



# FCC RADIO TEST REPORT

FCC ID : XHG-RG1000  
Equipment : Mobile Hotspot  
Model Name : RG1000  
Applicant : Franklin Technology Inc.  
906 JEI Platz, 186, Gasan digital 1-ro,  
Gumcheon-Gu, Seoul, South Korea, 08502  
Manufacturer : Franklin Technology Inc.  
906 JEI Platz, 186, Gasan digital 1-ro,  
Gumcheon-Gu, Seoul, South Korea, 08502  
Standard : FCC 47 CFR Part 2, 22(H), 24(E), 27

The product was received on May 07, 2021 and testing was started from Jun. 10, 2021 and completed on Aug. 18, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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## History of this test report

| Report No. | Version | Description             | Issued Date   |
|------------|---------|-------------------------|---------------|
| FG140849B  | 01      | Initial issue of report | Aug. 25, 2021 |
|            |         |                         |               |
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|            |         |                         |               |



## Summary of Test Result

| Report Clause | Ref Std. Clause                                                                       | Test Items                                                                               | Result (PASS/FAIL) | Remark |
|---------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------|--------|
| 3.2           | §2.1046                                                                               | Conducted Output Power                                                                   | Reporting only     | -      |
|               | §22.913 (a)(5)                                                                        | Effective Radiated Power (Band 5)                                                        | Pass               |        |
|               | §27.50 (b)(10)<br>§27.50 (c)(10)                                                      | Effective Radiated Power (Band 12) (Band 13)                                             |                    |        |
|               | §24.232 (c)<br>§27.50 (h)(2)                                                          | Equivalent Isotropic Radiated Power (Band 2) (Band 41)                                   |                    |        |
|               | §27.50 (d)(4)                                                                         | Equivalent Isotropic Radiated Power (Band 4) (Band 66)                                   |                    |        |
| 3.3           | §24.232 (d)<br>§27.50 (d)(5)                                                          | Peak-to-Average Ratio                                                                    | Pass               | -      |
| 3.4           | §2.1049                                                                               | Occupied Bandwidth                                                                       | Reporting only     | -      |
| 3.5           | §2.1051<br>§22.917 (a)<br>§24.238 (a)<br>§27.53 (c)(2)(4)<br>§27.53 (g)<br>§27.53 (h) | Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 66) | Pass               | -      |
|               | §2.1051<br>§27.53 (m)(4)                                                              | Conducted Band Edge Measurement (Band 41)                                                |                    |        |
| 3.6           | §2.1051<br>§22.917 (a)<br>§24.238 (a)<br>§27.53 (c)(2)<br>§27.53 (g)<br>§27.53 (h)    | Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 66)     | Pass               | -      |
|               | §2.1051<br>§27.53 (m)(4)                                                              | Conducted Spurious Emission (Band 41)                                                    |                    |        |
| 3.7           | §2.1055<br>§22.355<br>§24.235<br>§27.54                                               | Frequency Stability<br>Temperature & Voltage                                             | Pass               | -      |



| Report Clause | Ref Std. Clause                                                                                  | Test Items                                                                                | Result (PASS/FAIL) | Remark                                    |
|---------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------|-------------------------------------------|
| 4.2           | §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 66) | Pass               | Under limit<br>3.30 dB at<br>1569.000 MHz |
|               | §2.1051<br>§27.53 (m)(4)                                                                         | Radiated Spurious Emission<br>(Band 41)                                                   |                    |                                           |

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Avis Chuang**

**Report Producer: Cindy Liu**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

WCDMA/LTE/5G NR, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11n/ac/ax

| Product Specification subjective to this standard |                                                                                                                                                                                                                                 |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Antenna Type                                      | WWAN<br><Main>: PIFA Antenna<br><Aux.>: PIFA Antenna<br>WLAN:<br><Chain 0>: PIFA Antenna<br><Chain 1>: PIFA Antenna                                                                                                             |
| Antenna Gain                                      | <Main>:<br>Band 2: -1.54dBi<br>Band 4: -1.58dBi<br>Band 5: -1.07dBi<br>Band 12: -1.61dBi<br>Band 13: -0.99dBi<br>Band 41: -2.26dBi<br>Band 66: -1.58dBi<br><Aux.>:<br>Band 2: -2.44dBi<br>Band 4: -2.44dBi<br>Band 66: -2.44dBi |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

## 1.2 Modification of EUT

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



### 1.3 Testing Location

|                    |                                                                                                                           |
|--------------------|---------------------------------------------------------------------------------------------------------------------------|
| Test Site          | Sporton International Inc. EMC & Wireless Communications Laboratory                                                       |
| Test Site Location | No.52, Huaya 1st Rd., Guishan Dist.,<br>Taoyuan City 333, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| Test Site No.      | <b>Sporton Site No.</b>                                                                                                   |
|                    | TH03-HY                                                                                                                   |
| Test Engineer      | HaoEn Zhang                                                                                                               |
| Temperature        | 23.5~24.8℃                                                                                                                |
| Relative Humidity  | 52.4~55.6%                                                                                                                |

|                    |                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Site          | Sporton International Inc. Wensan Laboratory                                                                                                     |
| Test Site Location | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| Test Site No.      | <b>Sporton Site No.</b>                                                                                                                          |
|                    | 03CH20-HY (TAF Code: 3786)                                                                                                                       |
| Test Engineer      | JC Liang and Troye Hsieh                                                                                                                         |
| Temperature        | 20~23℃                                                                                                                                           |
| Relative Humidity  | 60~70%                                                                                                                                           |
| Remark             | The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory                                           |

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

FCC Designation No.: TW1190 and TW3786



## 1.4 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ FCC 47 CFR Part 2, 22(H), 24(E), 27
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site 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, recorded in a separate test report.
3. The TAF code is not including all the FCC KDB listed without accreditation.



## 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 v03r01 with maximum output power.

The measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and find X Plane for LTE Band 41; Y Plane for LTE Band 2, 5, 12; Z Plane for LTE Band 13, 66 plane as worst plane.

| 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 |
|                       | 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 |
|                       | 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 |
| Peak-to-Average Ratio | 2    |                    |   |   |    |    | v  | v          | v     | v     |      |      | v    |              | v |   |
|                       | 4    | Covered by Band 66 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |
|                       | 5    |                    |   |   | v  | -  | -  | v          | v     | v     |      |      | v    |              | v |   |
|                       | 12   |                    |   |   | v  | -  | -  | v          | v     | v     |      |      | v    |              | v |   |
|                       | 13   | -                  | - |   | v  | -  | -  | v          | v     | v     |      |      | v    |              | v |   |
|                       | 41   | -                  | - |   |    |    | v  | v          | v     | v     |      |      | v    |              | v |   |
|                       | 66   |                    |   |   |    |    | 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 |   |
|                             | 4    | Covered by Band 66 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |
|                             | 5    | 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 |   |
|                             | 41   | -                  | - | v | v  | v  | v  | v          | v     | v     |      |      | v    |              | v |   |
|                             | 66   | v                  | v | v | v  | v  | v  | v          | v     | v     |      |      | v    |              | v |   |
| Conducted Band Edge         | 2    | v                  | v | v | v  | v  | v  | v          | v     | v     | v    |      | v    | v            |   | v |
|                             | 4    | Covered by Band 66 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |
|                             | 5    | 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 |
|                             | 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 Spurious Emission | 2    | v                  | v | v | v  | v  | v  | v          |       |       | v    |      |      | v            | v | v |
|                             | 4    | Covered by Band 66 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |
|                             | 5    | 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 |
|                             | 41   | -                  | - | v | v  | v  | v  | v          |       |       | v    |      |      | v            | v | v |
|                             | 66   | v                  | v | v | v  | v  | v  | v          |       |       | v    |      |      | v            | v | v |
| Frequency Stability         | 2    |                    |   |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |
|                             | 4    | Covered by Band 66 |   |   |    |    |    |            |       |       |      |      |      |              |   |   |
|                             | 5    |                    |   |   | v  | -  | -  | v          |       |       |      |      | v    |              | v |   |
|                             | 12   |                    |   |   | v  | -  | -  | v          |       |       |      |      | v    |              | v |   |
|                             | 13   | -                  | - |   | v  | -  | -  | v          |       |       |      |      | v    |              | v |   |
|                             | 41   | -                  | - |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |
|                             | 66   |                    |   |   | v  |    |    | v          |       |       |      |      | v    |              | v |   |

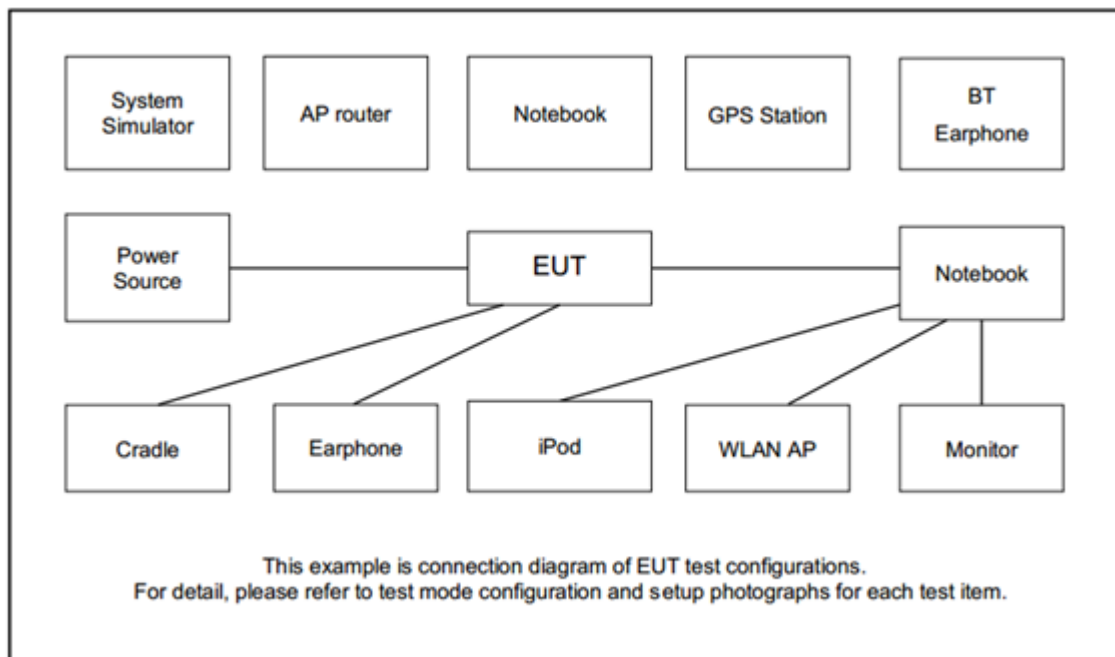


| Test Items                       | Band                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 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     | Max. Power |      |      |              |   |   |
|                                  | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | v                  | v | v | v  | v  | v  | v          | v     | v     |            |      |      |              |   |   |
|                                  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | v                  | v | v | v  | -  | -  | v          | v     | v     |            |      |      |              |   |   |
|                                  | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | v                  | v | v | v  | -  | -  | v          | v     | v     |            |      |      |              |   |   |
|                                  | 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                  | - | v | v  | -  | -  | v          | v     | v     |            |      |      |              |   |   |
|                                  | 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                  | - | v | v  | v  | v  | v          | v     | v     |            |      |      |              |   |   |
|                                  | 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | v                  | v | v | v  | v  | v  | v          | v     | v     |            |      |      |              |   |   |
| Radiated<br>Spurious<br>Emission | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
|                                  | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Covered by Band 66 |   |   |    |    |    |            |       |       |            |      |      |              |   |   |
|                                  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
|                                  | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
|                                  | 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
|                                  | 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
|                                  | 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Worst Case         |   |   |    |    |    |            |       |       |            |      | v    | v            | v |   |
| Remark                           | 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. Wider operating range bandwidth covers narrower one when the power is higher or the same. |                    |   |   |    |    |    |            |       |       |            |      |      |              |   |   |



| Test Items                  | Band                                                                                                                                                                                                                                                                                                                                                                                | Bandwidth (MHz) |     |      |      |       | Modulation |       |       | RB #       |      |      | Test Channel |   |   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|------|-------|------------|-------|-------|------------|------|------|--------------|---|---|
|                             |                                                                                                                                                                                                                                                                                                                                                                                     | 3+5             | 5+3 | 5+10 | 10+5 | 10+10 | QPSK       | 16QAM | 64QAM | 1          | Half | Full | L            | M | H |
| Max. Output Power           | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | v               | v   | v    | v    | v     | v          | v     | v     | v          | v    | v    | v            | v | v |
| 26dB and 99% Bandwidth      | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | v               | v   | v    | v    | v     | v          | v     | v     |            |      | v    |              | v |   |
| Conducted Band Edge         | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | v               | v   | v    | v    | v     | v          | v     | v     | v          | v    | v    | v            |   | v |
| Conducted Spurious Emission | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | v               | v   | v    | v    | v     | v          |       |       | v          | v    |      | v            | v | v |
| E.R.P.                      | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | v               | v   | v    | v    | v     | v          | v     | v     | Max. Power |      |      |              |   |   |
| Radiated Spurious Emission  | 5_CA                                                                                                                                                                                                                                                                                                                                                                                | Worst Case      |     |      |      |       |            |       |       |            |      |      | v            | v | v |
| Remark                      | 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. |                 |     |      |      |       |            |       |       |            |      |      |              |   |   |

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

| Item | Equipment        | Brand Name | Model No. | FCC ID | Data Cable | Power Cord        |
|------|------------------|------------|-----------|--------|------------|-------------------|
| 1.   | System Simulator | Anritsu    | MT8820A   | N/A    | N/A        | Unshielded, 1.8 m |
| 2.   | System Simulator | Anritsu    | MT8820C   | N/A    | N/A        | Unshielded, 1.8 m |

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

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

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

*Offset = RF cable loss + attenuator factor.*

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

Example :

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



## 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 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 41 Channel and Frequency List |                        |        |        |         |
|----------------------------------------|------------------------|--------|--------|---------|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |
| 20                                     | Channel                | 39750  | 40620  | 41490   |
|                                        | Frequency              | 2506.0 | 2593.0 | 2680.0  |
| 15                                     | Channel                | 39725  | 40620  | 41515   |
|                                        | Frequency              | 2503.5 | 2593.0 | 2682.5  |
| 10                                     | Channel                | 39700  | 40620  | 41540   |
|                                        | Frequency              | 2501.0 | 2593.0 | 2685.0  |
| 5                                      | Channel                | 39675  | 40620  | 41565   |
|                                        | Frequency              | 2498.5 | 2593.0 | 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 5B Channel and Frequency List |     |           |       |       |       |
|----------------------------------------|-----|-----------|-------|-------|-------|
| 3 + 5                                  | PCC | Channel   | 20416 | 20501 | 20586 |
|                                        |     | Frequency | 825.6 | 834.1 | 842.6 |
|                                        | SCC | Channel   | 20455 | 20540 | 20625 |
|                                        |     | Frequency | 829.5 | 838.0 | 846.5 |
| 5 + 3                                  | PCC | Channel   | 20425 | 20510 | 20595 |
|                                        |     | Frequency | 826.5 | 835.0 | 843.5 |
|                                        | SCC | Channel   | 20464 | 20549 | 20634 |
|                                        |     | Frequency | 830.4 | 838.9 | 847.4 |
| 5 + 10                                 | PCC | Channel   | 20428 | 20478 | 20528 |
|                                        |     | Frequency | 826.8 | 831.8 | 836.8 |
|                                        | SCC | Channel   | 20500 | 20550 | 20600 |
|                                        |     | Frequency | 834.0 | 839.0 | 844.0 |
| 10 + 5                                 | PCC | Channel   | 20450 | 20500 | 20550 |
|                                        |     | Frequency | 829.0 | 834.0 | 839.0 |
|                                        | SCC | Channel   | 20522 | 20572 | 20622 |
|                                        |     | Frequency | 836.2 | 841.2 | 846.2 |
| 10 + 10                                | PCC | Channel   | 20450 | 20476 | 20501 |
|                                        |     | Frequency | 829.0 | 831.6 | 834.1 |
|                                        | SCC | Channel   | 20549 | 20575 | 20600 |
|                                        |     | Frequency | 838.9 | 841.5 | 844.0 |

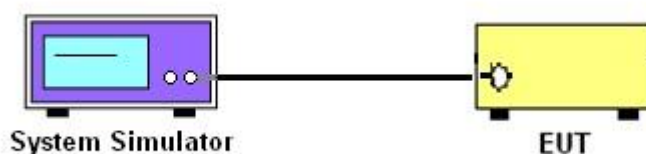
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

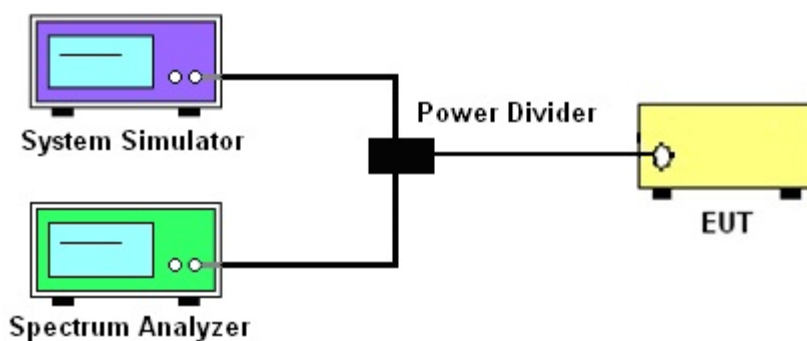
See list of measuring instruments of this test report.

##### 3.1.1 Test Setup

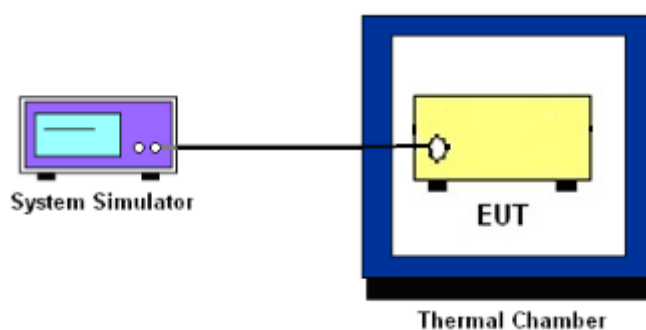
##### 3.1.2 Conducted Output Power



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



##### 3.1.4 Frequency Stability



##### 3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

## 3.2 Conducted Output Power and ERP/EIRP

### 3.2.1 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

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

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 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

### 3.2.2 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.



### **3.3 Peak-to-Average Ratio**

#### **3.3.1 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.

#### **3.3.2 Test Procedures**

The testing follows ANSI C63.26-2015 Section 5.2.6

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.



## **3.4 Occupied Bandwidth**

### **3.4.1 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.

### **3.4.2 Test Procedures**

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

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.



## **3.5 Conducted Band Edge**

### **3.5.1 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 600MHz band and 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, 1755-1780 MHz, 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.

### 3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

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)

For LTE Band 41

The other 40 dB, and 55 dB have additionally applied same calculation above.

## 3.6 Conducted Spurious Emission

### 3.6.1 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 LTE Band 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.

### 3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

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)

For LTE Band 41

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



### **3.7 Frequency Stability**

#### **3.7.1 Description of Frequency Stability Measurement**

22.355

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.

24.235 & 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### **3.7.2 Test Procedures for Temperature Variation**

The testing follows FCC KDB 971168 D01 v03r01 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.

#### **3.7.3 Test Procedures for Voltage Variation**

The testing follows FCC KDB 971168 D01 v03r01 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.

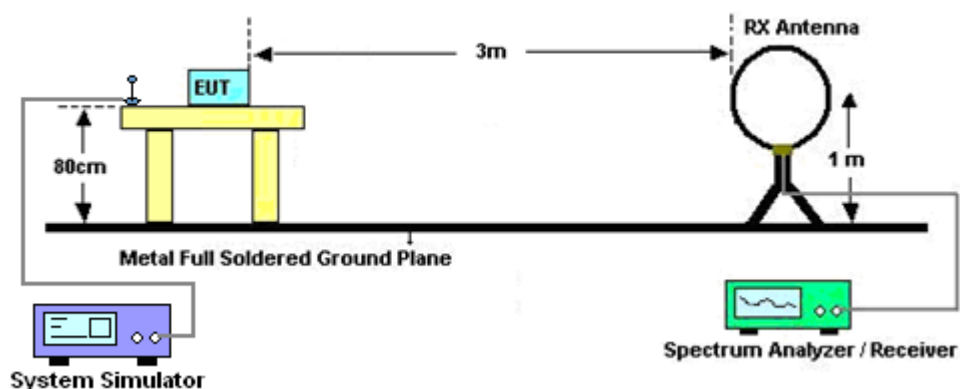
## 4 Radiated Test Items

### 4.1 Measuring Instruments

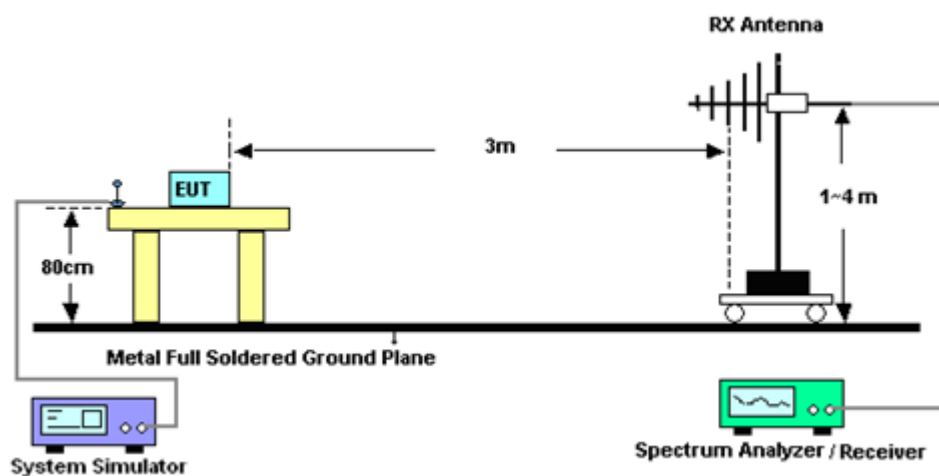
See list of measuring instruments of this test report.

#### 4.1.1 Test Setup

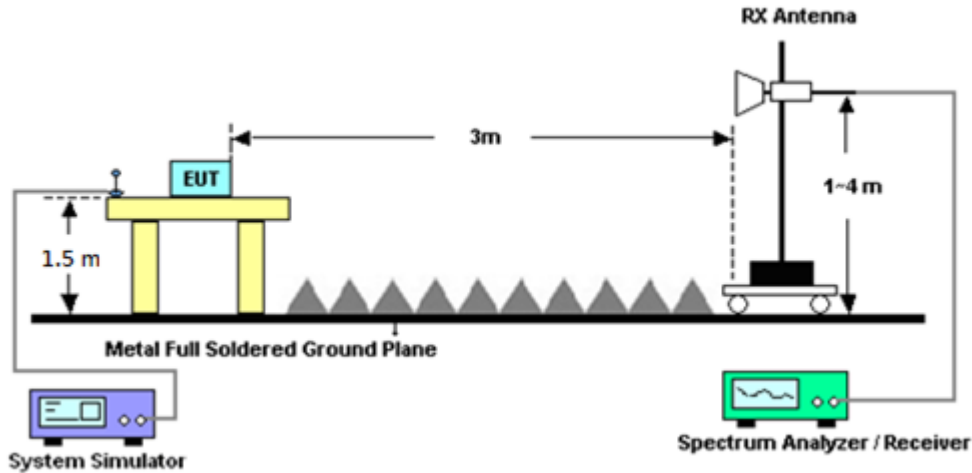
For radiated test below 30MHz



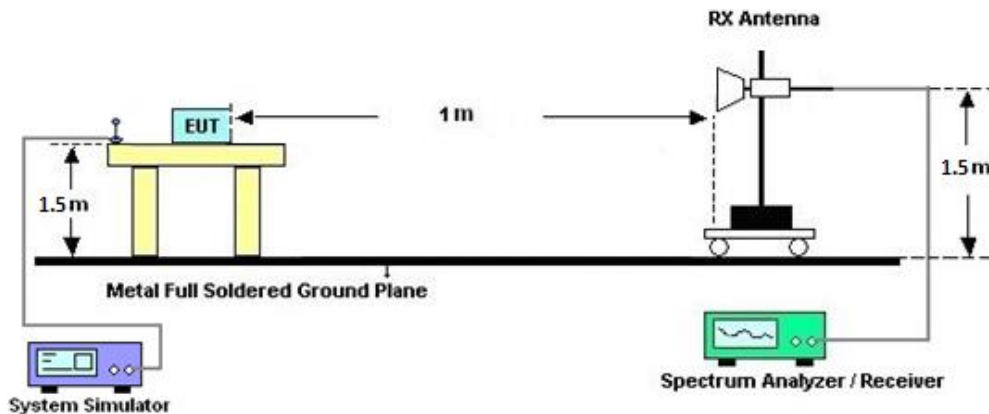
For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



For radiated test above 18GHz



#### 4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

##### Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.



## **4.2 Radiated Spurious Emission Measurement**

### **4.2.1 Description of Radiated Spurious Emission Measurement**

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 LTE Band 41

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

For LTE Band 13

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.

