

## RF Test Report

Applicant : Reliance Communications LLC  
Product Type : GSM/CDMA/WCDMA/LTE mobile phone  
Trade Name : Orbic  
Model Number : RC555L  
Test Specification : FCC 47 CFR PART 22H  
FCC 47 CFR PART 24E  
FCC 47 CFR PART 27L  
FCC 47 CFR PART 90S  
ANSI/TIA-603-D 2010  
Receive Date : Sep. 07, 2017  
Test Period : Sep. 21 ~ Sep. 29, 2017  
Issue Date : Sep. 29, 2017

### Issue by

A Test Lab Techno Corp.  
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Taiwan Accreditation Foundation accreditation number: 1330

Test Firm MRA designation number: TW0010

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### **Revision History**

| Rev. | Issue Date    | Revisions     | Revised By |
|------|---------------|---------------|------------|
| 00   | Sep. 29, 2017 | Initial Issue | Nina Lin   |
|      |               |               |            |
|      |               |               |            |
|      |               |               |            |

# Verification of Compliance

Issued Date: Sep. 29, 2017

Applicant : Reliance Communications LLC  
Product Type : GSM/CDMA/WCDMA/LTE mobile phone  
Trade Name : Orbic  
Model Number : RC555L  
FCC ID : 2ABGH-RC555L  
EUT Rated Voltage : DC 5V, 2A or DC 9V, 2A  
Test Voltage : 120 Vac / 60 Hz  
Applicable Standard : FCC 47 CFR PART 22H  
FCC 47 CFR PART 24E  
FCC 47 CFR PART 27L  
FCC 47 CFR PART 90S  
ANSI/TIA-603-D 2010  
Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.  
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<http://www.atl-lab.com.tw/e-index.htm>



A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : Fly Lu Reviewed By : Eric Ou Yang  
(Manager) (Fly Lu) (Testing Engineer) (Eric Ou Yang)



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# 1 General Information

## 1.1. EUT Description

|                            |   |                    |                    |            |
|----------------------------|---|--------------------|--------------------|------------|
| Applicant                  | Reliance Communications LLC<br>555 Wireless Blvd, Hauppauge, New York, 11788, United States                           |                    |                    |            |
| Manufacturer               | Unimaxcomm<br>Room 602, Building-B, Shenzhen Software Park T3, Hi-Tech Park South, Nan Shan District, Shenzhen, China |                    |                    |            |
| Product Type               | GSM/CDMA/WCDMA/LTE mobile phone   |                    |                    |            |
| Trade Name                 | Orbic   |                    |                    |            |
| Model Number               | RC555L  |                    |                    |            |
| FCC ID                     | 2ABGH-RC555L  |                    |                    |            |
| IMEI No.                   | 358924080001802   |                    |                    |            |
| Mode                       | Band  | UL Frequency (MHz) | DL Frequency (MHz) | Modulation |
| WCDMA                      | II  | 1852.4 ~ 1907.6    | 1932.4 ~ 1987.6    | QPSK       |
|                            | V   | 826.4 ~ 846.6      | 871.4 ~ 891.6      | QPSK       |
|                            | IV  | 1712.4 ~ 1752.6    | 2112.4 ~ 2152.6    | QPSK       |
| CDMA 1xRTT/<br>CDMA 1xEVDO | Band  | UL Frequency (MHz) | DL Frequency (MHz) | Modulation |
|                            | 850 (BC 0)  | 824.70 ~ 848.31    | 869.70 ~ 893.31    | QPSK       |
|                            | 1900 (BC 1)   | 1851.25 ~ 1908.75  | 1931.25 ~ 1988.75  | QPSK       |
|                            | Sec. 800 (BC 10)  | 817.25 ~ 822.75    | 862.25 ~ 867.75    | QPSK       |
| Channel Control            | Auto  |                    |                    |            |
| Antenna information        | Type  | Max. Gain (dBi)    |                    |            |
|                            | LDS Antenna   | WCDMA Band II      | 1                  |            |
|                            |   | WCDMA Band V       | -1                 |            |
|                            |   | WCDMA Band IV      | 0.5                |            |
|                            |   | CDMA BC 0          | -1                 |            |
|                            |   | CDMA BC 1          | 1                  |            |
| CDMA BC 10                 |   | -1                 |                    |            |
| Operate Temp. Range        | -10 ~ 40 °C   |                    |                    |            |

| Frequency Band | E.R.P. /E.I.R.P. (W) |            |
|----------------|----------------------|------------|
| WCDMA Band II  | 0.096                | (E.I.R.P.) |
| WCDMA Band V   | 0.070                | (E.I.R.P.) |
| WCDMA Band IV  | 0.070                | (E.R.P.)   |
| CDMA BC 0      | 0.078                | (E.R.P.)   |
| CDMA BC 1      | 0.067                | (E.I.R.P.) |
| CDMA BC 10     | 0.067                | (E.R.P.)   |



