

# TEST REPORT

**Product Name** : Energy Control Center  
**Model Number** : ECC  
**FCC ID** : 2AMEH-ECC

**Prepared for** : SolaX Power Network Technology (Zhejiang) Co., Ltd.  
**Address** : No.288, Shizhu Road, Tonglu Economic Development Zone,  
Tonglu City, Zhejiang Province, 310000 P. R. CHINA

**Prepared by** : EMTEK (SHENZHEN) CO., LTD.  
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**Report Number** : ENS2402060023W00502R  
**Date(s) of Tests** : February 29, 2024 to March 18, 2024  
**Date of Issue** : March 20, 2024

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## Modified Information

| Version | Report No.           | Revision Date | Summary         |
|---------|----------------------|---------------|-----------------|
| Ver.1.0 | ENS2402060023W00502R | /             | Original Report |
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## 1 TEST RESULT CERTIFICATION

Applicant : SolaX Power Network Technology (Zhejiang) Co., Ltd.  
Address : No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City,  
Zhejiang Province, 310000 P. R. CHINA  
Manufacturer : SolaX Power Network Technology (Zhejiang) Co., Ltd.  
Address : No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City,  
Zhejiang Province, 310000 P. R. CHINA  
Product Name : Energy Control Center  
Model Number : ECC  
Trademark : SolaX Power

### Measurement Procedure Used:

| APPLICABLE STANDARDS                                                                                                                        |             |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| STANDARD                                                                                                                                    | TEST RESULT |
| FCC 47 CFR Part 2 , Subpart J<br>FCC 47 CFR Part 22, Subpart H<br>FCC 47 CFR Part 24, Subpart E<br>FCC 47 CFR Part 27<br>FCC 47 CFR Part 90 | PASS        |

The device described above is tested by EMTEK (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (Shenzhen) Co., Ltd. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the above table standards requirement. This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (Shenzhen) Co., Ltd.

Date of Test : February 29, 2024 to March 18, 2024  
Prepared by :   
Una Yu/Editor  
Reviewer :   
Joe Xia/Supervisor  
Approved & Authorized Signer :   
Lisa Wang/Manager

## 2 EUT TECHNICAL DESCRIPTION

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Name:</b>                 | Energy Control Center                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Model Number:</b>                 | ECC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Operation Band:</b>               | LTE Cat M1: B2/B4/B5/B12/B13/B25/B26/B66/B85                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Modulation:</b>                   | QPSK, 16QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Operating Frequency Range(s):</b> | LTE Cat M1 B2: Tx: 1850~1910MHz/ Rx: 1930~1990MHz<br>LTE Cat M1 B4: Tx:1710~1755MHz/ Rx: 2110~2155MHz<br>LTE Cat M1 B5: Tx: 824~849MHz/ Rx: 869~894MHz<br>LTE Cat M1 B12: Tx: 699~716MHz/ Rx: 729~746MHz<br>LTE Cat M1 B13: Tx: 777~787MHz/ Rx: 746~756MHz<br>LTE Cat M1 B25: Tx: 1850~1915MHz/ Rx: 1930~1995MHz<br>LTE Cat M1 B26: Tx: 814~824MHz/ Rx: 859~869MHz<br>LTE Cat M1 B26: Tx: 824~849MHz/ Rx: 869~894MHz<br>LTE Cat M1 B66: Tx: 1710~1780MHz/ Rx: 2110~2200MHz<br>LTE Cat M1 B85: Tx: 698~716MHz/ Rx: 728~746MHz |
| <b>Antenna Type:</b>                 | External Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Antenna Gain:</b>                 | LTE Cat M1 B2: 2dBi<br>LTE Cat M1 B4: -0.74dBi<br>LTE Cat M1 B5: 1.1dBi<br>LTE Cat M1 B12: -0.43dBi<br>LTE Cat M1 B13: 0.8dBi<br>LTE Cat M1 B25: 2dBi<br>LTE Cat M1 B26: 1.1dBi<br>LTE Cat M1 B66: -0.33dBi<br>LTE Cat M1 B85: -0.43dBi                                                                                                                                                                                                                                                                                      |
| <b>Power Supply:</b>                 | AC 120V/60Hz by Adapter<br>Adapter:<br>Model: DCT30W120200ZZ-A0<br>Input: 100-240V~50/60Hz, 0.8A Max<br>Output: 12V, 2A, 24W                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Temperature Extreme Range:</b>    | 0°C ~ 40°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

*Note: for more details, please refer to the user's manual of the EUT.*

### 3 SUMMARY OF TEST RESULT

#### 3.1 TEST ITEMS

| FCC Rule                                                                                                                                                                                                                                                                                                                                                                                                         | Test Parameter                             | Verdict | Remark |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------|--------|
| 2.1046                                                                                                                                                                                                                                                                                                                                                                                                           | RF Power Output                            | PASS    | *      |
| 22.913, 24.232, 27.50, 90.635                                                                                                                                                                                                                                                                                                                                                                                    | Equivalent (Isotropic) Radiated Power      | PASS    |        |
| 2.1047                                                                                                                                                                                                                                                                                                                                                                                                           | Modulation Characteristics                 | PASS    | *      |
| 2.1049                                                                                                                                                                                                                                                                                                                                                                                                           | Occupied Bandwidth                         | PASS    | *      |
| 2.1051, 22.917, 24.238, 27.53, 90.691                                                                                                                                                                                                                                                                                                                                                                            | Out of Band Emissions at Antenna Terminals | PASS    | *      |
|                                                                                                                                                                                                                                                                                                                                                                                                                  | Band Edge Compliance                       | PASS    | *      |
| 2.1053, 22.917, 24.238, 27.53, 90.691                                                                                                                                                                                                                                                                                                                                                                            | Field Strength of Spurious Radiation       | PASS    |        |
| 2.1055, 22.355, 24.235, 27.54, 90.213                                                                                                                                                                                                                                                                                                                                                                            | Frequency Stability versus Temperature     | PASS    | *      |
|                                                                                                                                                                                                                                                                                                                                                                                                                  | Frequency Stability versus Voltage         | PASS    | *      |
| 24.232, 27.50                                                                                                                                                                                                                                                                                                                                                                                                    | Peak to Average Ratio                      | PASS    | *      |
| Note: * these modules have been tested and comply with the above table standards requirement, according to technical characteristic, only Equivalent (Isotropic) Radiated Power and Field Strength of Spurious Radiation retest for this device, all other test results please reference original module's test report No.: R1907A0448-R1V2, R1907A0448-R2V2, R1907A0448-R3V2, R1907A0448-R7V2, R1907A0448-R8V2. |                                            |         |        |

#### RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for **FCC ID: 2AMEH-ECC** filing to comply with the above table standards requirement.

## 4 TEST METHODOLOGY

### 4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC 47 CFR Part 2, Subpart J

FCC 47 CFR Part 22H

FCC 47 CFR Part 24E

FCC 47 CFR Part 27

FCC 47 CFR Part 90

KDB971168 D01:v02r02

ANSI/TIA-603-D-2010

ANSI C63.26:2015

### 4.2 MEASUREMENT EQUIPMENT USED

#### For Spurious Emissions Test

| Equipment                           | Manufacturer    | Model No.    | Serial No.     | Last Cal.  | Cal. Interval |
|-------------------------------------|-----------------|--------------|----------------|------------|---------------|
| Pre-Amplifier                       | Bonn            | BLMA 011001N | 2213967A       | 2023/10/23 | 1Year         |
| EMI Test Receiver                   | Rohde & Schwarz | ESR7         | 102551         | 2023/10/23 | 1Year         |
| Bilog Antenna                       | Schwarzbeck     | VULB9163     | 9163142        | 2022/7/24  | 2Year         |
| Horn antenna                        | Schwarzbeck     | BBHA9120D    | 9120D-1198     | 2023/6/2   | 2Year         |
| Pre-Amplifier                       | Bonn            | BLMA 0118-5G | 2213967B-01    | 2023/10/23 | 1Year         |
| Spectrum Analyzer                   | Rohde & Schwarz | FSV3044      | 101290         | 2023/10/23 | 1Year         |
| Horn antenna                        | Schwarzbeck     | BBHA9170     | 9170-399       | 2023/5/12  | 2Year         |
| Pre-Amplifier                       | Lunar EM        | LNA18G26-40  | J1012131010001 | 2023/5/10  | 1Year         |
| Pre-Amplifier                       | Lunar EM        | LNA26G40-40  | J1013131028001 | 2023/5/10  | 1Year         |
| Loop Antenna                        | Schwarzbeck     | FMZB1519     | 1519-012       | 2023/5/12  | 2Year         |
| Wideband Radio Communication Tester | R&S             | CMW500       | 171168         | 2023/9/14  | 1Year         |

#### For Other Test

| Equipment                           | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|-------------------------------------|--------------|-----------|------------|-----------|---------------|
| Wideband Radio Communication Tester | R&S          | CMW500    | 147366     | 2023/5/10 | 1Year         |
| Signal Analyzer                     | KEYSIGHT     | N9010B    | MY60240204 | 2023/9/14 | 1Year         |
| Vector Signal Generator             | KEYSIGHT     | N5182B    | MY59100922 | 2023/9/14 | 1Year         |
| Analog Signal Generator             | KEYSIGHT     | N5173B    | MY59100520 | 2023/9/14 | 1Year         |
| DC Power Supply                     | KEYSIGHT     | E3642A    | MY60266212 | 2023/9/14 | 1Year         |
| RF Control Unit                     | Tonscend     | JS0806-1  | 20H8060306 | N/A       | N/A           |
| Band Reject Filter Group            | Tonscend     | JS0806-F  | 20H8060310 | N/A       | N/A           |
| Temperature&Humidity Chamber        | ESPEC        | EL-02KA   | 12107166   | 2023/5/10 | 1 Year        |

### 4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition. The CMU200 and CMW500 used to control the EUT staying in continuous transmitting and receiving mode for testing.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

During all testing, EUT is in link mode with base station emulator at maximum power level.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

#### Test Environment

| Environment Parameter                                                                               | Selected Values During Tests |        |
|-----------------------------------------------------------------------------------------------------|------------------------------|--------|
| Relative Humidity                                                                                   | 60%                          |        |
| Temperature                                                                                         | 25°C                         |        |
| Voltage                                                                                             | VL                           | AC 108 |
|                                                                                                     | VN                           | AC 120 |
|                                                                                                     | VH                           | AC 132 |
| NOTE:<br>VL= Lower Extreme Test Voltage.<br>VN= Nominal Voltage.<br>VH= Upper Extreme Test Voltage. |                              |        |



## 5 FACILITIES AND ACCREDITATIONS

### 5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

Bldg 69, Majialong Industry Zone District, Nanshan District, Shenzhen, China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.26 and CISPR Publication 22.

### 5.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L2291

The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017)

**Accredited by FCC**

Designation Number: CN1204

Test Firm Registration Number: 882943

**Accredited by A2LA**

The Certificate Number is 4321.01

**Accredited by Industry Canada**

The Conformity Assessment Body Identifier is CN0008

Name of Firm

Site Location

: EMTEK (SHENZHEN) CO., LTD.

: Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

## 6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Parameter               | Uncertainty               |
|-------------------------|---------------------------|
| Radio Frequency         | $\pm 1 \times 10^{-5}$    |
| RF Power Output         | $\pm 1.0\text{dB}$        |
| Radiated Emission Test  | $\pm 2.0\text{dB}$        |
| Occupied Bandwidth Test | $\pm 1.0\text{dB}$        |
| Band Edge Test          | $\pm 3\text{dB}$          |
| All emission, radiated  | $\pm 3\text{dB}$          |
| Antenna Port Emission   | $\pm 3\text{dB}$          |
| Temperature             | $\pm 0.5^{\circ}\text{C}$ |
| Humidity                | $\pm 3\%$                 |

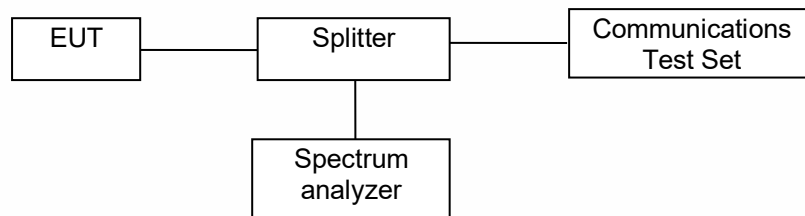
Measurement Uncertainty for a level of Confidence of 95%.



