



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT1929-4(SS)  
**FCC ID** : IHDT56XE1  
**STANDARD** : 47 CFR Part 2, 22(H), 24(E), 27  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jan. 18, 2018 and completely tested on Mar. 02, 2018. We, SPORTON INTERNATIONAL Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-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 INC., the test report shall not be reproduced except in full.

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Reviewed by: Joseph Lin / Supervisor

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Approved by: Jones Tsai / Manager



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FCC ID: IHDT56XE1

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## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FG811821B  | Rev. 01 | Initial issue of report | Mar. 05, 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<br>(Band 5) (Band 26)                                                                                                  | ERP < 7 Watt                        |        |        |
|                | §27.50(b)(10)<br>§27.50(c)(10)                                                   | Effective Radiated Power<br>(Band 12) (Band 13)<br>(Band 17) (Band 71)                                                                          | ERP < 3 Watt                        |        |        |
|                | §24.232(c)<br>§27.50(h)(2)                                                       | Equivalent Isotropic<br>Radiated Power<br>(Band 2) (Band 25)<br>(Band 7) (Band 38) (Band 41)                                                    | EIRP < 2Watt                        |        |        |
|                | §27.50(d)(4)                                                                     | Equivalent Isotropic<br>Radiated Power<br>(Band 4) (Band 66)                                                                                    | 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<br>Measurement<br>(Band 2) (Band 4) (Band 5)<br>(Band 12) (Band 13) (Band 17)<br>(Band 25) (Band 26) (Band 66)<br>(Band 71) | < 43+10log <sub>10</sub> (P[Watts]) | PASS   | -      |
|                | §27.53(m)(4)                                                                     | Conducted Band Edge<br>Measurement<br>(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<br>(Band 2) (Band 4) (Band 5)<br>(Band 12) (Band 13) (Band 17)<br>(Band 25) (Band 26) (Band 66)<br>(Band 71)        | < 43+10log <sub>10</sub> (P[Watts]) | PASS   | -      |
|                | §2.1051<br>§27.53(m)(4)                                                          | Conducted Spurious Emission<br>(Band 7) (Band 38) (Band 41)                                                                                     | < 55+10log <sub>10</sub> (P[Watts]) |        |        |
| 3.9            | §2.1055<br>§22.355                                                               | Frequency Stability<br>Temperature & Voltage                                                                                                    | < 2.5 ppm for Part 22               | 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(f)<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) (Band 66)<br>(Band 71) | $< 43 + 10\log_{10}(P[\text{Watts}])$ | PASS   | Under limit<br>10.08 dB at<br>16093.000<br>MHz |
|                | §2.1053<br>§27.53(m)(4)                                                                    | Radiated Spurious Emission<br>(Band 7) (Band 38) (Band 41)                                                                              | $< 55 + 10\log_{10}(P[\text{Watts}])$ |        |                                                |



# 1 General Description

## 1.1 Applicant

**Motorola Mobility LLC**

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

**Motorola Mobility LLC**

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

| Product Feature                        |                                                                                                                                                 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Equipment</b>                       | Mobile Cellular Phone                                                                                                                           |
| <b>Brand Name</b>                      | Motorola                                                                                                                                        |
| <b>Model Name</b>                      | XT1929-4(SS)                                                                                                                                    |
| <b>FCC ID</b>                          | IHDT56XE1                                                                                                                                       |
| <b>IMEI Code</b>                       | <b>Conducted :</b> IMEI: 351886090013043<br><b>Radiation :</b> IMEI: 351886090015329                                                            |
| <b>EUT supports Radios application</b> | CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/GNSS/NFC<br>WLAN 11b/g/n HT20<br>WLAN 11a/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth BR/EDR/LE |
| <b>HW Version</b>                      | DVT2                                                                                                                                            |
| <b>EUT Stage</b>                       | Identical Prototype                                                                                                                             |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



| Accessory List  |                                       |
|-----------------|---------------------------------------|
| AC Adapter 1    | Brand Name : Motorola                 |
|                 | Model Name : SC-22 SPN5970A           |
|                 | Manufacturer : Salom                  |
| AC Adapter 2    | Brand Name : Motorola                 |
|                 | Model Name : SC-22 SPN5993A           |
|                 | Manufacturer : Chenyang               |
| Battery         | Brand Name : Motorola                 |
|                 | Model Name : JS40                     |
|                 | Manufacturer : SUNWODA                |
| C2Audio Cable 1 | Brand Name : Motorola                 |
|                 | Model Name : SC18C27844               |
|                 | Manufacturer : Luxshare               |
| C2Audio Cable 2 | Brand Name : Motorola                 |
|                 | Model Name : SC18C27845               |
|                 | Manufacturer : Cabletech              |
| USB Cable 1     | Brand Name : Cabletech                |
|                 | Model Name : SKN6473A                 |
| USB Cable 2     | Brand Name : FOXLINK                  |
|                 | Model Name : SKN6473A 17195-C 0403532 |
| USB Cable 3     | Brand Name : SAIBAO                   |
|                 | Model Name : SKN6473A 17214-C 1127044 |
| USB Cable 4     | Brand Name : Luxshare                 |
|                 | Model Name : SKN6473A 17227-C 1126538 |



## 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: 1850.7 MHz ~ 1914.3 MHz<br>LTE Band 26: 814.7 MHz ~ 848.3 MHz<br>LTE Band 38: 2572.5 MHz ~ 2617.5 MHz<br>LTE Band 41: 2498.5 MHz ~ 2687.5 MHz<br>LTE Band 66: 1710.7 MHz ~ 1779.3 MHz<br>LTE Band 71: 665.5 MHz ~ 695.5 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<br>LTE Band 66: 2110.7 MHz ~ 2199.3 MHz<br>LTE Band 71: 619.5 MHz ~ 649.5 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<br>LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz<br>LTE Band 71: 5MHz / 10MHz / 15MHz / 20MHz |

| Standards-related Product Specification |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Output Power to Antenna         | LTE Band 2: 23.25 dBm<br>LTE Band 4: 22.84 dBm<br>LTE Band 5: 22.84 dBm<br>LTE Band 7: 22.83 dBm<br>LTE Band 12: 22.78 dBm<br>LTE Band 13: 22.72 dBm<br>LTE Band 17: 22.73 dBm<br>LTE Band 25: 23.26 dBm<br>LTE Band 26: 22.74 dBm<br>LTE Band 38: 22.92 dBm<br>LTE Band 41: 26.71 dBm<br>LTE Band 66: 22.93 dBm<br>LTE Band 71: 23.20 dBm                                                                                                                         |
| Antenna Type                            | Dipole Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Antenna Gain                            | <b>&lt;Main Antenna&gt;</b><br>LTE Band 2: -2.1 dBi<br>LTE Band 4: -2.0 dBi<br>LTE Band 5: -5.6 dBi<br>LTE Band 7: 0.3 dBi<br>LTE Band 12: -6.0 dBi<br>LTE Band 13: -5.9 dBi<br>LTE Band 17: -5.6 dBi<br>LTE Band 25: -2.1 dBi<br>LTE Band 26: -5.6 dBi<br>LTE Band 38: 0.5 dBi<br>LTE Band 41: 2.0 dBi<br>LTE Band 66: -2.0 dBi<br>LTE Band 71: -5.5 dBi<br><b>&lt;Aux. Antenna&gt;</b><br>LTE Band 7: -4.7 dBi<br>LTE Band 38: -3.5 dBi<br>LTE Band 41: -3.0 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 Emission Designator

<For Main Antenna>

| LTE Band 2  |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1850.7 ~ 1909.3       | 1M09G7D                      | -                         | 0.1208          | 1M10W7D                      | -                         | 0.1033          | 1M09W7D                      | -                         | 0.0805          |
| 3           | 1851.5 ~ 1908.5       | 2M73G7D                      | -                         | 0.1216          | 2M71W7D                      | -                         | 0.1038          | 2M72W7D                      | -                         | 0.0815          |
| 5           | 1852.5 ~ 1907.5       | 4M48G7D                      | -                         | 0.1227          | 4M49W7D                      | -                         | 0.1050          | 4M50W7D                      | -                         | 0.0826          |
| 10          | 1855.0 ~ 1905.0       | 9M07G7D                      | 0.0056                    | 0.1297          | 9M01W7D                      | -                         | 0.1117          | 9M05W7D                      | -                         | 0.0863          |
| 15          | 1857.5 ~ 1902.5       | 13M4G7D                      | -                         | 0.1256          | 13M5W7D                      | -                         | 0.1081          | 13M5W7D                      | -                         | 0.0849          |
| 20          | 1860.0 ~ 1900.0       | 18M5G7D                      | -                         | 0.1303          | 18M5W7D                      | -                         | 0.1127          | 18M4W7D                      | -                         | 0.0881          |
| LTE Band 25 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1850.7 ~ 1914.3       | 1M09G7D                      | -                         | 0.1194          | 1M09W7D                      | -                         | 0.1028          | 1M09W7D                      | -                         | 0.0802          |
| 3           | 1851.5 ~ 1913.5       | 2M73G7D                      | -                         | 0.1197          | 2M72W7D                      | -                         | 0.1028          | 2M74W7D                      | -                         | 0.0805          |
| 5           | 1852.5 ~ 1912.5       | 4M53G7D                      | -                         | 0.1213          | 4M50W7D                      | -                         | 0.1042          | 4M51W7D                      | -                         | 0.0817          |
| 10          | 1855.0 ~ 1910.0       | 9M01G7D                      | 0.0059                    | 0.1276          | 9M01W7D                      | -                         | 0.1102          | 9M09W7D                      | -                         | 0.0857          |
| 15          | 1857.5 ~ 1907.5       | 13M4G7D                      | -                         | 0.1250          | 13M4W7D                      | -                         | 0.1084          | 13M5W7D                      | -                         | 0.0839          |
| 20          | 1860.0 ~ 1905.0       | 18M4G7D                      | -                         | 0.1306          | 18M4W7D                      | -                         | 0.1127          | 18M4W7D                      | -                         | 0.0865          |
| LTE Band 4  |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1710.7 ~ 1754.3       | 1M09G7D                      | -                         | 0.1180          | 1M10W7D                      | -                         | 0.0995          | 1M09W7D                      | -                         | 0.0782          |
| 3           | 1711.5 ~ 1753.5       | 2M73G7D                      | -                         | 0.1189          | 2M74W7D                      | -                         | 0.1000          | 2M73W7D                      | -                         | 0.0789          |
| 5           | 1712.5 ~ 1752.5       | 4M50G7D                      | -                         | 0.1199          | 4M50W7D                      | -                         | 0.1019          | 4M51W7D                      | -                         | 0.0791          |
| 10          | 1715.0 ~ 1750.0       | 9M01G7D                      | 0.0350                    | 0.1205          | 9M05W7D                      | -                         | 0.1030          | 9M07W7D                      | -                         | 0.0809          |
| 15          | 1717.5 ~ 1747.5       | 13M5G7D                      | -                         | 0.1211          | 13M5W7D                      | -                         | 0.1054          | 13M5W7D                      | -                         | 0.0820          |
| 20          | 1720.0 ~ 1745.0       | 18M4G7D                      | -                         | 0.1213          | 18M6W7D                      | -                         | 0.1052          | 18M5W7D                      | -                         | 0.0817          |
| LTE Band 5  |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 824.7 ~ 848.3         | 1M09G7D                      | -                         | 0.0321          | 1M09W7D                      | -                         | 0.0275          | 1M09W7D                      | -                         | 0.0216          |
| 3           | 825.5 ~ 847.5         | 2M75G7D                      | -                         | 0.0322          | 2M73W7D                      | -                         | 0.0276          | 2M73W7D                      | -                         | 0.0216          |
| 5           | 826.5 ~ 846.5         | 4M50G7D                      | -                         | 0.0320          | 4M51W7D                      | -                         | 0.0276          | 4M51W7D                      | -                         | 0.0217          |
| 10          | 829.0 ~ 844.0         | 9M09G7D                      | 0.0056                    | 0.0323          | 9M01W7D                      | -                         | 0.0275          | 9M03W7D                      | -                         | 0.0217          |



| LTE Band 7  |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 2502.5 ~ 2567.5       | 4M51G7D                      | -                         | 0.2051          | 4M49W7D                      | -                         | 0.1766          | 4M51W7D                      | -                         | 0.1334          |
| 10          | 2505.0 ~ 2565.0       | 9M09G7D                      | 0.0033                    | 0.2004          | 9M05W7D                      | -                         | 0.1722          | 9M11W7D                      | -                         | 0.1337          |
| 15          | 2507.5 ~ 2562.5       | 13M5G7D                      | -                         | 0.2032          | 13M5W7D                      | -                         | 0.1738          | 13M5W7D                      | -                         | 0.1352          |
| 20          | 2510.0 ~ 2560.0       | 18M3G7D                      | -                         | 0.2056          | 18M5W7D                      | -                         | 0.1734          | 18M5W7D                      | -                         | 0.1349          |
| LTE Band 12 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 699.7 ~ 715.3         | 1M09G7D                      | -                         | 0.0285          | 1M09W7D                      | -                         | 0.0243          | 1M09W7D                      | -                         | 0.0191          |
| 3           | 700.5 ~ 714.5         | 2M72G7D                      | -                         | 0.0286          | 2M73W7D                      | -                         | 0.0245          | 2M73W7D                      | -                         | 0.0192          |
| 5           | 701.5 ~ 713.5         | 4M52G7D                      | -                         | 0.0288          | 4M52W7D                      | -                         | 0.0248          | 4M53W7D                      | -                         | 0.0192          |
| 10          | 704.0 ~ 711.0         | 9M07G7D                      | 0.0114                    | 0.0290          | 9M09W7D                      | -                         | 0.0246          | 9M05W7D                      | -                         | 0.0194          |
| LTE Band 13 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 779.5 ~ 784.5         | 4M51G7D                      | -                         | 0.0292          | 4M51W7D                      | -                         | 0.0249          | 4M51W7D                      | -                         | 0.0195          |
| 10          | 782.0                 | 8M97G7D                      | 0.0137                    | 0.0293          | 8M93W7D                      | -                         | 0.0250          | 8M93W7D                      | -                         | 0.0196          |
| LTE Band 17 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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)  | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 706.5 ~ 713.5         | 4M51G7D                      | -                         | 0.0313          | 4M49W7D                      | -                         | 0.0270          | 4M55W7D                      | -                         | 0.0210          |
| 10          | 709.0 ~ 711.0         | 9M05G7D                      | 0.0068                    | 0.0315          | 9M05W7D                      | -                         | 0.0270          | 9M09W7D                      | -                         | 0.0209          |
| LTE Band 26 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 824.7 ~ 848.3         | 1M09G7D                      | -                         | 0.0313          | 1M10W7D                      | -                         | 0.0269          | 1M09W7D                      | -                         | 0.0210          |
| 3           | 825.5 ~ 847.5         | 2M75G7D                      | -                         | 0.0314          | 2M72W7D                      | -                         | 0.0269          | 2M73W7D                      | -                         | 0.0211          |
| 5           | 826.5 ~ 846.5         | 4M50G7D                      | -                         | 0.0314          | 4M51W7D                      | -                         | 0.0273          | 4M52W7D                      | -                         | 0.0212          |
| 10          | 829.0 ~ 844.0         | 9M03G7D                      | 0.0112                    | 0.0315          | 9M05W7D                      | -                         | 0.0273          | 9M03W7D                      | -                         | 0.0211          |
| 15          | 831.5 ~ 841.5         | 13M4G7D                      | -                         | 0.0316          | 13M5W7D                      | -                         | 0.0261          | 13M5W7D                      | -                         | 0.0202          |



| LTE Band 38 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
|-------------|-----------------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|------------------------------|---------------------------|-----------------|
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 2572.5 ~ 2617.5       | 4M51G7D                      | -                         | 0.2183          | 4M50W7D                      | -                         | 0.1879          | 4M51W7D                      | -                         | 0.1466          |
| 10          | 2575.0 ~ 2615.0       | 9M01G7D                      | 0.0031                    | 0.2183          | 9M05W7D                      | -                         | 0.1841          | 9M03W7D                      | -                         | 0.1343          |
| 15          | 2577.5 ~ 2612.5       | 13M5G7D                      | -                         | 0.2173          | 13M5W7D                      | -                         | 0.1845          | 13M4W7D                      | -                         | 0.1346          |
| 20          | 2580.0 ~ 2610.0       | 18M4G7D                      | -                         | 0.2198          | 18M4W7D                      | -                         | 0.1841          | 18M4W7D                      | -                         | 0.1337          |
| LTE Band 41 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 2498.5 ~ 2687.5       | 4M51G7D                      | -                         | 0.6457          | 4M50W7D                      | -                         | 0.5572          | 4M49W7D                      | -                         | 0.4355          |
| 10          | 2501.0 ~ 2685.0       | 9M05G7D                      | 0.0043                    | 0.7430          | 9M07W7D                      | -                         | 0.6237          | 9M07W7D                      | -                         | 0.4853          |
| 15          | 2503.5 ~ 2682.5       | 13M5G7D                      | -                         | 0.6546          | 13M4W7D                      | -                         | 0.5559          | 13M5W7D                      | -                         | 0.4375          |
| 20          | 2506.0 ~ 2680.0       | 18M4G7D                      | -                         | 0.6546          | 18M5W7D                      | -                         | 0.5649          | 18M3W7D                      | -                         | 0.4345          |
| LTE Band 66 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 1.4         | 1710.7 ~ 1779.3       | 1M10G7D                      | -                         | 0.1178          | 1M10W7D                      | -                         | 0.1016          | 1M09W7D                      | -                         | 0.0794          |
| 3           | 1711.5 ~ 1778.5       | 2M73G7D                      | -                         | 0.1180          | 2M73W7D                      | -                         | 0.1009          | 2M75W7D                      | -                         | 0.0791          |
| 5           | 1712.5 ~ 1777.5       | 4M52G7D                      | -                         | 0.1186          | 4M50W7D                      | -                         | 0.1026          | 4M52W7D                      | -                         | 0.0804          |
| 10          | 1715.0 ~ 1775.0       | 9M03G7D                      | 0.0086                    | 0.1205          | 9M07W7D                      | -                         | 0.1038          | 9M01W7D                      | -                         | 0.0809          |
| 15          | 1717.5 ~ 1772.5       | 13M5G7D                      | -                         | 0.1236          | 13M5W7D                      | -                         | 0.1072          | 13M5W7D                      | -                         | 0.0838          |
| 20          | 1720.0 ~ 1770.0       | 18M5G7D                      | -                         | 0.1239          | 18M5W7D                      | -                         | 0.1059          | 18M5W7D                      | -                         | 0.0817          |
| LTE Band 71 |                       | QPSK                         |                           |                 | 16QAM                        |                           |                 | 64QAM                        |                           |                 |
| 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) | Emission Designator (99%OBW) | Frequency Tolerance (ppm) | Maximum EIRP(W) |
| 5           | 665.5 ~ 695.5         | 4M51G7D                      | -                         | 0.0352          | 4M50W7D                      | -                         | 0.0303          | 4M49W7D                      | -                         | 0.0238          |
| 10          | 668.0 ~ 693.0         | 9M07G7D                      | 0.0176                    | 0.0356          | 9M11W7D                      | -                         | 0.0305          | 9M07W7D                      | -                         | 0.0237          |
| 15          | 670.5 ~ 690.5         | 13M5G7D                      | -                         | 0.0354          | 13M5W7D                      | -                         | 0.0303          | 13M5W7D                      | -                         | 0.0237          |
| 20          | 673.0 ~ 688.0         | 18M5G7D                      | -                         | 0.0359          | 18M4W7D                      | -                         | 0.0301          | 18M5W7D                      | -                         | 0.0237          |



| LTE Band 41_CA                        |                                                             |                                                               | QPSK                               |                    | 16QAM                              |                    | 64QAM                              |                    |
|---------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|------------------------------------|--------------------|------------------------------------|--------------------|------------------------------------|--------------------|
| CA Combination<br>BW (MHz)<br>PCC/SCC | Primary<br>Component<br>Carrier<br>Frequency<br>Range (MHz) | Secondary<br>Component<br>Carrier<br>Frequency<br>Range (MHz) | Emission<br>Designator<br>(99%OBW) | Maximum<br>EIRP(W) | Emission<br>Designator<br>(99%OBW) | Maximum<br>EIRP(W) | Emission<br>Designator<br>(99%OBW) | Maximum<br>EIRP(W) |
| 20 + 20                               | 2506.0 ~ 2660.2                                             | 2525.8 ~ 2680.0                                               | 37M7G7D                            | 0.3273             | 38M1W7D                            | 0.3199             | 37M5W7D                            | 0.3170             |
| 20 + 15                               | 2506.0 ~ 2665.1                                             | 2523.1 ~ 2682.2                                               | 33M0G7D                            | 0.3228             | 33M0W7D                            | 0.2698             | 32M9W7D                            | 0.1683             |
| 15 + 20                               | 2503.8 ~ 2662.9                                             | 2520.9 ~ 2680.0                                               | 32M9G7D                            | 0.3162             | 32M9W7D                            | 0.2698             | 32M7W7D                            | 0.1660             |
| 20 + 10                               | 2506.0 ~ 2670.1                                             | 2520.4 ~ 2684.5                                               | 28M4G7D                            | 0.3199             | 28M1W7D                            | 0.2679             | 28M0W7D                            | 0.1652             |
| 10 + 20                               | 2501.5 ~ 2665.6                                             | 2515.9 ~ 2680.0                                               | 28M2G7D                            | 0.3199             | 28M1W7D                            | 0.2655             | 28M0W7D                            | 0.1660             |
| 20 + 5                                | 2506.0 ~ 2675.0                                             | 2517.7 ~ 2686.7                                               | 23M4G7D                            | 0.3148             | 23M6W7D                            | 0.2618             | 23M3W7D                            | 0.1641             |
| 5 + 20                                | 2499.3 ~ 2668.3                                             | 2511.0 ~ 2680.0                                               | 23M2G7D                            | 0.3199             | 23M3W7D                            | 0.2661             | 23M2W7D                            | 0.1652             |
| 15 + 10                               | 2503.5 ~ 2672.7                                             | 2515.5 ~ 2684.7                                               | 23M4G7D                            | 0.3148             | 23M6W7D                            | 0.2642             | 23M5W7D                            | 0.1644             |
| 10 + 15                               | 2501.3 ~ 2670.5                                             | 2513.3 ~ 2682.5                                               | 23M6G7D                            | 0.3155             | 23M7W7D                            | 0.2636             | 23M5W7D                            | 0.1648             |
| 15 + 15                               | 2503.5 ~ 2667.5                                             | 2518.5 ~ 2682.5                                               | 28M7G7D                            | 0.3199             | 28M7W7D                            | 0.2667             | 28M7W7D                            | 0.1652             |

**<For Aux. Antenna>**

| LTE Band 7  |                       | QPSK            | 16QAM           | 64QAM           |
|-------------|-----------------------|-----------------|-----------------|-----------------|
| BW (MHz)    | Frequency Range (MHz) | Maximum EIRP(W) | Maximum EIRP(W) | Maximum EIRP(W) |
| 5           | 2502.5 ~ 2567.5       | 0.0649          | 0.0558          | 0.0422          |
| 10          | 2505.0 ~ 2565.0       | 0.0634          | 0.0545          | 0.0423          |
| 15          | 2507.5 ~ 2562.5       | 0.0643          | 0.0550          | 0.0428          |
| 20          | 2510.0 ~ 2560.0       | 0.0650          | 0.0548          | 0.0427          |
| LTE Band 38 |                       | QPSK            | 16QAM           | 64QAM           |
| BW (MHz)    | Frequency Range (MHz) | Maximum EIRP(W) | Maximum EIRP(W) | Maximum EIRP(W) |
| 5           | 2572.5 ~ 2617.5       | 0.0869          | 0.0748          | 0.0583          |
| 10          | 2575.0 ~ 2615.0       | 0.0869          | 0.0733          | 0.0535          |
| 15          | 2577.5 ~ 2612.5       | 0.0865          | 0.0735          | 0.0536          |
| 20          | 2580.0 ~ 2610.0       | 0.0875          | 0.0733          | 0.0532          |
| LTE Band 41 |                       | QPSK            | 16QAM           | 64QAM           |
| BW (MHz)    | Frequency Range (MHz) | Maximum EIRP(W) | Maximum EIRP(W) | Maximum EIRP(W) |
| 5           | 2498.5 ~ 2687.5       | 0.2042          | 0.1762          | 0.1377          |
| 10          | 2501.0 ~ 2685.0       | 0.2350          | 0.1972          | 0.1535          |
| 15          | 2503.5 ~ 2682.5       | 0.2070          | 0.1758          | 0.1384          |
| 20          | 2506.0 ~ 2680.0       | 0.2070          | 0.1786          | 0.1374          |



| LTE Band 41_CA                        |                                                             |                                                               | QPSK               | 16QAM              | 64QAM              |
|---------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|--------------------|--------------------|--------------------|
| CA Combination<br>BW (MHz)<br>PCC/SCC | Primary<br>Component<br>Carrier<br>Frequency<br>Range (MHz) | Secondary<br>Component<br>Carrier<br>Frequency<br>Range (MHz) | Maximum<br>EIRP(W) | Maximum<br>EIRP(W) | Maximum<br>EIRP(W) |
| 20 + 20                               | 2506.0 ~ 2660.2                                             | 2525.8 ~ 2680.0                                               | 0.1035             | 0.1012             | 0.1002             |
| 20 + 15                               | 2506.0 ~ 2665.1                                             | 2523.1 ~ 2682.2                                               | 0.1021             | 0.0853             | 0.0532             |
| 15 + 20                               | 2503.8 ~ 2662.9                                             | 2520.9 ~ 2680.0                                               | 0.1000             | 0.0853             | 0.0525             |
| 20 + 10                               | 2506.0 ~ 2670.1                                             | 2520.4 ~ 2684.5                                               | 0.1012             | 0.0847             | 0.0522             |
| 10 + 20                               | 2501.5 ~ 2665.6                                             | 2515.9 ~ 2680.0                                               | 0.1012             | 0.0839             | 0.0525             |
| 20 + 5                                | 2506.0 ~ 2675.0                                             | 2517.7 ~ 2686.7                                               | 0.0995             | 0.0828             | 0.0519             |
| 5 + 20                                | 2499.3 ~ 2668.3                                             | 2511.0 ~ 2680.0                                               | 0.1012             | 0.0841             | 0.0522             |
| 15 + 10                               | 2503.5 ~ 2672.7                                             | 2515.5 ~ 2684.7                                               | 0.0995             | 0.0836             | 0.0520             |
| 10 + 15                               | 2501.3 ~ 2670.5                                             | 2513.3 ~ 2682.5                                               | 0.0998             | 0.0834             | 0.0521             |
| 15 + 15                               | 2503.5 ~ 2667.5                                             | 2518.5 ~ 2682.5                                               | 0.1012             | 0.0843             | 0.0522             |

## 1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

|                           |                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC.                                                                                                                                       |
| <b>Test Site Location</b> | No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park,<br>Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b><br>TH05-HY                                                                                                                               |

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

|                           |                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC.                                                                                                             |
| <b>Test Site Location</b> | No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b><br>03CH13-HY                                                                                                   |

**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
- ♦ 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 |
|                       | 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 | 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 |
|                       | 38   | -               | - | 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 |
|                       | 66   | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
|                       | 71   | -               | - | v | v  | v  | v  | v          | v     | v     | v    | v    | v    | v            | v | v |
| Peak-to-Average Ratio | 2    |                 |   |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 4    |                 |   |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 5    |                 |   |   | v  | -  | -  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 7    | -               | - |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 12   |                 |   |   | 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 |
|                       | 25   |                 |   |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 26   |                 |   |   | v  |    | -  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 38   | -               | - |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 41   | -               | - |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 66   |                 |   |   |    |    | v  | v          | v     | v     | v    |      | v    | v            | v | v |
|                       | 71   | -               | - |   |    |    | 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 |
| 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 |
|                        | 12   | v               | 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 |
|                        | 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 |
|                        | 38   | -               | - | v | v  | v  | v  | v          | v     | v     |      |      | v    | v            | v | v |
|                        | 41   | -               | - | v | v  | v  | v  | v          | v     | v     |      |      | v    | v            | v | v |
|                        | 66   | v               | v | v | v  | v  | v  | v          | v     | v     |      |      | v    | v            | v | v |
| Conducted Band Edge    | 71   | -               | - | v | v  | v  | v  | v          | v     | v     |      |      | v    | v            | v | v |
|                        | 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 |
|                        | 12   | v               | 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 |
|                        | 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 |
|                        | 38   | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      | v    | v            |   | v |
|                        | 41   | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      | v    | v            |   | v |
|                        | 66   | v               | v | v | v  | v  | v  | v          | v     | v     | v    |      | v    | v            |   | v |
|                        | 71   | -               | - | 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 | 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 |
|                             | 12   | v               | 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 |
|                             | 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 |
|                             | 38   | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 41   | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 66   | v               | v | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
|                             | 71   | -               | - | 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 |   |
|                             | 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 |   |
|                             | 38   | -               | - |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |
|                             | 41   | -               | - |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |
|                             | 66   |                 |   |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |
|                             | 71   | -               | - |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |



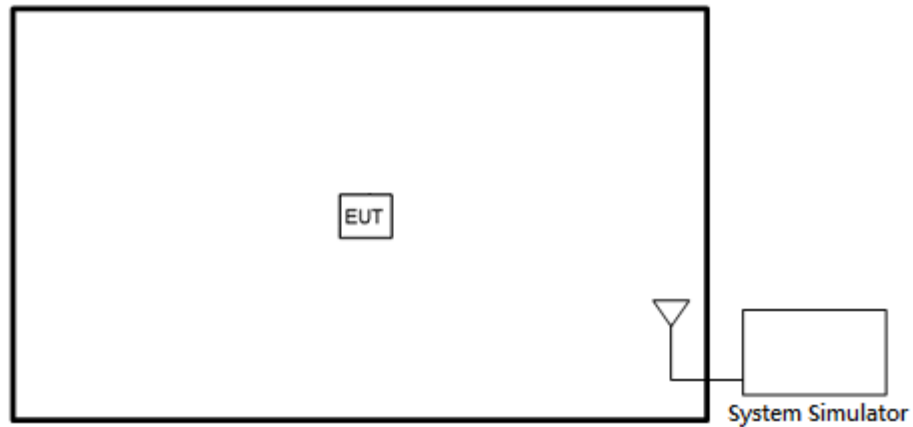
| Test Items                       | Band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 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 |
|                                  | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | v               | v | 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 |
|                                  | 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 | v |
|                                  | 38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -               | - | 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 |
|                                  | 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | v               | v | v | v  | v  | v  | v          | v     | v     | v    | v    |      | v            | v | v |
|                                  | 71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -               | - | v | v  | v  | v  | v          | v     | v     | v    |      |      | v            | v | v |
| Radiated<br>Spurious<br>Emission | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
|                                  | 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Worst Case      |   |   |    |    |    |            |       |       |      |      |      | v            | v | v |
| 71                               | Worst Case                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |   |   |    |    |    |            |       |       |      |      | v    | v            | 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 RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.<br>4. All the radiated test cases were performance with Adapter 1, C2Audio Cable 1, and USB Cable 1. |                 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |



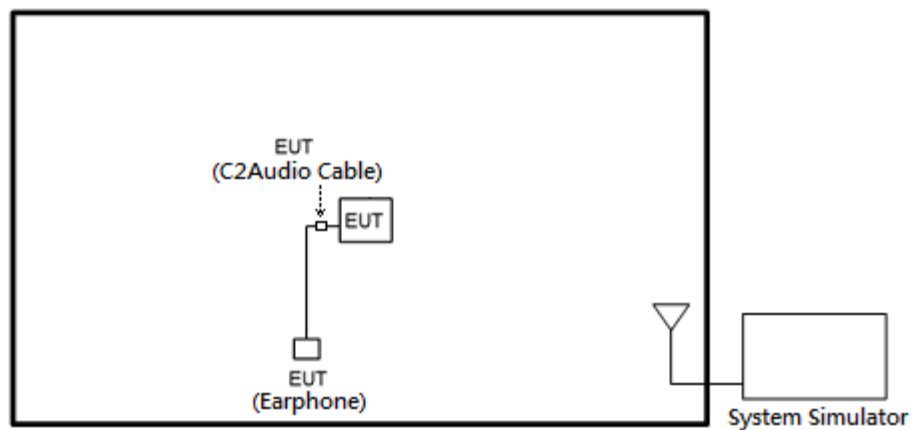
| Test Items                  | Band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 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 |
| Max. Output Power           | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    | v    | v    | v            | v | v |
| 26dB and 99% Bandwidth      | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     |      |      | v    | v            | v | v |
| Conducted Band Edge         | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    |      | v    | v            |   | v |
| Conducted Spurious Emission | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    |      |      | v            | v | v |
| E.I.R.P.                    | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | v               | v     | v     | v     | v     | v    | v    | v     | v     | v     | v          | v     | v     | v    |      |      | v            | v | v |
| Radiated Spurious Emission  | 41_CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Worst Case      |       |       |       |       |      |      |       |       |       |            |       |       |      |      |      | v            | v | 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 RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.<br>4. All the radiated test cases were performance with Adapter 1, C2Audio Cable 1, and USB Cable 1. |                 |       |       |       |       |      |      |       |       |       |            |       |       |      |      |      |              |   |   |

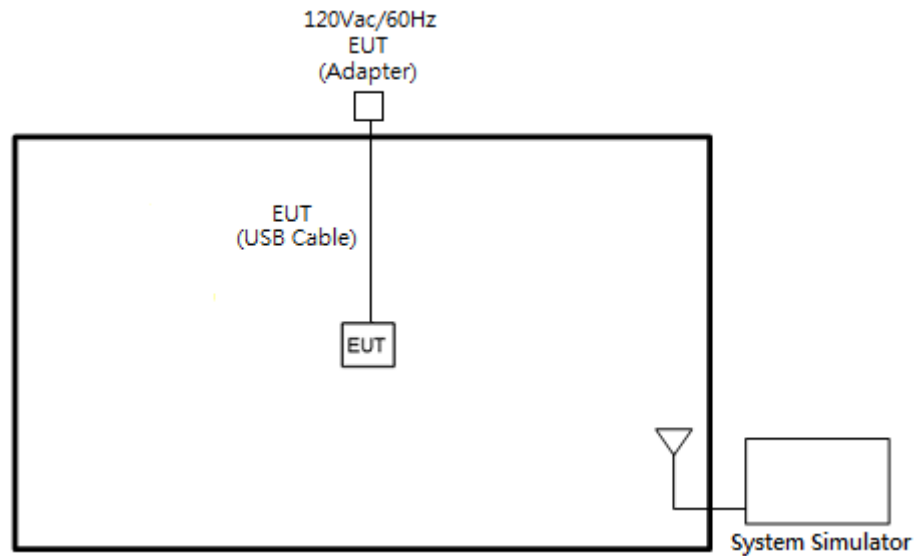
## 2.2 Connection Diagram of Test System

<EUT with Standalone>



<EUT with Earphone>



**<EUT with Adapter>**

**2.3 Support Unit used in test configuration and system**

| Item | Equipment        | Trade Name | Model No.  | FCC ID | Data Cable        | Power Cord        |
|------|------------------|------------|------------|--------|-------------------|-------------------|
| 1.   | LTE Base Station | Anritsu    | MT8820C    | N/A    | N/A               | Unshielded, 1.8 m |
| 2.   | Earphone         | Motorola   | SH38C16618 | N/A    | Unshielded, 1.2 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 and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

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

*Offset = RF cable loss + attenuator factor.*

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

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$



## 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 66 Channel and Frequency List |                        |        |        |         |
|----------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 132072 | 132322 | 132572  |
|                                        | Frequency              | 1720   | 1745   | 1770    |
| 15                                     | Channel                | 132047 | 132322 | 132597  |
|                                        | Frequency              | 1717.5 | 1745   | 1772.5  |
| 10                                     | Channel                | 132022 | 132322 | 132622  |
|                                        | Frequency              | 1715   | 1745   | 1775    |
| 5                                      | Channel                | 131997 | 132322 | 132647  |
|                                        | Frequency              | 1712.5 | 1745   | 1777.5  |
| 3                                      | Channel                | 131987 | 132322 | 132657  |
|                                        | Frequency              | 1711.5 | 1745   | 1778.5  |
| 1.4                                    | Channel                | 131979 | 132322 | 132665  |
|                                        | Frequency              | 1710.7 | 1745   | 1779.3  |

| LTE Band 71 Channel and Frequency List |                        |        |        |         |
|----------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 133222 | 133322 | 133372  |
|                                        | Frequency              | 673    | 683    | 688     |
| 15                                     | Channel                | 133197 | 133297 | 133397  |
|                                        | Frequency              | 670.5  | 680.5  | 690.5   |
| 10                                     | Channel                | 133172 | 133272 | 133422  |
|                                        | Frequency              | 668    | 678    | 693     |
| 5                                      | Channel                | 133147 | 133247 | 133447  |
|                                        | Frequency              | 665.5  | 675.5  | 695.5   |



| 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 |

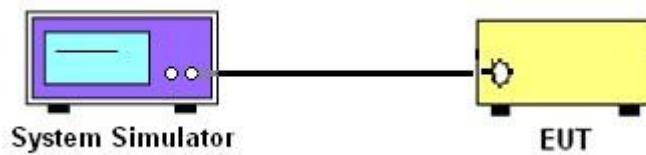
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

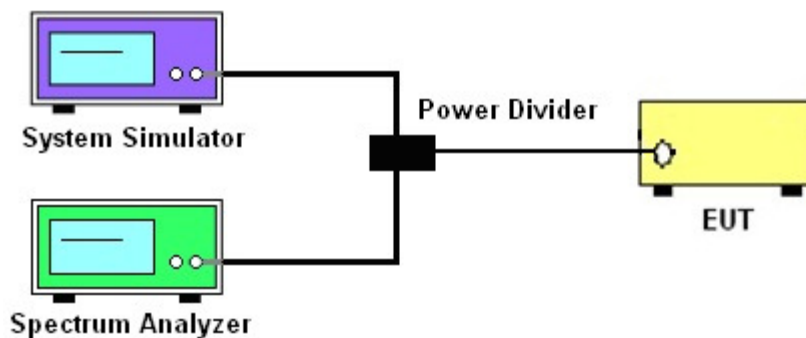
See list of measuring instruments of this test report.