## 1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode                                 |
|---|
| Mode 1: WCDMA Band II Link Mode           |
| Mode 2: WCDMA Band V Link Mode            |
| Mode 3: WCDMA Band IV Link Mode           |
| Mode 4: CDMA 850 (BC 0) Link Mode         |
| Mode 5: CDMA 1900 (BC 1) Link Mode        |
| Mode 6: CDMA Sec. 800 (BC 10) Link Mode   |
| Mode 7: 1xEVDO 850 (BC 0) Link Mode       |
| Mode 8: 1xEVDO 1900 (BC 1) Link Mode      |
| Mode 9: 1xEVDO Sec. 800 (BC 10) Link Mode |

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

### Tested System Details

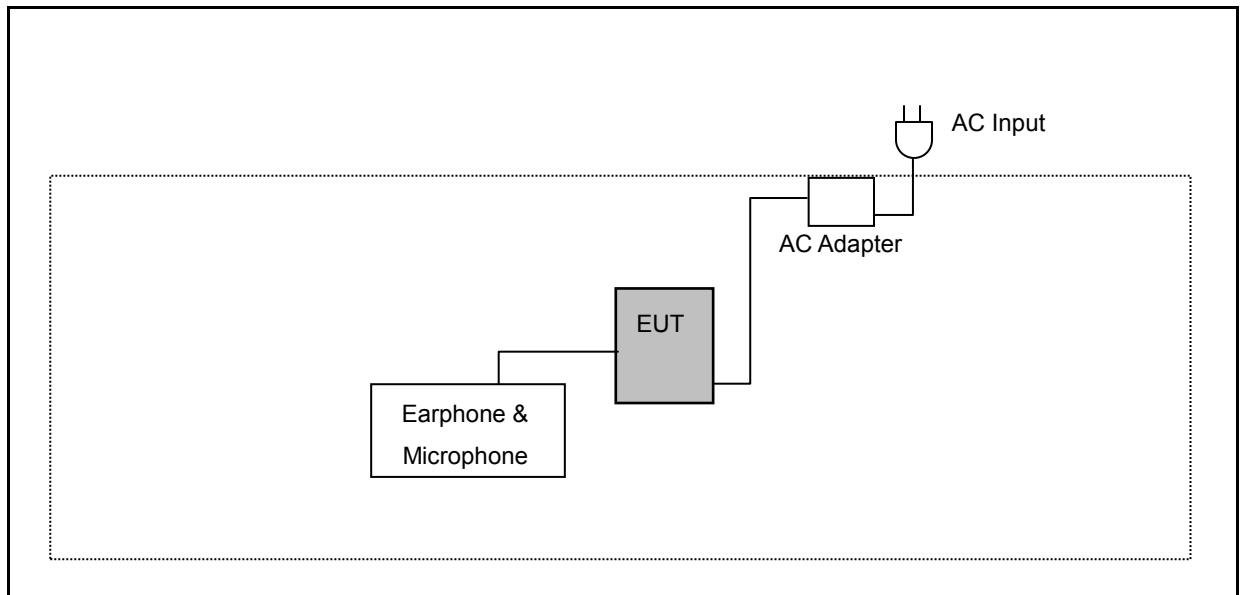
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

|    | Product                              | Manufacturer | Model Number | Serial Number | Power Cord |
|----|--------------------------------------|--------------|--------------|---------------|------------|
| 1. | Universal Radio Communication Tester | R & S        | CMU200       | 112387        | NA         |

## 1.3. EUT Exercise Software

|   |  |
|---|--|
| 1 | Setup the EUT and Base Station (CMU200) as shown on 1.4. |
| 2 | Turn on the power of all equipment.                      |

#### 1.4. Configuration of Test System Details





## 1.5. Test Instruments

For Spurious Radiation

| Equipment                     | Manufacturer                   | Model Number            | Serial Number | Cal. Date  | Cal. Cycle |
|-------------------------------|--------------------------------|-------------------------|---------------|------------|------------|
| RF Pre-selector               | Agilent                        | N9039A                  | MY46520256    | 04/24/2017 | 1 year     |
| Spectrum Analyzer             | Agilent                        | E4446A                  | MY46180578    | 04/24/2017 | 1 year     |
| Pre Amplifier                 | Agilent                        | 8449B                   | 3008A02237    | 10/11/2016 | 1 year     |
| Pre Amplifier                 | Agilent                        | 8447D                   | 2944A11119    | 01/12/2017 | 1 year     |
| Pre Amplifier<br>(26.5~40GHz) | EMCI                           | EMC2654045              | 980028        | 08/29/2017 | 1 year     |
| Pre Amplifier<br>(1~26.5GHz)  | EMCI                           | EMC012645SE             | 980289        | 01/16/2017 | 1 year     |
| Broadband Antenna             | Schwarzbeck                    | VULB9168                | 416           | 10/13/2016 | 1 year     |
| Horn Antenna<br>(1~18GHz)     | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120D               | 9120D-550     | 06/20/2017 | 1 year     |
| Horn Antenna<br>(18~40GHz)    | ETS                            | 3116                    | 00086467      | 09/11/2017 | 1 year     |
| Microwave Cable               | EMCI                           | EMC102-KM-KM-<br>14000  | 151001        | 02/20/2017 | 1 year     |
| Microwave Cable               | EMCI                           | EMC-104-SM-SM<br>-14000 | 140202        | 02/20/2017 | 1 year     |
| Microwave Cable               | EMCI                           | EMC104-SM-SM-<br>600    | 140301        | 02/20/2017 | 1 year     |
| Signal Generator              | Agilent                        | E8257D                  | MY44320425    | 03/02/2017 | 1 year     |
| Test Site                     | ATL                            | TE01                    | 888001        | 08/29/2017 | 1 year     |

Note: N.C.R. = No Calibration Request.