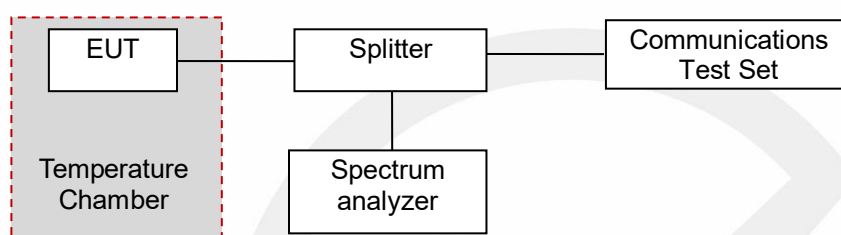
## 7 SETUP OF EQUIPMENT UNDER TEST

### 7.1 RADIO FREQUENCY TEST SETUP 1

The sample component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



### 7.2 RADIO FREQUENCY TEST SETUP 2



### 7.3 RADIO FREQUENCY TEST SETUP 3

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.26-2015 and CAN/CSA-CEI/IEC CISPR 22.

Below 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

Above 30MHz:

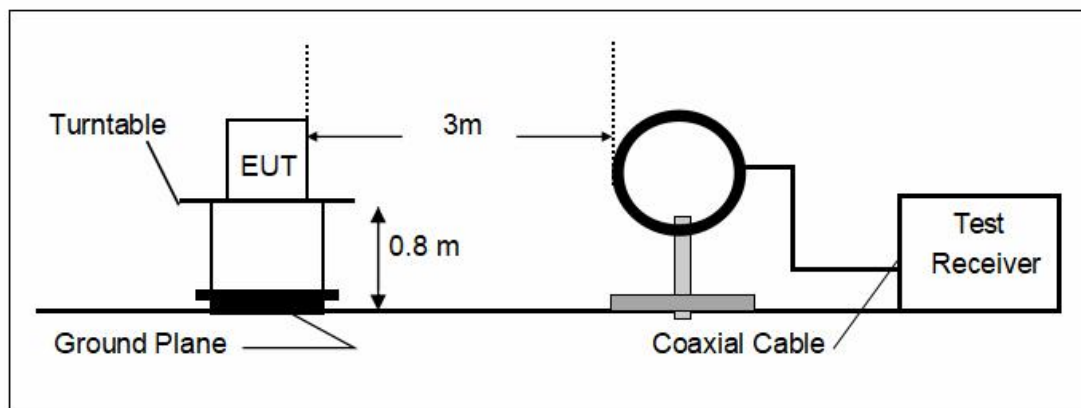
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz:

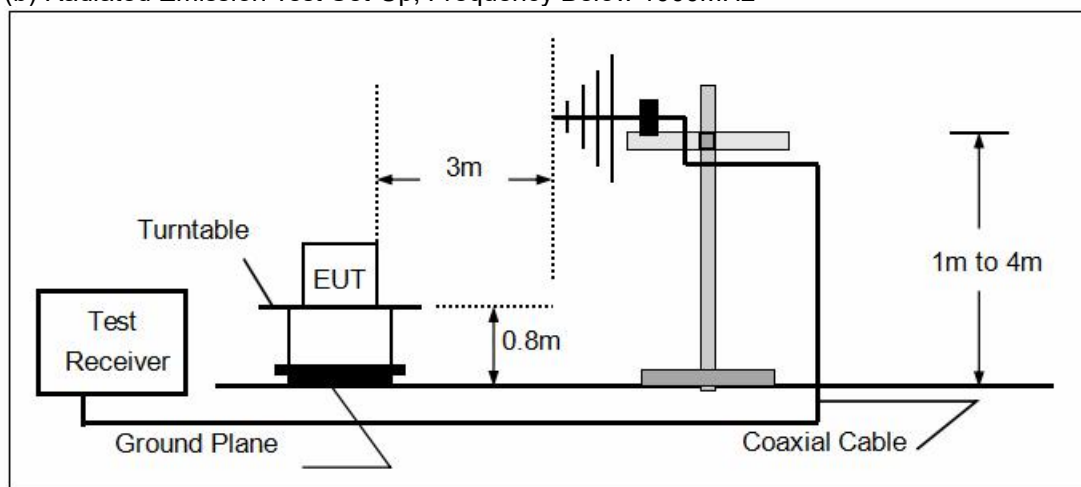
(Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.)

The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

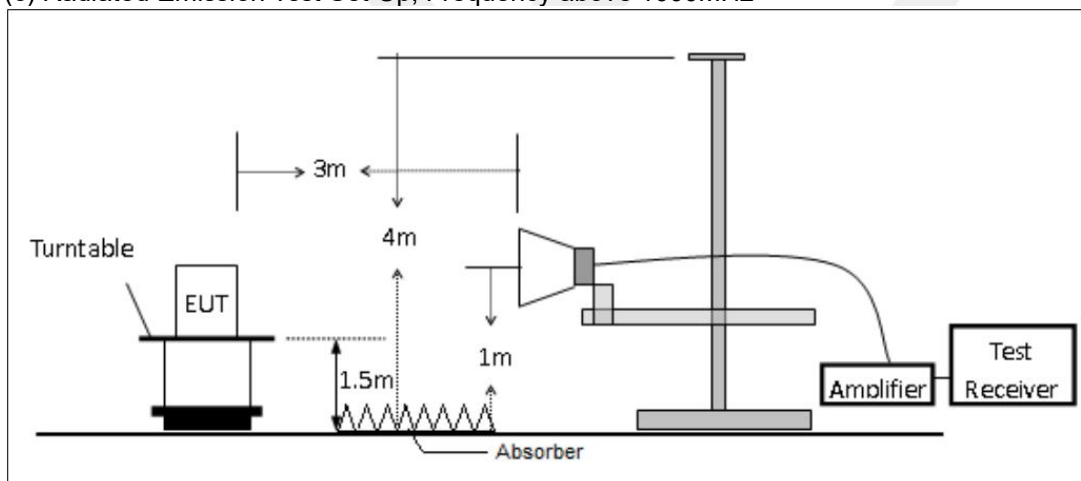
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz



#### 7.4 SUPPORT EQUIPMENT

N/A

**Notes:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. Unless otherwise denoted as EUT in 『Remark』 column, device(s) used in tested system is a support equipment.



## 8 TEST REQUIREMENTS

### 8.1 EQUIVALENT (ISOTROPIC) RADIATED POWER

Measurement Procedure: FCC KDB 971168 D01 V03r01 ; C63.26 (2015)

Calculate power in dBm by the following formula:

ERP (dBm) = Conducted Power (dBm) + antenna gain (dBd)

EIRP(dBm) = Conducted Power (dBm) + antenna gain (dBi)

EIRP=ERP+2.15dB

Measurement Procedure: FCC KDB 971168 D01 V03r01 ; ANSI/C63.26 (2015)

#### Below 1GHz test procedure as below:

- 1). The EUT was powered ON and placed on a 0.8m high table in the chamber. The antenna of the transmitter was extended to its maximum length.
- 2). The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
- 3). Steps 1) and 2) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
- 4). The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter.
- 5). A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 2) is obtained for this set of conditions.
- 6). The output power into the substitution antenna was then measured.
- 7). Steps 5) and 6) were repeated with both antennas polarized.
- 8). Calculate power in dBm by the following formula:  

$$\text{ERP (dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBd)}$$

Where:  
Pg is the generator output power into the substitution antenna.

#### Above 1GHz test procedure as below:

- 1). Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber
- 2). Calculate power in dBm by the following formula:  

$$\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$$

$$\text{EIRP} = \text{ERP} + 2.15\text{dB}$$

Where:  
Pg is the generator output power into the substitution antenna.
- 3). Test the EUT in the lowest channel, the middle channel the Highest channel
- 4). The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, Only the test worst case mode is recorded in the report.
- 5). Repeat above procedures until all frequencies measured was complete.

**LTE Cat M1 B2:**

| Band 2 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|--------|----------------------------|-------|----------------|-----------------------|-------|
|        |                            |       |                | QPSK                  | 16QAM |
| 1.4MHz | 18607/1850.7               | 0     | 1#0            | 20.08                 | 18.92 |
|        |                            | 0     | 6#0            | 18.11                 | 17.98 |
|        | 18900/1880                 | 0     | 1#0            | 20.08                 | 19.41 |
|        |                            | 0     | 6#0            | 18.12                 | 17.98 |
|        | 19193/1909.3               | 0     | 1#5            | 19.91                 | 19.01 |
|        |                            | 0     | 6#0            | 17.91                 | 18.08 |
| 3MHz   | 18615/1851.5               | 0     | 1#0            | 20.22                 | 18.88 |
|        |                            | 0     | 6#0            | 17.99                 | 18.25 |
|        | 18900/1880                 | 0     | 1#0            | 20.18                 | 18.84 |
|        |                            | 0     | 6#0            | 17.96                 | 18.24 |
|        | 19185/1908.5               | 1     | 1#5            | 19.85                 | 18.59 |
|        |                            | 1     | 6#0            | 17.81                 | 18.08 |
| 5MHz   | 18625/1852.5               | 0     | 1#0            | 20.17                 | 19.85 |
|        |                            | 0     | 6#0            | 18.98                 | 19.09 |
|        | 18900/1880                 | 0     | 1#0            | 20.15                 | 19.81 |
|        |                            | 0     | 6#0            | 19.04                 | 19.15 |
|        | 19175/1907.5               | 0     | 1#5            | 19.75                 | 19.54 |
|        |                            | 3     | 6#0            | 18.76                 | 19.05 |
| 10MHz  | 18650/1855                 | 3     | 1#0            | 20.18                 | 19.75 |
|        |                            | 0     | 4#0            | 20.11                 | 20.34 |
|        | 18900/1880                 | 0     | 1#0            | 19.94                 | 20.37 |
|        |                            | 0     | 4#0            | 19.98                 | 20.21 |
|        | 19150/1905                 | 4     | 1#5            | 19.76                 | 19.45 |
|        |                            | 7     | 4#2            | 19.88                 | 20.11 |
| 15MHz  | 18675/1857.5               | 3     | 1#0            | 20.13                 | 19.85 |
|        |                            | 0     | 6#0            | 19.94                 | 19.68 |
|        | 18900/1880                 | 0     | 1#0            | 20.06                 | 19.81 |
|        |                            | 0     | 6#0            | 19.93                 | 20.11 |
|        | 19125/1902.5               | 8     | 1#5            | 19.83                 | 19.57 |
|        |                            | 11    | 6#0            | 19.89                 | 20.07 |
| 20MHz  | 18700/1860                 | 3     | 1#0            | 20.09                 | 19.92 |
|        |                            | 0     | 6#0            | 19.92                 | 20.13 |
|        | 18900/1880                 | 0     | 1#0            | 20.03                 | 19.75 |
|        |                            | 0     | 6#0            | 19.89                 | 20.08 |
|        | 19100/1900                 | 12    | 1#5            | 19.85                 | 19.54 |
|        |                            | 15    | 6#0            | 19.89                 | 20.12 |