### **4.2.2 Test Procedures**

The testing follows FCC KDB 971168 D01 v03r01 Section 7 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)

For LTE Band 41

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

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

ERP (dBm) = EIRP - 2.15



## 5 List of Measuring Equipment

| Instrument           | Brand Name        | Model No.                           | Serial No.                         | Characteristics                  | Calibration Date | Test Date                       | Due Date      | Remark                   |
|----------------------|-------------------|-------------------------------------|------------------------------------|----------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Spectrum Analyzer    | Keysight          | N9010A                              | MY54200486                         | 10Hz~44GHz                       | Oct. 23, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Oct. 22, 2021 | Radiation<br>(03CH20-HY) |
| EMI Test Receiver    | Keysight          | N9038A                              | MY59053012                         | N/A                              | Nov. 18, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 17, 2021 | Radiation<br>(03CH20-HY) |
| Loop Antenna         | Rohde & Schwarz   | HFH2-Z2                             | 100488                             | 9 kHz~30 MHz                     | Jul. 14, 2020    | Jun. 22, 2021~<br>Jul. 01, 2021 | Jul. 13, 2021 | Radiation<br>(03CH20-HY) |
| Loop Antenna         | Rohde & Schwarz   | HFH2-Z2                             | 100315                             | 9 kHz~30 MHz                     | Jan. 04, 2021    | Aug. 18, 2021                   | Jan. 03, 2022 | Radiation<br>(03CH20-HY) |
| Bilog Antenna        | TESEQ             | CBL 6111D &<br>N-6-06               | 35414 &<br>AT-N0602                | 30MHz~1GHz                       | Oct. 11, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Oct. 10, 2021 | Radiation<br>(03CH20-HY) |
| Bilog Antenna        | TESEQ             | CBL<br>6111D&00802<br>N1D01N-06     | 55606 & 08                         | 30MHz~1GHz                       | Oct. 22, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Oct. 21, 2021 | Radiation<br>(03CH20-HY) |
| Horn Antenna         | SCHWARZBECK       | BBHA 9120 D                         | 002360                             | 1GHz~18GHz                       | Nov. 03, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 02, 2021 | Radiation<br>(03CH20-HY) |
| Horn Antenna         | SCHWARZBECK       | BBHA 9120 D                         | 9120D-1328                         | 1GHz~18GHz                       | Nov. 23, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 22, 2021 | Radiation<br>(03CH20-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK       | BBHA 9170                           | 00993                              | 18GHz~40GHz                      | Nov. 19, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 18, 2021 | Radiation<br>(03CH20-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK       | BBHA 9170                           | BBHA917057<br>6                    | 18GHz~40GHz                      | May 21, 2021     | Jun. 22, 2021~<br>Aug. 18, 2021 | May 20, 2022  | Radiation<br>(03CH20-HY) |
| Preamplifier         | COM-POWER         | PAM-103                             | 18020201                           | 1MHz~1000MHz                     | Jan. 04, 2021    | Jun. 22, 2021~<br>Aug. 18, 2021 | Jan. 03, 2022 | Radiation<br>(03CH20-HY) |
| Amplifier            | EMCI              | EMC118A45S<br>E                     | 980792                             | N/A                              | Nov. 16, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 15, 2021 | Radiation<br>(03CH20-HY) |
| Preamplifier         | EMEC              | EM18G40G                            | 060715                             | 18GHz~40GHz                      | Dec. 11, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Dec. 10, 2021 | Radiation<br>(03CH20-HY) |
| Filter               | Wainwright        | WLK4-1000-15<br>30-8000-40SS        | SN27                               | 1.53GHz Low<br>Pass Filter       | May 25, 2021     | Jun. 22, 2021~<br>Aug. 18, 2021 | May 24, 2022  | Radiation<br>(03CH20-HY) |
| Filter               | Wainwright        | WHKX8-6090-<br>7000-18000-4<br>0SS  | SN99                               | N/A                              | Nov. 05, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Nov. 04, 2021 | Radiation<br>(03CH20-HY) |
| Filter               | Wainwright        | WHKX12-2700<br>-3000-18000-6<br>0ST | SN8                                | N/A                              | Mar. 26, 2021    | Jun. 22, 2021~<br>Aug. 18, 2021 | Mar. 25, 2022 | Radiation<br>(03CH20-HY) |
| Hygrometer           | TECEPEL           | DTM-303B                            | TP200728                           | N/A                              | Mar. 09, 2021    | Jun. 22, 2021~<br>Aug. 18, 2021 | Mar. 08, 2022 | Radiation<br>(03CH20-HY) |
| RF Cable             | HUBER +<br>SUHNER | SUCOFLEX<br>102                     | 519229/2,80<br>4015/2,8040<br>27/2 | N/A                              | Jan. 20, 2021    | Jun. 22, 2021~<br>Aug. 18, 2021 | Jan. 19, 2022 | Radiation<br>(03CH20-HY) |
| Software             | Audix             | E3<br>6.2009-8-24                   | RK-002156                          | N/A                              | N/A              | Jun. 22, 2021~<br>Aug. 18, 2021 | N/A           | Radiation<br>(03CH20-HY) |
| Controller           | EMEC              | EM1000                              | N/A                                | Control Turn<br>table & Ant Mast | N/A              | Jun. 22, 2021~<br>Aug. 18, 2021 | N/A           | Radiation<br>(03CH20-HY) |
| Antenna Mast         | EMEC              | AM-BS-4500-B                        | N/A                                | 1m~4m                            | N/A              | Jun. 22, 2021~<br>Aug. 18, 2021 | N/A           | Radiation<br>(03CH20-HY) |
| Turn Table           | EMEC              | TT2000                              | N/A                                | 0~360 Degree                     | N/A              | Jun. 22, 2021~<br>Aug. 18, 2021 | N/A           | Radiation<br>(03CH20-HY) |
| Signal Generator     | Rohde & Schwarz   | SMF100A                             | 101107                             | 100kHz~40GHz                     | Dec. 04, 2020    | Jun. 22, 2021~<br>Aug. 18, 2021 | Dec. 03, 2021 | Radiation<br>(03CH20-HY) |



| Instrument             | Brand Name      | Model No.                                 | Serial No.      | Characteristics                     | Calibration Date | Test Date                       | Due Date      | Remark                 |
|------------------------|-----------------|-------------------------------------------|-----------------|-------------------------------------|------------------|---------------------------------|---------------|------------------------|
| Base Station(Measur e) | Anritsu         | MT8821C                                   | 6262002534<br>1 | LTE FDD/TDD<br>LTE-2CC<br>ULCA/DLCA | Oct. 06, 2020    | Jun. 10, 2021~<br>Aug. 18, 2021 | Oct. 05, 2021 | Conducted<br>(TH03-HY) |
| Spectrum Analyzer      | Rohde & Schwarz | FSV40                                     | 101565          | 10Hz~40GHz                          | Nov. 13, 2020    | Jun. 10, 2021~<br>Aug. 18, 2021 | Nov. 12, 2021 | Conducted<br>(TH03-HY) |
| Thermal Chamber        | ESPEC           | SH-641                                    | 92013720        | -40℃ ~90℃                           | Sep. 14, 2020    | Jun. 10, 2021~<br>Aug. 18, 2021 | Sep. 13, 2021 | Conducted<br>(TH03-HY) |
| DC Power Supply        | GW Instek       | PSS-2005                                  | GET861546       | 0V~64V ; 0A~6A                      | Jul. 01, 2020    | Jun. 10, 2021~<br>Aug. 18, 2021 | Jun. 30, 2021 | Conducted<br>(TH03-HY) |
| DC Power Supply        | GW Instek       | PSS-2005                                  | GET861546       | 0V~64V ; 0A~6A                      | Jun. 22, 2020    | Jun. 10, 2021~<br>Aug. 18, 2021 | Jun. 21, 2022 | Conducted<br>(TH03-HY) |
| Coupler                | Warison         | 20dB 25W<br>SMA<br>Directional<br>Coupler | #B              | 1-18GHz                             | Jan. 09, 2021    | Jun. 10, 2021~<br>Aug. 18, 2021 | Jan. 08, 2022 | Conducted<br>(TH03-HY) |



## 6 Uncertainty of Evaluation

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

|                                                                            |         |
|----------------------------------------------------------------------------|---------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 3.31 dB |
|----------------------------------------------------------------------------|---------|

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

|                                                                            |         |
|----------------------------------------------------------------------------|---------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 3.63 dB |
|----------------------------------------------------------------------------|---------|

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

|                                                                            |         |
|----------------------------------------------------------------------------|---------|
| Measuring Uncertainty for a Level of<br>Confidence of 95% ( $U = 2Uc(y)$ ) | 4.03 dB |
|----------------------------------------------------------------------------|---------|



## Appendix A. Test Results of Conducted Test

### Conducted Output Power(Average power & ERP/EIRP)

<Main>

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                          | 1         | 0         | QPSK   | 23.15  | 23.25  | 23.13   | 21.71      | 0.1483   |
| 20                                                          | 1         | 49        |        | 23.09  | 23.23  | 23.05   |            |          |
| 20                                                          | 1         | 99        |        | 23.14  | 23.20  | 23.10   |            |          |
| 20                                                          | 50        | 0         |        | 22.36  | 22.39  | 22.32   |            |          |
| 20                                                          | 50        | 24        |        | 22.34  | 22.30  | 22.28   |            |          |
| 20                                                          | 50        | 50        |        | 22.33  | 22.35  | 22.27   |            |          |
| 20                                                          | 100       | 0         |        | 22.31  | 22.29  | 22.20   |            |          |
| 20                                                          | 1         | 0         | 16-QAM | 22.54  | 22.54  | 22.48   | 21.03      | 0.1268   |
| 20                                                          | 1         | 49        |        | 22.43  | 22.57  | 22.44   |            |          |
| 20                                                          | 1         | 99        |        | 22.48  | 22.53  | 22.44   |            |          |
| 20                                                          | 50        | 0         |        | 21.21  | 21.30  | 21.17   |            |          |
| 20                                                          | 50        | 24        |        | 21.34  | 21.30  | 21.28   |            |          |
| 20                                                          | 50        | 50        |        | 21.32  | 21.40  | 21.28   |            |          |
| 20                                                          | 100       | 0         |        | 21.30  | 21.28  | 21.21   |            |          |
| 20                                                          | 1         | 0         | 64-QAM | 21.37  | 21.41  | 21.34   | 19.92      | 0.0982   |
| 20                                                          | 1         | 49        |        | 21.40  | 21.43  | 21.38   |            |          |
| 20                                                          | 1         | 99        |        | 21.46  | 21.40  | 21.35   |            |          |
| 20                                                          | 50        | 0         |        | 20.26  | 20.31  | 20.21   |            |          |
| 20                                                          | 50        | 24        |        | 20.35  | 20.36  | 20.29   |            |          |
| 20                                                          | 50        | 50        |        | 20.33  | 20.41  | 20.29   |            |          |
| 20                                                          | 100       | 0         |        | 20.33  | 20.32  | 20.19   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                          | 1         | 0         | QPSK   | 23.09  | 23.13  | 22.97   | 21.59      | 0.1442   |
| 15                                                          | 1         | 37        |        | 22.94  | 23.08  | 23.00   |            |          |
| 15                                                          | 1         | 74        |        | 23.10  | 23.06  | 22.98   |            |          |
| 15                                                          | 36        | 0         |        | 22.18  | 22.32  | 22.28   |            |          |
| 15                                                          | 36        | 20        |        | 22.15  | 22.12  | 22.19   |            |          |
| 15                                                          | 36        | 39        |        | 22.27  | 22.16  | 22.08   |            |          |
| 15                                                          | 75        | 0         |        | 22.16  | 22.24  | 22.11   |            |          |
| 15                                                          | 1         | 0         | 16-QAM | 22.49  | 22.42  | 22.48   | 20.99      | 0.1256   |
| 15                                                          | 1         | 37        |        | 22.41  | 22.43  | 22.26   |            |          |
| 15                                                          | 1         | 74        |        | 22.37  | 22.53  | 22.26   |            |          |
| 15                                                          | 36        | 0         |        | 21.01  | 21.12  | 21.06   |            |          |
| 15                                                          | 36        | 20        |        | 21.22  | 21.24  | 21.26   |            |          |
| 15                                                          | 36        | 39        |        | 21.30  | 21.27  | 21.09   |            |          |
| 15                                                          | 75        | 0         |        | 21.10  | 21.13  | 21.15   |            |          |
| 15                                                          | 1         | 0         | 64-QAM | 21.21  | 21.37  | 21.34   | 19.87      | 0.0971   |
| 15                                                          | 1         | 37        |        | 21.28  | 21.33  | 21.28   |            |          |
| 15                                                          | 1         | 74        |        | 21.41  | 21.22  | 21.23   |            |          |
| 15                                                          | 36        | 0         |        | 20.15  | 20.22  | 20.19   |            |          |
| 15                                                          | 36        | 20        |        | 20.30  | 20.34  | 20.15   |            |          |
| 15                                                          | 36        | 39        |        | 20.15  | 20.22  | 20.22   |            |          |
| 15                                                          | 75        | 0         |        | 20.24  | 20.20  | 20.14   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                          | 1         | 0         | QPSK   | 23.00  | 23.08  | 22.97   | 21.65      | 0.1462   |
| 10                                                          | 1         | 25        |        | 22.90  | 23.19  | 22.99   |            |          |
| 10                                                          | 1         | 49        |        | 22.87  | 22.96  | 22.91   |            |          |
| 10                                                          | 25        | 0         |        | 22.13  | 22.19  | 22.06   |            |          |
| 10                                                          | 25        | 12        |        | 22.31  | 22.20  | 22.20   |            |          |
| 10                                                          | 25        | 25        |        | 22.23  | 22.29  | 21.98   |            |          |
| 10                                                          | 50        | 0         |        | 21.97  | 21.99  | 22.01   |            |          |
| 10                                                          | 1         | 0         | 16-QAM | 22.34  | 22.48  | 22.25   | 20.94      | 0.1242   |
| 10                                                          | 1         | 25        |        | 22.17  | 22.44  | 22.15   |            |          |
| 10                                                          | 1         | 49        |        | 22.32  | 22.29  | 22.33   |            |          |
| 10                                                          | 25        | 0         |        | 21.03  | 21.05  | 20.95   |            |          |
| 10                                                          | 25        | 12        |        | 21.09  | 21.26  | 20.99   |            |          |
| 10                                                          | 25        | 25        |        | 21.16  | 21.32  | 21.08   |            |          |
| 10                                                          | 50        | 0         |        | 21.18  | 20.99  | 20.96   |            |          |
| 10                                                          | 1         | 0         | 64-QAM | 21.00  | 21.28  | 21.15   | 19.74      | 0.0942   |
| 10                                                          | 1         | 25        |        | 21.18  | 21.19  | 21.20   |            |          |
| 10                                                          | 1         | 49        |        | 21.27  | 21.02  | 21.13   |            |          |
| 10                                                          | 25        | 0         |        | 20.19  | 20.12  | 19.99   |            |          |
| 10                                                          | 25        | 12        |        | 20.16  | 20.00  | 20.09   |            |          |
| 10                                                          | 25        | 25        |        | 20.17  | 20.24  | 20.06   |            |          |
| 10                                                          | 50        | 0         |        | 20.03  | 20.19  | 20.03   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                           | 1         | 0         | QPSK   | 22.87  | 22.93  | 22.84   | 21.61      | 0.1449   |
| 5                                                           | 1         | 12        |        | 22.89  | 23.15  | 22.82   |            |          |
| 5                                                           | 1         | 24        |        | 22.83  | 22.79  | 22.82   |            |          |
| 5                                                           | 12        | 0         |        | 22.07  | 22.01  | 21.98   |            |          |
| 5                                                           | 12        | 7         |        | 22.19  | 22.19  | 22.12   |            |          |
| 5                                                           | 12        | 13        |        | 22.11  | 22.23  | 21.97   |            |          |
| 5                                                           | 25        | 0         |        | 21.82  | 21.97  | 21.97   |            |          |
| 5                                                           | 1         | 0         | 16-QAM | 22.19  | 22.39  | 22.06   | 20.85      | 0.1216   |
| 5                                                           | 1         | 12        |        | 22.11  | 22.30  | 22.13   |            |          |
| 5                                                           | 1         | 24        |        | 22.18  | 22.16  | 22.18   |            |          |
| 5                                                           | 12        | 0         |        | 20.98  | 21.01  | 20.94   |            |          |
| 5                                                           | 12        | 7         |        | 20.93  | 21.13  | 20.99   |            |          |
| 5                                                           | 12        | 13        |        | 21.13  | 21.32  | 21.02   |            |          |
| 5                                                           | 25        | 0         |        | 21.07  | 20.85  | 20.91   |            |          |
| 5                                                           | 1         | 0         | 64-QAM | 20.86  | 21.18  | 21.08   | 19.65      | 0.0923   |
| 5                                                           | 1         | 12        |        | 20.98  | 21.10  | 21.01   |            |          |
| 5                                                           | 1         | 24        |        | 21.19  | 20.86  | 21.03   |            |          |
| 5                                                           | 12        | 0         |        | 20.06  | 20.09  | 19.90   |            |          |
| 5                                                           | 12        | 7         |        | 20.10  | 19.91  | 19.95   |            |          |
| 5                                                           | 12        | 13        |        | 20.08  | 20.18  | 20.01   |            |          |
| 5                                                           | 25        | 0         |        | 19.86  | 20.10  | 19.90   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 3                                                           | 1         | 0         | QPSK   | 22.77  | 22.77  | 22.74   | 21.53      | 0.1422   |
| 3                                                           | 1         | 8         |        | 22.87  | 23.07  | 22.72   |            |          |
| 3                                                           | 1         | 14        |        | 22.71  | 22.62  | 22.77   |            |          |
| 3                                                           | 8         | 0         |        | 21.90  | 21.98  | 21.78   |            |          |
| 3                                                           | 8         | 4         |        | 22.19  | 22.01  | 22.03   |            |          |
| 3                                                           | 8         | 7         |        | 21.94  | 22.18  | 21.94   |            |          |
| 3                                                           | 15        | 0         |        | 21.69  | 21.89  | 21.80   |            |          |
| 3                                                           | 1         | 0         | 16-QAM | 22.03  | 22.31  | 21.99   | 20.77      | 0.1194   |
| 3                                                           | 1         | 8         |        | 21.92  | 22.18  | 22.06   |            |          |
| 3                                                           | 1         | 14        |        | 22.00  | 22.07  | 21.98   |            |          |
| 3                                                           | 8         | 0         |        | 20.94  | 20.84  | 20.89   |            |          |
| 3                                                           | 8         | 4         |        | 20.75  | 20.97  | 20.93   |            |          |
| 3                                                           | 8         | 7         |        | 20.93  | 21.18  | 20.88   |            |          |
| 3                                                           | 15        | 0         |        | 20.95  | 20.65  | 20.81   |            |          |
| 3                                                           | 1         | 0         | 64-QAM | 20.84  | 21.10  | 21.08   | 19.60      | 0.0912   |
| 3                                                           | 1         | 8         |        | 20.88  | 20.94  | 20.90   |            |          |
| 3                                                           | 1         | 14        |        | 21.14  | 20.71  | 20.89   |            |          |
| 3                                                           | 8         | 0         |        | 20.03  | 19.91  | 19.76   |            |          |
| 3                                                           | 8         | 4         |        | 19.99  | 19.77  | 19.94   |            |          |
| 3                                                           | 8         | 7         |        | 19.96  | 20.08  | 19.84   |            |          |
| 3                                                           | 15        | 0         |        | 19.77  | 19.90  | 19.77   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -1.54 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 1.4                                                         | 1         | 0         | QPSK   | 22.57  | 22.58  | 22.74   | 21.20      | 0.1318   |
| 1.4                                                         | 1         | 3         |        | 22.73  | 22.72  | 22.74   |            |          |
| 1.4                                                         | 1         | 5         |        | 22.59  | 22.56  | 22.62   |            |          |
| 1.4                                                         | 3         | 0         |        | 22.66  | 22.70  | 22.68   |            |          |
| 1.4                                                         | 3         | 1         |        | 22.65  | 22.68  | 22.56   |            |          |
| 1.4                                                         | 3         | 3         |        | 22.63  | 22.68  | 22.56   |            |          |
| 1.4                                                         | 6         | 0         |        | 21.56  | 21.68  | 21.57   |            |          |
| 1.4                                                         | 1         | 0         | 16-QAM | 21.66  | 21.57  | 21.76   | 20.22      | 0.1052   |
| 1.4                                                         | 1         | 3         |        | 21.63  | 21.59  | 21.56   |            |          |
| 1.4                                                         | 1         | 5         |        | 21.59  | 21.63  | 21.72   |            |          |
| 1.4                                                         | 3         | 0         |        | 21.74  | 21.66  | 21.63   |            |          |
| 1.4                                                         | 3         | 1         |        | 21.60  | 21.56  | 21.75   |            |          |
| 1.4                                                         | 3         | 3         |        | 21.72  | 21.75  | 21.59   |            |          |
| 1.4                                                         | 6         | 0         |        | 20.94  | 20.82  | 20.81   |            |          |
| 1.4                                                         | 1         | 0         | 64-QAM | 20.80  | 21.00  | 20.85   | 19.46      | 0.0883   |
| 1.4                                                         | 1         | 3         |        | 20.97  | 20.89  | 20.95   |            |          |
| 1.4                                                         | 1         | 5         |        | 20.86  | 20.81  | 20.83   |            |          |
| 1.4                                                         | 3         | 0         |        | 20.84  | 20.81  | 20.99   |            |          |
| 1.4                                                         | 3         | 1         |        | 20.90  | 20.88  | 20.88   |            |          |
| 1.4                                                         | 3         | 3         |        | 20.98  | 20.97  | 20.82   |            |          |
| 1.4                                                         | 6         | 0         |        | 20.90  | 20.98  | 20.84   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                          | 1         | 0         | QPSK   | 23.38  | 23.25  | 23.20   | 21.80      | 0.1514   |
| 20                                                          | 1         | 49        |        | 23.14  | 22.96  | 23.08   |            |          |
| 20                                                          | 1         | 99        |        | 23.10  | 23.08  | 23.09   |            |          |
| 20                                                          | 50        | 0         |        | 22.46  | 22.32  | 22.31   |            |          |
| 20                                                          | 50        | 24        |        | 22.37  | 22.22  | 22.30   |            |          |
| 20                                                          | 50        | 50        |        | 22.28  | 22.15  | 22.21   |            |          |
| 20                                                          | 100       | 0         |        | 22.37  | 22.23  | 22.21   |            |          |
| 20                                                          | 1         | 0         | 16-QAM | 22.69  | 22.63  | 22.54   | 21.11      | 0.1291   |
| 20                                                          | 1         | 49        |        | 22.54  | 22.35  | 22.42   |            |          |
| 20                                                          | 1         | 99        |        | 22.44  | 22.41  | 22.46   |            |          |
| 20                                                          | 50        | 0         |        | 21.45  | 21.33  | 21.28   |            |          |
| 20                                                          | 50        | 24        |        | 21.36  | 21.24  | 21.30   |            |          |
| 20                                                          | 50        | 50        |        | 21.30  | 21.15  | 21.22   |            |          |
| 20                                                          | 100       | 0         |        | 21.37  | 21.24  | 21.23   |            |          |
| 20                                                          | 1         | 0         | 64-QAM | 21.66  | 21.51  | 21.37   | 20.08      | 0.1019   |
| 20                                                          | 1         | 49        |        | 21.33  | 21.28  | 21.29   |            |          |
| 20                                                          | 1         | 99        |        | 21.36  | 21.35  | 21.32   |            |          |
| 20                                                          | 50        | 0         |        | 20.47  | 20.34  | 20.30   |            |          |
| 20                                                          | 50        | 24        |        | 20.41  | 20.28  | 20.34   |            |          |
| 20                                                          | 50        | 50        |        | 20.33  | 20.19  | 20.26   |            |          |
| 20                                                          | 100       | 0         |        | 20.38  | 20.25  | 20.23   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                          | 1         | 0         | QPSK   | 23.22  | 23.20  | 23.03   | 21.64      | 0.1459   |
| 15                                                          | 1         | 37        |        | 23.05  | 22.95  | 22.89   |            |          |
| 15                                                          | 1         | 74        |        | 22.92  | 22.99  | 23.03   |            |          |
| 15                                                          | 36        | 0         |        | 22.46  | 22.16  | 22.30   |            |          |
| 15                                                          | 36        | 20        |        | 22.35  | 22.19  | 22.20   |            |          |
| 15                                                          | 36        | 39        |        | 22.27  | 22.12  | 22.07   |            |          |
| 15                                                          | 75        | 0         |        | 22.24  | 22.23  | 22.17   |            |          |
| 15                                                          | 1         | 0         | 16-QAM | 22.62  | 22.47  | 22.44   | 21.04      | 0.1271   |
| 15                                                          | 1         | 37        |        | 22.35  | 22.16  | 22.35   |            |          |
| 15                                                          | 1         | 74        |        | 22.31  | 22.33  | 22.36   |            |          |
| 15                                                          | 36        | 0         |        | 21.36  | 21.28  | 21.25   |            |          |
| 15                                                          | 36        | 20        |        | 21.24  | 21.19  | 21.23   |            |          |
| 15                                                          | 36        | 39        |        | 21.19  | 20.95  | 21.22   |            |          |
| 15                                                          | 75        | 0         |        | 21.20  | 21.16  | 21.18   |            |          |
| 15                                                          | 1         | 0         | 64-QAM | 21.60  | 21.41  | 21.36   | 20.02      | 0.1005   |
| 15                                                          | 1         | 37        |        | 21.27  | 21.13  | 21.29   |            |          |
| 15                                                          | 1         | 74        |        | 21.36  | 21.23  | 21.22   |            |          |
| 15                                                          | 36        | 0         |        | 20.37  | 20.24  | 20.30   |            |          |
| 15                                                          | 36        | 20        |        | 20.23  | 20.10  | 20.34   |            |          |
| 15                                                          | 36        | 39        |        | 20.15  | 20.19  | 20.08   |            |          |
| 15                                                          | 75        | 0         |        | 20.24  | 20.14  | 20.11   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                          | 1         | 0         | QPSK   | 23.09  | 23.15  | 23.01   | 21.57      | 0.1435   |
| 10                                                          | 1         | 25        |        | 22.87  | 22.92  | 22.69   |            |          |
| 10                                                          | 1         | 49        |        | 22.78  | 22.82  | 22.94   |            |          |
| 10                                                          | 25        | 0         |        | 22.27  | 22.10  | 22.15   |            |          |
| 10                                                          | 25        | 12        |        | 22.30  | 22.19  | 22.16   |            |          |
| 10                                                          | 25        | 25        |        | 22.09  | 21.92  | 21.87   |            |          |
| 10                                                          | 50        | 0         |        | 22.07  | 22.22  | 22.06   |            |          |
| 10                                                          | 1         | 0         | 16-QAM | 22.49  | 22.29  | 22.34   | 20.91      | 0.1233   |
| 10                                                          | 1         | 25        |        | 22.33  | 22.03  | 22.28   |            |          |
| 10                                                          | 1         | 49        |        | 22.13  | 22.32  | 22.25   |            |          |
| 10                                                          | 25        | 0         |        | 21.17  | 21.23  | 21.21   |            |          |
| 10                                                          | 25        | 12        |        | 21.23  | 20.99  | 21.19   |            |          |
| 10                                                          | 25        | 25        |        | 21.12  | 20.87  | 21.18   |            |          |
| 10                                                          | 50        | 0         |        | 21.09  | 21.10  | 21.17   |            |          |
| 10                                                          | 1         | 0         | 64-QAM | 21.54  | 21.36  | 21.18   | 19.96      | 0.0991   |
| 10                                                          | 1         | 25        |        | 21.18  | 21.06  | 21.11   |            |          |
| 10                                                          | 1         | 49        |        | 21.33  | 21.15  | 21.06   |            |          |
| 10                                                          | 25        | 0         |        | 20.19  | 20.17  | 20.17   |            |          |
| 10                                                          | 25        | 12        |        | 20.19  | 20.09  | 20.23   |            |          |
| 10                                                          | 25        | 25        |        | 20.04  | 20.06  | 20.02   |            |          |
| 10                                                          | 50        | 0         |        | 20.05  | 20.07  | 20.01   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                           | 1         | 0         | QPSK   | 22.96  | 23.09  | 22.81   | 21.51      | 0.1416   |
| 5                                                           | 1         | 12        |        | 22.72  | 22.78  | 22.53   |            |          |
| 5                                                           | 1         | 24        |        | 22.64  | 22.75  | 22.86   |            |          |
| 5                                                           | 12        | 0         |        | 22.22  | 21.92  | 21.98   |            |          |
| 5                                                           | 12        | 7         |        | 22.15  | 22.00  | 21.97   |            |          |
| 5                                                           | 12        | 13        |        | 21.95  | 21.91  | 21.71   |            |          |
| 5                                                           | 25        | 0         |        | 22.06  | 22.19  | 21.99   |            |          |
| 5                                                           | 1         | 0         | 16-QAM | 22.41  | 22.16  | 22.34   | 20.83      | 0.1211   |
| 5                                                           | 1         | 12        |        | 22.21  | 21.96  | 22.18   |            |          |
| 5                                                           | 1         | 24        |        | 22.06  | 22.12  | 22.23   |            |          |
| 5                                                           | 12        | 0         |        | 21.03  | 21.11  | 21.13   |            |          |
| 5                                                           | 12        | 7         |        | 21.18  | 20.98  | 21.12   |            |          |
| 5                                                           | 12        | 13        |        | 21.11  | 20.75  | 21.02   |            |          |
| 5                                                           | 25        | 0         |        | 20.89  | 21.08  | 21.17   |            |          |
| 5                                                           | 1         | 0         | 64-QAM | 21.51  | 21.23  | 21.08   | 19.93      | 0.0984   |
| 5                                                           | 1         | 12        |        | 21.01  | 20.89  | 21.01   |            |          |
| 5                                                           | 1         | 24        |        | 21.14  | 20.95  | 21.05   |            |          |
| 5                                                           | 12        | 0         |        | 20.07  | 20.12  | 20.13   |            |          |
| 5                                                           | 12        | 7         |        | 20.08  | 20.08  | 20.03   |            |          |
| 5                                                           | 12        | 13        |        | 19.86  | 20.02  | 19.92   |            |          |
| 5                                                           | 25        | 0         |        | 19.89  | 20.05  | 19.96   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 3                                                           | 1         | 0         | QPSK   | 22.92  | 22.91  | 22.65   | 21.34      | 0.1361   |
| 3                                                           | 1         | 8         |        | 22.53  | 22.76  | 22.41   |            |          |
| 3                                                           | 1         | 14        |        | 22.47  | 22.63  | 22.77   |            |          |
| 3                                                           | 8         | 0         |        | 22.02  | 21.72  | 21.94   |            |          |
| 3                                                           | 8         | 4         |        | 22.03  | 21.91  | 21.91   |            |          |
| 3                                                           | 8         | 7         |        | 21.91  | 21.90  | 21.58   |            |          |
| 3                                                           | 15        | 0         |        | 21.94  | 22.01  | 21.94   |            |          |
| 3                                                           | 1         | 0         | 16-QAM | 22.41  | 21.97  | 22.30   | 20.83      | 0.1211   |
| 3                                                           | 1         | 8         |        | 22.01  | 21.95  | 22.16   |            |          |
| 3                                                           | 1         | 14        |        | 22.03  | 21.93  | 22.15   |            |          |
| 3                                                           | 8         | 0         |        | 21.00  | 20.94  | 20.96   |            |          |
| 3                                                           | 8         | 4         |        | 21.03  | 20.97  | 20.96   |            |          |
| 3                                                           | 8         | 7         |        | 20.93  | 20.69  | 21.01   |            |          |
| 3                                                           | 15        | 0         |        | 20.87  | 20.93  | 21.15   |            |          |
| 3                                                           | 1         | 0         | 64-QAM | 21.35  | 21.23  | 21.04   | 19.77      | 0.0948   |
| 3                                                           | 1         | 8         |        | 20.94  | 20.88  | 20.95   |            |          |
| 3                                                           | 1         | 14        |        | 21.07  | 20.86  | 21.05   |            |          |
| 3                                                           | 8         | 0         |        | 19.95  | 20.10  | 19.96   |            |          |
| 3                                                           | 8         | 4         |        | 20.00  | 20.03  | 19.96   |            |          |
| 3                                                           | 8         | 7         |        | 19.85  | 19.96  | 19.90   |            |          |
| 3                                                           | 15        | 0         |        | 19.76  | 19.85  | 19.77   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 4 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 1.4                                                         | 1         | 0         | QPSK   | 22.51  | 22.61  | 22.76   | 21.18      | 0.1312   |
| 1.4                                                         | 1         | 3         |        | 22.75  | 22.69  | 22.64   |            |          |
| 1.4                                                         | 1         | 5         |        | 22.58  | 22.52  | 22.71   |            |          |
| 1.4                                                         | 3         | 0         |        | 22.61  | 22.73  | 22.61   |            |          |
| 1.4                                                         | 3         | 1         |        | 22.72  | 22.62  | 22.51   |            |          |
| 1.4                                                         | 3         | 3         |        | 22.69  | 22.70  | 22.46   |            |          |
| 1.4                                                         | 6         | 0         |        | 21.61  | 21.78  | 21.50   |            |          |
| 1.4                                                         | 1         | 0         | 16-QAM | 21.69  | 21.52  | 21.74   | 20.23      | 0.1054   |
| 1.4                                                         | 1         | 3         |        | 21.55  | 21.68  | 21.56   |            |          |
| 1.4                                                         | 1         | 5         |        | 21.53  | 21.57  | 21.73   |            |          |
| 1.4                                                         | 3         | 0         |        | 21.81  | 21.73  | 21.61   |            |          |
| 1.4                                                         | 3         | 1         |        | 21.67  | 21.49  | 21.71   |            |          |
| 1.4                                                         | 3         | 3         |        | 21.66  | 21.73  | 21.55   |            |          |
| 1.4                                                         | 6         | 0         |        | 20.96  | 20.73  | 20.76   |            |          |
| 1.4                                                         | 1         | 0         | 64-QAM | 20.76  | 20.92  | 20.82   | 19.42      | 0.0875   |
| 1.4                                                         | 1         | 3         |        | 20.94  | 20.86  | 20.85   |            |          |
| 1.4                                                         | 1         | 5         |        | 20.91  | 20.78  | 20.85   |            |          |
| 1.4                                                         | 3         | 0         |        | 20.84  | 20.81  | 20.94   |            |          |
| 1.4                                                         | 3         | 1         |        | 20.83  | 20.90  | 20.79   |            |          |
| 1.4                                                         | 3         | 3         |        | 20.91  | 20.88  | 20.74   |            |          |
| 1.4                                                         | 6         | 0         |        | 20.89  | 21.00  | 20.74   |            |          |
| Limit                                                       | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 5 Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |        |        |        |         |           |         |
|-------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                    | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 10                                                          | 1        | 0         | QPSK   | 23.22  | 23.35  | 23.34   | 20.13     | 0.1030  |
| 10                                                          | 1        | 25        |        | 23.11  | 23.20  | 23.33   |           |         |
| 10                                                          | 1        | 49        |        | 23.17  | 23.30  | 23.29   |           |         |
| 10                                                          | 25       | 0         |        | 22.31  | 22.52  | 22.51   |           |         |
| 10                                                          | 25       | 12        |        | 22.30  | 22.36  | 22.43   |           |         |
| 10                                                          | 25       | 25        |        | 22.26  | 22.42  | 22.49   |           |         |
| 10                                                          | 50       | 0         |        | 22.29  | 22.36  | 22.44   |           |         |
| 10                                                          | 1        | 0         | 16-QAM | 22.52  | 22.59  | 22.69   | 19.53     | 0.0897  |
| 10                                                          | 1        | 25        |        | 22.52  | 22.66  | 22.75   |           |         |
| 10                                                          | 1        | 49        |        | 22.65  | 22.71  | 22.03   |           |         |
| 10                                                          | 25       | 0         |        | 21.20  | 21.33  | 21.44   |           |         |
| 10                                                          | 25       | 12        |        | 21.31  | 21.34  | 21.43   |           |         |
| 10                                                          | 25       | 25        |        | 21.26  | 21.45  | 21.44   |           |         |
| 10                                                          | 50       | 0         |        | 21.32  | 21.33  | 21.45   |           |         |
| 10                                                          | 1        | 0         | 64-QAM | 21.43  | 21.42  | 21.59   | 18.37     | 0.0687  |
| 10                                                          | 1        | 25        |        | 21.13  | 21.56  | 20.89   |           |         |
| 10                                                          | 1        | 49        |        | 21.13  | 21.57  | 20.01   |           |         |
| 10                                                          | 25       | 0         |        | 20.10  | 20.35  | 19.98   |           |         |
| 10                                                          | 25       | 12        |        | 20.20  | 20.41  | 20.11   |           |         |
| 10                                                          | 25       | 25        |        | 20.30  | 20.48  | 20.23   |           |         |
| 10                                                          | 50       | 0         |        | 20.33  | 20.34  | 20.10   |           |         |
| Limit                                                       | ERP < 7W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 5 Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |        |        |        |         |           |         |
|-------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                    | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 5                                                           | 1        | 0         | QPSK   | 23.05  | 23.31  | 23.33   | 20.11     | 0.1026  |
| 5                                                           | 1        | 12        |        | 23.09  | 23.12  | 23.30   |           |         |
| 5                                                           | 1        | 24        |        | 23.13  | 23.24  | 23.20   |           |         |
| 5                                                           | 12       | 0         |        | 22.31  | 22.35  | 22.34   |           |         |
| 5                                                           | 12       | 7         |        | 22.30  | 22.23  | 22.23   |           |         |
| 5                                                           | 12       | 13        |        | 22.17  | 22.39  | 22.46   |           |         |
| 5                                                           | 25       | 0         |        | 22.10  | 22.25  | 22.30   |           |         |
| 5                                                           | 1        | 0         | 16-QAM | 22.47  | 22.52  | 22.49   | 19.51     | 0.0893  |
| 5                                                           | 1        | 12        |        | 22.44  | 22.47  | 22.73   |           |         |
| 5                                                           | 1        | 24        |        | 22.63  | 22.51  | 22.00   |           |         |
| 5                                                           | 12       | 0         |        | 21.10  | 21.22  | 21.26   |           |         |
| 5                                                           | 12       | 7         |        | 21.23  | 21.27  | 21.28   |           |         |
| 5                                                           | 12       | 13        |        | 21.09  | 21.30  | 21.27   |           |         |
| 5                                                           | 25       | 0         |        | 21.22  | 21.25  | 21.37   |           |         |
| 5                                                           | 1        | 0         | 64-QAM | 21.39  | 21.33  | 21.48   | 18.26     | 0.0670  |
| 5                                                           | 1        | 12        |        | 21.11  | 21.44  | 20.89   |           |         |
| 5                                                           | 1        | 24        |        | 21.12  | 21.40  | 19.98   |           |         |
| 5                                                           | 12       | 0         |        | 20.05  | 20.21  | 19.96   |           |         |
| 5                                                           | 12       | 7         |        | 20.18  | 20.37  | 19.92   |           |         |
| 5                                                           | 12       | 13        |        | 20.10  | 20.43  | 20.06   |           |         |
| 5                                                           | 25       | 0         |        | 20.30  | 20.27  | 19.90   |           |         |
| Limit                                                       | ERP < 7W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 5 Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |        |        |        |         |           |         |
|-------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                    | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 3                                                           | 1        | 0         | QPSK   | 22.92  | 23.31  | 23.13   | 20.09     | 0.1021  |
| 3                                                           | 1        | 8         |        | 23.09  | 23.01  | 23.30   |           |         |
| 3                                                           | 1        | 14        |        | 23.06  | 23.10  | 23.05   |           |         |
| 3                                                           | 8        | 0         |        | 22.26  | 22.27  | 22.14   |           |         |
| 3                                                           | 8        | 4         |        | 22.20  | 22.09  | 22.19   |           |         |
| 3                                                           | 8        | 7         |        | 22.00  | 22.31  | 22.36   |           |         |
| 3                                                           | 15       | 0         |        | 21.98  | 22.13  | 22.17   |           |         |
| 3                                                           | 1        | 0         | 16-QAM | 22.39  | 22.46  | 22.38   | 19.45     | 0.0881  |
| 3                                                           | 1        | 8         |        | 22.40  | 22.42  | 22.67   |           |         |
| 3                                                           | 1        | 14        |        | 22.59  | 22.42  | 21.96   |           |         |
| 3                                                           | 8        | 0         |        | 21.04  | 21.21  | 21.23   |           |         |
| 3                                                           | 8        | 4         |        | 21.18  | 21.08  | 21.24   |           |         |
| 3                                                           | 8        | 7         |        | 20.97  | 21.13  | 21.21   |           |         |
| 3                                                           | 15       | 0         |        | 21.07  | 21.09  | 21.22   |           |         |
| 3                                                           | 1        | 0         | 64-QAM | 21.23  | 21.13  | 21.39   | 18.17     | 0.0656  |
| 3                                                           | 1        | 8         |        | 20.94  | 21.36  | 20.70   |           |         |
| 3                                                           | 1        | 14        |        | 21.06  | 21.28  | 19.81   |           |         |
| 3                                                           | 8        | 0         |        | 20.03  | 20.13  | 19.81   |           |         |
| 3                                                           | 8        | 4         |        | 19.99  | 20.23  | 19.89   |           |         |
| 3                                                           | 8        | 7         |        | 19.96  | 20.40  | 20.06   |           |         |
| 3                                                           | 15       | 0         |        | 20.21  | 20.23  | 19.70   |           |         |
| Limit                                                       | ERP < 7W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 5 Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |        |        |        |         |           |         |
|-------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                    | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 1.4                                                         | 1        | 0         | QPSK   | 22.51  | 22.54  | 22.83   | 19.61     | 0.0914  |
| 1.4                                                         | 1        | 3         |        | 22.83  | 22.62  | 22.69   |           |         |
| 1.4                                                         | 1        | 5         |        | 22.62  | 22.47  | 22.76   |           |         |
| 1.4                                                         | 3        | 0         |        | 22.55  | 22.74  | 22.53   |           |         |
| 1.4                                                         | 3        | 1         |        | 22.69  | 22.63  | 22.43   |           |         |
| 1.4                                                         | 3        | 3         |        | 22.59  | 22.70  | 22.44   |           |         |
| 1.4                                                         | 6        | 0         |        | 21.51  | 21.87  | 21.48   |           |         |
| 1.4                                                         | 1        | 0         | 16-QAM | 21.70  | 21.45  | 21.71   | 18.65     | 0.0733  |
| 1.4                                                         | 1        | 3         |        | 21.52  | 21.64  | 21.55   |           |         |
| 1.4                                                         | 1        | 5         |        | 21.60  | 21.59  | 21.67   |           |         |
| 1.4                                                         | 3        | 0         |        | 21.87  | 21.75  | 21.68   |           |         |
| 1.4                                                         | 3        | 1         |        | 21.66  | 21.49  | 21.64   |           |         |
| 1.4                                                         | 3        | 3         |        | 21.58  | 21.68  | 21.46   |           |         |
| 1.4                                                         | 6        | 0         |        | 20.92  | 20.77  | 20.80   |           |         |
| 1.4                                                         | 1        | 0         | 64-QAM | 20.79  | 20.86  | 20.83   | 17.77     | 0.0598  |
| 1.4                                                         | 1        | 3         |        | 20.86  | 20.85  | 20.85   |           |         |
| 1.4                                                         | 1        | 5         |        | 20.89  | 20.85  | 20.87   |           |         |
| 1.4                                                         | 3        | 0         |        | 20.81  | 20.83  | 20.99   |           |         |
| 1.4                                                         | 3        | 1         |        | 20.77  | 20.88  | 20.72   |           |         |
| 1.4                                                         | 3        | 3         |        | 20.99  | 20.93  | 20.69   |           |         |
| 1.4                                                         | 6        | 0         |        | 20.99  | 20.91  | 20.71   |           |         |
| Limit                                                       | ERP < 7W |           |        | Result |        |         | Pass      |         |