#### 3.2 Test Setup

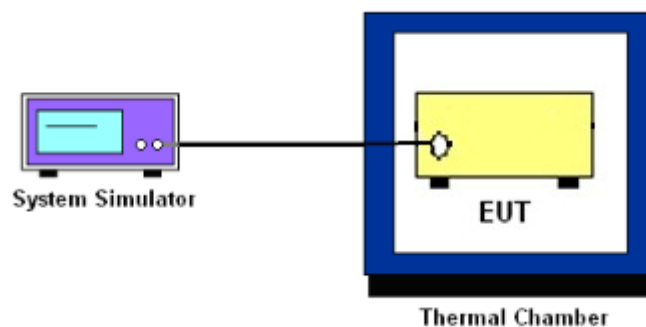
##### 3.2.1 Conducted Output Power



##### 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, Band 17, and Band 71.

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

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66.

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  $P(\text{Watts})$  in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (c)

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

27.53 (g)

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

27.53 (h)

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



27.53(m)(4)

For 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. Checked that all the results comply with the emission limit line.  
The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)
8. 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. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)
10. 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.

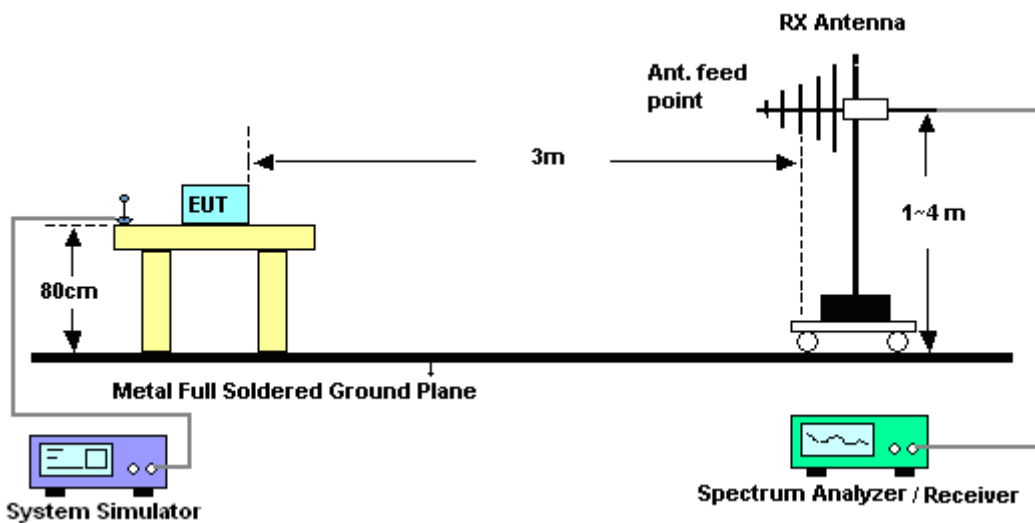
## 4 Radiated Test Items

### 4.1 Measuring Instruments

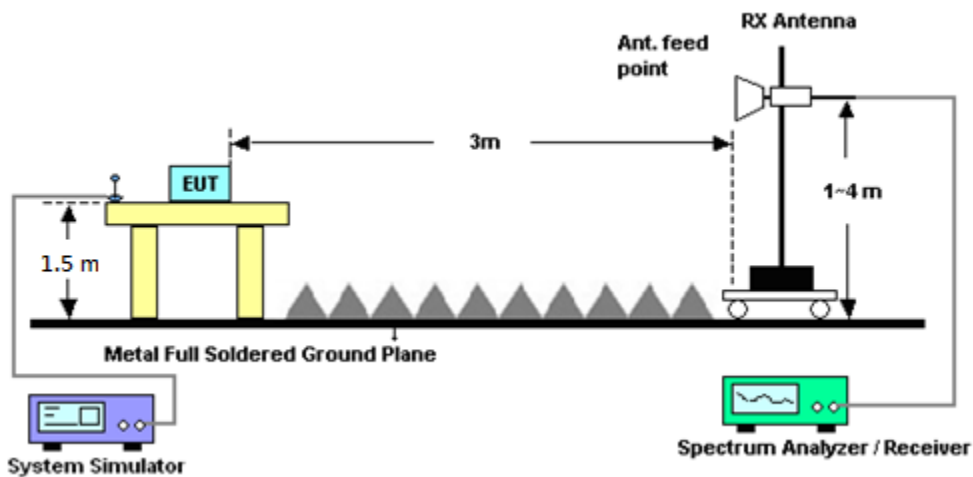
See list of measuring instruments of this test report.

### 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.

For LTE Band 12,13,17

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

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

### 4.4.2 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)

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

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



## 5 List of Measuring Equipment

| Instrument                | Manufacturer      | Model No.                       | Serial No.  | Characteristics                                 | Calibration Date | Test Date                       | Due Date      | Remark                   |
|---------------------------|-------------------|---------------------------------|-------------|-------------------------------------------------|------------------|---------------------------------|---------------|--------------------------|
| LTE Base Station          | Anritsu           | MT8820C                         | 6201432821  | GSM/GPRS /WCDMA/LTE                             | Oct. 13, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Oct. 12, 2018 | Conducted<br>(TH05-HY)   |
| Base Station(Measure)     | Anritsu           | MT8821C                         | 6201664755  | GSM / GPRS /WCDMA / LTE FDD/TDD with 44) /LTE-3 | Mar. 23, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Mar. 22, 2018 | Conducted<br>(TH05-HY)   |
| Spectrum Analyzer         | Rohde & Schwarz   | FSV40                           | 101397      | 10Hz~40GHz                                      | Nov. 09, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Nov. 08, 2018 | Conducted<br>(TH05-HY)   |
| Spectrum Analyzer         | Rohde & Schwarz   | FSV30                           | 100895      | 9kHz~30GHz                                      | Apr. 25, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Apr. 24, 2018 | Conducted<br>(TH05-HY)   |
| Temperature Chamber       | ESPEC             | SH-641                          | 92013720    | -30℃~70℃                                        | Aug. 28, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Aug. 27, 2018 | Conducted<br>(TH05-HY)   |
| Programmable Power Supply | GW Instek         | PSS-2005                        | EL890001    | 1V~20V<br>0.5A~5A                               | Oct. 06, 2017    | Jan. 18, 2018~<br>Mar. 02, 2018 | Oct. 05, 2018 | Conducted<br>(TH05-HY)   |
| Amplifier                 | MITEQ             | TTA1840-35-HG                   | 1871923     | 18GHz~40GHz,<br>VSWR : 2.5:1<br>max             | Jul. 18, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Jul. 17, 2018 | Radiation<br>(03CH13-HY) |
| Amplifier                 | Sonoma-Instrument | 310 N                           | 187282      | 9KHz~1GHz                                       | Dec. 21, 2016    | Feb. 16, 2018~<br>Mar. 02, 2018 | Dec. 20, 2018 | Radiation<br>(03CH13-HY) |
| Bilog Antenna             | TESEQ             | CBL<br>6111D&00800<br>N1D01N-06 | 40103&07    | 30MHz to 1GHz                                   | Jan. 10, 2018    | Feb. 16, 2018~<br>Mar. 02, 2018 | Jan. 09, 2019 | Radiation<br>(03CH13-HY) |
| Horn Antenna              | SCHWARZBECK       | BBHA 9120 D                     | 9120D-1241  | 1GHz ~ 18GHz                                    | Jun. 15, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Jun. 14, 2018 | Radiation<br>(03CH13-HY) |
| Preamplifier              | MITEQ             | AMF-7D-0010<br>1800-30-10P      | 1590074     | 1GHz~18GHz                                      | May 22, 2017     | Feb. 16, 2018~<br>Mar. 02, 2018 | May 21, 2018  | Radiation<br>(03CH13-HY) |
| Preamplifier              | Keysight          | 83017A                          | MY53270147  | 1GHz~26.5GHz                                    | Feb. 02, 2018    | Feb. 16, 2018~<br>Mar. 02, 2018 | Feb. 01, 2019 | Radiation<br>(03CH13-HY) |
| Spectrum Analyzer         | Keysight          | N9010A                          | MY55370526  | 10Hz~44GHz                                      | Mar. 15, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Mar. 14, 2018 | Radiation<br>(03CH13-HY) |
| Controller                | EMEC              | EM1000                          | N/A         | Control Turn<br>table & Ant Mast                | N/A              | Feb. 16, 2018~<br>Mar. 02, 2018 | N/A           | Radiation<br>(03CH13-HY) |
| Antenna Mast              | EMEC              | AM-BS-4500-B                    | N/A         | 1m~4m                                           | N/A              | Feb. 16, 2018~<br>Mar. 02, 2018 | N/A           | Radiation<br>(03CH13-HY) |
| Turn Table                | EMEC              | TT2000                          | N/A         | 0~360 Degree                                    | N/A              | Feb. 16, 2018~<br>Mar. 02, 2018 | N/A           | Radiation<br>(03CH13-HY) |
| SHF-EHF Horn Antenna      | SCHWARZBECK       | BBHA 9170                       | BBHA9170251 | 18GHz- 40GHz                                    | Nov. 10, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Nov. 09, 2018 | Radiation<br>(03CH13-HY) |
| SHF-EHF Horn Antenna      | SCHWARZBECK       | BBHA 9170                       | BBHA9170584 | 18GHz- 40GHz                                    | Nov. 27, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Nov. 26, 2018 | Radiation<br>(03CH13-HY) |
| Horn Antenna              | SCHWARZBECK       | BBHA 9120 D                     | 9120D-1522  | 1G~18GHz                                        | Mar. 17, 2017    | Feb. 16, 2018~<br>Mar. 02, 2018 | Mar. 16, 2018 | Radiation<br>(03CH13-HY) |
| Signal Generator          | Rohde & Schwarz   | SMF100A                         | 101107      | 100kHz~40GHz                                    | May 22, 2017     | Feb. 16, 2018~<br>Mar. 02, 2018 | May 21, 2018  | Radiation<br>(03CH13-HY) |



## 6 Uncertainty of Evaluation

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

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 3.07 |
|-------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 3.48 |
|-------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 3.92 |
|-------------------------------------------------------------------------|------|



## 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   | 23.25  | 23.16  | 22.82   |
| 20                                     | 1       | 49        |        | 22.84  | 22.72  | 22.73   |
| 20                                     | 1       | 99        |        | 23.03  | 22.91  | 22.77   |
| 20                                     | 50      | 0         |        | 21.97  | 21.85  | 21.80   |
| 20                                     | 50      | 24        |        | 21.92  | 21.83  | 21.82   |
| 20                                     | 50      | 50        |        | 21.91  | 21.82  | 21.79   |
| 20                                     | 100     | 0         |        | 21.96  | 21.84  | 21.74   |
| 20                                     | 1       | 0         | 16-QAM | 22.62  | 22.51  | 22.14   |
| 20                                     | 1       | 49        |        | 22.17  | 22.07  | 22.11   |
| 20                                     | 1       | 99        |        | 22.40  | 22.25  | 22.07   |
| 20                                     | 50      | 0         |        | 21.08  | 20.97  | 20.89   |
| 20                                     | 50      | 24        |        | 21.07  | 20.91  | 20.92   |
| 20                                     | 50      | 50        |        | 21.05  | 20.90  | 20.89   |
| 20                                     | 100     | 0         |        | 21.04  | 20.95  | 20.83   |
| 20                                     | 1       | 0         | 64-QAM | 21.55  | 21.46  | 21.04   |
| 20                                     | 1       | 49        |        | 21.11  | 21.00  | 21.03   |
| 20                                     | 1       | 99        |        | 21.31  | 21.17  | 21.02   |
| 20                                     | 50      | 0         |        | 20.08  | 19.96  | 19.91   |
| 20                                     | 50      | 24        |        | 20.09  | 19.92  | 19.95   |
| 20                                     | 50      | 50        |        | 20.05  | 19.91  | 19.91   |
| 20                                     | 100     | 0         |        | 20.07  | 19.94  | 19.86   |
| 15                                     | 1       | 0         | QPSK   | 23.09  | 22.90  | 22.94   |
| 15                                     | 1       | 37        |        | 22.95  | 22.75  | 22.77   |
| 15                                     | 1       | 74        |        | 22.89  | 22.80  | 22.83   |
| 15                                     | 36      | 0         |        | 22.08  | 21.87  | 21.87   |
| 15                                     | 36      | 20        |        | 21.97  | 21.87  | 21.85   |
| 15                                     | 36      | 39        |        | 21.92  | 21.80  | 21.84   |
| 15                                     | 75      | 0         |        | 21.91  | 21.86  | 21.84   |
| 15                                     | 1       | 0         | 16-QAM | 22.44  | 22.25  | 22.26   |
| 15                                     | 1       | 37        |        | 22.30  | 22.08  | 22.10   |
| 15                                     | 1       | 74        |        | 22.28  | 22.16  | 22.09   |
| 15                                     | 36      | 0         |        | 21.18  | 20.98  | 20.97   |
| 15                                     | 36      | 20        |        | 21.07  | 20.96  | 20.94   |
| 15                                     | 36      | 39        |        | 21.04  | 20.91  | 20.93   |
| 15                                     | 75      | 0         |        | 21.06  | 20.97  | 20.94   |
| 15                                     | 1       | 0         | 64-QAM | 21.39  | 21.21  | 21.19   |
| 15                                     | 1       | 37        |        | 21.21  | 21.03  | 21.04   |
| 15                                     | 1       | 74        |        | 21.15  | 21.08  | 21.06   |
| 15                                     | 36      | 0         |        | 20.20  | 20.00  | 20.00   |
| 15                                     | 36      | 20        |        | 20.08  | 20.01  | 19.99   |
| 15                                     | 36      | 39        |        | 20.05  | 19.96  | 19.96   |
| 15                                     | 75      | 0         |        | 20.03  | 19.97  | 19.95   |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 23.23  | 23.05  | 22.83   |
| 10                                     | 1       | 25        |        | 22.94  | 22.76  | 22.76   |
| 10                                     | 1       | 49        |        | 23.09  | 23.01  | 22.77   |
| 10                                     | 25      | 0         |        | 22.03  | 21.87  | 21.83   |
| 10                                     | 25      | 12        |        | 22.00  | 21.84  | 21.80   |
| 10                                     | 25      | 25        |        | 21.90  | 21.83  | 21.80   |
| 10                                     | 50      | 0         |        | 21.92  | 21.85  | 21.85   |
| 10                                     | 1       | 0         | 16-QAM | 22.58  | 22.40  | 22.21   |
| 10                                     | 1       | 25        |        | 22.31  | 22.13  | 22.11   |
| 10                                     | 1       | 49        |        | 22.44  | 22.35  | 22.06   |
| 10                                     | 25      | 0         |        | 21.14  | 20.95  | 20.92   |
| 10                                     | 25      | 12        |        | 21.11  | 20.94  | 20.91   |
| 10                                     | 25      | 25        |        | 21.00  | 20.93  | 20.90   |
| 10                                     | 50      | 0         |        | 21.00  | 20.95  | 20.91   |
| 10                                     | 1       | 0         | 64-QAM | 21.46  | 21.32  | 21.10   |
| 10                                     | 1       | 25        |        | 21.21  | 21.03  | 21.02   |
| 10                                     | 1       | 49        |        | 21.31  | 21.26  | 21.01   |
| 10                                     | 25      | 0         |        | 20.13  | 19.95  | 19.96   |
| 10                                     | 25      | 12        |        | 20.12  | 19.95  | 19.95   |
| 10                                     | 25      | 25        |        | 20.01  | 19.94  | 19.94   |
| 10                                     | 50      | 0         |        | 20.03  | 19.98  | 19.94   |
| 5                                      | 1       | 0         | QPSK   | 22.99  | 22.80  | 22.77   |
| 5                                      | 1       | 12        |        | 22.92  | 22.75  | 22.74   |
| 5                                      | 1       | 24        |        | 22.97  | 22.77  | 22.79   |
| 5                                      | 12      | 0         |        | 21.97  | 21.80  | 21.81   |
| 5                                      | 12      | 7         |        | 21.97  | 21.81  | 21.82   |
| 5                                      | 12      | 13        |        | 21.93  | 21.81  | 21.80   |
| 5                                      | 25      | 0         |        | 21.93  | 21.77  | 21.77   |
| 5                                      | 1       | 0         | 16-QAM | 22.31  | 22.19  | 22.13   |
| 5                                      | 1       | 12        |        | 22.27  | 22.11  | 22.08   |
| 5                                      | 1       | 24        |        | 22.31  | 22.13  | 22.12   |
| 5                                      | 12      | 0         |        | 21.06  | 20.92  | 20.89   |
| 5                                      | 12      | 7         |        | 21.07  | 20.90  | 20.89   |
| 5                                      | 12      | 13        |        | 21.06  | 20.91  | 20.86   |
| 5                                      | 25      | 0         |        | 21.04  | 20.87  | 20.84   |
| 5                                      | 1       | 0         | 64-QAM | 21.27  | 21.06  | 21.06   |
| 5                                      | 1       | 12        |        | 21.18  | 21.01  | 20.98   |
| 5                                      | 1       | 24        |        | 21.23  | 21.04  | 20.99   |
| 5                                      | 12      | 0         |        | 20.10  | 19.98  | 19.92   |
| 5                                      | 12      | 7         |        | 20.10  | 19.93  | 19.95   |
| 5                                      | 12      | 13        |        | 20.11  | 19.96  | 19.91   |
| 5                                      | 25      | 0         |        | 20.05  | 19.88  | 19.90   |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.95  | 22.78  | 22.78   |
| 3                                      | 1       | 8         |        | 22.91  | 22.76  | 22.76   |
| 3                                      | 1       | 14        |        | 22.83  | 22.75  | 22.74   |
| 3                                      | 8       | 0         |        | 21.87  | 21.82  | 21.77   |
| 3                                      | 8       | 4         |        | 21.96  | 21.72  | 21.82   |
| 3                                      | 8       | 7         |        | 21.94  | 21.79  | 21.79   |
| 3                                      | 15      | 0         |        | 21.95  | 21.78  | 21.78   |
| 3                                      | 1       | 0         | 16-QAM | 22.24  | 22.05  | 22.07   |
| 3                                      | 1       | 8         |        | 22.26  | 22.11  | 22.06   |
| 3                                      | 1       | 14        |        | 22.23  | 22.08  | 21.97   |
| 3                                      | 8       | 0         |        | 21.11  | 20.94  | 20.90   |
| 3                                      | 8       | 4         |        | 21.11  | 20.95  | 20.95   |
| 3                                      | 8       | 7         |        | 21.01  | 20.75  | 20.93   |
| 3                                      | 15      | 0         |        | 21.05  | 20.89  | 20.90   |
| 3                                      | 1       | 0         | 64-QAM | 21.21  | 21.08  | 21.01   |
| 3                                      | 1       | 8         |        | 21.18  | 21.04  | 20.99   |
| 3                                      | 1       | 14        |        | 21.20  | 21.02  | 20.99   |
| 3                                      | 8       | 0         |        | 20.09  | 19.96  | 19.92   |
| 3                                      | 8       | 4         |        | 20.11  | 19.96  | 19.92   |
| 3                                      | 8       | 7         |        | 20.07  | 19.94  | 19.93   |
| 3                                      | 15      | 0         |        | 20.05  | 19.88  | 19.89   |
| 1.4                                    | 1       | 0         | QPSK   | 22.86  | 22.68  | 22.68   |
| 1.4                                    | 1       | 3         |        | 22.91  | 22.75  | 22.75   |
| 1.4                                    | 1       | 5         |        | 22.85  | 22.67  | 22.67   |
| 1.4                                    | 3       | 0         |        | 22.88  | 22.73  | 22.68   |
| 1.4                                    | 3       | 1         |        | 22.92  | 22.76  | 22.74   |
| 1.4                                    | 3       | 3         |        | 22.89  | 22.73  | 22.71   |
| 1.4                                    | 6       | 0         |        | 21.87  | 21.71  | 21.69   |
| 1.4                                    | 1       | 0         | 16-QAM | 22.18  | 22.03  | 21.95   |
| 1.4                                    | 1       | 3         |        | 22.24  | 22.10  | 22.02   |
| 1.4                                    | 1       | 5         |        | 22.16  | 22.01  | 21.94   |
| 1.4                                    | 3       | 0         |        | 22.00  | 21.84  | 21.78   |
| 1.4                                    | 3       | 1         |        | 22.01  | 21.87  | 21.79   |
| 1.4                                    | 3       | 3         |        | 21.96  | 21.82  | 21.76   |
| 1.4                                    | 6       | 0         |        | 21.05  | 20.88  | 20.83   |
| 1.4                                    | 1       | 0         | 64-QAM | 21.14  | 20.98  | 20.91   |
| 1.4                                    | 1       | 3         |        | 21.15  | 21.01  | 20.96   |
| 1.4                                    | 1       | 5         |        | 21.10  | 20.93  | 20.90   |
| 1.4                                    | 3       | 0         |        | 21.11  | 20.95  | 20.89   |
| 1.4                                    | 3       | 1         |        | 21.16  | 21.01  | 20.95   |
| 1.4                                    | 3       | 3         |        | 21.11  | 20.95  | 20.90   |
| 1.4                                    | 6       | 0         |        | 19.97  | 19.81  | 19.80   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |              |        |         |
|-----------------------------------------|---------|-----------|--------|--------------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest       | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | <b>23.26</b> | 23.15  | 22.99   |
| 20                                      | 1       | 49        |        | 22.92        | 22.84  | 22.80   |
| 20                                      | 1       | 99        |        | 23.02        | 23.02  | 22.89   |
| 20                                      | 50      | 0         |        | 22.07        | 21.97  | 21.97   |
| 20                                      | 50      | 24        |        | 21.93        | 21.90  | 21.93   |
| 20                                      | 50      | 50        |        | 21.93        | 21.90  | 21.92   |
| 20                                      | 100     | 0         |        | 21.95        | 21.95  | 21.96   |
| 20                                      | 1       | 0         | 16-QAM | 22.62        | 22.52  | 22.34   |
| 20                                      | 1       | 49        |        | 22.26        | 22.18  | 22.19   |
| 20                                      | 1       | 99        |        | 22.40        | 22.34  | 22.21   |
| 20                                      | 50      | 0         |        | 21.21        | 21.06  | 21.04   |
| 20                                      | 50      | 24        |        | 21.04        | 21.02  | 21.00   |
| 20                                      | 50      | 50        |        | 21.01        | 21.01  | 21.00   |
| 20                                      | 100     | 0         |        | 21.04        | 21.07  | 21.04   |
| 20                                      | 1       | 0         | 64-QAM | 21.47        | 21.36  | 21.25   |
| 20                                      | 1       | 49        |        | 21.18        | 21.07  | 21.07   |
| 20                                      | 1       | 99        |        | 21.27        | 21.27  | 21.13   |
| 20                                      | 50      | 0         |        | 20.21        | 20.10  | 20.08   |
| 20                                      | 50      | 24        |        | 20.06        | 20.02  | 20.05   |
| 20                                      | 50      | 50        |        | 20.03        | 20.01  | 20.02   |
| 20                                      | 100     | 0         |        | 20.05        | 20.08  | 20.07   |
| 15                                      | 1       | 0         | QPSK   | 23.07        | 22.97  | 22.98   |
| 15                                      | 1       | 37        |        | 22.92        | 22.84  | 22.81   |
| 15                                      | 1       | 74        |        | 22.89        | 22.90  | 22.94   |
| 15                                      | 36      | 0         |        | 22.05        | 21.98  | 21.96   |
| 15                                      | 36      | 20        |        | 22.04        | 21.93  | 21.94   |
| 15                                      | 36      | 39        |        | 21.92        | 21.94  | 21.94   |
| 15                                      | 75      | 0         |        | 21.92        | 21.95  | 21.95   |
| 15                                      | 1       | 0         | 16-QAM | 22.45        | 22.36  | 22.35   |
| 15                                      | 1       | 37        |        | 22.29        | 22.20  | 22.13   |
| 15                                      | 1       | 74        |        | 22.28        | 22.23  | 22.22   |
| 15                                      | 36      | 0         |        | 21.19        | 21.08  | 21.06   |
| 15                                      | 36      | 20        |        | 21.15        | 21.04  | 21.03   |
| 15                                      | 36      | 39        |        | 21.06        | 21.05  | 21.03   |
| 15                                      | 75      | 0         |        | 21.06        | 21.06  | 21.03   |
| 15                                      | 1       | 0         | 64-QAM | 21.34        | 21.29  | 21.28   |
| 15                                      | 1       | 37        |        | 21.19        | 21.12  | 21.07   |
| 15                                      | 1       | 74        |        | 21.19        | 21.16  | 21.19   |
| 15                                      | 36      | 0         |        | 20.23        | 20.13  | 20.10   |
| 15                                      | 36      | 20        |        | 20.19        | 20.09  | 20.04   |
| 15                                      | 36      | 39        |        | 20.06        | 20.07  | 20.07   |
| 15                                      | 75      | 0         |        | 20.07        | 20.04  | 20.05   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 23.16  | 23.12  | 22.87   |
| 10                                      | 1       | 25        |        | 22.90  | 22.84  | 22.83   |
| 10                                      | 1       | 49        |        | 23.12  | 23.08  | 22.88   |
| 10                                      | 25      | 0         |        | 22.01  | 21.94  | 21.92   |
| 10                                      | 25      | 12        |        | 21.97  | 21.91  | 21.89   |
| 10                                      | 25      | 25        |        | 21.97  | 21.91  | 21.91   |
| 10                                      | 50      | 0         |        | 21.98  | 21.92  | 21.90   |
| 10                                      | 1       | 0         | 16-QAM | 22.52  | 22.48  | 22.24   |
| 10                                      | 1       | 25        |        | 22.27  | 22.21  | 22.17   |
| 10                                      | 1       | 49        |        | 22.47  | 22.42  | 22.20   |
| 10                                      | 25      | 0         |        | 21.11  | 21.04  | 21.00   |
| 10                                      | 25      | 12        |        | 21.08  | 21.01  | 20.99   |
| 10                                      | 25      | 25        |        | 21.07  | 21.02  | 21.02   |
| 10                                      | 50      | 0         |        | 21.08  | 21.05  | 21.00   |
| 10                                      | 1       | 0         | 64-QAM | 21.43  | 21.40  | 21.12   |
| 10                                      | 1       | 25        |        | 21.16  | 21.10  | 21.04   |
| 10                                      | 1       | 49        |        | 21.38  | 21.34  | 21.13   |
| 10                                      | 25      | 0         |        | 20.11  | 20.04  | 20.04   |
| 10                                      | 25      | 12        |        | 20.11  | 20.05  | 20.03   |
| 10                                      | 25      | 25        |        | 20.08  | 20.01  | 20.01   |
| 10                                      | 50      | 0         |        | 20.10  | 20.02  | 20.02   |
| 5                                       | 1       | 0         | QPSK   | 22.94  | 22.89  | 22.83   |
| 5                                       | 1       | 12        |        | 22.86  | 22.82  | 22.80   |
| 5                                       | 1       | 24        |        | 22.90  | 22.84  | 22.85   |
| 5                                       | 12      | 0         |        | 21.93  | 21.88  | 21.88   |
| 5                                       | 12      | 7         |        | 21.94  | 21.87  | 21.88   |
| 5                                       | 12      | 13        |        | 21.90  | 21.86  | 21.87   |
| 5                                       | 25      | 0         |        | 21.94  | 21.83  | 21.87   |
| 5                                       | 1       | 0         | 16-QAM | 22.28  | 22.23  | 22.17   |
| 5                                       | 1       | 12        |        | 22.21  | 22.17  | 22.17   |
| 5                                       | 1       | 24        |        | 22.22  | 22.18  | 22.13   |
| 5                                       | 12      | 0         |        | 21.03  | 21.02  | 20.94   |
| 5                                       | 12      | 7         |        | 21.04  | 20.97  | 20.97   |
| 5                                       | 12      | 13        |        | 21.05  | 21.00  | 20.97   |
| 5                                       | 25      | 0         |        | 21.03  | 20.94  | 20.96   |
| 5                                       | 1       | 0         | 64-QAM | 21.22  | 21.17  | 21.08   |
| 5                                       | 1       | 12        |        | 21.13  | 21.09  | 21.07   |
| 5                                       | 1       | 24        |        | 21.18  | 21.11  | 21.08   |
| 5                                       | 12      | 0         |        | 20.10  | 20.01  | 20.02   |
| 5                                       | 12      | 7         |        | 20.08  | 20.03  | 20.04   |
| 5                                       | 12      | 13        |        | 20.08  | 20.02  | 20.01   |
| 5                                       | 25      | 0         |        | 20.04  | 19.98  | 19.97   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.88  | 22.75  | 22.82   |
| 3                                       | 1       | 8         |        | 22.87  | 22.84  | 22.81   |
| 3                                       | 1       | 14        |        | 22.87  | 22.84  | 22.83   |
| 3                                       | 8       | 0         |        | 21.95  | 21.88  | 21.86   |
| 3                                       | 8       | 4         |        | 21.93  | 21.89  | 21.91   |
| 3                                       | 8       | 7         |        | 21.93  | 21.87  | 21.88   |
| 3                                       | 15      | 0         |        | 21.94  | 21.88  | 21.87   |
| 3                                       | 1       | 0         | 16-QAM | 22.22  | 22.17  | 22.14   |
| 3                                       | 1       | 8         |        | 22.21  | 22.18  | 22.11   |
| 3                                       | 1       | 14        |        | 22.18  | 22.16  | 22.04   |
| 3                                       | 8       | 0         |        | 21.08  | 21.01  | 20.99   |
| 3                                       | 8       | 4         |        | 21.11  | 21.06  | 21.04   |
| 3                                       | 8       | 7         |        | 21.04  | 21.00  | 21.01   |
| 3                                       | 15      | 0         |        | 21.02  | 20.98  | 20.98   |
| 3                                       | 1       | 0         | 64-QAM | 21.15  | 20.97  | 21.08   |
| 3                                       | 1       | 8         |        | 21.15  | 21.12  | 21.08   |
| 3                                       | 1       | 14        |        | 21.16  | 21.12  | 21.08   |
| 3                                       | 8       | 0         |        | 20.06  | 20.03  | 20.01   |
| 3                                       | 8       | 4         |        | 20.09  | 20.05  | 20.04   |
| 3                                       | 8       | 7         |        | 20.05  | 19.99  | 20.02   |
| 3                                       | 15      | 0         |        | 20.03  | 19.99  | 19.97   |
| 1.4                                     | 1       | 0         | QPSK   | 22.81  | 22.77  | 22.74   |
| 1.4                                     | 1       | 3         |        | 22.87  | 22.84  | 22.82   |
| 1.4                                     | 1       | 5         |        | 22.82  | 22.76  | 22.74   |
| 1.4                                     | 3       | 0         |        | 22.82  | 22.81  | 22.78   |
| 1.4                                     | 3       | 1         |        | 22.86  | 22.85  | 22.81   |
| 1.4                                     | 3       | 3         |        | 22.83  | 22.79  | 22.79   |
| 1.4                                     | 6       | 0         |        | 21.86  | 21.80  | 21.80   |
| 1.4                                     | 1       | 0         | 16-QAM | 22.16  | 22.14  | 22.02   |
| 1.4                                     | 1       | 3         |        | 22.22  | 22.16  | 22.11   |
| 1.4                                     | 1       | 5         |        | 22.14  | 22.09  | 22.02   |
| 1.4                                     | 3       | 0         |        | 21.94  | 21.90  | 21.87   |
| 1.4                                     | 3       | 1         |        | 22.00  | 21.96  | 21.89   |
| 1.4                                     | 3       | 3         |        | 21.94  | 21.92  | 21.85   |
| 1.4                                     | 6       | 0         |        | 21.01  | 20.96  | 20.96   |
| 1.4                                     | 1       | 0         | 64-QAM | 21.07  | 21.09  | 21.02   |
| 1.4                                     | 1       | 3         |        | 21.14  | 21.11  | 21.07   |
| 1.4                                     | 1       | 5         |        | 21.09  | 21.03  | 21.00   |
| 1.4                                     | 3       | 0         |        | 21.07  | 21.03  | 20.99   |
| 1.4                                     | 3       | 1         |        | 21.12  | 21.08  | 21.04   |
| 1.4                                     | 3       | 3         |        | 21.06  | 21.02  | 21.00   |
| 1.4                                     | 6       | 0         |        | 19.96  | 19.92  | 19.91   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                     | 1       | 0         | QPSK   | 22.83  | 22.84  | 22.80   |
| 20                                     | 1       | 49        |        | 22.65  | 22.59  | 22.65   |
| 20                                     | 1       | 99        |        | 22.65  | 22.57  | 22.63   |
| 20                                     | 50      | 0         |        | 21.79  | 21.75  | 21.71   |
| 20                                     | 50      | 24        |        | 21.75  | 21.70  | 21.62   |
| 20                                     | 50      | 50        |        | 21.69  | 21.60  | 21.70   |
| 20                                     | 100     | 0         |        | 21.75  | 21.69  | 21.67   |
| 20                                     | 1       | 0         | 16-QAM | 22.22  | 22.19  | 22.15   |
| 20                                     | 1       | 49        |        | 22.00  | 21.96  | 22.03   |
| 20                                     | 1       | 99        |        | 22.00  | 21.95  | 21.94   |
| 20                                     | 50      | 0         |        | 20.89  | 20.85  | 20.79   |
| 20                                     | 50      | 24        |        | 20.84  | 20.79  | 20.73   |
| 20                                     | 50      | 50        |        | 20.81  | 20.70  | 20.80   |
| 20                                     | 100     | 0         |        | 20.83  | 20.79  | 20.74   |
| 20                                     | 1       | 0         | 64-QAM | 21.12  | 21.08  | 21.04   |
| 20                                     | 1       | 49        |        | 20.89  | 20.85  | 20.92   |
| 20                                     | 1       | 99        |        | 20.88  | 20.83  | 20.83   |
| 20                                     | 50      | 0         |        | 19.90  | 19.86  | 19.83   |
| 20                                     | 50      | 24        |        | 19.85  | 19.79  | 19.74   |
| 20                                     | 50      | 50        |        | 19.82  | 19.73  | 19.80   |
| 20                                     | 100     | 0         |        | 19.87  | 19.80  | 19.77   |
| 15                                     | 1       | 0         | QPSK   | 22.79  | 22.83  | 22.78   |
| 15                                     | 1       | 37        |        | 22.68  | 22.63  | 22.66   |
| 15                                     | 1       | 74        |        | 22.76  | 22.65  | 22.70   |
| 15                                     | 36      | 0         |        | 21.81  | 21.75  | 21.68   |
| 15                                     | 36      | 20        |        | 21.77  | 21.67  | 21.78   |
| 15                                     | 36      | 39        |        | 21.76  | 21.64  | 21.68   |
| 15                                     | 75      | 0         |        | 21.77  | 21.71  | 21.64   |
| 15                                     | 1       | 0         | 16-QAM | 22.23  | 22.16  | 22.13   |
| 15                                     | 1       | 37        |        | 22.01  | 21.97  | 21.99   |
| 15                                     | 1       | 74        |        | 22.08  | 21.99  | 21.97   |
| 15                                     | 36      | 0         |        | 20.94  | 20.82  | 20.80   |
| 15                                     | 36      | 20        |        | 20.89  | 20.84  | 20.87   |
| 15                                     | 36      | 39        |        | 20.84  | 20.80  | 20.81   |
| 15                                     | 75      | 0         |        | 20.88  | 20.78  | 20.76   |
| 15                                     | 1       | 0         | 64-QAM | 21.14  | 21.10  | 21.07   |
| 15                                     | 1       | 37        |        | 20.97  | 20.90  | 20.94   |
| 15                                     | 1       | 74        |        | 21.00  | 20.91  | 20.91   |
| 15                                     | 36      | 0         |        | 19.94  | 19.91  | 19.86   |
| 15                                     | 36      | 20        |        | 19.90  | 19.86  | 19.90   |
| 15                                     | 36      | 39        |        | 19.87  | 19.82  | 19.84   |
| 15                                     | 75      | 0         |        | 19.89  | 19.82  | 19.75   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.81  | 22.73  | 22.78   |
| 10                                     | 1       | 25        |        | 22.73  | 22.64  | 22.67   |
| 10                                     | 1       | 49        |        | 22.75  | 22.62  | 22.64   |
| 10                                     | 25      | 0         |        | 21.83  | 21.71  | 21.79   |
| 10                                     | 25      | 12        |        | 21.77  | 21.68  | 21.76   |
| 10                                     | 25      | 25        |        | 21.77  | 21.64  | 21.69   |
| 10                                     | 50      | 0         |        | 21.77  | 21.69  | 21.72   |
| 10                                     | 1       | 0         | 16-QAM | 22.10  | 22.10  | 22.13   |
| 10                                     | 1       | 25        |        | 22.07  | 21.98  | 21.94   |
| 10                                     | 1       | 49        |        | 22.10  | 21.96  | 21.99   |
| 10                                     | 25      | 0         |        | 20.92  | 20.84  | 20.87   |
| 10                                     | 25      | 12        |        | 20.85  | 20.79  | 20.81   |
| 10                                     | 25      | 25        |        | 20.86  | 20.78  | 20.78   |
| 10                                     | 50      | 0         |        | 20.88  | 20.80  | 20.82   |
| 10                                     | 1       | 0         | 64-QAM | 21.02  | 21.01  | 21.08   |
| 10                                     | 1       | 25        |        | 20.94  | 20.91  | 20.90   |
| 10                                     | 1       | 49        |        | 20.99  | 20.88  | 20.91   |
| 10                                     | 25      | 0         |        | 19.91  | 19.86  | 19.89   |
| 10                                     | 25      | 12        |        | 19.87  | 19.82  | 19.82   |
| 10                                     | 25      | 25        |        | 19.87  | 19.78  | 19.84   |
| 10                                     | 50      | 0         |        | 19.87  | 19.83  | 19.83   |
| 5                                      | 1       | 0         | QPSK   | 22.79  | 22.66  | 22.69   |
| 5                                      | 1       | 12        |        | 22.71  | 22.61  | 22.62   |
| 5                                      | 1       | 24        |        | 22.72  | 22.64  | 22.64   |
| 5                                      | 12      | 0         |        | 21.74  | 21.64  | 21.70   |
| 5                                      | 12      | 7         |        | 21.75  | 21.65  | 21.69   |
| 5                                      | 12      | 13        |        | 21.75  | 21.63  | 21.68   |
| 5                                      | 25      | 0         |        | 21.76  | 21.64  | 21.66   |
| 5                                      | 1       | 0         | 16-QAM | 22.04  | 22.02  | 21.94   |
| 5                                      | 1       | 12        |        | 22.04  | 21.96  | 21.90   |
| 5                                      | 1       | 24        |        | 22.08  | 21.96  | 21.92   |
| 5                                      | 12      | 0         |        | 20.86  | 20.77  | 20.79   |
| 5                                      | 12      | 7         |        | 20.83  | 20.75  | 20.78   |
| 5                                      | 12      | 13        |        | 20.79  | 20.77  | 20.74   |
| 5                                      | 25      | 0         |        | 20.86  | 20.76  | 20.75   |
| 5                                      | 1       | 0         | 64-QAM | 20.98  | 20.96  | 20.92   |
| 5                                      | 1       | 12        |        | 20.95  | 20.90  | 20.86   |
| 5                                      | 1       | 24        |        | 20.94  | 20.89  | 20.86   |
| 5                                      | 12      | 0         |        | 19.89  | 19.84  | 19.83   |
| 5                                      | 12      | 7         |        | 19.89  | 19.83  | 19.84   |
| 5                                      | 12      | 13        |        | 19.85  | 19.78  | 19.81   |
| 5                                      | 25      | 0         |        | 19.82  | 19.77  | 19.79   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.75  | 22.68  | 22.66   |
| 3                                      | 1       | 8         |        | 22.71  | 22.62  | 22.54   |
| 3                                      | 1       | 14        |        | 22.62  | 22.63  | 22.64   |
| 3                                      | 8       | 0         |        | 21.77  | 21.67  | 21.67   |
| 3                                      | 8       | 4         |        | 21.78  | 21.68  | 21.70   |
| 3                                      | 8       | 7         |        | 21.74  | 21.65  | 21.66   |
| 3                                      | 15      | 0         |        | 21.76  | 21.66  | 21.67   |
| 3                                      | 1       | 0         | 16-QAM | 21.97  | 21.99  | 21.93   |
| 3                                      | 1       | 8         |        | 22.00  | 21.97  | 21.95   |
| 3                                      | 1       | 14        |        | 21.87  | 21.94  | 21.91   |
| 3                                      | 8       | 0         |        | 20.89  | 20.79  | 20.79   |
| 3                                      | 8       | 4         |        | 20.91  | 20.85  | 20.74   |
| 3                                      | 8       | 7         |        | 20.85  | 20.82  | 20.82   |
| 3                                      | 15      | 0         |        | 20.85  | 20.78  | 20.77   |
| 3                                      | 1       | 0         | 64-QAM | 20.97  | 20.94  | 20.89   |
| 3                                      | 1       | 8         |        | 20.86  | 20.91  | 20.88   |
| 3                                      | 1       | 14        |        | 20.85  | 20.89  | 20.78   |
| 3                                      | 8       | 0         |        | 19.87  | 19.80  | 19.82   |
| 3                                      | 8       | 4         |        | 19.89  | 19.84  | 19.84   |
| 3                                      | 8       | 7         |        | 19.86  | 19.81  | 19.78   |
| 3                                      | 15      | 0         |        | 19.87  | 19.79  | 19.79   |
| 1.4                                    | 1       | 0         | QPSK   | 22.65  | 22.59  | 22.56   |
| 1.4                                    | 1       | 3         |        | 22.71  | 22.64  | 22.64   |
| 1.4                                    | 1       | 5         |        | 22.63  | 22.54  | 22.55   |
| 1.4                                    | 3       | 0         |        | 22.69  | 22.63  | 22.61   |
| 1.4                                    | 3       | 1         |        | 22.72  | 22.64  | 22.65   |
| 1.4                                    | 3       | 3         |        | 22.68  | 22.60  | 22.62   |
| 1.4                                    | 6       | 0         |        | 21.68  | 21.57  | 21.61   |
| 1.4                                    | 1       | 0         | 16-QAM | 21.90  | 21.88  | 21.86   |
| 1.4                                    | 1       | 3         |        | 21.98  | 21.96  | 21.91   |
| 1.4                                    | 1       | 5         |        | 21.90  | 21.88  | 21.85   |
| 1.4                                    | 3       | 0         |        | 21.73  | 21.68  | 21.68   |
| 1.4                                    | 3       | 1         |        | 21.73  | 21.72  | 21.71   |
| 1.4                                    | 3       | 3         |        | 21.70  | 21.68  | 21.67   |
| 1.4                                    | 6       | 0         |        | 20.82  | 20.76  | 20.76   |
| 1.4                                    | 1       | 0         | 64-QAM | 20.88  | 20.85  | 20.80   |
| 1.4                                    | 1       | 3         |        | 20.93  | 20.90  | 20.87   |
| 1.4                                    | 1       | 5         |        | 20.84  | 20.81  | 20.81   |
| 1.4                                    | 3       | 0         |        | 20.88  | 20.83  | 20.81   |
| 1.4                                    | 3       | 1         |        | 20.92  | 20.86  | 20.84   |
| 1.4                                    | 3       | 3         |        | 20.86  | 20.83  | 20.84   |
| 1.4                                    | 6       | 0         |        | 19.78  | 19.69  | 19.72   |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                     | 1       | 0         | QPSK   | 22.83  | 22.84  | 22.66   |
| 10                                     | 1       | 25        |        | 22.74  | 22.65  | 22.60   |
| 10                                     | 1       | 49        |        | 22.74  | 22.63  | 22.56   |
| 10                                     | 25      | 0         |        | 21.82  | 21.73  | 21.67   |
| 10                                     | 25      | 12        |        | 21.83  | 21.72  | 21.68   |
| 10                                     | 25      | 25        |        | 21.79  | 21.71  | 21.63   |
| 10                                     | 50      | 0         |        | 21.83  | 21.70  | 21.65   |
| 10                                     | 1       | 0         | 16-QAM | 22.15  | 22.09  | 22.00   |
| 10                                     | 1       | 25        |        | 22.10  | 22.01  | 21.95   |
| 10                                     | 1       | 49        |        | 22.06  | 22.01  | 21.94   |
| 10                                     | 25      | 0         |        | 20.93  | 20.80  | 20.75   |
| 10                                     | 25      | 12        |        | 20.89  | 20.85  | 20.78   |
| 10                                     | 25      | 25        |        | 20.86  | 20.82  | 20.72   |
| 10                                     | 50      | 0         |        | 20.90  | 20.83  | 20.76   |
| 10                                     | 1       | 0         | 64-QAM | 21.12  | 21.00  | 20.96   |
| 10                                     | 1       | 25        |        | 21.05  | 20.96  | 20.90   |
| 10                                     | 1       | 49        |        | 21.00  | 20.93  | 20.84   |
| 10                                     | 25      | 0         |        | 19.95  | 19.83  | 19.77   |
| 10                                     | 25      | 12        |        | 19.94  | 19.85  | 19.76   |
| 10                                     | 25      | 25        |        | 19.89  | 19.81  | 19.73   |
| 10                                     | 50      | 0         |        | 19.94  | 19.83  | 19.76   |
| 5                                      | 1       | 0         | QPSK   | 22.80  | 22.68  | 22.62   |
| 5                                      | 1       | 12        |        | 22.75  | 22.63  | 22.56   |
| 5                                      | 1       | 24        |        | 22.75  | 22.66  | 22.55   |
| 5                                      | 12      | 0         |        | 21.84  | 21.70  | 21.63   |
| 5                                      | 12      | 7         |        | 21.86  | 21.72  | 21.64   |
| 5                                      | 12      | 13        |        | 21.79  | 21.70  | 21.58   |
| 5                                      | 25      | 0         |        | 21.80  | 21.71  | 21.61   |
| 5                                      | 1       | 0         | 16-QAM | 22.16  | 22.04  | 21.96   |
| 5                                      | 1       | 12        |        | 22.14  | 21.99  | 21.89   |
| 5                                      | 1       | 24        |        | 22.13  | 21.97  | 21.89   |
| 5                                      | 12      | 0         |        | 20.91  | 20.81  | 20.69   |
| 5                                      | 12      | 7         |        | 20.94  | 20.82  | 20.71   |
| 5                                      | 12      | 13        |        | 20.90  | 20.82  | 20.69   |
| 5                                      | 25      | 0         |        | 20.91  | 20.81  | 20.69   |
| 5                                      | 1       | 0         | 64-QAM | 21.11  | 20.98  | 20.89   |
| 5                                      | 1       | 12        |        | 21.03  | 20.94  | 20.80   |
| 5                                      | 1       | 24        |        | 21.04  | 20.91  | 20.80   |
| 5                                      | 12      | 0         |        | 19.94  | 19.83  | 19.76   |
| 5                                      | 12      | 7         |        | 19.98  | 19.86  | 19.78   |
| 5                                      | 12      | 13        |        | 19.93  | 19.83  | 19.73   |
| 5                                      | 25      | 0         |        | 19.93  | 19.80  | 19.71   |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                      | 1       | 0         | QPSK   | 22.83  | 22.68  | 22.59   |
| 3                                      | 1       | 8         |        | 22.69  | 22.64  | 22.54   |
| 3                                      | 1       | 14        |        | 22.77  | 22.65  | 22.52   |
| 3                                      | 8       | 0         |        | 21.85  | 21.71  | 21.60   |
| 3                                      | 8       | 4         |        | 21.83  | 21.71  | 21.62   |
| 3                                      | 8       | 7         |        | 21.84  | 21.69  | 21.60   |
| 3                                      | 15      | 0         |        | 21.81  | 21.69  | 21.58   |
| 3                                      | 1       | 0         | 16-QAM | 22.16  | 22.00  | 21.89   |
| 3                                      | 1       | 8         |        | 22.13  | 21.99  | 21.90   |
| 3                                      | 1       | 14        |        | 22.09  | 21.98  | 21.88   |
| 3                                      | 8       | 0         |        | 20.95  | 20.84  | 20.73   |
| 3                                      | 8       | 4         |        | 20.97  | 20.85  | 20.75   |
| 3                                      | 8       | 7         |        | 20.98  | 20.84  | 20.70   |
| 3                                      | 15      | 0         |        | 20.82  | 20.77  | 20.70   |
| 3                                      | 1       | 0         | 64-QAM | 21.10  | 20.95  | 20.84   |
| 3                                      | 1       | 8         |        | 21.06  | 20.92  | 20.82   |
| 3                                      | 1       | 14        |        | 20.98  | 20.94  | 20.83   |
| 3                                      | 8       | 0         |        | 19.98  | 19.83  | 19.71   |
| 3                                      | 8       | 4         |        | 19.91  | 19.85  | 19.75   |
| 3                                      | 8       | 7         |        | 19.98  | 19.83  | 19.70   |
| 3                                      | 15      | 0         |        | 19.87  | 19.80  | 19.61   |
| 1.4                                    | 1       | 0         | QPSK   | 22.73  | 22.60  | 22.47   |
| 1.4                                    | 1       | 3         |        | 22.79  | 22.65  | 22.55   |
| 1.4                                    | 1       | 5         |        | 22.72  | 22.59  | 22.46   |
| 1.4                                    | 3       | 0         |        | 22.78  | 22.64  | 22.54   |
| 1.4                                    | 3       | 1         |        | 22.82  | 22.65  | 22.54   |
| 1.4                                    | 3       | 3         |        | 22.76  | 22.62  | 22.51   |
| 1.4                                    | 6       | 0         |        | 21.76  | 21.64  | 21.52   |
| 1.4                                    | 1       | 0         | 16-QAM | 22.06  | 21.91  | 21.79   |
| 1.4                                    | 1       | 3         |        | 22.14  | 22.00  | 21.89   |
| 1.4                                    | 1       | 5         |        | 22.05  | 21.93  | 21.80   |
| 1.4                                    | 3       | 0         |        | 21.89  | 21.74  | 21.61   |
| 1.4                                    | 3       | 1         |        | 21.92  | 21.76  | 21.64   |
| 1.4                                    | 3       | 3         |        | 21.87  | 21.74  | 21.61   |
| 1.4                                    | 6       | 0         |        | 20.94  | 20.78  | 20.67   |
| 1.4                                    | 1       | 0         | 64-QAM | 21.03  | 20.87  | 20.78   |
| 1.4                                    | 1       | 3         |        | 21.09  | 20.94  | 20.83   |
| 1.4                                    | 1       | 5         |        | 20.99  | 20.84  | 20.75   |
| 1.4                                    | 3       | 0         |        | 20.99  | 20.84  | 20.74   |
| 1.4                                    | 3       | 1         |        | 21.04  | 20.90  | 20.78   |
| 1.4                                    | 3       | 3         |        | 20.99  | 20.85  | 20.73   |
| 1.4                                    | 6       | 0         |        | 19.87  | 19.72  | 19.62   |