| Band 2 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | EIRP(dBm) |       | Limit<br>(dBm) | Conclusion |
|--------|----------------------------|-------|----------------|-----------|-------|----------------|------------|
|        |                            |       |                | QPSK      | 16QAM |                |            |
| 1.4MHz | 18607/1850.7               | 0     | 1#0            | 22.08     | 20.92 | 33             | Pass       |
|        |                            | 0     | 6#0            | 20.11     | 19.98 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 22.08     | 21.41 | 33             | Pass       |
|        |                            | 0     | 6#0            | 20.12     | 19.98 | 33             | Pass       |
|        | 19193/1909.3               | 0     | 1#5            | 21.91     | 21.01 | 33             | Pass       |
|        |                            | 0     | 6#0            | 19.91     | 20.08 | 33             | Pass       |
| 3MHz   | 18615/1851.5               | 0     | 1#0            | 22.22     | 20.88 | 33             | Pass       |
|        |                            | 0     | 6#0            | 19.99     | 20.25 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 22.18     | 20.84 | 33             | Pass       |
|        |                            | 0     | 6#0            | 19.96     | 20.24 | 33             | Pass       |
|        | 19185/1908.5               | 1     | 1#5            | 21.85     | 20.59 | 33             | Pass       |
|        |                            | 1     | 6#0            | 19.81     | 20.08 | 33             | Pass       |
| 5MHz   | 18625/1852.5               | 0     | 1#0            | 22.17     | 21.85 | 33             | Pass       |
|        |                            | 0     | 6#0            | 20.98     | 21.09 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 22.15     | 21.81 | 33             | Pass       |
|        |                            | 0     | 6#0            | 21.04     | 21.15 | 33             | Pass       |
|        | 19175/1907.5               | 0     | 1#5            | 21.75     | 21.54 | 33             | Pass       |
|        |                            | 3     | 6#0            | 20.76     | 21.05 | 33             | Pass       |
| 10MHz  | 18650/1855                 | 3     | 1#0            | 22.18     | 21.75 | 33             | Pass       |
|        |                            | 0     | 4#0            | 22.11     | 22.34 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 21.94     | 22.37 | 33             | Pass       |
|        |                            | 0     | 4#0            | 21.98     | 22.21 | 33             | Pass       |
|        | 19150/1905                 | 4     | 1#5            | 21.76     | 21.45 | 33             | Pass       |
|        |                            | 7     | 4#2            | 21.88     | 22.11 | 33             | Pass       |
| 15MHz  | 18675/1857.5               | 3     | 1#0            | 22.13     | 21.85 | 33             | Pass       |
|        |                            | 0     | 6#0            | 21.94     | 21.68 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 22.06     | 21.81 | 33             | Pass       |
|        |                            | 0     | 6#0            | 21.93     | 22.11 | 33             | Pass       |
|        | 19125/1902.5               | 8     | 1#5            | 21.83     | 21.57 | 33             | Pass       |
|        |                            | 11    | 6#0            | 21.89     | 22.07 | 33             | Pass       |
| 20MHz  | 18700/1860                 | 3     | 1#0            | 22.09     | 21.92 | 33             | Pass       |
|        |                            | 0     | 6#0            | 21.92     | 22.13 | 33             | Pass       |
|        | 18900/1880                 | 0     | 1#0            | 22.03     | 21.75 | 33             | Pass       |
|        |                            | 0     | 6#0            | 21.89     | 22.08 | 33             | Pass       |
|        | 19100/1900                 | 12    | 1#5            | 21.85     | 21.54 | 33             | Pass       |
|        |                            | 15    | 6#0            | 21.89     | 22.12 | 33             | Pass       |



# LTE Cat M1 B4:

| Band 4 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|--------|----------------------------|-------|----------------|-----------------------|-------|
|        |                            |       |                | QPSK                  | 16AM  |
| 1.4MHz | 19957/1710.7               | 0     | 1#0            | 19.88                 | 19.37 |
|        |                            | 0     | 6#0            | 17.72                 | 17.58 |
|        | 20175/1732.5               | 0     | 1#0            | 20.51                 | 18.87 |
|        |                            | 0     | 6#0            | 17.70                 | 18.09 |
|        | 20393/1754.3               | 0     | 1#5            | 20.20                 | 18.63 |
|        |                            | 0     | 6#0            | 17.66                 | 18.02 |
| 3MHz   | 19965/1711.5               | 0     | 1#0            | 19.92                 | 18.56 |
|        |                            | 0     | 6#0            | 17.68                 | 17.91 |
|        | 20175/1732.5               | 0     | 1#0            | 20.02                 | 18.55 |
|        |                            | 0     | 6#0            | 17.78                 | 17.99 |
|        | 20385/1753.5               | 1     | 1#5            | 19.72                 | 18.35 |
|        |                            | 1     | 6#0            | 17.78                 | 18.05 |
| 5MHz   | 19975/1712.5               | 0     | 1#0            | 20.04                 | 19.56 |
|        |                            | 0     | 6#0            | 18.78                 | 19.11 |
|        | 20175/1732.5               | 0     | 1#0            | 20.09                 | 19.74 |
|        |                            | 0     | 6#0            | 18.92                 | 19.01 |
|        | 20375/1752.5               | 3     | 1#5            | 19.82                 | 19.45 |
|        |                            | 3     | 6#0            | 18.81                 | 18.89 |
| 10MHz  | 20000/1715                 | 0     | 1#0            | 19.95                 | 19.55 |
|        |                            | 0     | 4#0            | 19.98                 | 20.06 |
|        | 20175/1732.5               | 0     | 1#0            | 20.07                 | 19.72 |
|        |                            | 0     | 4#0            | 18.90                 | 20.04 |
|        | 20350/1750                 | 7     | 1#5            | 19.75                 | 19.49 |
|        |                            | 7     | 4#2            | 19.92                 | 20.02 |
| 15MHz  | 20025/1717.5               | 0     | 1#0            | 20.06                 | 19.53 |
|        |                            | 0     | 6#0            | 19.91                 | 20.01 |
|        | 20175/1732.5               | 0     | 1#0            | 20.05                 | 19.61 |
|        |                            | 0     | 6#0            | 19.99                 | 20.10 |
|        | 20325/1747.5               | 11    | 1#5            | 19.93                 | 19.51 |
|        |                            | 11    | 6#0            | 19.96                 | 20.09 |
| 20MHz  | 20050/1720                 | 0     | 1#0            | 19.99                 | 19.54 |
|        |                            | 0     | 6#0            | 19.85                 | 20.03 |
|        | 20175/1732.5               | 0     | 1#0            | 20.07                 | 19.59 |
|        |                            | 0     | 6#0            | 19.92                 | 20.09 |
|        | 20300/1745                 | 15    | 1#5            | 19.81                 | 19.55 |
|        |                            | 15    | 6#0            | 19.93                 | 20.02 |

| Band 4 | Channel/<br>Frequency(MHz) | Index | RB#<br>Bstart | EIRP(dBm) |       | Limit<br>(dBm) | Conclusion |
|--------|----------------------------|-------|---------------|-----------|-------|----------------|------------|
|        |                            |       |               | QPSK      | 16QAM |                |            |
| 1.4MHz | 19957/1710.7               | 0     | 1#0           | 19.14     | 18.63 | 30             | Pass       |
|        |                            | 0     | 6#0           | 16.98     | 16.84 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.77     | 18.13 | 30             | Pass       |
|        |                            | 0     | 6#0           | 16.96     | 17.35 | 30             | Pass       |
|        | 20393/1754.3               | 0     | 1#5           | 19.46     | 17.89 | 30             | Pass       |
|        |                            | 0     | 6#0           | 16.92     | 17.28 | 30             | Pass       |
| 3MHz   | 19965/1711.5               | 0     | 1#0           | 19.18     | 17.82 | 30             | Pass       |
|        |                            | 0     | 6#0           | 16.94     | 17.17 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.28     | 17.81 | 30             | Pass       |
|        |                            | 0     | 6#0           | 17.04     | 17.25 | 30             | Pass       |
|        | 20385/1753.5               | 1     | 1#5           | 18.98     | 17.61 | 30             | Pass       |
|        |                            | 1     | 6#0           | 17.04     | 17.31 | 30             | Pass       |
| 5MHz   | 19975/1712.5               | 0     | 1#0           | 19.3      | 18.82 | 30             | Pass       |
|        |                            | 0     | 6#0           | 18.04     | 18.37 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.35     | 19.00 | 30             | Pass       |
|        |                            | 0     | 6#0           | 18.18     | 18.27 | 30             | Pass       |
|        | 20375/1752.5               | 3     | 1#5           | 19.08     | 18.71 | 30             | Pass       |
|        |                            | 3     | 6#0           | 18.07     | 18.15 | 30             | Pass       |
| 10MHz  | 20000/1715                 | 0     | 1#0           | 19.21     | 18.81 | 30             | Pass       |
|        |                            | 0     | 4#0           | 19.24     | 19.32 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.33     | 18.98 | 30             | Pass       |
|        |                            | 0     | 4#0           | 18.16     | 19.3  | 30             | Pass       |
|        | 20350/1750                 | 7     | 1#5           | 19.01     | 18.75 | 30             | Pass       |
|        |                            | 7     | 4#2           | 19.18     | 19.28 | 30             | Pass       |
| 15MHz  | 20025/1717.5               | 0     | 1#0           | 19.32     | 18.79 | 30             | Pass       |
|        |                            | 0     | 6#0           | 19.17     | 19.27 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.31     | 18.87 | 30             | Pass       |
|        |                            | 0     | 6#0           | 19.25     | 19.36 | 30             | Pass       |
|        | 20325/1747.5               | 11    | 1#5           | 19.19     | 18.77 | 30             | Pass       |
|        |                            | 11    | 6#0           | 19.22     | 19.35 | 30             | Pass       |
| 20MHz  | 20050/1720                 | 0     | 1#0           | 19.25     | 18.8  | 30             | Pass       |
|        |                            | 0     | 6#0           | 19.11     | 19.29 | 30             | Pass       |
|        | 20175/1732.5               | 0     | 1#0           | 19.33     | 18.85 | 30             | Pass       |
|        |                            | 0     | 6#0           | 19.18     | 19.35 | 30             | Pass       |
|        | 20300/1745                 | 15    | 1#5           | 19.07     | 18.81 | 30             | Pass       |
|        |                            | 15    | 6#0           | 19.19     | 19.28 | 30             | Pass       |

**LTE Cat M1 B5:**

| Band 5 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|--------|----------------------------|-------|----------------|-----------------------|-------|
|        |                            |       |                | QPSK                  | 16QAM |
| 1.4MHz | 20407/824.7                | 0     | 1#0            | 20.05                 | 18.29 |
|        |                            | 0     | 6#0            | 17.54                 | 18.53 |
|        | 20525/836.5                | 0     | 1#0            | 20.62                 | 18.78 |
|        |                            | 0     | 6#0            | 18.14                 | 18.9  |
|        | 20643/848.3                | 0     | 1#5            | 20.32                 | 18.83 |
|        |                            | 0     | 6#0            | 18.09                 | 18.83 |
| 3MHz   | 20415/825.5                | 0     | 1#0            | 19.85                 | 18.59 |
|        |                            | 0     | 6#0            | 17.75                 | 18.15 |
|        | 20525/836.5                | 0     | 1#0            | 20.38                 | 18.99 |
|        |                            | 0     | 6#0            | 18.22                 | 18.61 |
|        | 20635/847.5                | 1     | 1#5            | 20.23                 | 18.87 |
|        |                            | 1     | 6#0            | 18.11                 | 18.46 |
| 5MHz   | 20425/826.5                | 0     | 1#0            | 19.85                 | 19.42 |
|        |                            | 0     | 6#0            | 18.93                 | 19.09 |
|        | 20525/836.5                | 0     | 1#0            | 20.24                 | 19.85 |
|        |                            | 0     | 6#0            | 19.28                 | 19.51 |
|        | 20625/846.5                | 3     | 1#5            | 20.19                 | 19.71 |
|        |                            | 3     | 6#0            | 19.27                 | 19.49 |
| 10MHz  | 20450/829                  | 0     | 1#0            | 19.63                 | 20.22 |
|        |                            | 0     | 4#0            | 19.95                 | 19.67 |
|        | 20525/836.5                | 0     | 1#0            | 20.23                 | 19.73 |
|        |                            | 0     | 4#0            | 20.16                 | 20.49 |
|        | 20600/844                  | 7     | 1#5            | 19.93                 | 20.35 |
|        |                            | 7     | 4#2            | 20.33                 | 19.97 |

| Band 5 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|--------|----------------------------|-------|----------------|----------|-------|----------------|------------|
|        |                            |       |                | QPSK     | 16QAM |                |            |
| 1.4MHz | 20407/824.7                | 0     | 1#0            | 21.15    | 19.39 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 18.64    | 19.63 | 38.45          | Pass       |
|        | 20525/836.5                | 0     | 1#0            | 21.72    | 19.88 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 19.24    | 20.00 | 38.45          | Pass       |
|        | 20643/848.3                | 0     | 1#5            | 21.42    | 19.93 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 19.19    | 19.93 | 38.45          | Pass       |
| 3MHz   | 20415/825.5                | 0     | 1#0            | 20.95    | 19.69 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 18.85    | 19.25 | 38.45          | Pass       |
|        | 20525/836.5                | 0     | 1#0            | 21.48    | 20.09 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 19.32    | 19.71 | 38.45          | Pass       |
|        | 20635/847.5                | 1     | 1#5            | 21.33    | 19.97 | 38.45          | Pass       |
|        |                            | 1     | 6#0            | 19.21    | 19.56 | 38.45          | Pass       |
| 5MHz   | 20425/826.5                | 0     | 1#0            | 20.95    | 20.52 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 20.03    | 20.19 | 38.45          | Pass       |
|        | 20525/836.5                | 0     | 1#0            | 21.34    | 20.95 | 38.45          | Pass       |
|        |                            | 0     | 6#0            | 20.38    | 20.61 | 38.45          | Pass       |
|        | 20625/846.5                | 3     | 1#5            | 21.29    | 20.81 | 38.45          | Pass       |
|        |                            | 3     | 6#0            | 20.37    | 20.59 | 38.45          | Pass       |
| 10MHz  | 20450/829                  | 0     | 1#0            | 20.73    | 21.32 | 38.45          | Pass       |
|        |                            | 0     | 4#0            | 21.05    | 20.77 | 38.45          | Pass       |
|        | 20525/836.5                | 0     | 1#0            | 21.33    | 20.83 | 38.45          | Pass       |
|        |                            | 0     | 4#0            | 21.26    | 21.59 | 38.45          | Pass       |
|        | 20600/844                  | 7     | 1#5            | 21.03    | 21.45 | 38.45          | Pass       |
|        |                            | 7     | 4#2            | 21.43    | 21.07 | 38.45          | Pass       |