### 1.6. Test Site Environment

| Items                      | Required (IEC 60068-1) | Actual |
|----------------------------|------------------------|--------|
| Temperature (°C)           | 15-35                  | 26     |
| Humidity (%RH)             | 25-75                  | 60     |
| Barometric pressure (mbar) | 860-1060               | 950    |

### 1.7. Summary of Test Result

| FCC Rule  | Description                                   | Result        |
|---|---|---------------|
| §2.1046<br>§90.635  | Conducted Output Power                        | N/A<br>(Note) |
| §22.913(a)(2)   | Effective Radiated Power                      | Pass          |
| §24.232(c)<br>§27.50(d)(4)                                  | Equivalent Isotropic Radiated Power           | Pass          |
| §24.232(d)<br>§27.50<br>KDB 971168 D01 (5.7.1)              | Peak to average ratio                         | N/A<br>(Note) |
| §2.1049<br>§22.917(a)<br>§24.238(a)<br>§27.53(g)<br>§90.691 | Emission Bandwidth & Occupied Bandwidth       | N/A<br>(Note) |
| §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(h)<br>§90.691 | Band Edge Measurement                         | N/A<br>(Note) |
| §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(h)<br>§90.691 | Conducted Spurious Emission                   | N/A<br>(Note) |
| §2.1053<br>§22.917(a)<br>§24.238(a)<br>§27.53(h)<br>§90.691 | Field Strength of Spurious Radiation          | Pass          |
| §2.1055<br>§22.355<br>§24.235<br>§27.54<br>§90.213          | Frequency Stability for Temperature & Voltage | N/A<br>(Note) |

Note : Refer report number : I17Z61374-WMD02 / I17Z61374-WMD04 / I17Z61374-WMD05

## 2 Measurement Procedure

### 2.1. Effective Radiated Power / Equivalent Isotropic Radiated Power Test

#### ■ Limit

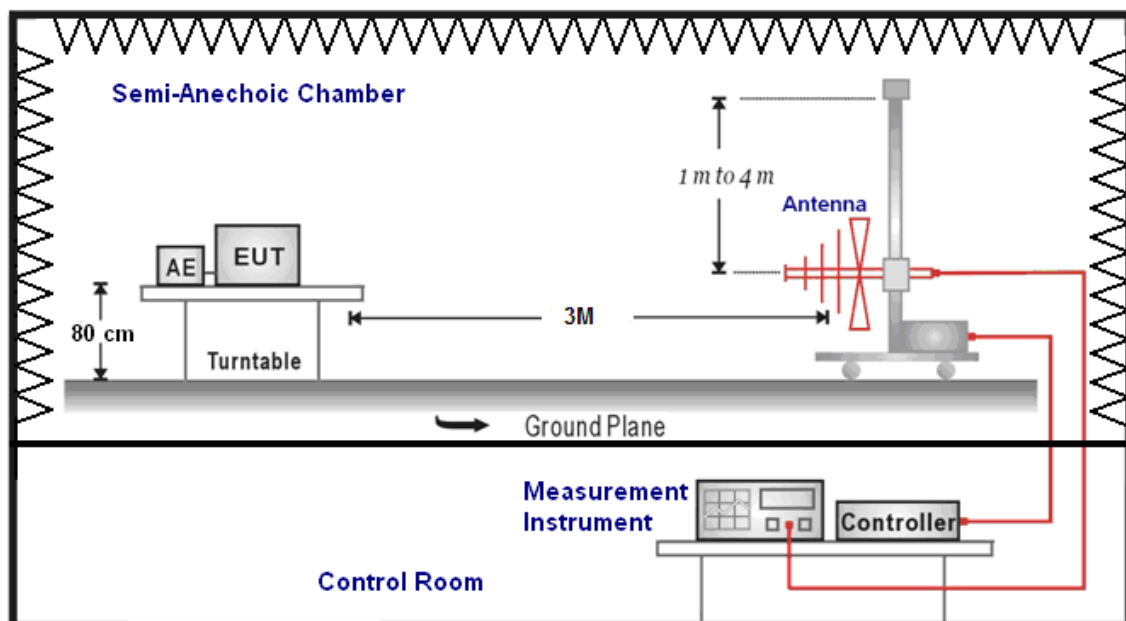
For FCC Part 22.913(a)(2): The E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(c): The E.I.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