| LTE Band 7 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                     | 1       | 0         | QPSK   | 22.49  | 22.50  | 22.39   |
| 20                                     | 1       | 49        |        | 22.62  | 22.63  | 22.67   |
| 20                                     | 1       | 99        |        | 22.66  | 22.70  | 22.83   |
| 20                                     | 50      | 0         |        | 21.54  | 21.54  | 21.55   |
| 20                                     | 50      | 24        |        | 21.66  | 21.69  | 21.69   |
| 20                                     | 50      | 50        |        | 21.63  | 21.77  | 21.77   |
| 20                                     | 100     | 0         |        | 21.64  | 21.65  | 21.65   |
| 20                                     | 1       | 0         | 16-QAM | 21.81  | 21.83  | 21.70   |
| 20                                     | 1       | 49        |        | 21.96  | 21.94  | 21.99   |
| 20                                     | 1       | 99        |        | 22.01  | 22.02  | 22.09   |
| 20                                     | 50      | 0         |        | 20.61  | 20.65  | 20.63   |
| 20                                     | 50      | 24        |        | 20.76  | 20.73  | 20.75   |
| 20                                     | 50      | 50        |        | 20.72  | 20.86  | 20.86   |
| 20                                     | 100     | 0         |        | 20.69  | 20.72  | 20.72   |
| 20                                     | 1       | 0         | 64-QAM | 20.72  | 20.72  | 20.61   |
| 20                                     | 1       | 49        |        | 20.84  | 20.86  | 20.89   |
| 20                                     | 1       | 99        |        | 20.89  | 20.92  | 21.00   |
| 20                                     | 50      | 0         |        | 19.62  | 19.66  | 19.63   |
| 20                                     | 50      | 24        |        | 19.75  | 19.75  | 19.79   |
| 20                                     | 50      | 50        |        | 19.73  | 19.84  | 19.89   |
| 20                                     | 100     | 0         |        | 19.73  | 19.72  | 19.74   |
| 15                                     | 1       | 0         | QPSK   | 22.55  | 22.59  | 22.53   |
| 15                                     | 1       | 37        |        | 22.62  | 22.65  | 22.64   |
| 15                                     | 1       | 74        |        | 22.74  | 22.68  | 22.78   |
| 15                                     | 36      | 0         |        | 21.54  | 21.55  | 21.61   |
| 15                                     | 36      | 20        |        | 21.68  | 21.68  | 21.76   |
| 15                                     | 36      | 39        |        | 21.68  | 21.75  | 21.75   |
| 15                                     | 75      | 0         |        | 21.64  | 21.63  | 21.71   |
| 15                                     | 1       | 0         | 16-QAM | 21.89  | 21.90  | 21.86   |
| 15                                     | 1       | 37        |        | 21.93  | 21.97  | 21.96   |
| 15                                     | 1       | 74        |        | 22.06  | 22.00  | 22.10   |
| 15                                     | 36      | 0         |        | 20.61  | 20.66  | 20.68   |
| 15                                     | 36      | 20        |        | 20.73  | 20.76  | 20.85   |
| 15                                     | 36      | 39        |        | 20.78  | 20.79  | 20.78   |
| 15                                     | 75      | 0         |        | 20.68  | 20.75  | 20.80   |
| 15                                     | 1       | 0         | 64-QAM | 20.81  | 20.81  | 20.77   |
| 15                                     | 1       | 37        |        | 20.86  | 20.88  | 20.88   |
| 15                                     | 1       | 74        |        | 20.95  | 20.89  | 21.01   |
| 15                                     | 36      | 0         |        | 19.65  | 19.69  | 19.71   |
| 15                                     | 36      | 20        |        | 19.77  | 19.78  | 19.87   |
| 15                                     | 36      | 39        |        | 19.78  | 19.85  | 19.81   |
| 15                                     | 75      | 0         |        | 19.73  | 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   | 22.56  | 22.53  | 22.59   |
| 10                                     | 1       | 25        |        | 22.67  | 22.62  | 22.64   |
| 10                                     | 1       | 49        |        | 22.65  | 22.72  | 22.72   |
| 10                                     | 25      | 0         |        | 21.62  | 21.57  | 21.69   |
| 10                                     | 25      | 12        |        | 21.62  | 21.64  | 21.66   |
| 10                                     | 25      | 25        |        | 21.65  | 21.71  | 21.73   |
| 10                                     | 50      | 0         |        | 21.57  | 21.64  | 21.77   |
| 10                                     | 1       | 0         | 16-QAM | 21.89  | 21.83  | 21.95   |
| 10                                     | 1       | 25        |        | 22.01  | 21.96  | 21.97   |
| 10                                     | 1       | 49        |        | 21.98  | 22.04  | 22.06   |
| 10                                     | 25      | 0         |        | 20.73  | 20.67  | 20.74   |
| 10                                     | 25      | 12        |        | 20.72  | 20.76  | 20.73   |
| 10                                     | 25      | 25        |        | 20.70  | 20.80  | 20.76   |
| 10                                     | 50      | 0         |        | 20.71  | 20.71  | 20.84   |
| 10                                     | 1       | 0         | 64-QAM | 20.79  | 20.72  | 20.76   |
| 10                                     | 1       | 25        |        | 20.85  | 20.85  | 20.84   |
| 10                                     | 1       | 49        |        | 20.88  | 20.80  | 20.96   |
| 10                                     | 25      | 0         |        | 19.64  | 19.66  | 19.70   |
| 10                                     | 25      | 12        |        | 19.67  | 19.77  | 19.85   |
| 10                                     | 25      | 25        |        | 19.77  | 19.79  | 19.73   |
| 10                                     | 50      | 0         |        | 19.67  | 19.67  | 19.76   |
| 5                                      | 1       | 0         | QPSK   | 22.59  | 22.58  | 22.69   |
| 5                                      | 1       | 12        |        | 22.64  | 22.61  | 22.76   |
| 5                                      | 1       | 24        |        | 22.70  | 22.68  | 22.82   |
| 5                                      | 12      | 0         |        | 21.66  | 21.59  | 21.74   |
| 5                                      | 12      | 7         |        | 21.70  | 21.66  | 21.79   |
| 5                                      | 12      | 13        |        | 21.68  | 21.67  | 21.81   |
| 5                                      | 25      | 0         |        | 21.65  | 21.65  | 21.75   |
| 5                                      | 1       | 0         | 16-QAM | 21.93  | 21.86  | 22.02   |
| 5                                      | 1       | 12        |        | 21.98  | 21.94  | 22.10   |
| 5                                      | 1       | 24        |        | 22.00  | 21.98  | 22.17   |
| 5                                      | 12      | 0         |        | 20.72  | 20.67  | 20.80   |
| 5                                      | 12      | 7         |        | 20.81  | 20.74  | 20.88   |
| 5                                      | 12      | 13        |        | 20.78  | 20.77  | 20.88   |
| 5                                      | 25      | 0         |        | 20.75  | 20.72  | 20.84   |
| 5                                      | 1       | 0         | 64-QAM | 20.76  | 20.75  | 20.71   |
| 5                                      | 1       | 12        |        | 20.82  | 20.83  | 20.87   |
| 5                                      | 1       | 24        |        | 20.91  | 20.88  | 20.95   |
| 5                                      | 12      | 0         |        | 19.60  | 19.59  | 19.69   |
| 5                                      | 12      | 7         |        | 19.67  | 19.71  | 19.78   |
| 5                                      | 12      | 13        |        | 19.77  | 19.85  | 19.76   |
| 5                                      | 25      | 0         |        | 19.67  | 19.66  | 19.69   |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.64  | 22.58  | 22.55   |
| 10                                      | 1       | 25        |        | 22.62  | 22.57  | 22.64   |
| 10                                      | 1       | 49        |        | 22.64  | 22.78  | 22.77   |
| 10                                      | 25      | 0         |        | 21.70  | 21.65  | 21.55   |
| 10                                      | 25      | 12        |        | 21.69  | 21.62  | 21.61   |
| 10                                      | 25      | 25        |        | 21.68  | 21.64  | 21.70   |
| 10                                      | 50      | 0         |        | 21.69  | 21.64  | 21.59   |
| 10                                      | 1       | 0         | 16-QAM | 22.01  | 21.89  | 21.89   |
| 10                                      | 1       | 25        |        | 21.96  | 21.89  | 21.90   |
| 10                                      | 1       | 49        |        | 21.96  | 21.97  | 22.06   |
| 10                                      | 25      | 0         |        | 20.76  | 20.72  | 20.65   |
| 10                                      | 25      | 12        |        | 20.77  | 20.72  | 20.67   |
| 10                                      | 25      | 25        |        | 20.76  | 20.71  | 20.80   |
| 10                                      | 50      | 0         |        | 20.76  | 20.71  | 20.65   |
| 10                                      | 1       | 0         | 64-QAM | 20.90  | 20.86  | 20.78   |
| 10                                      | 1       | 25        |        | 20.91  | 20.84  | 20.89   |
| 10                                      | 1       | 49        |        | 20.92  | 20.97  | 21.02   |
| 10                                      | 25      | 0         |        | 19.77  | 19.72  | 19.68   |
| 10                                      | 25      | 12        |        | 19.81  | 19.77  | 19.70   |
| 10                                      | 25      | 25        |        | 19.76  | 19.72  | 19.80   |
| 10                                      | 50      | 0         |        | 19.82  | 19.74  | 19.72   |
| 5                                       | 1       | 0         | QPSK   | 22.67  | 22.58  | 22.59   |
| 5                                       | 1       | 12        |        | 22.65  | 22.57  | 22.62   |
| 5                                       | 1       | 24        |        | 22.68  | 22.58  | 22.74   |
| 5                                       | 12      | 0         |        | 21.70  | 21.62  | 21.63   |
| 5                                       | 12      | 7         |        | 21.74  | 21.64  | 21.66   |
| 5                                       | 12      | 13        |        | 21.69  | 21.61  | 21.63   |
| 5                                       | 25      | 0         |        | 21.71  | 21.58  | 21.64   |
| 5                                       | 1       | 0         | 16-QAM | 22.01  | 21.90  | 21.96   |
| 5                                       | 1       | 12        |        | 21.99  | 21.88  | 21.91   |
| 5                                       | 1       | 24        |        | 22.00  | 21.86  | 22.09   |
| 5                                       | 12      | 0         |        | 20.76  | 20.68  | 20.71   |
| 5                                       | 12      | 7         |        | 20.78  | 20.70  | 20.76   |
| 5                                       | 12      | 13        |        | 20.77  | 20.68  | 20.75   |
| 5                                       | 25      | 0         |        | 20.79  | 20.68  | 20.71   |
| 5                                       | 1       | 0         | 64-QAM | 20.95  | 20.80  | 20.86   |
| 5                                       | 1       | 12        |        | 20.92  | 20.81  | 20.89   |
| 5                                       | 1       | 24        |        | 20.91  | 20.80  | 20.99   |
| 5                                       | 12      | 0         |        | 19.83  | 19.76  | 19.77   |
| 5                                       | 12      | 7         |        | 19.85  | 19.76  | 19.80   |
| 5                                       | 12      | 13        |        | 19.84  | 19.75  | 19.78   |
| 5                                       | 25      | 0         |        | 19.78  | 19.68  | 19.75   |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.69  | 22.57  | 22.61   |
| 3                                       | 1       | 8         |        | 22.67  | 22.48  | 22.70   |
| 3                                       | 1       | 14        |        | 22.66  | 22.60  | 22.72   |
| 3                                       | 8       | 0         |        | 21.70  | 21.58  | 21.63   |
| 3                                       | 8       | 4         |        | 21.73  | 21.66  | 21.75   |
| 3                                       | 8       | 7         |        | 21.71  | 21.60  | 21.73   |
| 3                                       | 15      | 0         |        | 21.70  | 21.59  | 21.62   |
| 3                                       | 1       | 0         | 16-QAM | 22.02  | 21.88  | 21.88   |
| 3                                       | 1       | 8         |        | 22.02  | 21.89  | 21.97   |
| 3                                       | 1       | 14        |        | 21.95  | 21.85  | 22.04   |
| 3                                       | 8       | 0         |        | 20.85  | 20.72  | 20.72   |
| 3                                       | 8       | 4         |        | 20.87  | 20.73  | 20.81   |
| 3                                       | 8       | 7         |        | 20.84  | 20.74  | 20.76   |
| 3                                       | 15      | 0         |        | 20.79  | 20.68  | 20.73   |
| 3                                       | 1       | 0         | 64-QAM | 20.95  | 20.83  | 20.83   |
| 3                                       | 1       | 8         |        | 20.95  | 20.80  | 20.94   |
| 3                                       | 1       | 14        |        | 20.92  | 20.82  | 20.98   |
| 3                                       | 8       | 0         |        | 19.76  | 19.65  | 19.75   |
| 3                                       | 8       | 4         |        | 19.86  | 19.67  | 19.90   |
| 3                                       | 8       | 7         |        | 19.85  | 19.72  | 19.90   |
| 3                                       | 15      | 0         |        | 19.81  | 19.70  | 19.73   |
| 1.4                                     | 1       | 0         | QPSK   | 22.61  | 22.49  | 22.62   |
| 1.4                                     | 1       | 3         |        | 22.68  | 22.56  | 22.70   |
| 1.4                                     | 1       | 5         |        | 22.62  | 22.50  | 22.62   |
| 1.4                                     | 3       | 0         |        | 22.65  | 22.54  | 22.64   |
| 1.4                                     | 3       | 1         |        | 22.69  | 22.57  | 22.68   |
| 1.4                                     | 3       | 3         |        | 22.65  | 22.55  | 22.66   |
| 1.4                                     | 6       | 0         |        | 21.64  | 21.53  | 21.65   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.95  | 21.81  | 21.87   |
| 1.4                                     | 1       | 3         |        | 22.00  | 21.87  | 21.94   |
| 1.4                                     | 1       | 5         |        | 21.96  | 21.78  | 21.98   |
| 1.4                                     | 3       | 0         |        | 21.74  | 21.61  | 21.71   |
| 1.4                                     | 3       | 1         |        | 21.78  | 21.65  | 21.74   |
| 1.4                                     | 3       | 3         |        | 21.74  | 21.60  | 21.76   |
| 1.4                                     | 6       | 0         |        | 20.80  | 20.69  | 20.82   |
| 1.4                                     | 1       | 0         | 64-QAM | 20.88  | 20.74  | 20.88   |
| 1.4                                     | 1       | 3         |        | 20.94  | 20.81  | 20.95   |
| 1.4                                     | 1       | 5         |        | 20.90  | 20.73  | 20.88   |
| 1.4                                     | 3       | 0         |        | 20.86  | 20.71  | 20.86   |
| 1.4                                     | 3       | 1         |        | 20.91  | 20.78  | 20.89   |
| 1.4                                     | 3       | 3         |        | 20.87  | 20.71  | 20.86   |
| 1.4                                     | 6       | 0         |        | 19.73  | 19.64  | 19.76   |