**LTE Cat M1 B12:**

| Band 12 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|---------|----------------------------|-------|----------------|-----------------------|-------|
|         |                            |       |                | QPSK                  | 16QAM |
| 1.4MHz  | 23017/699.7                | 0     | 1#0            | 19.98                 | 19.44 |
|         |                            | 0     | 6#0            | 18.31                 | 18.16 |
|         | 23095/707.5                | 0     | 1#0            | 20.44                 | 18.71 |
|         |                            | 0     | 6#0            | 18.06                 | 18.44 |
|         | 23173/715.3                | 0     | 1#5            | 19.51                 | 19.18 |
|         |                            | 0     | 6#0            | 18.22                 | 17.99 |
| 3MHz    | 23025/700.5                | 0     | 1#0            | 20.32                 | 18.93 |
|         |                            | 0     | 6#0            | 18.05                 | 18.39 |
|         | 23095/707.5                | 0     | 1#0            | 20.29                 | 18.97 |
|         |                            | 0     | 6#0            | 18.04                 | 18.41 |
|         | 23165/714.5                | 1     | 1#5            | 20.07                 | 18.72 |
|         |                            | 1     | 6#0            | 17.84                 | 18.22 |
| 5MHz    | 23035/701.5                | 3     | 1#0            | 20.24                 | 19.85 |
|         |                            | 0     | 6#0            | 19.21                 | 19.41 |
|         | 23095/707.5                | 0     | 1#0            | 20.12                 | 19.81 |
|         |                            | 0     | 6#0            | 19.19                 | 19.42 |
|         | 23155/713.5                | 0     | 1#5            | 19.92                 | 19.51 |
|         |                            | 3     | 6#0            | 19.17                 | 19.41 |
| 10MHz   | 23060/704                  | 3     | 1#0            | 20.22                 | 19.82 |
|         |                            | 0     | 4#0            | 20.30                 | 20.41 |
|         | 23095/707.5                | 0     | 1#0            | 20.13                 | 19.79 |
|         |                            | 0     | 4#0            | 20.26                 | 20.44 |
|         | 23130/711                  | 4     | 1#5            | 20.16                 | 19.77 |
|         |                            | 7     | 4#2            | 20.20                 | 20.45 |

| Band 12 | Channel/<br>Frequency(MHz) | Index | RB#<br>Bstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|---------------|----------|-------|----------------|------------|
|         |                            |       |               | QPSK     | 16QAM |                |            |
| 1.4MHz  | 20407/824.7                | 0     | 1#0           | 19.55    | 19.01 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 17.88    | 17.73 | 34.77          | Pass       |
|         | 20525/836.5                | 0     | 1#0           | 20.01    | 18.28 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 17.63    | 18.01 | 34.77          | Pass       |
|         | 20643/848.3                | 0     | 1#5           | 19.08    | 18.75 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 17.79    | 17.56 | 34.77          | Pass       |
| 3MHz    | 20415/825.5                | 0     | 1#0           | 19.89    | 18.50 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 17.62    | 17.96 | 34.77          | Pass       |
|         | 20525/836.5                | 0     | 1#0           | 19.86    | 18.54 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 17.61    | 17.98 | 34.77          | Pass       |
|         | 20635/847.5                | 1     | 1#5           | 19.64    | 18.29 | 34.77          | Pass       |
|         |                            | 1     | 6#0           | 17.41    | 17.79 | 34.77          | Pass       |
| 5MHz    | 20425/826.5                | 0     | 1#0           | 19.81    | 19.42 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 18.78    | 18.98 | 34.77          | Pass       |
|         | 20525/836.5                | 0     | 1#0           | 19.69    | 19.38 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 18.76    | 18.99 | 34.77          | Pass       |
|         | 20625/846.5                | 3     | 1#5           | 19.49    | 19.08 | 34.77          | Pass       |
|         |                            | 3     | 6#0           | 18.74    | 18.98 | 34.77          | Pass       |
| 10MHz   | 20450/829                  | 0     | 1#0           | 19.79    | 19.39 | 34.77          | Pass       |
|         |                            | 0     | 4#0           | 19.87    | 19.98 | 34.77          | Pass       |
|         | 20525/836.5                | 0     | 1#0           | 19.70    | 19.36 | 34.77          | Pass       |
|         |                            | 0     | 4#0           | 19.83    | 20.01 | 34.77          | Pass       |
|         | 20600/844                  | 7     | 1#5           | 19.73    | 19.34 | 34.77          | Pass       |
|         |                            | 7     | 4#2           | 19.77    | 20.02 | 34.77          | Pass       |

**LTE Cat M1 B13:**

| Band 13 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|---------|----------------------------|-------|----------------|-----------------------|-------|
|         |                            |       |                | QPSK                  | 16QAM |
| 5MHz    | 23205/779.5                | 0     | 1#0            | 19.86                 | 20.35 |
|         |                            | 0     | 6#0            | 19.22                 | 19.34 |
|         | 23230/782                  | 0     | 1#0            | 20.47                 | 19.67 |
|         |                            | 0     | 6#0            | 19.11                 | 19.35 |
|         | 23255/784.5                | 3     | 1#5            | 19.95                 | 19.55 |
|         |                            | 3     | 6#0            | 19.14                 | 19.31 |
| 10MHz   | 23230/782                  | 0     | 1#0            | 20.05                 | 19.61 |
|         |                            | 0     | 4#0            | 20.18                 | 20.51 |

| Band 13 | Channel/<br>Frequency(MHz) | Index | RB#<br>Bstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|---------------|----------|-------|----------------|------------|
|         |                            |       |               | QPSK     | 16QAM |                |            |
| 5MHz    | 23205/779.5                | 0     | 1#0           | 20.66    | 21.15 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 20.02    | 20.14 | 34.77          | Pass       |
|         | 23230/782                  | 0     | 1#0           | 21.27    | 20.47 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 19.91    | 20.15 | 34.77          | Pass       |
|         | 23255/784.5                | 3     | 1#5           | 20.75    | 20.35 | 34.77          | Pass       |
|         |                            | 3     | 6#0           | 19.94    | 20.11 | 34.77          | Pass       |
| 10MHz   | 23230/782                  | 0     | 1#0           | 20.85    | 20.41 | 34.77          | Pass       |
|         |                            | 0     | 4#0           | 20.98    | 21.31 | 34.77          | Pass       |

**LTE Cat M1 B25:**

| Band 25 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|---------|----------------------------|-------|----------------|-----------------------|-------|
|         |                            |       |                | QPSK                  | 16QAM |
| 1.4MHz  | 26047/1850.7               | 0     | 1#0            | 19.83                 | 19.21 |
|         |                            | 0     | 6#0            | 17.72                 | 17.53 |
|         | 26365/1882.5               | 0     | 1#0            | 20.46                 | 19.02 |
|         |                            | 0     | 6#0            | 17.76                 | 18.15 |
|         | 26683/1914.3               | 0     | 1#5            | 20.30                 | 18.79 |
|         |                            | 0     | 6#0            | 17.85                 | 18.24 |
| 3MHz    | 26055/1851.5               | 0     | 1#0            | 20.03                 | 18.73 |
|         |                            | 0     | 6#0            | 17.61                 | 17.97 |
|         | 26365/1882.5               | 0     | 1#0            | 20.22                 | 18.96 |
|         |                            | 0     | 6#0            | 17.78                 | 18.16 |
|         | 26675/1913.5               | 1     | 1#5            | 20.07                 | 18.74 |
|         |                            | 1     | 6#0            | 17.75                 | 18.12 |
| 5MHz    | 26065/1852.5               | 0     | 1#0            | 19.92                 | 19.63 |
|         |                            | 0     | 6#0            | 18.75                 | 18.94 |
|         | 26365/1882.5               | 0     | 1#0            | 20.12                 | 19.68 |
|         |                            | 0     | 6#0            | 18.97                 | 19.13 |
|         | 26665/1912.5               | 0     | 1#5            | 20.14                 | 19.81 |
|         |                            | 3     | 6#0            | 18.92                 | 19.12 |
| 10MHz   | 26090/1855                 | 3     | 1#0            | 19.94                 | 19.62 |
|         |                            | 0     | 4#0            | 18.81                 | 19.98 |
|         | 26365/1882.5               | 0     | 1#0            | 20.16                 | 19.87 |
|         |                            | 0     | 4#0            | 18.99                 | 20.06 |
|         | 26640/1910                 | 4     | 1#5            | 20.02                 | 19.68 |
|         |                            | 7     | 4#2            | 20.05                 | 20.29 |
| 15MHz   | 26115/1857.5               | 3     | 1#0            | 19.94                 | 19.65 |
|         |                            | 0     | 6#0            | 19.83                 | 19.93 |
|         | 26365/1882.5               | 0     | 1#0            | 20.19                 | 19.74 |
|         |                            | 0     | 6#0            | 19.99                 | 20.02 |
|         | 26615/1907.5               | 8     | 1#5            | 19.97                 | 19.67 |
|         |                            | 11    | 6#0            | 20.07                 | 20.18 |
| 20MHz   | 26140/1860                 | 3     | 1#0            | 19.88                 | 19.61 |
|         |                            | 0     | 6#0            | 19.83                 | 20.01 |
|         | 26365/1882.5               | 0     | 1#0            | 20.09                 | 19.78 |
|         |                            | 0     | 6#0            | 20.02                 | 20.12 |
|         | 26590/1905                 | 12    | 1#5            | 19.94                 | 19.66 |
|         |                            | 15    | 6#0            | 20.01                 | 20.19 |



| Band 25 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | EIRP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|----------------|-----------|-------|----------------|------------|
|         |                            |       |                | QPSK      | 16QAM |                |            |
| 1.4MHz  | 26047/1850.7               | 0     | 1#0            | 21.83     | 21.21 | 33             | Pass       |
|         |                            | 0     | 6#0            | 19.72     | 19.53 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.46     | 21.02 | 33             | Pass       |
|         |                            | 0     | 6#0            | 19.76     | 20.15 | 33             | Pass       |
|         | 26683/1914.3               | 0     | 1#5            | 22.30     | 20.79 | 33             | Pass       |
|         |                            | 0     | 6#0            | 19.85     | 20.24 | 33             | Pass       |
| 3MHz    | 26055/1851.5               | 0     | 1#0            | 22.03     | 20.73 | 33             | Pass       |
|         |                            | 0     | 6#0            | 19.61     | 19.97 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.22     | 20.96 | 33             | Pass       |
|         |                            | 0     | 6#0            | 19.78     | 20.16 | 33             | Pass       |
|         | 26675/1913.5               | 1     | 1#5            | 22.07     | 20.74 | 33             | Pass       |
|         |                            | 1     | 6#0            | 19.75     | 20.12 | 33             | Pass       |
| 5MHz    | 26065/1852.5               | 0     | 1#0            | 21.92     | 21.63 | 33             | Pass       |
|         |                            | 0     | 6#0            | 20.75     | 20.94 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.12     | 21.68 | 33             | Pass       |
|         |                            | 0     | 6#0            | 20.97     | 21.13 | 33             | Pass       |
|         | 26665/1912.5               | 0     | 1#5            | 22.14     | 21.81 | 33             | Pass       |
|         |                            | 3     | 6#0            | 20.92     | 21.12 | 33             | Pass       |
| 10MHz   | 26090/1855                 | 3     | 1#0            | 21.94     | 21.62 | 33             | Pass       |
|         |                            | 0     | 4#0            | 20.81     | 21.98 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.16     | 21.87 | 33             | Pass       |
|         |                            | 0     | 4#0            | 20.99     | 22.06 | 33             | Pass       |
|         | 26640/1910                 | 4     | 1#5            | 22.02     | 21.68 | 33             | Pass       |
|         |                            | 7     | 4#2            | 22.05     | 22.29 | 33             | Pass       |
| 15MHz   | 26115/1857.5               | 3     | 1#0            | 21.94     | 21.65 | 33             | Pass       |
|         |                            | 0     | 6#0            | 21.83     | 21.93 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.19     | 21.74 | 33             | Pass       |
|         |                            | 0     | 6#0            | 21.99     | 22.02 | 33             | Pass       |
|         | 26615/1907.5               | 8     | 1#5            | 21.97     | 21.67 | 33             | Pass       |
|         |                            | 11    | 6#0            | 22.07     | 22.18 | 33             | Pass       |
| 20MHz   | 26140/1860                 | 3     | 1#0            | 21.88     | 21.61 | 33             | Pass       |
|         |                            | 0     | 6#0            | 21.83     | 22.01 | 33             | Pass       |
|         | 26365/1882.5               | 0     | 1#0            | 22.09     | 21.78 | 33             | Pass       |
|         |                            | 0     | 6#0            | 22.02     | 22.12 | 33             | Pass       |
|         | 26590/1905                 | 12    | 1#5            | 21.94     | 21.66 | 33             | Pass       |
|         |                            | 15    | 6#0            | 22.01     | 22.19 | 33             | Pass       |