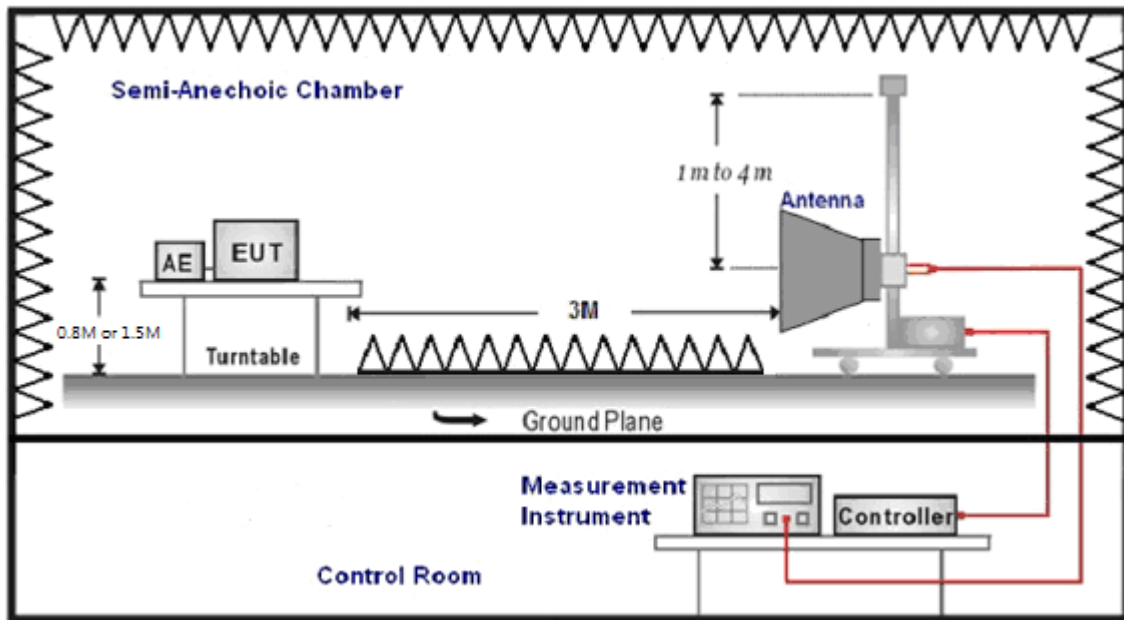
For FCC Part 90.635(b): ERP maximum power is 100 watts for mobile stations.

#### ■ Setup

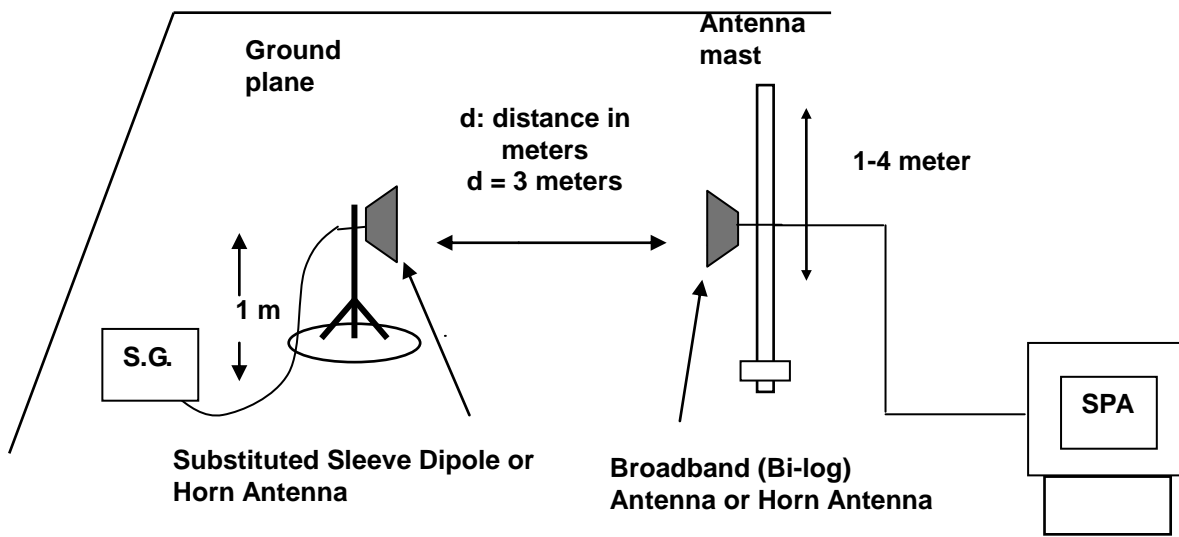
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



## ■ Test Procedure

### For FCC

- a. The EUT was set up for the maximum power with wwan link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m 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.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d.  $E.I.R.P. = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e.  $E.R.P. = E.I.R.P. - 2.15 \text{ dB}$