| LTE Band 13 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   |        | 22.72  |         |
| 10                                      | 1       | 25        |        |        | 22.62  |         |
| 10                                      | 1       | 49        |        |        | 22.56  |         |
| 10                                      | 25      | 0         |        |        | 21.73  |         |
| 10                                      | 25      | 12        |        |        | 21.68  |         |
| 10                                      | 25      | 25        |        |        | 21.67  |         |
| 10                                      | 50      | 0         |        |        | 21.71  |         |
| 10                                      | 1       | 0         | 16-QAM |        | 22.03  |         |
| 10                                      | 1       | 25        |        |        | 21.97  |         |
| 10                                      | 1       | 49        |        |        | 21.95  |         |
| 10                                      | 25      | 0         |        |        | 20.81  |         |
| 10                                      | 25      | 12        |        |        | 20.78  |         |
| 10                                      | 25      | 25        |        |        | 20.71  |         |
| 10                                      | 50      | 0         |        |        | 20.77  |         |
| 10                                      | 1       | 0         | 64-QAM |        | 20.97  |         |
| 10                                      | 1       | 25        |        |        | 20.91  |         |
| 10                                      | 1       | 49        |        |        | 20.84  |         |
| 10                                      | 25      | 0         |        |        | 19.80  |         |
| 10                                      | 25      | 12        |        |        | 19.79  |         |
| 10                                      | 25      | 25        |        |        | 19.73  |         |
| 10                                      | 50      | 0         |        |        | 19.78  |         |
| 5                                       | 1       | 0         | QPSK   | 22.70  | 22.64  | 22.62   |
| 5                                       | 1       | 12        |        | 22.63  | 22.60  | 22.59   |
| 5                                       | 1       | 24        |        | 22.62  | 22.57  | 22.57   |
| 5                                       | 12      | 0         |        | 21.72  | 21.69  | 21.66   |
| 5                                       | 12      | 7         |        | 21.73  | 21.69  | 21.65   |
| 5                                       | 12      | 13        |        | 21.66  | 21.66  | 21.65   |
| 5                                       | 25      | 0         |        | 21.70  | 21.64  | 21.61   |
| 5                                       | 1       | 0         | 16-QAM | 22.02  | 21.98  | 21.96   |
| 5                                       | 1       | 12        |        | 21.99  | 21.93  | 21.93   |
| 5                                       | 1       | 24        |        | 21.98  | 21.92  | 21.92   |
| 5                                       | 12      | 0         |        | 20.80  | 20.76  | 20.73   |
| 5                                       | 12      | 7         |        | 20.79  | 20.75  | 20.75   |
| 5                                       | 12      | 13        |        | 20.78  | 20.76  | 20.68   |
| 5                                       | 25      | 0         |        | 20.78  | 20.74  | 20.72   |
| 5                                       | 1       | 0         | 64-QAM | 20.94  | 20.91  | 20.90   |
| 5                                       | 1       | 12        |        | 20.92  | 20.88  | 20.86   |
| 5                                       | 1       | 24        |        | 20.87  | 20.85  | 20.82   |
| 5                                       | 12      | 0         |        | 19.85  | 19.80  | 19.76   |
| 5                                       | 12      | 7         |        | 19.86  | 19.82  | 19.78   |
| 5                                       | 12      | 13        |        | 19.79  | 19.78  | 19.74   |
| 5                                       | 25      | 0         |        | 19.76  | 19.76  | 19.72   |



| LTE Band 17 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.72  | 22.73  | 22.68   |
| 10                                      | 1       | 25        |        | 22.69  | 22.58  | 22.56   |
| 10                                      | 1       | 49        |        | 22.62  | 22.60  | 22.58   |
| 10                                      | 25      | 0         |        | 21.71  | 21.72  | 21.67   |
| 10                                      | 25      | 12        |        | 21.74  | 21.73  | 21.73   |
| 10                                      | 25      | 25        |        | 21.73  | 21.64  | 21.62   |
| 10                                      | 50      | 0         |        | 21.71  | 21.71  | 21.68   |
| 10                                      | 1       | 0         | 16-QAM | 22.06  | 22.03  | 22.01   |
| 10                                      | 1       | 25        |        | 22.02  | 21.87  | 21.89   |
| 10                                      | 1       | 49        |        | 21.96  | 21.93  | 21.92   |
| 10                                      | 25      | 0         |        | 20.81  | 20.79  | 20.80   |
| 10                                      | 25      | 12        |        | 20.84  | 20.83  | 20.80   |
| 10                                      | 25      | 25        |        | 20.83  | 20.73  | 20.68   |
| 10                                      | 50      | 0         |        | 20.81  | 20.81  | 20.80   |
| 10                                      | 1       | 0         | 64-QAM | 20.96  | 20.94  | 20.92   |
| 10                                      | 1       | 25        |        | 20.94  | 20.81  | 20.78   |
| 10                                      | 1       | 49        |        | 20.89  | 20.87  | 20.85   |
| 10                                      | 25      | 0         |        | 19.84  | 19.79  | 19.79   |
| 10                                      | 25      | 12        |        | 19.85  | 19.81  | 19.85   |
| 10                                      | 25      | 25        |        | 19.84  | 19.73  | 19.71   |
| 10                                      | 50      | 0         |        | 19.86  | 19.81  | 19.84   |
| 5                                       | 1       | 0         | QPSK   | 22.69  | 22.65  | 22.53   |
| 5                                       | 1       | 12        |        | 22.68  | 22.53  | 22.51   |
| 5                                       | 1       | 24        |        | 22.71  | 22.57  | 22.53   |
| 5                                       | 12      | 0         |        | 21.71  | 21.67  | 21.55   |
| 5                                       | 12      | 7         |        | 21.74  | 21.72  | 21.58   |
| 5                                       | 12      | 13        |        | 21.71  | 21.61  | 21.57   |
| 5                                       | 25      | 0         |        | 21.73  | 21.69  | 21.55   |
| 5                                       | 1       | 0         | 16-QAM | 22.06  | 21.97  | 21.81   |
| 5                                       | 1       | 12        |        | 22.00  | 21.86  | 21.85   |
| 5                                       | 1       | 24        |        | 22.03  | 21.86  | 21.84   |
| 5                                       | 12      | 0         |        | 20.80  | 20.77  | 20.62   |
| 5                                       | 12      | 7         |        | 20.82  | 20.79  | 20.65   |
| 5                                       | 12      | 13        |        | 20.80  | 20.67  | 20.63   |
| 5                                       | 25      | 0         |        | 20.83  | 20.77  | 20.63   |
| 5                                       | 1       | 0         | 64-QAM | 20.94  | 20.93  | 20.78   |
| 5                                       | 1       | 12        |        | 20.92  | 20.78  | 20.79   |
| 5                                       | 1       | 24        |        | 20.97  | 20.81  | 20.79   |
| 5                                       | 12      | 0         |        | 19.87  | 19.80  | 19.69   |
| 5                                       | 12      | 7         |        | 19.89  | 19.84  | 19.74   |
| 5                                       | 12      | 13        |        | 19.87  | 19.74  | 19.72   |
| 5                                       | 25      | 0         |        | 19.83  | 19.76  | 19.67   |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.51  | 22.49  | 22.50   |
| 15                                      | 1       | 37        |        | 22.74  | 22.50  | 22.43   |
| 15                                      | 1       | 74        |        | 22.51  | 22.38  | 22.30   |
| 15                                      | 36      | 0         |        | 21.61  | 21.57  | 21.51   |
| 15                                      | 36      | 20        |        | 21.59  | 21.54  | 21.47   |
| 15                                      | 36      | 39        |        | 21.59  | 21.47  | 21.36   |
| 15                                      | 75      | 0         |        | 21.55  | 21.51  | 21.45   |
| 15                                      | 1       | 0         | 16-QAM | 21.87  | 21.84  | 21.84   |
| 15                                      | 1       | 37        |        | 21.84  | 21.85  | 21.79   |
| 15                                      | 1       | 74        |        | 21.91  | 21.75  | 21.66   |
| 15                                      | 36      | 0         |        | 20.67  | 20.67  | 20.57   |
| 15                                      | 36      | 20        |        | 20.68  | 20.63  | 20.57   |
| 15                                      | 36      | 39        |        | 20.70  | 20.54  | 20.48   |
| 15                                      | 75      | 0         |        | 20.63  | 20.58  | 20.53   |
| 15                                      | 1       | 0         | 64-QAM | 20.80  | 20.76  | 20.79   |
| 15                                      | 1       | 37        |        | 20.79  | 20.78  | 20.71   |
| 15                                      | 1       | 74        |        | 20.80  | 20.67  | 20.59   |
| 15                                      | 36      | 0         |        | 19.72  | 19.68  | 19.60   |
| 15                                      | 36      | 20        |        | 19.71  | 19.66  | 19.60   |
| 15                                      | 36      | 39        |        | 19.72  | 19.60  | 19.49   |
| 15                                      | 75      | 0         |        | 19.63  | 19.62  | 19.52   |
| 10                                      | 1       | 0         | QPSK   | 22.70  | 22.68  | 22.63   |
| 10                                      | 1       | 25        |        | 22.72  | 22.70  | 22.59   |
| 10                                      | 1       | 49        |        | 22.73  | 22.65  | 22.53   |
| 10                                      | 25      | 0         |        | 21.81  | 21.74  | 21.64   |
| 10                                      | 25      | 12        |        | 21.80  | 21.75  | 21.60   |
| 10                                      | 25      | 25        |        | 21.76  | 21.69  | 21.58   |
| 10                                      | 50      | 0         |        | 21.79  | 21.71  | 21.62   |
| 10                                      | 1       | 0         | 16-QAM | 22.07  | 22.05  | 21.99   |
| 10                                      | 1       | 25        |        | 22.09  | 22.06  | 21.94   |
| 10                                      | 1       | 49        |        | 22.11  | 22.06  | 21.91   |
| 10                                      | 25      | 0         |        | 20.89  | 20.85  | 20.76   |
| 10                                      | 25      | 12        |        | 20.90  | 20.84  | 20.73   |
| 10                                      | 25      | 25        |        | 20.87  | 20.81  | 20.68   |
| 10                                      | 50      | 0         |        | 20.87  | 20.86  | 20.73   |
| 10                                      | 1       | 0         | 64-QAM | 20.98  | 20.93  | 20.91   |
| 10                                      | 1       | 25        |        | 20.98  | 20.98  | 20.85   |
| 10                                      | 1       | 49        |        | 21.00  | 20.96  | 20.80   |
| 10                                      | 25      | 0         |        | 19.90  | 19.85  | 19.74   |
| 10                                      | 25      | 12        |        | 19.91  | 19.86  | 19.75   |
| 10                                      | 25      | 25        |        | 19.86  | 19.81  | 19.69   |
| 10                                      | 50      | 0         |        | 19.88  | 19.83  | 19.71   |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.67  | 22.72  | 22.56   |
| 5                                       | 1       | 12        |        | 22.63  | 22.66  | 22.53   |
| 5                                       | 1       | 24        |        | 22.71  | 22.68  | 22.51   |
| 5                                       | 12      | 0         |        | 21.69  | 21.71  | 21.55   |
| 5                                       | 12      | 7         |        | 21.72  | 21.73  | 21.57   |
| 5                                       | 12      | 13        |        | 21.78  | 21.67  | 21.52   |
| 5                                       | 25      | 0         |        | 21.77  | 21.70  | 21.55   |
| 5                                       | 1       | 0         | 16-QAM | 22.03  | 22.05  | 21.88   |
| 5                                       | 1       | 12        |        | 21.99  | 22.01  | 21.89   |
| 5                                       | 1       | 24        |        | 22.11  | 22.02  | 21.88   |
| 5                                       | 12      | 0         |        | 20.82  | 20.82  | 20.64   |
| 5                                       | 12      | 7         |        | 20.81  | 20.82  | 20.65   |
| 5                                       | 12      | 13        |        | 20.85  | 20.78  | 20.63   |
| 5                                       | 25      | 0         |        | 20.87  | 20.76  | 20.65   |
| 5                                       | 1       | 0         | 64-QAM | 20.97  | 20.98  | 20.84   |
| 5                                       | 1       | 12        |        | 20.88  | 20.94  | 20.79   |
| 5                                       | 1       | 24        |        | 21.02  | 20.93  | 20.77   |
| 5                                       | 12      | 0         |        | 19.85  | 19.86  | 19.70   |
| 5                                       | 12      | 7         |        | 19.85  | 19.85  | 19.71   |
| 5                                       | 12      | 13        |        | 19.91  | 19.80  | 19.68   |
| 5                                       | 25      | 0         |        | 19.88  | 19.79  | 19.66   |
| 3                                       | 1       | 0         | QPSK   | 22.69  | 22.72  | 22.56   |
| 3                                       | 1       | 8         |        | 22.65  | 22.69  | 22.52   |
| 3                                       | 1       | 14        |        | 22.65  | 22.68  | 22.51   |
| 3                                       | 8       | 0         |        | 21.71  | 21.71  | 21.45   |
| 3                                       | 8       | 4         |        | 21.73  | 21.71  | 21.56   |
| 3                                       | 8       | 7         |        | 21.71  | 21.69  | 21.54   |
| 3                                       | 15      | 0         |        | 21.71  | 21.71  | 21.54   |
| 3                                       | 1       | 0         | 16-QAM | 22.03  | 22.04  | 21.89   |
| 3                                       | 1       | 8         |        | 22.02  | 22.03  | 21.88   |
| 3                                       | 1       | 14        |        | 21.99  | 22.02  | 21.87   |
| 3                                       | 8       | 0         |        | 20.87  | 20.85  | 20.68   |
| 3                                       | 8       | 4         |        | 20.88  | 20.88  | 20.70   |
| 3                                       | 8       | 7         |        | 20.83  | 20.83  | 20.69   |
| 3                                       | 15      | 0         |        | 20.81  | 20.81  | 20.64   |
| 3                                       | 1       | 0         | 64-QAM | 20.97  | 20.99  | 20.81   |
| 3                                       | 1       | 8         |        | 20.94  | 20.95  | 20.79   |
| 3                                       | 1       | 14        |        | 20.94  | 20.89  | 20.77   |
| 3                                       | 8       | 0         |        | 19.88  | 19.85  | 19.66   |
| 3                                       | 8       | 4         |        | 19.86  | 19.88  | 19.63   |
| 3                                       | 8       | 7         |        | 19.83  | 19.84  | 19.66   |
| 3                                       | 15      | 0         |        | 19.82  | 19.73  | 19.64   |



| LTE Band 26 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                     | 1       | 0         | QPSK   | 22.62  | 22.64  | 22.48   |
| 1.4                                     | 1       | 3         |        | 22.69  | 22.69  | 22.52   |
| 1.4                                     | 1       | 5         |        | 22.61  | 22.64  | 22.43   |
| 1.4                                     | 3       | 0         |        | 22.66  | 22.66  | 22.50   |
| 1.4                                     | 3       | 1         |        | 22.69  | 22.70  | 22.53   |
| 1.4                                     | 3       | 3         |        | 22.65  | 22.63  | 22.49   |
| 1.4                                     | 6       | 0         |        | 21.67  | 21.63  | 21.48   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.96  | 22.01  | 21.78   |
| 1.4                                     | 1       | 3         |        | 22.02  | 22.05  | 21.89   |
| 1.4                                     | 1       | 5         |        | 21.94  | 21.99  | 21.78   |
| 1.4                                     | 3       | 0         |        | 21.77  | 21.78  | 21.59   |
| 1.4                                     | 3       | 1         |        | 21.79  | 21.81  | 21.62   |
| 1.4                                     | 3       | 3         |        | 21.75  | 21.74  | 21.58   |
| 1.4                                     | 6       | 0         |        | 20.82  | 20.79  | 20.63   |
| 1.4                                     | 1       | 0         | 64-QAM | 20.90  | 20.91  | 20.73   |
| 1.4                                     | 1       | 3         |        | 20.97  | 20.96  | 20.80   |
| 1.4                                     | 1       | 5         |        | 20.88  | 20.86  | 20.71   |
| 1.4                                     | 3       | 0         |        | 20.90  | 20.89  | 20.73   |
| 1.4                                     | 3       | 1         |        | 20.92  | 20.92  | 20.76   |
| 1.4                                     | 3       | 3         |        | 20.88  | 20.89  | 20.73   |
| 1.4                                     | 6       | 0         |        | 19.77  | 19.73  | 19.57   |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 22.89  | 22.80  | 22.92   |
| 20                                      | 1       | 49        |        | 22.74  | 22.76  | 22.89   |
| 20                                      | 1       | 99        |        | 22.65  | 22.71  | 22.88   |
| 20                                      | 50      | 0         |        | 21.84  | 21.77  | 21.94   |
| 20                                      | 50      | 24        |        | 21.78  | 21.77  | 21.95   |
| 20                                      | 50      | 50        |        | 21.66  | 21.74  | 21.96   |
| 20                                      | 100     | 0         |        | 21.76  | 21.76  | 21.92   |
| 20                                      | 1       | 0         | 16-QAM | 22.05  | 21.96  | 22.08   |
| 20                                      | 1       | 49        |        | 21.90  | 21.91  | 22.15   |
| 20                                      | 1       | 99        |        | 21.81  | 21.84  | 22.01   |
| 20                                      | 50      | 0         |        | 20.95  | 20.88  | 21.06   |
| 20                                      | 50      | 24        |        | 20.90  | 20.90  | 21.04   |
| 20                                      | 50      | 50        |        | 20.79  | 20.88  | 21.10   |
| 20                                      | 100     | 0         |        | 20.87  | 20.88  | 21.03   |
| 20                                      | 1       | 0         | 64-QAM | 20.66  | 20.57  | 20.68   |
| 20                                      | 1       | 49        |        | 20.52  | 20.52  | 20.76   |
| 20                                      | 1       | 99        |        | 20.40  | 20.46  | 20.64   |
| 20                                      | 50      | 0         |        | 19.95  | 19.87  | 20.06   |
| 20                                      | 50      | 24        |        | 19.88  | 19.88  | 20.06   |
| 20                                      | 50      | 50        |        | 19.78  | 19.86  | 20.07   |
| 20                                      | 100     | 0         |        | 19.85  | 19.87  | 20.02   |
| 15                                      | 1       | 0         | QPSK   | 22.87  | 22.84  | 22.86   |
| 15                                      | 1       | 37        |        | 22.84  | 22.77  | 22.83   |
| 15                                      | 1       | 74        |        | 22.74  | 22.75  | 22.84   |
| 15                                      | 36      | 0         |        | 21.77  | 21.73  | 21.93   |
| 15                                      | 36      | 20        |        | 21.71  | 21.79  | 22.03   |
| 15                                      | 36      | 39        |        | 21.73  | 21.73  | 21.97   |
| 15                                      | 75      | 0         |        | 21.70  | 21.76  | 21.91   |
| 15                                      | 1       | 0         | 16-QAM | 22.02  | 21.97  | 22.10   |
| 15                                      | 1       | 37        |        | 21.97  | 21.90  | 22.16   |
| 15                                      | 1       | 74        |        | 21.85  | 21.85  | 22.08   |
| 15                                      | 36      | 0         |        | 20.83  | 20.81  | 20.99   |
| 15                                      | 36      | 20        |        | 20.81  | 20.86  | 21.12   |
| 15                                      | 36      | 39        |        | 20.79  | 20.81  | 21.04   |
| 15                                      | 75      | 0         |        | 20.82  | 20.85  | 21.03   |
| 15                                      | 1       | 0         | 64-QAM | 20.63  | 20.60  | 20.69   |
| 15                                      | 1       | 37        |        | 20.59  | 20.51  | 20.79   |
| 15                                      | 1       | 74        |        | 20.48  | 20.48  | 20.68   |
| 15                                      | 36      | 0         |        | 19.89  | 19.86  | 20.04   |
| 15                                      | 36      | 20        |        | 19.84  | 19.89  | 20.15   |
| 15                                      | 36      | 39        |        | 19.82  | 19.85  | 20.07   |
| 15                                      | 75      | 0         |        | 19.80  | 19.87  | 20.06   |



| LTE Band 38 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.81  | 22.69  | 22.89   |
| 10                                      | 1       | 25        |        | 22.74  | 22.70  | 22.88   |
| 10                                      | 1       | 49        |        | 22.65  | 22.70  | 22.83   |
| 10                                      | 25      | 0         |        | 21.70  | 21.71  | 21.98   |
| 10                                      | 25      | 12        |        | 21.77  | 21.74  | 22.02   |
| 10                                      | 25      | 25        |        | 21.64  | 21.71  | 21.96   |
| 10                                      | 50      | 0         |        | 21.74  | 21.73  | 22.03   |
| 10                                      | 1       | 0         | 16-QAM | 21.96  | 21.85  | 22.15   |
| 10                                      | 1       | 25        |        | 21.90  | 21.87  | 22.11   |
| 10                                      | 1       | 49        |        | 21.76  | 21.84  | 22.04   |
| 10                                      | 25      | 0         |        | 20.83  | 20.82  | 21.12   |
| 10                                      | 25      | 12        |        | 20.87  | 20.85  | 21.09   |
| 10                                      | 25      | 25        |        | 20.73  | 20.82  | 21.07   |
| 10                                      | 50      | 0         |        | 20.85  | 20.87  | 21.14   |
| 10                                      | 1       | 0         | 64-QAM | 20.58  | 20.48  | 20.78   |
| 10                                      | 1       | 25        |        | 20.52  | 20.48  | 20.75   |
| 10                                      | 1       | 49        |        | 20.39  | 20.46  | 20.67   |
| 10                                      | 25      | 0         |        | 19.88  | 19.89  | 20.17   |
| 10                                      | 25      | 12        |        | 19.91  | 19.92  | 20.17   |
| 10                                      | 25      | 25        |        | 19.81  | 19.90  | 20.12   |
| 10                                      | 50      | 0         |        | 19.86  | 19.85  | 20.13   |
| 5                                       | 1       | 0         | QPSK   | 22.85  | 22.83  | 22.85   |
| 5                                       | 1       | 12        |        | 22.84  | 22.83  | 22.88   |
| 5                                       | 1       | 24        |        | 22.89  | 22.83  | 22.85   |
| 5                                       | 12      | 0         |        | 21.96  | 21.92  | 21.97   |
| 5                                       | 12      | 7         |        | 21.90  | 21.99  | 21.99   |
| 5                                       | 12      | 13        |        | 21.90  | 21.94  | 21.89   |
| 5                                       | 25      | 0         |        | 21.90  | 21.96  | 21.94   |
| 5                                       | 1       | 0         | 16-QAM | 22.18  | 22.10  | 22.24   |
| 5                                       | 1       | 12        |        | 22.09  | 22.14  | 22.09   |
| 5                                       | 1       | 24        |        | 22.04  | 22.05  | 22.12   |
| 5                                       | 12      | 0         |        | 21.06  | 21.00  | 21.03   |
| 5                                       | 12      | 7         |        | 21.00  | 21.03  | 21.05   |
| 5                                       | 12      | 13        |        | 21.00  | 21.04  | 20.91   |
| 5                                       | 25      | 0         |        | 20.96  | 21.04  | 21.05   |
| 5                                       | 1       | 0         | 64-QAM | 21.15  | 21.09  | 21.16   |
| 5                                       | 1       | 12        |        | 21.00  | 21.08  | 21.04   |
| 5                                       | 1       | 24        |        | 21.11  | 21.05  | 21.06   |
| 5                                       | 12      | 0         |        | 20.06  | 20.05  | 20.08   |
| 5                                       | 12      | 7         |        | 20.03  | 20.09  | 20.09   |
| 5                                       | 12      | 13        |        | 20.01  | 20.06  | 19.99   |
| 5                                       | 25      | 0         |        | 19.95  | 20.04  | 20.05   |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 25.91  | 25.84  | 26.11   |
| 20                                      | 1       | 49        |        | 25.98  | 26.12  | 26.04   |
| 20                                      | 1       | 99        |        | 26.00  | 26.16  | 26.14   |
| 20                                      | 50      | 0         |        | 24.44  | 24.63  | 24.56   |
| 20                                      | 50      | 24        |        | 24.49  | 24.76  | 24.69   |
| 20                                      | 50      | 50        |        | 24.63  | 24.80  | 24.69   |
| 20                                      | 100     | 0         |        | 24.48  | 24.72  | 24.63   |
| 20                                      | 1       | 0         | 16-QAM | 25.09  | 25.21  | 25.40   |
| 20                                      | 1       | 49        |        | 25.37  | 25.47  | 25.40   |
| 20                                      | 1       | 99        |        | 25.36  | 25.52  | 25.46   |
| 20                                      | 50      | 0         |        | 23.59  | 23.76  | 23.66   |
| 20                                      | 50      | 24        |        | 23.66  | 23.88  | 23.80   |
| 20                                      | 50      | 50        |        | 23.69  | 23.90  | 23.79   |
| 20                                      | 100     | 0         |        | 23.52  | 23.79  | 23.71   |
| 20                                      | 1       | 0         | 64-QAM | 24.09  | 24.11  | 24.38   |
| 20                                      | 1       | 49        |        | 24.19  | 24.36  | 24.30   |
| 20                                      | 1       | 99        |        | 24.21  | 24.38  | 24.36   |
| 20                                      | 50      | 0         |        | 22.56  | 22.75  | 22.69   |
| 20                                      | 50      | 24        |        | 22.59  | 22.87  | 22.81   |
| 20                                      | 50      | 50        |        | 22.66  | 22.90  | 22.82   |
| 20                                      | 100     | 0         |        | 22.52  | 22.81  | 22.74   |
| 15                                      | 1       | 0         | QPSK   | 26.01  | 25.99  | 25.82   |
| 15                                      | 1       | 37        |        | 26.08  | 26.16  | 26.07   |
| 15                                      | 1       | 74        |        | 26.01  | 26.14  | 26.11   |
| 15                                      | 36      | 0         |        | 24.50  | 24.54  | 24.59   |
| 15                                      | 36      | 20        |        | 24.64  | 24.68  | 24.70   |
| 15                                      | 36      | 39        |        | 24.56  | 24.66  | 24.72   |
| 15                                      | 75      | 0         |        | 24.56  | 24.66  | 24.68   |
| 15                                      | 1       | 0         | 16-QAM | 25.28  | 25.22  | 25.09   |
| 15                                      | 1       | 37        |        | 25.36  | 25.36  | 25.36   |
| 15                                      | 1       | 74        |        | 25.28  | 25.45  | 25.40   |
| 15                                      | 36      | 0         |        | 23.60  | 23.63  | 23.66   |
| 15                                      | 36      | 20        |        | 23.69  | 23.83  | 23.78   |
| 15                                      | 36      | 39        |        | 23.59  | 23.83  | 23.82   |
| 15                                      | 75      | 0         |        | 23.67  | 23.83  | 23.75   |
| 15                                      | 1       | 0         | 64-QAM | 24.17  | 24.17  | 24.01   |
| 15                                      | 1       | 37        |        | 24.23  | 24.37  | 24.27   |
| 15                                      | 1       | 74        |        | 24.19  | 24.41  | 24.29   |
| 15                                      | 36      | 0         |        | 22.64  | 22.77  | 22.72   |
| 15                                      | 36      | 20        |        | 22.75  | 22.87  | 22.81   |
| 15                                      | 36      | 39        |        | 22.63  | 22.89  | 22.84   |
| 15                                      | 75      | 0         |        | 22.69  | 22.82  | 22.76   |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 25.96  | 25.95  | 26.57   |
| 10                                      | 1       | 25        |        | 25.96  | 26.11  | 26.05   |
| 10                                      | 1       | 49        |        | 26.04  | 26.12  | 26.71   |
| 10                                      | 25      | 0         |        | 24.53  | 24.69  | 24.85   |
| 10                                      | 25      | 12        |        | 24.61  | 24.74  | 24.72   |
| 10                                      | 25      | 25        |        | 24.55  | 24.73  | 24.91   |
| 10                                      | 50      | 0         |        | 24.57  | 24.73  | 24.90   |
| 10                                      | 1       | 0         | 16-QAM | 25.27  | 25.32  | 25.84   |
| 10                                      | 1       | 25        |        | 25.27  | 25.46  | 25.40   |
| 10                                      | 1       | 49        |        | 25.34  | 25.49  | 25.95   |
| 10                                      | 25      | 0         |        | 23.63  | 23.81  | 23.96   |
| 10                                      | 25      | 12        |        | 23.74  | 23.88  | 23.91   |
| 10                                      | 25      | 25        |        | 23.65  | 23.85  | 24.01   |
| 10                                      | 50      | 0         |        | 23.65  | 23.84  | 23.99   |
| 10                                      | 1       | 0         | 64-QAM | 24.08  | 24.23  | 24.78   |
| 10                                      | 1       | 25        |        | 24.23  | 24.34  | 24.32   |
| 10                                      | 1       | 49        |        | 24.20  | 24.36  | 24.86   |
| 10                                      | 25      | 0         |        | 22.60  | 22.85  | 23.03   |
| 10                                      | 25      | 12        |        | 22.70  | 22.92  | 22.95   |
| 10                                      | 25      | 25        |        | 22.80  | 22.92  | 23.08   |
| 10                                      | 50      | 0         |        | 22.66  | 22.83  | 23.03   |
| 5                                       | 1       | 0         | QPSK   | 26.01  | 26.04  | 26.08   |
| 5                                       | 1       | 12        |        | 26.07  | 26.09  | 26.10   |
| 5                                       | 1       | 24        |        | 26.05  | 26.08  | 26.10   |
| 5                                       | 12      | 0         |        | 24.61  | 24.72  | 24.69   |
| 5                                       | 12      | 7         |        | 24.65  | 24.76  | 24.78   |
| 5                                       | 12      | 13        |        | 24.66  | 24.76  | 24.74   |
| 5                                       | 25      | 0         |        | 24.64  | 24.70  | 24.71   |
| 5                                       | 1       | 0         | 16-QAM | 25.31  | 25.38  | 25.38   |
| 5                                       | 1       | 12        |        | 25.39  | 25.46  | 25.43   |
| 5                                       | 1       | 24        |        | 25.39  | 25.46  | 25.44   |
| 5                                       | 12      | 0         |        | 23.71  | 23.81  | 23.80   |
| 5                                       | 12      | 7         |        | 23.76  | 23.89  | 23.89   |
| 5                                       | 12      | 13        |        | 23.80  | 23.88  | 23.87   |
| 5                                       | 25      | 0         |        | 23.76  | 23.86  | 23.86   |
| 5                                       | 1       | 0         | 64-QAM | 24.21  | 24.28  | 24.29   |
| 5                                       | 1       | 12        |        | 24.29  | 24.32  | 24.33   |
| 5                                       | 1       | 24        |        | 24.29  | 24.39  | 24.37   |
| 5                                       | 12      | 0         |        | 22.75  | 22.85  | 22.85   |
| 5                                       | 12      | 7         |        | 22.79  | 22.91  | 22.91   |
| 5                                       | 12      | 13        |        | 22.78  | 22.90  | 22.89   |
| 5                                       | 25      | 0         |        | 22.79  | 22.88  | 22.89   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | 22.83  | 22.87  | 22.93   |
| 20                                      | 1       | 49        |        | 22.59  | 22.69  | 22.69   |
| 20                                      | 1       | 99        |        | 22.69  | 22.67  | 22.69   |
| 20                                      | 50      | 0         |        | 21.76  | 21.85  | 21.84   |
| 20                                      | 50      | 24        |        | 21.80  | 21.80  | 21.79   |
| 20                                      | 50      | 50        |        | 21.75  | 21.78  | 21.76   |
| 20                                      | 100     | 0         |        | 21.82  | 21.83  | 21.83   |
| 20                                      | 1       | 0         | 16-QAM | 22.17  | 22.24  | 22.25   |
| 20                                      | 1       | 49        |        | 21.91  | 22.06  | 22.08   |
| 20                                      | 1       | 99        |        | 22.08  | 22.02  | 22.08   |
| 20                                      | 50      | 0         |        | 20.85  | 20.99  | 20.95   |
| 20                                      | 50      | 24        |        | 20.90  | 20.91  | 20.90   |
| 20                                      | 50      | 50        |        | 20.84  | 20.83  | 20.88   |
| 20                                      | 100     | 0         |        | 20.92  | 20.91  | 20.89   |
| 20                                      | 1       | 0         | 64-QAM | 21.05  | 21.12  | 21.12   |
| 20                                      | 1       | 49        |        | 20.82  | 20.98  | 20.94   |
| 20                                      | 1       | 99        |        | 20.94  | 20.92  | 20.95   |
| 20                                      | 50      | 0         |        | 19.88  | 20.01  | 19.98   |
| 20                                      | 50      | 24        |        | 19.91  | 19.92  | 19.93   |
| 20                                      | 50      | 50        |        | 19.88  | 19.88  | 19.88   |
| 20                                      | 100     | 0         |        | 19.93  | 19.94  | 19.91   |
| 15                                      | 1       | 0         | QPSK   | 22.83  | 22.92  | 22.90   |
| 15                                      | 1       | 37        |        | 22.64  | 22.72  | 22.71   |
| 15                                      | 1       | 74        |        | 22.76  | 22.75  | 22.74   |
| 15                                      | 36      | 0         |        | 21.77  | 21.85  | 21.86   |
| 15                                      | 36      | 20        |        | 21.71  | 21.84  | 21.83   |
| 15                                      | 36      | 39        |        | 21.82  | 21.76  | 21.78   |
| 15                                      | 75      | 0         |        | 21.83  | 21.83  | 21.79   |
| 15                                      | 1       | 0         | 16-QAM | 22.14  | 22.30  | 22.26   |
| 15                                      | 1       | 37        |        | 21.94  | 22.02  | 22.03   |
| 15                                      | 1       | 74        |        | 22.12  | 22.04  | 22.12   |
| 15                                      | 36      | 0         |        | 20.86  | 20.97  | 20.96   |
| 15                                      | 36      | 20        |        | 20.83  | 20.90  | 20.89   |
| 15                                      | 36      | 39        |        | 20.91  | 20.85  | 20.90   |
| 15                                      | 75      | 0         |        | 20.94  | 20.95  | 20.90   |
| 15                                      | 1       | 0         | 64-QAM | 21.08  | 21.23  | 21.18   |
| 15                                      | 1       | 37        |        | 20.88  | 21.00  | 20.97   |
| 15                                      | 1       | 74        |        | 21.06  | 20.98  | 21.02   |
| 15                                      | 36      | 0         |        | 19.92  | 20.03  | 19.97   |
| 15                                      | 36      | 20        |        | 19.87  | 19.94  | 19.95   |
| 15                                      | 36      | 39        |        | 19.94  | 19.93  | 19.92   |
| 15                                      | 75      | 0         |        | 19.93  | 19.95  | 19.94   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 22.72  | 22.81  | 22.75   |
| 10                                      | 1       | 25        |        | 22.64  | 22.71  | 22.67   |
| 10                                      | 1       | 49        |        | 22.62  | 22.70  | 22.69   |
| 10                                      | 25      | 0         |        | 21.70  | 21.80  | 21.80   |
| 10                                      | 25      | 12        |        | 21.70  | 21.81  | 21.79   |
| 10                                      | 25      | 25        |        | 21.68  | 21.73  | 21.71   |
| 10                                      | 50      | 0         |        | 21.69  | 21.80  | 21.78   |
| 10                                      | 1       | 0         | 16-QAM | 22.05  | 22.16  | 22.12   |
| 10                                      | 1       | 25        |        | 21.95  | 22.01  | 22.05   |
| 10                                      | 1       | 49        |        | 21.95  | 22.04  | 22.07   |
| 10                                      | 25      | 0         |        | 20.79  | 20.91  | 20.91   |
| 10                                      | 25      | 12        |        | 20.77  | 20.89  | 20.85   |
| 10                                      | 25      | 25        |        | 20.76  | 20.83  | 20.82   |
| 10                                      | 50      | 0         |        | 20.82  | 20.88  | 20.90   |
| 10                                      | 1       | 0         | 64-QAM | 20.96  | 21.08  | 21.05   |
| 10                                      | 1       | 25        |        | 20.88  | 20.94  | 20.95   |
| 10                                      | 1       | 49        |        | 20.88  | 20.92  | 20.96   |
| 10                                      | 25      | 0         |        | 19.80  | 19.93  | 19.87   |
| 10                                      | 25      | 12        |        | 19.83  | 19.89  | 19.87   |
| 10                                      | 25      | 25        |        | 19.75  | 19.88  | 19.86   |
| 10                                      | 50      | 0         |        | 19.81  | 19.89  | 19.85   |
| 5                                       | 1       | 0         | QPSK   | 22.66  | 22.74  | 22.72   |
| 5                                       | 1       | 12        |        | 22.62  | 22.69  | 22.68   |
| 5                                       | 1       | 24        |        | 22.62  | 22.70  | 22.70   |
| 5                                       | 12      | 0         |        | 21.66  | 21.75  | 21.73   |
| 5                                       | 12      | 7         |        | 21.69  | 21.79  | 21.74   |
| 5                                       | 12      | 13        |        | 21.65  | 21.71  | 21.75   |
| 5                                       | 25      | 0         |        | 21.64  | 21.73  | 21.73   |
| 5                                       | 1       | 0         | 16-QAM | 21.97  | 22.11  | 22.09   |
| 5                                       | 1       | 12        |        | 21.92  | 21.99  | 22.06   |
| 5                                       | 1       | 24        |        | 21.96  | 21.99  | 22.08   |
| 5                                       | 12      | 0         |        | 20.78  | 20.88  | 20.84   |
| 5                                       | 12      | 7         |        | 20.75  | 20.86  | 20.85   |
| 5                                       | 12      | 13        |        | 20.73  | 20.79  | 20.84   |
| 5                                       | 25      | 0         |        | 20.78  | 20.82  | 20.84   |
| 5                                       | 1       | 0         | 64-QAM | 20.92  | 21.05  | 21.03   |
| 5                                       | 1       | 12        |        | 20.86  | 20.95  | 20.97   |
| 5                                       | 1       | 24        |        | 20.88  | 20.94  | 20.99   |
| 5                                       | 12      | 0         |        | 19.79  | 19.91  | 19.93   |
| 5                                       | 12      | 7         |        | 19.85  | 19.92  | 19.92   |
| 5                                       | 12      | 13        |        | 19.79  | 19.90  | 19.91   |
| 5                                       | 25      | 0         |        | 19.78  | 19.86  | 19.88   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 3                                       | 1       | 0         | QPSK   | 22.66  | 22.72  | 22.71   |
| 3                                       | 1       | 8         |        | 22.61  | 22.68  | 22.67   |
| 3                                       | 1       | 14        |        | 22.61  | 22.65  | 22.66   |
| 3                                       | 8       | 0         |        | 21.65  | 21.76  | 21.76   |
| 3                                       | 8       | 4         |        | 21.67  | 21.75  | 21.74   |
| 3                                       | 8       | 7         |        | 21.65  | 21.73  | 21.76   |
| 3                                       | 15      | 0         |        | 21.66  | 21.72  | 21.62   |
| 3                                       | 1       | 0         | 16-QAM | 21.95  | 21.95  | 22.04   |
| 3                                       | 1       | 8         |        | 21.94  | 21.98  | 22.01   |
| 3                                       | 1       | 14        |        | 21.91  | 21.96  | 22.00   |
| 3                                       | 8       | 0         |        | 20.79  | 20.85  | 20.89   |
| 3                                       | 8       | 4         |        | 20.81  | 20.87  | 20.89   |
| 3                                       | 8       | 7         |        | 20.71  | 20.87  | 20.91   |
| 3                                       | 15      | 0         |        | 20.77  | 20.84  | 20.83   |
| 3                                       | 1       | 0         | 64-QAM | 20.88  | 20.91  | 20.95   |
| 3                                       | 1       | 8         |        | 20.88  | 20.91  | 20.98   |
| 3                                       | 1       | 14        |        | 20.86  | 20.92  | 20.97   |
| 3                                       | 8       | 0         |        | 19.81  | 19.89  | 19.86   |
| 3                                       | 8       | 4         |        | 19.83  | 19.90  | 19.91   |
| 3                                       | 8       | 7         |        | 19.79  | 19.87  | 19.85   |
| 3                                       | 15      | 0         |        | 19.77  | 19.86  | 19.85   |
| 1.4                                     | 1       | 0         | QPSK   | 22.58  | 22.63  | 22.63   |
| 1.4                                     | 1       | 3         |        | 22.63  | 22.71  | 22.70   |
| 1.4                                     | 1       | 5         |        | 22.54  | 22.61  | 22.62   |
| 1.4                                     | 3       | 0         |        | 22.60  | 22.66  | 22.70   |
| 1.4                                     | 3       | 1         |        | 22.63  | 22.69  | 22.71   |
| 1.4                                     | 3       | 3         |        | 22.58  | 22.65  | 22.69   |
| 1.4                                     | 6       | 0         |        | 21.58  | 21.69  | 21.68   |
| 1.4                                     | 1       | 0         | 16-QAM | 21.86  | 21.93  | 21.98   |
| 1.4                                     | 1       | 3         |        | 21.96  | 21.97  | 22.07   |
| 1.4                                     | 1       | 5         |        | 21.87  | 21.91  | 22.00   |
| 1.4                                     | 3       | 0         |        | 21.65  | 21.70  | 21.80   |
| 1.4                                     | 3       | 1         |        | 21.70  | 21.74  | 21.81   |
| 1.4                                     | 3       | 3         |        | 21.65  | 21.70  | 21.78   |
| 1.4                                     | 6       | 0         |        | 20.75  | 20.85  | 20.86   |
| 1.4                                     | 1       | 0         | 64-QAM | 20.83  | 20.88  | 20.95   |
| 1.4                                     | 1       | 3         |        | 20.86  | 20.93  | 21.00   |
| 1.4                                     | 1       | 5         |        | 20.79  | 20.87  | 20.94   |
| 1.4                                     | 3       | 0         |        | 20.83  | 20.87  | 20.88   |
| 1.4                                     | 3       | 1         |        | 20.85  | 20.91  | 20.95   |
| 1.4                                     | 3       | 3         |        | 20.79  | 20.89  | 20.92   |
| 1.4                                     | 6       | 0         |        | 19.68  | 19.78  | 19.79   |