| LTE Band 12 Maximum Average Power [dBm] (GT - LC = -1.61 dB) |          |           |        |        |        |         |           |         |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 10                                                           | 1        | 0         | QPSK   | 23.69  | 23.70  | 23.62   | 19.94     | 0.0986  |
| 10                                                           | 1        | 25        |        | 23.64  | 23.58  | 23.53   |           |         |
| 10                                                           | 1        | 49        |        | 23.66  | 23.58  | 23.57   |           |         |
| 10                                                           | 25       | 0         |        | 22.90  | 22.79  | 22.78   |           |         |
| 10                                                           | 25       | 12        |        | 22.89  | 22.76  | 22.76   |           |         |
| 10                                                           | 25       | 25        |        | 22.85  | 22.72  | 22.76   |           |         |
| 10                                                           | 50       | 0         |        | 22.86  | 22.76  | 22.82   |           |         |
| 10                                                           | 1        | 0         | 16-QAM | 22.85  | 22.78  | 22.99   | 19.23     | 0.0838  |
| 10                                                           | 1        | 25        |        | 22.68  | 22.85  | 22.93   |           |         |
| 10                                                           | 1        | 49        |        | 22.92  | 22.92  | 22.90   |           |         |
| 10                                                           | 25       | 0         |        | 21.81  | 21.76  | 21.78   |           |         |
| 10                                                           | 25       | 12        |        | 21.85  | 21.78  | 21.81   |           |         |
| 10                                                           | 25       | 25        |        | 21.90  | 21.71  | 21.75   |           |         |
| 10                                                           | 50       | 0         |        | 21.86  | 21.78  | 21.79   |           |         |
| 10                                                           | 1        | 0         | 64-QAM | 21.95  | 21.91  | 21.86   | 18.2      | 0.0661  |
| 10                                                           | 1        | 25        |        | 21.92  | 21.96  | 21.78   |           |         |
| 10                                                           | 1        | 49        |        | 21.92  | 21.85  | 21.73   |           |         |
| 10                                                           | 25       | 0         |        | 20.86  | 20.81  | 20.83   |           |         |
| 10                                                           | 25       | 12        |        | 20.99  | 20.81  | 20.81   |           |         |
| 10                                                           | 25       | 25        |        | 20.88  | 20.76  | 20.81   |           |         |
| 10                                                           | 50       | 0         |        | 20.87  | 20.79  | 20.83   |           |         |
| Limit                                                        | ERP < 3W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 12 Maximum Average Power [dBm] (GT - LC = -1.61 dB) |          |           |        |        |        |         |           |         |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 5                                                            | 1        | 0         | QPSK   | 23.60  | 23.58  | 23.51   | 19.84     | 0.0964  |
| 5                                                            | 1        | 12        |        | 23.54  | 23.45  | 23.33   |           |         |
| 5                                                            | 1        | 24        |        | 23.58  | 23.52  | 23.44   |           |         |
| 5                                                            | 12       | 0         |        | 22.70  | 22.67  | 22.60   |           |         |
| 5                                                            | 12       | 7         |        | 22.71  | 22.66  | 22.63   |           |         |
| 5                                                            | 12       | 13        |        | 22.85  | 22.55  | 22.60   |           |         |
| 5                                                            | 25       | 0         |        | 22.72  | 22.61  | 22.81   |           |         |
| 5                                                            | 1        | 0         | 16-QAM | 22.76  | 22.61  | 22.92   | 19.16     | 0.0824  |
| 5                                                            | 1        | 12        |        | 22.49  | 22.73  | 22.84   |           |         |
| 5                                                            | 1        | 24        |        | 22.77  | 22.79  | 22.86   |           |         |
| 5                                                            | 12       | 0         |        | 21.72  | 21.62  | 21.61   |           |         |
| 5                                                            | 12       | 7         |        | 21.67  | 21.74  | 21.62   |           |         |
| 5                                                            | 12       | 13        |        | 21.72  | 21.68  | 21.57   |           |         |
| 5                                                            | 25       | 0         |        | 21.85  | 21.59  | 21.70   |           |         |
| 5                                                            | 1        | 0         | 64-QAM | 21.86  | 21.81  | 21.85   | 18.1      | 0.0646  |
| 5                                                            | 1        | 12        |        | 21.83  | 21.76  | 21.58   |           |         |
| 5                                                            | 1        | 24        |        | 21.84  | 21.77  | 21.72   |           |         |
| 5                                                            | 12       | 0         |        | 20.67  | 20.67  | 20.72   |           |         |
| 5                                                            | 12       | 7         |        | 20.90  | 20.74  | 20.76   |           |         |
| 5                                                            | 12       | 13        |        | 20.73  | 20.59  | 20.70   |           |         |
| 5                                                            | 25       | 0         |        | 20.71  | 20.60  | 20.81   |           |         |
| Limit                                                        | ERP < 3W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 12 Maximum Average Power [dBm] (GT - LC = -1.61 dB) |          |           |        |        |        |         |           |         |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 3                                                            | 1        | 0         | QPSK   | 23.53  | 23.40  | 23.43   | 19.77     | 0.0948  |
| 3                                                            | 1        | 8         |        | 23.41  | 23.32  | 23.18   |           |         |
| 3                                                            | 1        | 14        |        | 23.52  | 23.39  | 23.39   |           |         |
| 3                                                            | 8        | 0         |        | 22.68  | 22.52  | 22.42   |           |         |
| 3                                                            | 8        | 4         |        | 22.60  | 22.65  | 22.43   |           |         |
| 3                                                            | 8        | 7         |        | 22.66  | 22.51  | 22.43   |           |         |
| 3                                                            | 15       | 0         |        | 22.70  | 22.48  | 22.72   |           |         |
| 3                                                            | 1        | 0         | 16-QAM | 22.61  | 22.61  | 22.84   | 19.09     | 0.0811  |
| 3                                                            | 1        | 8         |        | 22.30  | 22.65  | 22.71   |           |         |
| 3                                                            | 1        | 14        |        | 22.58  | 22.72  | 22.85   |           |         |
| 3                                                            | 8        | 0         |        | 21.54  | 21.59  | 21.54   |           |         |
| 3                                                            | 8        | 4         |        | 21.48  | 21.71  | 21.60   |           |         |
| 3                                                            | 8        | 7         |        | 21.65  | 21.54  | 21.43   |           |         |
| 3                                                            | 15       | 0         |        | 21.84  | 21.52  | 21.62   |           |         |
| 3                                                            | 1        | 0         | 64-QAM | 21.70  | 21.81  | 21.72   | 18.07     | 0.0641  |
| 3                                                            | 1        | 8         |        | 21.79  | 21.58  | 21.38   |           |         |
| 3                                                            | 1        | 14        |        | 21.83  | 21.65  | 21.64   |           |         |
| 3                                                            | 8        | 0         |        | 20.52  | 20.56  | 20.62   |           |         |
| 3                                                            | 8        | 4         |        | 20.71  | 20.57  | 20.65   |           |         |
| 3                                                            | 8        | 7         |        | 20.61  | 20.39  | 20.57   |           |         |
| 3                                                            | 15       | 0         |        | 20.58  | 20.53  | 20.80   |           |         |
| Limit                                                        | ERP < 3W |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 12 Maximum Average Power [dBm] (GT - LC = -1.61 dB) |          |           |        |        |        |         |           |         |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 1.4                                                          | 1        | 0         | QPSK   | 22.42  | 22.69  | 22.92   | 19.17     | 0.0826  |
| 1.4                                                          | 1        | 3         |        | 22.78  | 22.61  | 22.88   |           |         |
| 1.4                                                          | 1        | 5         |        | 22.62  | 22.64  | 22.93   |           |         |
| 1.4                                                          | 3        | 0         |        | 22.56  | 22.66  | 22.50   |           |         |
| 1.4                                                          | 3        | 1         |        | 22.73  | 22.62  | 22.26   |           |         |
| 1.4                                                          | 3        | 3         |        | 22.53  | 22.60  | 22.60   |           |         |
| 1.4                                                          | 6        | 0         |        | 21.37  | 21.79  | 21.68   |           |         |
| 1.4                                                          | 1        | 0         | 16-QAM | 21.62  | 21.36  | 21.80   | 18.08     | 0.0643  |
| 1.4                                                          | 1        | 3         |        | 21.49  | 21.69  | 21.68   |           |         |
| 1.4                                                          | 1        | 5         |        | 21.43  | 21.65  | 21.82   |           |         |
| 1.4                                                          | 3        | 0         |        | 21.84  | 21.55  | 21.56   |           |         |
| 1.4                                                          | 3        | 1         |        | 21.52  | 21.68  | 21.64   |           |         |
| 1.4                                                          | 3        | 3         |        | 21.56  | 21.51  | 21.39   |           |         |
| 1.4                                                          | 6        | 0         |        | 20.88  | 20.66  | 20.91   |           |         |
| 1.4                                                          | 1        | 0         | 64-QAM | 20.97  | 20.95  | 20.67   | 17.42     | 0.0552  |
| 1.4                                                          | 1        | 3         |        | 20.88  | 20.67  | 20.76   |           |         |
| 1.4                                                          | 1        | 5         |        | 20.97  | 20.69  | 20.99   |           |         |
| 1.4                                                          | 3        | 0         |        | 20.96  | 21.03  | 20.83   |           |         |
| 1.4                                                          | 3        | 1         |        | 20.67  | 20.93  | 20.76   |           |         |
| 1.4                                                          | 3        | 3         |        | 20.89  | 20.74  | 20.89   |           |         |
| 1.4                                                          | 6        | 0         |        | 21.18  | 20.86  | 20.86   |           |         |
| Limit                                                        | ERP < 3W |           |        | Result |        |         | Pass      |         |



| LTE Band 13 Maximum Average Power [dBm] (GT - LC = -0.99 dB) |          |           |        |        |        |         |           |         |        |        |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|--------|--------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |        |        |
| 10                                                           | 1        | 0         | QPSK   | -      | 23.51  | -       | 20.37     | 0.1089  |        |        |
| 10                                                           | 1        | 25        |        |        | 23.49  |         |           |         |        |        |
| 10                                                           | 1        | 49        |        |        | 23.46  |         |           |         |        |        |
| 10                                                           | 25       | 0         |        |        | 21.93  |         |           |         |        |        |
| 10                                                           | 25       | 12        |        |        | 21.74  |         |           |         |        |        |
| 10                                                           | 25       | 25        |        |        | 21.40  |         |           |         |        |        |
| 10                                                           | 50       | 0         |        |        | 21.67  |         |           |         |        |        |
| 10                                                           | 1        | 0         | 16-QAM |        | 21.48  |         | -         | 18.7    | 0.0741 |        |
| 10                                                           | 1        | 25        |        |        | 21.60  |         |           |         |        |        |
| 10                                                           | 1        | 49        |        |        | 21.84  |         |           |         |        |        |
| 10                                                           | 25       | 0         |        |        | 20.41  |         |           |         |        |        |
| 10                                                           | 25       | 12        |        |        | 20.87  |         |           |         |        |        |
| 10                                                           | 25       | 25        |        |        | 20.32  |         |           |         |        |        |
| 10                                                           | 50       | 0         |        |        | 20.28  |         |           |         |        |        |
| 10                                                           | 1        | 0         | 64-QAM |        | 21.63  |         |           | -       | 18.62  | 0.0728 |
| 10                                                           | 1        | 25        |        |        | 21.52  |         |           |         |        |        |
| 10                                                           | 1        | 49        |        |        | 21.76  |         |           |         |        |        |
| 10                                                           | 25       | 0         |        |        | 20.75  |         |           |         |        |        |
| 10                                                           | 25       | 12        |        |        | 20.62  |         |           |         |        |        |
| 10                                                           | 25       | 25        |        |        | 20.71  |         |           |         |        |        |
| 10                                                           | 50       | 0         |        |        | 20.53  |         |           |         |        |        |
| Limit                                                        | ERP < 3W |           |        | Result |        |         |           |         | Pass   |        |



