

## Partial FCC Test Report (Part 90 – LTE B14/B26)

**Report No.:** RFBDTL-WTW-P21060469-7

**FCC ID:** VUI-DAV001

**Test Model:** AG521R-NA

**Received Date:** Feb. 15, 2022

**Test Date:** Mar. 26 ~ Apr. 16, 2022

**Issued Date:** May 19, 2022

**Applicant:** PEGATRON CORPORATION

**Address:** 5F., NO. 76, LIGONG ST., BEITOU DISTRICT, TAIPEI CITY 11259, TAIWAN

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

**FCC Registration /** 281270 / TW0032  
**Designation Number:**



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### Release Control Record

| Issue No.              | Description      | Date Issued  |
|------------------------|------------------|--------------|
| RFBDTL-WTW-P21060469-7 | Original release | May 19, 2022 |

## 1 Certificate of Conformity

**Product:** LTE Module

**Brand:** Quectel

**Test Model:** AG521R-NA

**Sample Status:** PVT

**Applicant:** PEGATRON CORPORATION

**Test Date:** Mar. 26 ~ Apr. 16, 2022

**Standards:** FCC Part 90, Subpart S, R

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :** Celine Chou , **Date:** May 19, 2022  
Celine Chou / Senior Specialist

**Approved by :** Jeremy Lin , **Date:** May 19, 2022  
Jeremy Lin / Project Engineer

## 2 Summary of Test Results

| Applied Standard: FCC Part 90 & Part 2 |                              |        |                                                                                     |
|----------------------------------------|------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                    | Result | Remarks                                                                             |
| 2.1046<br>90.635 (b)                   | Effective Radiated Power     | Pass   | Meet the requirement of limit.                                                      |
| 2.1047                                 | Modulation Characteristics   | N/A    | Refer to Note                                                                       |
| 2.1055<br>90.213                       | Frequency Stability          | N/A    | Refer to Note                                                                       |
| 2.1049<br>90.209                       | Occupied Bandwidth           | N/A    | Refer to Note                                                                       |
| 90.691                                 | Emission Mask                | N/A    | Refer to Note                                                                       |
| 2.1051<br>90.691                       | Conducted Spurious Emissions | N/A    | Refer to Note                                                                       |
| 2.1053<br>90.691                       | Radiated Spurious Emissions  | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -11.78dB at 1586.00MHz. |

### Note:

1. This report is a partial report, only test item of Effective Radiated Power and Radiated Emissions were performed for this report. Other testing data please refer to MRT Technology (Suzhou) Co., Ltd. report no.: 2101RSU050-U7 V01 and 2101RSU050-U8 V01for module (Brand: Quectel, Model: AG521R-NA).
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement                    | Frequency        | Expanded Uncertainty (k=2) ( $\pm$ ) |
|--------------------------------|------------------|--------------------------------------|
| Radiated Emissions up to 1 GHz | 9kHz ~ 30MHz     | 3.00 dB                              |
|                                | 30MHz ~ 200MHz   | 2.91 dB                              |
|                                | 200MHz ~ 1000MHz | 2.93 dB                              |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz     | 1.76 dB                              |
|                                | 18GHz ~ 40GHz    | 1.77 dB                              |

## 2.2 Test Site and Instruments

| Description & Manufacturer                 | Model No.                       | Serial No.             | Cal. Date     | Cal. Due      |
|--------------------------------------------|---------------------------------|------------------------|---------------|---------------|
| Test Receiver<br>KEYSIGHT                  | N9038B                          | MY60180018             | Feb. 18, 2022 | Feb. 17, 2023 |
| Spectrum Analyzer<br>KEYSIGHT              | N9020B                          | MY60110513             | Dec. 24, 2021 | Dec. 23, 2022 |
| BILOG Antenna<br>SCHWARZBECK               | VULB9168                        | 9168-1214              | Oct. 27, 2021 | Oct. 26, 2022 |
| HORN Antenna<br>RF SPIN                    | DRH18-E                         | 210101A18E             | Nov. 14, 2021 | Nov. 13, 2022 |
| HORN Antenna<br>SCHWARZBECK                | BBHA 9170                       | 9170-1049              | Nov. 14, 2021 | Nov. 13, 2022 |
| Loop Antenna<br>EMCI                       | EM-6879                         | 269                    | Sep. 16, 2021 | Sep. 15, 2022 |
| Loop Antenna<br>TESEQ                      | HLA 6121                        | 45745                  | Jul. 21, 2021 | Jul. 20, 2022 |
| Preamplifier<br>EMCI                       | EMC330N                         | 980798                 | Jan. 17, 2022 | Jan. 16, 2023 |
| Preamplifier<br>EMCI                       | EMC118A45SE                     | 980809                 | Dec. 30, 2021 | Dec. 29, 2022 |
| Preamplifier<br>EMCI                       | EMC184045SE                     | 980786                 | Jan. 17, 2022 | Jan. 16, 2023 |
| RF signal cable<br>EMCI                    | EMC104-SM-SM-(9000+3000+1000)   | 201244+ 201232+ 210103 | Jan. 17, 2022 | Jan. 16, 2023 |
| RF signal cable<br>EMCI                    | EMCCFD400-NM-NM-(9000+3000+500) | 201251+ 201249+ 201248 | Jan. 17, 2022 | Jan. 16, 2023 |
| RF signal cable<br>EMCI                    | EMC101G-KM-KM-(5000+3000+2000)  | 201261+201258+201255   | Jan. 17, 2022 | Jan. 16, 2023 |
| Software<br>BV ADT                         | ADT_Radiated_V7.6.15.9.5        | NA                     | NA            | NA            |
| Antenna Tower<br>Max-Full                  | MFA-515BSN                      | NA                     | NA            | NA            |
| Turn Table<br>Max-Full                     | MFT-201SS                       | NA                     | NA            | NA            |
| Turn Table Controller<br>Max-Full          | MF-7802BS                       | MF780208676            | NA            | NA            |
| Boresight Antenna Fixture                  | FBA-01                          | FBA-SIP01              | NA            | NA            |
| DC Power Supply Keysight                   | U8002A                          | MY56330015             | NA            | NA            |
| Spectrum Analyzer<br>ROHDE & SCHWARZ       | FSV40                           | 100979                 | Mar. 29, 2021 | Mar. 28, 2022 |
|                                            |                                 |                        | Mar. 25, 2022 | Mar. 24, 2023 |
| Radio Communication<br>Analyzer<br>Anritsu | MT8820C                         | 6201010284             | Dec. 24, 2021 | Dec. 23, 2022 |

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in WM Chamber 9.

### 3 General Information

#### 3.1 General Description of EUT

|                                                      |                                        |                         |                         |                         |
|------------------------------------------------------|----------------------------------------|-------------------------|-------------------------|-------------------------|
| Product                                              | LTE Module                             |                         |                         |                         |
| Brand                                                | Quectel                                |                         |                         |                         |
| Test Model                                           | AG521R-NA                              |                         |                         |                         |
| Sample Status                                        | PVT                                    |                         |                         |                         |
| Power Supply Rating                                  | 3.3-4.3Vdc, Typical 3.8Vdc             |                         |                         |                         |
| Modulation Type                                      | QPSK, 16QAM, 64QAM                     |                         |                         |                         |
| Operating Frequency                                  | LTE Band 14 (Channel Bandwidth 5MHz)   | 790.5MHz ~ 795.5MHz     |                         |                         |
|                                                      | LTE Band 14 (Channel Bandwidth 10MHz)  | 793.0MHz                |                         |                         |
|                                                      | LTE Band 26 (Channel Bandwidth 1.4MHz) | 814.7MHz ~ 823.3MHz     |                         |                         |
|                                                      | LTE Band 26 (Channel Bandwidth 3MHz)   | 815.5MHz ~ 822.5MHz     |                         |                         |
|                                                      | LTE Band 26 (Channel Bandwidth 5MHz)   | 816.5MHz ~ 821.5MHz     |                         |                         |
|                                                      | LTE Band 26 (Channel Bandwidth 10MHz)  | 819.0MHz                |                         |                         |
| Max. ERP Power<br>(EUT + Antenna 1<br>(Main Source)) |                                        | QPSK                    | 16QAM                   | 64QAM                   |
|                                                      | LTE Band 14 (Channel Bandwidth 5MHz)   | 127.644mW<br>(21.06dBm) | 101.859mW<br>(20.08dBm) | 81.283mW<br>(19.10dBm)  |
|                                                      | LTE Band 14 (Channel Bandwidth 10MHz)  | 132.130mW<br>(21.21dBm) | 102.329mW<br>(20.10dBm) | 82.035mW<br>(19.14dBm)  |
|                                                      | LTE Band 26 (Channel Bandwidth 1.4MHz) | 165.959mW<br>(22.20dBm) | 136.458mW<br>(21.35dBm) | 111.429mW<br>(20.47dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 3MHz)   | 167.494mW<br>(22.24dBm) | 136.773mW<br>(21.36dBm) | 108.893mW<br>(20.37dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 5MHz)   | 164.816mW<br>(22.17dBm) | 135.207mW<br>(21.31dBm) | 106.660mW<br>(20.28dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 10MHz)  | 172.982mW<br>(22.38dBm) | 133.352mW<br>(21.25dBm) | 102.094mW<br>(20.09dBm) |
|                                                      |                                        | QPSK                    | 16QAM                   | 64QAM                   |
| Max. ERP Power<br>(EUT + Antenna 2<br>(2nd Source))  | LTE Band 14 (Channel Bandwidth 5MHz)   | 135.519mW<br>(21.32dBm) | 111.944mW<br>(20.49dBm) | 87.498mW<br>(19.42dBm)  |
|                                                      | LTE Band 14 (Channel Bandwidth 10MHz)  | 140.605mW<br>(21.48dBm) | 109.901mW<br>(20.41dBm) | 84.918mW<br>(19.29dBm)  |
|                                                      | LTE Band 26 (Channel Bandwidth 1.4MHz) | 168.267mW<br>(22.26dBm) | 139.637mW<br>(21.45dBm) | 114.551mW<br>(20.59dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 3MHz)   | 170.608mW<br>(22.32dBm) | 137.088mW<br>(21.37dBm) | 110.662mW<br>(20.44dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 5MHz)   | 170.216mW<br>(22.31dBm) | 133.352mW<br>(21.25dBm) | 105.682mW<br>(20.24dBm) |
|                                                      | LTE Band 26 (Channel Bandwidth 10MHz)  | 174.181mW<br>(22.41dBm) | 132.739mW<br>(21.23dBm) | 109.648mW<br>(20.40dBm) |
|                                                      |                                        |                         |                         |                         |

| Max. ERP Power<br>(EUT + Antenna 3) |                                        | QPSK                    | 16QAM                   | 64QAM                  |
|-------------------------------------|----------------------------------------|-------------------------|-------------------------|------------------------|
|                                     | LTE Band 14 (Channel Bandwidth 5MHz)   | 120.781mW<br>(20.82dBm) | 94.624mW<br>(19.76dBm)  | 78.705mW<br>(18.96dBm) |
|                                     | LTE Band 14 (Channel Bandwidth 10MHz)  | 123.027mW<br>(20.90dBm) | 93.972mW<br>(19.73dBm)  | 73.961mW<br>(18.69dBm) |
|                                     | LTE Band 26 (Channel Bandwidth 1.4MHz) | 146.218mW<br>(21.65dBm) | 119.399mW<br>(20.77dBm) | 92.257mW<br>(19.65dBm) |
|                                     | LTE Band 26 (Channel Bandwidth 3MHz)   | 143.219mW<br>(21.56dBm) | 117.761mW<br>(20.71dBm) | 97.499mW<br>(19.89dBm) |
|                                     | LTE Band 26 (Channel Bandwidth 5MHz)   | 144.212mW<br>(21.59dBm) | 110.917mW<br>(20.45dBm) | 89.536mW<br>(19.52dBm) |
|                                     | LTE Band 26 (Channel Bandwidth 10MHz)  | 148.594mW<br>(21.72dBm) | 114.025mW<br>(20.57dBm) | 91.833mW<br>(19.63dBm) |
| Antenna Type                        | Refer to note                          |                         |                         |                        |
| Antenna Connector                   | Refer to note                          |                         |                         |                        |
| Accessory Device                    | NA                                     |                         |                         |                        |
| Cable Supplied                      | NA                                     |                         |                         |                        |