**LTE Cat M1 B26:**

**(B26: Tx: 814~824MHz)**

| Band 26 | Channel/<br>Frequency(MHz) | Index | RB#<br>RB start | Conducted Power (dBm) |       |
|---------|----------------------------|-------|-----------------|-----------------------|-------|
|         |                            |       |                 | QPSK                  | 16QAM |
| 1.4MHz  | 26697/814.7                | 0     | 1#0             | 19.66                 | 19.47 |
|         |                            | 0     | 6#0             | 18.03                 | 18.12 |
|         | 26740/819                  | 0     | 1#0             | 20.35                 | 18.59 |
|         |                            | 0     | 6#0             | 19.84                 | 18.63 |
|         | 26783/823.3                | 0     | 1#5             | 20.26                 | 19.15 |
|         |                            | 0     | 6#0             | 17.95                 | 18.21 |
| 3MHz    | 26705/815.5                | 0     | 1#0             | 20.08                 | 18.81 |
|         |                            | 0     | 6#0             | 17.89                 | 18.29 |
|         | 26740/819                  | 0     | 1#0             | 20.11                 | 18.72 |
|         |                            | 0     | 6#0             | 17.86                 | 18.35 |
|         | 26775/822.5                | 1     | 1#5             | 19.90                 | 18.59 |
|         |                            | 1     | 6#0             | 17.86                 | 18.26 |
| 5MHz    | 26715/816.5                | 3     | 1#0             | 20.04                 | 19.78 |
|         |                            | 0     | 6#0             | 19.05                 | 19.28 |
|         | 26740/819                  | 0     | 1#0             | 20.04                 | 19.68 |
|         |                            | 0     | 6#0             | 18.99                 | 19.35 |
|         | 26765/821.5                | 0     | 1#5             | 19.94                 | 19.55 |
|         |                            | 3     | 6#0             | 19.07                 | 19.31 |
| 10MHz   | 26740/819                  | 0     | 1#0             | 20.09                 | 19.74 |
|         |                            | 0     | 4#0             | 20.07                 | 20.51 |

| Band 26 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|----------------|----------|-------|----------------|------------|
|         |                            |       |                | QPSK     | 16QAM |                |            |
| 1.4MHz  | 26697/814.7                | 0     | 1#0            | 20.76    | 20.57 | 50             | Pass       |
|         |                            | 0     | 6#0            | 19.13    | 19.22 | 50             | Pass       |
|         | 26740/819                  | 0     | 1#0            | 21.45    | 19.69 | 50             | Pass       |
|         |                            | 0     | 6#0            | 20.94    | 19.73 | 50             | Pass       |
|         | 26783/823.3                | 0     | 1#5            | 21.36    | 20.25 | 50             | Pass       |
|         |                            | 0     | 6#0            | 19.05    | 19.31 | 50             | Pass       |
| 3MHz    | 26705/815.5                | 0     | 1#0            | 21.18    | 19.91 | 50             | Pass       |
|         |                            | 0     | 6#0            | 18.99    | 19.39 | 50             | Pass       |
|         | 26740/819                  | 0     | 1#0            | 21.21    | 19.82 | 50             | Pass       |
|         |                            | 0     | 6#0            | 18.96    | 19.45 | 50             | Pass       |
|         | 26775/822.5                | 1     | 1#5            | 21.00    | 19.69 | 50             | Pass       |
|         |                            | 1     | 6#0            | 18.96    | 19.36 | 50             | Pass       |
| 5MHz    | 26715/816.5                | 3     | 1#0            | 21.14    | 20.88 | 50             | Pass       |
|         |                            | 0     | 6#0            | 20.15    | 20.38 | 50             | Pass       |
|         | 26740/819                  | 0     | 1#0            | 21.14    | 20.78 | 50             | Pass       |
|         |                            | 0     | 6#0            | 20.09    | 20.45 | 50             | Pass       |
|         | 26765/821.5                | 0     | 1#5            | 21.04    | 20.65 | 50             | Pass       |
|         |                            | 3     | 6#0            | 20.17    | 20.41 | 50             | Pass       |
| 10MHz   | 26740/819                  | 0     | 1#0            | 21.19    | 20.84 | 50             | Pass       |
|         |                            | 0     | 4#0            | 21.17    | 21.61 | 50             | Pass       |

(B26: Tx: 824~849MHz)

| Band 26 | Channel/<br>Frequency(MHz) | Index | RB#<br>RB start | Conducted Power (dBm) |       |
|---------|----------------------------|-------|-----------------|-----------------------|-------|
|         |                            |       |                 | QPSK                  | 16QAM |
| 1.4MHz  | 26797/824.7                | 0     | 1#0             | 19.82                 | 18.89 |
|         |                            | 0     | 6#0             | 17.91                 | 18.01 |
|         | 26915/836.5                | 0     | 1#0             | 20.26                 | 18.34 |
|         |                            | 0     | 6#0             | 17.59                 | 18.38 |
|         | 27033/848.3                | 0     | 1#5             | 19.98                 | 18.45 |
|         |                            | 0     | 6#0             | 17.63                 | 18.34 |
| 3MHz    | 26805/825.5                | 0     | 1#0             | 19.83                 | 18.45 |
|         |                            | 0     | 6#0             | 17.49                 | 17.97 |
|         | 26915/836.5                | 0     | 1#0             | 19.91                 | 18.54 |
|         |                            | 0     | 6#0             | 17.60                 | 17.99 |
|         | 27025/847.5                | 1     | 1#5             | 19.96                 | 18.56 |
|         |                            | 1     | 6#0             | 17.60                 | 18.07 |
| 5MHz    | 26815/826.5                | 3     | 1#0             | 19.87                 | 19.55 |
|         |                            | 0     | 6#0             | 18.88                 | 19.21 |
|         | 26915/836.5                | 0     | 1#0             | 19.91                 | 19.59 |
|         |                            | 0     | 6#0             | 19.01                 | 19.25 |
|         | 27015/846.5                | 0     | 1#5             | 19.80                 | 19.51 |
|         |                            | 3     | 6#0             | 19.00                 | 19.23 |
| 10MHz   | 26840/829                  | 3     | 1#0             | 19.93                 | 19.53 |
|         |                            | 0     | 4#0             | 19.98                 | 20.49 |
|         | 26915/836.5                | 0     | 1#0             | 20.04                 | 19.55 |
|         |                            | 0     | 4#0             | 20.11                 | 20.47 |
|         | 26990/844                  | 4     | 1#5             | 19.88                 | 19.41 |
|         |                            | 7     | 4#2             | 19.94                 | 20.37 |
| 15MHz   | 26865/831.5                | 3     | 1#0             | 19.90                 | 19.62 |
|         |                            | 0     | 6#0             | 20.10                 | 19.84 |
|         | 26915/836.5                | 0     | 1#0             | 20.06                 | 19.72 |
|         |                            | 0     | 6#0             | 20.08                 | 20.23 |
|         | 26965/841.5                | 8     | 1#5             | 19.87                 | 19.55 |
|         |                            | 11    | 6#0             | 19.99                 | 20.25 |

| Band 26 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|----------------|----------|-------|----------------|------------|
|         |                            |       |                | QPSK     | 16QAM |                |            |
| 1.4MHz  | 26797/824.7                | 0     | 1#0            | 20.92    | 19.99 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 19.01    | 19.11 | 38.45          | Pass       |
|         | 26915/836.5                | 0     | 1#0            | 21.36    | 19.44 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 18.69    | 19.48 | 38.45          | Pass       |
|         | 27033/848.3                | 0     | 1#5            | 21.08    | 19.55 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 18.73    | 19.44 | 38.45          | Pass       |
| 3MHz    | 26805/825.5                | 0     | 1#0            | 20.93    | 19.55 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 18.59    | 19.07 | 38.45          | Pass       |
|         | 26915/836.5                | 0     | 1#0            | 21.01    | 19.64 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 18.70    | 19.09 | 38.45          | Pass       |
|         | 27025/847.5                | 1     | 1#5            | 21.06    | 19.66 | 38.45          | Pass       |
|         |                            | 1     | 6#0            | 18.70    | 19.17 | 38.45          | Pass       |
| 5MHz    | 26815/826.5                | 3     | 1#0            | 20.97    | 20.65 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 19.98    | 20.31 | 38.45          | Pass       |
|         | 26915/836.5                | 0     | 1#0            | 21.01    | 20.69 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 20.11    | 20.35 | 38.45          | Pass       |
|         | 27015/846.5                | 0     | 1#5            | 20.90    | 20.61 | 38.45          | Pass       |
|         |                            | 3     | 6#0            | 20.10    | 20.33 | 38.45          | Pass       |
| 10MHz   | 26840/829                  | 3     | 1#0            | 21.03    | 20.63 | 38.45          | Pass       |
|         |                            | 0     | 4#0            | 21.08    | 21.59 | 38.45          | Pass       |
|         | 26915/836.5                | 0     | 1#0            | 21.14    | 20.65 | 38.45          | Pass       |
|         |                            | 0     | 4#0            | 21.21    | 21.57 | 38.45          | Pass       |
|         | 26990/844                  | 4     | 1#5            | 20.98    | 20.51 | 38.45          | Pass       |
|         |                            | 7     | 4#2            | 21.04    | 21.47 | 38.45          | Pass       |
| 15MHz   | 26865/831.5                | 3     | 1#0            | 21.00    | 20.72 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 21.20    | 20.94 | 38.45          | Pass       |
|         | 26915/836.5                | 0     | 1#0            | 21.16    | 20.82 | 38.45          | Pass       |
|         |                            | 0     | 6#0            | 21.18    | 21.33 | 38.45          | Pass       |
|         | 26965/841.5                | 8     | 1#5            | 20.97    | 20.65 | 38.45          | Pass       |
|         |                            | 11    | 6#0            | 21.09    | 21.35 | 38.45          | Pass       |