| LTE Band 71 Maximum Average Power [dBm] |         |           |        |              |        |         |
|-----------------------------------------|---------|-----------|--------|--------------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest       | Middle | Highest |
| 20                                      | 1       | 0         | QPSK   | <b>23.20</b> | 23.08  | 23.01   |
| 20                                      | 1       | 49        |        | 23.00        | 22.88  | 22.91   |
| 20                                      | 1       | 99        |        | 22.82        | 22.80  | 22.79   |
| 20                                      | 50      | 0         |        | 22.10        | 22.02  | 21.97   |
| 20                                      | 50      | 24        |        | 22.05        | 21.95  | 21.86   |
| 20                                      | 50      | 50        |        | 21.93        | 21.83  | 21.87   |
| 20                                      | 100     | 0         |        | 22.02        | 21.91  | 21.87   |
| 20                                      | 1       | 0         | 16-QAM | 22.43        | 22.29  | 22.31   |
| 20                                      | 1       | 49        |        | 22.29        | 22.23  | 22.22   |
| 20                                      | 1       | 99        |        | 22.18        | 22.03  | 22.08   |
| 20                                      | 50      | 0         |        | 21.20        | 21.09  | 21.01   |
| 20                                      | 50      | 24        |        | 21.13        | 21.04  | 20.95   |
| 20                                      | 50      | 50        |        | 21.05        | 20.91  | 20.96   |
| 20                                      | 100     | 0         |        | 21.09        | 20.97  | 20.92   |
| 20                                      | 1       | 0         | 64-QAM | 21.39        | 21.37  | 21.24   |
| 20                                      | 1       | 49        |        | 21.24        | 21.14  | 21.17   |
| 20                                      | 1       | 99        |        | 21.10        | 21.03  | 21.04   |
| 20                                      | 50      | 0         |        | 20.21        | 20.10  | 20.06   |
| 20                                      | 50      | 24        |        | 20.15        | 20.03  | 19.98   |
| 20                                      | 50      | 50        |        | 20.05        | 19.89  | 19.98   |
| 20                                      | 100     | 0         |        | 20.11        | 19.99  | 19.93   |
| 15                                      | 1       | 0         | QPSK   | 23.14        | 23.06  | 22.93   |
| 15                                      | 1       | 37        |        | 23.02        | 22.89  | 22.87   |
| 15                                      | 1       | 74        |        | 22.91        | 22.89  | 22.82   |
| 15                                      | 36      | 0         |        | 22.09        | 21.97  | 21.87   |
| 15                                      | 36      | 20        |        | 22.06        | 21.96  | 21.92   |
| 15                                      | 36      | 39        |        | 21.97        | 21.85  | 21.82   |
| 15                                      | 75      | 0         |        | 22.03        | 21.96  | 21.91   |
| 15                                      | 1       | 0         | 16-QAM | 22.47        | 22.26  | 22.23   |
| 15                                      | 1       | 37        |        | 22.23        | 22.28  | 22.12   |
| 15                                      | 1       | 74        |        | 22.27        | 22.18  | 22.14   |
| 15                                      | 36      | 0         |        | 21.17        | 21.05  | 20.96   |
| 15                                      | 36      | 20        |        | 21.13        | 21.06  | 21.01   |
| 15                                      | 36      | 39        |        | 21.08        | 20.93  | 20.88   |
| 15                                      | 75      | 0         |        | 21.15        | 21.02  | 20.97   |
| 15                                      | 1       | 0         | 64-QAM | 21.39        | 21.30  | 21.19   |
| 15                                      | 1       | 37        |        | 21.25        | 21.23  | 21.09   |
| 15                                      | 1       | 74        |        | 21.17        | 21.10  | 21.09   |
| 15                                      | 36      | 0         |        | 20.25        | 20.10  | 19.99   |
| 15                                      | 36      | 20        |        | 20.17        | 20.05  | 20.07   |
| 15                                      | 36      | 39        |        | 20.11        | 19.97  | 19.96   |
| 15                                      | 75      | 0         |        | 20.09        | 20.02  | 19.99   |



| LTE Band 71 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 10                                      | 1       | 0         | QPSK   | 23.16  | 22.99  | 22.95   |
| 10                                      | 1       | 25        |        | 23.03  | 22.90  | 22.84   |
| 10                                      | 1       | 49        |        | 22.92  | 22.92  | 22.81   |
| 10                                      | 25      | 0         |        | 22.11  | 21.97  | 21.92   |
| 10                                      | 25      | 12        |        | 22.11  | 21.95  | 21.88   |
| 10                                      | 25      | 25        |        | 22.04  | 21.90  | 21.82   |
| 10                                      | 50      | 0         |        | 22.07  | 21.94  | 21.87   |
| 10                                      | 1       | 0         | 16-QAM | 22.49  | 22.30  | 22.22   |
| 10                                      | 1       | 25        |        | 22.46  | 22.28  | 22.09   |
| 10                                      | 1       | 49        |        | 22.24  | 22.22  | 22.08   |
| 10                                      | 25      | 0         |        | 21.19  | 21.05  | 21.00   |
| 10                                      | 25      | 12        |        | 21.16  | 21.03  | 21.00   |
| 10                                      | 25      | 25        |        | 21.11  | 21.01  | 20.92   |
| 10                                      | 50      | 0         |        | 21.16  | 21.04  | 20.95   |
| 10                                      | 1       | 0         | 64-QAM | 21.40  | 21.26  | 21.10   |
| 10                                      | 1       | 25        |        | 21.29  | 21.13  | 21.07   |
| 10                                      | 1       | 49        |        | 21.20  | 21.11  | 21.02   |
| 10                                      | 25      | 0         |        | 20.21  | 20.09  | 20.04   |
| 10                                      | 25      | 12        |        | 20.21  | 20.05  | 20.00   |
| 10                                      | 25      | 25        |        | 20.09  | 19.99  | 19.90   |
| 10                                      | 50      | 0         |        | 20.18  | 20.06  | 20.00   |
| 5                                       | 1       | 0         | QPSK   | 23.12  | 22.98  | 22.87   |
| 5                                       | 1       | 12        |        | 23.08  | 22.92  | 22.91   |
| 5                                       | 1       | 24        |        | 23.01  | 22.85  | 22.85   |
| 5                                       | 12      | 0         |        | 22.17  | 21.98  | 21.86   |
| 5                                       | 12      | 7         |        | 22.15  | 21.99  | 21.97   |
| 5                                       | 12      | 13        |        | 22.06  | 21.94  | 21.88   |
| 5                                       | 25      | 0         |        | 22.11  | 21.93  | 21.85   |
| 5                                       | 1       | 0         | 16-QAM | 22.46  | 22.32  | 22.11   |
| 5                                       | 1       | 12        |        | 22.39  | 22.30  | 22.21   |
| 5                                       | 1       | 24        |        | 22.39  | 22.18  | 22.11   |
| 5                                       | 12      | 0         |        | 21.21  | 21.08  | 20.98   |
| 5                                       | 12      | 7         |        | 21.26  | 21.06  | 21.07   |
| 5                                       | 12      | 13        |        | 21.17  | 21.00  | 20.99   |
| 5                                       | 25      | 0         |        | 21.18  | 21.04  | 20.94   |
| 5                                       | 1       | 0         | 64-QAM | 21.41  | 21.23  | 21.07   |
| 5                                       | 1       | 12        |        | 21.31  | 21.19  | 21.13   |
| 5                                       | 1       | 24        |        | 21.26  | 21.14  | 21.10   |
| 5                                       | 12      | 0         |        | 20.29  | 20.12  | 19.99   |
| 5                                       | 12      | 7         |        | 20.27  | 20.13  | 20.12   |
| 5                                       | 12      | 13        |        | 20.24  | 20.06  | 20.04   |
| 5                                       | 25      | 0         |        | 20.23  | 20.08  | 19.94   |



| LTE Band 41_CA Maximum Average Power [dBm] |         |           |         |           |        |        |        |         |
|--------------------------------------------|---------|-----------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                   | PCC     |           | SCC     |           | Mod    | Lowest | Middle | Highest |
|                                            | RB Size | RB Offset | RB Size | RB Offset |        |        |        |         |
| 20+20                                      | 0       | 0         | 1       | 99        | QPSK   | 23.15  | 23.06  | 23.08   |
| 20+20                                      | 1       | 0         | 0       | 0         |        | 23.14  | 22.92  | 22.88   |
| 20+20                                      | 100     | 0         | 0       | 0         |        | 22.20  | 22.01  | 22.11   |
| 20+20                                      | 100     | 0         | 100     | 0         |        | 21.11  | 21.13  | 21.07   |
| 20+20                                      | 1       | 0         | 1       | 99        |        | 14.43  | 14.46  | 14.49   |
| 20+20                                      | 1       | 0         | 1       | 0         |        | 18.71  | 18.37  | 18.61   |
| 20+20                                      | 1       | 99        | 1       | 0         |        | 23.12  | 23.02  | 23.07   |
| 20+20                                      | 100     | 0         | 1       | 99        |        | 19.51  | 19.44  | 19.59   |
| 20+20                                      | 0       | 0         | 1       | 99        | 16-QAM | 22.76  | 23.05  | 22.96   |
| 20+20                                      | 1       | 0         | 0       | 0         |        | 22.23  | 22.10  | 22.06   |
| 20+20                                      | 100     | 0         | 0       | 0         |        | 21.30  | 21.12  | 21.22   |
| 20+20                                      | 100     | 0         | 100     | 0         |        | 20.16  | 20.16  | 20.14   |
| 20+20                                      | 1       | 0         | 1       | 99        |        | 14.53  | 14.57  | 14.54   |
| 20+20                                      | 1       | 0         | 1       | 0         |        | 18.72  | 18.53  | 18.40   |
| 20+20                                      | 1       | 99        | 1       | 0         |        | 22.38  | 22.14  | 22.16   |
| 20+20                                      | 100     | 0         | 1       | 99        |        | 19.55  | 19.47  | 19.64   |
| 20+20                                      | 0       | 0         | 1       | 99        | 64-QAM | 22.74  | 23.01  | 21.98   |
| 20+20                                      | 1       | 0         | 0       | 0         |        | 20.86  | 20.65  | 20.77   |
| 20+20                                      | 100     | 0         | 0       | 0         |        | 20.26  | 20.09  | 20.19   |
| 20+20                                      | 100     | 0         | 100     | 0         |        | 20.13  | 20.17  | 20.12   |
| 20+20                                      | 1       | 0         | 1       | 99        |        | 14.33  | 14.36  | 14.36   |
| 20+20                                      | 1       | 0         | 1       | 0         |        | 18.61  | 18.34  | 18.35   |
| 20+20                                      | 1       | 99        | 1       | 0         |        | 20.13  | 19.95  | 20.03   |
| 20+20                                      | 100     | 0         | 1       | 99        |        | 19.53  | 19.46  | 19.65   |
| 20+15                                      | 100     | 0         | 75      | 0         | QPSK   | 21.19  | 21.11  | 21.17   |
| 20+15                                      | 1       | 0         | 1       | 74        |        | 14.36  | 14.37  | 14.54   |
| 20+15                                      | 1       | 99        | 1       | 0         |        | 23.09  | 22.88  | 23.07   |
| 20+15                                      | 100     | 0         | 75      | 0         | 16-QAM | 20.19  | 20.14  | 20.21   |
| 20+15                                      | 1       | 0         | 1       | 74        |        | 14.46  | 14.49  | 14.52   |
| 20+15                                      | 1       | 99        | 1       | 0         |        | 22.31  | 22.11  | 22.25   |
| 20+15                                      | 100     | 0         | 75      | 0         | 64-QAM | 20.26  | 20.21  | 20.16   |
| 20+15                                      | 1       | 0         | 1       | 74        |        | 14.23  | 14.25  | 14.27   |
| 20+15                                      | 1       | 99        | 1       | 0         |        | 20.12  | 20.05  | 19.93   |
| 15+20                                      | 75      | 0         | 100     | 0         | QPSK   | 21.14  | 21.02  | 21.14   |
| 15+20                                      | 1       | 0         | 1       | 99        |        | 14.34  | 14.34  | 14.49   |
| 15+20                                      | 1       | 74        | 1       | 0         |        | 23.00  | 22.88  | 22.97   |
| 15+20                                      | 75      | 0         | 100     | 0         | 16-QAM | 20.19  | 20.13  | 20.11   |
| 15+20                                      | 1       | 0         | 1       | 99        |        | 14.36  | 14.41  | 14.46   |
| 15+20                                      | 1       | 74        | 1       | 0         |        | 22.31  | 22.08  | 22.16   |
| 15+20                                      | 75      | 0         | 100     | 0         | 64-QAM | 20.20  | 20.18  | 20.08   |
| 15+20                                      | 1       | 0         | 1       | 99        |        | 14.21  | 14.15  | 14.25   |
| 15+20                                      | 1       | 74        | 1       | 0         |        | 20.07  | 19.99  | 19.90   |



| LTE Band 41_CA Maximum Average Power [dBm] |         |           |         |           |        |        |        |         |
|--------------------------------------------|---------|-----------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                   | PCC     |           | SCC     |           | Mod    | Lowest | Middle | Highest |
|                                            | RB Size | RB Offset | RB Size | RB Offset |        |        |        |         |
| 20+10                                      | 100     | 0         | 50      | 0         | QPSK   | 21.18  | 21.03  | 21.16   |
| 20+10                                      | 1       | 0         | 1       | 49        |        | 14.31  | 14.32  | 14.46   |
| 20+10                                      | 1       | 99        | 1       | 0         |        | 23.00  | 22.79  | 23.05   |
| 20+10                                      | 100     | 0         | 50      | 0         | 16-QAM | 20.12  | 20.12  | 20.14   |
| 20+10                                      | 1       | 0         | 1       | 49        |        | 14.46  | 14.42  | 14.43   |
| 20+10                                      | 1       | 99        | 1       | 0         |        | 22.28  | 22.02  | 22.23   |
| 20+10                                      | 100     | 0         | 50      | 0         | 64-QAM | 20.18  | 20.15  | 20.10   |
| 20+10                                      | 1       | 0         | 1       | 49        |        | 14.17  | 14.15  | 14.20   |
| 20+10                                      | 1       | 99        | 1       | 0         |        | 20.03  | 20.00  | 19.88   |
| 10+20                                      | 50      | 0         | 100     | 0         | QPSK   | 21.13  | 21.03  | 21.17   |
| 10+20                                      | 1       | 0         | 1       | 99        |        | 14.26  | 14.27  | 14.53   |
| 10+20                                      | 1       | 49        | 1       | 0         |        | 23.05  | 22.88  | 23.03   |
| 10+20                                      | 50      | 0         | 100     | 0         | 16-QAM | 20.16  | 20.04  | 20.18   |
| 10+20                                      | 1       | 0         | 1       | 99        |        | 14.43  | 14.48  | 14.51   |
| 10+20                                      | 1       | 49        | 1       | 0         |        | 22.24  | 22.07  | 22.19   |
| 10+20                                      | 50      | 0         | 100     | 0         | 64-QAM | 20.20  | 20.17  | 20.06   |
| 10+20                                      | 1       | 0         | 1       | 99        |        | 14.14  | 14.23  | 14.17   |
| 10+20                                      | 1       | 49        | 1       | 0         |        | 20.06  | 19.95  | 19.90   |
| 20+5                                       | 100     | 0         | 25      | 0         | QPSK   | 21.08  | 21.02  | 21.08   |
| 20+5                                       | 1       | 0         | 1       | 24        |        | 14.28  | 14.19  | 14.34   |
| 20+5                                       | 1       | 99        | 1       | 0         |        | 22.98  | 22.86  | 22.96   |
| 20+5                                       | 100     | 0         | 25      | 0         | 16-QAM | 20.03  | 19.96  | 20.18   |
| 20+5                                       | 1       | 0         | 1       | 24        |        | 14.26  | 14.29  | 14.42   |
| 20+5                                       | 1       | 99        | 1       | 0         |        | 22.11  | 22.09  | 22.18   |
| 20+5                                       | 100     | 0         | 25      | 0         | 64-QAM | 20.15  | 20.13  | 19.99   |
| 20+5                                       | 1       | 0         | 1       | 24        |        | 14.18  | 14.10  | 14.19   |
| 20+5                                       | 1       | 99        | 1       | 0         |        | 19.99  | 19.91  | 19.76   |
| 5+20                                       | 25      | 0         | 100     | 0         | QPSK   | 21.16  | 21.06  | 21.16   |
| 5+20                                       | 1       | 0         | 1       | 99        |        | 14.35  | 14.35  | 14.44   |
| 5+20                                       | 1       | 24        | 1       | 0         |        | 23.05  | 22.79  | 23.03   |
| 5+20                                       | 25      | 0         | 100     | 0         | 16-QAM | 20.10  | 20.08  | 20.13   |
| 5+20                                       | 1       | 0         | 1       | 99        |        | 14.41  | 14.44  | 14.48   |
| 5+20                                       | 1       | 24        | 1       | 0         |        | 22.25  | 22.03  | 22.17   |
| 5+20                                       | 25      | 0         | 100     | 0         | 64-QAM | 20.17  | 20.18  | 20.07   |
| 5+20                                       | 1       | 0         | 1       | 99        |        | 14.22  | 14.17  | 14.17   |
| 5+20                                       | 1       | 24        | 1       | 0         |        | 20.05  | 20.00  | 19.93   |



| LTE Band 41_CA Maximum Average Power [dBm] |         |           |         |           |        |        |        |         |
|--------------------------------------------|---------|-----------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                   | PCC     |           | SCC     |           | Mod    | Lowest | Middle | Highest |
|                                            | RB Size | RB Offset | RB Size | RB Offset |        |        |        |         |
| 15+10                                      | 75      | 0         | 50      | 0         | QPSK   | 21.05  | 21.05  | 21.03   |
| 15+10                                      | 1       | 0         | 1       | 49        |        | 14.29  | 14.30  | 14.46   |
| 15+10                                      | 1       | 74        | 1       | 0         |        | 22.98  | 22.82  | 22.94   |
| 15+10                                      | 75      | 0         | 50      | 0         | 16-QAM | 20.11  | 20.05  | 20.06   |
| 15+10                                      | 1       | 0         | 1       | 49        |        | 14.31  | 14.34  | 14.37   |
| 15+10                                      | 1       | 74        | 1       | 0         |        | 22.22  | 22.00  | 22.16   |
| 15+10                                      | 75      | 0         | 50      | 0         | 64-QAM | 20.16  | 20.09  | 20.10   |
| 15+10                                      | 1       | 0         | 1       | 49        |        | 14.13  | 14.17  | 14.20   |
| 15+10                                      | 1       | 74        | 1       | 0         |        | 20.05  | 19.95  | 19.78   |
| 10+15                                      | 50      | 0         | 75      | 0         | QPSK   | 21.09  | 21.03  | 21.06   |
| 10+15                                      | 1       | 49        | 1       | 0         |        | 14.25  | 14.29  | 14.47   |
| 10+15                                      | 1       | 0         | 1       | 74        |        | 22.98  | 22.85  | 22.99   |
| 10+15                                      | 50      | 0         | 75      | 0         | 16-QAM | 20.06  | 20.08  | 20.15   |
| 10+15                                      | 1       | 49        | 1       | 0         |        | 14.40  | 14.46  | 14.44   |
| 10+15                                      | 1       | 0         | 1       | 74        |        | 22.21  | 22.05  | 22.13   |
| 10+15                                      | 50      | 0         | 75      | 0         | 64-QAM | 20.17  | 20.13  | 20.11   |
| 10+15                                      | 1       | 49        | 1       | 0         |        | 14.13  | 14.15  | 14.24   |
| 10+15                                      | 1       | 0         | 1       | 74        |        | 20.02  | 20.00  | 19.83   |
| 15+15                                      | 75      | 0         | 75      | 0         | QPSK   | 21.06  | 21.02  | 21.04   |
| 15+15                                      | 1       | 0         | 1       | 74        |        | 14.22  | 14.28  | 14.50   |
| 15+15                                      | 1       | 74        | 1       | 0         |        | 23.05  | 22.81  | 22.98   |
| 15+15                                      | 75      | 0         | 75      | 0         | 16-QAM | 20.08  | 20.09  | 20.08   |
| 15+15                                      | 1       | 0         | 1       | 74        |        | 14.36  | 14.35  | 14.40   |
| 15+15                                      | 1       | 74        | 1       | 0         |        | 22.26  | 22.01  | 22.17   |
| 15+15                                      | 75      | 0         | 75      | 0         | 64-QAM | 20.18  | 20.17  | 20.07   |
| 15+15                                      | 1       | 0         | 1       | 74        |        | 14.19  | 14.20  | 14.17   |
| 15+15                                      | 1       | 74        | 1       | 0         |        | 20.05  | 20.00  | 19.85   |

## LTE Band 2

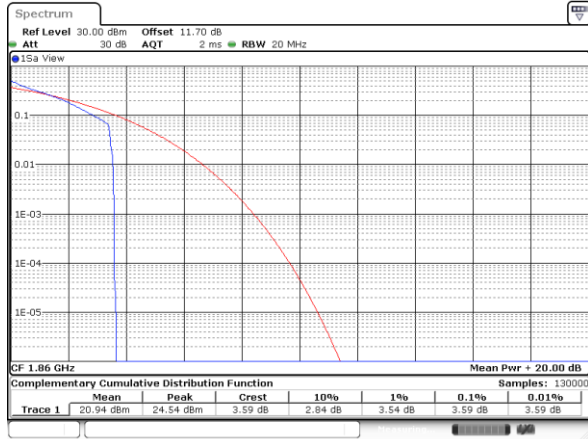
### Peak-to-Average Ratio

| Mode       | LTE Band 2 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.59               | 4.58    | 5.42  | 5.94    | PASS        |
| Middle CH  | 3.57               | 4.64    | 5.22  | 6       |             |
| Highest CH | 3.59               | 4.61    | 5.16  | 5.94    |             |
| Mode       | LTE Band 2 / 20MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 6.17               | 6.43    | -     | -       | PASS        |
| Middle CH  | 6.35               | 6.46    | -     | -       |             |
| Highest CH | 5.97               | 6.55    | -     | -       |             |