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Report No. : FG140849B

| LTE Band 13 Maximum Average Power [dBm] (GT - LC = -0.99 dB) |          |           |        |        |        |         |           |         |
|--------------------------------------------------------------|----------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                     | RB Size  | RB Offset | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
| 5                                                            | 1        | 0         | QPSK   | 23.43  | 23.41  | 23.40   | 20.32     | 0.1076  |
| 5                                                            | 1        | 12        |        | 23.46  | 23.41  | 23.41   |           |         |
| 5                                                            | 1        | 24        |        | 23.42  | 23.36  | 23.42   |           |         |
| 5                                                            | 12       | 0         |        | 21.87  | 21.87  | 21.85   |           |         |
| 5                                                            | 12       | 7         |        | 21.68  | 21.70  | 21.69   |           |         |
| 5                                                            | 12       | 13        |        | 21.33  | 21.30  | 21.30   |           |         |
| 5                                                            | 25       | 0         |        | 21.57  | 21.65  | 21.65   |           |         |
| 5                                                            | 1        | 0         | 16-QAM | 21.44  | 21.42  | 21.40   | 18.64     | 0.0731  |
| 5                                                            | 1        | 12        |        | 21.58  | 21.51  | 21.51   |           |         |
| 5                                                            | 1        | 24        |        | 21.78  | 21.75  | 21.74   |           |         |
| 5                                                            | 12       | 0         |        | 20.35  | 20.33  | 20.33   |           |         |
| 5                                                            | 12       | 7         |        | 20.85  | 20.81  | 20.80   |           |         |
| 5                                                            | 12       | 13        |        | 20.25  | 20.23  | 20.31   |           |         |
| 5                                                            | 25       | 0         |        | 20.28  | 20.24  | 20.28   |           |         |
| 5                                                            | 1        | 0         | 64-QAM | 21.54  | 21.57  | 21.61   | 18.53     | 0.0713  |
| 5                                                            | 1        | 12        |        | 21.46  | 21.42  | 21.45   |           |         |
| 5                                                            | 1        | 24        |        | 21.67  | 21.66  | 21.67   |           |         |
| 5                                                            | 12       | 0         |        | 20.72  | 20.65  | 20.65   |           |         |
| 5                                                            | 12       | 7         |        | 20.58  | 20.59  | 20.62   |           |         |
| 5                                                            | 12       | 13        |        | 20.71  | 20.66  | 20.68   |           |         |
| 5                                                            | 25       | 0         |        | 20.52  | 20.50  | 20.48   |           |         |
| Limit                                                        | ERP < 3W |           |        | Result |        |         | Pass      |         |



| LTE Band 41 Maximum Average Power [dBm] (GT - LC = -2.26 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                           | 1         | 0         | QPSK   | 22.71  | 22.61  | 23.24   | 20.98      | 0.1253   |
| 20                                                           | 1         | 49        |        | 22.96  | 23.02  | 23.03   |            |          |
| 20                                                           | 1         | 99        |        | 22.96  | 22.95  | 23.10   |            |          |
| 20                                                           | 50        | 0         |        | 21.89  | 21.63  | 22.16   |            |          |
| 20                                                           | 50        | 24        |        | 21.74  | 21.67  | 21.77   |            |          |
| 20                                                           | 50        | 50        |        | 21.83  | 21.69  | 21.65   |            |          |
| 20                                                           | 100       | 0         |        | 21.89  | 21.68  | 22.10   |            |          |
| 20                                                           | 1         | 0         | 16-QAM | 21.93  | 21.78  | 22.18   | 19.92      | 0.0982   |
| 20                                                           | 1         | 49        |        | 21.98  | 21.74  | 21.76   |            |          |
| 20                                                           | 1         | 99        |        | 21.79  | 21.84  | 21.68   |            |          |
| 20                                                           | 50        | 0         |        | 21.74  | 21.66  | 21.57   |            |          |
| 20                                                           | 50        | 24        |        | 21.84  | 21.81  | 21.87   |            |          |
| 20                                                           | 50        | 50        |        | 21.82  | 21.66  | 21.70   |            |          |
| 20                                                           | 100       | 0         |        | 21.87  | 21.68  | 21.54   |            |          |
| 20                                                           | 1         | 0         | 64-QAM | 21.62  | 21.50  | 21.83   | 19.57      | 0.0906   |
| 20                                                           | 1         | 49        |        | 21.72  | 21.70  | 21.54   |            |          |
| 20                                                           | 1         | 99        |        | 21.59  | 21.54  | 21.61   |            |          |
| 20                                                           | 50        | 0         |        | 19.95  | 19.67  | 20.20   |            |          |
| 20                                                           | 50        | 24        |        | 19.82  | 19.96  | 19.69   |            |          |
| 20                                                           | 50        | 50        |        | 19.96  | 19.75  | 20.00   |            |          |
| 20                                                           | 100       | 0         |        | 19.79  | 19.96  | 19.99   |            |          |
| Limit                                                        | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 41 Maximum Average Power [dBm] (GT - LC = -2.26 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                           | 1         | 0         | QPSK   | 22.56  | 22.60  | 23.10   | 20.84      | 0.1213   |
| 15                                                           | 1         | 37        |        | 22.76  | 22.97  | 22.92   |            |          |
| 15                                                           | 1         | 74        |        | 22.92  | 22.86  | 22.91   |            |          |
| 15                                                           | 36        | 0         |        | 21.72  | 21.57  | 22.04   |            |          |
| 15                                                           | 36        | 20        |        | 21.74  | 21.49  | 21.61   |            |          |
| 15                                                           | 36        | 39        |        | 21.63  | 21.50  | 21.61   |            |          |
| 15                                                           | 75        | 0         |        | 21.84  | 21.62  | 22.00   |            |          |
| 15                                                           | 1         | 0         | 16-QAM | 21.90  | 21.67  | 22.16   | 19.90      | 0.0977   |
| 15                                                           | 1         | 37        |        | 21.89  | 21.70  | 21.67   |            |          |
| 15                                                           | 1         | 74        |        | 21.61  | 21.77  | 21.66   |            |          |
| 15                                                           | 36        | 0         |        | 21.62  | 21.54  | 21.37   |            |          |
| 15                                                           | 36        | 20        |        | 21.72  | 21.65  | 21.78   |            |          |
| 15                                                           | 36        | 39        |        | 21.69  | 21.56  | 21.61   |            |          |
| 15                                                           | 75        | 0         |        | 21.79  | 21.51  | 21.42   |            |          |
| 15                                                           | 1         | 0         | 64-QAM | 21.45  | 21.50  | 21.73   | 19.47      | 0.0885   |
| 15                                                           | 1         | 37        |        | 21.69  | 21.56  | 21.54   |            |          |
| 15                                                           | 1         | 74        |        | 21.58  | 21.54  | 21.55   |            |          |
| 15                                                           | 36        | 0         |        | 19.94  | 19.50  | 20.06   |            |          |
| 15                                                           | 36        | 20        |        | 19.79  | 19.90  | 19.51   |            |          |
| 15                                                           | 36        | 39        |        | 19.90  | 19.73  | 19.83   |            |          |
| 15                                                           | 75        | 0         |        | 19.66  | 19.88  | 19.83   |            |          |
| Limit                                                        | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 41 Maximum Average Power [dBm] (GT - LC = -2.26 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                           | 1         | 0         | QPSK   | 22.39  | 22.60  | 22.91   | 20.66      | 0.1164   |
| 10                                                           | 1         | 25        |        | 22.70  | 22.92  | 22.92   |            |          |
| 10                                                           | 1         | 49        |        | 22.91  | 22.80  | 22.78   |            |          |
| 10                                                           | 25        | 0         |        | 21.57  | 21.42  | 22.02   |            |          |
| 10                                                           | 25        | 12        |        | 21.62  | 21.38  | 21.48   |            |          |
| 10                                                           | 25        | 25        |        | 21.53  | 21.32  | 21.41   |            |          |
| 10                                                           | 50        | 0         |        | 21.83  | 21.61  | 21.80   |            |          |
| 10                                                           | 1         | 0         | 16-QAM | 21.87  | 21.50  | 22.05   | 19.79      | 0.0953   |
| 10                                                           | 1         | 25        |        | 21.74  | 21.51  | 21.47   |            |          |
| 10                                                           | 1         | 49        |        | 21.50  | 21.77  | 21.66   |            |          |
| 10                                                           | 25        | 0         |        | 21.44  | 21.54  | 21.37   |            |          |
| 10                                                           | 25        | 12        |        | 21.54  | 21.49  | 21.78   |            |          |
| 10                                                           | 25        | 25        |        | 21.59  | 21.42  | 21.42   |            |          |
| 10                                                           | 50        | 0         |        | 21.77  | 21.45  | 21.41   |            |          |
| 10                                                           | 1         | 0         | 64-QAM | 21.34  | 21.35  | 21.67   | 19.41      | 0.0873   |
| 10                                                           | 1         | 25        |        | 21.66  | 21.36  | 21.54   |            |          |
| 10                                                           | 1         | 49        |        | 21.38  | 21.44  | 21.45   |            |          |
| 10                                                           | 25        | 0         |        | 19.79  | 19.48  | 19.96   |            |          |
| 10                                                           | 25        | 12        |        | 19.63  | 19.82  | 19.33   |            |          |
| 10                                                           | 25        | 25        |        | 19.72  | 19.57  | 19.75   |            |          |
| 10                                                           | 50        | 0         |        | 19.53  | 19.85  | 19.67   |            |          |
| Limit                                                        | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 41 Maximum Average Power [dBm] (GT - LC = -2.26 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                            | 1         | 0         | QPSK   | 22.29  | 22.45  | 22.86   | 20.63      | 0.1156   |
| 5                                                            | 1         | 12        |        | 22.55  | 22.89  | 22.80   |            |          |
| 5                                                            | 1         | 24        |        | 22.84  | 22.64  | 22.64   |            |          |
| 5                                                            | 12        | 0         |        | 21.40  | 21.30  | 22.00   |            |          |
| 5                                                            | 12        | 7         |        | 21.59  | 21.24  | 21.36   |            |          |
| 5                                                            | 12        | 13        |        | 21.40  | 21.30  | 21.37   |            |          |
| 5                                                            | 25        | 0         |        | 21.77  | 21.52  | 21.75   |            |          |
| 5                                                            | 1         | 0         | 16-QAM | 21.69  | 21.31  | 21.98   | 19.72      | 0.0938   |
| 5                                                            | 1         | 12        |        | 21.63  | 21.40  | 21.27   |            |          |
| 5                                                            | 1         | 24        |        | 21.39  | 21.71  | 21.46   |            |          |
| 5                                                            | 12        | 0         |        | 21.32  | 21.53  | 21.17   |            |          |
| 5                                                            | 12        | 7         |        | 21.50  | 21.45  | 21.67   |            |          |
| 5                                                            | 12        | 13        |        | 21.55  | 21.33  | 21.40   |            |          |
| 5                                                            | 25        | 0         |        | 21.71  | 21.44  | 21.34   |            |          |
| 5                                                            | 1         | 0         | 64-QAM | 21.25  | 21.20  | 21.55   | 19.29      | 0.0849   |
| 5                                                            | 1         | 12        |        | 21.49  | 21.28  | 21.44   |            |          |
| 5                                                            | 1         | 24        |        | 21.28  | 21.40  | 21.41   |            |          |
| 5                                                            | 12        | 0         |        | 19.65  | 19.46  | 19.83   |            |          |
| 5                                                            | 12        | 7         |        | 19.59  | 19.62  | 19.17   |            |          |
| 5                                                            | 12        | 13        |        | 19.71  | 19.43  | 19.75   |            |          |
| 5                                                            | 25        | 0         |        | 19.52  | 19.66  | 19.51   |            |          |
| Limit                                                        | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                           | 1         | 0         | QPSK   | 23.49  | 23.51  | 23.41   | 21.93      | 0.1560   |
| 20                                                           | 1         | 49        |        | 23.35  | 23.42  | 23.41   |            |          |
| 20                                                           | 1         | 99        |        | 23.33  | 23.26  | 23.46   |            |          |
| 20                                                           | 50        | 0         |        | 22.57  | 22.42  | 22.58   |            |          |
| 20                                                           | 50        | 24        |        | 22.54  | 22.36  | 22.56   |            |          |
| 20                                                           | 50        | 50        |        | 22.48  | 22.31  | 22.61   |            |          |
| 20                                                           | 100       | 0         |        | 22.51  | 22.34  | 22.55   |            |          |
| 20                                                           | 1         | 0         | 16-QAM | 22.85  | 22.61  | 22.79   | 21.27      | 0.1340   |
| 20                                                           | 1         | 49        |        | 22.78  | 22.53  | 22.78   |            |          |
| 20                                                           | 1         | 99        |        | 22.65  | 22.59  | 22.83   |            |          |
| 20                                                           | 50        | 0         |        | 21.59  | 21.30  | 21.59   |            |          |
| 20                                                           | 50        | 24        |        | 21.55  | 21.35  | 21.58   |            |          |
| 20                                                           | 50        | 50        |        | 21.49  | 21.34  | 21.62   |            |          |
| 20                                                           | 100       | 0         |        | 21.51  | 21.36  | 21.54   |            |          |
| 20                                                           | 1         | 0         | 64-QAM | 21.67  | 21.55  | 21.64   | 20.11      | 0.1026   |
| 20                                                           | 1         | 49        |        | 21.53  | 21.46  | 21.52   |            |          |
| 20                                                           | 1         | 99        |        | 21.55  | 21.57  | 21.69   |            |          |
| 20                                                           | 50        | 0         |        | 20.59  | 20.32  | 20.59   |            |          |
| 20                                                           | 50        | 24        |        | 20.56  | 20.38  | 20.60   |            |          |
| 20                                                           | 50        | 50        |        | 20.50  | 20.37  | 20.63   |            |          |
| 20                                                           | 100       | 0         |        | 20.55  | 20.38  | 20.57   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                           | 1         | 0         | QPSK   | 23.47  | 23.34  | 23.25   | 21.89      | 0.1545   |
| 15                                                           | 1         | 37        |        | 23.27  | 23.36  | 23.28   |            |          |
| 15                                                           | 1         | 74        |        | 23.20  | 23.13  | 23.36   |            |          |
| 15                                                           | 36        | 0         |        | 22.48  | 22.24  | 22.50   |            |          |
| 15                                                           | 36        | 20        |        | 22.35  | 22.26  | 22.54   |            |          |
| 15                                                           | 36        | 39        |        | 22.39  | 22.17  | 22.42   |            |          |
| 15                                                           | 75        | 0         |        | 22.49  | 22.31  | 22.40   |            |          |
| 15                                                           | 1         | 0         | 16-QAM | 22.76  | 22.54  | 22.78   | 21.20      | 0.1318   |
| 15                                                           | 1         | 37        |        | 22.68  | 22.35  | 22.77   |            |          |
| 15                                                           | 1         | 74        |        | 22.56  | 22.54  | 22.74   |            |          |
| 15                                                           | 36        | 0         |        | 21.53  | 21.13  | 21.46   |            |          |
| 15                                                           | 36        | 20        |        | 21.46  | 21.21  | 21.44   |            |          |
| 15                                                           | 36        | 39        |        | 21.29  | 21.31  | 21.52   |            |          |
| 15                                                           | 75        | 0         |        | 21.37  | 21.30  | 21.43   |            |          |
| 15                                                           | 1         | 0         | 64-QAM | 21.59  | 21.54  | 21.51   | 20.01      | 0.1002   |
| 15                                                           | 1         | 37        |        | 21.41  | 21.36  | 21.33   |            |          |
| 15                                                           | 1         | 74        |        | 21.48  | 21.48  | 21.54   |            |          |
| 15                                                           | 36        | 0         |        | 20.52  | 20.29  | 20.59   |            |          |
| 15                                                           | 36        | 20        |        | 20.44  | 20.31  | 20.40   |            |          |
| 15                                                           | 36        | 39        |        | 20.32  | 20.20  | 20.44   |            |          |
| 15                                                           | 75        | 0         |        | 20.40  | 20.29  | 20.41   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                           | 1         | 0         | QPSK   | 23.44  | 23.34  | 23.17   | 21.86      | 0.1535   |
| 10                                                           | 1         | 25        |        | 23.14  | 23.17  | 23.08   |            |          |
| 10                                                           | 1         | 49        |        | 23.00  | 23.08  | 23.25   |            |          |
| 10                                                           | 25        | 0         |        | 22.47  | 22.04  | 22.45   |            |          |
| 10                                                           | 25        | 12        |        | 22.33  | 22.13  | 22.45   |            |          |
| 10                                                           | 25        | 25        |        | 22.39  | 22.09  | 22.32   |            |          |
| 10                                                           | 50        | 0         |        | 22.34  | 22.22  | 22.35   |            |          |
| 10                                                           | 1         | 0         | 16-QAM | 22.64  | 22.38  | 22.72   | 21.18      | 0.1312   |
| 10                                                           | 1         | 25        |        | 22.49  | 22.25  | 22.76   |            |          |
| 10                                                           | 1         | 49        |        | 22.51  | 22.54  | 22.62   |            |          |
| 10                                                           | 25        | 0         |        | 21.39  | 21.03  | 21.33   |            |          |
| 10                                                           | 25        | 12        |        | 21.28  | 21.09  | 21.35   |            |          |
| 10                                                           | 25        | 25        |        | 21.18  | 21.19  | 21.40   |            |          |
| 10                                                           | 50        | 0         |        | 21.34  | 21.21  | 21.39   |            |          |
| 10                                                           | 1         | 0         | 64-QAM | 21.43  | 21.50  | 21.50   | 19.92      | 0.0982   |
| 10                                                           | 1         | 25        |        | 21.21  | 21.23  | 21.18   |            |          |
| 10                                                           | 1         | 49        |        | 21.34  | 21.33  | 21.49   |            |          |
| 10                                                           | 25        | 0         |        | 20.42  | 20.09  | 20.57   |            |          |
| 10                                                           | 25        | 12        |        | 20.43  | 20.22  | 20.24   |            |          |
| 10                                                           | 25        | 25        |        | 20.16  | 20.08  | 20.37   |            |          |
| 10                                                           | 50        | 0         |        | 20.40  | 20.26  | 20.31   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                            | 1         | 0         | QPSK   | 23.43  | 23.18  | 22.98   | 21.85      | 0.1531   |
| 5                                                            | 1         | 12        |        | 23.01  | 23.17  | 23.08   |            |          |
| 5                                                            | 1         | 24        |        | 22.82  | 23.00  | 23.16   |            |          |
| 5                                                            | 12        | 0         |        | 22.37  | 21.98  | 22.31   |            |          |
| 5                                                            | 12        | 7         |        | 22.24  | 22.09  | 22.40   |            |          |
| 5                                                            | 12        | 13        |        | 22.38  | 22.09  | 22.32   |            |          |
| 5                                                            | 25        | 0         |        | 22.17  | 22.16  | 22.30   |            |          |
| 5                                                            | 1         | 0         | 16-QAM | 22.59  | 22.20  | 22.56   | 21.07      | 0.1279   |
| 5                                                            | 1         | 12        |        | 22.45  | 22.19  | 22.65   |            |          |
| 5                                                            | 1         | 24        |        | 22.34  | 22.49  | 22.53   |            |          |
| 5                                                            | 12        | 0         |        | 21.20  | 20.96  | 21.19   |            |          |
| 5                                                            | 12        | 7         |        | 21.22  | 21.02  | 21.24   |            |          |
| 5                                                            | 12        | 13        |        | 21.18  | 21.19  | 21.20   |            |          |
| 5                                                            | 25        | 0         |        | 21.17  | 21.03  | 21.22   |            |          |
| 5                                                            | 1         | 0         | 64-QAM | 21.23  | 21.35  | 21.50   | 19.92      | 0.0982   |
| 5                                                            | 1         | 12        |        | 21.16  | 21.12  | 21.10   |            |          |
| 5                                                            | 1         | 24        |        | 21.20  | 21.33  | 21.29   |            |          |
| 5                                                            | 12        | 0         |        | 20.37  | 20.07  | 20.55   |            |          |
| 5                                                            | 12        | 7         |        | 20.38  | 20.16  | 20.16   |            |          |
| 5                                                            | 12        | 13        |        | 19.98  | 19.98  | 20.28   |            |          |
| 5                                                            | 25        | 0         |        | 20.28  | 20.25  | 20.19   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 3                                                            | 1         | 0         | QPSK   | 23.43  | 23.08  | 22.84   | 21.85      | 0.1531   |
| 3                                                            | 1         | 8         |        | 22.92  | 23.13  | 22.90   |            |          |
| 3                                                            | 1         | 14        |        | 22.82  | 22.88  | 23.00   |            |          |
| 3                                                            | 8         | 0         |        | 22.17  | 21.88  | 22.28   |            |          |
| 3                                                            | 8         | 4         |        | 22.20  | 22.03  | 22.29   |            |          |
| 3                                                            | 8         | 7         |        | 22.19  | 21.97  | 22.29   |            |          |
| 3                                                            | 15        | 0         |        | 22.17  | 21.97  | 22.26   |            |          |
| 3                                                            | 1         | 0         | 16-QAM | 22.40  | 22.10  | 22.40   | 20.94      | 0.1242   |
| 3                                                            | 1         | 8         |        | 22.45  | 22.18  | 22.52   |            |          |
| 3                                                            | 1         | 14        |        | 22.26  | 22.34  | 22.35   |            |          |
| 3                                                            | 8         | 0         |        | 21.00  | 20.95  | 21.09   |            |          |
| 3                                                            | 8         | 4         |        | 21.04  | 21.01  | 21.07   |            |          |
| 3                                                            | 8         | 7         |        | 21.00  | 21.12  | 21.12   |            |          |
| 3                                                            | 15        | 0         |        | 20.99  | 20.96  | 21.03   |            |          |
| 3                                                            | 1         | 0         | 64-QAM | 21.03  | 21.20  | 21.45   | 19.87      | 0.0971   |
| 3                                                            | 1         | 8         |        | 21.16  | 20.99  | 20.90   |            |          |
| 3                                                            | 1         | 14        |        | 21.19  | 21.31  | 21.13   |            |          |
| 3                                                            | 8         | 0         |        | 20.18  | 20.04  | 20.51   |            |          |
| 3                                                            | 8         | 4         |        | 20.18  | 19.99  | 20.04   |            |          |
| 3                                                            | 8         | 7         |        | 19.91  | 19.79  | 20.17   |            |          |
| 3                                                            | 15        | 0         |        | 20.20  | 20.08  | 20.17   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -1.58 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 1.4                                                          | 1         | 0         | QPSK   | 22.57  | 22.63  | 22.66   | 21.25      | 0.1334   |
| 1.4                                                          | 1         | 3         |        | 22.83  | 22.77  | 22.71   |            |          |
| 1.4                                                          | 1         | 5         |        | 22.65  | 22.54  | 22.66   |            |          |
| 1.4                                                          | 3         | 0         |        | 22.53  | 22.68  | 22.68   |            |          |
| 1.4                                                          | 3         | 1         |        | 22.63  | 22.60  | 22.46   |            |          |
| 1.4                                                          | 3         | 3         |        | 22.79  | 22.65  | 22.51   |            |          |
| 1.4                                                          | 6         | 0         |        | 21.68  | 21.85  | 21.59   |            |          |
| 1.4                                                          | 1         | 0         | 16-QAM | 21.62  | 21.44  | 21.66   | 20.30      | 0.1072   |
| 1.4                                                          | 1         | 3         |        | 21.54  | 21.61  | 21.62   |            |          |
| 1.4                                                          | 1         | 5         |        | 21.53  | 21.64  | 21.70   |            |          |
| 1.4                                                          | 3         | 0         |        | 21.88  | 21.82  | 21.69   |            |          |
| 1.4                                                          | 3         | 1         |        | 21.58  | 21.42  | 21.65   |            |          |
| 1.4                                                          | 3         | 3         |        | 21.63  | 21.64  | 21.52   |            |          |
| 1.4                                                          | 6         | 0         |        | 20.95  | 20.70  | 20.80   |            |          |
| 1.4                                                          | 1         | 0         | 64-QAM | 20.73  | 20.98  | 20.91   | 19.43      | 0.0877   |
| 1.4                                                          | 1         | 3         |        | 20.91  | 20.83  | 20.85   |            |          |
| 1.4                                                          | 1         | 5         |        | 20.95  | 20.70  | 20.92   |            |          |
| 1.4                                                          | 3         | 0         |        | 20.76  | 20.82  | 21.01   |            |          |
| 1.4                                                          | 3         | 1         |        | 20.81  | 20.89  | 20.86   |            |          |
| 1.4                                                          | 3         | 3         |        | 20.84  | 20.89  | 20.81   |            |          |
| 1.4                                                          | 6         | 0         |        | 20.86  | 20.99  | 20.81   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 5B_CA Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |         |           |        |        |        |         |           |         |
|-----------------------------------------------------------------|----------|-----------|---------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                        | PCC      |           | SCC     |           | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
|                                                                 | RB Size  | RB Offset | RB Size | RB Offset |        |        |        |         |           |         |
| 10+10                                                           | 50       | 0         | 50      | 0         | QPSK   | 21.59  | 21.72  | 21.65   | 20.39     | 0.1094  |
| 10+10                                                           | 1        | 0         | 1       | 49        |        | 10.95  | 10.84  | 10.93   |           |         |
| 10+10                                                           | 1        | 49        | 1       | 0         |        | 23.54  | 23.43  | 23.61   |           |         |
| 10+10                                                           | 50       | 0         | 50      | 0         | 16-QAM | 20.63  | 20.27  | 20.72   | 19.89     | 0.0975  |
| 10+10                                                           | 1        | 0         | 1       | 49        |        | 11.49  | 11.30  | 11.49   |           |         |
| 10+10                                                           | 1        | 49        | 1       | 0         |        | 22.98  | 22.92  | 23.11   |           |         |
| 10+10                                                           | 50       | 0         | 50      | 0         | 64-QAM | 19.86  | 20.03  | 20.23   | 17.49     | 0.0561  |
| 10+10                                                           | 1        | 0         | 1       | 49        |        | 11.27  | 11.15  | 11.28   |           |         |
| 10+10                                                           | 1        | 49        | 1       | 0         |        | 20.15  | 20.52  | 20.71   |           |         |
| 10+5                                                            | 50       | 0         | 25      | 0         | QPSK   | 21.35  | 21.51  | 21.23   | 20.37     | 0.1089  |
| 10+5                                                            | 1        | 0         | 1       | 24        |        | 11.21  | 11.11  | 12.18   |           |         |
| 10+5                                                            | 1        | 49        | 1       | 0         |        | 23.27  | 23.59  | 23.05   |           |         |
| 10+5                                                            | 50       | 0         | 25      | 0         | 16-QAM | 20.41  | 20.50  | 20.65   | 19.82     | 0.0959  |
| 10+5                                                            | 1        | 0         | 1       | 24        |        | 11.59  | 11.69  | 12.84   |           |         |
| 10+5                                                            | 1        | 49        | 1       | 0         |        | 22.83  | 23.04  | 22.58   |           |         |
| 10+5                                                            | 50       | 0         | 25      | 0         | 64-QAM | 19.85  | 20.12  | 19.91   | 16.91     | 0.0491  |
| 10+5                                                            | 1        | 0         | 1       | 24        |        | 11.51  | 11.45  | 12.56   |           |         |
| 10+5                                                            | 1        | 49        | 1       | 0         |        | 20.13  | 20.09  | 19.51   |           |         |
| 5+10                                                            | 25       | 0         | 50      | 0         | QPSK   | 21.49  | 21.52  | 21.75   | 20.43     | 0.1104  |
| 5+10                                                            | 1        | 0         | 1       | 49        |        | 11.29  | 11.25  | 12.26   |           |         |
| 5+10                                                            | 1        | 24        | 1       | 0         |        | 23.35  | 23.51  | 23.65   |           |         |
| 5+10                                                            | 25       | 0         | 50      | 0         | 16-QAM | 20.47  | 20.64  | 20.71   | 19.76     | 0.0946  |
| 5+10                                                            | 1        | 0         | 1       | 49        |        | 11.68  | 11.51  | 12.75   |           |         |
| 5+10                                                            | 1        | 24        | 1       | 0         |        | 22.75  | 22.98  | 22.91   |           |         |
| 5+10                                                            | 25       | 0         | 50      | 0         | 64-QAM | 19.61  | 20.34  | 20.52   | 17.51     | 0.0564  |
| 5+10                                                            | 1        | 0         | 1       | 49        |        | 11.56  | 11.46  | 12.56   |           |         |
| 5+10                                                            | 1        | 24        | 1       | 0         |        | 19.84  | 20.73  | 20.67   |           |         |
| Limit                                                           | ERP < 7W |           |         |           |        | Result |        |         | Pass      |         |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 5B_CA Maximum Average Power [dBm] (GT - LC = -1.07 dB) |          |           |         |           |        |        |        |         |           |         |
|-----------------------------------------------------------------|----------|-----------|---------|-----------|--------|--------|--------|---------|-----------|---------|
| BW [MHz]                                                        | PCC      |           | SCC     |           | Mod    | Lowest | Middle | Highest | ERP (dBm) | ERP (W) |
|                                                                 | RB Size  | RB Offset | RB Size | RB Offset |        |        |        |         |           |         |
| 5+3                                                             | 25       | 0         | 15      | 0         | QPSK   | 21.26  | 22.92  | 21.12   | 19.76     | 0.0946  |
| 5+3                                                             | 1        | 0         | 1       | 14        |        | 10.62  | 11.49  | 11.69   |           |         |
| 5+3                                                             | 1        | 24        | 1       | 0         |        | 21.45  | 22.98  | 20.69   |           |         |
| 5+3                                                             | 25       | 0         | 15      | 0         | 16-QAM | 20.34  | 21.81  | 20.45   | 19.31     | 0.0853  |
| 5+3                                                             | 1        | 0         | 1       | 14        |        | 11.07  | 12.06  | 12.07   |           |         |
| 5+3                                                             | 1        | 24        | 1       | 0         |        | 20.91  | 22.53  | 20.18   |           |         |
| 5+3                                                             | 25       | 0         | 15      | 0         | 64-QAM | 19.38  | 20.99  | 19.41   | 18.20     | 0.0661  |
| 5+3                                                             | 1        | 0         | 1       | 14        |        | 10.97  | 11.88  | 11.95   |           |         |
| 5+3                                                             | 1        | 24        | 1       | 0         |        | 19.64  | 21.42  | 18.86   |           |         |
| 3+5                                                             | 15       | 0         | 25      | 0         | QPSK   | 21.26  | 22.94  | 21.18   | 19.80     | 0.0955  |
| 3+5                                                             | 1        | 0         | 1       | 24        |        | 10.69  | 11.42  | 11.65   |           |         |
| 3+5                                                             | 1        | 14        | 1       | 0         |        | 21.81  | 23.02  | 21.52   |           |         |
| 3+5                                                             | 15       | 0         | 25      | 0         | 16-QAM | 20.32  | 22.06  | 20.23   | 19.28     | 0.0847  |
| 3+5                                                             | 1        | 0         | 1       | 24        |        | 11.21  | 11.84  | 12.16   |           |         |
| 3+5                                                             | 1        | 14        | 1       | 0         |        | 21.26  | 22.50  | 21.13   |           |         |
| 3+5                                                             | 15       | 0         | 25      | 0         | 64-QAM | 19.38  | 21.06  | 19.29   | 18.04     | 0.0637  |
| 3+5                                                             | 1        | 0         | 1       | 24        |        | 10.96  | 11.82  | 11.92   |           |         |
| 3+5                                                             | 1        | 14        | 1       | 0         |        | 20.24  | 21.26  | 19.86   |           |         |
| Limit                                                           | ERP < 7W |           |         |           |        | Result |        |         | Pass      |         |