**LTE Cat M1 B66:**

| Band 66 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conduct d Power ( Bm) |       |
|---------|----------------------------|-------|----------------|-----------------------|-------|
|         |                            |       |                | QPSK                  | 16QAM |
| 1.4MHz  | 131979/1710.7              | 0     | 1#0            | 20.18                 | 19.74 |
|         |                            | 0     | 6#0            | 18.14                 | 17.97 |
|         | 132322/1745                | 0     | 1#0            | 20.17                 | 18.52 |
|         |                            | 0     | 6#0            | 17.46                 | 17.85 |
|         | 132665/1779.3              | 0     | 1#5            | 20.18                 | 18.27 |
|         |                            | 0     | 6#0            | 17.78                 | 18.62 |
| 3MHz    | 131987/1711.5              | 0     | 1#0            | 20.18                 | 18.83 |
|         |                            | 0     | 6#0            | 18.12                 | 18.39 |
|         | 132322/1745                | 0     | 1#0            | 18.21                 | 18.31 |
|         |                            | 0     | 6#0            | 17.55                 | 17.77 |
|         | 132657/1778.5              | 1     | 1#5            | 19.89                 | 18.39 |
|         |                            | 1     | 6#0            | 17.73                 | 18.23 |
| 5MHz    | 131997/1712.5              | 0     | 1#0            | 20.17                 | 19.87 |
|         |                            | 0     | 6#0            | 19.18                 | 19.31 |
|         | 132322/1745                | 0     | 1#0            | 19.74                 | 19.45 |
|         |                            | 0     | 6#0            | 18.58                 | 18.61 |
|         | 132647/1777.5              | 0     | 1#5            | 19.80                 | 19.45 |
|         |                            | 3     | 6#0            | 18.77                 | 19.08 |
| 10MHz   | 132022/1715                | 3     | 1#0            | 20.18                 | 19.98 |
|         |                            | 0     | 4#0            | 20.17                 | 20.13 |
|         | 132022/1745                | 0     | 1#0            | 19.72                 | 19.43 |
|         |                            | 0     | 4#0            | 19.81                 | 19.91 |
|         | 132622/1775                | 4     | 1#5            | 19.21                 | 18.87 |
|         |                            | 7     | 4#2            | 19.34                 | 19.46 |
| 15MHz   | 132047/1717.5              | 3     | 1#0            | 20.17                 | 19.91 |
|         |                            | 0     | 6#0            | 20.16                 | 20.15 |
|         | 132322/1745                | 0     | 1#0            | 19.76                 | 19.44 |
|         |                            | 0     | 6#0            | 19.67                 | 19.75 |
|         | 132597/1772.5              | 8     | 1#5            | 19.61                 | 19.72 |
|         |                            | 11    | 6#0            | 19.71                 | 19.78 |
| 20MHz   | 132072/1720                | 3     | 1#0            | 20.17                 | 19.91 |
|         |                            | 0     | 6#0            | 20.18                 | 20.16 |
|         | 132322/1745                | 0     | 1#0            | 19.78                 | 19.98 |
|         |                            | 0     | 6#0            | 19.66                 | 19.79 |
|         | 132572/1770                | 12    | 1#5            | 19.18                 | 18.89 |
|         |                            | 15    | 6#0            | 19.31                 | 19.41 |

| Band 66 | Channel/<br>Frequency(MHz) | Index | RB#<br>Bstart | EIRP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|---------------|-----------|-------|----------------|------------|
|         |                            |       |               | QPSK      | 16QAM |                |            |
| 1.4MHz  | 131979/1710.7              | 0     | 1#0           | 19.85     | 19.41 | 30             | Pass       |
|         |                            | 0     | 6#0           | 17.81     | 17.64 | 30             | Pass       |
|         | 132322/1745                | 0     | 1#0           | 19.84     | 18.19 | 30             | Pass       |
|         |                            | 0     | 6#0           | 17.13     | 17.52 | 30             | Pass       |
|         | 132665/1779.3              | 0     | 1#5           | 19.85     | 17.94 | 30             | Pass       |
|         |                            | 0     | 6#0           | 17.45     | 18.29 | 30             | Pass       |
| 3MHz    | 131987/1711.5              | 0     | 1#0           | 19.85     | 18.50 | 30             | Pass       |
|         |                            | 0     | 6#0           | 17.79     | 18.06 | 30             | Pass       |
|         | 132322/1745                | 0     | 1#0           | 17.88     | 17.98 | 30             | Pass       |
|         |                            | 0     | 6#0           | 17.22     | 17.44 | 30             | Pass       |
|         | 132657/1778.5              | 1     | 1#5           | 19.56     | 18.06 | 30             | Pass       |
|         |                            | 1     | 6#0           | 17.40     | 17.90 | 30             | Pass       |
| 5MHz    | 131997/1712.5              | 0     | 1#0           | 19.84     | 19.54 | 30             | Pass       |
|         |                            | 0     | 6#0           | 18.85     | 18.98 | 30             | Pass       |
|         | 132322/1745                | 0     | 1#0           | 19.41     | 19.12 | 30             | Pass       |
|         |                            | 0     | 6#0           | 18.25     | 18.28 | 30             | Pass       |
|         | 132647/1777.5              | 0     | 1#5           | 19.47     | 19.12 | 30             | Pass       |
|         |                            | 3     | 6#0           | 18.44     | 18.75 | 30             | Pass       |
| 10MHz   | 132022/1715                | 3     | 1#0           | 19.85     | 19.65 | 30             | Pass       |
|         |                            | 0     | 4#0           | 19.84     | 19.80 | 30             | Pass       |
|         | 132022/1745                | 0     | 1#0           | 19.39     | 19.10 | 30             | Pass       |
|         |                            | 0     | 4#0           | 19.48     | 19.58 | 30             | Pass       |
|         | 132622/1775                | 4     | 1#5           | 18.88     | 18.54 | 30             | Pass       |
|         |                            | 7     | 4#2           | 19.01     | 19.13 | 30             | Pass       |
| 15MHz   | 132047/1717.5              | 3     | 1#0           | 19.84     | 19.58 | 30             | Pass       |
|         |                            | 0     | 6#0           | 19.83     | 19.82 | 30             | Pass       |
|         | 132322/1745                | 0     | 1#0           | 19.43     | 19.11 | 30             | Pass       |
|         |                            | 0     | 6#0           | 19.34     | 19.42 | 30             | Pass       |
|         | 132597/1772.5              | 8     | 1#5           | 19.28     | 19.39 | 30             | Pass       |
|         |                            | 11    | 6#0           | 19.38     | 19.45 | 30             | Pass       |
| 20MHz   | 132072/1720                | 3     | 1#0           | 19.84     | 19.58 | 30             | Pass       |
|         |                            | 0     | 6#0           | 19.85     | 19.83 | 30             | Pass       |
|         | 132322/1745                | 0     | 1#0           | 19.45     | 19.65 | 30             | Pass       |
|         |                            | 0     | 6#0           | 19.33     | 19.46 | 30             | Pass       |
|         | 132572/1770                | 12    | 1#5           | 18.85     | 18.56 | 30             | Pass       |
|         |                            | 15    | 6#0           | 18.98     | 19.08 | 30             | Pass       |



**LTE Cat M1 B85:**

| Band 85 | Channel/<br>Frequency(MHz) | Index | RB#<br>RBstart | Conducted Power (dBm) |       |
|---------|----------------------------|-------|----------------|-----------------------|-------|
|         |                            |       |                | QPSK                  | 16QAM |
| 5MHz    | 134027/700.5               | 0     | 1#0            | 20.71                 | 20.54 |
|         |                            | 0     | 6#0            | 20.48                 | 20.61 |
|         | 134092/707                 | 0     | 1#0            | 20.94                 | 20.62 |
|         |                            | 0     | 6#0            | 20.56                 | 20.57 |
|         | 134157/713.5               | 3     | 1#5            | 20.95                 | 20.49 |
|         |                            | 3     | 6#0            | 20.64                 | 20.68 |
| 10MHz   | 134052/703                 | 0     | 1#0            | 20.86                 | 20.23 |
|         |                            | 0     | 4#0            | 20.34                 | 20.68 |
|         | 134092/707                 | 0     | 1#0            | 20.91                 | 20.49 |
|         |                            | 0     | 4#0            | 20.86                 | 21.08 |
|         | 134132/711                 | 0     | 1#5            | 21.03                 | 20.58 |
|         |                            | 0     | 4#2            | 21.13                 | 21.31 |

| Band 85 | Channel/<br>Frequency(MHz) | Index | RB#<br>Bstart | ERP(dBm) |       | Limit<br>(dBm) | Conclusion |
|---------|----------------------------|-------|---------------|----------|-------|----------------|------------|
|         |                            |       |               | QPSK     | 16QAM |                |            |
| 5MHz    | 134027/700.5               | 0     | 1#0           | 20.28    | 20.11 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 20.05    | 20.18 | 34.77          | Pass       |
|         | 134092/707                 | 0     | 1#0           | 20.51    | 20.19 | 34.77          | Pass       |
|         |                            | 0     | 6#0           | 20.13    | 20.14 | 34.77          | Pass       |
|         | 134157/713.5               | 3     | 1#5           | 20.52    | 20.06 | 34.77          | Pass       |
|         |                            | 3     | 6#0           | 20.21    | 20.25 | 34.77          | Pass       |
| 10MHz   | 134052/703                 | 0     | 1#0           | 20.43    | 19.80 | 34.77          | Pass       |
|         |                            | 0     | 4#0           | 19.91    | 20.25 | 34.77          | Pass       |
|         | 134092/707                 | 0     | 1#0           | 20.48    | 20.06 | 34.77          | Pass       |
|         |                            | 0     | 4#0           | 20.43    | 20.65 | 34.77          | Pass       |
|         | 134132/711                 | 0     | 1#5           | 20.60    | 20.15 | 34.77          | Pass       |
|         |                            | 0     | 4#2           | 20.70    | 20.88 | 34.77          | Pass       |



## 8.2 FIELD STRENGTH OF SPURIOUS RADIATION

### 8.2.1 Test Configuration

Test according to clause 7.3 radio frequency test setup 3.

### 8.2.2 Test Procedure

Connect the EUT to Universal Radio Communication Tester CMU200 or CMU500 via the antenna connector. A call is set up by the SS according to the generic call set up procedure on a channel with ARFCN in the Mid ARFCN range, power control level set to Max power. MS TXPWR\_MAX\_CCH is set to the maximum value supported by the Power Class of the Mobile under test.

Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as

specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power, then the following procedure can be used to determine spurious emission.

- a) RBW = 1 MHz for  $f \geq 1$  GHz (1GHz to 25GHz), 100 kHz for  $f < 1$  GHz (30MHz to 1GHz), 200Hz for  $f < 150$  KHz (9KHz to 150KHz), 9KHz for  $f < 30$  MHz (150KHz to 30KHz).
- b) Set VBW  $\geq 3 \times$  RBW.
- c) Set span wide enough to fully capture the emission being measured.
- d) Sweep time = auto couple.
- e) Detector = peak.
- f) Ensure that the number of measurement points  $\geq$  span/RBW.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the peak amplitude level.

Step1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.

Step2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.

Step3. The table was rotated 360 degrees to determine the position of the highest spurious emission.

Step4. 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.

Step5. Make the measurement with the spectrum analyzer's RBW , VBW , taking the record of maximum spurious emission.

Step6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.

Step7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.

Step8. Taking the record of output power at antenna port.

Step9. Repeat step 7 to step 8 for another polarization.

Step10. Emission level (dBm) = output power + substitution Gain.

### 8.2.3 Test Results

#### **PASS**

All modes have been tested, and the worst result recorded was report as below.

#### ■ Spurious Emission below 30MHz (9KHz to 30MHz)

|              |         |          |     |
|--------------|---------|----------|-----|
| Temperature: | 25℃     | Test By: | ZXR |
| Humidity:    | 60%     |          |     |
| Test mode:   | TX Mode |          |     |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Emission<br>Level(dBuV/m)<br>PK | Limit 3m(dBuV/m)<br>PK | Over(dB)<br>PK |
|----------------|-----------------|---------------------------------|------------------------|----------------|
| --             | --              | --                              | --                     | --             |