Note:

- The differences compared with the original report are added antennas. Only test item of Effective Radiated Power and Radiated Emissions were performed for this report. Other testing data please refer to MRT Technology (Suzhou) Co., Ltd. report no.: 2101RSU050-U7 V01 and 2101RSU050-U8 for module (Brand: Quectel, Model: AG521R-NA).
- The antenna information for new antenna is listed as below.

| Type                   | Connector | Ant. No.                   |                                | Gain (dBi) |           |           |           |            |            |            |            |            |            |            |
|------------------------|-----------|----------------------------|--------------------------------|------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
|                        |           |                            |                                | LTE<br>B2  | LTE<br>B4 | LTE<br>B5 | LTE<br>B7 | LTE<br>B12 | LTE<br>B13 | LTE<br>B14 | LTE<br>B25 | LTE<br>B26 | LTE<br>B66 | LTE<br>B71 |
| Multi-Band<br>Monopole | Fakra     | Antenna 1<br>(Main Source) | 85004262<br>LTE_Primary        | 4.22       | 2.47      | 3.16      | 4.47      | 2.78       | 2.94       | 3.08       | 4.22       | 3.16       | 2.47       | 2.78       |
|                        |           |                            | 85004262<br>LTE_Secondary      | 3.50       | 3.31      | 2.39      | 3.80      | 1.86       | 2.02       | 2.06       | 3.50       | 2.39       | 3.31       | 1.87       |
|                        |           | Antenna 2<br>(2nd Source)  | 85004262<br>LTE_Primary        | 4.22       | 2.47      | 3.16      | 4.47      | 2.78       | 2.94       | 3.08       | 4.22       | 3.16       | 2.47       | 2.78       |
|                        |           |                            | 85004262<br>LTE_Secondary      | 3.50       | 3.31      | 2.39      | 3.80      | 1.86       | 2.02       | 2.06       | 3.50       | 2.39       | 3.31       | 1.87       |
|                        |           | Antenna 3                  | 85004261<br>LTE/GNSS_Primary   | 4.22       | 2.47      | 3.16      | 4.47      | 2.78       | 2.94       | 3.08       | 4.22       | 3.16       | 2.47       | 2.78       |
|                        |           |                            | 85004261<br>LTE/GNSS_Secondary | 3.50       | 3.31      | 2.39      | 3.80      | 1.86       | 2.02       | 2.06       | 3.50       | 2.39       | 3.31       | 1.87       |

\* Antenna 2 was provided by the manufacturer for verified test.

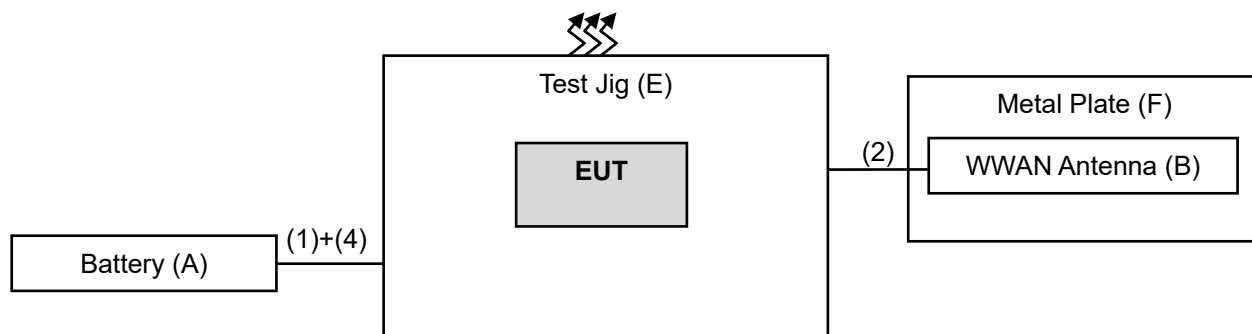
\* max. gain for each band was chosen to final test.

\* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

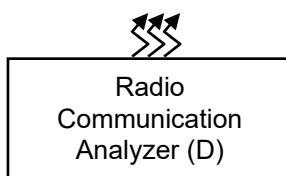


### 3.2 Configuration of System under Test

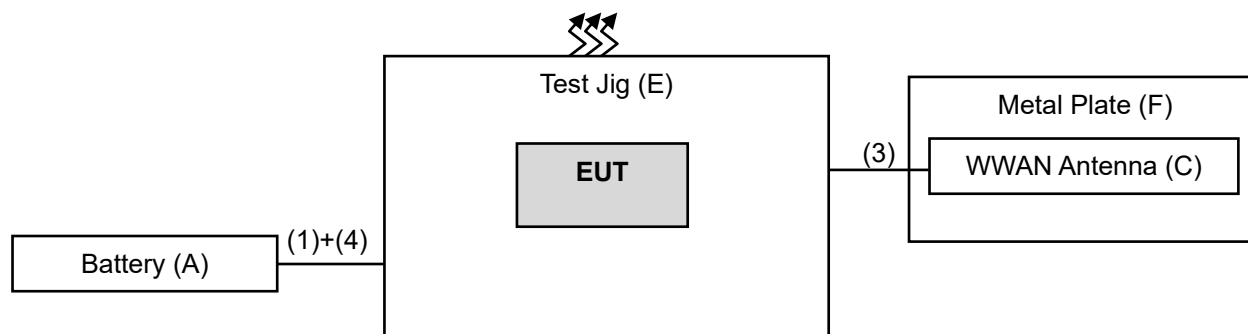
#### EUT + Antenna 1 (Main Source) and EUT + Antenna 2 (2nd Source)



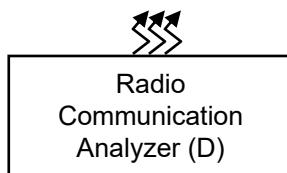
Remote site



#### EUT + Antenna 3



Remote site



### 3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| ID | Product                      | Brand                                                                             | Model No.     | Serial No. | FCC ID | Remarks            |
|----|------------------------------|-----------------------------------------------------------------------------------|---------------|------------|--------|--------------------|
| A. | Battery                      | YUASA                                                                             | 75D23R-CMF II | NA         | NA     | -                  |
| B. | WWAN Antenna                 | Continental                                                                       | 85004262      | NA         | NA     | Provided by client |
| C. | WWAN Antenna                 | Continental                                                                       | 85004261      | NA         | NA     | Provided by client |
| D. | Radio Communication Analyzer | Anritsu                                                                           | MT8821C       | 6261806803 | NA     | -                  |
| E. | Test Jig                     |  | 84945296C     | NA         | NA     | Provided by client |
| F. | Metal Plate                  | NA                                                                                | NA            | NA         | NA     | Provided by client |

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item D acted as a communication partner to transfer data.

| ID | Cable Descriptions                | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks                                                                          |
|----|-----------------------------------|------|------------|--------------------|--------------|----------------------------------------------------------------------------------|
| 1. | Power cable                       | 1    | 2          | N                  | 0            | Provided by client<br>2M (With Power Supply 0.85M Cable, 0.3M Cable, 1.8M Cable) |
| 2. | Rosenberger Harness TANG LTE      | 2    | 2.35       | N                  | 0            | Provided by client                                                               |
| 3. | Rosenberger Harness TANG LTE/GNSS | 1    | 2.35       | N                  | 0            | Provided by client                                                               |
| 4. | Power cable                       | 1    | 2          | N                  | 0            | -                                                                                |

### 3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The EUT was positioned on the X-plane during testing. Following channel(s) was (were) selected for the final test as listed below.

#### LTE Band 14

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                             | Channel Bandwidth | Modulation           | RB # |
|--------------------|------------------------------|-------------------|------------------------------------------------------------|-------------------|----------------------|------|
| -                  | ERP                          | 23305 to 23355    | 23305 (790.5MHz),<br>23330 (793.0MHz),<br>23355 (795.5MHz) | 5MHz              | QPSK / 16QAM / 64QAM | 1    |
|                    |                              | 23330             | 23330 (793.0MHz)                                           | 10MHz             | QPSK / 16QAM / 64QAM | 1    |
| -                  | Radiated Emission Below 1GHz | 23330             | 23330 (793.0MHz)                                           | 10MHz             | QPSK                 | 1    |
| -                  | Radiated Emission Above 1GHz | 23305 to 23355    | 23305 (790.5MHz),<br>23330 (793.0MHz),<br>23355 (795.5MHz) | 5MHz              | QPSK                 | 1    |
|                    |                              | 23330             | 23330 (793.0MHz)                                           | 10MHz             | QPSK                 | 1    |

#### Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521-1 Section 6.6.3.1.4.1, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM and 64QAM, measured value of QPSK is higher than 16QAM, and 64QAM mode. Therefore, Radiated Emission was performed under QPSK mode according to the maximum output power.

# LTE Band 26

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                             | Channel Bandwidth | Modulation           | RB # |
|--------------------|------------------------------|-------------------|------------------------------------------------------------|-------------------|----------------------|------|
| -                  | ERP                          | 26697 to 26783    | 26697 (814.7MHz),<br>26740 (819.0MHz),<br>26783 (823.3MHz) | 1.4MHz            | QPSK / 16QAM / 64QAM | 1    |
|                    |                              | 26705 to 26775    | 26705 (815.5MHz),<br>26740 (819.0MHz),<br>26775 (822.5MHz) | 3MHz              | QPSK / 16QAM / 64QAM | 1    |
|                    |                              | 26715 to 26765    | 26715 (816.5MHz),<br>26740 (819.0MHz),<br>26765 (821.5MHz) | 5MHz              | QPSK / 16QAM / 64QAM | 1    |
|                    |                              | 26740             | 26740 (819.0MHz)                                           | 10MHz             | QPSK / 16QAM / 64QAM | 1    |
| -                  | Radiated Emission Below 1GHz | 26740             | 26740 (819.0MHz)                                           | 10MHz             | QPSK                 | 1    |
| -                  | Radiated Emission Above 1GHz | 26697 to 26783    | 26697 (814.7MHz),<br>26740 (819.0MHz),<br>26783 (823.3MHz) | 1.4MHz            | QPSK                 | 1    |
|                    |                              | 26715 to 26765    | 26715 (816.5MHz),<br>26740 (819.0MHz),<br>26765 (821.5MHz) | 5MHz              | QPSK                 | 1    |
|                    |                              | 26740             | 26740 (819.0MHz)                                           | 10MHz             | QPSK                 | 1    |

## Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521-1 Section 6.6.3.1.4.1, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM and 64QAM, measured value of QPSK is higher than 16QAM, and 64QAM mode. Therefore, Radiated Emission was performed under QPSK mode according to the maximum output power.