## Appendix A. Test Results of Conducted Test

### Conducted Output Power(Average power & ERP/EIRP)

<Aux.>

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                          | 1         | 0         | QPSK   | 23.03  | 22.82  | 22.84   | 20.59      | 0.1146   |
| 20                                                          | 1         | 49        |        | 22.71  | 22.70  | 22.56   |            |          |
| 20                                                          | 1         | 99        |        | 22.73  | 22.86  | 22.59   |            |          |
| 20                                                          | 50        | 0         |        | 22.01  | 21.99  | 21.78   |            |          |
| 20                                                          | 50        | 24        |        | 21.95  | 21.90  | 21.66   |            |          |
| 20                                                          | 50        | 50        |        | 21.85  | 21.86  | 21.61   |            |          |
| 20                                                          | 100       | 0         |        | 21.96  | 21.96  | 21.68   |            |          |
| 20                                                          | 1         | 0         | 16-QAM | 22.18  | 22.00  | 22.08   | 19.74      | 0.0942   |
| 20                                                          | 1         | 49        |        | 21.91  | 21.92  | 21.74   |            |          |
| 20                                                          | 1         | 99        |        | 21.63  | 21.56  | 21.72   |            |          |
| 20                                                          | 50        | 0         |        | 20.84  | 20.81  | 21.67   |            |          |
| 20                                                          | 50        | 24        |        | 20.90  | 20.87  | 20.70   |            |          |
| 20                                                          | 50        | 50        |        | 20.84  | 20.78  | 21.60   |            |          |
| 20                                                          | 100       | 0         |        | 20.88  | 20.91  | 20.63   |            |          |
| 20                                                          | 1         | 0         | 64-QAM | 20.84  | 20.56  | 20.15   | 18.56      | 0.0718   |
| 20                                                          | 1         | 49        |        | 20.91  | 21.00  | 20.97   |            |          |
| 20                                                          | 1         | 99        |        | 20.99  | 20.97  | 20.89   |            |          |
| 20                                                          | 50        | 0         |        | 19.78  | 19.84  | 19.72   |            |          |
| 20                                                          | 50        | 24        |        | 19.89  | 19.90  | 19.83   |            |          |
| 20                                                          | 50        | 50        |        | 19.81  | 19.83  | 19.67   |            |          |
| 20                                                          | 100       | 0         |        | 19.95  | 19.93  | 19.63   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                          | 1         | 0         | QPSK   | 22.97  | 22.70  | 22.64   | 20.53      | 0.1130   |
| 15                                                          | 1         | 37        |        | 22.63  | 22.53  | 22.54   |            |          |
| 15                                                          | 1         | 74        |        | 22.56  | 22.78  | 22.53   |            |          |
| 15                                                          | 36        | 0         |        | 21.90  | 21.87  | 21.72   |            |          |
| 15                                                          | 36        | 20        |        | 21.78  | 21.90  | 21.53   |            |          |
| 15                                                          | 36        | 39        |        | 21.83  | 21.85  | 21.51   |            |          |
| 15                                                          | 75        | 0         |        | 21.78  | 21.93  | 21.62   |            |          |
| 15                                                          | 1         | 0         | 16-QAM | 22.15  | 21.96  | 21.91   | 19.71      | 0.0935   |
| 15                                                          | 1         | 37        |        | 21.74  | 21.74  | 21.73   |            |          |
| 15                                                          | 1         | 74        |        | 21.62  | 21.37  | 21.56   |            |          |
| 15                                                          | 36        | 0         |        | 20.83  | 20.70  | 21.59   |            |          |
| 15                                                          | 36        | 20        |        | 20.89  | 20.70  | 20.64   |            |          |
| 15                                                          | 36        | 39        |        | 20.64  | 20.73  | 21.40   |            |          |
| 15                                                          | 75        | 0         |        | 20.76  | 20.88  | 20.55   |            |          |
| 15                                                          | 1         | 0         | 64-QAM | 20.65  | 20.39  | 19.97   | 18.53      | 0.0713   |
| 15                                                          | 1         | 37        |        | 20.87  | 20.92  | 20.97   |            |          |
| 15                                                          | 1         | 74        |        | 20.92  | 20.80  | 20.71   |            |          |
| 15                                                          | 36        | 0         |        | 19.72  | 19.79  | 19.65   |            |          |
| 15                                                          | 36        | 20        |        | 19.79  | 19.75  | 19.68   |            |          |
| 15                                                          | 36        | 39        |        | 19.80  | 19.65  | 19.61   |            |          |
| 15                                                          | 75        | 0         |        | 19.82  | 19.77  | 19.55   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                          | 1         | 0         | QPSK   | 22.82  | 22.57  | 22.50   | 20.38      | 0.1091   |
| 10                                                          | 1         | 25        |        | 22.48  | 22.47  | 22.38   |            |          |
| 10                                                          | 1         | 49        |        | 22.37  | 22.69  | 22.43   |            |          |
| 10                                                          | 25        | 0         |        | 21.70  | 21.79  | 21.62   |            |          |
| 10                                                          | 25        | 12        |        | 21.58  | 21.83  | 21.51   |            |          |
| 10                                                          | 25        | 25        |        | 21.76  | 21.67  | 21.46   |            |          |
| 10                                                          | 50        | 0         |        | 21.65  | 21.87  | 21.45   |            |          |
| 10                                                          | 1         | 0         | 16-QAM | 21.96  | 21.81  | 21.91   | 19.52      | 0.0895   |
| 10                                                          | 1         | 25        |        | 21.62  | 21.59  | 21.60   |            |          |
| 10                                                          | 1         | 49        |        | 21.49  | 21.20  | 21.51   |            |          |
| 10                                                          | 25        | 0         |        | 20.77  | 20.61  | 21.50   |            |          |
| 10                                                          | 25        | 12        |        | 20.82  | 20.52  | 20.59   |            |          |
| 10                                                          | 25        | 25        |        | 20.64  | 20.57  | 21.33   |            |          |
| 10                                                          | 50        | 0         |        | 20.56  | 20.73  | 20.42   |            |          |
| 10                                                          | 1         | 0         | 64-QAM | 20.63  | 20.23  | 19.78   | 18.46      | 0.0701   |
| 10                                                          | 1         | 25        |        | 20.82  | 20.90  | 20.90   |            |          |
| 10                                                          | 1         | 49        |        | 20.90  | 20.60  | 20.58   |            |          |
| 10                                                          | 25        | 0         |        | 19.72  | 19.77  | 19.48   |            |          |
| 10                                                          | 25        | 12        |        | 19.59  | 19.56  | 19.56   |            |          |
| 10                                                          | 25        | 25        |        | 19.78  | 19.49  | 19.56   |            |          |
| 10                                                          | 50        | 0         |        | 19.67  | 19.60  | 19.38   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                           | 1         | 0         | QPSK   | 22.72  | 22.57  | 22.36   | 20.28      | 0.1067   |
| 5                                                           | 1         | 12        |        | 22.40  | 22.29  | 22.22   |            |          |
| 5                                                           | 1         | 24        |        | 22.25  | 22.62  | 22.39   |            |          |
| 5                                                           | 12        | 0         |        | 21.61  | 21.76  | 21.42   |            |          |
| 5                                                           | 12        | 7         |        | 21.42  | 21.77  | 21.36   |            |          |
| 5                                                           | 12        | 13        |        | 21.75  | 21.48  | 21.28   |            |          |
| 5                                                           | 25        | 0         |        | 21.63  | 21.80  | 21.32   |            |          |
| 5                                                           | 1         | 0         | 16-QAM | 21.82  | 21.77  | 21.89   | 19.45      | 0.0881   |
| 5                                                           | 1         | 12        |        | 21.44  | 21.57  | 21.50   |            |          |
| 5                                                           | 1         | 24        |        | 21.32  | 21.02  | 21.47   |            |          |
| 5                                                           | 12        | 0         |        | 20.69  | 20.45  | 21.48   |            |          |
| 5                                                           | 12        | 7         |        | 20.75  | 20.45  | 20.58   |            |          |
| 5                                                           | 12        | 13        |        | 20.53  | 20.52  | 21.27   |            |          |
| 5                                                           | 25        | 0         |        | 20.51  | 20.63  | 20.29   |            |          |
| 5                                                           | 1         | 0         | 64-QAM | 20.44  | 20.15  | 19.78   | 18.37      | 0.0687   |
| 5                                                           | 1         | 12        |        | 20.79  | 20.81  | 20.70   |            |          |
| 5                                                           | 1         | 24        |        | 20.70  | 20.57  | 20.49   |            |          |
| 5                                                           | 12        | 0         |        | 19.59  | 19.59  | 19.28   |            |          |
| 5                                                           | 12        | 7         |        | 19.46  | 19.54  | 19.50   |            |          |
| 5                                                           | 12        | 13        |        | 19.70  | 19.34  | 19.53   |            |          |
| 5                                                           | 25        | 0         |        | 19.49  | 19.54  | 19.33   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 3                                                           | 1         | 0         | QPSK   | 22.57  | 22.45  | 22.35   | 20.13      | 0.1030   |
| 3                                                           | 1         | 8         |        | 22.28  | 22.20  | 22.19   |            |          |
| 3                                                           | 1         | 14        |        | 22.19  | 22.43  | 22.38   |            |          |
| 3                                                           | 8         | 0         |        | 21.47  | 21.58  | 21.38   |            |          |
| 3                                                           | 8         | 4         |        | 21.29  | 21.74  | 21.29   |            |          |
| 3                                                           | 8         | 7         |        | 21.56  | 21.41  | 21.22   |            |          |
| 3                                                           | 15        | 0         |        | 21.55  | 21.62  | 21.22   |            |          |
| 3                                                           | 1         | 0         | 16-QAM | 21.79  | 21.71  | 21.85   | 19.41      | 0.0873   |
| 3                                                           | 1         | 8         |        | 21.44  | 21.54  | 21.46   |            |          |
| 3                                                           | 1         | 14        |        | 21.32  | 20.94  | 21.36   |            |          |
| 3                                                           | 8         | 0         |        | 20.52  | 20.43  | 21.43   |            |          |
| 3                                                           | 8         | 4         |        | 20.73  | 20.31  | 20.44   |            |          |
| 3                                                           | 8         | 7         |        | 20.38  | 20.52  | 21.21   |            |          |
| 3                                                           | 15        | 0         |        | 20.41  | 20.57  | 20.22   |            |          |
| 3                                                           | 1         | 0         | 64-QAM | 20.25  | 20.05  | 19.77   | 18.34      | 0.0682   |
| 3                                                           | 1         | 8         |        | 20.78  | 20.73  | 20.61   |            |          |
| 3                                                           | 1         | 14        |        | 20.57  | 20.52  | 20.38   |            |          |
| 3                                                           | 8         | 0         |        | 19.56  | 19.41  | 19.23   |            |          |
| 3                                                           | 8         | 4         |        | 19.40  | 19.34  | 19.44   |            |          |
| 3                                                           | 8         | 7         |        | 19.64  | 19.16  | 19.49   |            |          |
| 3                                                           | 15        | 0         |        | 19.32  | 19.50  | 19.14   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 2 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|-------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                    | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 1.4                                                         | 1         | 0         | QPSK   | 22.55  | 22.60  | 22.64   | 20.20      | 0.1047   |
| 1.4                                                         | 1         | 3         |        | 22.56  | 22.62  | 22.56   |            |          |
| 1.4                                                         | 1         | 5         |        | 22.57  | 22.58  | 22.58   |            |          |
| 1.4                                                         | 3         | 0         |        | 22.59  | 22.55  | 22.64   |            |          |
| 1.4                                                         | 3         | 1         |        | 22.55  | 22.58  | 22.55   |            |          |
| 1.4                                                         | 3         | 3         |        | 22.63  | 22.62  | 22.64   |            |          |
| 1.4                                                         | 6         | 0         |        | 21.85  | 21.84  | 21.86   |            |          |
| 1.4                                                         | 1         | 0         | 16-QAM | 21.92  | 21.86  | 21.88   | 19.50      | 0.0891   |
| 1.4                                                         | 1         | 3         |        | 21.92  | 21.91  | 21.91   |            |          |
| 1.4                                                         | 1         | 5         |        | 21.93  | 21.94  | 21.90   |            |          |
| 1.4                                                         | 3         | 0         |        | 21.86  | 21.92  | 21.88   |            |          |
| 1.4                                                         | 3         | 1         |        | 21.88  | 21.89  | 21.93   |            |          |
| 1.4                                                         | 3         | 3         |        | 21.92  | 21.84  | 21.84   |            |          |
| 1.4                                                         | 6         | 0         |        | 20.91  | 20.95  | 20.94   |            |          |
| 1.4                                                         | 1         | 0         | 64-QAM | 20.97  | 20.90  | 20.95   | 18.56      | 0.0718   |
| 1.4                                                         | 1         | 3         |        | 20.97  | 20.99  | 20.90   |            |          |
| 1.4                                                         | 1         | 5         |        | 21.00  | 20.95  | 20.91   |            |          |
| 1.4                                                         | 3         | 0         |        | 20.93  | 20.97  | 20.94   |            |          |
| 1.4                                                         | 3         | 1         |        | 20.93  | 20.94  | 20.93   |            |          |
| 1.4                                                         | 3         | 3         |        | 20.98  | 20.96  | 20.95   |            |          |
| 1.4                                                         | 6         | 0         |        | 19.57  | 19.68  | 19.88   |            |          |
| Limit                                                       | EIRP < 2W |           |        | Result |        |         | Pass       |          |



| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 20                                                           | 1         | 0         | QPSK   | 22.73  | 22.74  | 22.99   | 20.55      | 0.1135   |
| 20                                                           | 1         | 49        |        | 22.44  | 22.37  | 22.76   |            |          |
| 20                                                           | 1         | 99        |        | 22.47  | 22.47  | 22.80   |            |          |
| 20                                                           | 50        | 0         |        | 22.20  | 22.22  | 22.43   |            |          |
| 20                                                           | 50        | 24        |        | 22.19  | 22.12  | 22.30   |            |          |
| 20                                                           | 50        | 50        |        | 22.14  | 22.01  | 22.35   |            |          |
| 20                                                           | 100       | 0         |        | 22.12  | 22.02  | 22.30   |            |          |
| 20                                                           | 1         | 0         | 16-QAM | 21.81  | 21.78  | 22.33   | 19.89      | 0.0975   |
| 20                                                           | 1         | 49        |        | 22.02  | 21.94  | 22.13   |            |          |
| 20                                                           | 1         | 99        |        | 21.91  | 22.01  | 22.22   |            |          |
| 20                                                           | 50        | 0         |        | 21.14  | 21.00  | 21.19   |            |          |
| 20                                                           | 50        | 24        |        | 21.11  | 21.04  | 21.25   |            |          |
| 20                                                           | 50        | 50        |        | 21.06  | 20.99  | 21.32   |            |          |
| 20                                                           | 100       | 0         |        | 21.18  | 21.03  | 21.29   |            |          |
| 20                                                           | 1         | 0         | 64-QAM | 21.18  | 21.14  | 21.40   | 19.05      | 0.0804   |
| 20                                                           | 1         | 49        |        | 21.20  | 21.10  | 21.46   |            |          |
| 20                                                           | 1         | 99        |        | 21.32  | 21.25  | 21.49   |            |          |
| 20                                                           | 50        | 0         |        | 20.15  | 19.98  | 20.19   |            |          |
| 20                                                           | 50        | 24        |        | 20.12  | 20.04  | 20.16   |            |          |
| 20                                                           | 50        | 50        |        | 20.04  | 19.99  | 20.30   |            |          |
| 20                                                           | 100       | 0         |        | 20.13  | 20.04  | 20.28   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 15                                                           | 1         | 0         | QPSK   | 22.68  | 22.69  | 22.93   | 20.49      | 0.1119   |
| 15                                                           | 1         | 37        |        | 22.31  | 22.24  | 22.73   |            |          |
| 15                                                           | 1         | 74        |        | 22.41  | 22.28  | 22.68   |            |          |
| 15                                                           | 36        | 0         |        | 22.10  | 22.04  | 22.29   |            |          |
| 15                                                           | 36        | 20        |        | 22.03  | 21.99  | 22.29   |            |          |
| 15                                                           | 36        | 39        |        | 22.04  | 21.86  | 22.22   |            |          |
| 15                                                           | 75        | 0         |        | 21.99  | 21.91  | 22.28   |            |          |
| 15                                                           | 1         | 0         | 16-QAM | 21.74  | 21.77  | 22.17   | 19.73      | 0.0940   |
| 15                                                           | 1         | 37        |        | 21.90  | 21.87  | 21.97   |            |          |
| 15                                                           | 1         | 74        |        | 21.84  | 21.92  | 22.14   |            |          |
| 15                                                           | 36        | 0         |        | 21.00  | 20.98  | 21.01   |            |          |
| 15                                                           | 36        | 20        |        | 21.09  | 20.86  | 21.08   |            |          |
| 15                                                           | 36        | 39        |        | 20.95  | 20.90  | 21.28   |            |          |
| 15                                                           | 75        | 0         |        | 21.01  | 21.03  | 21.21   |            |          |
| 15                                                           | 1         | 0         | 64-QAM | 21.14  | 21.06  | 21.33   | 19.01      | 0.0796   |
| 15                                                           | 1         | 37        |        | 21.05  | 21.09  | 21.45   |            |          |
| 15                                                           | 1         | 74        |        | 21.12  | 21.15  | 21.36   |            |          |
| 15                                                           | 36        | 0         |        | 20.07  | 19.81  | 20.06   |            |          |
| 15                                                           | 36        | 20        |        | 19.99  | 19.98  | 20.03   |            |          |
| 15                                                           | 36        | 39        |        | 19.94  | 19.88  | 20.30   |            |          |
| 15                                                           | 75        | 0         |        | 20.06  | 19.95  | 20.11   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 10                                                           | 1         | 0         | QPSK   | 22.59  | 22.55  | 22.77   | 20.33      | 0.1079   |
| 10                                                           | 1         | 25        |        | 22.14  | 22.24  | 22.72   |            |          |
| 10                                                           | 1         | 49        |        | 22.24  | 22.14  | 22.67   |            |          |
| 10                                                           | 25        | 0         |        | 22.01  | 22.03  | 22.12   |            |          |
| 10                                                           | 25        | 12        |        | 21.91  | 21.79  | 22.17   |            |          |
| 10                                                           | 25        | 25        |        | 21.98  | 21.83  | 22.22   |            |          |
| 10                                                           | 50        | 0         |        | 21.86  | 21.71  | 22.22   |            |          |
| 10                                                           | 1         | 0         | 16-QAM | 21.55  | 21.60  | 22.04   | 19.60      | 0.0912   |
| 10                                                           | 1         | 25        |        | 21.82  | 21.70  | 21.90   |            |          |
| 10                                                           | 1         | 49        |        | 21.75  | 21.90  | 21.96   |            |          |
| 10                                                           | 25        | 0         |        | 20.90  | 20.91  | 21.01   |            |          |
| 10                                                           | 25        | 12        |        | 21.02  | 20.85  | 20.96   |            |          |
| 10                                                           | 25        | 25        |        | 20.91  | 20.78  | 21.24   |            |          |
| 10                                                           | 50        | 0         |        | 20.85  | 20.98  | 21.06   |            |          |
| 10                                                           | 1         | 0         | 64-QAM | 21.14  | 20.96  | 21.29   | 18.99      | 0.0793   |
| 10                                                           | 1         | 25        |        | 20.94  | 20.94  | 21.43   |            |          |
| 10                                                           | 1         | 49        |        | 21.08  | 21.07  | 21.33   |            |          |
| 10                                                           | 25        | 0         |        | 20.04  | 19.77  | 20.06   |            |          |
| 10                                                           | 25        | 12        |        | 19.94  | 19.81  | 19.95   |            |          |
| 10                                                           | 25        | 25        |        | 19.78  | 19.81  | 20.16   |            |          |
| 10                                                           | 50        | 0         |        | 20.06  | 19.95  | 20.06   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 5                                                            | 1         | 0         | QPSK   | 22.49  | 22.40  | 22.76   | 20.32      | 0.1076   |
| 5                                                            | 1         | 12        |        | 22.01  | 22.11  | 22.54   |            |          |
| 5                                                            | 1         | 24        |        | 22.21  | 22.15  | 22.53   |            |          |
| 5                                                            | 12        | 0         |        | 21.90  | 21.94  | 22.11   |            |          |
| 5                                                            | 12        | 7         |        | 21.75  | 21.77  | 22.14   |            |          |
| 5                                                            | 12        | 13        |        | 21.78  | 21.71  | 22.16   |            |          |
| 5                                                            | 25        | 0         |        | 21.67  | 21.71  | 22.22   |            |          |
| 5                                                            | 1         | 0         | 16-QAM | 21.51  | 21.41  | 22.03   | 19.59      | 0.0910   |
| 5                                                            | 1         | 12        |        | 21.72  | 21.59  | 21.70   |            |          |
| 5                                                            | 1         | 24        |        | 21.55  | 21.86  | 21.85   |            |          |
| 5                                                            | 12        | 0         |        | 20.88  | 20.76  | 20.88   |            |          |
| 5                                                            | 12        | 7         |        | 20.91  | 20.80  | 20.77   |            |          |
| 5                                                            | 12        | 13        |        | 20.90  | 20.71  | 21.04   |            |          |
| 5                                                            | 25        | 0         |        | 20.65  | 20.90  | 21.00   |            |          |
| 5                                                            | 1         | 0         | 64-QAM | 21.04  | 20.86  | 21.17   | 18.79      | 0.0757   |
| 5                                                            | 1         | 12        |        | 20.85  | 20.91  | 21.23   |            |          |
| 5                                                            | 1         | 24        |        | 20.89  | 21.05  | 21.17   |            |          |
| 5                                                            | 12        | 0         |        | 20.02  | 19.68  | 19.88   |            |          |
| 5                                                            | 12        | 7         |        | 19.87  | 19.67  | 19.79   |            |          |
| 5                                                            | 12        | 13        |        | 19.78  | 19.70  | 20.00   |            |          |
| 5                                                            | 25        | 0         |        | 19.88  | 19.87  | 19.86   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 3                                                            | 1         | 0         | QPSK   | 22.43  | 22.31  | 22.74   | 20.30      | 0.1072   |
| 3                                                            | 1         | 8         |        | 22.64  | 22.00  | 22.44   |            |          |
| 3                                                            | 1         | 14        |        | 22.07  | 22.05  | 22.36   |            |          |
| 3                                                            | 8         | 0         |        | 21.84  | 21.90  | 22.07   |            |          |
| 3                                                            | 8         | 4         |        | 21.64  | 21.69  | 22.08   |            |          |
| 3                                                            | 8         | 7         |        | 21.75  | 21.62  | 22.10   |            |          |
| 3                                                            | 15        | 0         |        | 21.52  | 21.52  | 22.07   |            |          |
| 3                                                            | 1         | 0         | 16-QAM | 21.40  | 21.37  | 21.98   | 19.54      | 0.0899   |
| 3                                                            | 1         | 8         |        | 21.59  | 21.49  | 21.58   |            |          |
| 3                                                            | 1         | 14        |        | 21.44  | 21.79  | 21.85   |            |          |
| 3                                                            | 8         | 0         |        | 20.74  | 20.56  | 20.68   |            |          |
| 3                                                            | 8         | 4         |        | 20.72  | 20.66  | 20.67   |            |          |
| 3                                                            | 8         | 7         |        | 20.73  | 20.62  | 20.85   |            |          |
| 3                                                            | 15        | 0         |        | 20.53  | 20.80  | 20.80   |            |          |
| 3                                                            | 1         | 0         | 64-QAM | 20.89  | 20.74  | 21.07   | 18.77      | 0.0753   |
| 3                                                            | 1         | 8         |        | 20.72  | 20.76  | 21.21   |            |          |
| 3                                                            | 1         | 14        |        | 20.74  | 21.05  | 20.97   |            |          |
| 3                                                            | 8         | 0         |        | 19.82  | 19.48  | 19.87   |            |          |
| 3                                                            | 8         | 4         |        | 19.82  | 19.56  | 19.69   |            |          |
| 3                                                            | 8         | 7         |        | 19.70  | 19.53  | 19.99   |            |          |
| 3                                                            | 15        | 0         |        | 19.72  | 19.71  | 19.78   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