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

## ■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072 \text{ dB}$ .

## 2.2. Field Strength of Spurious Radiation Test

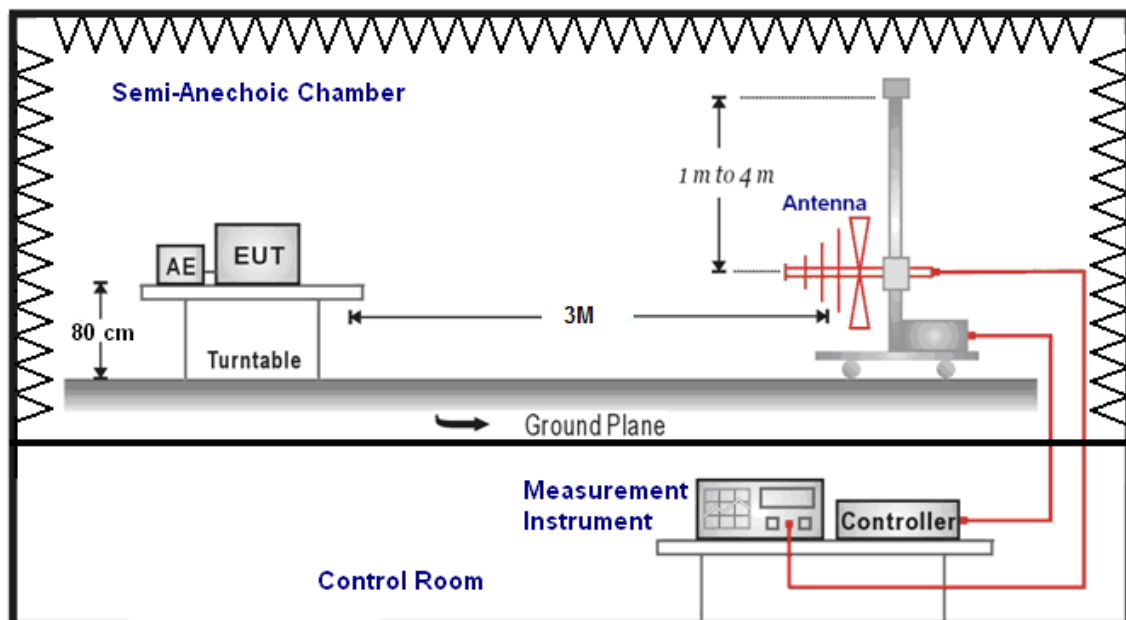
### ■ Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

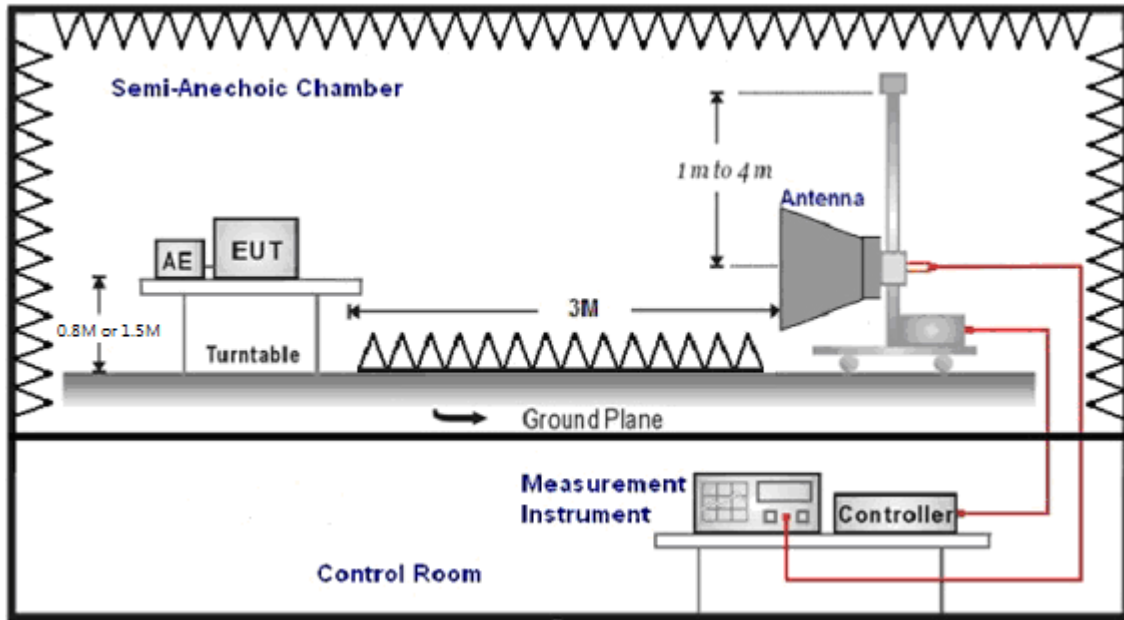
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

