Size    | 1RB                | Full RB | 1RB         | Full RB | Result      |  |
| Lowest CH  | 3.62               | 4.52    | 5.22        | 5.88    | PASS        |  |
| Middle CH  | 3.59               | 4.52    | 4.64        | 5.86    |             |  |
| Highest CH | 3.57               | 4.61    | 5.36        | 5.91    |             |  |
| Mod.       | 64QAM              |         | Limit: 13dB |         |             |  |
| RB Size    | 1RB                | Full RB | Result      |         |             |  |
| Lowest CH  | 6.35               | 6.35    | PASS        |         |             |  |
| Middle CH  | 5.68               | 6.38    |             |         |             |  |
| Highest CH | 6.55               | 6.43    |             |         |             |  |

| Mode       | LTE Band 7 / 20MHz |         |             |         |             |  |
|------------|--------------------|---------|-------------|---------|-------------|--|
| Mod.       | QPSK               |         | 16QAM       |         | Limit: 13dB |  |
| RB Size    | 1RB                | Full RB | 1RB         | Full RB | Result      |  |
| Lowest CH  | 3.36               | 4.32    | 4.87        | 5.74    | PASS        |  |
| Middle CH  | 3.39               | 4.38    | 4.99        | 5.68    |             |  |
| Highest CH | 3.36               | 4.23    | 5.07        | 5.59    |             |  |
| Mod.       | 64QAM              |         | Limit: 13dB |         |             |  |
| RB Size    | 1RB                | Full RB | Result      |         |             |  |
| Lowest CH  | 5.01               | 5.71    | PASS        |         |             |  |
| Middle CH  | 4.93               | 5.68    |             |         |             |  |
| Highest CH | 4.84               | 5.62    |             |         |             |  |

| Mode       | LTE Band 12 / 10MHz |         |             |         |             |  |
|------------|---------------------|---------|-------------|---------|-------------|--|
| Mod.       | QPSK                |         | 16QAM       |         | Limit: 13dB |  |
| RB Size    | 1RB                 | Full RB | 1RB         | Full RB | Result      |  |
| Lowest CH  | 3.59                | 4.61    | 5.22        | 5.62    | PASS        |  |
| Middle CH  | 3.54                | 4.64    | 5.57        | 6.00    |             |  |
| Highest CH | 3.59                | 4.78    | 4.64        | 6.00    |             |  |
| Mod.       | 64QAM               |         | Limit: 13dB |         |             |  |
| RB Size    | 1RB                 | Full RB | Result      |         |             |  |
| Lowest CH  | 5.51                | 6.00    | PASS        |         |             |  |
| Middle CH  | 5.42                | 5.91    |             |         |             |  |
| Highest CH | 4.78                | 5.88    |             |         |             |  |



| Mode       | LTE Band 13 / 10MHz |         |             |         |             |
|------------|---------------------|---------|-------------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB         | Full RB | Result      |
| Lowest CH  |                     | -       | -           | -       | PASS        |
| Middle CH  | 3.65                | 4.58    | 5.25        | 5.94    |             |
| Highest CH | -                   | -       | -           | -       |             |
| Mod.       | 64QAM               |         | Limit: 13dB |         |             |
| RB Size    | 1RB                 | Full RB | Result      |         |             |
| Lowest CH  | -                   | -       | PASS        |         |             |
| Middle CH  | 5.10                | 5.88    |             |         |             |
| Highest CH | -                   | -       |             |         |             |

| Mode       | LTE Band 25 / 20MHz |         |             |         |             |
|------------|---------------------|---------|-------------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB         | Full RB | Result      |
| Lowest CH  | 3.65                | 4.55    | 5.28        | 5.88    | PASS        |
| Middle CH  | 3.59                | 4.61    | 5.59        | 5.86    |             |
| Highest CH | 3.59                | 4.52    | 5.36        | 5.91    |             |
| Mod.       | 64QAM               |         | Limit: 13dB |         |             |
| RB Size    | 1RB                 | Full RB | Result      |         |             |
| Lowest CH  | 6.09                | 6.55    | PASS        |         |             |
| Middle CH  | 6.38                | 6.43    |             |         |             |
| Highest CH | 6.64                | 6.49    |             |         |             |

| Mode       | LTE Band 26 / 15MHz |         |             |         |             |
|------------|---------------------|---------|-------------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB         | Full RB | Result      |
| Lowest CH  | 3.51                | 4.81    | 4.93        | 6.06    | PASS        |
| Middle CH  | 3.59                | 4.78    | 5.45        | 6.00    |             |
| Highest CH | 3.62                | 4.72    | 5.33        | 6.00    |             |
| Mod.       | 64QAM               |         | Limit: 13dB |         |             |
| RB Size    | 1RB                 | Full RB | Result      |         |             |
| Lowest CH  | 5.30                | 5.97    | PASS        |         |             |
| Middle CH  | 5.39                | 5.94    |             |         |             |
| Highest CH | 5.48                | 5.91    |             |         |             |



| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.45                | 6.26    | 5.51  | 5.83    | PASS        |
| Middle CH  | 4.29                | 5.57    | 5.65  | 5.74    |             |
| Highest CH | 3.42                | 4.58    | 5.25  | 5.68    |             |

| Mod.       | 64QAM |         | Limit: 13dB |
|------------|-------|---------|-------------|
| RB Size    | 1RB   | Full RB | Result      |
| Lowest CH  | 5.39  | 5.80    | PASS        |
| Middle CH  | 6.23  | 6.84    |             |
| Highest CH | 6.72  | 5.68    |             |