Note: Data of measurement within this frequency range shown “ -- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature:    | 25°C                 | Mode      |                      | Band 2      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 175.0513        | V                    | 100       | -71.12               | -13.00      | 58.12     | PASS    |
| 281.0503        | V                    | 100       | -60.61               | -13.00      | 47.61     | PASS    |
| 374.9212        | V                    | 100       | -64.93               | -13.00      | 51.93     | PASS    |
| 625.0012        | V                    | 100       | -66.14               | -13.00      | 53.14     | PASS    |
| 836.9992        | V                    | 100       | -63.56               | -13.00      | 50.56     | PASS    |
| 987.3868        | V                    | 100       | -62.06               | -13.00      | 49.06     | PASS    |
| 191.3028        | H                    | 100       | -69.96               | -13.00      | 56.96     | PASS    |
| 279.3523        | H                    | 100       | -57.58               | -13.00      | 44.58     | PASS    |
| 500.0825        | H                    | 100       | -67.93               | -13.00      | 54.93     | PASS    |
| 600.0175        | H                    | 100       | -65.52               | -13.00      | 52.52     | PASS    |
| 783.1508        | H                    | 100       | -63.18               | -13.00      | 50.18     | PASS    |
| 984.9612        | H                    | 100       | -60.65               | -13.00      | 47.65     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature:    | 25°C                 | Mode      |                      | Band 2      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3774.955        | V                    | 1000      | -46.43               | -13.00      | 33.43     | PASS    |
| 6475.095        | V                    | 1000      | -37.99               | -13.00      | 24.99     | PASS    |
| 8920.184        | V                    | 1000      | -29.95               | -13.00      | 16.95     | PASS    |
| 11508.1016      | V                    | 1000      | -28.25               | -13.00      | 15.25     | PASS    |
| 14663.9328      | V                    | 1000      | -22.98               | -13.00      | 9.98      | PASS    |
| 17547.7095      | V                    | 1000      | -21.21               | -13.00      | 8.21      | PASS    |
| 3662.7325       | H                    | 1000      | -48.78               | -13.00      | 35.78     | PASS    |
| 6488.6977       | H                    | 1000      | -40.00               | -13.00      | 27.00     | PASS    |
| 8954.1908       | H                    | 1000      | -32.69               | -13.00      | 19.69     | PASS    |
| 11494.4989      | H                    | 1000      | -30.31               | -13.00      | 17.31     | PASS    |
| 14701.3403      | H                    | 1000      | -25.70               | -13.00      | 12.70     | PASS    |
| 17466.0932      | H                    | 1000      | -21.26               | -13.00      | 8.26      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature:    | 25℃                  | Mode      |                      | Band 4      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 172.8682        | V                    | 100       | -71.39               | -13.00      | 58.39     | PASS    |
| 279.5949        | V                    | 100       | -60.68               | -13.00      | 47.68     | PASS    |
| 374.9212        | V                    | 100       | -66.74               | -13.00      | 53.74     | PASS    |
| 655.8065        | V                    | 100       | -65.63               | -13.00      | 52.63     | PASS    |
| 817.837         | V                    | 100       | -63.89               | -13.00      | 50.89     | PASS    |
| 889.6349        | V                    | 100       | -61.70               | -13.00      | 48.70     | PASS    |
| 175.0513        | H                    | 100       | -69.25               | -13.00      | 56.25     | PASS    |
| 278.8672        | H                    | 100       | -56.95               | -13.00      | 43.95     | PASS    |
| 500.0825        | H                    | 100       | -67.67               | -13.00      | 54.67     | PASS    |
| 610.2051        | H                    | 100       | -64.17               | -13.00      | 51.17     | PASS    |
| 761.0778        | H                    | 100       | -62.97               | -13.00      | 49.97     | PASS    |
| 977.6844        | H                    | 100       | -60.96               | -13.00      | 47.96     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature:    | 25℃                  | Mode      |                      | Band 4      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 2438.4877       | V                    | 1000      | -45.73               | -13.00      | 32.73     | PASS    |
| 6478.4957       | V                    | 1000      | -37.85               | -13.00      | 24.85     | PASS    |
| 8882.7766       | V                    | 1000      | -29.55               | -13.00      | 16.55     | PASS    |
| 10056.0112      | V                    | 1000      | -28.60               | -13.00      | 15.60     | PASS    |
| 14640.128       | V                    | 1000      | -23.72               | -13.00      | 10.72     | PASS    |
| 17595.3191      | V                    | 1000      | -20.08               | -13.00      | 7.08      | PASS    |
| 3785.157        | H                    | 1000      | -46.74               | -13.00      | 33.74     | PASS    |
| 6492.0984       | H                    | 1000      | -38.50               | -13.00      | 25.50     | PASS    |
| 8991.5983       | H                    | 1000      | -29.76               | -13.00      | 16.76     | PASS    |
| 11494.4989      | H                    | 1000      | -28.07               | -13.00      | 15.07     | PASS    |
| 14575.5151      | H                    | 1000      | -23.20               | -13.00      | 10.20     | PASS    |
| 16802.9606      | H                    | 1000      | -19.13               | -13.00      | 6.13      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature:    | 25°C                 | Mode      |                      | Band 5      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 175.0513        | V                    | 100       | -71.37               | -13.00      | 58.37     | PASS    |
| 279.1098        | V                    | 100       | -60.70               | -13.00      | 47.70     | PASS    |
| 374.9212        | V                    | 100       | -67.30               | -13.00      | 54.30     | PASS    |
| 625.0012        | V                    | 100       | -66.60               | -13.00      | 53.60     | PASS    |
| 837.9695        | V                    | 100       | -64.20               | -13.00      | 51.20     | PASS    |
| 975.5014        | V                    | 100       | -62.20               | -13.00      | 49.20     | PASS    |
| 184.9962        | H                    | 100       | -70.35               | -13.00      | 57.35     | PASS    |
| 278.8672        | H                    | 100       | -57.97               | -13.00      | 44.97     | PASS    |
| 500.0825        | H                    | 100       | -67.55               | -13.00      | 54.55     | PASS    |
| 625.0012        | H                    | 100       | -64.83               | -13.00      | 51.83     | PASS    |
| 802.5556        | H                    | 100       | -62.50               | -13.00      | 49.50     | PASS    |
| 976.7142        | H                    | 100       | -60.56               | -13.00      | 47.56     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature:    | 25°C                 | Mode      |                      | Band 5      |           |         |
|-----------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity:       | 60%                  |           |                      |             |           |         |
| Air Pressure    | 106kPa               |           |                      |             |           |         |
| Frequency (MHz) | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 2401.0802       | V                    | 1000      | -44.01               | -13.00      | 31.01     | PASS    |
| 6468.2937       | V                    | 1000      | -37.54               | -13.00      | 24.54     | PASS    |
| 8954.1908       | V                    | 1000      | -30.11               | -13.00      | 17.11     | PASS    |
| 11504.7009      | V                    | 1000      | -27.24               | -13.00      | 14.24     | PASS    |
| 14582.3165      | V                    | 1000      | -23.21               | -13.00      | 10.21     | PASS    |
| 17935.3871      | V                    | 1000      | -20.57               | -13.00      | 7.57      | PASS    |
| 3771.5543       | H                    | 1000      | -46.06               | -13.00      | 33.06     | PASS    |
| 6502.3005       | H                    | 1000      | -38.59               | -13.00      | 25.59     | PASS    |
| 8950.7902       | H                    | 1000      | -30.21               | -13.00      | 17.21     | PASS    |
| 11497.8996      | H                    | 1000      | -28.36               | -13.00      | 15.36     | PASS    |
| 14735.3471      | H                    | 1000      | -23.37               | -13.00      | 10.37     | PASS    |
| 17938.7878      | H                    | 1000      | -19.97               | -13.00      | 6.97      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

#### Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25°C   |                      | Mode      |                      | Band 12     |           |         |
|---------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity: 60%       |                      |           |                      |             |           |         |
| Air Pressure 106kPa |                      |           |                      |             |           |         |
| Frequency (MHz)     | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 177.4769            | V                    | 100       | -72.32               | -13.00      | 59.32     | PASS    |
| 279.1098            | V                    | 100       | -60.72               | -13.00      | 47.72     | PASS    |
| 374.9212            | V                    | 100       | -66.22               | -13.00      | 53.22     | PASS    |
| 662.3556            | V                    | 100       | -65.45               | -13.00      | 52.45     | PASS    |
| 807.892             | V                    | 100       | -64.38               | -13.00      | 51.38     | PASS    |
| 990.7827            | V                    | 100       | -61.26               | -13.00      | 48.26     | PASS    |
| 184.2686            | H                    | 100       | -69.77               | -13.00      | 56.77     | PASS    |
| 278.8672            | H                    | 100       | -58.39               | -13.00      | 45.39     | PASS    |
| 500.0825            | H                    | 100       | -68.14               | -13.00      | 55.14     | PASS    |
| 612.6307            | H                    | 100       | -65.65               | -13.00      | 52.65     | PASS    |
| 786.0615            | H                    | 100       | -63.14               | -13.00      | 50.14     | PASS    |
| 975.0163            | H                    | 100       | -60.73               | -13.00      | 47.73     | PASS    |