# FCC RADIO TEST REPORT

Report No. : FG140849B

| LTE Band 66 Maximum Average Power [dBm] (GT - LC = -2.44 dB) |           |           |        |        |        |         |            |          |
|--------------------------------------------------------------|-----------|-----------|--------|--------|--------|---------|------------|----------|
| BW [MHz]                                                     | RB Size   | RB Offset | Mod    | Lowest | Middle | Highest | EIRP (dBm) | EIRP (W) |
| 1.4                                                          | 1         | 0         | QPSK   | 22.47  | 22.55  | 22.53   | 20.39      | 0.1094   |
| 1.4                                                          | 1         | 3         |        | 22.62  | 22.53  | 22.48   |            |          |
| 1.4                                                          | 1         | 5         |        | 22.57  | 22.66  | 22.60   |            |          |
| 1.4                                                          | 3         | 0         |        | 22.58  | 22.60  | 22.83   |            |          |
| 1.4                                                          | 3         | 1         |        | 22.37  | 22.66  | 22.58   |            |          |
| 1.4                                                          | 3         | 3         |        | 22.70  | 22.53  | 22.57   |            |          |
| 1.4                                                          | 6         | 0         |        | 21.91  | 21.78  | 22.00   |            |          |
| 1.4                                                          | 1         | 0         | 16-QAM | 21.99  | 21.80  | 21.80   | 19.55      | 0.0902   |
| 1.4                                                          | 1         | 3         |        | 21.98  | 21.98  | 21.77   |            |          |
| 1.4                                                          | 1         | 5         |        | 21.73  | 21.87  | 21.84   |            |          |
| 1.4                                                          | 3         | 0         |        | 21.91  | 21.94  | 21.78   |            |          |
| 1.4                                                          | 3         | 1         |        | 21.74  | 21.83  | 21.88   |            |          |
| 1.4                                                          | 3         | 3         |        | 21.79  | 21.81  | 21.86   |            |          |
| 1.4                                                          | 6         | 0         |        | 21.03  | 20.92  | 20.86   |            |          |
| 1.4                                                          | 1         | 0         | 64-QAM | 20.86  | 21.03  | 20.84   | 18.66      | 0.0735   |
| 1.4                                                          | 1         | 3         |        | 21.04  | 21.09  | 20.72   |            |          |
| 1.4                                                          | 1         | 5         |        | 20.98  | 20.98  | 21.00   |            |          |
| 1.4                                                          | 3         | 0         |        | 21.04  | 20.93  | 20.77   |            |          |
| 1.4                                                          | 3         | 1         |        | 20.94  | 20.93  | 21.04   |            |          |
| 1.4                                                          | 3         | 3         |        | 21.01  | 21.10  | 21.01   |            |          |
| 1.4                                                          | 6         | 0         |        | 19.45  | 19.76  | 19.89   |            |          |
| Limit                                                        | EIRP < 1W |           |        | Result |        |         | Pass       |          |



## LTE Band 2

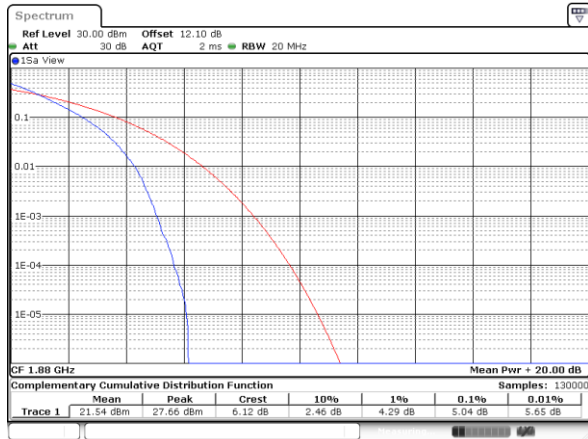
### Peak-to-Average Ratio

| Mode      | LTE Band 2 / 20MHz |         |         |             |
|-----------|--------------------|---------|---------|-------------|
| Mod.      | QPSK               | 16QAM   | 64QAM   | Limit: 13dB |
| RB Size   | Full RB            | Full RB | Full RB | Result      |
| Middle CH | 5.04               | 5.91    | 6.46    | <b>PASS</b> |



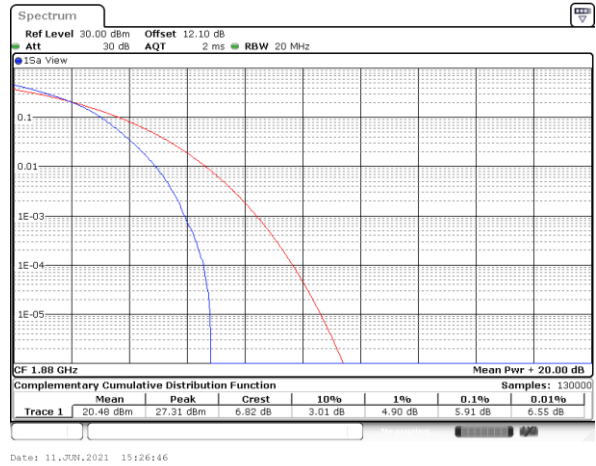
## LTE Band 2 / 20MHz / QPSK

## Middle Channel / Full RB



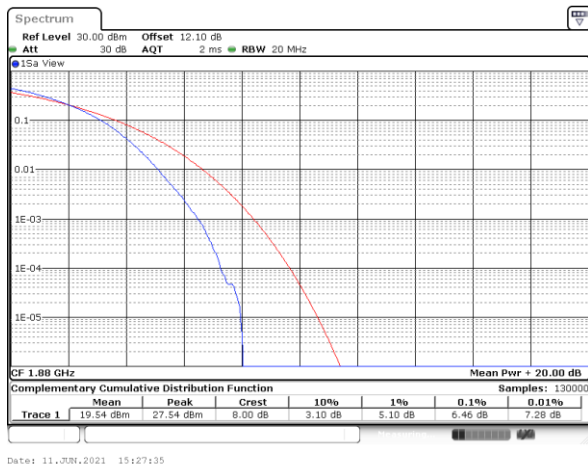
## LTE Band 2 / 20MHz / 16QAM

## Middle Channel / Full RB



## LTE Band 2 / 20MHz / 64QAM

## Middle Channel / Full RB



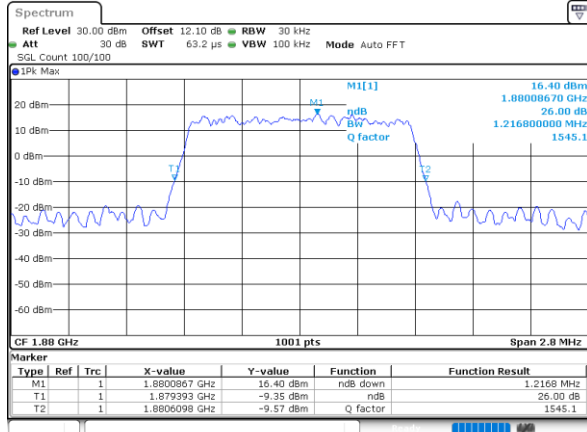
**26dB Bandwidth**

| 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   |
| Middle CH | 1.22                      | 1.24    | 3.03  | 3.00    | 4.91  | 4.98    | 9.83  | 9.67    | 14.36 | 14.30   | 19.14 | 18.86   |
| Mode      | LTE Band 2 : 26dB BW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
| BW        | 1.4MHz                    |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | 64QAM                     | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | 1.21                      | -       | 2.99  | -       | 4.96  | -       | 9.87  | -       | 14.30 | -       | 19.50 | -       |

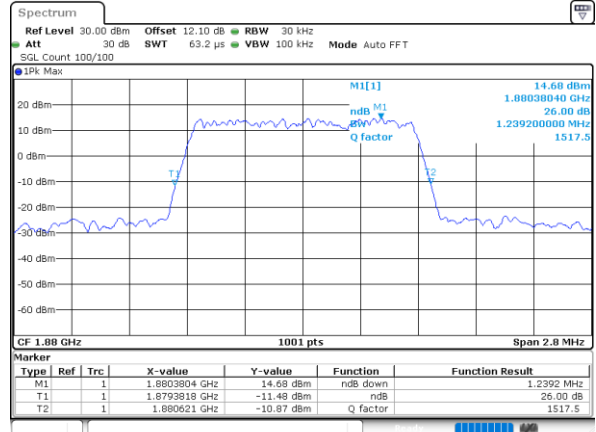


## LTE Band 2

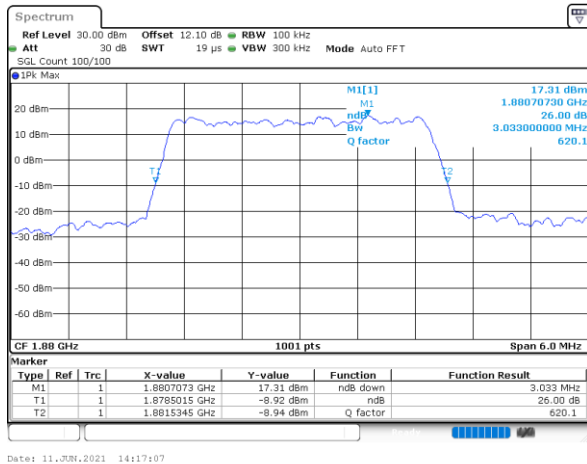
## Middle Channel / 1.4MHz / QPSK



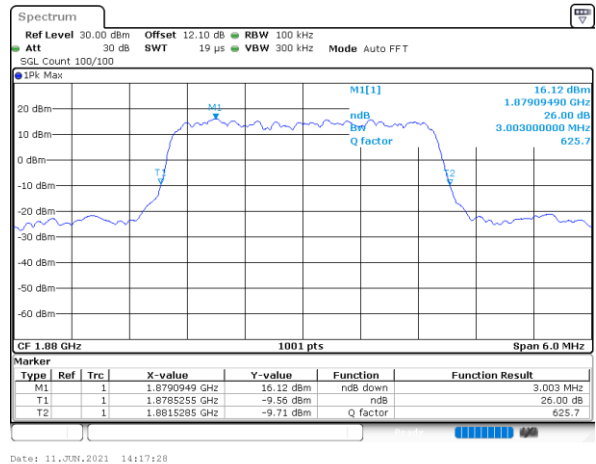
## Middle Channel / 1.4MHz / 16QAM



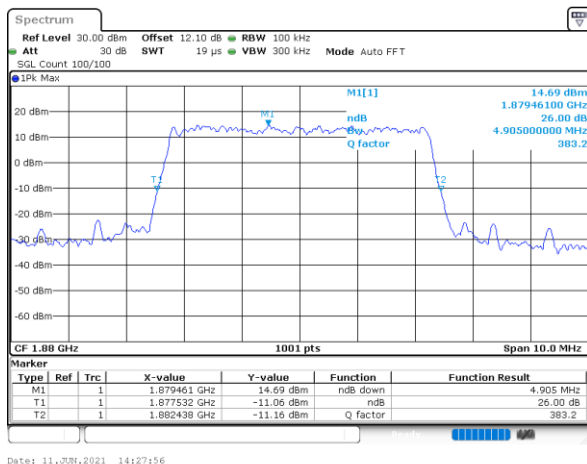
## Middle Channel / 3MHz / QPSK



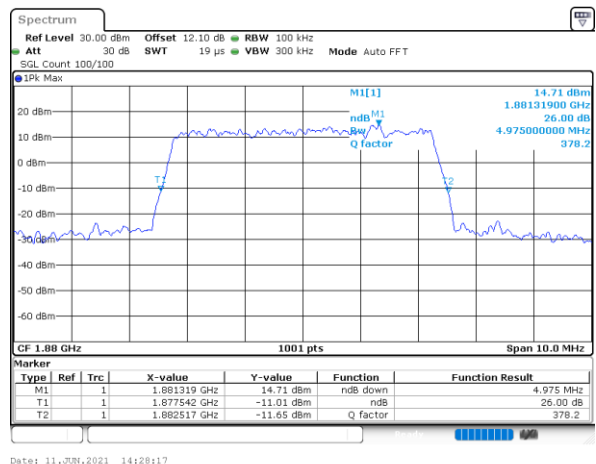
## Middle Channel / 3MHz / 16QAM



## Middle Channel / 5MHz / QPSK



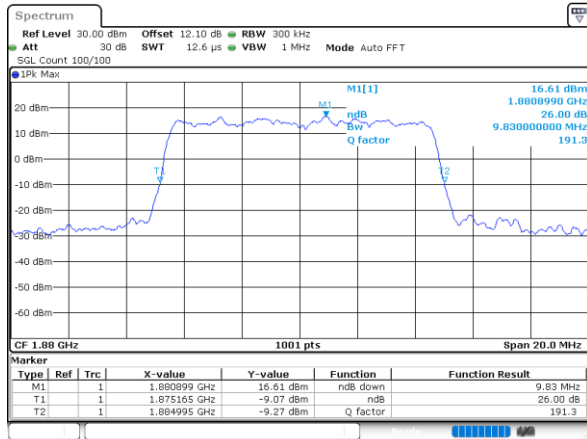
## Middle Channel / 5MHz / 16QAM



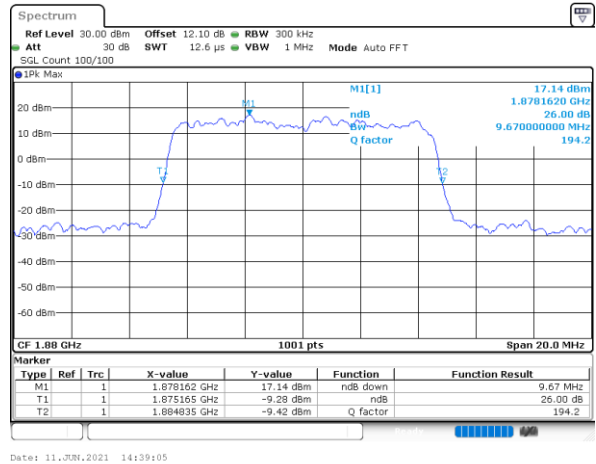


## LTE Band 2

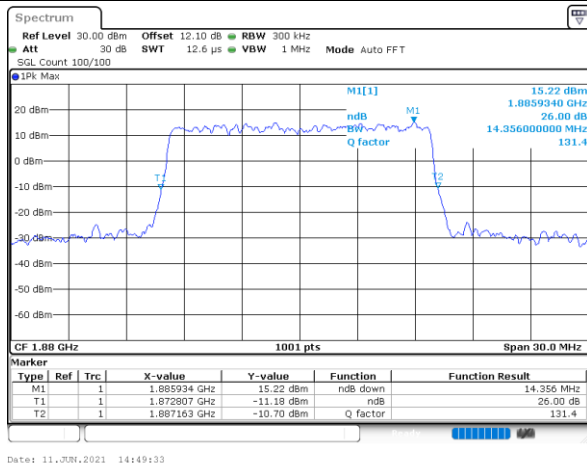
## Middle Channel / 10MHz / QPSK



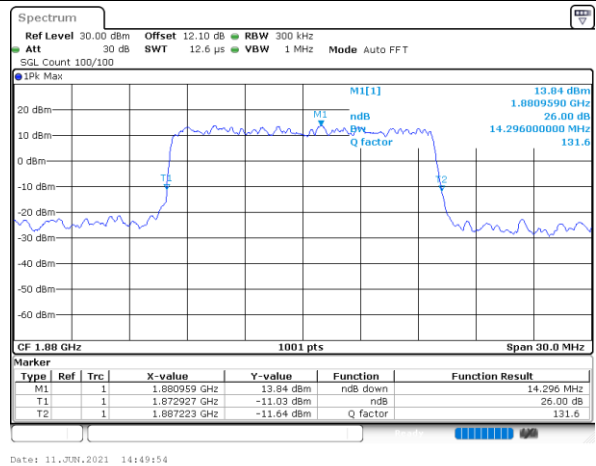
## Middle Channel / 10MHz / 16QAM



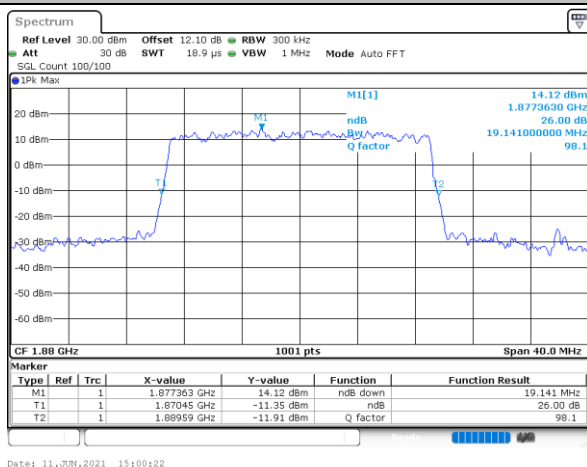
## Middle Channel / 15MHz / QPSK



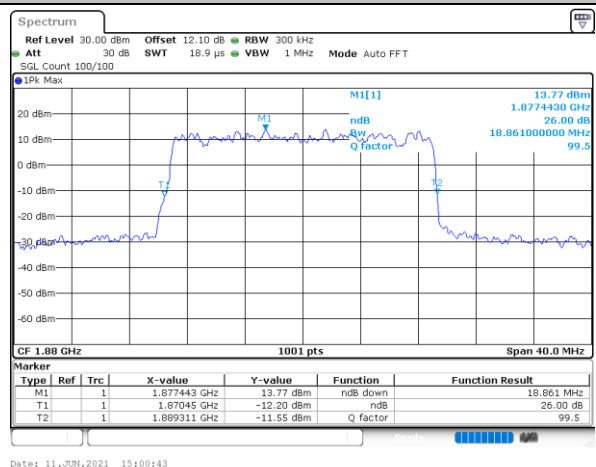
## Middle Channel / 15MHz / 16QAM



## Middle Channel / 20MHz / QPSK



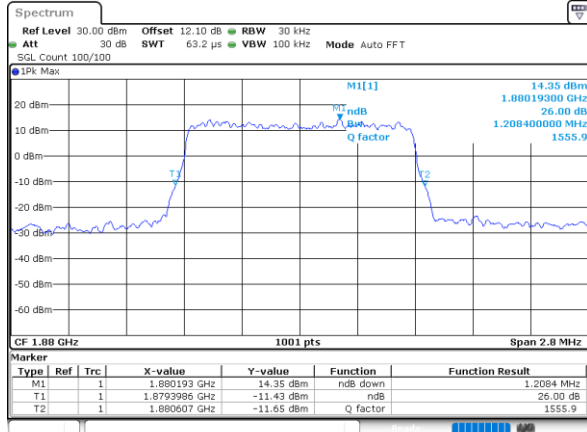
## Middle Channel / 20MHz / 16QAM



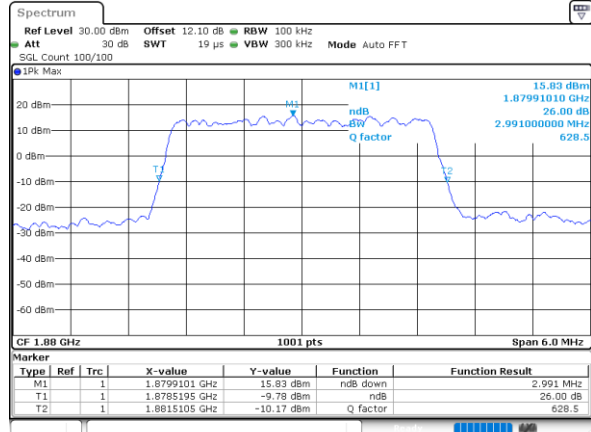


## LTE Band 2

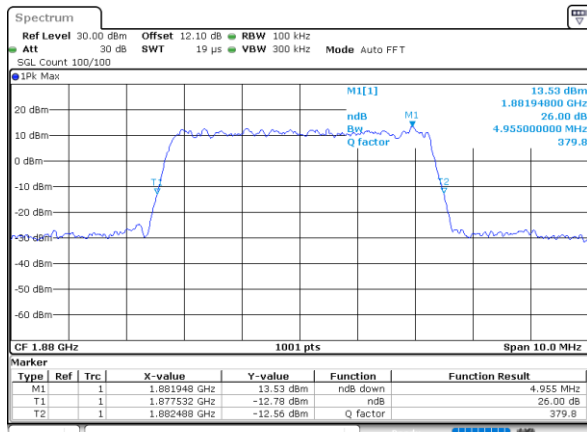
## Middle Channel / 1.4MHz / 64QAM



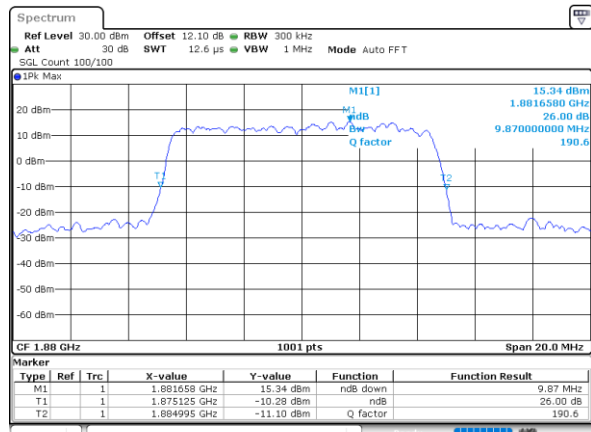
## Middle Channel / 3MHz / 64QAM



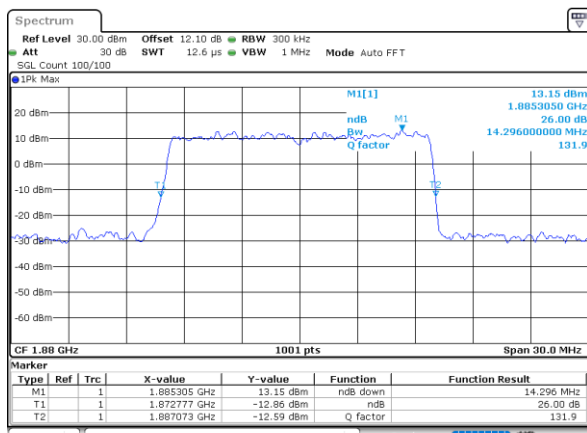
## Middle Channel / 5MHz / 64QAM



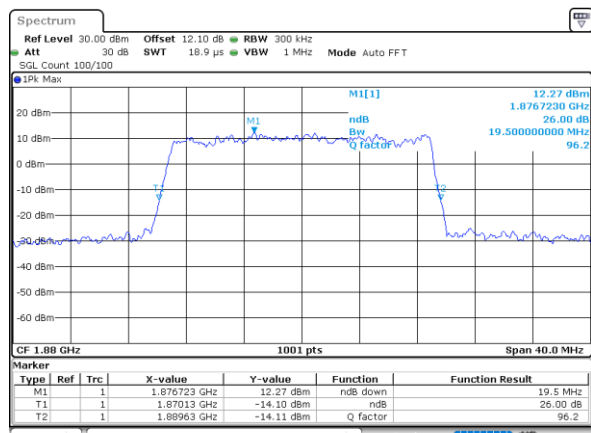
## Middle Channel / 10MHz / 64QAM



## Middle Channel / 15MHz / 64QAM



## Middle Channel / 20MHz / 64QAM



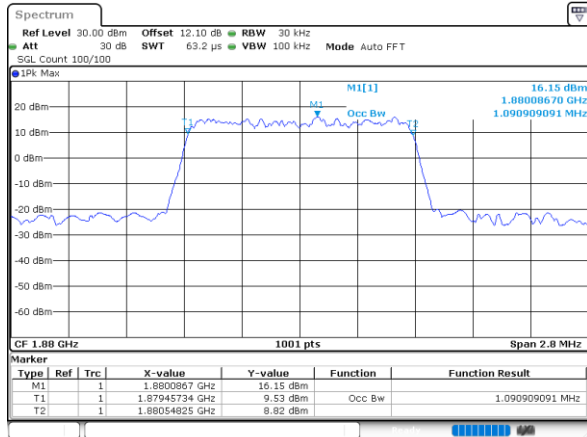
**Occupied Bandwidth**

| 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   |
| Middle CH | 1.09                     | 1.09    | 2.70  | 2.73    | 4.49  | 4.49    | 9.07  | 9.01    | 13.40 | 13.49   | 17.90 | 17.82   |
| Mode      | LTE Band 2 : 99%OBW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
| BW        | 1.4MHz                   |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | 64QAM                    | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | 1.08                     | -       | 2.73  | -       | 4.49  | -       | 9.01  | -       | 13.46 | -       | 17.90 | -       |