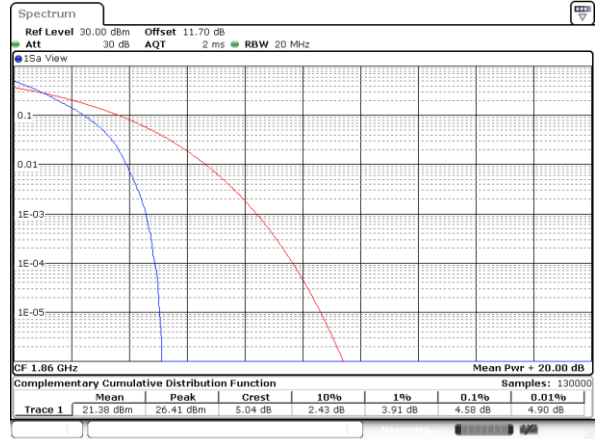


## LTE Band 2 / 20MHz / QPSK

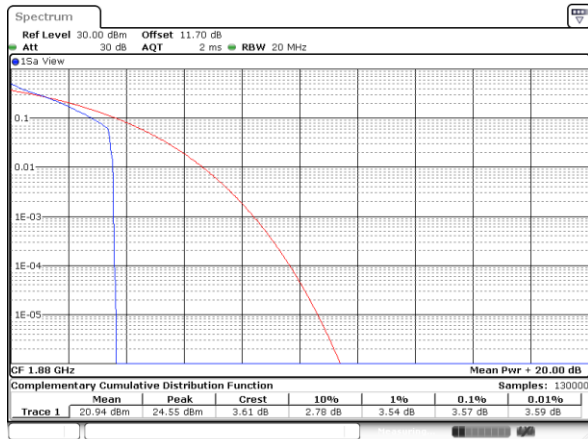
## Lowest Channel / 1RB



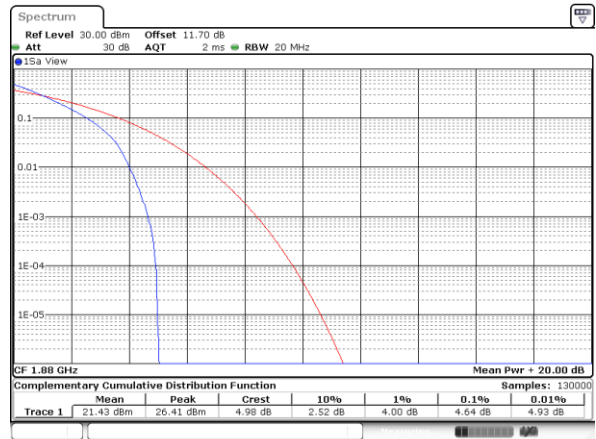
## Lowest Channel / Full RB



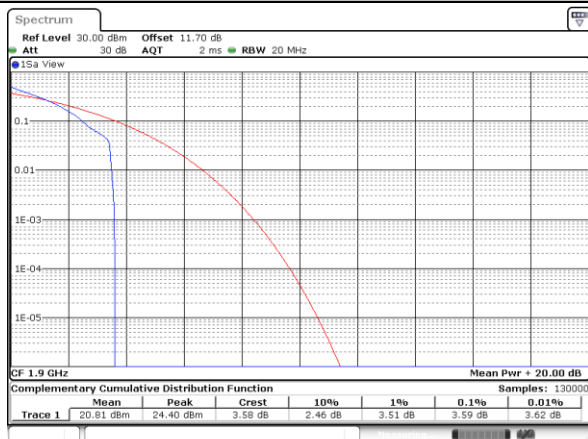
## Middle Channel / 1RB



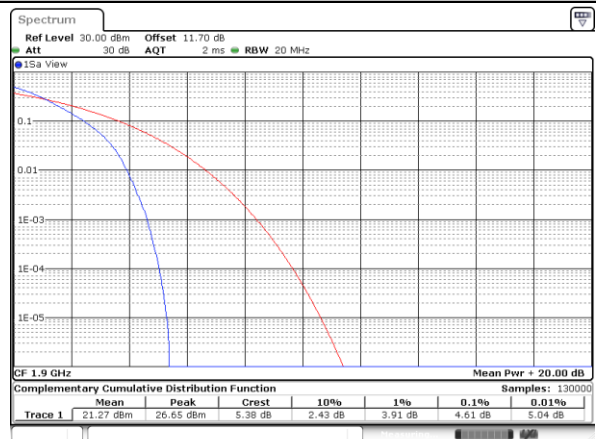
## Middle Channel / Full RB



## Highest Channel / 1RB



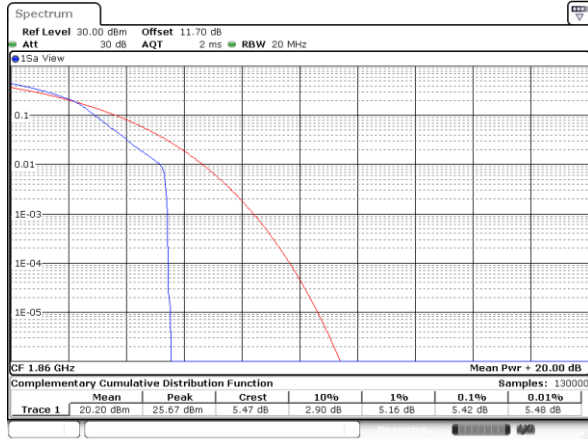
## Highest Channel / Full RB



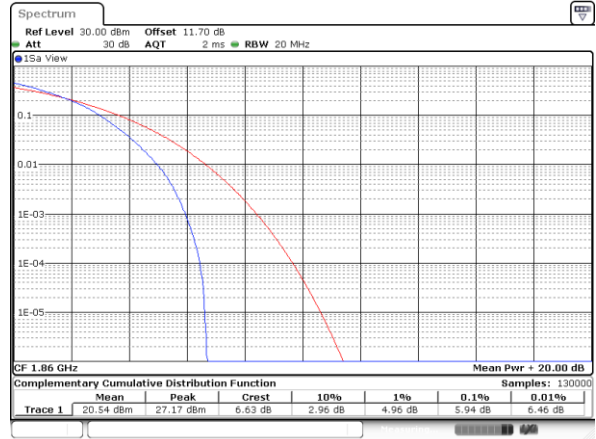


## LTE Band 2 / 20MHz / 16QAM

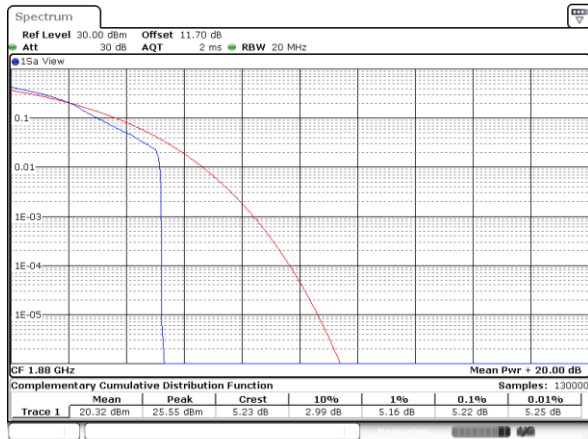
## Lowest Channel / 1RB



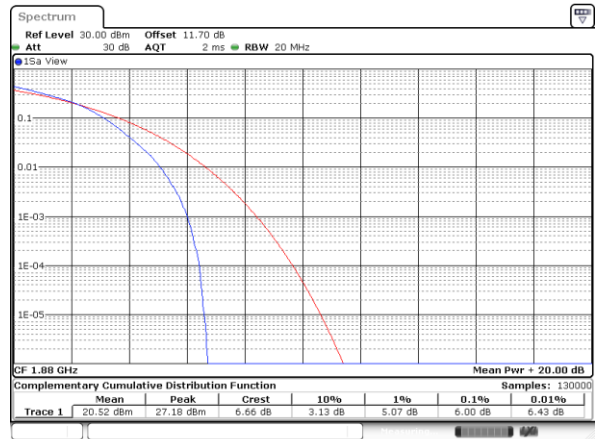
## Lowest Channel / Full RB



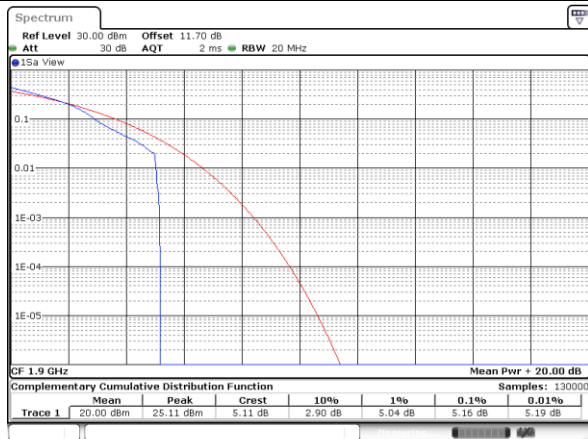
## Middle Channel / 1RB



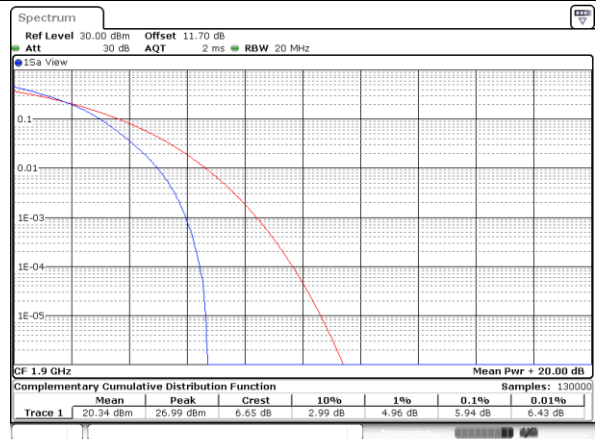
## Middle Channel / Full RB



## Highest Channel / 1RB



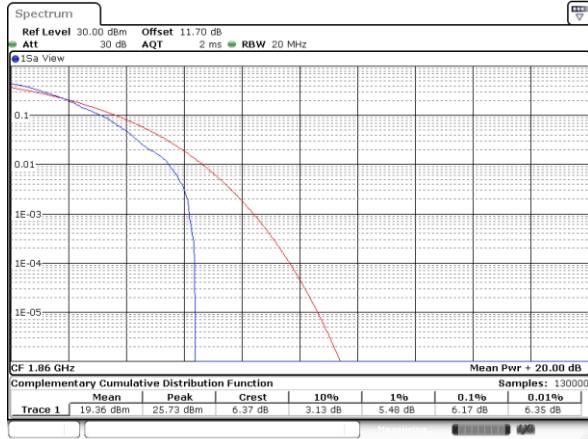
## Highest Channel / Full RB



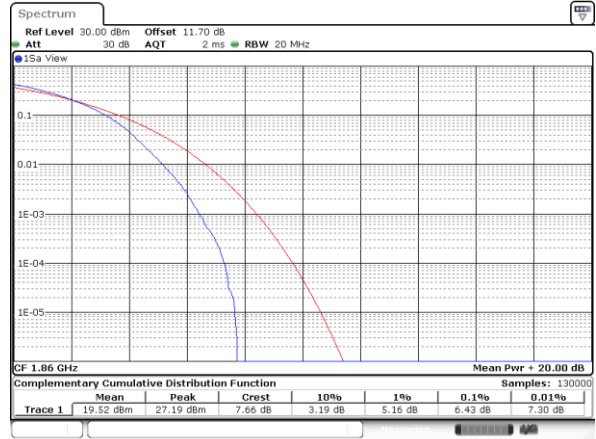


## LTE Band 2 / 20MHz / 64QAM

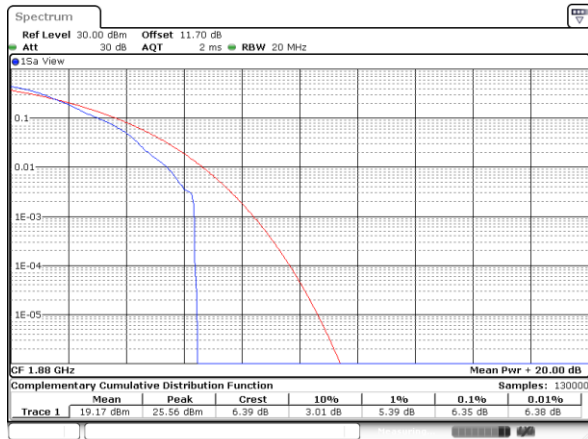
## Lowest Channel / 1RB



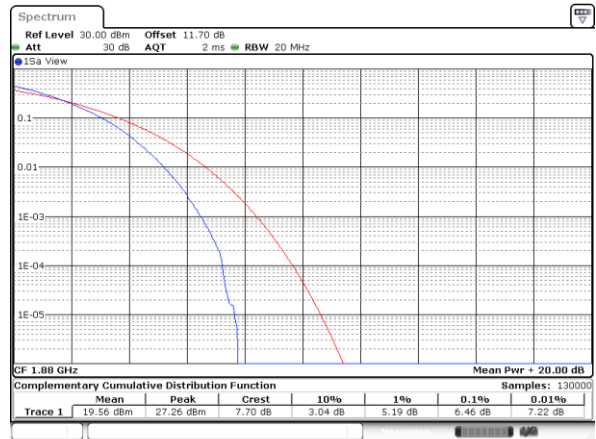
## Lowest Channel / Full RB



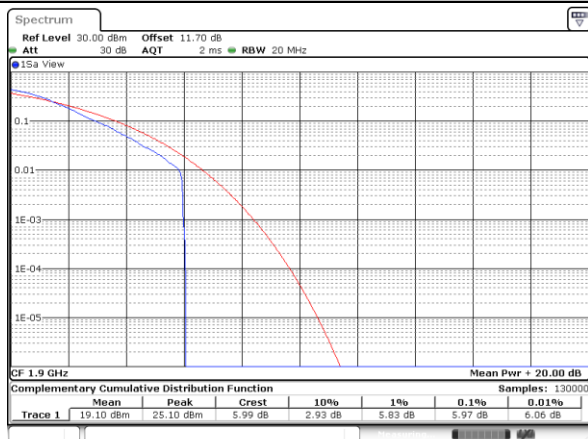
## Middle Channel / 1RB



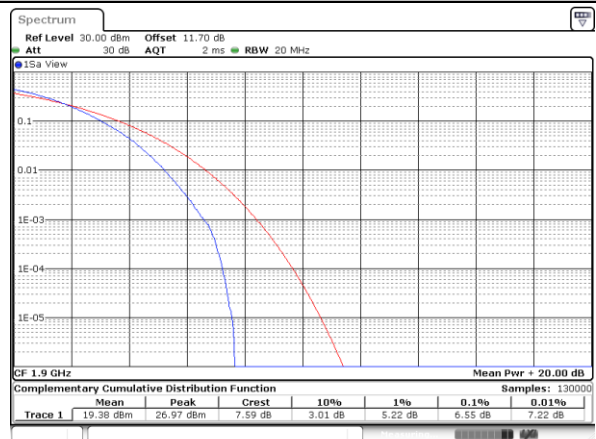
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



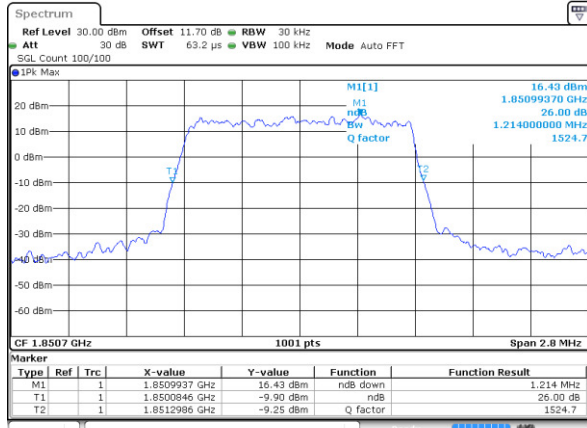
**26dB Bandwidth**

| Mode       | LTE Band 2 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.21                      | 1.25  | 3.00  | 3.05  | 4.96  | 4.90  | 9.75  | 9.81  | 14.30 | 14.30 | 20.22 | 20.22 |
| Middle CH  | 1.24                      | 1.23  | 2.99  | 3.03  | 4.91  | 4.92  | 9.77  | 9.83  | 14.39 | 14.57 | 20.18 | 20.10 |
| Highest CH | 1.23                      | 1.24  | 3.03  | 2.96  | 4.92  | 4.88  | 9.75  | 9.69  | 14.66 | 14.18 | 20.10 | 20.34 |
| Mode       | LTE Band 2 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.22                      | -     | 3.03  | -     | 4.91  | -     | 9.99  | -     | 14.18 | -     | 19.98 | -     |
| Middle CH  | 1.22                      | -     | 3.00  | -     | 4.91  | -     | 9.69  | -     | 14.69 | -     | 20.06 | -     |
| Highest CH | 1.24                      | -     | 2.99  | -     | 4.92  | -     | 9.91  | -     | 14.30 | -     | 20.18 | -     |