## Test Condition:

| Test Item         | Environmental Conditions | Input Power | Tested By              |
|-------------------|--------------------------|-------------|------------------------|
| ERP               | 21deg. C, 67%RH          | 12Vdc       | Edison Lee<br>Tim Chen |
| Radiated Emission | 21deg. C, 67%RH          | 12Vdc       | Edison Lee<br>Tim Chen |

### **3.4 EUT Operating Conditions**

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

### **3.5 General Description of Applied Standards and References**

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

#### **Test Standard:**

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 90**

**ANSI/TIA/EIA-603-E 2016**

ANSI 63.26-2015

All test items have been performed and recorded as per the above standards.

#### **References Test Guidance:**

**KDB 971168 D01 Power Meas License Digital Systems v03r01**

**KDB 971168 D02 Misc Rev Approv License Devices v02r01**

All test items have been performed as a reference to the above KDB test guidance.

## 4 Test Types and Results

### 4.1 Output Power Measurement

#### 4.1.1 Limits of Output Power Measurement

For LTE Band 14:

Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP. Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

For LTE Band 26:

The output power shall be according to the specific rule Part 90.635 that "Mobile station are limited to 100 watts e.r.p".

#### 4.1.2 Test Procedures

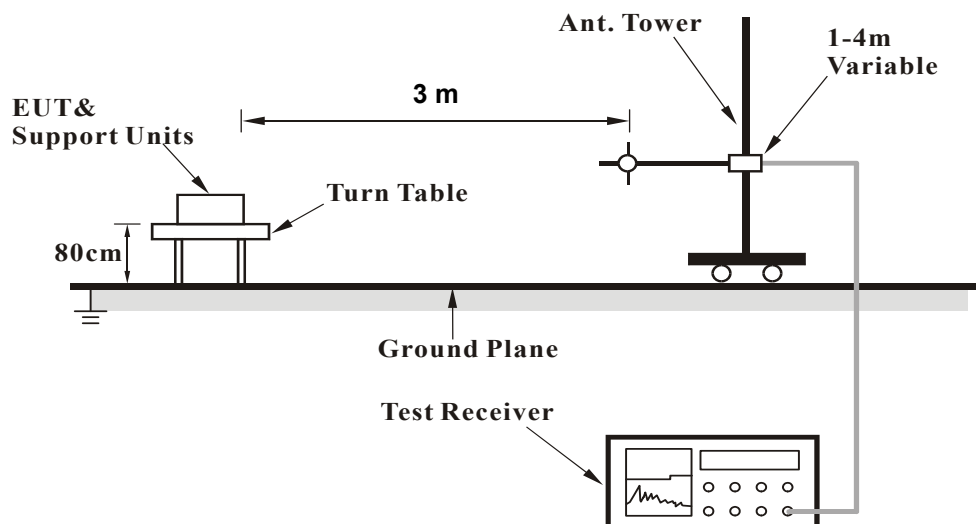
##### EIRP / ERP Measurement:

- a. In the semi-anechoic chamber, EUT placed on the 0.8m (below or equal 1GHz) and/or 1.5m (above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7
  - $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
  - $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

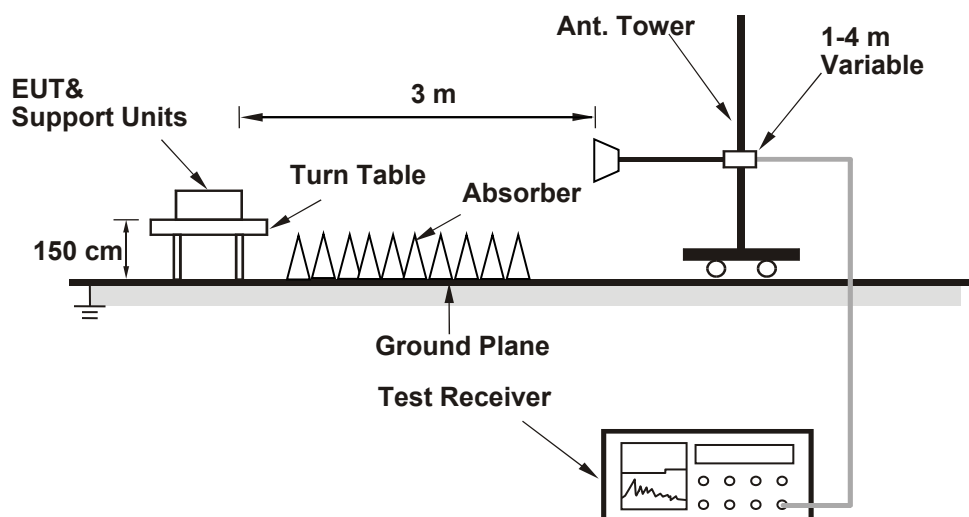
#### 4.1.3 Test Setup

##### EIRP / ERP Measurement:

<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.1.4 Test Results

##### ERP Power (dBm)

##### EUT + Antenna 1 (Main Source)

##### Modulation Type: QPSK

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 10.57                          | 34.77          | -24.20         | 1.61 H                   | 269                        | 84.23                  | -73.66                         |
| 2                                                   | 793.00             | 10.39                          | 34.77          | -24.38         | 1.62 H                   | 264                        | 84.09                  | -73.70                         |
| 3                                                   | 795.50             | 10.46                          | 34.77          | -24.31         | 1.57 H                   | 267                        | 84.18                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 21.06                          | 34.77          | -13.71         | 1.65 V                   | 278                        | 94.72                  | -73.66                         |
| 2                                                   | 793.00             | 21.04                          | 34.77          | -13.73         | 1.67 V                   | 279                        | 94.74                  | -73.70                         |
| 3                                                   | 795.50             | 20.99                          | 34.77          | -13.78         | 1.64 V                   | 277                        | 94.71                  | -73.72                         |

##### Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 10.67            | 34.77       | -24.10      | 1.63 H             | 265                  | 84.37            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 21.21            | 34.77       | -13.56      | 1.72 V             | 277                  | 94.91            | -73.70                   |

##### Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$



### Modulation Type: 16QAM

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 9.66                           | 34.77          | -25.11         | 1.57 H                   | 271                        | 83.32                  | -73.66                         |
| 2                                                   | 793.00             | 9.47                           | 34.77          | -25.30         | 1.57 H                   | 267                        | 83.17                  | -73.70                         |
| 3                                                   | 795.50             | 9.41                           | 34.77          | -25.36         | 1.56 H                   | 266                        | 83.13                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 20.06                          | 34.77          | -14.71         | 1.74 V                   | 277                        | 93.72                  | -73.66                         |
| 2                                                   | 793.00             | 20.08                          | 34.77          | -14.69         | 1.73 V                   | 280                        | 93.78                  | -73.70                         |
| 3                                                   | 795.50             | 19.86                          | 34.77          | -14.91         | 1.69 V                   | 281                        | 93.58                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 9.82             | 34.77       | -24.95      | 1.56 H             | 266                  | 83.52            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 20.10            | 34.77       | -14.67      | 1.73 V             | 280                  | 93.80            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 64QAM

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 8.62                           | 34.77          | -26.15         | 1.60 H                   | 264                        | 82.28                  | -73.66                         |
| 2                                                   | 793.00             | 8.49                           | 34.77          | -26.28         | 1.57 H                   | 265                        | 82.19                  | -73.70                         |
| 3                                                   | 795.50             | 8.25                           | 34.77          | -26.52         | 1.61 H                   | 269                        | 81.97                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 18.86                          | 34.77          | -15.91         | 1.65 V                   | 283                        | 92.52                  | -73.66                         |
| 2                                                   | 793.00             | 19.10                          | 34.77          | -15.67         | 1.69 V                   | 283                        | 92.80                  | -73.70                         |
| 3                                                   | 795.50             | 18.91                          | 34.77          | -15.86         | 1.68 V                   | 279                        | 92.63                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 8.65             | 34.77       | -26.12      | 1.54 H             | 267                  | 82.35            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 19.14            | 34.77       | -15.63      | 1.73 V             | 279                  | 92.84            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$





### Modulation Type: 16QAM

LTE Band 26, Channel Bandwidth: 1.4MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26697, 26740, 26783 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 11.07                          | 50.00          | -38.93         | 1.46 H                   | 65                         | 84.51                  | -73.44                         |
| 2                                                   | 819.00             | 10.81                          | 50.00          | -39.19         | 1.52 H                   | 66                         | 84.19                  | -73.38                         |
| 3                                                   | 823.30             | 11.10                          | 50.00          | -38.90         | 1.45 H                   | 65                         | 84.44                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 21.36                          | 50.00          | -28.64         | 1.66 V                   | 220                        | 94.80                  | -73.44                         |
| 2                                                   | 819.00             | 21.05                          | 50.00          | -28.95         | 1.65 V                   | 219                        | 94.43                  | -73.38                         |
| 3                                                   | 823.30             | 21.35                          | 50.00          | -28.65         | 1.75 V                   | 219                        | 94.69                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 3MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26705, 26740, 26775 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 10.88                          | 50.00          | -39.12         | 1.42 H                   | 68                         | 84.30                  | -73.42                         |
| 2                                                   | 819.00             | 10.90                          | 50.00          | -39.10         | 1.50 H                   | 68                         | 84.28                  | -73.38                         |
| 3                                                   | 822.50             | 10.93                          | 50.00          | -39.07         | 1.48 H                   | 68                         | 84.27                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 21.05                          | 50.00          | -28.95         | 1.65 V                   | 217                        | 94.47                  | -73.42                         |
| 2                                                   | 819.00             | 21.33                          | 50.00          | -28.67         | 1.67 V                   | 217                        | 94.71                  | -73.38                         |
| 3                                                   | 822.50             | 21.36                          | 50.00          | -28.64         | 1.71 V                   | 216                        | 94.70                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26715, 26740, 26765 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 11.05                          | 50.00          | -38.95         | 1.52 H                   | 62                         | 84.46                  | -73.41                         |
| 2                                                   | 819.00             | 10.74                          | 50.00          | -39.26         | 1.44 H                   | 67                         | 84.12                  | -73.38                         |
| 3                                                   | 821.50             | 11.04                          | 50.00          | -38.96         | 1.48 H                   | 62                         | 84.39                  | -73.35                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 21.11                          | 50.00          | -28.89         | 1.68 V                   | 213                        | 94.52                  | -73.41                         |
| 2                                                   | 819.00             | 21.08                          | 50.00          | -28.92         | 1.73 V                   | 218                        | 94.46                  | -73.38                         |
| 3                                                   | 821.50             | 21.31                          | 50.00          | -28.69         | 1.70 V                   | 214                        | 94.66                  | -73.35                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                    |                  |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26740 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                  |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 819.00             | 11.07            | 50.00          | -38.93         | 1.47 H                   | 62                         | 84.45                  | -73.38                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                  |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 819.00             | 21.25            | 50.00          | -28.75         | 1.65 V                   | 215                        | 94.63                  | -73.38                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 64QAM