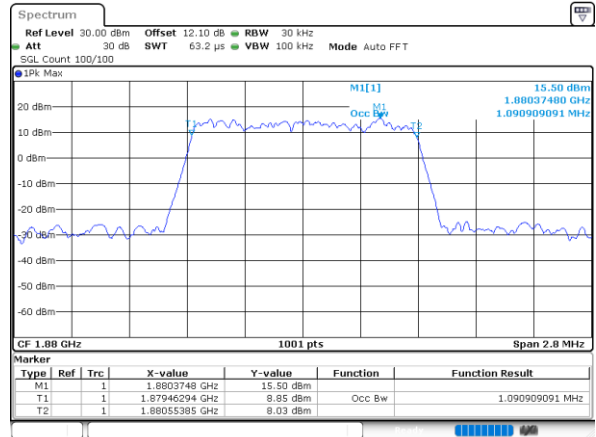


## LTE Band 2

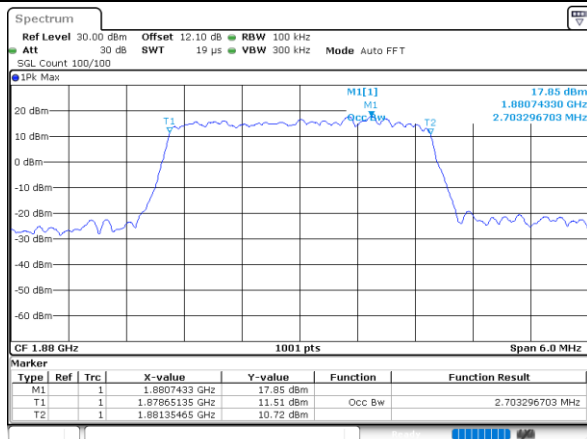
## Middle Channel / 1.4MHz / QPSK



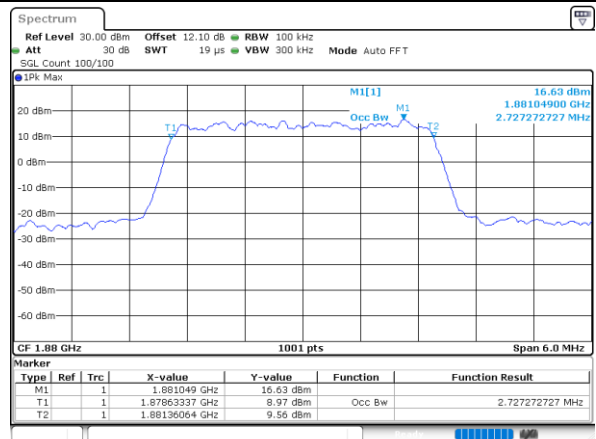
## Middle Channel / 1.4MHz / 16QAM



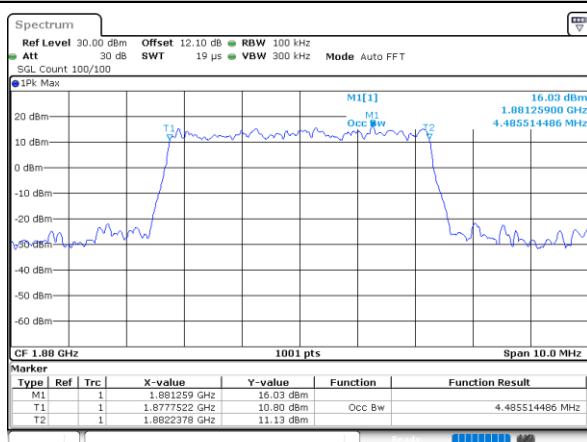
## Middle Channel / 3MHz / QPSK



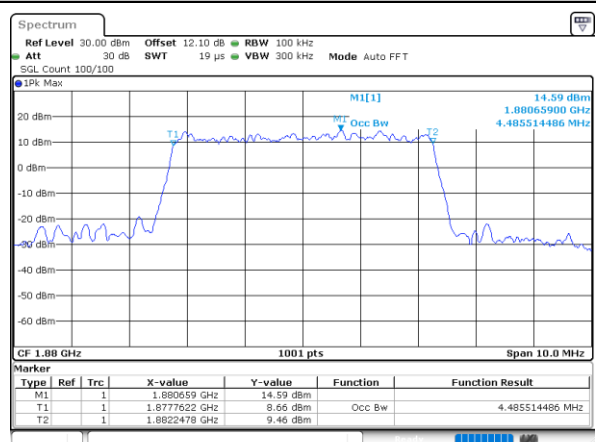
## Middle Channel / 3MHz / 16QAM



## Middle Channel / 5MHz / QPSK



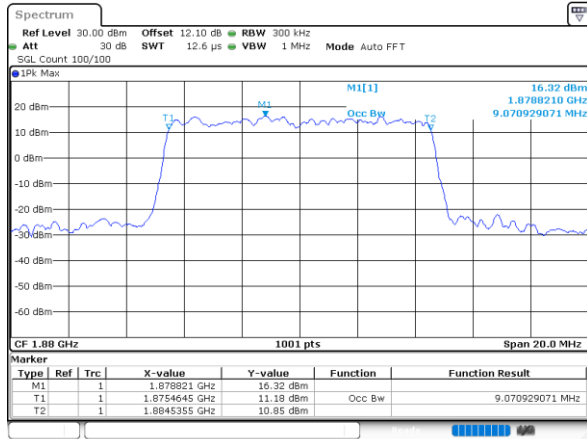
## Middle Channel / 5MHz / 16QAM



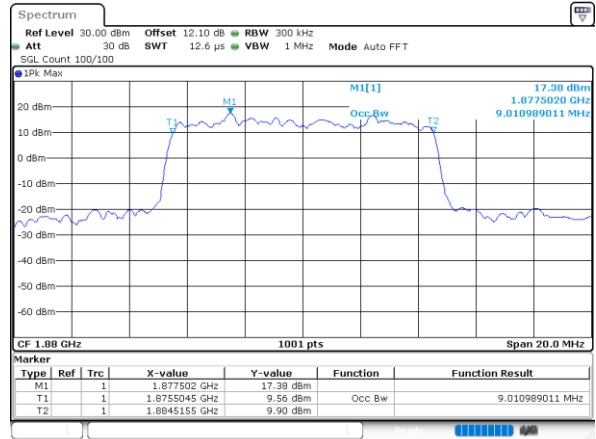


## LTE Band 2

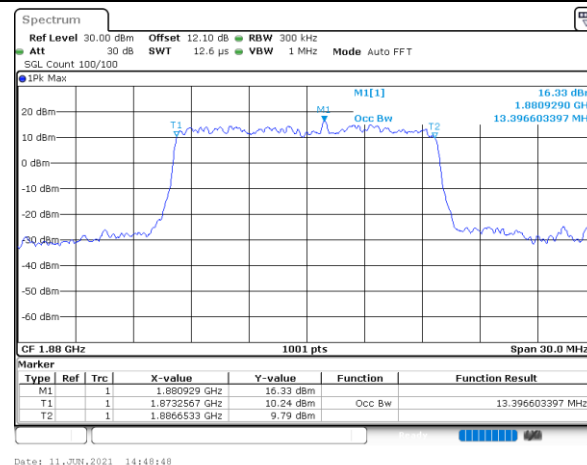
## Middle Channel / 10MHz / QPSK



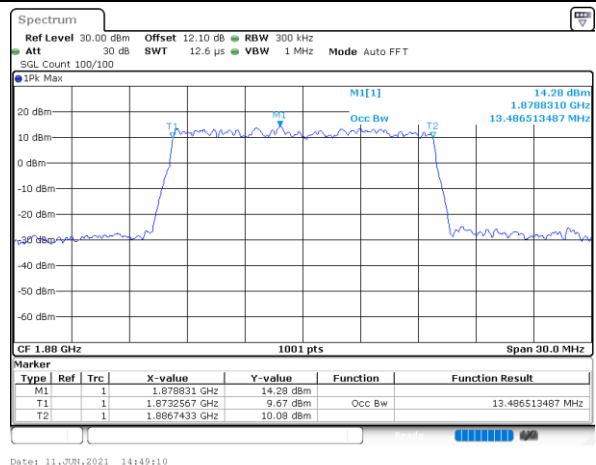
## Middle Channel / 10MHz / 16QAM



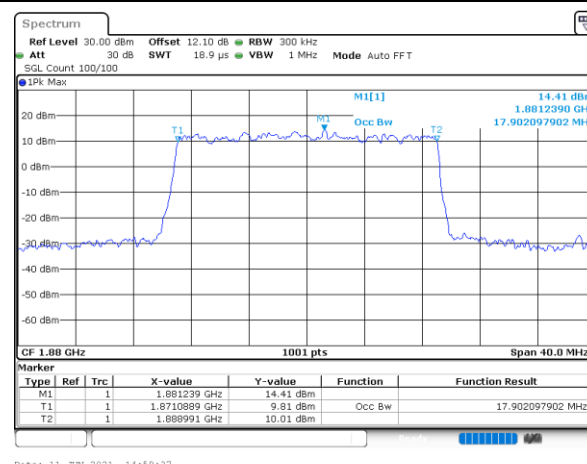
## Middle Channel / 15MHz / QPSK



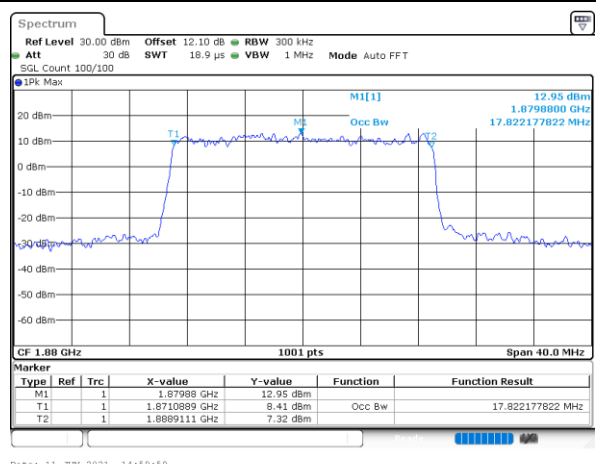
## Middle Channel / 15MHz / 16QAM



## Middle Channel / 20MHz / QPSK



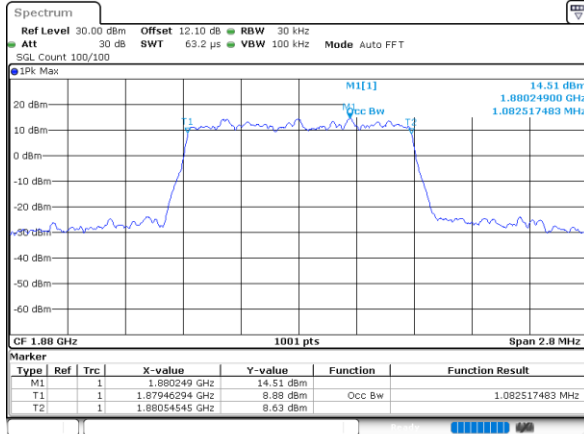
## Middle Channel / 20MHz / 16QAM



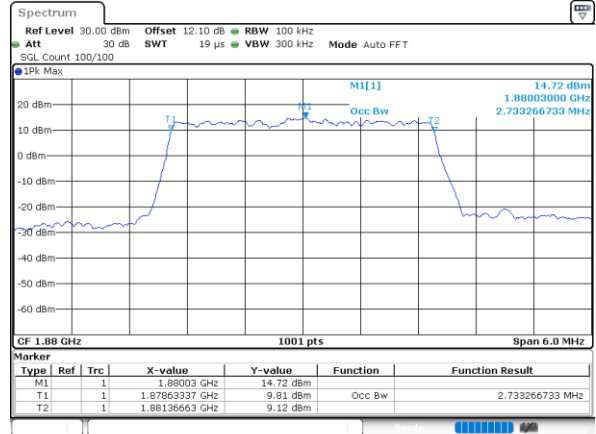


## LTE Band 2

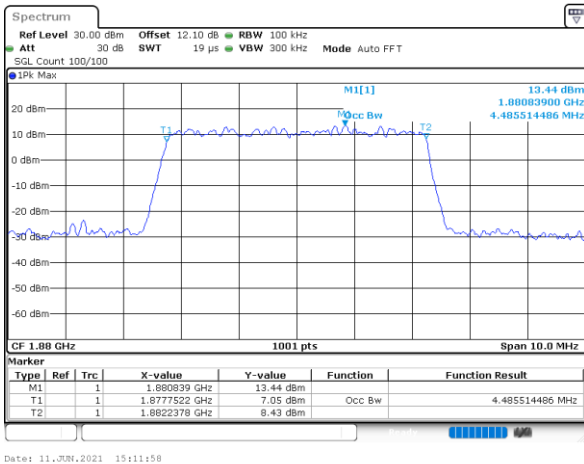
## Middle Channel / 1.4MHz / 64QAM



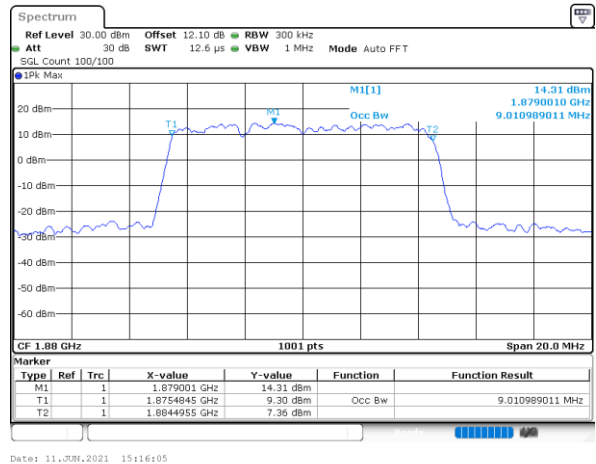
## Middle Channel / 3MHz / 64QAM



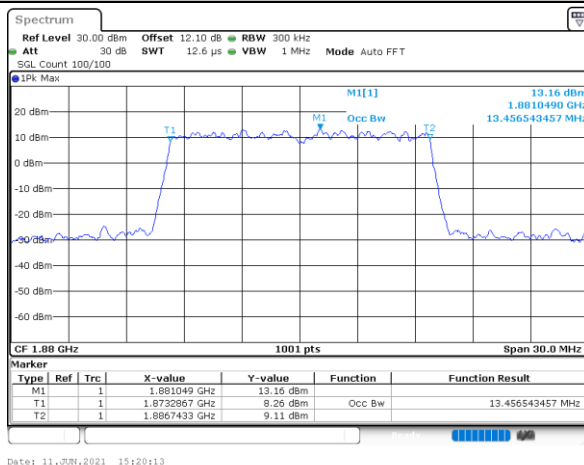
## Middle Channel / 5MHz / 64QAM



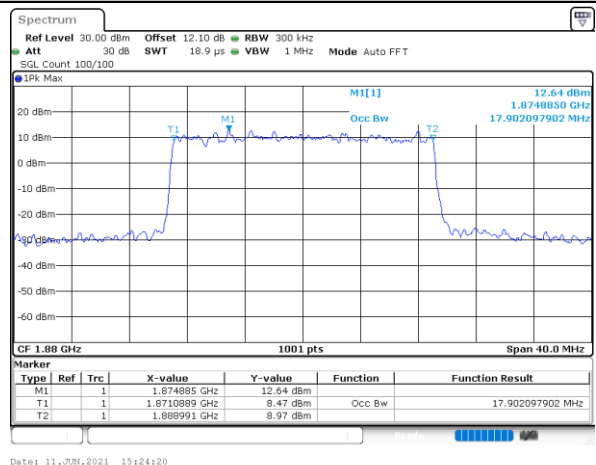
## Middle Channel / 10MHz / 64QAM



## Middle Channel / 15MHz / 64QAM



## Middle Channel / 20MHz / 64QAM

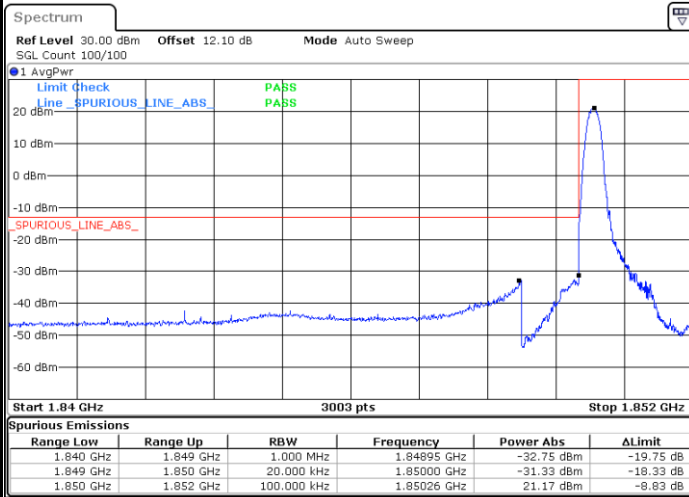




# Conducted Band Edge

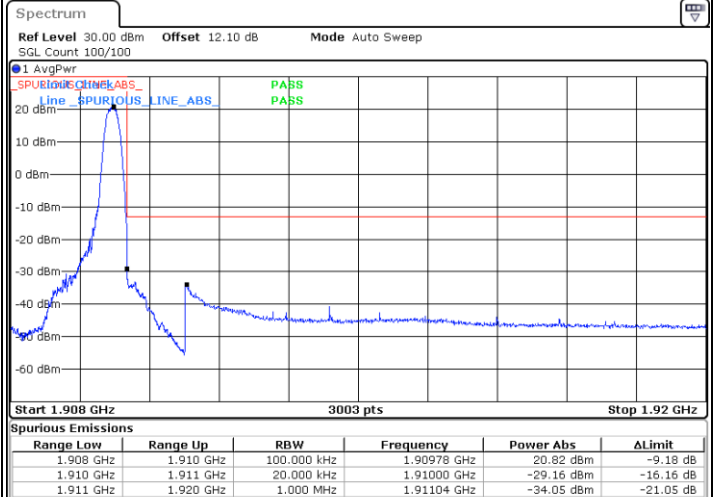
## LTE Band 2 / 1.4MHz / QPSK

### Lowest Band Edge / 1RB



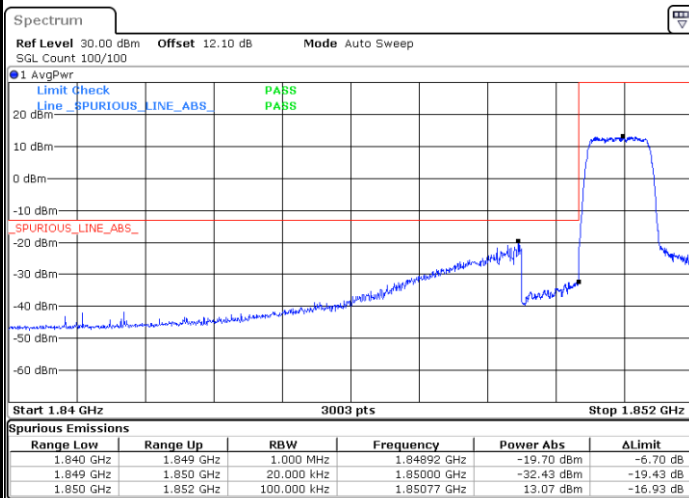
Date: 11.JUN.2021 14:01:44

### Highest Band Edge / 1RB



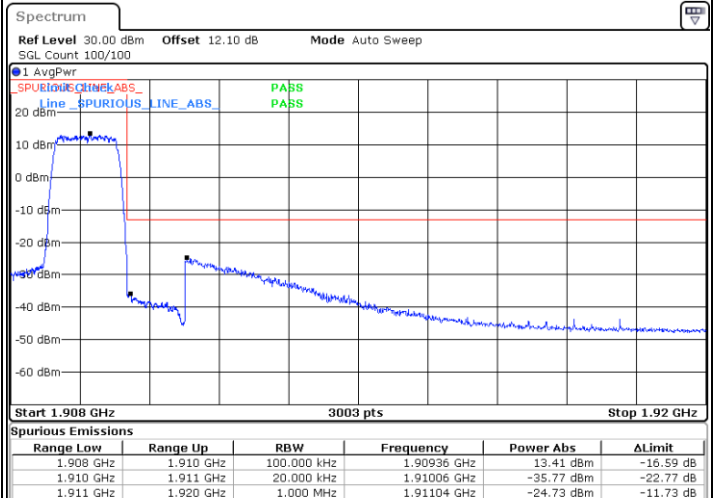
Date: 11.JUN.2021 14:08:16

### Lowest Band Edge / Full RB



Date: 11.JUN.2021 14:03:26

### Highest Band Edge / Full RB

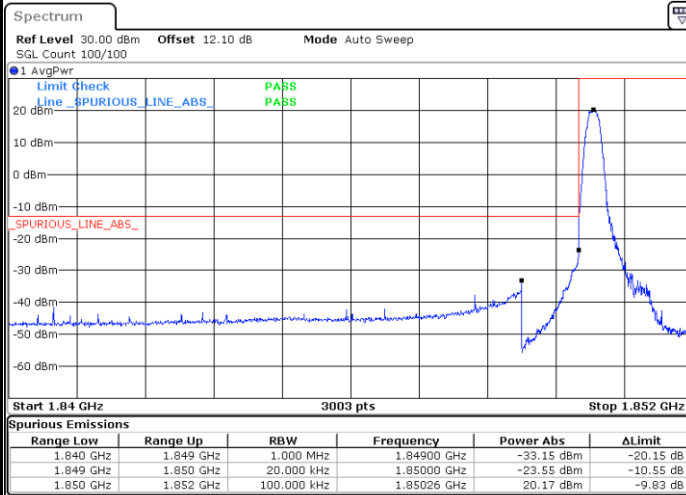


Date: 11.JUN.2021 14:09:58

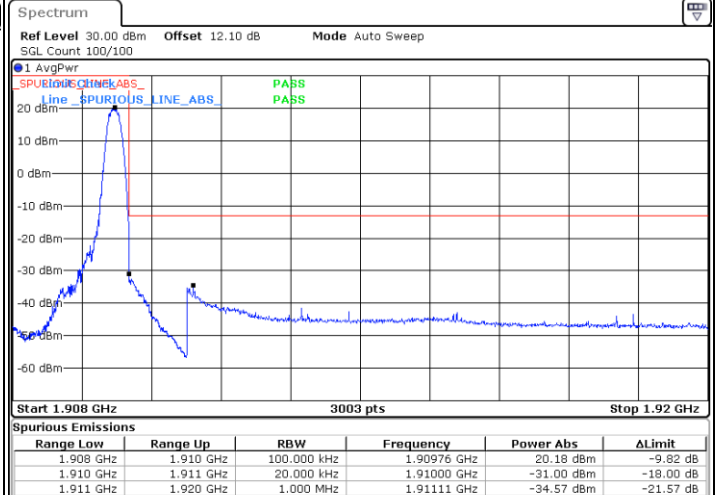


## LTE Band 2 / 1.4MHz / 16QAM

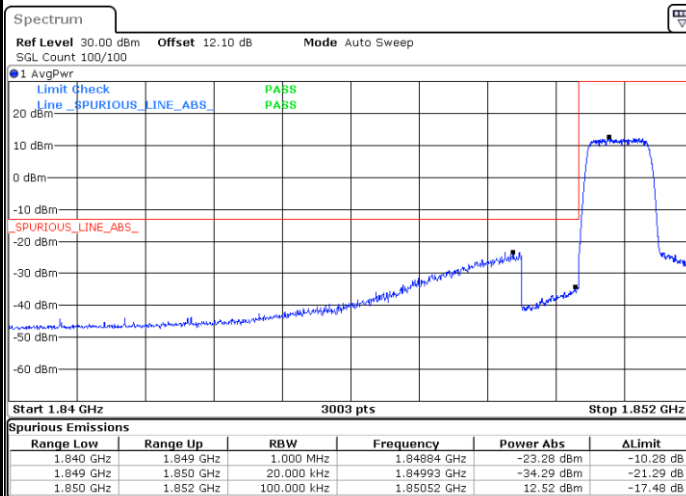
## Lowest Band Edge / 1 RB



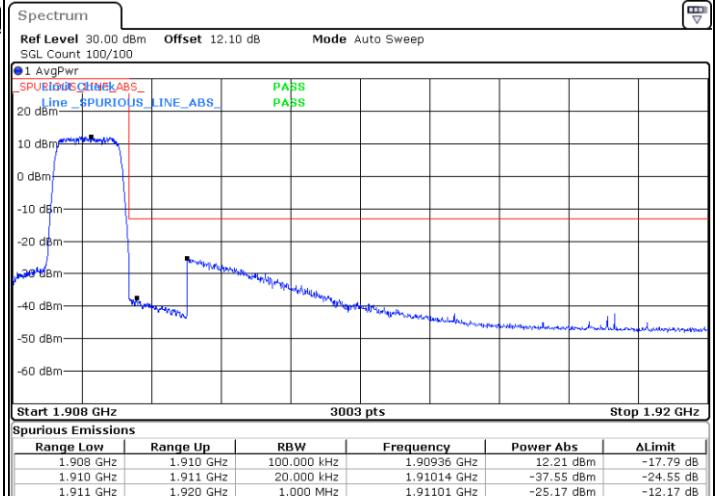
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



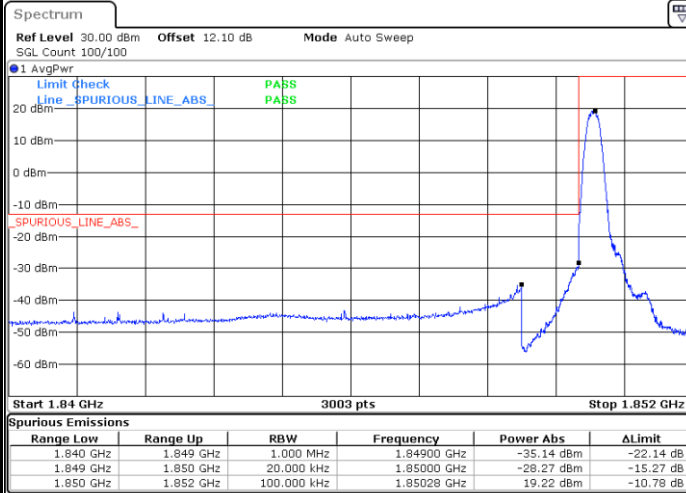
## Highest Band Edge / Full RB



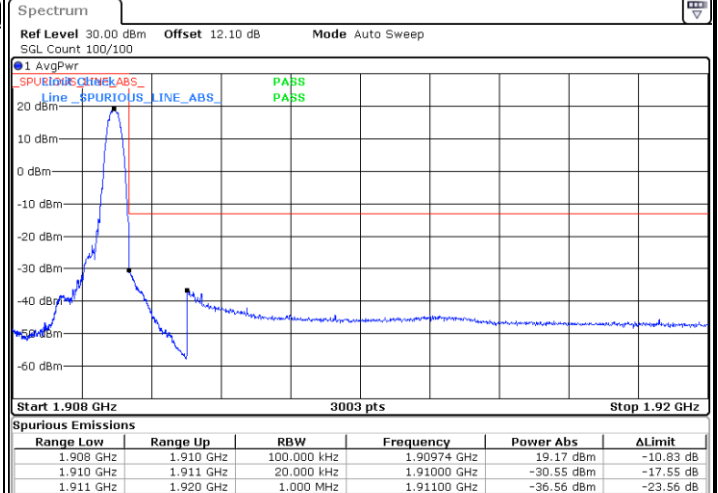


## LTE Band 2 / 1.4MHz / 64QAM

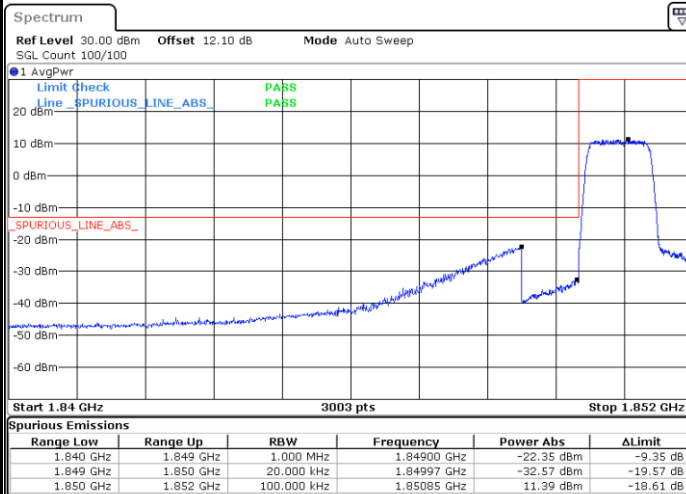
## Lowest Band Edge / 1 RB



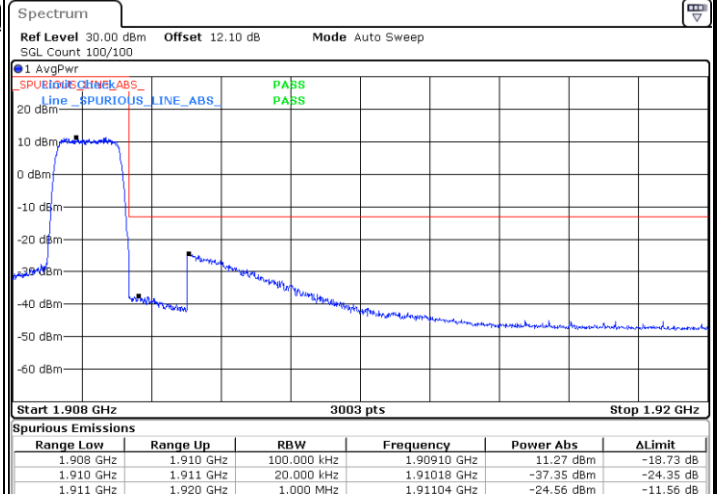
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