### ■ Setup

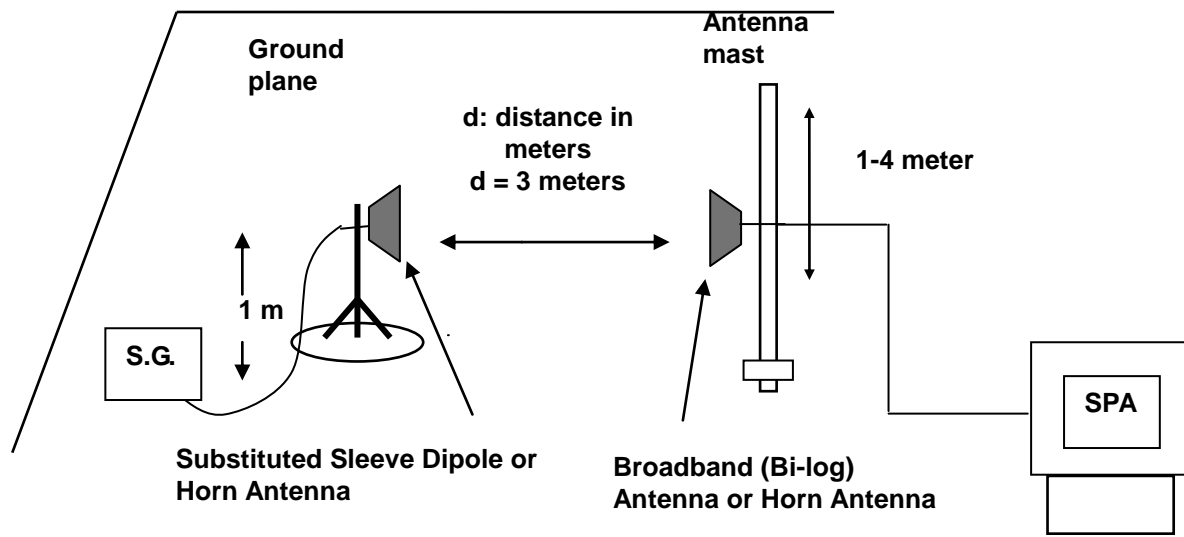
Below 1GHz



Above 1GHz



For Substituted Method Test Set-UP





## ■ Test Procedure

### For FCC

- a. The EUT was set up for the maximum power with wwan link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m 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.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d. E.I.R.P. = Output power level of S.G - TX cable loss + Antenna gain of substitution horn
- e. E.R.P. = E.I.R.P.- 2.15 dB

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

## ■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.



### 3 Test Results

#### Appendix A: Effective Radiated Power

| Band 2 |            |                 |             |                  |                         |              |              |           |
|--------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band   | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.I.R.P.     |              | Limit (W) |
|        |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| WCDMA  | QPSK       | 1852.4          | H           | 27.25            | -10.67                  | 16.58        | 0.045        | < 2       |
|        |            |                 | V           | 30.20            | -10.66                  | 19.54        | 0.090        | < 2       |
|        |            | 1880.0          | H           | 28.18            | -10.25                  | 17.93        | 0.062        | < 2       |
|        |            |                 | V           | 30.07            | -10.25                  | <b>19.82</b> | <b>0.096</b> | < 2       |
|        |            | 1907.6          | H           | 29.59            | -9.82                   | 19.77        | 0.095        | < 2       |
|        |            |                 | V           | 29.59            | -9.82                   | 19.77        | 0.095        | < 2       |

| Band 5 |            |                 |             |                  |                         |              |              |           |
|--------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band   | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.R.P.       |              | Limit (W) |
|        |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| WCDMA  | QPSK       | 826.4           | H           | 15.53            | -0.04                   | 15.49        | 0.035        | < 7       |
|        |            |                 | V           | 17.98            | -0.04                   | 17.94        | 0.062        | < 7       |
|        |            | 836.6           | H           | 16.08            | 0.04                    | 16.12        | 0.041        | < 7       |
|        |            |                 | V           | 18.42            | 0.04                    | <b>18.46</b> | <b>0.070</b> | < 7       |
|        |            | 846.6           | H           | 14.99            | 0.04                    | 15.03        | 0.032        | < 7       |
|        |            |                 | V           | 17.93            | 0.04                    | 17.97        | 0.063        | < 7       |

| Band 4 |            |                 |             |                  |                         |              |              |           |
|--------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band   | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.R.P.       |              | Limit (W) |
|        |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| WCDMA  | QPSK       | 1712.4          | H           | 27.82            | -12.56                  | 15.26        | 0.035        | < 1       |
|        |            |                 | V           | 30.53            | -12.56                  | 17.97        | 0.062        | < 1       |
|        |            | 1732.6          | H           | 26.83            | -12.29                  | 14.54        | 0.041        | < 1       |
|        |            |                 | V           | 30.69            | -12.27                  | <b>18.42</b> | <b>0.070</b> | < 1       |
|        |            | 1752.6          | H           | 25.07            | -12.01                  | 13.06        | 0.032        | < 1       |
|        |            |                 | V           | 30.40            | -12.02                  | 18.38        | 0.063        | < 1       |





| BC 0       |            |                 |             |                  |                         |              |              |           |
|------------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band       | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.I.R.P.     |              | Limit (W) |
|            |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| CDMA 1xRTT | QPSK       | 824.7           | H           | 17.15            | -0.09                   | 17.06        | 0.051        | < 7       |
|            |            |                 | V           | 18.43            | -0.09                   | 18.34        | 0.068        | < 7       |
|            |            | 836.5           | H           | 16.25            | 0.04                    | 16.29        | 0.043        | < 7       |
|            |            |                 | V           | 18.87            | 0.04                    | <b>18.91</b> | <b>0.078</b> | < 7       |
|            |            | 848.3           | H           | 16.05            | 0.04                    | 16.09        | 0.041        | < 7       |
|            |            |                 | V           | 18.21            | 0.04                    | 18.25        | 0.067        | < 7       |
| CDMA EVDO  | QPSK       | 824.7           | H           | 18.07            | -0.09                   | 17.98        | 0.063        | < 7       |
|            |            |                 | V           | 18.07            | -0.09                   | 17.98        | 0.063        | < 7       |
|            |            | 836.5           | H           | 15.37            | 0.04                    | 15.41        | 0.035        | < 7       |
|            |            |                 | V           | 17.44            | 0.04                    | 17.48        | 0.056        | < 7       |
|            |            | 848.3           | H           | 15.73            | 0.04                    | 15.77        | 0.038        | < 7       |
|            |            |                 | V           | 17.99            | 0.04                    | 18.03        | 0.064        | < 7       |