LTE Band 26, Channel Bandwidth: 1.4MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26697, 26740, 26783 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 10.20                          | 50.00          | -39.80         | 1.46 H                   | 62                         | 83.64                  | -73.44                         |
| 2                                                   | 819.00             | 9.91                           | 50.00          | -40.09         | 1.42 H                   | 62                         | 83.29                  | -73.38                         |
| 3                                                   | 823.30             | 10.09                          | 50.00          | -39.91         | 1.45 H                   | 68                         | 83.43                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 20.29                          | 50.00          | -29.71         | 1.66 V                   | 213                        | 93.73                  | -73.44                         |
| 2                                                   | 819.00             | 19.89                          | 50.00          | -30.11         | 1.66 V                   | 217                        | 93.27                  | -73.38                         |
| 3                                                   | 823.30             | 20.47                          | 50.00          | -29.53         | 1.68 V                   | 213                        | 93.81                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 3MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26705, 26740, 26775 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 9.88                           | 50.00          | -40.12         | 1.52 H                   | 66                         | 83.30                  | -73.42                         |
| 2                                                   | 819.00             | 9.71                           | 50.00          | -40.29         | 1.47 H                   | 64                         | 83.09                  | -73.38                         |
| 3                                                   | 822.50             | 10.10                          | 50.00          | -39.90         | 1.51 H                   | 66                         | 83.44                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 19.87                          | 50.00          | -30.13         | 1.65 V                   | 215                        | 93.29                  | -73.42                         |
| 2                                                   | 819.00             | 10.24                          | 50.00          | -39.76         | 1.67 V                   | 213                        | 83.62                  | -73.38                         |
| 3                                                   | 822.50             | 20.37                          | 50.00          | -29.63         | 1.71 V                   | 219                        | 93.71                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26715, 26740, 26765 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 10.19                          | 50.00          | -39.81         | 1.42 H                   | 68                         | 83.60                  | -73.41                         |
| 2                                                   | 819.00             | 9.82                           | 50.00          | -40.18         | 1.48 H                   | 63                         | 83.20                  | -73.38                         |
| 3                                                   | 821.50             | 10.01                          | 50.00          | -39.99         | 1.49 H                   | 66                         | 83.36                  | -73.35                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 20.30                          | 50.00          | -29.70         | 1.75 V                   | 214                        | 93.71                  | -73.41                         |
| 2                                                   | 819.00             | 20.07                          | 50.00          | -29.93         | 1.67 V                   | 214                        | 93.45                  | -73.38                         |
| 3                                                   | 821.50             | 20.28                          | 50.00          | -29.72         | 1.66 V                   | 215                        | 93.63                  | -73.35                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 26740 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 10.07            | 50.00       | -39.93      | 1.45 H             | 66                   | 83.45            | -73.38                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 20.09            | 50.00       | -29.91      | 1.67 V             | 215                  | 93.47            | -73.38                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$



## EUT + Antenna 2 (2nd Source)

### Modulation Type: QPSK

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 10.38                          | 34.77          | -24.39         | 2.29 H                   | 316                        | 84.04                  | -73.66                         |
| 2                                                   | 793.00             | 10.49                          | 34.77          | -24.28         | 2.30 H                   | 314                        | 84.19                  | -73.70                         |
| 3                                                   | 795.50             | 10.39                          | 34.77          | -24.38         | 2.28 H                   | 316                        | 84.11                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 21.32                          | 34.77          | -13.45         | 1.90 V                   | 176                        | 94.98                  | -73.66                         |
| 2                                                   | 793.00             | 21.21                          | 34.77          | -13.56         | 1.87 V                   | 175                        | 94.91                  | -73.70                         |
| 3                                                   | 795.50             | 21.32                          | 34.77          | -13.45         | 1.89 V                   | 176                        | 95.04                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 10.59            | 34.77       | -24.18      | 2.31 H             | 317                  | 84.29            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 21.48            | 34.77       | -13.29      | 1.89 V             | 170                  | 95.18            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 16QAM

LTE Band 14, Channel Bandwidth: 5MHz

| Mode                                                |                 | TX channel 23305, 23330, 23355 |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|--------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                                |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)                      | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 790.50          | 9.54                           | 34.77       | -25.23      | 2.36 H             | 320                  | 83.20            | -73.66                   |
| 2                                                   | 793.00          | 9.36                           | 34.77       | -25.41      | 2.28 H             | 318                  | 83.06            | -73.70                   |
| 3                                                   | 795.50          | 9.20                           | 34.77       | -25.57      | 2.31 H             | 319                  | 82.92            | -73.72                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                                |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)                      | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 790.50          | 20.41                          | 34.77       | -14.36      | 1.86 V             | 175                  | 94.07            | -73.66                   |
| 2                                                   | 793.00          | 20.29                          | 34.77       | -14.48      | 1.92 V             | 173                  | 93.99            | -73.70                   |
| 3                                                   | 795.50          | 20.49                          | 34.77       | -14.28      | 1.94 V             | 170                  | 94.21            | -73.72                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 9.63             | 34.77       | -25.14      | 2.32 H             | 319                  | 83.33            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 20.41            | 34.77       | -14.36      | 1.94 V             | 176                  | 94.11            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 64QAM

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 8.69                           | 34.77          | -26.08         | 2.38 H                   | 314                        | 82.35                  | -73.66                         |
| 2                                                   | 793.00             | 8.39                           | 34.77          | -26.38         | 2.34 H                   | 320                        | 82.09                  | -73.70                         |
| 3                                                   | 795.50             | 8.08                           | 34.77          | -26.69         | 2.29 H                   | 321                        | 81.80                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 19.42                          | 34.77          | -15.35         | 1.95 V                   | 175                        | 93.08                  | -73.66                         |
| 2                                                   | 793.00             | 19.41                          | 34.77          | -15.36         | 1.91 V                   | 173                        | 93.11                  | -73.70                         |
| 3                                                   | 795.50             | 19.37                          | 34.77          | -15.40         | 1.88 V                   | 171                        | 93.09                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 8.71             | 34.77       | -26.06      | 2.37 H             | 318                  | 82.41            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 19.29            | 34.77       | -15.48      | 1.91 V             | 170                  | 92.99            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: QPSK

LTE Band 26, Channel Bandwidth: 1.4MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26697, 26740, 26783 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 11.87                          | 50.00          | -38.13         | 1.97 H                   | 69                         | 85.31                  | -73.44                         |
| 2                                                   | 819.00             | 12.02                          | 50.00          | -37.98         | 1.89 H                   | 66                         | 85.40                  | -73.38                         |
| 3                                                   | 823.30             | 12.14                          | 50.00          | -37.86         | 1.88 H                   | 72                         | 85.48                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 22.24                          | 50.00          | -27.76         | 1.65 V                   | 192                        | 95.68                  | -73.44                         |
| 2                                                   | 819.00             | 22.26                          | 50.00          | -27.74         | 1.69 V                   | 195                        | 95.64                  | -73.38                         |
| 3                                                   | 823.30             | 22.17                          | 50.00          | -27.83         | 1.70 V                   | 191                        | 95.51                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 3MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26705, 26740, 26775 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 11.88                          | 50.00          | -38.12         | 1.95 H                   | 66                         | 85.30                  | -73.42                         |
| 2                                                   | 819.00             | 12.08                          | 50.00          | -37.92         | 1.94 H                   | 69                         | 85.46                  | -73.38                         |
| 3                                                   | 822.50             | 12.02                          | 50.00          | -37.98         | 1.90 H                   | 70                         | 85.36                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 22.18                          | 50.00          | -27.82         | 1.66 V                   | 195                        | 95.60                  | -73.42                         |
| 2                                                   | 819.00             | 22.16                          | 50.00          | -27.84         | 1.68 V                   | 197                        | 95.54                  | -73.38                         |
| 3                                                   | 822.50             | 22.32                          | 50.00          | -27.68         | 1.61 V                   | 194                        | 95.66                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                 |                                |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|--------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 26715, 26740, 26765 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                                |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)                      | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 816.50          | 12.01                          | 50.00       | -37.99      | 1.94 H             | 65                   | 85.42            | -73.41                   |
| 2                                                   | 819.00          | 12.06                          | 50.00       | -37.94      | 1.91 H             | 70                   | 85.44            | -73.38                   |
| 3                                                   | 821.50          | 12.12                          | 50.00       | -37.88      | 1.95 H             | 67                   | 85.47            | -73.35                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                                |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)                      | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 816.50          | 22.12                          | 50.00       | -27.88      | 1.69 V             | 197                  | 95.53            | -73.41                   |
| 2                                                   | 819.00          | 22.31                          | 50.00       | -27.69      | 1.71 V             | 197                  | 95.69            | -73.38                   |
| 3                                                   | 821.50          | 22.27                          | 50.00       | -27.73      | 1.65 V             | 195                  | 95.62            | -73.35                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 26740 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 12.21            | 50.00       | -37.79      | 1.91 H             | 65                   | 85.59            | -73.38                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 22.41            | 50.00       | -27.59      | 1.64 V             | 192                  | 95.79            | -73.38                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 16QAM

LTE Band 26, Channel Bandwidth: 1.4MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26697, 26740, 26783 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 10.81                          | 50.00          | -39.19         | 1.91 H                   | 66                         | 84.25                  | -73.44                         |
| 2                                                   | 819.00             | 10.92                          | 50.00          | -39.08         | 1.94 H                   | 66                         | 84.30                  | -73.38                         |
| 3                                                   | 823.30             | 11.18                          | 50.00          | -38.82         | 1.89 H                   | 68                         | 84.52                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 21.42                          | 50.00          | -28.58         | 1.70 V                   | 195                        | 94.86                  | -73.44                         |
| 2                                                   | 819.00             | 21.45                          | 50.00          | -28.55         | 1.63 V                   | 192                        | 94.83                  | -73.38                         |
| 3                                                   | 823.30             | 21.01                          | 50.00          | -28.99         | 1.70 V                   | 190                        | 94.35                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 3MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26705, 26740, 26775 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 10.93                          | 50.00          | -39.07         | 1.95 H                   | 65                         | 84.35                  | -73.42                         |
| 2                                                   | 819.00             | 10.90                          | 50.00          | -39.10         | 1.93 H                   | 71                         | 84.28                  | -73.38                         |
| 3                                                   | 822.50             | 11.06                          | 50.00          | -38.94         | 1.88 H                   | 68                         | 84.40                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 21.32                          | 50.00          | -28.68         | 1.66 V                   | 192                        | 94.74                  | -73.42                         |
| 2                                                   | 819.00             | 21.21                          | 50.00          | -28.79         | 1.70 V                   | 190                        | 94.59                  | -73.38                         |
| 3                                                   | 822.50             | 21.37                          | 50.00          | -28.63         | 1.67 V                   | 195                        | 94.71                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$







LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26715, 26740, 26765 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 10.18                          | 50.00          | -39.82         | 1.95 H                   | 66                         | 83.59                  | -73.41                         |
| 2                                                   | 819.00             | 10.10                          | 50.00          | -39.90         | 1.88 H                   | 70                         | 83.48                  | -73.38                         |
| 3                                                   | 821.50             | 9.98                           | 50.00          | -40.02         | 1.93 H                   | 69                         | 83.33                  | -73.35                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 20.07                          | 50.00          | -29.93         | 1.70 V                   | 197                        | 93.48                  | -73.41                         |
| 2                                                   | 819.00             | 20.12                          | 50.00          | -29.88         | 1.66 V                   | 193                        | 93.50                  | -73.38                         |
| 3                                                   | 821.50             | 20.24                          | 50.00          | -29.76         | 1.69 V                   | 194                        | 93.59                  | -73.35                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 26740 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 10.25            | 50.00       | -39.75      | 1.88 H             | 71                   | 83.63            | -73.38                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 20.40            | 50.00       | -29.60      | 1.62 V             | 195                  | 93.78            | -73.38                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### EUT + Antenna 3

#### Modulation Type: QPSK

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 10.20                          | 34.77          | -24.57         | 2.07 H                   | 299                        | 83.86                  | -73.66                         |
| 2                                                   | 793.00             | 10.10                          | 34.77          | -24.67         | 2.07 H                   | 298                        | 83.80                  | -73.70                         |
| 3                                                   | 795.50             | 10.12                          | 34.77          | -24.65         | 2.11 H                   | 299                        | 83.84                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 20.82                          | 34.77          | -13.95         | 1.81 V                   | 89                         | 94.48                  | -73.66                         |
| 2                                                   | 793.00             | 20.79                          | 34.77          | -13.98         | 1.80 V                   | 191                        | 94.49                  | -73.70                         |
| 3                                                   | 795.50             | 20.73                          | 34.77          | -14.04         | 1.91 V                   | 189                        | 94.45                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 10.40            | 34.77       | -24.37      | 2.09 H             | 302                  | 84.10            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 20.90            | 34.77       | -13.87      | 1.81 V             | 190                  | 94.60            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 16QAM

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 9.14                           | 34.77          | -25.63         | 2.10 H                   | 300                        | 82.80                  | -73.66                         |
| 2                                                   | 793.00             | 8.99                           | 34.77          | -25.78         | 2.14 H                   | 298                        | 82.69                  | -73.70                         |
| 3                                                   | 795.50             | 9.24                           | 34.77          | -25.53         | 2.08 H                   | 302                        | 82.96                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 19.76                          | 34.77          | -15.01         | 1.87 V                   | 192                        | 93.42                  | -73.66                         |
| 2                                                   | 793.00             | 19.67                          | 34.77          | -15.10         | 1.85 V                   | 188                        | 93.37                  | -73.70                         |
| 3                                                   | 795.50             | 19.66                          | 34.77          | -15.11         | 1.84 V                   | 190                        | 93.38                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 9.23             | 34.77       | -25.54      | 2.15 H             | 304                  | 82.93            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 19.73            | 34.77       | -15.04      | 1.85 V             | 187                  | 93.43            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

### Modulation Type: 64QAM

LTE Band 14, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 23305, 23330, 23355 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 8.08                           | 34.77          | -26.69         | 2.07 H                   | 302                        | 81.74                  | -73.66                         |
| 2                                                   | 793.00             | 8.11                           | 34.77          | -26.66         | 2.15 H                   | 304                        | 81.81                  | -73.70                         |
| 3                                                   | 795.50             | 8.24                           | 34.77          | -26.53         | 2.16 H                   | 304                        | 81.96                  | -73.72                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 790.50             | 18.96                          | 34.77          | -15.81         | 1.86 V                   | 186                        | 92.62                  | -73.66                         |
| 2                                                   | 793.00             | 18.71                          | 34.77          | -16.06         | 1.85 V                   | 185                        | 92.41                  | -73.70                         |
| 3                                                   | 795.50             | 18.52                          | 34.77          | -16.25         | 1.85 V                   | 187                        | 92.24                  | -73.72                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 14, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 23330 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 9.23             | 34.77       | -25.54      | 2.15 H             | 304                  | 82.93            | -73.70                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 793.00          | 18.69            | 34.77       | -16.08      | 1.83 V             | 191                  | 92.39            | -73.70                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$





### Modulation Type: 16QAM

LTE Band 26, Channel Bandwidth: 1.4MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26697, 26740, 26783 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 10.23                          | 50.00          | -39.77         | 1.92 H                   | 269                        | 83.67                  | -73.44                         |
| 2                                                   | 819.00             | 10.50                          | 50.00          | -39.50         | 1.92 H                   | 265                        | 83.88                  | -73.38                         |
| 3                                                   | 823.30             | 10.39                          | 50.00          | -39.61         | 2.02 H                   | 266                        | 83.73                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 814.70             | 20.62                          | 50.00          | -29.38         | 1.56 V                   | 106                        | 94.06                  | -73.44                         |
| 2                                                   | 819.00             | 20.36                          | 50.00          | -29.64         | 1.54 V                   | 99                         | 93.74                  | -73.38                         |
| 3                                                   | 823.30             | 20.77                          | 50.00          | -29.23         | 1.56 V                   | 106                        | 94.11                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 3MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26705, 26740, 26775 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 10.39                          | 50.00          | -39.61         | 2.00 H                   | 271                        | 83.81                  | -73.42                         |
| 2                                                   | 819.00             | 10.33                          | 50.00          | -39.67         | 2.00 H                   | 271                        | 83.71                  | -73.38                         |
| 3                                                   | 822.50             | 10.23                          | 50.00          | -39.77         | 2.00 H                   | 264                        | 83.57                  | -73.34                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 815.50             | 20.71                          | 50.00          | -29.29         | 1.60 V                   | 105                        | 94.13                  | -73.42                         |
| 2                                                   | 819.00             | 20.70                          | 50.00          | -29.30         | 1.59 V                   | 99                         | 94.08                  | -73.38                         |
| 3                                                   | 822.50             | 20.58                          | 50.00          | -29.42         | 1.56 V                   | 99                         | 93.92                  | -73.34                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26715, 26740, 26765 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 10.18                          | 50.00          | -39.82         | 2.02 H                   | 266                        | 83.59                  | -73.41                         |
| 2                                                   | 819.00             | 10.38                          | 50.00          | -39.62         | 1.95 H                   | 268                        | 83.76                  | -73.38                         |
| 3                                                   | 821.50             | 10.10                          | 50.00          | -39.90         | 2.02 H                   | 264                        | 83.45                  | -73.35                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 20.38                          | 50.00          | -29.62         | 1.51 V                   | 106                        | 93.79                  | -73.41                         |
| 2                                                   | 819.00             | 20.45                          | 50.00          | -29.55         | 1.54 V                   | 102                        | 93.83                  | -73.38                         |
| 3                                                   | 821.50             | 20.42                          | 50.00          | -29.58         | 1.56 V                   | 106                        | 93.77                  | -73.35                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                    |                  |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26740 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                  |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 819.00             | 10.39            | 50.00          | -39.61         | 2.00 H                   | 265                        | 83.77                  | -73.38                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                  |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 819.00             | 20.57            | 50.00          | -29.43         | 1.92 V                   | 265                        | 93.95                  | -73.38                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$





LTE Band 26, Channel Bandwidth: 5MHz

|                                                     |                    |                                |                |                |                          |                            |                        |                                |
|-----------------------------------------------------|--------------------|--------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                |                    | TX channel 26715, 26740, 26765 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 9.28                           | 50.00          | -40.72         | 1.94 H                   | 267                        | 82.69                  | -73.41                         |
| 2                                                   | 819.00             | 9.20                           | 50.00          | -40.80         | 1.97 H                   | 265                        | 82.58                  | -73.38                         |
| 3                                                   | 821.50             | 9.08                           | 50.00          | -40.92         | 1.98 H                   | 265                        | 82.43                  | -73.35                         |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                    |                                |                |                |                          |                            |                        |                                |
| No                                                  | Frequency<br>(MHz) | ERP<br>(dBm)                   | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                   | 816.50             | 19.52                          | 50.00          | -30.48         | 1.51 V                   | 101                        | 92.93                  | -73.41                         |
| 2                                                   | 819.00             | 19.42                          | 50.00          | -30.58         | 1.54 V                   | 104                        | 92.80                  | -73.38                         |
| 3                                                   | 821.50             | 19.30                          | 50.00          | -30.70         | 1.58 V                   | 105                        | 92.65                  | -73.35                         |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

LTE Band 26, Channel Bandwidth: 10MHz

|                                                     |                 |                  |             |             |                    |                      |                  |                          |
|-----------------------------------------------------|-----------------|------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                |                 | TX channel 26740 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance: Horizontal at 3 M |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 9.61             | 50.00       | -40.39      | 2.00 H             | 271                  | 82.99            | -73.38                   |
| Antenna Polarity & Test Distance : Vertical at 3 m  |                 |                  |             |             |                    |                      |                  |                          |
| No                                                  | Frequency (MHz) | ERP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                   | 819.00          | 19.63            | 50.00       | -30.37      | 1.60 V             | 104                  | 93.01            | -73.38                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$

# MIMO ERP Power (dBm)

| Band | Max. EIRP Power (dBm)         | Max. EIRP Power (dBm)        | Max. EIRP Power (dBm) | Total Power (dBm) | Limit (dBm) |
|------|-------------------------------|------------------------------|-----------------------|-------------------|-------------|
|      | EUT + Antenna 1 (Main Source) | EUT + Antenna 2 (2nd Source) | EUT + Antenna 3       |                   |             |
| 14   | 21.21                         | 21.48                        | 20.90                 | 25.97             | 34.77       |
| 26   | 22.38                         | 22.41                        | 21.72                 | 26.95             | 50.00       |

## 4.2 Radiated Emission Measurement

### 4.2.1 Limits of Radiated Emission Measurement

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10}(P)$  dB. The limit of emission equal to  $-13\text{dBm}$ .

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to  $-70\text{ dBW/MHz}$ . The limit of emissions is equal to  $-40\text{ dBm}$ .