#### ■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25°C   |                      | Mode      |                      | Band 12     |           |         |
|---------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity: 60%       |                      |           |                      |             |           |         |
| Air Pressure 106kPa |                      |           |                      |             |           |         |
| Frequency (MHz)     | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3601.5203           | V                    | 1000      | -47.02               | -13.00      | 34.02     | PASS    |
| 6461.4923           | V                    | 1000      | -37.87               | -13.00      | 24.87     | PASS    |
| 8947.3895           | V                    | 1000      | -30.26               | -13.00      | 17.26     | PASS    |
| 11504.7009          | V                    | 1000      | -27.64               | -13.00      | 14.64     | PASS    |
| 14667.3335          | V                    | 1000      | -23.52               | -13.00      | 10.52     | PASS    |
| 17809.5619          | V                    | 1000      | -19.76               | -13.00      | 6.76      | PASS    |
| 3492.6985           | H                    | 1000      | -41.07               | -13.00      | 28.07     | PASS    |
| 6437.6875           | H                    | 1000      | -38.38               | -13.00      | 25.38     | PASS    |
| 8950.7902           | H                    | 1000      | -30.06               | -13.00      | 17.06     | PASS    |
| 11501.3003          | H                    | 1000      | -27.22               | -13.00      | 14.22     | PASS    |
| 14660.5321          | H                    | 1000      | -24.14               | -13.00      | 11.14     | PASS    |
| 17704.1408          | H                    | 1000      | -20.48               | -13.00      | 7.48      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25℃<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 13     |           |         |
|----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                          | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 175.0513                                                 | V                    | 100       | -71.46               | -13.00      | 58.46     | PASS    |
| 279.5949                                                 | V                    | 100       | -60.73               | -13.00      | 47.73     | PASS    |
| 374.9212                                                 | V                    | 100       | -66.32               | -13.00      | 53.32     | PASS    |
| 625.0012                                                 | V                    | 100       | -66.51               | -13.00      | 53.51     | PASS    |
| 805.7089                                                 | V                    | 100       | -64.45               | -13.00      | 51.45     | PASS    |
| 992.9657                                                 | V                    | 100       | -61.68               | -13.00      | 48.68     | PASS    |
| 175.0513                                                 | H                    | 100       | -70.85               | -13.00      | 57.85     | PASS    |
| 281.2928                                                 | H                    | 100       | -57.58               | -13.00      | 44.58     | PASS    |
| 500.0825                                                 | H                    | 100       | -67.85               | -13.00      | 54.85     | PASS    |
| 600.0175                                                 | H                    | 100       | -64.89               | -13.00      | 51.89     | PASS    |
| 804.7387                                                 | H                    | 100       | -62.83               | -13.00      | 49.83     | PASS    |
| 968.7097                                                 | H                    | 100       | -59.76               | -13.00      | 46.76     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25℃<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 13     |           |         |
|----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                          | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3815.7632                                                | V                    | 1000      | -46.81               | -13.00      | 33.81     | PASS    |
| 6495.4991                                                | V                    | 1000      | -37.42               | -13.00      | 24.42     | PASS    |
| 8940.5881                                                | V                    | 1000      | -29.85               | -13.00      | 16.85     | PASS    |
| 11484.2969                                               | V                    | 1000      | -27.72               | -13.00      | 14.72     | PASS    |
| 14572.1144                                               | V                    | 1000      | -24.06               | -13.00      | 11.06     | PASS    |
| 17935.3871                                               | V                    | 1000      | -20.02               | -13.00      | 7.02      | PASS    |
| 3768.1536                                                | H                    | 1000      | -46.13               | -13.00      | 33.13     | PASS    |
| 5176.0352                                                | H                    | 1000      | -37.98               | -13.00      | 24.98     | PASS    |
| 9022.2044                                                | H                    | 1000      | -29.75               | -13.00      | 16.75     | PASS    |
| 11508.1016                                               | H                    | 1000      | -28.24               | -13.00      | 15.24     | PASS    |
| 14742.1484                                               | H                    | 1000      | -22.97               | -13.00      | 9.97      | PASS    |
| 18000                                                    | H                    | 1000      | -20.84               | -13.00      | 7.84      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25℃<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 25     |           |         |
|----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                          | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 170.9277                                                 | V                    | 100       | -70.64               | -13.00      | 57.64     | PASS    |
| 281.0503                                                 | V                    | 100       | -60.17               | -13.00      | 47.17     | PASS    |
| 374.9212                                                 | V                    | 100       | -65.73               | -13.00      | 52.73     | PASS    |
| 644.4061                                                 | V                    | 100       | -66.55               | -13.00      | 53.55     | PASS    |
| 824.3861                                                 | V                    | 100       | -63.85               | -13.00      | 50.85     | PASS    |
| 989.8125                                                 | V                    | 100       | -61.89               | -13.00      | 48.89     | PASS    |
| 184.7537                                                 | H                    | 100       | -70.81               | -13.00      | 57.81     | PASS    |
| 279.3523                                                 | H                    | 100       | -56.79               | -13.00      | 43.79     | PASS    |
| 500.0825                                                 | H                    | 100       | -67.30               | -13.00      | 54.30     | PASS    |
| 625.0012                                                 | H                    | 100       | -64.99               | -13.00      | 51.99     | PASS    |
| 760.3501                                                 | H                    | 100       | -63.08               | -13.00      | 50.08     | PASS    |
| 969.9225                                                 | H                    | 100       | -61.00               | -13.00      | 48.00     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25℃<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 25     |           |         |
|----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                          | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3720.5441                                                | V                    | 1000      | -47.09               | -13.00      | 34.09     | PASS    |
| 6454.6909                                                | V                    | 1000      | -38.20               | -13.00      | 25.20     | PASS    |
| 8909.982                                                 | V                    | 1000      | -30.25               | -13.00      | 17.25     | PASS    |
| 11497.8996                                               | V                    | 1000      | -28.12               | -13.00      | 15.12     | PASS    |
| 14803.3607                                               | V                    | 1000      | -23.18               | -13.00      | 10.18     | PASS    |
| 17887.7776                                               | V                    | 1000      | -21.74               | -13.00      | 8.74      | PASS    |
| 3802.1604                                                | H                    | 1000      | -46.31               | -13.00      | 33.31     | PASS    |
| 6451.2903                                                | H                    | 1000      | -38.44               | -13.00      | 25.44     | PASS    |
| 9236.4473                                                | H                    | 1000      | -29.92               | -13.00      | 16.92     | PASS    |
| 11497.8996                                               | H                    | 1000      | -27.83               | -13.00      | 14.83     | PASS    |
| 14595.9192                                               | H                    | 1000      | -23.38               | -13.00      | 10.38     | PASS    |
| 17877.5755                                               | H                    | 1000      | -19.20               | -13.00      | 6.20      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25°C<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 26     |           |         |
|-----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                           | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 171.1703                                                  | V                    | 100       | -70.74               | -13.00      | 57.74     | PASS    |
| 279.1098                                                  | V                    | 100       | -60.30               | -13.00      | 47.30     | PASS    |
| 374.9212                                                  | V                    | 100       | -66.20               | -13.00      | 53.20     | PASS    |
| 662.3556                                                  | V                    | 100       | -67.09               | -13.00      | 54.09     | PASS    |
| 835.7864                                                  | V                    | 100       | -64.37               | -13.00      | 51.37     | PASS    |
| 989.5699                                                  | V                    | 100       | -61.33               | -13.00      | 48.33     | PASS    |
| 177.4769                                                  | H                    | 100       | -70.16               | -13.00      | 57.16     | PASS    |
| 279.1098                                                  | H                    | 100       | -57.96               | -13.00      | 44.96     | PASS    |
| 500.0825                                                  | H                    | 100       | -66.98               | -13.00      | 53.98     | PASS    |
| 609.7199                                                  | H                    | 100       | -65.56               | -13.00      | 52.56     | PASS    |
| 794.066                                                   | H                    | 100       | -63.03               | -13.00      | 50.03     | PASS    |
| 965.0713                                                  | H                    | 100       | -61.12               | -13.00      | 48.12     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25°C<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 26     |           |         |
|-----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                           | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3805.5611                                                 | V                    | 1000      | -47.19               | -13.00      | 34.19     | PASS    |
| 6505.7011                                                 | V                    | 1000      | -38.16               | -13.00      | 25.16     | PASS    |
| 9328.2657                                                 | V                    | 1000      | -30.42               | -13.00      | 17.42     | PASS    |
| 11467.2935                                                | V                    | 1000      | -28.36               | -13.00      | 15.36     | PASS    |
| 14623.1246                                                | V                    | 1000      | -22.86               | -13.00      | 9.86      | PASS    |
| 17636.1272                                                | V                    | 1000      | -21.04               | -13.00      | 8.04      | PASS    |
| 3655.9312                                                 | H                    | 1000      | -46.66               | -13.00      | 33.66     | PASS    |
| 6454.6909                                                 | H                    | 1000      | -38.09               | -13.00      | 25.09     | PASS    |
| 8947.3895                                                 | H                    | 1000      | -30.38               | -13.00      | 17.38     | PASS    |
| 11521.7043                                                | H                    | 1000      | -28.25               | -13.00      | 15.25     | PASS    |
| 14786.3573                                                | H                    | 1000      | -23.85               | -13.00      | 10.85     | PASS    |
| 17962.5925                                                | H                    | 1000      | -19.38               | -13.00      | 6.38      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25°C<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 66     |           |         |
|-----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                           | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 175.0513                                                  | V                    | 100       | -72.33               | -13.00      | 59.33     | PASS    |
| 279.3523                                                  | V                    | 100       | -60.20               | -13.00      | 47.20     | PASS    |
| 374.9212                                                  | V                    | 100       | -67.45               | -13.00      | 54.45     | PASS    |
| 632.5206                                                  | V                    | 100       | -66.38               | -13.00      | 53.38     | PASS    |
| 829.2373                                                  | V                    | 100       | -64.01               | -13.00      | 51.01     | PASS    |
| 993.936                                                   | V                    | 100       | -61.88               | -13.00      | 48.88     | PASS    |
| 191.3028                                                  | H                    | 100       | -70.65               | -13.00      | 57.65     | PASS    |
| 279.3523                                                  | H                    | 100       | -57.97               | -13.00      | 44.97     | PASS    |
| 500.0825                                                  | H                    | 100       | -66.51               | -13.00      | 53.51     | PASS    |
| 601.4729                                                  | H                    | 100       | -64.60               | -13.00      | 51.60     | PASS    |
| 747.9795                                                  | H                    | 100       | -63.27               | -13.00      | 50.27     | PASS    |
| 960.2201                                                  | H                    | 100       | -61.38               | -13.00      | 48.38     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25°C<br>Humidity: 60%<br>Air Pressure 106kPa |                      | Mode      |                      | Band 66     |           |         |
|-----------------------------------------------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Frequency (MHz)                                           | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 2302.4605                                                 | V                    | 1000      | -46.99               | -13.00      | 33.99     | PASS    |
| 6478.4957                                                 | V                    | 1000      | -38.18               | -13.00      | 25.18     | PASS    |
| 9199.0398                                                 | V                    | 1000      | -30.31               | -13.00      | 17.31     | PASS    |
| 11487.6975                                                | V                    | 1000      | -28.36               | -13.00      | 15.36     | PASS    |
| 14660.5321                                                | V                    | 1000      | -22.67               | -13.00      | 9.67      | PASS    |
| 17945.5891                                                | V                    | 1000      | -20.14               | -13.00      | 7.14      | PASS    |
| 2401.0802                                                 | H                    | 1000      | -43.20               | -13.00      | 30.20     | PASS    |
| 6481.8964                                                 | H                    | 1000      | -37.40               | -13.00      | 24.40     | PASS    |
| 8943.9888                                                 | H                    | 1000      | -30.14               | -13.00      | 17.14     | PASS    |
| 11497.8996                                                | H                    | 1000      | -28.58               | -13.00      | 15.58     | PASS    |
| 14609.5219                                                | H                    | 1000      | -23.75               | -13.00      | 10.75     | PASS    |
| 17581.7163                                                | H                    | 1000      | -19.98               | -13.00      | 6.98      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission Above 30MHz (30MHz to 1 GHz)

| Temperature: 25°C   |                      | Mode      |                      | Band 85     |           |         |
|---------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity: 60%       |                      |           |                      |             |           |         |
| Air Pressure 106kPa |                      |           |                      |             |           |         |
| Frequency (MHz)     | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 175.0513            | V                    | 100       | -71.80               | -13.00      | 58.80     | PASS    |
| 279.3523            | V                    | 100       | -60.79               | -13.00      | 47.79     | PASS    |
| 374.9212            | V                    | 100       | -66.45               | -13.00      | 53.45     | PASS    |
| 674.9687            | V                    | 100       | -66.71               | -13.00      | 53.71     | PASS    |
| 828.9947            | V                    | 100       | -64.10               | -13.00      | 51.10     | PASS    |
| 998.0595            | V                    | 100       | -61.27               | -13.00      | 48.27     | PASS    |
| 184.9962            | H                    | 100       | -70.22               | -13.00      | 57.22     | PASS    |
| 281.0503            | H                    | 100       | -58.24               | -13.00      | 45.24     | PASS    |
| 500.0825            | H                    | 100       | -67.22               | -13.00      | 54.22     | PASS    |
| 609.4774            | H                    | 100       | -65.25               | -13.00      | 52.25     | PASS    |
| 802.5556            | H                    | 100       | -62.73               | -13.00      | 49.73     | PASS    |
| 985.9315            | H                    | 100       | -60.69               | -13.00      | 47.69     | PASS    |

■ Spurious Emission Above 1GHz (1GHz to 10<sup>th</sup> harmonics)

| Temperature: 25°C   |                      | Mode      |                      | Band 85     |           |         |
|---------------------|----------------------|-----------|----------------------|-------------|-----------|---------|
| Humidity: 60%       |                      |           |                      |             |           |         |
| Air Pressure 106kPa |                      |           |                      |             |           |         |
| Frequency (MHz)     | Antenna Polarization | RBW (kHz) | Emission level (dBm) | Limit (dBm) | Over (dB) | Verdict |
| 3710.3421           | V                    | 1000      | -47.02               | -13.00      | 34.02     | PASS    |
| 6509.1018           | V                    | 1000      | -38.16               | -13.00      | 25.16     | PASS    |
| 8957.5915           | V                    | 1000      | -30.50               | -13.00      | 17.50     | PASS    |
| 11480.8962          | V                    | 1000      | -27.93               | -13.00      | 14.93     | PASS    |
| 14619.7239          | V                    | 1000      | -23.04               | -13.00      | 10.04     | PASS    |
| 17581.7163          | V                    | 1000      | -20.66               | -13.00      | 7.66      | PASS    |
| 2407.8816           | H                    | 1000      | -45.67               | -13.00      | 32.67     | PASS    |
| 6488.6977           | H                    | 1000      | -38.18               | -13.00      | 25.18     | PASS    |
| 8913.3827           | H                    | 1000      | -29.97               | -13.00      | 16.97     | PASS    |
| 11501.3003          | H                    | 1000      | -27.65               | -13.00      | 14.65     | PASS    |
| 14595.9192          | H                    | 1000      | -23.94               | -13.00      | 10.94     | PASS    |
| 17908.1816          | H                    | 1000      | -19.83               | -13.00      | 6.83      | PASS    |

Note: (1) Emission Level= Reading Level+ Correct Factor +Cable Loss.

(2) Correct Factor= Ant\_F + Cab\_L - Preamp.

(3) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Detail of factor for radiated emission:

| Frequency(MHz) | Ant_F(dB) | Cab_L(dB) | Preamp(dB) | Correct Factor(dB) |
|----------------|-----------|-----------|------------|--------------------|
| 0.009          | 20.6      | 0.03      | \          | 20.63              |
| 0.15           | 20.7      | 0.1       | \          | 20.8               |
| 1              | 20.9      | 0.15      | \          | 21.05              |
| 10             | 20.1      | 0.28      | \          | 20.38              |
| 30             | 18.8      | 0.45      | \          | 19.25              |
| 30             | 11.7      | 0.62      | 27.9       | -15.58             |
| 100            | 12.5      | 1.02      | 27.8       | -14.28             |
| 300            | 12.9      | 1.91      | 27.5       | -12.69             |
| 600            | 19.2      | 2.92      | 27         | -4.88              |
| 800            | 21.1      | 3.54      | 26.6       | -1.96              |
| 1000           | 22.3      | 4.17      | 26.2       | 0.27               |
| 1000           | 25.6      | 1.76      | 41.4       | -14.04             |
| 3000           | 28.9      | 3.27      | 43.2       | -11.03             |
| 5000           | 31.1      | 4.2       | 44.6       | -9.3               |
| 8000           | 36.2      | 5.95      | 44.7       | -2.55              |
| 10000          | 38.4      | 6.3       | 43.9       | 0.8                |
| 12000          | 38.5      | 7.14      | 42.3       | 3.34               |
| 15000          | 40.2      | 8.15      | 41.4       | 6.95               |
| 18000          | 45.4      | 9.02      | 41.3       | 13.12              |
| 18000          | 37.9      | 1.81      | 47.9       | -8.19              |
| 21000          | 37.9      | 1.95      | 48.7       | -8.85              |
| 25000          | 39.3      | 2.01      | 42.8       | -1.49              |
| 28000          | 39.6      | 2.16      | 46.0       | -4.24              |
| 31000          | 41.2      | 2.24      | 44.5       | -1.06              |
| 34000          | 41.5      | 2.29      | 46.6       | -2.81              |
| 37000          | 43.8      | 2.30      | 46.4       | -0.3               |
| 40000          | 43.2      | 2.50      | 42.2       | 3.5                |

--- End of Report ---