| BC 1       |            |                 |             |                  |                         |              |              |           |
|------------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band       | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.R.P.       |              | Limit (W) |
|            |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| CDMA 1xRTT | QPSK       | 1908.8          | H           | 26.67            | -9.79                   | 16.88        | 0.049        | < 2       |
|            |            |                 | V           | 28.03            | -9.79                   | <b>18.24</b> | <b>0.067</b> | < 2       |
|            |            | 1851.3          | H           | 27.06            | -10.69                  | 16.37        | 0.043        | < 2       |
|            |            |                 | V           | 28.28            | -10.69                  | 17.59        | 0.057        | < 2       |
|            |            | 1880.0          | H           | 26.27            | -10.24                  | 16.03        | 0.040        | < 2       |
|            |            |                 | V           | 28.08            | -10.24                  | 17.84        | 0.061        | < 2       |
| CDMA EVDO  | QPSK       | 1908.8          | H           | 25.96            | -9.79                   | 16.17        | 0.041        | < 2       |
|            |            |                 | V           | 27.68            | -9.79                   | 17.89        | 0.062        | < 2       |
|            |            | 1851.3          | H           | 26.17            | -10.69                  | 15.48        | 0.035        | < 2       |
|            |            |                 | V           | 28.01            | -10.69                  | 17.32        | 0.054        | < 2       |
|            |            | 1880.0          | H           | 27.27            | -10.24                  | 17.03        | 0.050        | < 2       |
|            |            |                 | V           | 28.33            | -10.24                  | 18.09        | 0.064        | < 2       |

| BC 10      |            |                 |             |                  |                         |              |              |           |
|------------|------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-----------|
| Band       | Modulation | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | E.R.P.       |              | Limit (W) |
|            |            |                 |             |                  |                         | (dBm)        | (W)          |           |
| CDMA 1xRTT | QPSK       | 817.3           | H           | 16.11            | -0.22                   | 15.89        | 0.039        | < 100     |
|            |            |                 | V           | 18.46            | -0.22                   | <b>18.24</b> | <b>0.067</b> | < 100     |
|            |            | 820.0           | H           | 16.11            | -0.17                   | 15.94        | 0.039        | < 100     |
|            |            |                 | V           | 17.50            | -0.17                   | 17.33        | 0.054        | < 100     |
|            |            | 822.8           | H           | 15.60            | -0.12                   | 15.48        | 0.035        | < 100     |
|            |            |                 | V           | 17.35            | -0.12                   | 17.23        | 0.053        | < 100     |
| CDMA EVDO  | QPSK       | 817.3           | H           | 17.33            | -0.22                   | 17.11        | 0.051        | < 100     |
|            |            |                 | V           | 18.14            | -0.22                   | 17.92        | 0.062        | < 100     |
|            |            | 820.0           | H           | 15.81            | -0.17                   | 15.64        | 0.037        | < 100     |
|            |            |                 | V           | 16.66            | -0.17                   | 16.49        | 0.045        | < 100     |
|            |            | 822.8           | H           | 15.21            | -0.12                   | 15.09        | 0.032        | < 100     |
|            |            |                 | V           | 17.00            | -0.12                   | 16.88        | 0.049        | < 100     |

**Appendix B: Field Strength of Spurious Radiation**

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1852.4MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3704.800           | -52.12           | -6.10                  | -58.22          | -13.00         | -45.22         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1852.4MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3704.800           | -51.34           | -6.10                  | -57.44          | -13.00         | -44.44         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -51.54           | -5.87                  | -57.41          | -13.00         | -44.41         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -52.16           | -5.87                  | -58.03          | -13.00         | -45.03         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1907.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3815.200           | -51.42           | -5.82                  | -57.24          | -13.00         | -44.24         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1907.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 1                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3815.200           | -51.14           | -5.82                  | -56.96          | -13.00         | -43.96         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 826.4MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1652.800           | -38.91           | -13.37                 | -52.28          | -13.00         | -39.28         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 826.4MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1652.800           | -40.72           | -13.37                 | -54.09          | -13.00         | -41.09         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.6MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.200           | -40.92           | -13.10                 | -54.02          | -13.00         | -41.02         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.6MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.200           | -43.05           | -13.10                 | -56.15          | -13.00         | -43.15         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 846.6MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1693.200           | -41.38           | -12.83                 | -54.21          | -13.00         | -41.21         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 846.6MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 2                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1693.200           | -43.07           | -12.83                 | -55.90          | -13.00         | -42.90         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1712.4MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3424.800           | -48.88           | -7.31                  | -56.19          | -13.00         | -43.19         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1712.4MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3424.800           | -49.26           | -7.31                  | -56.57          | -13.00         | -43.57         | peak   |