### 4.2.2 Test Procedure

- a. In the semi-anechoic chamber, EUT placed on the 0.8m (below or equal 1GHz) and/or 1.5m (above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7
  - $\text{EIRP (dBm)} = E (\text{dB}\mu\text{V/m}) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
  - $\text{ERP (dBm)} = E (\text{dB}\mu\text{V/m}) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

Note:

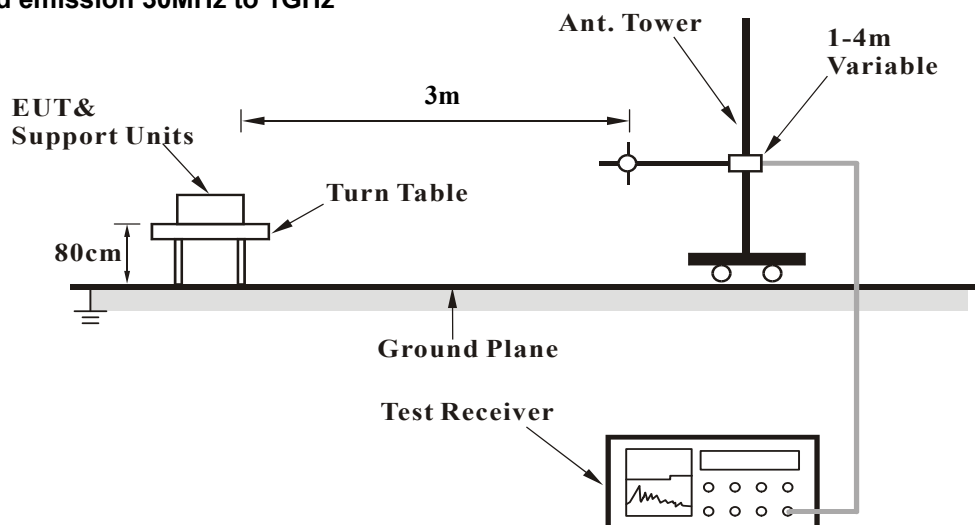
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:  
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

### 4.2.3 Deviation from Test Standard

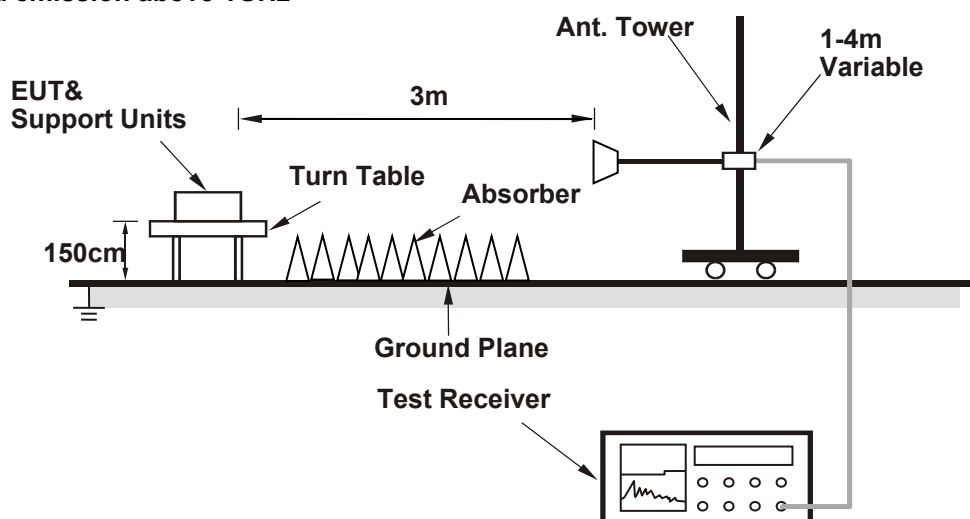
No deviation.

#### 4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.2.5 Test Results

##### EUT + Antenna 1 (Main Source)

Below 1GHz

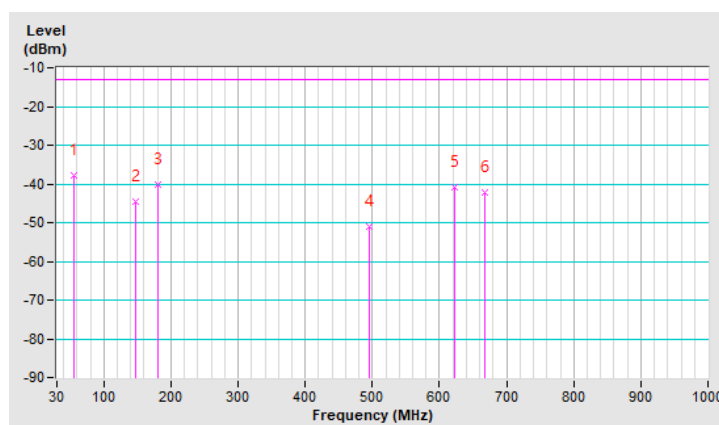
LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 55.22           | -37.80    | -13.00      | -24.80      | 1.50 H             | 230                  | 73.20            | -111.00                  |
| 2                                                    | 147.37          | -44.60    | -13.00      | -31.60      | 1.00 H             | 227                  | 66.00            | -110.60                  |
| 3                                                    | 180.35          | -40.00    | -13.00      | -27.00      | 1.00 H             | 276                  | 72.10            | -112.10                  |
| 4                                                    | 495.60          | -51.00    | -13.00      | -38.00      | 1.00 H             | 170                  | 54.30            | -105.30                  |
| 5                                                    | 621.70          | -40.80    | -13.00      | -27.80      | 2.00 H             | 18                   | 61.80            | -102.60                  |
| 6                                                    | 667.29          | -42.30    | -13.00      | -29.30      | 1.00 H             | 301                  | 59.60            | -101.90                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

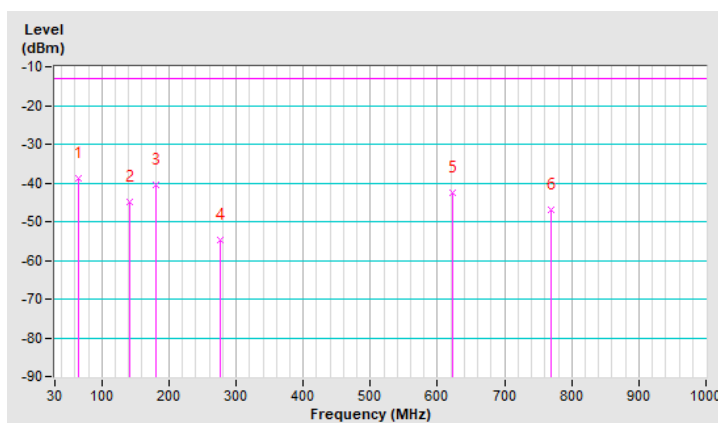


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |           |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 65.89           | -38.90    | -13.00      | -25.90      | 1.00 V             | 259                  | 73.30            | -112.20                  |
| 2                                                 | 141.55          | -44.80    | -13.00      | -31.80      | 1.00 V             | 223                  | 66.10            | -110.90                  |
| 3                                                 | 181.32          | -40.50    | -13.00      | -27.50      | 1.00 V             | 244                  | 71.70            | -112.20                  |
| 4                                                 | 276.38          | -54.60    | -13.00      | -41.60      | 1.00 V             | 103                  | 55.70            | -110.30                  |
| 5                                                 | 621.70          | -42.40    | -13.00      | -29.40      | 1.00 V             | 19                   | 60.20            | -102.60                  |
| 6                                                 | 770.11          | -47.10    | -13.00      | -34.10      | 1.00 V             | 164                  | 53.50            | -100.60                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



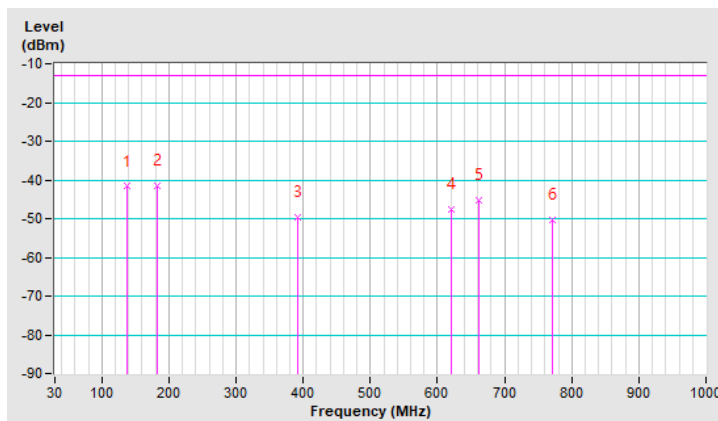
LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 136.70          | -41.70    | -13.00      | -28.70      | 1.49 H             | 104                  | 69.50            | -111.20                  |
| 2                                                    | 182.29          | -41.50    | -13.00      | -28.50      | 1.49 H             | 221                  | 70.70            | -112.20                  |
| 3                                                    | 391.81          | -49.80    | -13.00      | -36.80      | 1.00 H             | 186                  | 57.80            | -107.60                  |
| 4                                                    | 620.73          | -47.70    | -13.00      | -34.70      | 1.00 H             | 175                  | 55.00            | -102.70                  |
| 5                                                    | 662.44          | -45.40    | -13.00      | -32.40      | 1.00 H             | 36                   | 56.60            | -102.00                  |
| 6                                                    | 771.08          | -50.50    | -13.00      | -37.50      | 1.49 H             | 37                   | 50.10            | -100.60                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



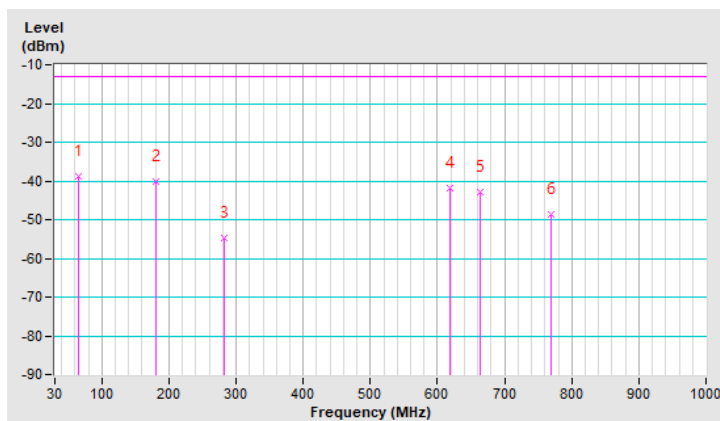


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                    |              |                |                |                          |                            |                        |                                |
|---------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                 | 65.89              | -38.70       | -13.00         | -25.70         | 2.00 V                   | 250                        | 73.50                  | -112.20                        |
| 2                                                 | 180.35             | -40.20       | -13.00         | -27.20         | 1.01 V                   | 242                        | 71.90                  | -112.10                        |
| 3                                                 | 282.20             | -54.80       | -13.00         | -41.80         | 1.01 V                   | 249                        | 55.50                  | -110.30                        |
| 4                                                 | 617.82             | -41.80       | -13.00         | -28.80         | 1.50 V                   | 22                         | 60.90                  | -102.70                        |
| 5                                                 | 664.38             | -43.00       | -13.00         | -30.00         | 1.01 V                   | 320                        | 59.00                  | -102.00                        |
| 6                                                 | 770.11             | -48.50       | -13.00         | -35.50         | 1.01 V                   | 229                        | 52.10                  | -100.60                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



Above 1GHz

LTE Band 14, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23305<br>(790.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -55.96        | -40.00         | -15.96         | 1.48 H                   | 341                        | 45.95                  | -101.91                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -52.00        | -40.00         | -12.00         | 2.48 V                   | 86                         | 49.91                  | -101.91                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -56.00        | -40.00         | -16.00         | 1.56 H                   | 342                        | 45.90                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -51.95        | -40.00         | -11.95         | 2.48 V                   | 87                         | 49.95                  | -101.90                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23355<br>(795.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -55.98        | -40.00         | -15.98         | 1.47 H                   | 347                        | 45.90                  | -101.88                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -51.93        | -40.00         | -11.93         | 2.51 V                   | 87                         | 49.95                  | -101.88                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -55.70        | -40.00         | -15.70         | 1.56 H                   | 344                        | 46.20                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -51.80        | -40.00         | -11.80         | 2.47 V                   | 84                         | 50.10                  | -101.90                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 1.4MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26697<br>(814.7MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -58.80       | -13.00         | -45.80         | 2.02 H                   | 141                        | 45.17                  | -103.97                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -57.52       | -13.00         | -44.52         | 2.98 V                   | 165                        | 46.45                  | -103.97                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -58.78       | -13.00         | -45.78         | 2.04 H                   | 141                        | 45.17                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.54       | -13.00         | -44.54         | 2.99 V                   | 158                        | 46.41                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26783<br>(823.3MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -58.83       | -13.00         | -45.83         | 1.95 H                   | 141                        | 45.11                  | -103.94                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -57.50       | -13.00         | -44.50         | 2.99 V                   | 160                        | 46.44                  | -103.94                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26715<br>(816.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -58.79       | -13.00         | -45.79         | 1.96 H                   | 142                        | 45.17                  | -103.96                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -57.53       | -13.00         | -44.53         | 3.00 V                   | 158                        | 46.43                  | -103.96                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -58.85       | -13.00         | -45.85         | 4.00 H                   | 143                        | 45.10                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.50       | -13.00         | -44.50         | 2.69 V                   | 162                        | 46.45                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26765<br>(821.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -58.75       | -13.00         | -45.75         | 2.04 H                   | 143                        | 45.20                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -57.46       | -13.00         | -44.46         | 2.97 V                   | 164                        | 46.49                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.



LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Edison Lee                     |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -58.55       | -13.00         | -45.55         | 1.97 H                   | 141                        | 45.40                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.35       | -13.00         | -44.35         | 2.94 V                   | 162                        | 46.60                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

## EUT + Antenna 2 (2nd Source)

Below 1GHz

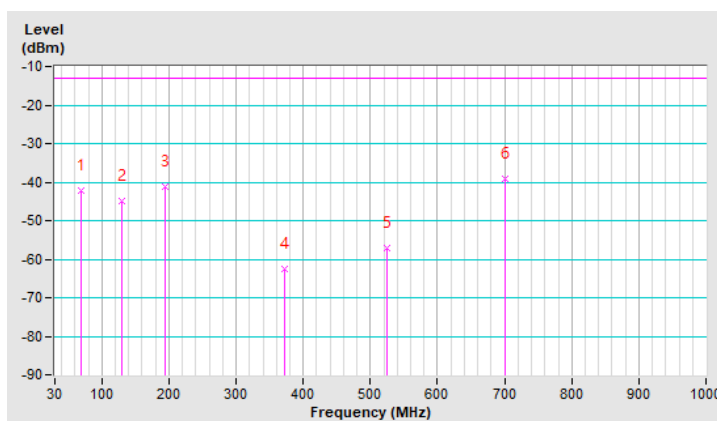
LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 68.80              | -42.08       | -13.00         | -29.08         | 1.50 H                   | 252                        | 70.57                  | -112.65                        |
| 2                                                    | 129.91             | -44.83       | -13.00         | -31.83         | 1.01 H                   | 186                        | 66.96                  | -111.79                        |
| 3                                                    | 194.90             | -41.23       | -13.00         | -28.23         | 2.00 H                   | 158                        | 72.39                  | -113.62                        |
| 4                                                    | 371.44             | -62.40       | -13.00         | -49.40         | 1.01 H                   | 195                        | 45.65                  | -108.05                        |
| 5                                                    | 525.67             | -57.14       | -13.00         | -44.14         | 2.00 H                   | 18                         | 47.54                  | -104.68                        |
| 6                                                    | 700.27             | -39.26       | -13.00         | -26.26         | 1.01 H                   | 254                        | 62.02                  | -101.28                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

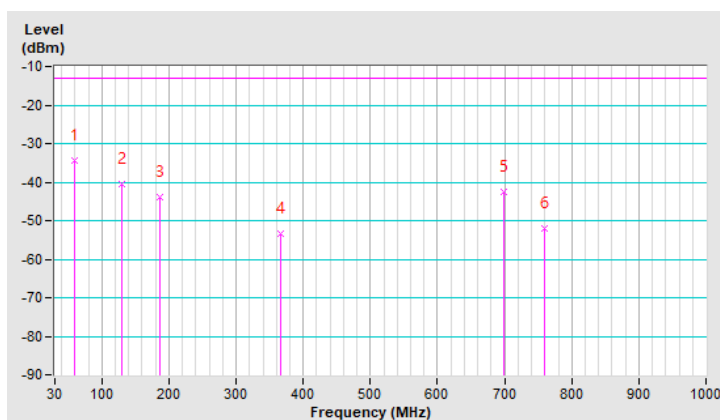


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |           |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 59.10           | -34.55    | -13.00      | -21.55      | 1.50 V             | 250                  | 76.44            | -110.99                  |
| 2                                                 | 129.91          | -40.40    | -13.00      | -27.40      | 1.00 V             | 167                  | 71.39            | -111.79                  |
| 3                                                 | 186.17          | -43.79    | -13.00      | -30.79      | 1.00 V             | 222                  | 69.01            | -112.80                  |
| 4                                                 | 365.62          | -53.53    | -13.00      | -40.53      | 1.99 V             | 193                  | 54.77            | -108.30                  |
| 5                                                 | 699.30          | -42.60    | -13.00      | -29.60      | 1.00 V             | 102                  | 58.69            | -101.29                  |
| 6                                                 | 760.41          | -52.03    | -13.00      | -39.03      | 1.00 V             | 44                   | 48.49            | -100.52                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



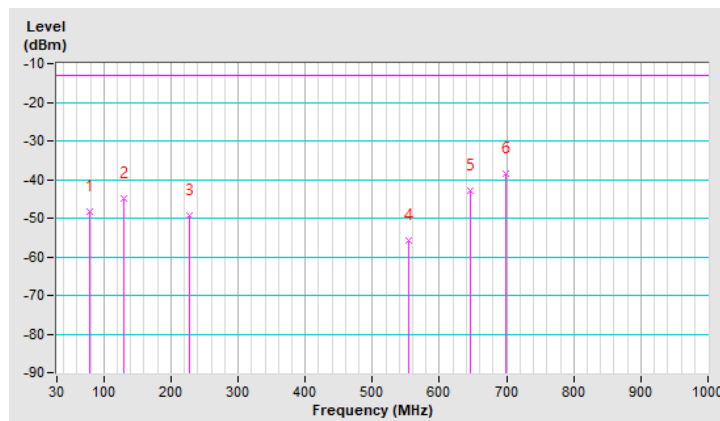
LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 78.50           | -48.38    | -13.00      | -35.38      | 2.00 H             | 292                  | 66.67            | -115.05                  |
| 2                                                    | 129.91          | -45.05    | -13.00      | -32.05      | 1.00 H             | 143                  | 66.74            | -111.79                  |
| 3                                                    | 226.91          | -49.24    | -13.00      | -36.24      | 1.50 H             | 300                  | 64.17            | -113.41                  |
| 4                                                    | 554.77          | -55.63    | -13.00      | -42.63      | 1.50 H             | 261                  | 48.62            | -104.25                  |
| 5                                                    | 645.95          | -42.76    | -13.00      | -29.76      | 1.01 H             | 179                  | 59.27            | -102.03                  |
| 6                                                    | 698.33          | -38.63    | -13.00      | -25.63      | 1.50 H             | 76                   | 62.67            | -101.30                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

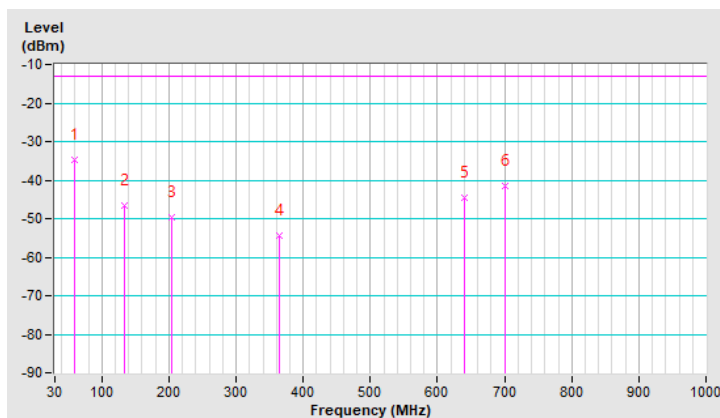


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |           |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 59.10           | -34.65    | -13.00      | -21.65      | 2.00 V             | 266                  | 76.34            | -110.99                  |
| 2                                                 | 132.82          | -46.69    | -13.00      | -33.69      | 1.00 V             | 147                  | 64.79            | -111.48                  |
| 3                                                 | 204.60          | -49.83    | -13.00      | -36.83      | 1.00 V             | 2                    | 63.98            | -113.81                  |
| 4                                                 | 363.68          | -54.41    | -13.00      | -41.41      | 1.49 V             | 292                  | 53.98            | -108.39                  |
| 5                                                 | 641.10          | -44.52    | -13.00      | -31.52      | 1.49 V             | 159                  | 57.63            | -102.15                  |
| 6                                                 | 700.27          | -41.60    | -13.00      | -28.60      | 1.49 V             | 287                  | 59.68            | -101.28                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



Above 1GHz

LTE Band 14, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23305<br>(790.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -53.17        | -40.00         | -13.17         | 1.51 H                   | 299                        | 48.74                  | -101.91                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -51.88        | -40.00         | -11.88         | 2.46 V                   | 201                        | 50.03                  | -101.91                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -53.18        | -40.00         | -13.18         | 1.45 H                   | 303                        | 48.72                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -51.91        | -40.00         | -11.91         | 2.46 V                   | 213                        | 49.99                  | -101.90                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23355<br>(795.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -53.14        | -40.00         | -13.14         | 1.46 H                   | 296                        | 48.74                  | -101.88                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -51.94        | -40.00         | -11.94         | 2.36 V                   | 207                        | 49.94                  | -101.88                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -52.94        | -40.00         | -12.94         | 1.48 H                   | 298                        | 48.96                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| <b>1</b>                                             | <b>1586.00</b>     | <b>-51.78</b> | <b>-40.00</b>  | <b>-11.78</b>  | <b>2.43 V</b>            | <b>212</b>                 | <b>50.12</b>           | <b>-101.90</b>                 |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



LTE Band 26, Channel Bandwidth 1.4MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26697<br>(814.7MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -59.79       | -13.00         | -46.79         | 1.11 H                   | 155                        | 44.18                  | -103.97                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -57.02       | -13.00         | -44.02         | 1.54 V                   | 203                        | 46.95                  | -103.97                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -59.80       | -13.00         | -46.80         | 1.10 H                   | 159                        | 44.15                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.03       | -13.00         | -44.03         | 1.58 V                   | 205                        | 46.92                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26783<br>(823.3MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -59.76       | -13.00         | -46.76         | 1.13 H                   | 165                        | 44.18                  | -103.94                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -56.99       | -13.00         | -43.99         | 1.65 V                   | 208                        | 46.95                  | -103.94                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26715<br>(816.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -59.74       | -13.00         | -46.74         | 1.15 H                   | 163                        | 44.22                  | -103.96                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -57.02       | -13.00         | -44.02         | 1.59 V                   | 203                        | 46.94                  | -103.96                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -59.76       | -13.00         | -46.76         | 1.18 H                   | 164                        | 44.19                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.04       | -13.00         | -44.04         | 1.64 V                   | 205                        | 46.91                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26765<br>(821.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -59.81       | -13.00         | -46.81         | 1.16 H                   | 159                        | 44.14                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -57.03       | -13.00         | -44.03         | 1.55 V                   | 201                        | 46.92                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -59.53       | -13.00         | -46.53         | 1.10 H                   | 159                        | 44.42                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -56.82       | -13.00         | -43.82         | 1.59 V                   | 202                        | 47.13                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m).$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