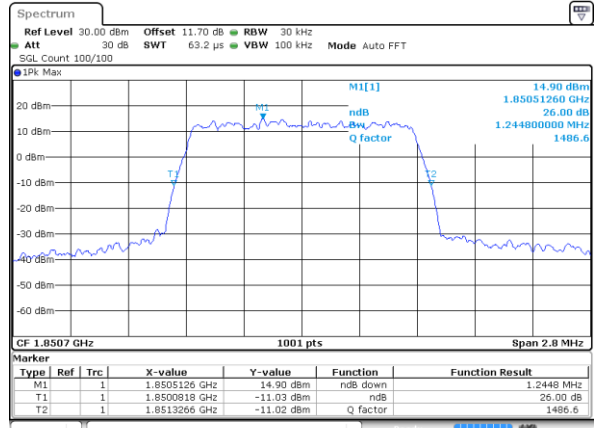
## LTE Band 2

## Lowest Channel / 1.4MHz / QPSK



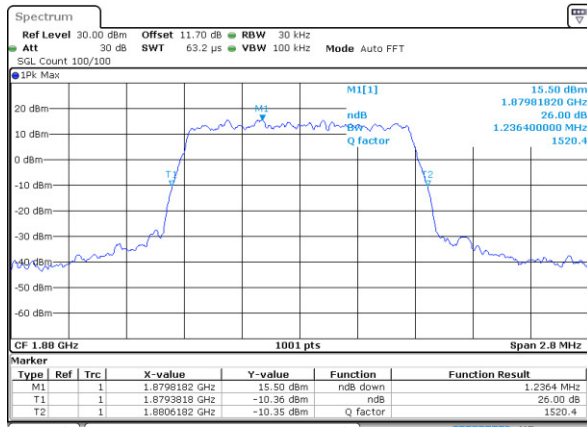
Date: 17 FEB 2018 02:27:48

## Lowest Channel / 1.4MHz / 16QAM



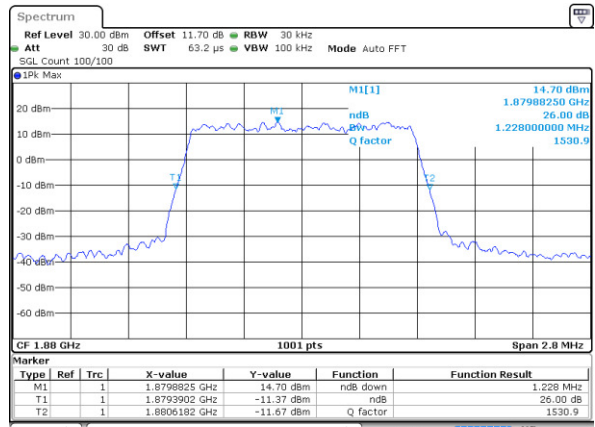
Date: 17 FEB 2018 02:27:58

## Middle Channel / 1.4MHz / QPSK



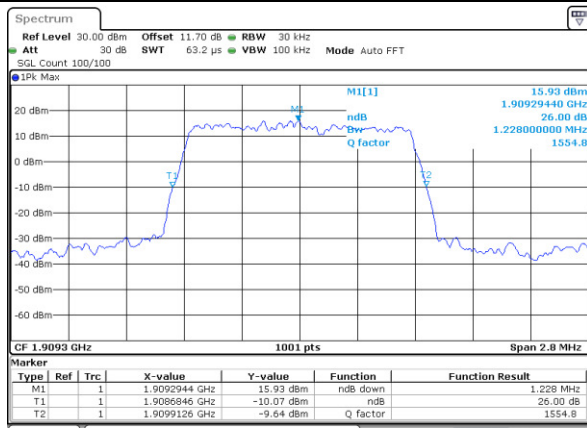
Date: 17 FEB 2018 02:34:44

## Middle Channel / 1.4MHz / 16QAM



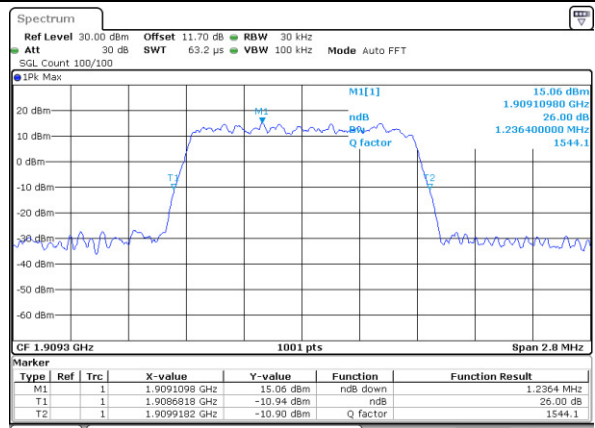
Date: 17 FEB 2018 02:34:54

## Highest Channel / 1.4MHz / QPSK



Date: 17 FEB 2018 02:37:11

## Highest Channel / 1.4MHz / 16QAM

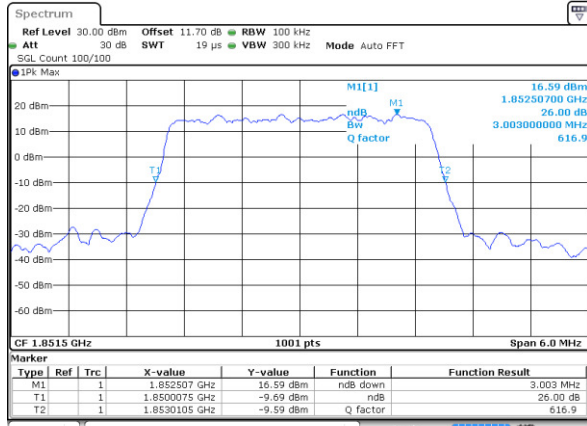


Date: 17 FEB 2018 02:37:21



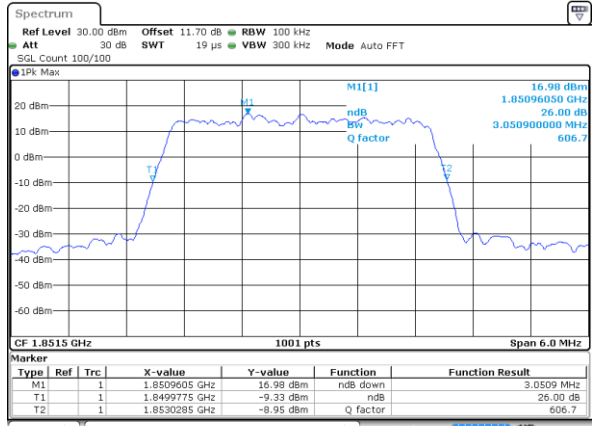
## LTE Band 2

## Lowest Channel / 3MHz / QPSK



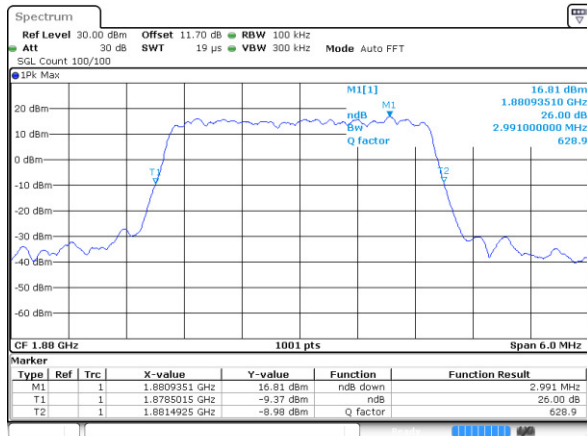
Date: 17 FEB 2018 00:17:16

## Lowest Channel / 3MHz / 16QAM



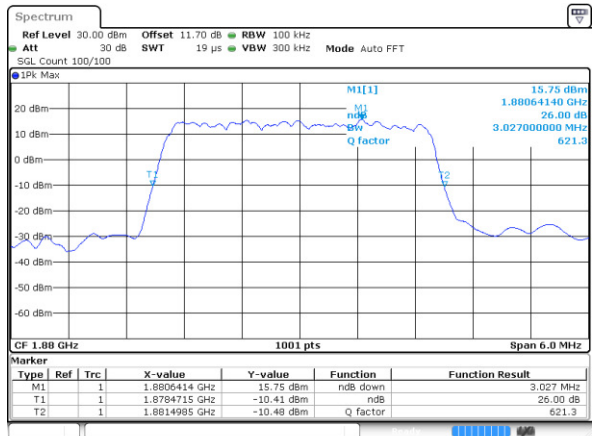
Date: 17 FEB 2018 00:17:25

## Middle Channel / 3MHz / QPSK



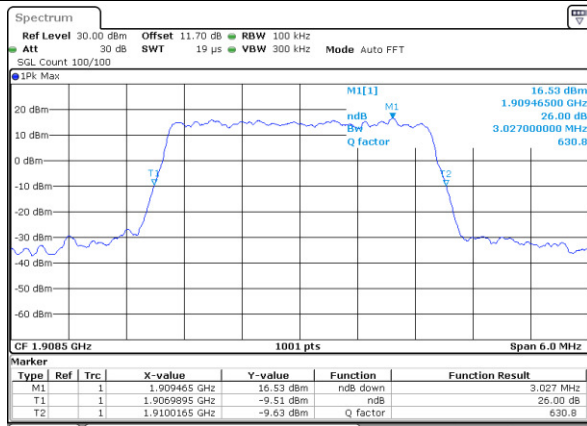
Date: 17 FEB 2018 00:24:12

## Middle Channel / 3MHz / 16QAM



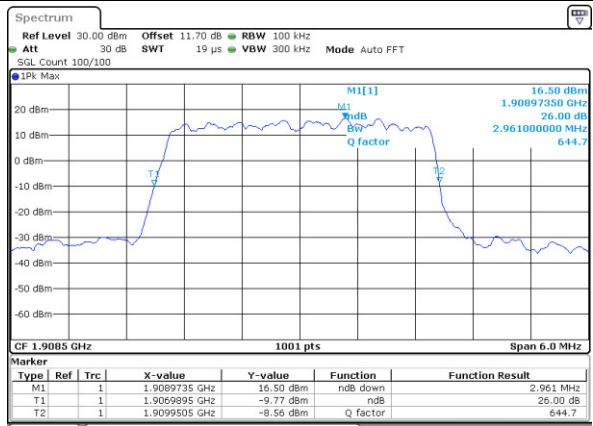
Date: 17 FEB 2018 00:24:22

## Highest Channel / 3MHz / QPSK



Date: 17 FEB 2018 00:26:39

## Highest Channel / 3MHz / 16QAM

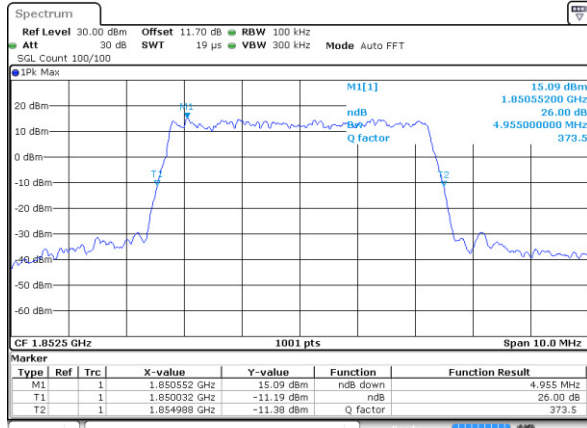


Date: 17 FEB 2018 00:26:49



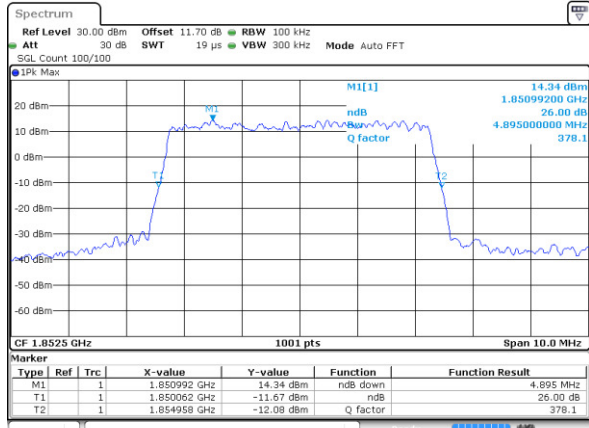
## LTE Band 2

## Lowest Channel / 5MHz / QPSK



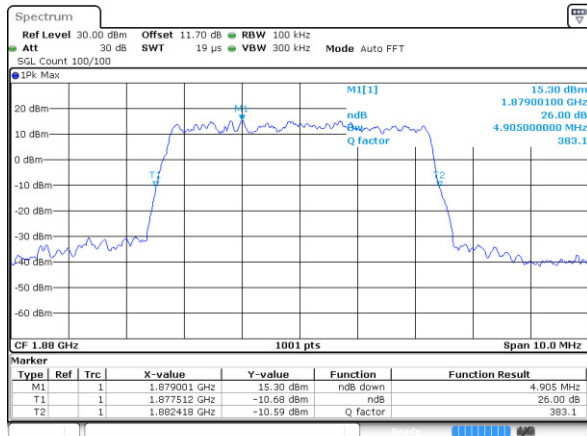
Date: 17 FEB 2018 00:33:35

## Lowest Channel / 5MHz / 16QAM



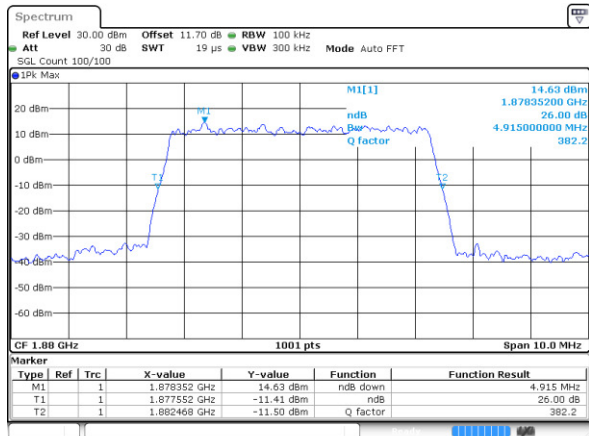
Date: 17 FEB 2018 00:33:45

## Middle Channel / 5MHz / QPSK



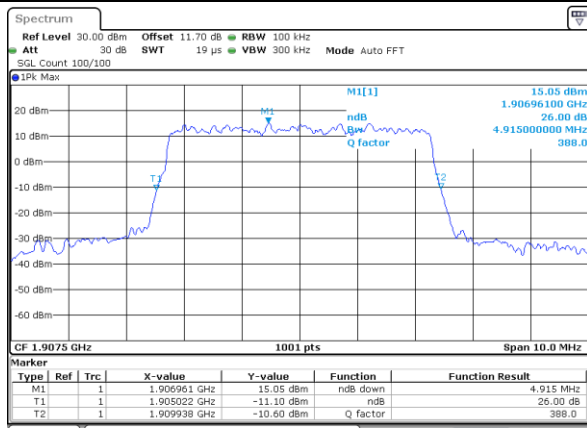
Date: 17 FEB 2018 00:40:31

## Middle Channel / 5MHz / 16QAM



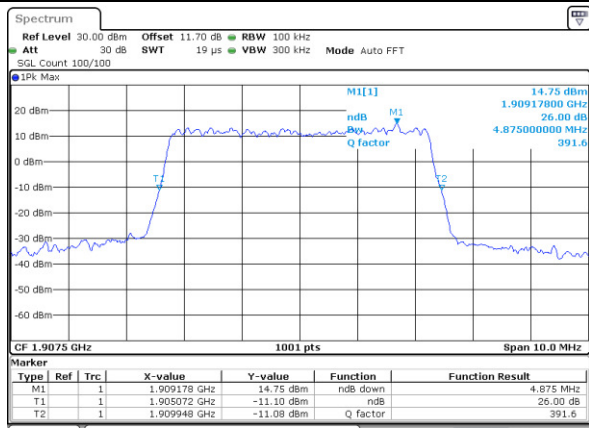
Date: 17 FEB 2018 00:40:41

## Highest Channel / 5MHz / QPSK



Date: 17 FEB 2018 00:42:58

## Highest Channel / 5MHz / 16QAM

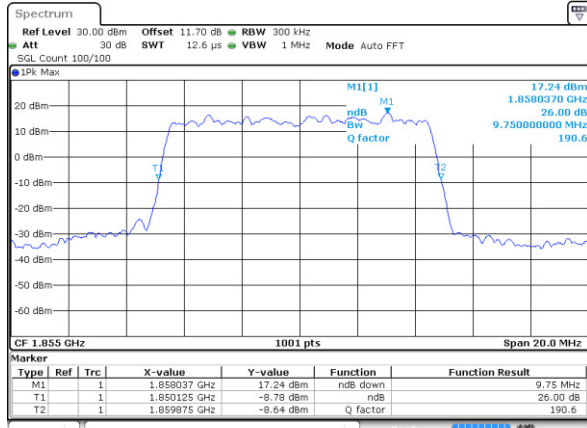


Date: 17 FEB 2018 00:43:08



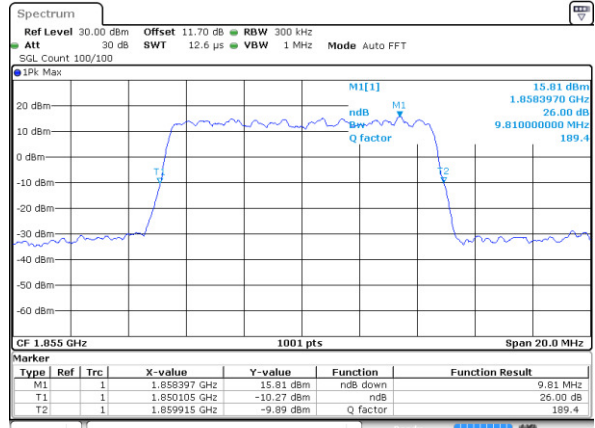
## LTE Band 2

## Lowest Channel / 10MHz / QPSK



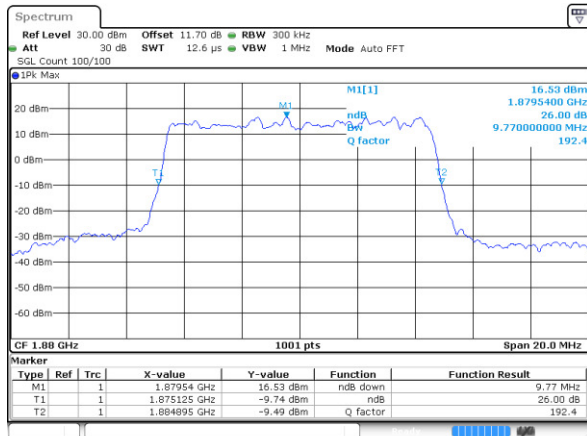
Date: 17 FEB 2018 00:49:54

## Lowest Channel / 10MHz / 16QAM



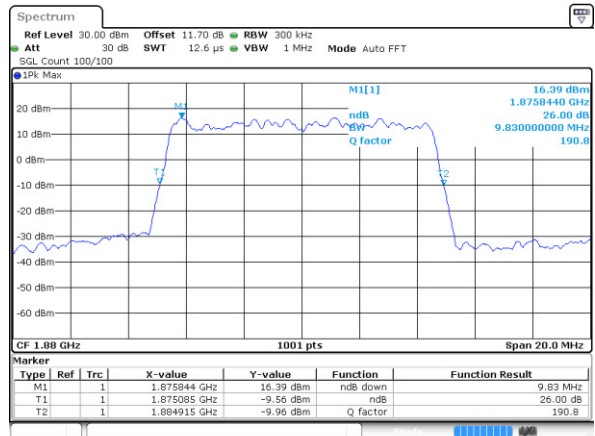
Date: 17 FEB 2018 00:50:04

## Middle Channel / 10MHz / QPSK



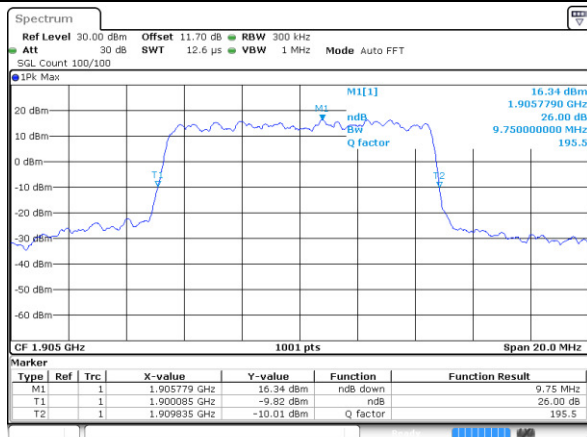
Date: 17 FEB 2018 00:56:50

## Middle Channel / 10MHz / 16QAM



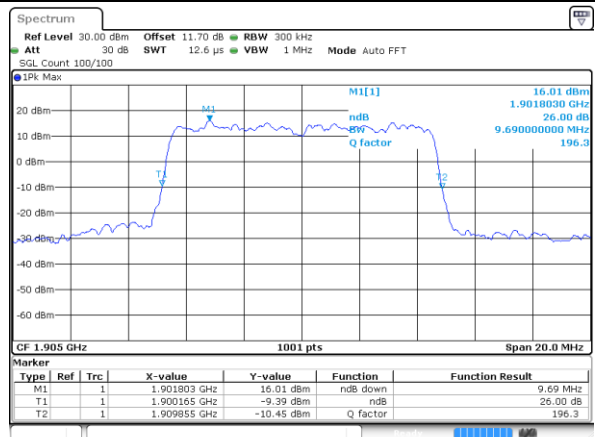
Date: 17 FEB 2018 00:57:00

## Highest Channel / 10MHz / QPSK



Date: 17 FEB 2018 00:59:17

## Highest Channel / 10MHz / 16QAM

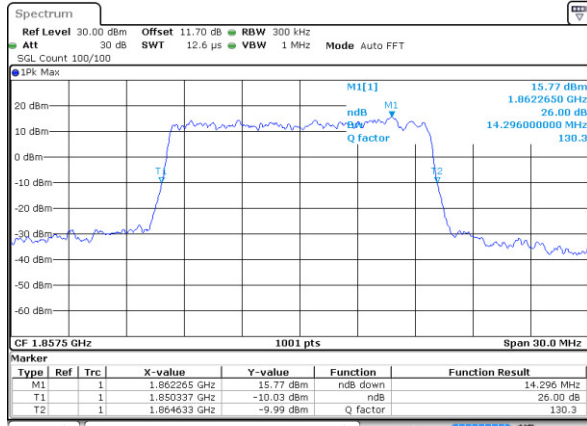


Date: 17 FEB 2018 00:59:27



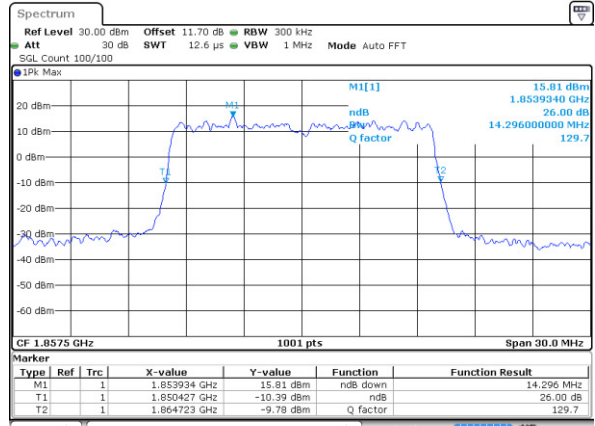
## LTE Band 2

## Lowest Channel / 15MHz / QPSK



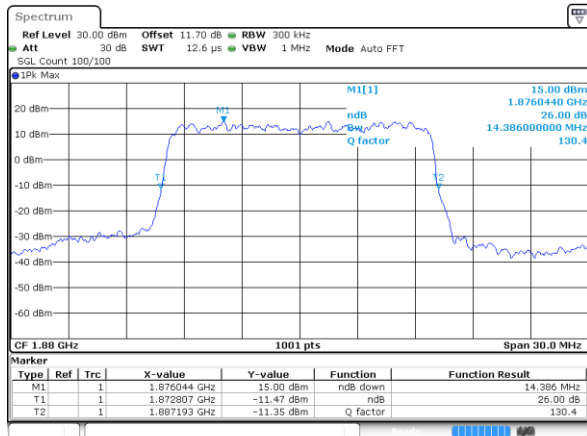
Date: 17 FEB 2018 01:06:13

## Lowest Channel / 15MHz / 16QAM



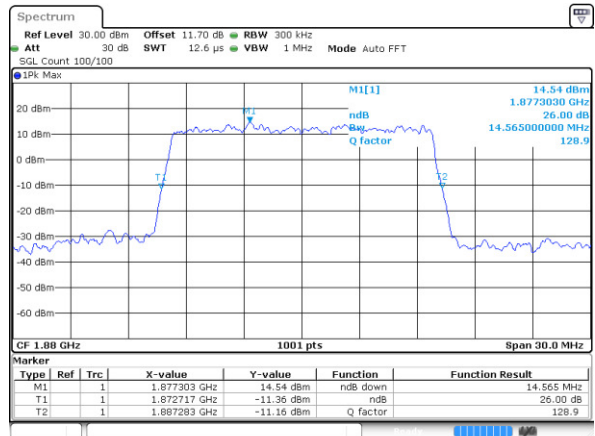
Date: 17 FEB 2018 01:06:23

## Middle Channel / 15MHz / QPSK



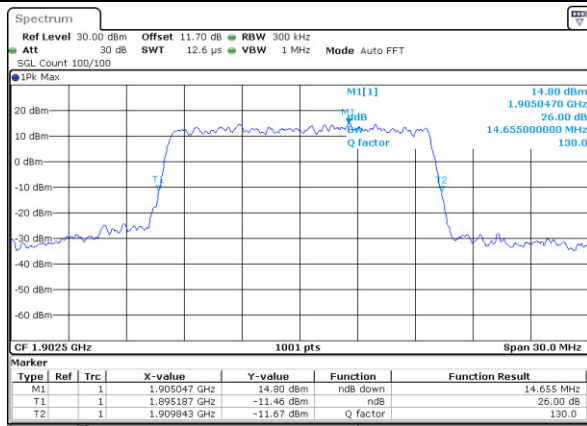
Date: 17 FEB 2018 01:13:09

## Middle Channel / 15MHz / 16QAM



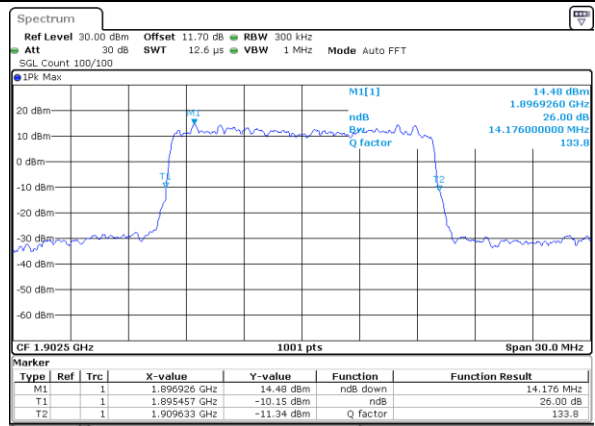
Date: 17 FEB 2018 01:13:19

## Highest Channel / 15MHz / QPSK



Date: 17 FEB 2018 01:15:36

## Highest Channel / 15MHz / 16QAM

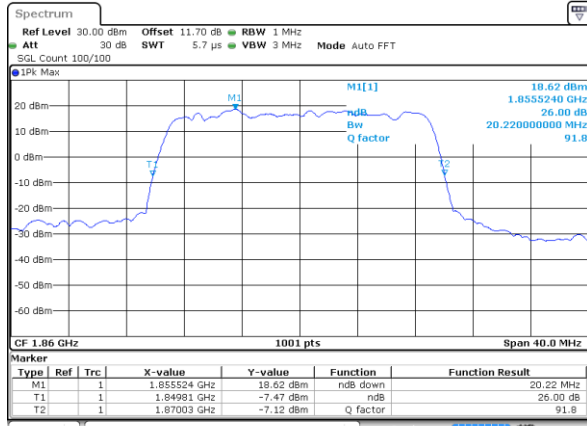


Date: 17 FEB 2018 01:15:46

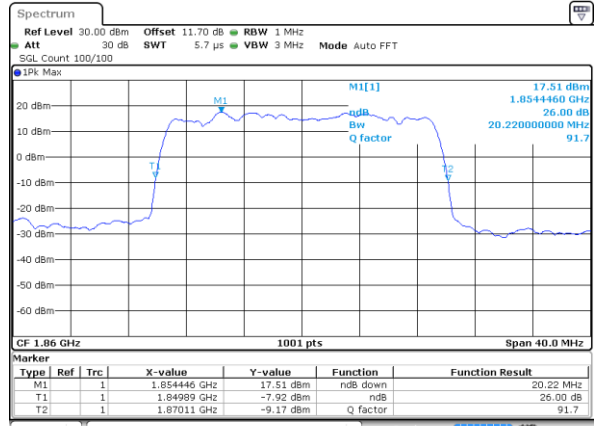


## LTE Band 2

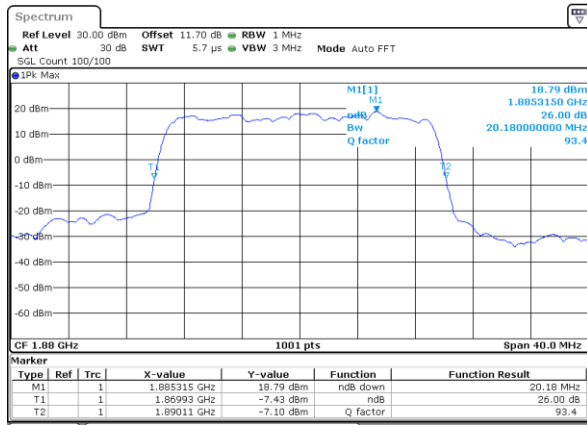
## Lowest Channel / 20MHz / QPSK



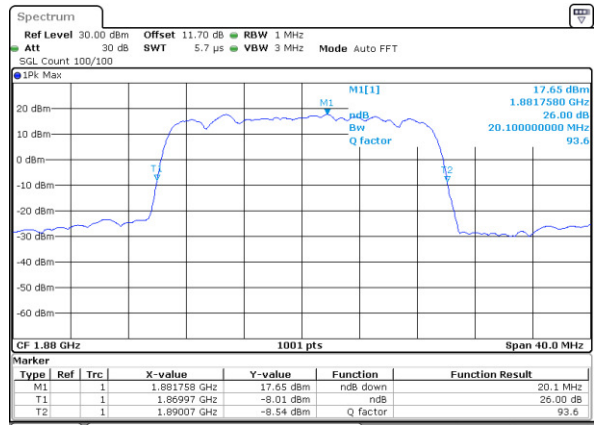
## Lowest Channel / 20MHz / 16QAM



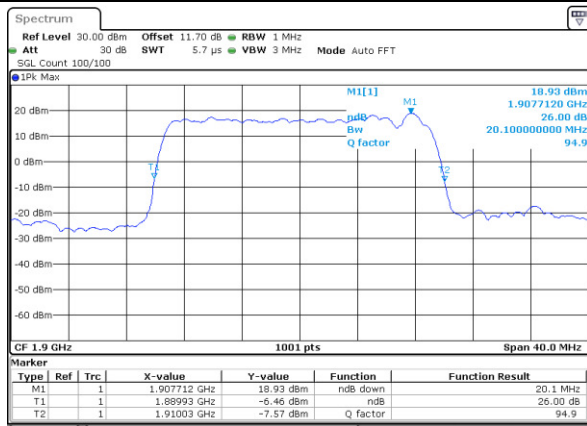
## Middle Channel / 20MHz / QPSK



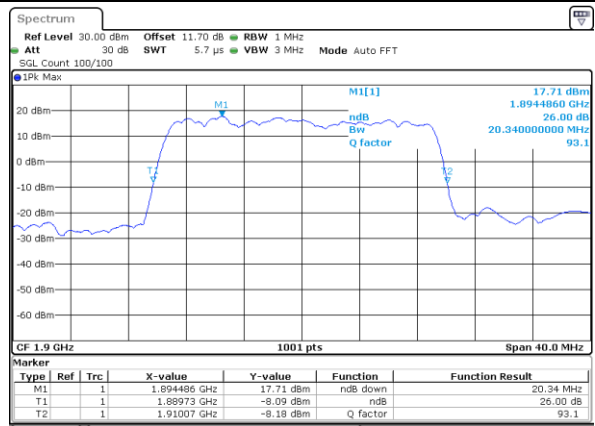
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



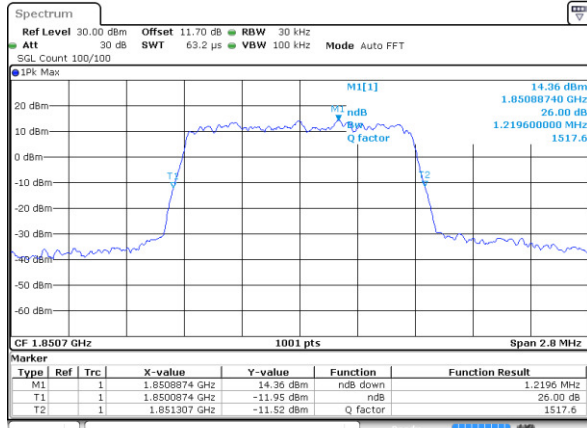
## Highest Channel / 20MHz / 16QAM





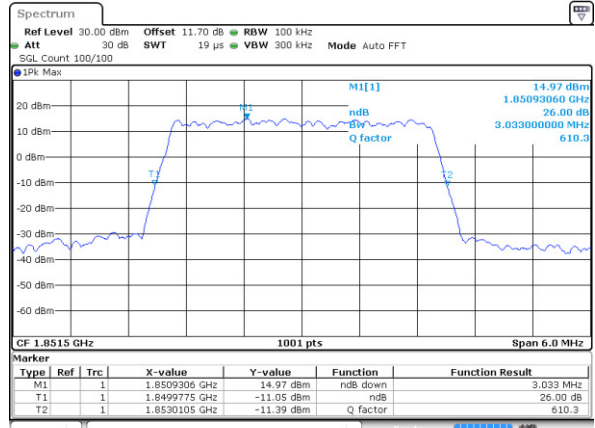
## LTE Band 2

## Lowest Channel / 1.4MHz / 64QAM



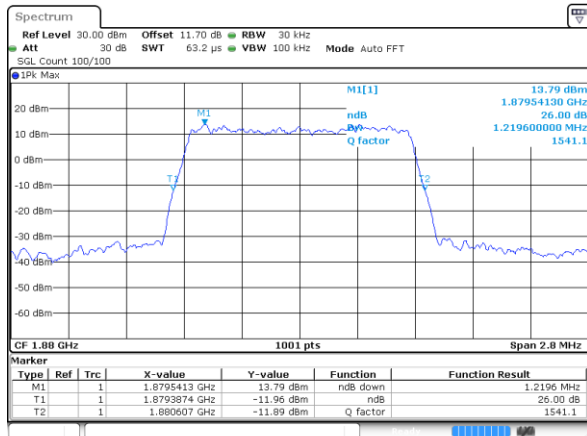
Date: 17 FEB 2018 02:19:29

## Lowest Channel / 3MHz / 64QAM



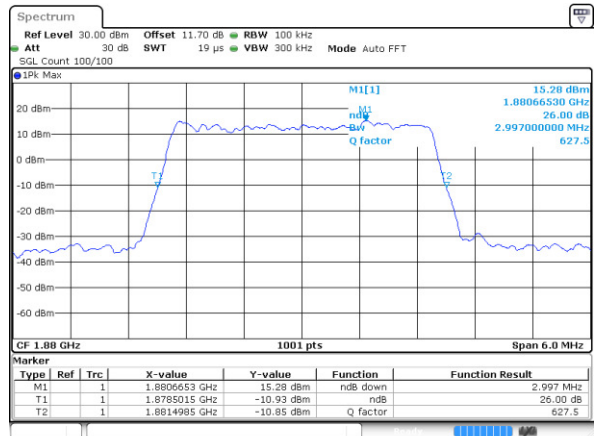
Date: 17 FEB 2018 01:38:41

## Middle Channel / 1.4MHz / 64QAM



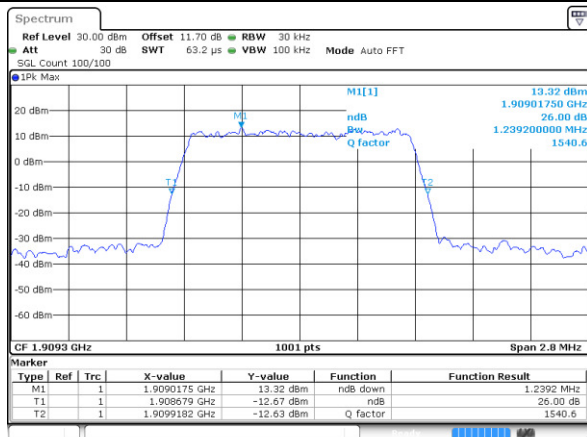
Date: 17 FEB 2018 02:22:57

## Middle Channel / 3MHz / 64QAM



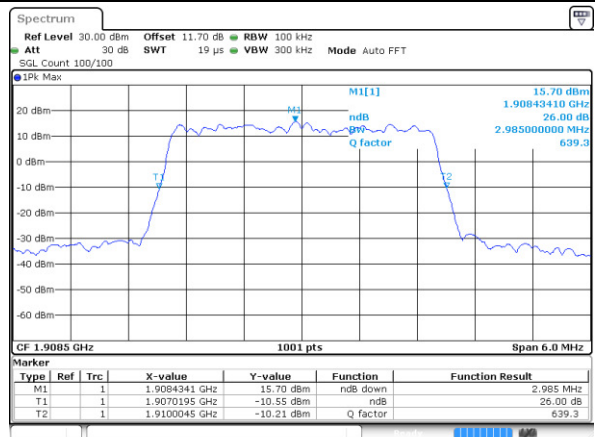
Date: 17 FEB 2018 01:42:09

## Highest Channel / 1.4MHz / 64QAM



Date: 17 FEB 2018 02:24:11

## Highest Channel / 3MHz / 64QAM

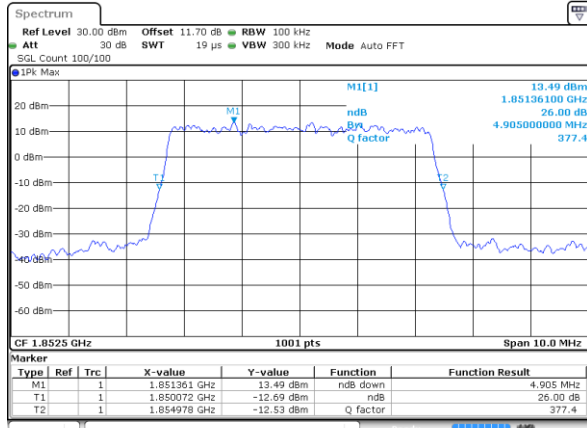


Date: 17 FEB 2018 01:43:23



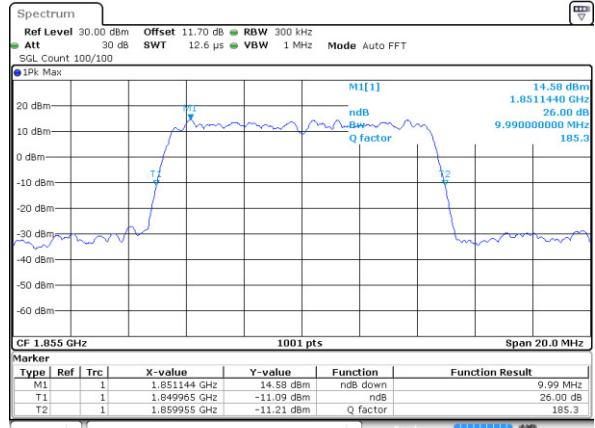
## LTE Band 2

## Lowest Channel / 5MHz / 64QAM



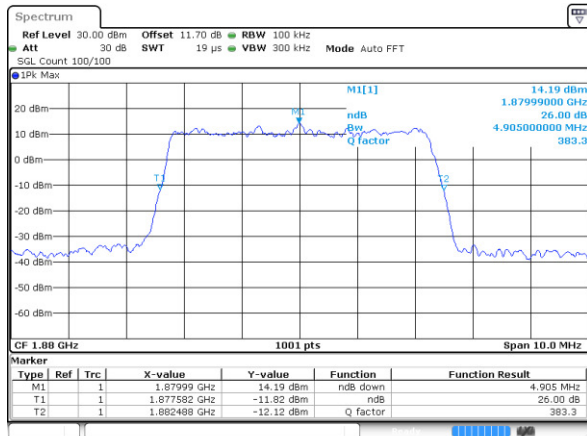
Date: 17 FEB 2018 01:46:51

## Lowest Channel / 10MHz / 64QAM



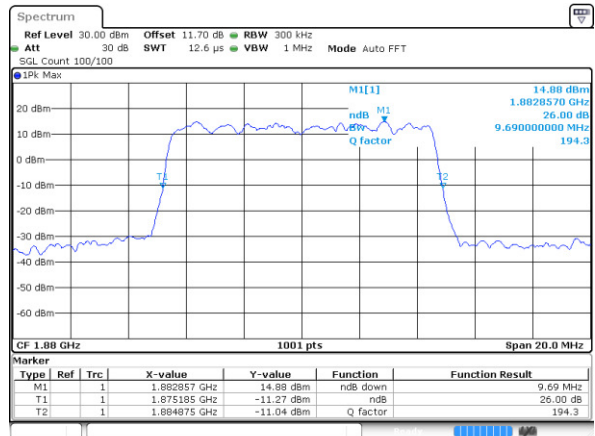
Date: 17 FEB 2018 01:55:00

## Middle Channel / 5MHz / 64QAM



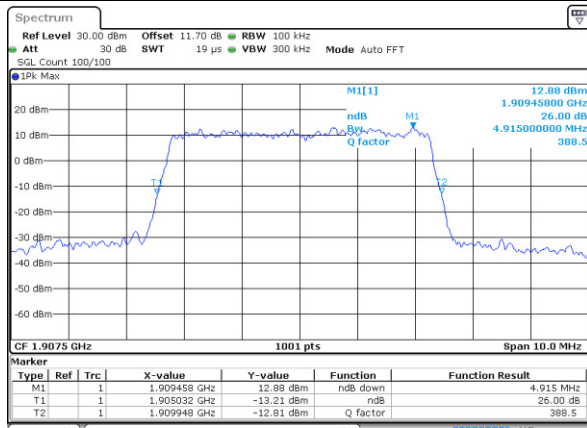
Date: 17 FEB 2018 01:50:19

## Middle Channel / 10MHz / 64QAM



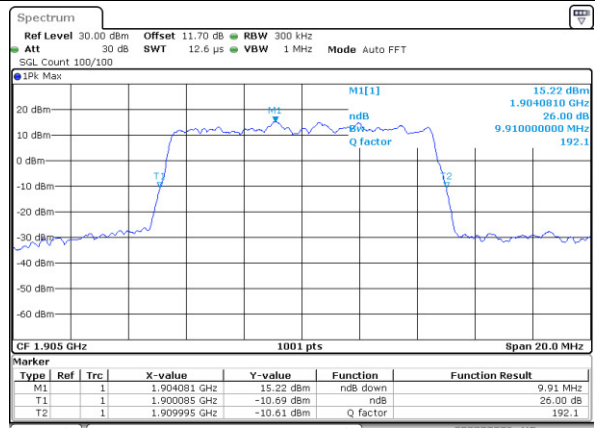
Date: 17 FEB 2018 01:56:28

## Highest Channel / 5MHz / 64QAM



Date: 17 FEB 2018 01:51:32

## Highest Channel / 10MHz / 64QAM

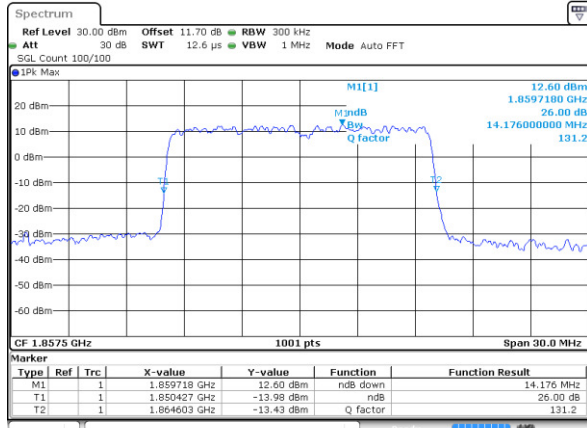


Date: 17 FEB 2018 01:59:42



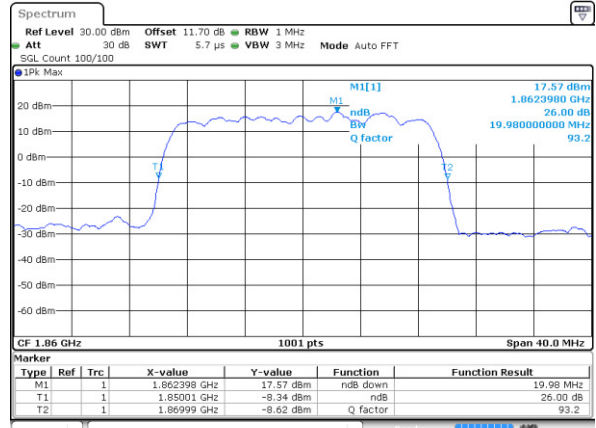
## LTE Band 2

## Lowest Channel / 15MHz / 64QAM



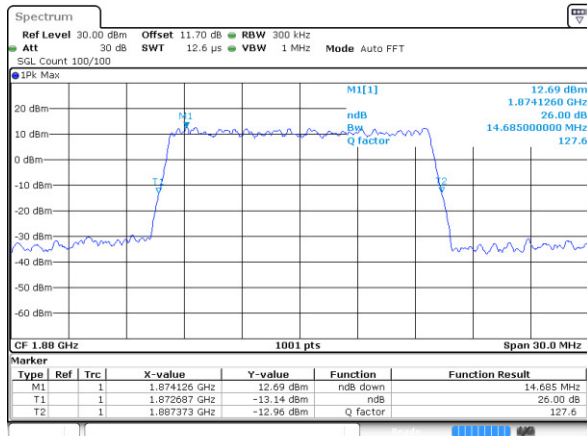
Date: 17 FEB 2018 02:03:10

## Lowest Channel / 20MHz / 64QAM



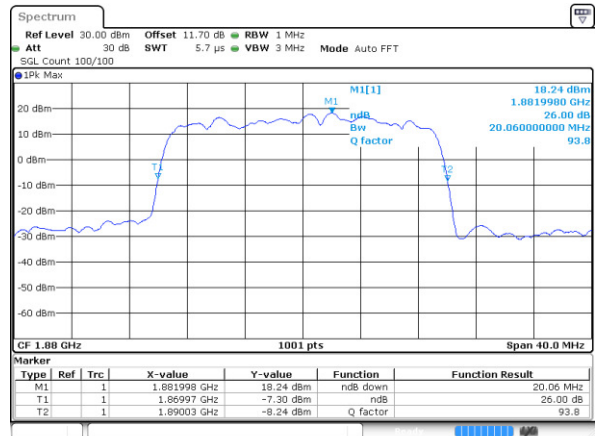
Date: 17 FEB 2018 02:11:20

## Middle Channel / 15MHz / 64QAM



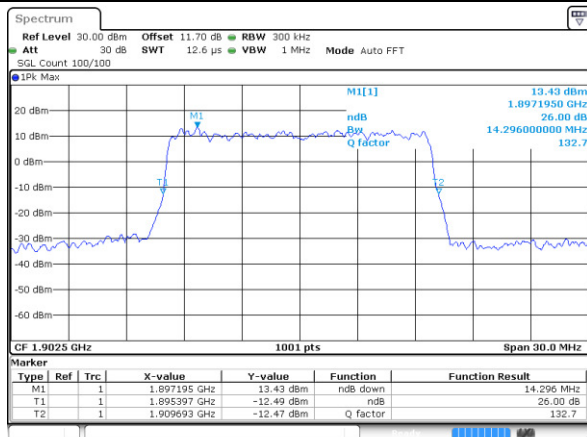
Date: 17 FEB 2018 02:06:38

## Middle Channel / 20MHz / 64QAM



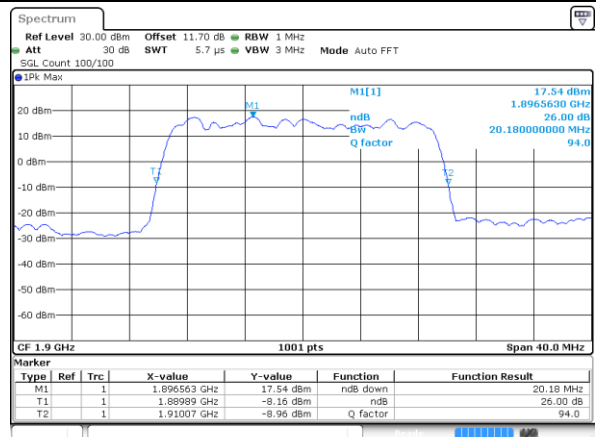
Date: 17 FEB 2018 02:14:48

## Highest Channel / 15MHz / 64QAM



Date: 17 FEB 2018 02:07:51

## Highest Channel / 20MHz / 64QAM



Date: 17 FEB 2018 02:16:01

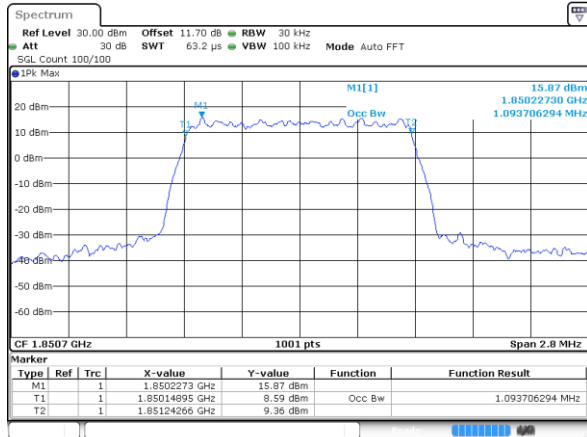
**Occupied Bandwidth**

| Mode       | LTE Band 2 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                     | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.09                     | 1.1   | 2.73  | 2.7   | 4.47  | 4.48  | 9.07  | 8.99  | 13.4  | 13.46 | 18.42 | 18.34 |
| Middle CH  | 1.09                     | 1.09  | 2.72  | 2.71  | 4.48  | 4.49  | 9.07  | 9.01  | 13.43 | 13.43 | 18.46 | 18.38 |
| Highest CH | 1.09                     | 1.1   | 2.72  | 2.71  | 4.48  | 4.48  | 9.03  | 8.97  | 13.37 | 13.43 | 18.38 | 18.46 |
| Mode       | LTE Band 2 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                    |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.09                     | -     | 2.72  | -     | 4.50  | -     | 9.05  | -     | 13.40 | -     | 18.34 | -     |
| Middle CH  | 1.09                     | -     | 2.72  | -     | 4.49  | -     | 9.03  | -     | 13.46 | -     | 18.38 | -     |
| Highest CH | 1.08                     | -     | 2.72  | -     | 4.49  | -     | 8.97  | -     | 13.43 | -     | 18.42 | -     |

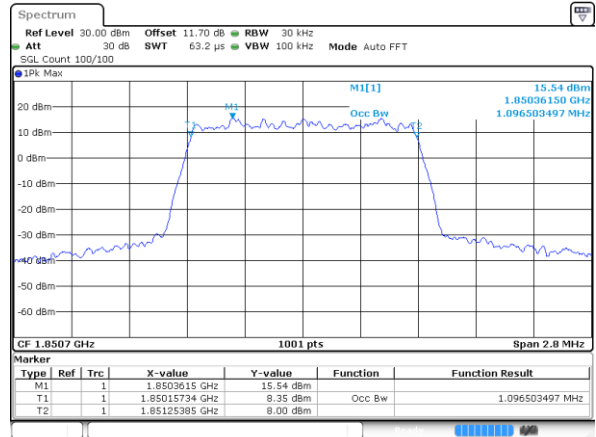


## LTE Band 2

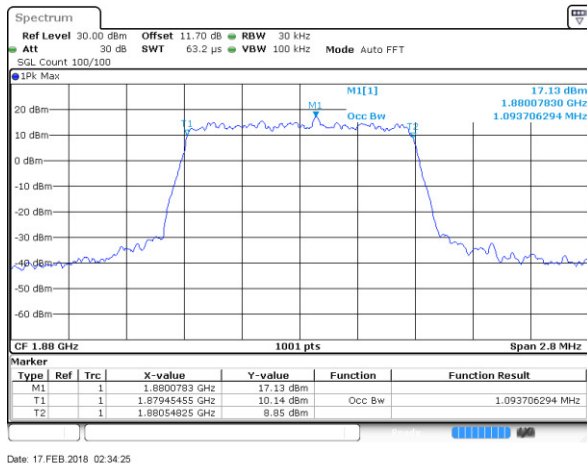
## Lowest Channel / 1.4MHz / QPSK



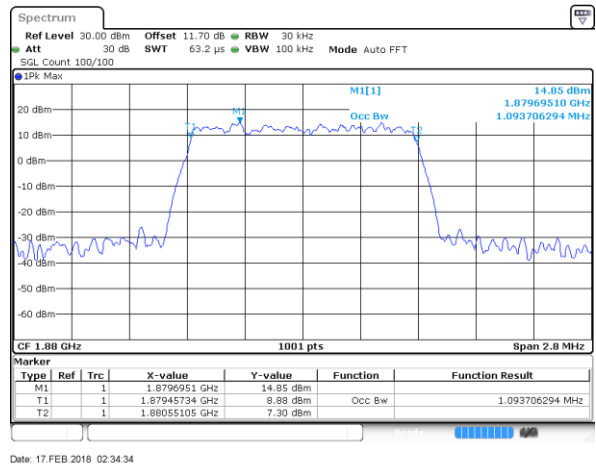
## Lowest Channel / 1.4MHz / 16QAM



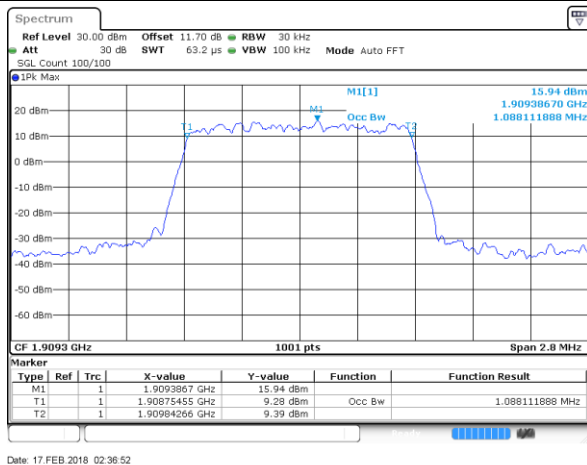
## Middle Channel / 1.4MHz / QPSK



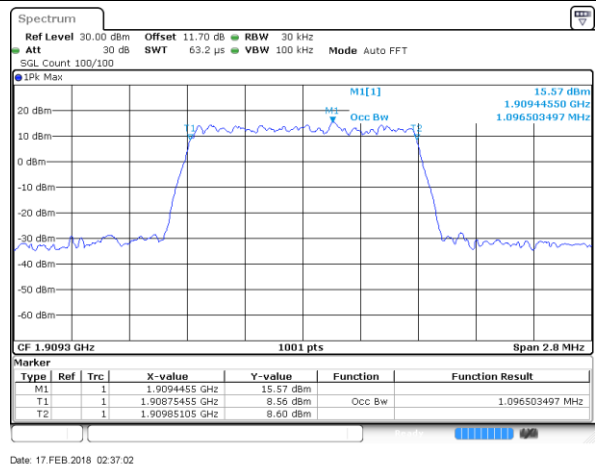
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