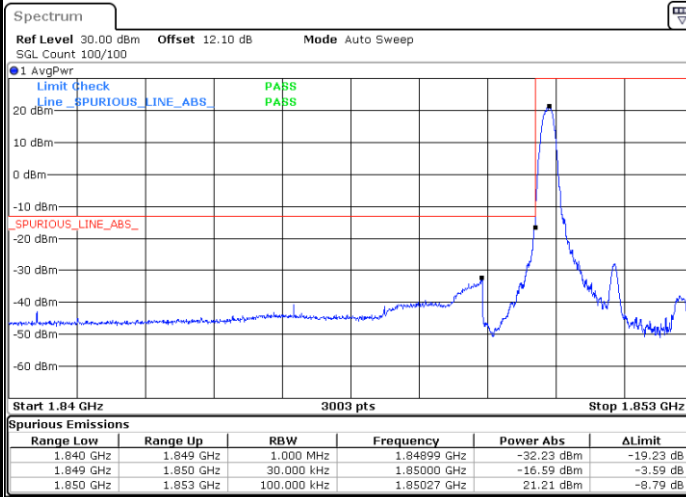
## Highest Band Edge / Full RB



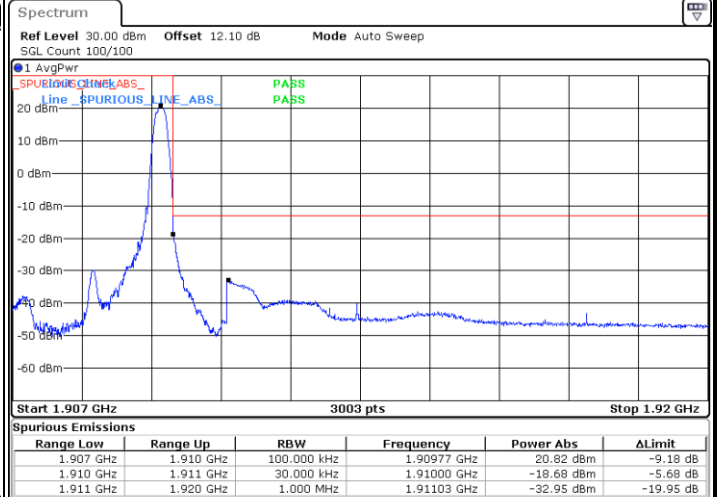


## LTE Band 2 / 3MHz / QPSK

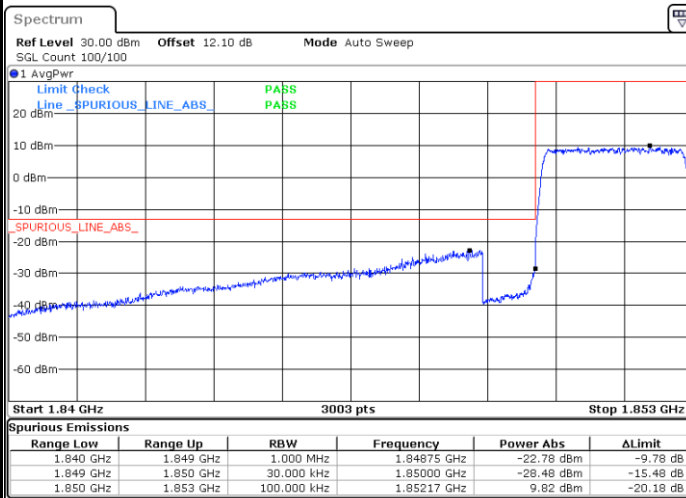
## Lowest Band Edge / 1RB



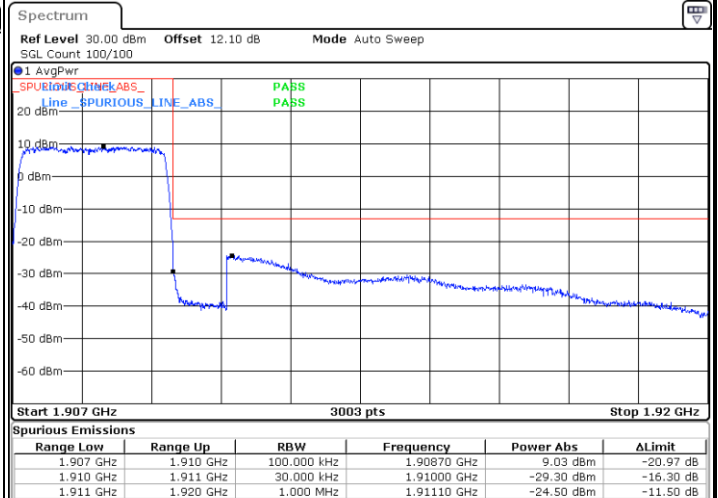
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



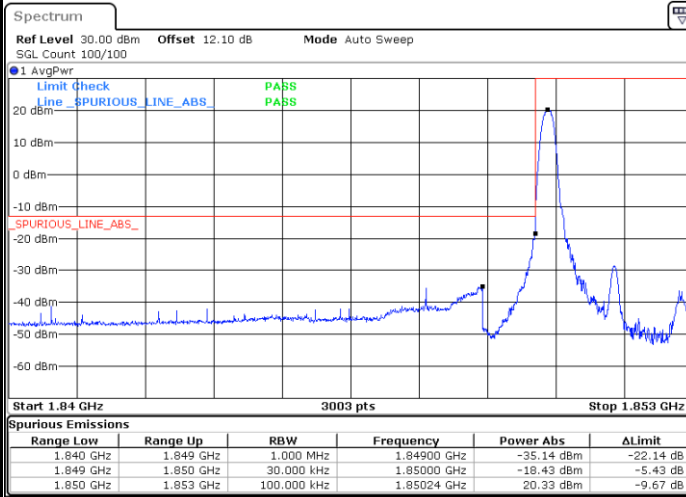
## Highest Band Edge / Full RB



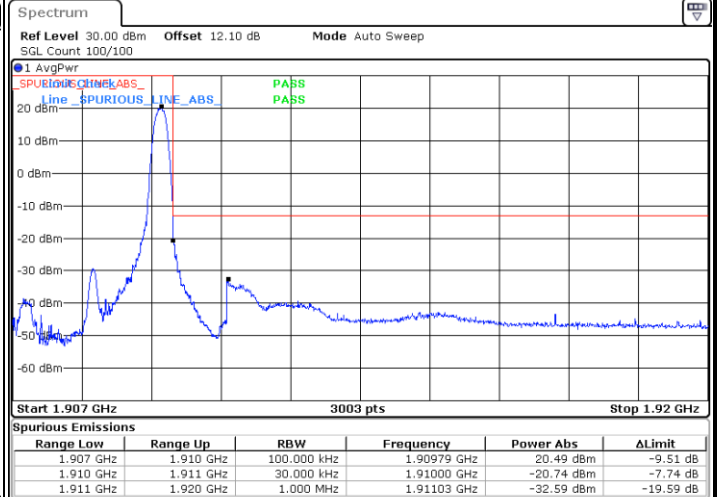


## LTE Band 2 / 3MHz / 16QAM

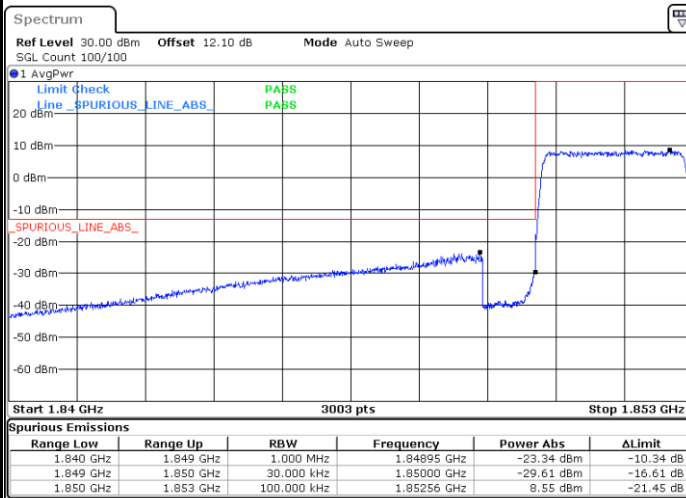
## Lowest Band Edge / 1 RB



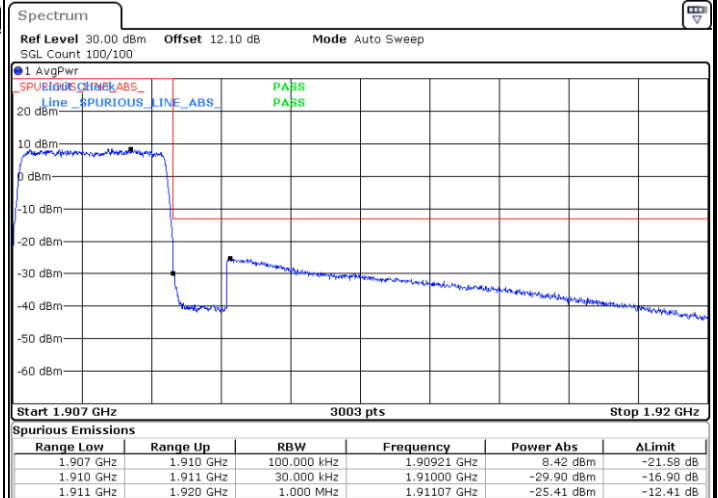
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



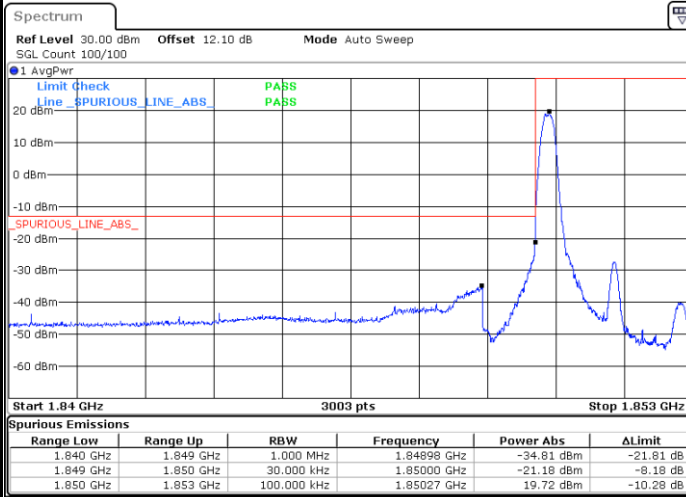
## Highest Band Edge / Full RB



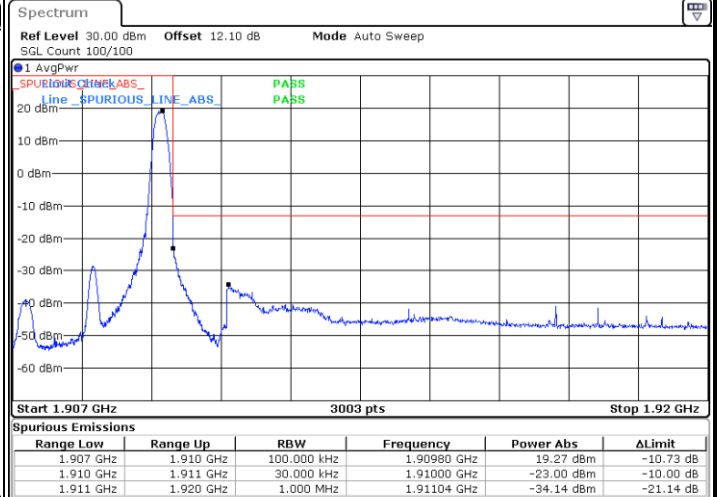


## LTE Band 2 / 3MHz / 64QAM

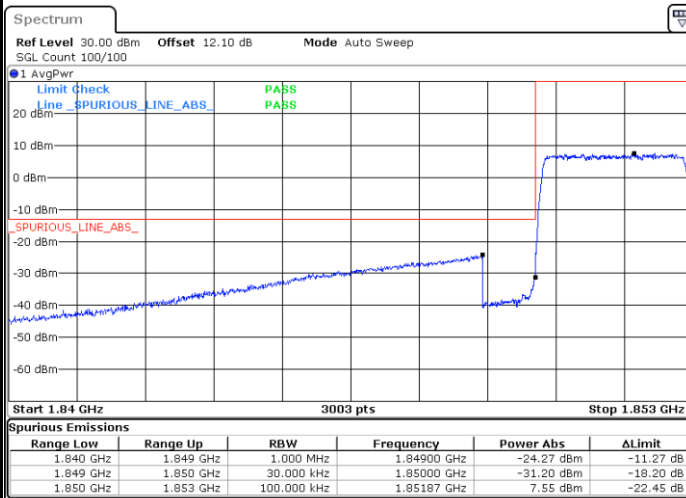
## Lowest Band Edge / 1 RB



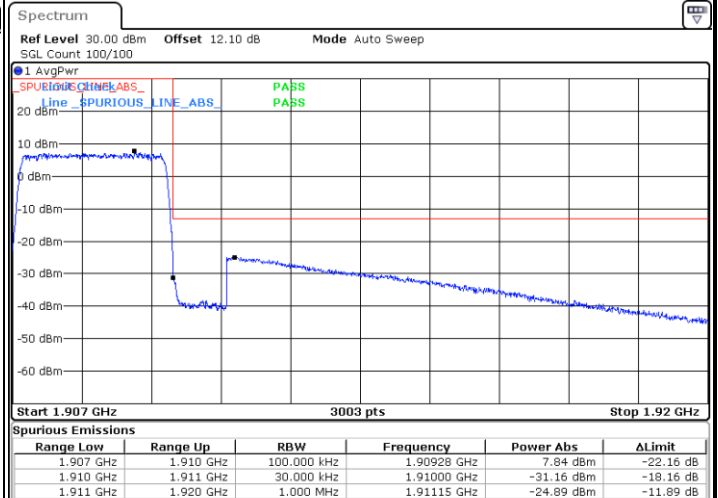
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



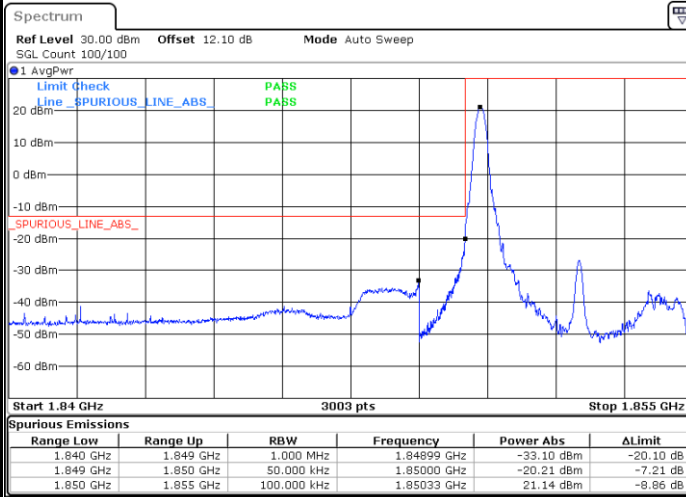
## Highest Band Edge / Full RB



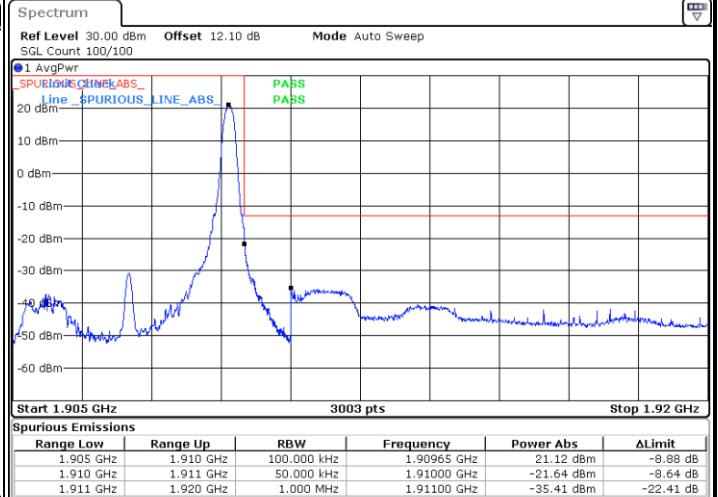


## LTE Band 2 / 5MHz / QPSK

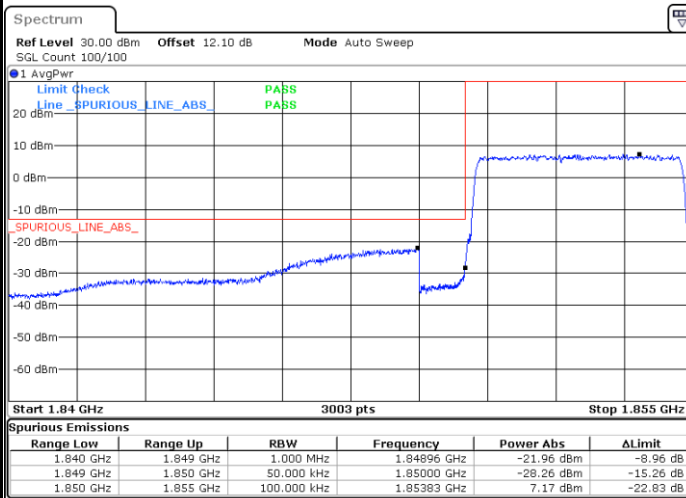
## Lowest Band Edge / 1 RB



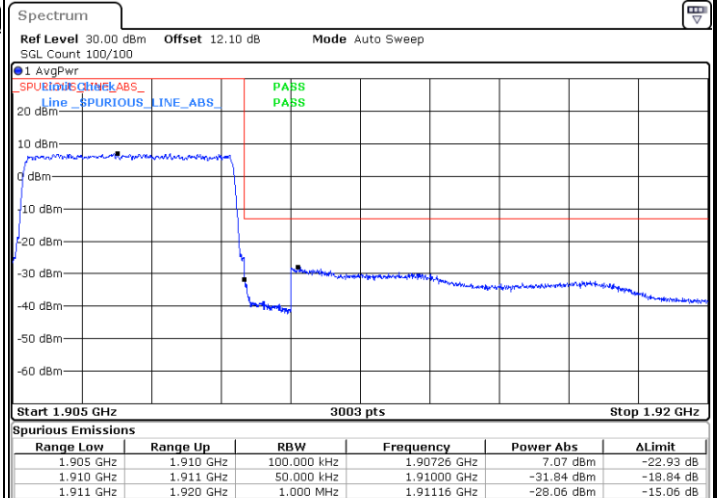
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



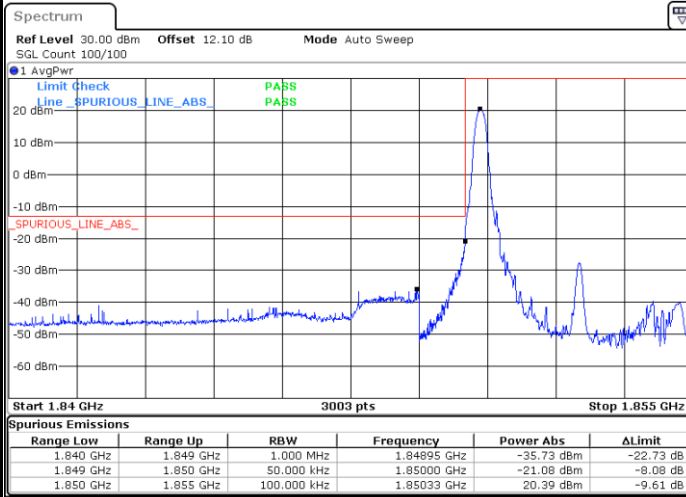
## Highest Band Edge / Full RB



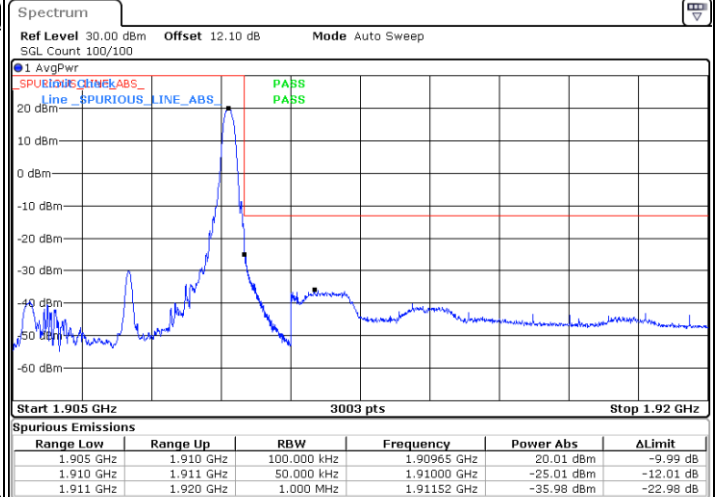


## LTE Band 2 / 5MHz / 16QAM

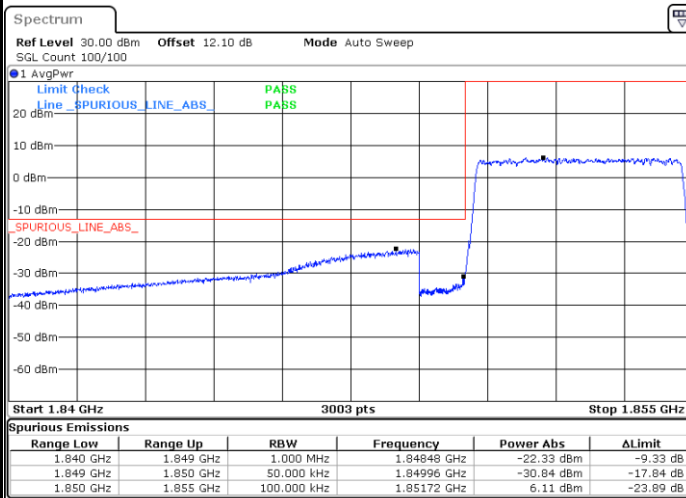
## Lowest Band Edge / 1RB



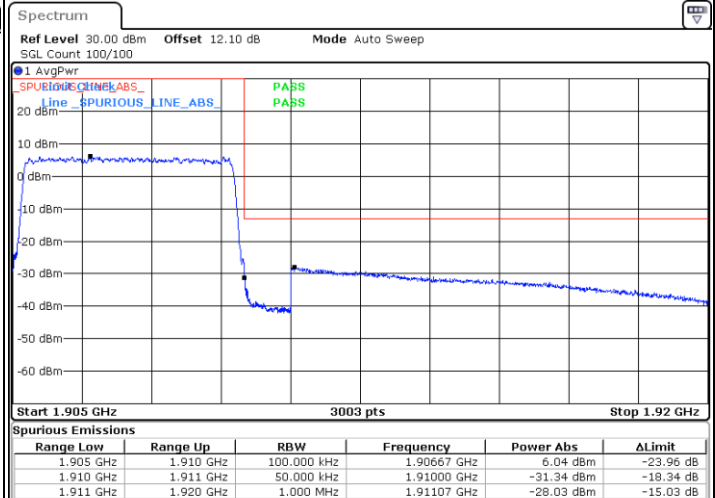
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



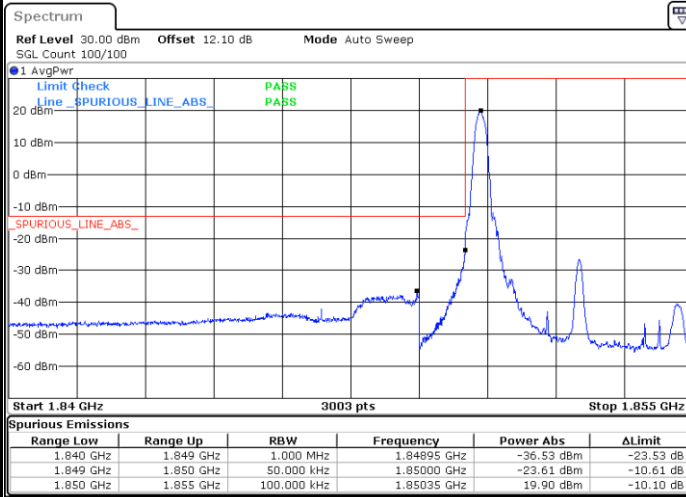
## Highest Band Edge / Full RB



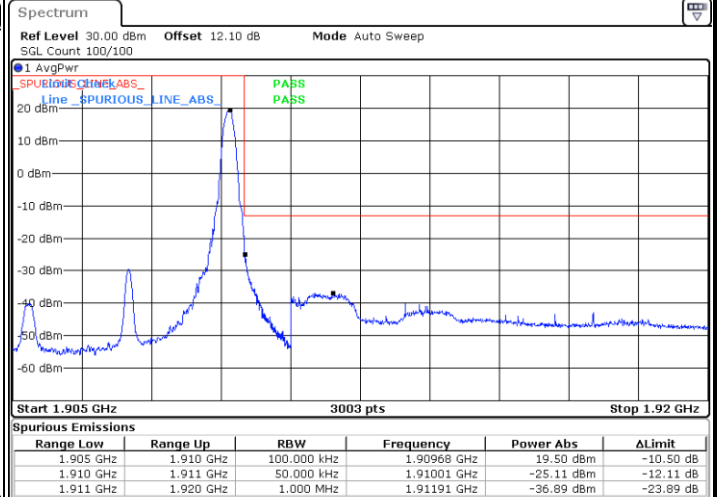


## LTE Band 2 / 5MHz / 64QAM

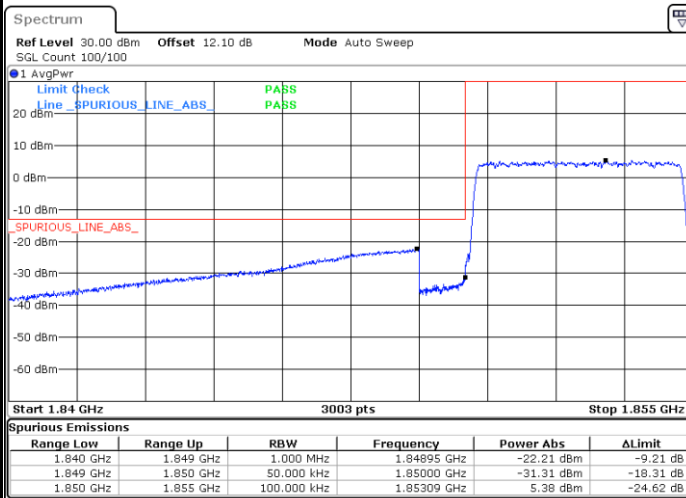
## Lowest Band Edge / 1RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