## EUT + Antenna 3

Below 1GHz

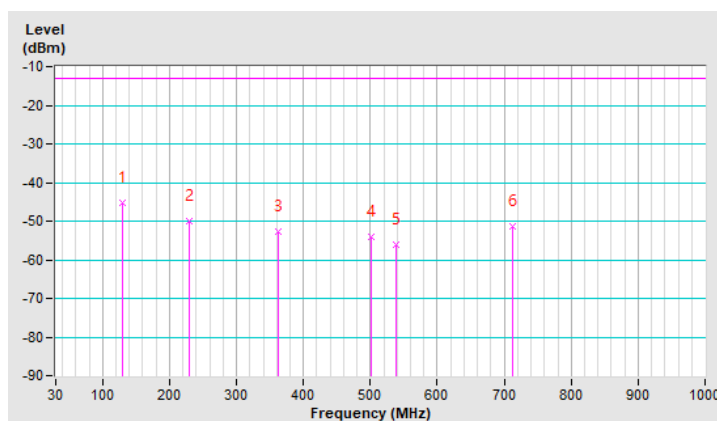
LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 129.91          | -45.28    | -13.00      | -32.28      | 1.50 H             | 137                  | 66.51            | -111.79                  |
| 2                                                    | 229.82          | -49.96    | -13.00      | -36.96      | 1.50 H             | 329                  | 62.93            | -112.89                  |
| 3                                                    | 362.71          | -52.86    | -13.00      | -39.86      | 1.01 H             | 168                  | 55.57            | -108.43                  |
| 4                                                    | 500.45          | -53.92    | -13.00      | -40.92      | 1.50 H             | 109                  | 51.35            | -105.27                  |
| 5                                                    | 539.25          | -55.98    | -13.00      | -42.98      | 2.00 H             | 96                   | 48.57            | -104.55                  |
| 6                                                    | 711.91          | -51.34    | -13.00      | -38.34      | 1.01 H             | 157                  | 49.93            | -101.27                  |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

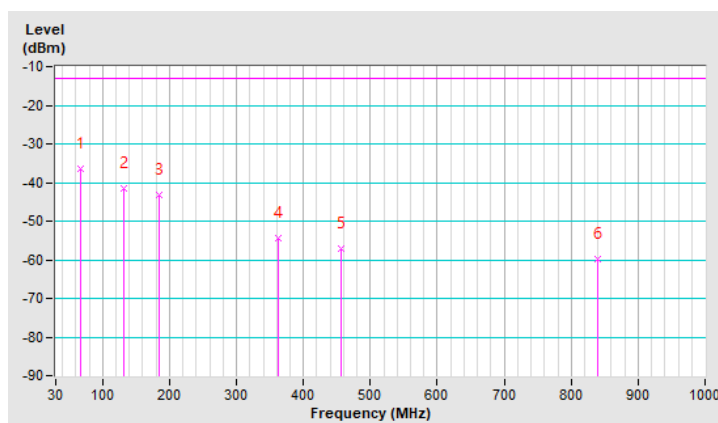


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |           |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 67.83           | -36.37    | -13.00      | -23.37      | 2.00 V             | 238                  | 76.01            | -112.38                  |
| 2                                                 | 130.88          | -41.36    | -13.00      | -28.36      | 1.00 V             | 172                  | 70.30            | -111.66                  |
| 3                                                 | 185.20          | -43.25    | -13.00      | -30.25      | 1.00 V             | 221                  | 69.46            | -112.71                  |
| 4                                                 | 362.71          | -54.42    | -13.00      | -41.42      | 1.49 V             | 249                  | 54.01            | -108.43                  |
| 5                                                 | 456.80          | -57.07    | -13.00      | -44.07      | 2.00 V             | 296                  | 48.75            | -105.82                  |
| 6                                                 | 838.98          | -59.72    | -13.00      | -46.72      | 1.49 V             | 127                  | 39.73            | -99.45                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



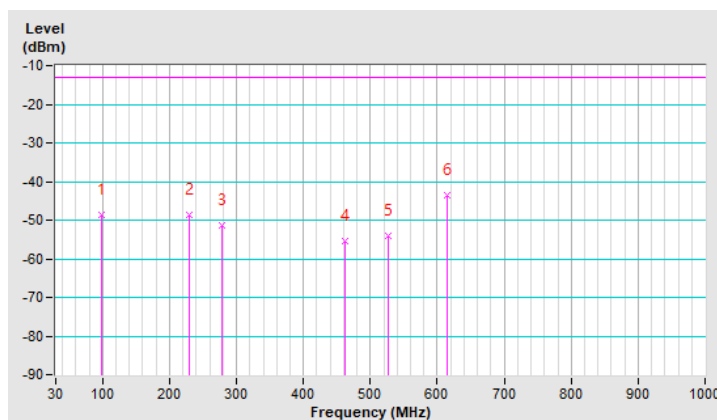
LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 98.87              | -48.63       | -13.00         | -35.63         | 1.50 H                   | 109                        | 66.59                  | -115.22                        |
| 2                                                    | 228.85             | -48.60       | -13.00         | -35.60         | 1.01 H                   | 317                        | 64.46                  | -113.06                        |
| 3                                                    | 279.29             | -51.46       | -13.00         | -38.46         | 2.00 H                   | 275                        | 58.83                  | -110.29                        |
| 4                                                    | 461.65             | -55.28       | -13.00         | -42.28         | 1.01 H                   | 195                        | 50.49                  | -105.77                        |
| 5                                                    | 527.61             | -54.16       | -13.00         | -41.16         | 1.50 H                   | 261                        | 50.52                  | -104.68                        |
| 6                                                    | 614.91             | -43.43       | -13.00         | -30.43         | 1.50 H                   | 310                        | 59.14                  | -102.57                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



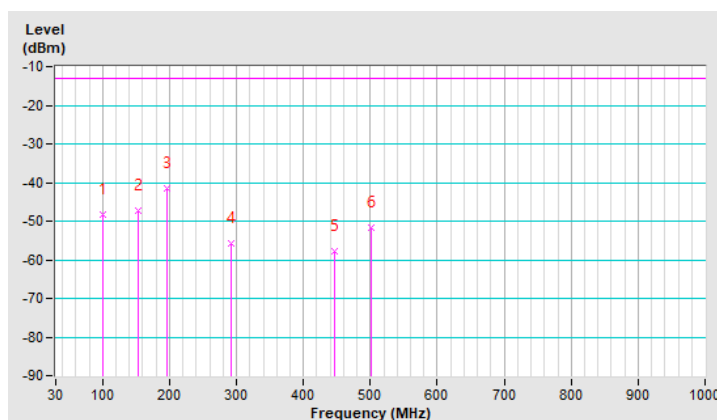


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc          |
| Tested By                | Edison Lee                     |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                    |              |                |                |                          |                            |                        |                                |
|---------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                 | 99.84              | -48.43       | -13.00         | -35.43         | 2.00 V                   | 115                        | 66.61                  | -115.04                        |
| 2                                                 | 153.19             | -47.43       | -13.00         | -34.43         | 1.49 V                   | 84                         | 63.04                  | -110.47                        |
| 3                                                 | 195.87             | -41.67       | -13.00         | -28.67         | 1.00 V                   | 173                        | 72.05                  | -113.72                        |
| 4                                                 | 291.90             | -55.76       | -13.00         | -42.76         | 1.00 V                   | 176                        | 54.28                  | -110.04                        |
| 5                                                 | 446.13             | -57.89       | -13.00         | -44.89         | 1.00 V                   | 146                        | 48.17                  | -106.06                        |
| 6                                                 | 500.45             | -51.62       | -13.00         | -38.62         | 1.49 V                   | 98                         | 53.65                  | -105.27                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



Above 1GHz

LTE Band 14, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23305<br>(790.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -56.69        | -40.00         | -16.69         | 2.14 H                   | 171                        | 45.22                  | -101.91                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1581.00            | -55.49        | -40.00         | -15.49         | 1.09 V                   | 61                         | 46.42                  | -101.91                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -56.78        | -40.00         | -16.78         | 2.16 H                   | 171                        | 45.12                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -55.38        | -40.00         | -15.38         | 1.08 V                   | 64                         | 46.52                  | -101.90                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23355<br>(795.5MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -56.74        | -40.00         | -16.74         | 2.05 H                   | 173                        | 45.14                  | -101.88                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1591.00            | -55.41        | -40.00         | -15.41         | 1.12 V                   | 64                         | 46.47                  | -101.88                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

LTE Band 14, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | 1GHz ~ 8GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |               |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -56.47        | -40.00         | -16.47         | 2.15 H                   | 171                        | 45.43                  | -101.90                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |               |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1586.00            | -55.29        | -40.00         | -15.29         | 1.05 V                   | 60                         | 46.61                  | -101.90                        |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 1.4MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26697<br>(814.7MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -60.05       | -13.00         | -47.05         | 1.21 H                   | 158                        | 43.92                  | -103.97                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1629.40            | -57.36       | -13.00         | -44.36         | 1.64 V                   | 209                        | 46.61                  | -103.97                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -59.98       | -13.00         | -46.98         | 1.18 H                   | 161                        | 43.97                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.31       | -13.00         | -44.31         | 1.67 V                   | 216                        | 46.64                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26783<br>(823.3MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -60.00       | -13.00         | -47.00         | 1.28 H                   | 157                        | 43.94                  | -103.94                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1646.60            | -57.29       | -13.00         | -44.29         | 1.68 V                   | 212                        | 46.65                  | -103.94                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

LTE Band 26, Channel Bandwidth 5MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26715<br>(816.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -59.98       | -13.00         | -46.98         | 1.28 H                   | 159                        | 43.98                  | -103.96                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1633.00            | -57.34       | -13.00         | -44.34         | 1.69 V                   | 212                        | 46.62                  | -103.96                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -60.00       | -13.00         | -47.00         | 1.23 H                   | 161                        | 43.95                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.30       | -13.00         | -44.30         | 1.67 V                   | 210                        | 46.65                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26765<br>(821.5MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -59.96       | -13.00         | -46.96         | 1.23 H                   | 158                        | 43.99                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1643.00            | -57.27       | -13.00         | -44.27         | 1.63 V                   | 209                        | 46.68                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$ .
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.



LTE Band 26, Channel Bandwidth 10MHz

|                          |                                |                 |             |
|--------------------------|--------------------------------|-----------------|-------------|
| Mode                     | TX channel 26740<br>(819.0MHz) | Frequency Range | 1GHz ~ 9GHz |
| Environmental Conditions | 21deg. C, 67%RH                | Input Power     | 12Vdc       |
| Tested By                | Tim Chen                       |                 |             |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |              |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -59.74       | -13.00         | -46.74         | 1.27 H                   | 162                        | 44.21                  | -103.95                        |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1638.00            | -57.14       | -13.00         | -44.14         | 1.64 V                   | 215                        | 46.81                  | -103.95                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m).$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value.
4. The other ERP levels were very low against the limit.

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

## Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The address and road map of all our labs can be found in our web site also.

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