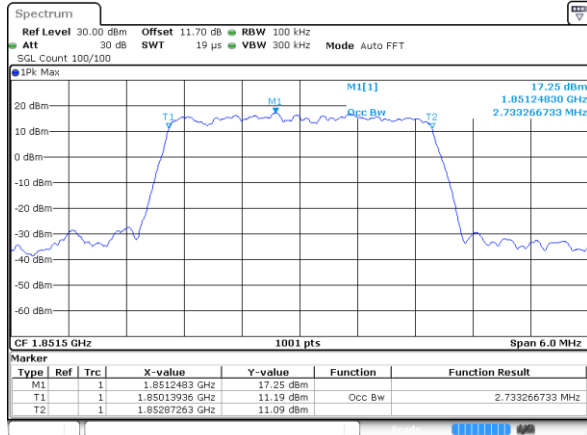
## Highest Channel / 1.4MHz / 16QAM





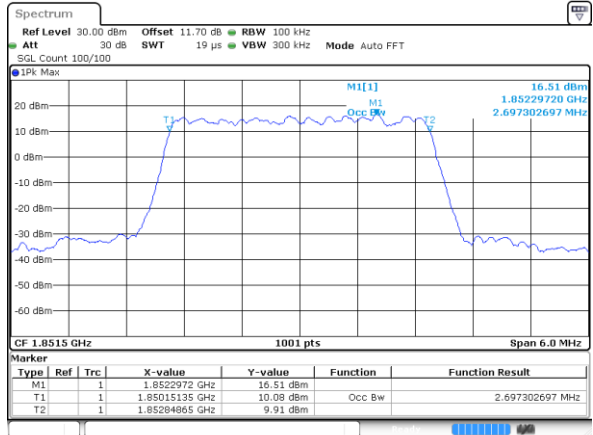
## LTE Band 2

## Lowest Channel / 3MHz / QPSK



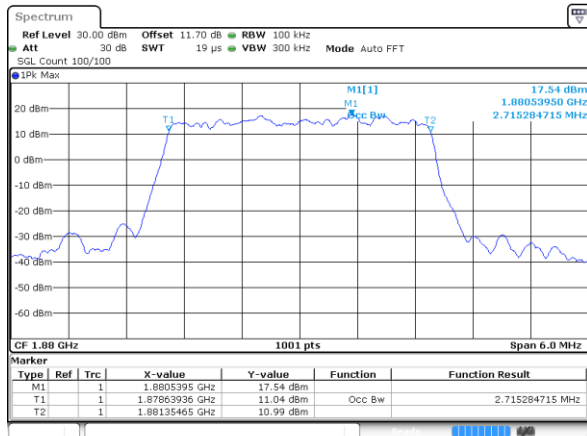
Date: 17 FEB 2018 00:16:56

## Lowest Channel / 3MHz / 16QAM



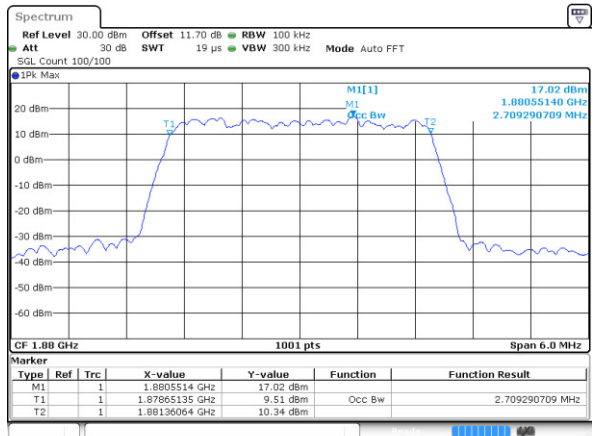
Date: 17 FEB 2018 00:17:06

## Middle Channel / 3MHz / QPSK



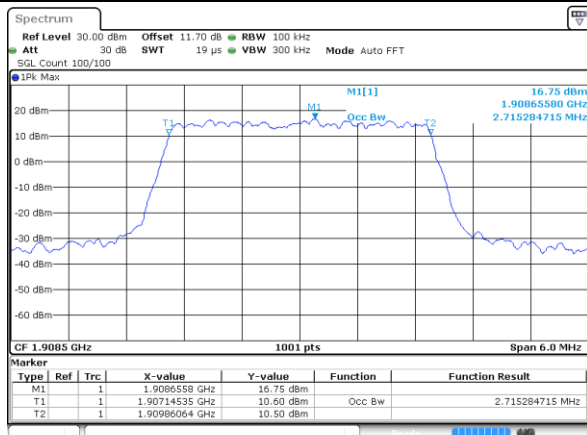
Date: 17 FEB 2018 00:23:52

## Middle Channel / 3MHz / 16QAM



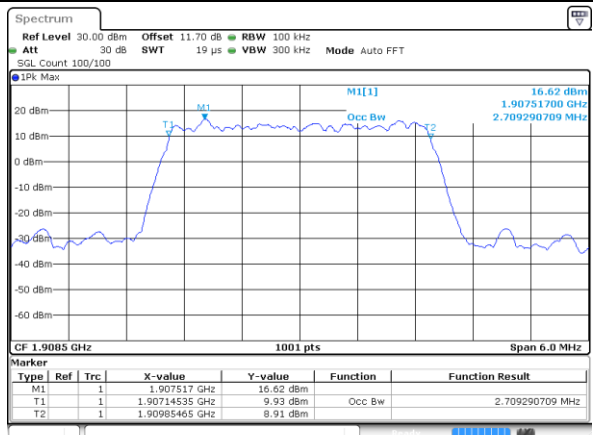
Date: 17 FEB 2018 00:24:02

## Highest Channel / 3MHz / QPSK



Date: 17 FEB 2018 00:26:19

## Highest Channel / 3MHz / 16QAM

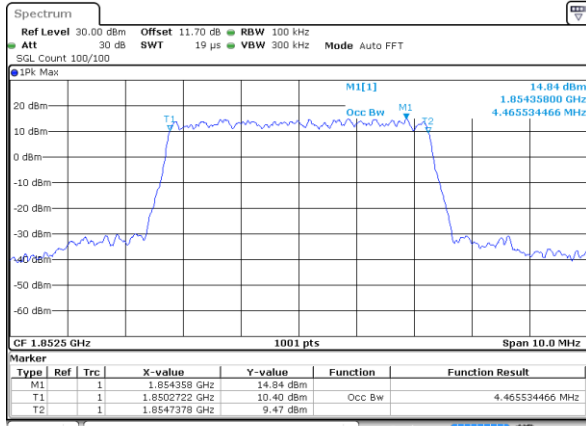


Date: 17 FEB 2018 00:26:29

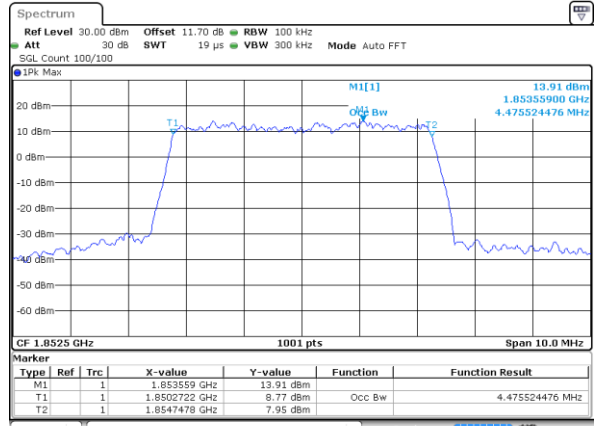


## LTE Band 2

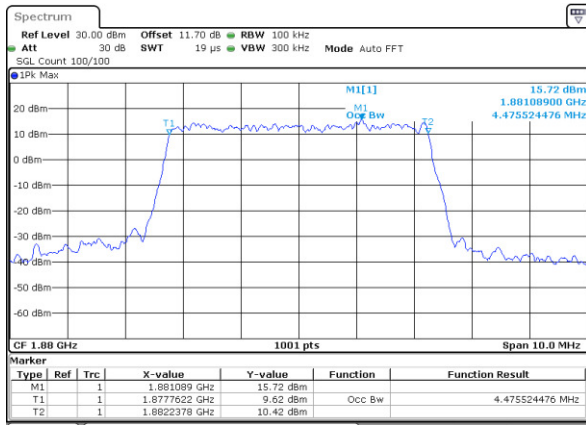
## Lowest Channel / 5MHz / QPSK



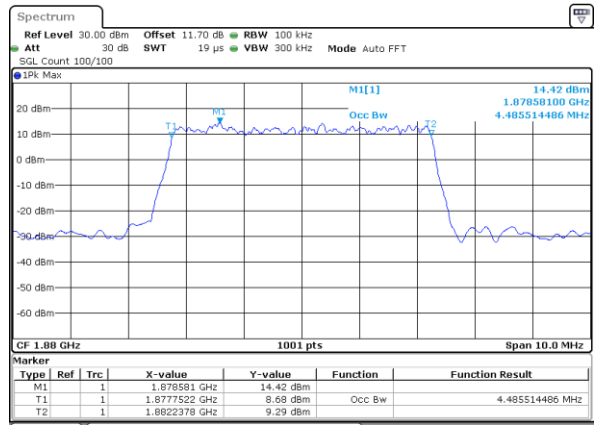
## Lowest Channel / 5MHz / 16QAM



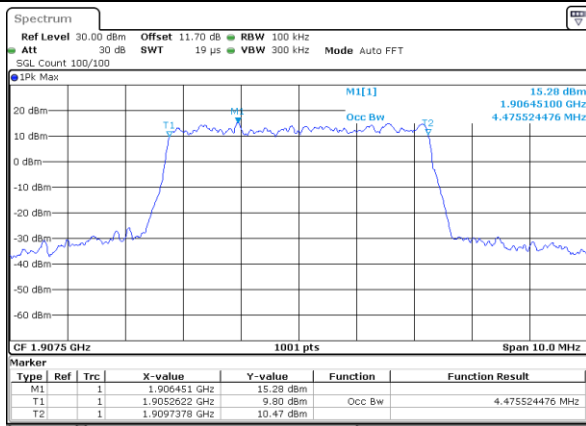
## Middle Channel / 5MHz / QPSK



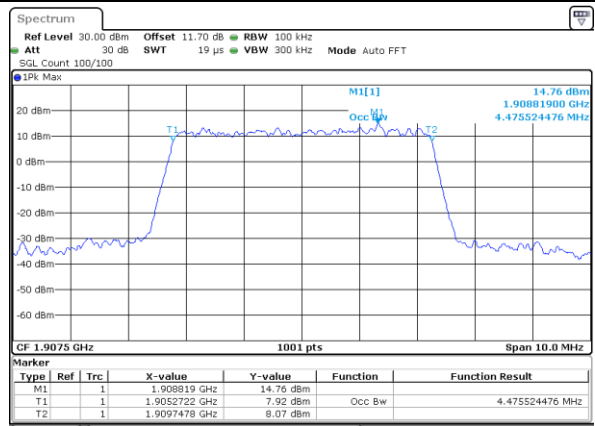
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



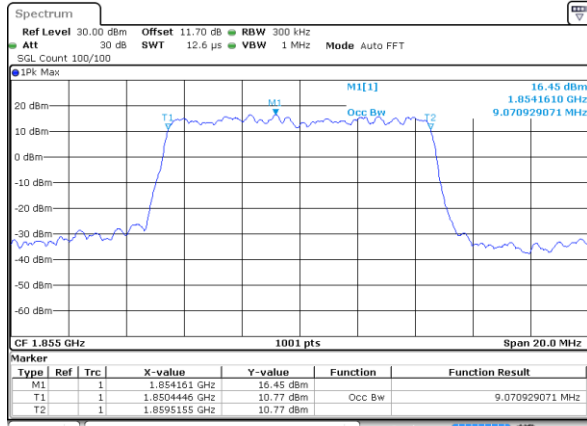
## Highest Channel / 5MHz / 16QAM





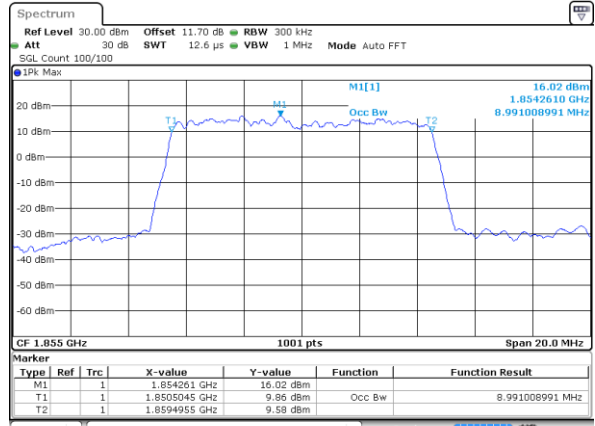
## LTE Band 2

## Lowest Channel / 10MHz / QPSK



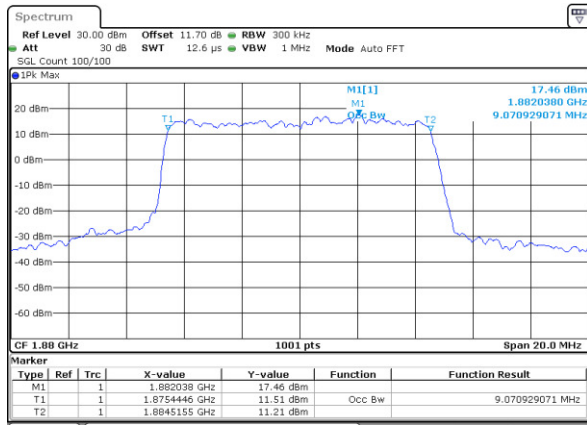
Date: 17 FEB 2018 00:49:34

## Lowest Channel / 10MHz / 16QAM



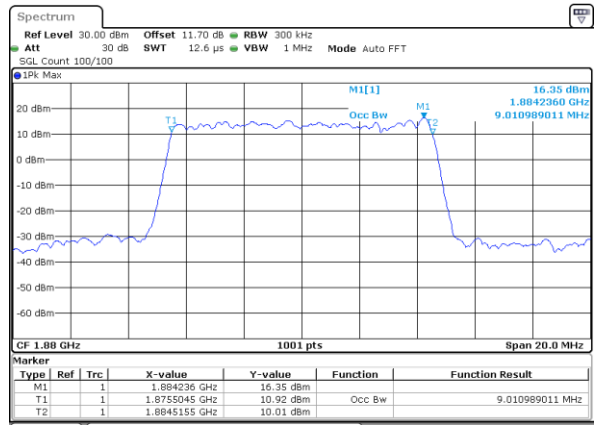
Date: 17 FEB 2018 00:49:44

## Middle Channel / 10MHz / QPSK



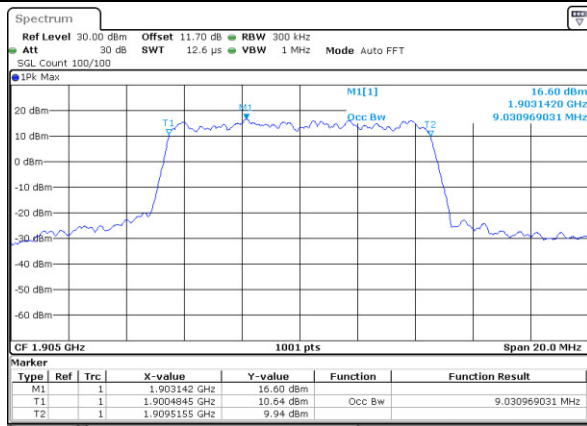
Date: 17 FEB 2018 00:56:30

## Middle Channel / 10MHz / 16QAM



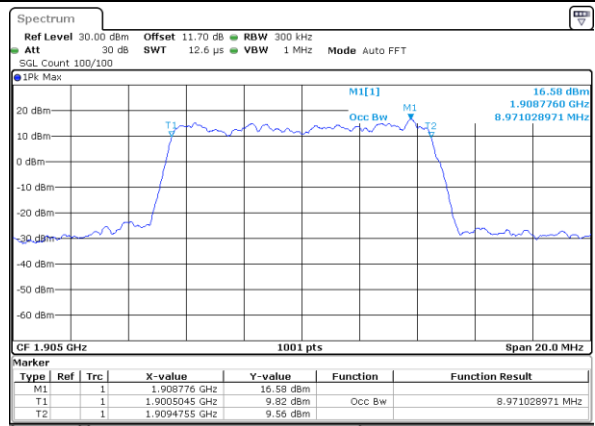
Date: 17 FEB 2018 00:56:40

## Highest Channel / 10MHz / QPSK



Date: 17 FEB 2018 00:58:57

## Highest Channel / 10MHz / 16QAM

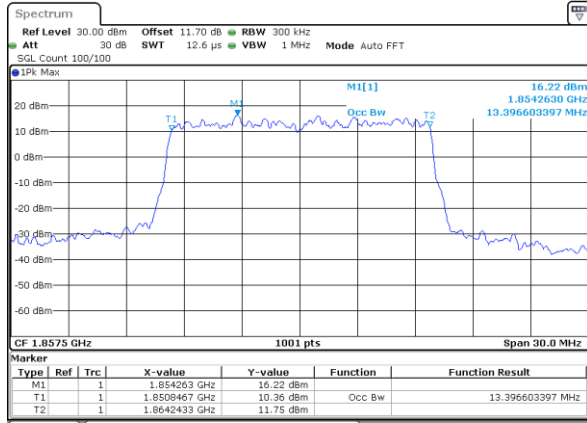


Date: 17 FEB 2018 00:59:07



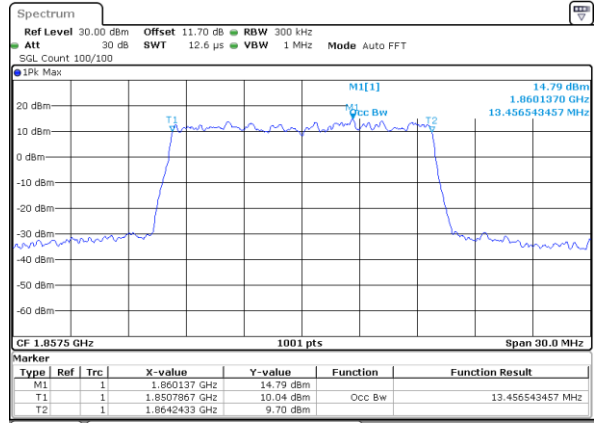
## LTE Band 2

## Lowest Channel / 15MHz / QPSK



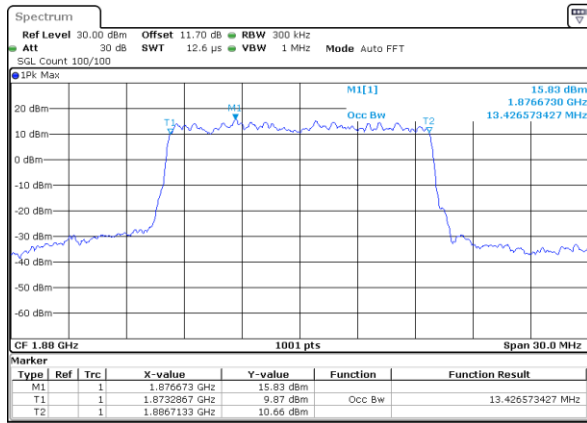
Date: 17 FEB 2018 01:05:53

## Lowest Channel / 15MHz / 16QAM



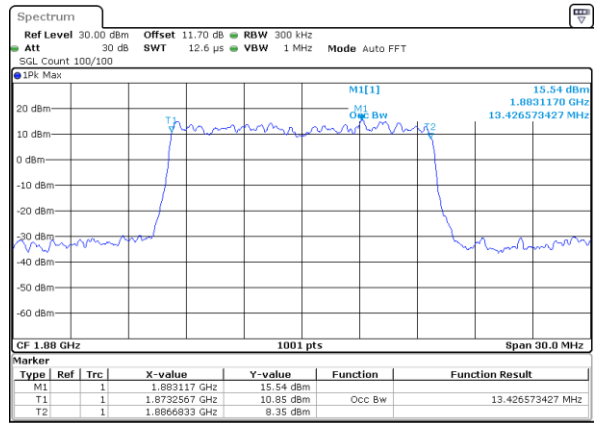
Date: 17 FEB 2018 01:06:03

## Middle Channel / 15MHz / QPSK



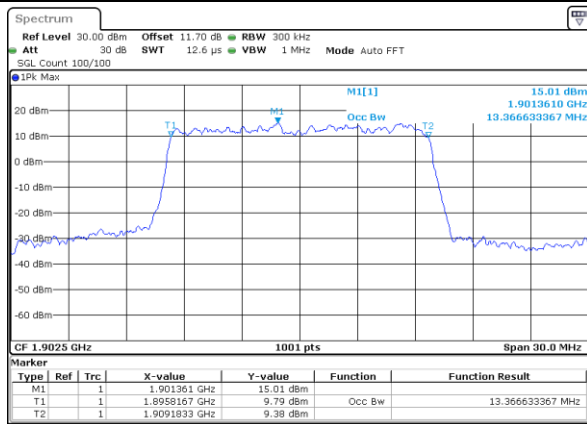
Date: 17 FEB 2018 01:12:49

## Middle Channel / 15MHz / 16QAM



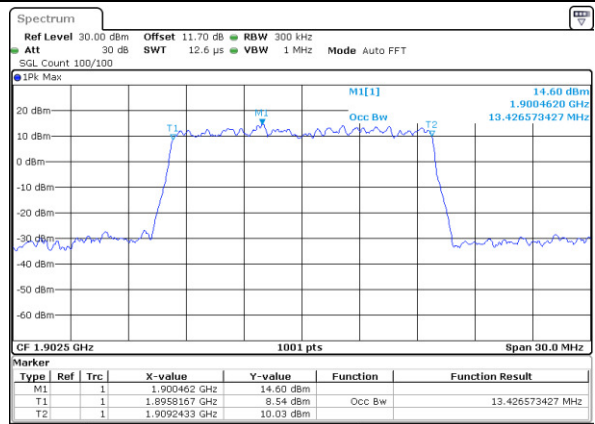
Date: 17 FEB 2018 01:12:59

## Highest Channel / 15MHz / QPSK



Date: 17 FEB 2018 01:15:16

## Highest Channel / 15MHz / 16QAM

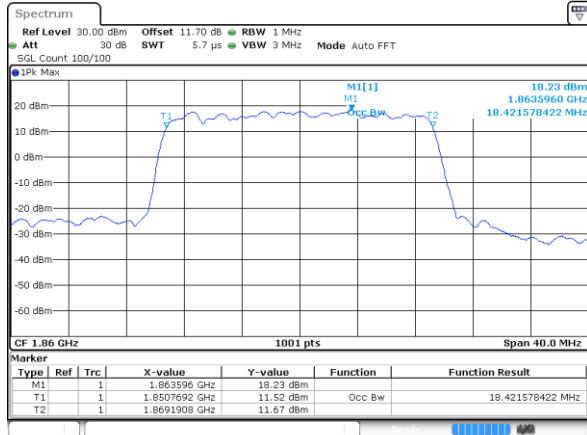


Date: 17 FEB 2018 01:15:26

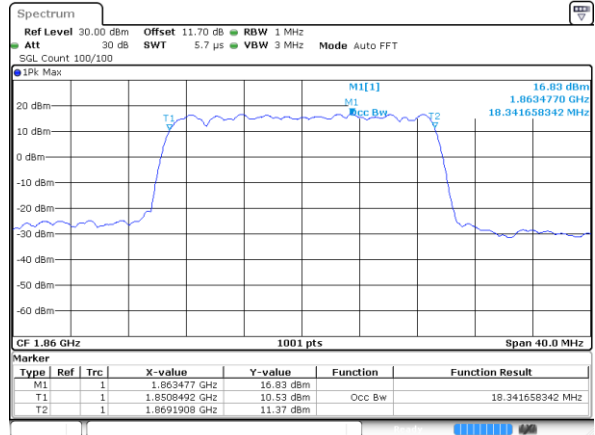


## LTE Band 2

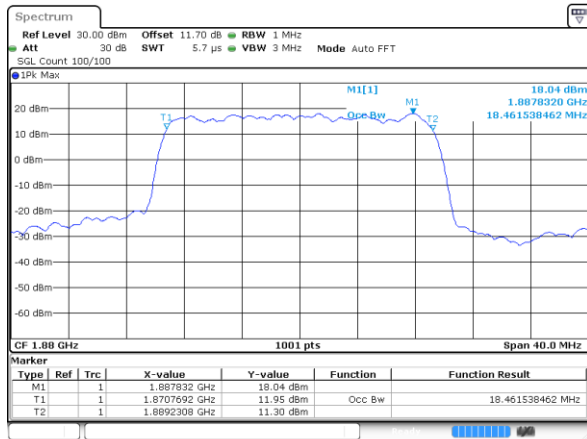
## Lowest Channel / 20MHz / QPSK



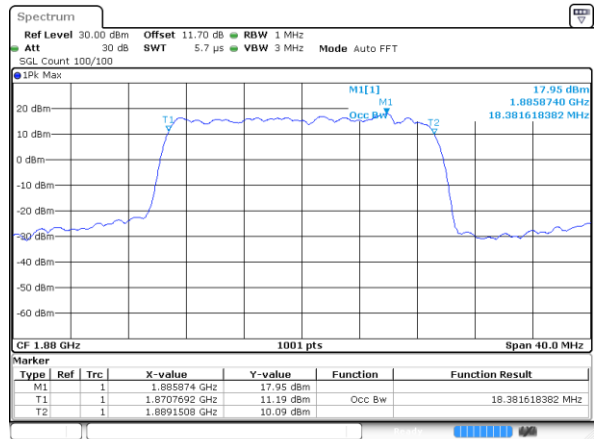
## Lowest Channel / 20MHz / 16QAM



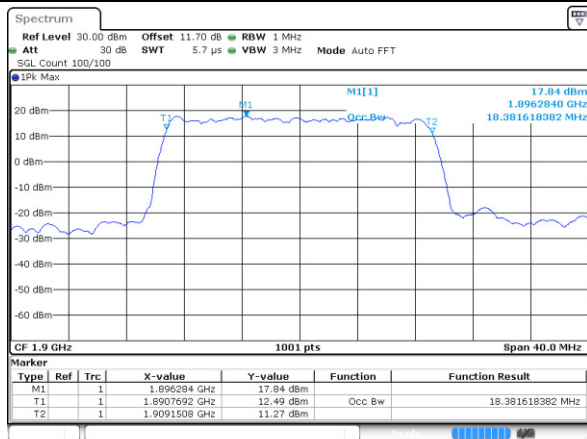
## Middle Channel / 20MHz / QPSK



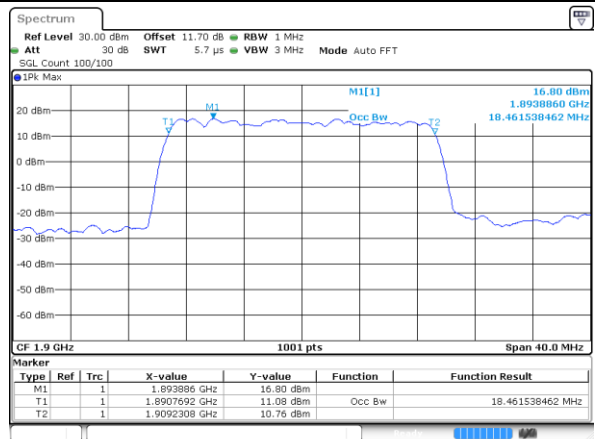
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



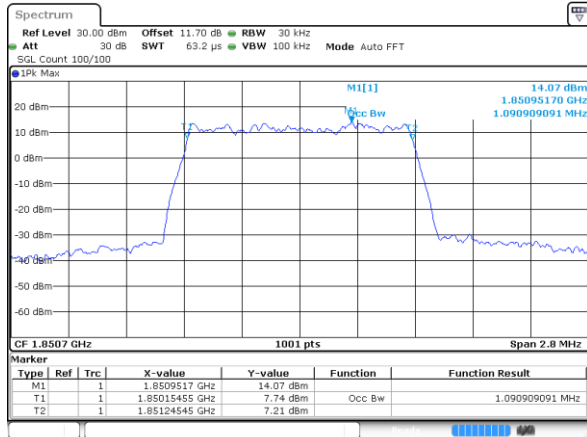
## Highest Channel / 20MHz / 16QAM



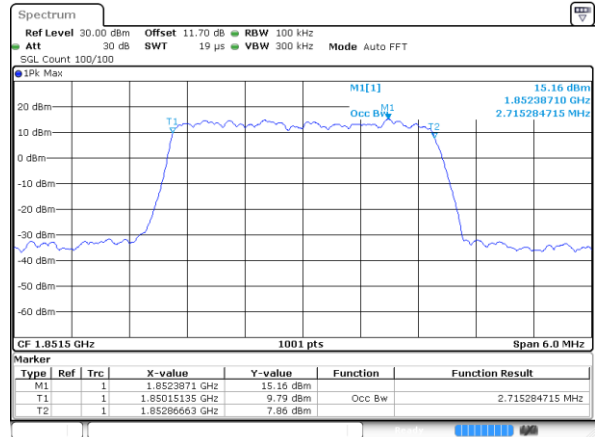


## LTE Band 2

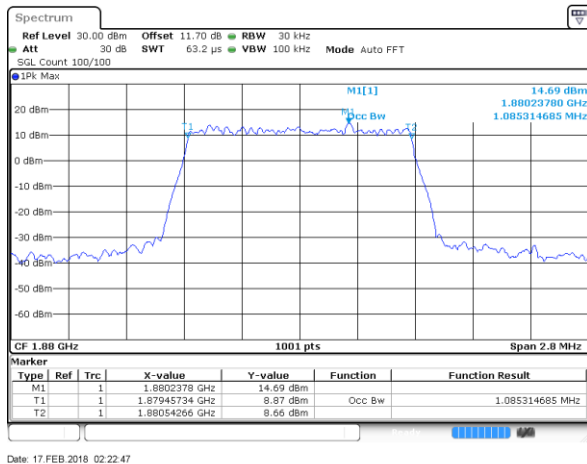
## Lowest Channel / 1.4MHz / 64QAM



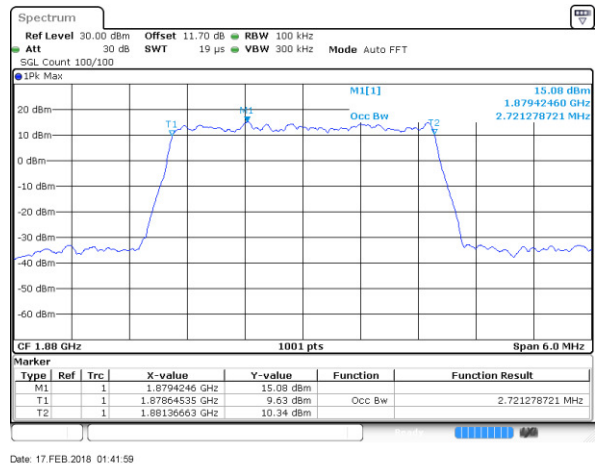
## Lowest Channel / 3MHz / 64QAM



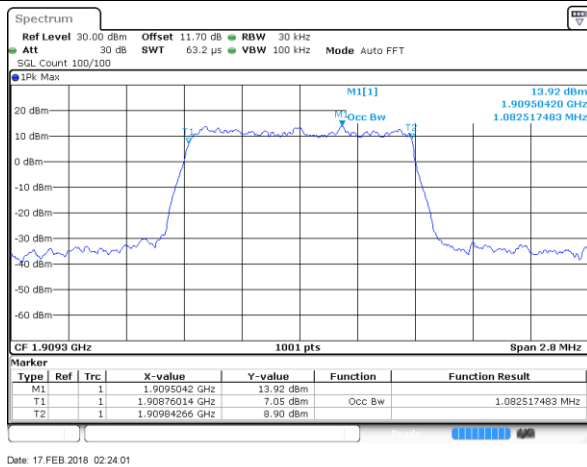
## Middle Channel / 1.4MHz / 64QAM



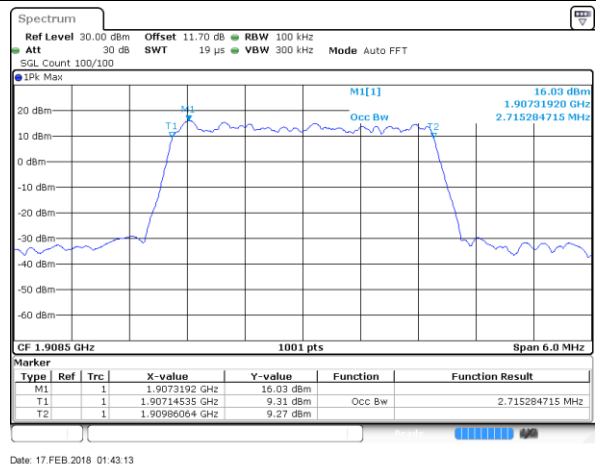
## Middle Channel / 3MHz / 64QAM



## Highest Channel / 1.4MHz / 64QAM



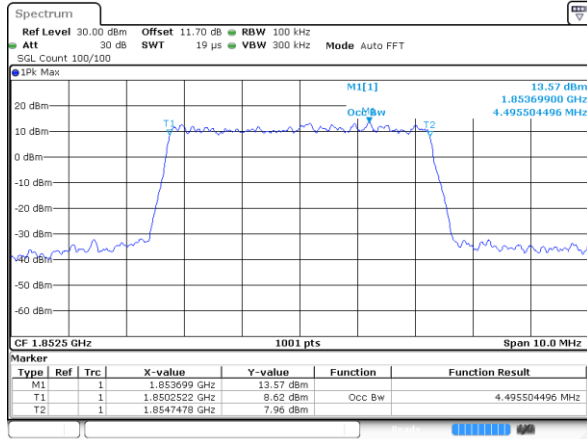
## Highest Channel / 3MHz / 64QAM



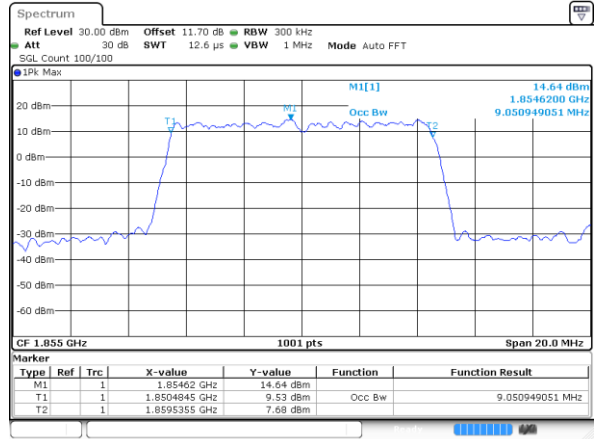


## LTE Band 2

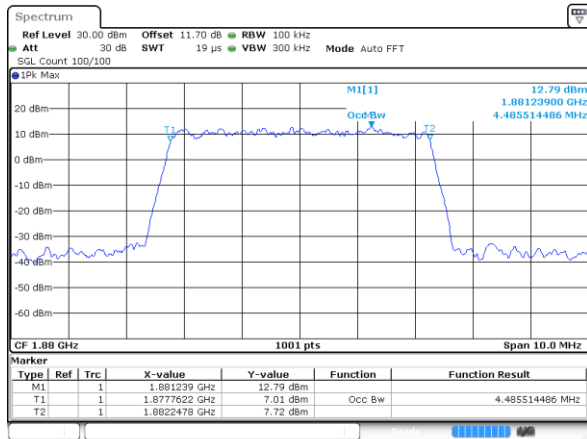
## Lowest Channel / 5MHz / 64QAM



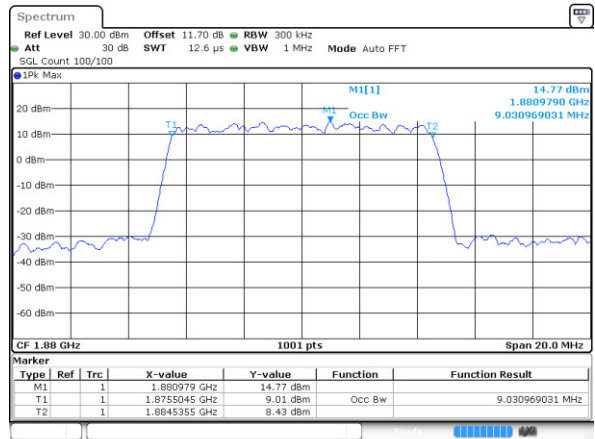
## Lowest Channel / 10MHz / 64QAM



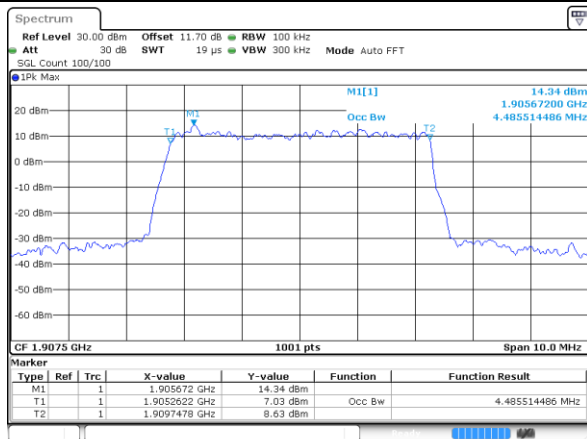
## Middle Channel / 5MHz / 64QAM



## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



## Highest Channel / 10MHz / 64QAM