|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1732.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3465.200           | -48.57           | -7.18                  | -55.75          | -13.00         | -42.75         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1732.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3465.200           | -48.98           | -7.18                  | -56.16          | -13.00         | -43.16         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1752.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3505.200           | -48.95           | -7.04                  | -55.99          | -13.00         | -42.99         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1752.6MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 3                 | Date:                | 09/21/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3505.200           | -49.20           | -7.04                  | -56.24          | -13.00         | -43.24         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 824.7MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1649.400           | -34.95           | -13.42                 | -48.37          | -13.00         | -35.37         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 824.7MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/22/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1649.400           | -33.64           | -13.42                 | -47.06          | -13.00         | -34.06         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.52MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.040           | -36.13           | -13.10                 | -49.23          | -13.00         | -36.23         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.52MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.040           | -34.91           | -13.10                 | -48.01          | -13.00         | -35.01         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 848.31MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1696.620           | -37.42           | -12.77                 | -50.19          | -13.00         | -37.19         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 848.31MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 4                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1696.620           | -36.26           | -12.77                 | -49.03          | -13.00         | -36.03         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1908.75MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3817.500           | -42.89           | -5.82                  | -48.71          | -13.00         | -35.71         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1908.75MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3817.500           | -44.25           | -5.82                  | -50.07          | -13.00         | -37.07         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1851.25MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3702.500           | -42.67           | -6.12                  | -48.79          | -13.00         | -35.79         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1851.25MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3702.500           | -40.26           | -6.12                  | -46.38          | -13.00         | -33.38         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -45.40           | -5.87                  | -51.27          | -13.00         | -38.27         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 5                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -44.29           | -5.87                  | -50.16          | -13.00         | -37.16         | peak   |





|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 817.25MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1634.500           | -32.55           | -13.62                 | -46.17          | -13.00         | -33.17         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 817.25MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1634.500           | -35.76           | -13.62                 | -49.38          | -13.00         | -36.38         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 820MHz                 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1640.000           | -36.57           | -13.55                 | -50.12          | -13.00         | -37.12         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 820MHz                 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1640.000           | -34.82           | -13.55                 | -48.37          | -13.00         | -35.37         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 822.75MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1645.500           | -37.81           | -13.46                 | -51.27          | -13.00         | -38.27         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 822.75MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 6                 | Date:                | 09/25/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1645.500           | -35.51           | -13.46                 | -48.97          | -13.00         | -35.97         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 824.7MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1649.400           | -31.89           | -13.42                 | -45.31          | -13.00         | -32.31         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 824.7MHz               | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1649.400           | -31.36           | -13.42                 | -44.78          | -13.00         | -31.78         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.52MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.040           | -36.23           | -13.10                 | -49.33          | -13.00         | -36.33         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 836.52MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1673.040           | -34.93           | -13.10                 | -48.03          | -13.00         | -35.03         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 848.31MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1696.620           | -37.31           | -12.77                 | -50.08          | -13.00         | -37.08         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 848.31MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 7                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1696.620           | -36.58           | -12.77                 | -49.35          | -13.00         | -36.35         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1908.75MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3817.500           | -35.86           | -5.82                  | -41.68          | -13.00         | -28.68         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1908.75MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3817.500           | -36.46           | -5.82                  | -42.28          | -13.00         | -29.28         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1851.25MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3702.500           | -40.86           | -6.12                  | -46.98          | -13.00         | -33.98         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1851.25MHz             | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3702.500           | -41.26           | -6.12                  | -47.38          | -13.00         | -34.38         | peak   |





|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -41.82           | -5.87                  | -47.69          | -13.00         | -34.69         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 1880MHz                | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 8                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 3760.000           | -39.52           | -5.87                  | -45.39          | -13.00         | -32.39         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 817.25MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1634.500           | -29.83           | -13.62                 | -43.45          | -13.00         | -30.45         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 817.25MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1634.500           | -27.13           | -13.62                 | -40.75          | -13.00         | -27.75         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 820MHz                 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1640.000           | -27.16           | -13.55                 | -40.71          | -13.00         | -27.71         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 820MHz                 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1640.000           | -29.58           | -13.55                 | -43.13          | -13.00         | -30.13         | peak   |



|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 822.75MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Horizontal             |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1645.500           | -25.16           | -13.46                 | -38.62          | -13.00         | -25.62         | peak   |

|             |                        |                      |              |
|-------------|------------------------|----------------------|--------------|
| Standard:   | FCC Part 22H/24E/27/90 | Test Distance:       | 3m           |
| Test item:  | Harmonic               | Power:               | AC 120V/60Hz |
| Frequency:  | 822.75MHz              | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:       | Mode 9                 | Date:                | 09/29/2017   |
| Ant.Polar.: | Vertical               |                      |              |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct Factor<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|
| 1   | 1645.500           | -22.40           | -13.46                 | -35.86          | -13.00         | -22.86         | peak   |