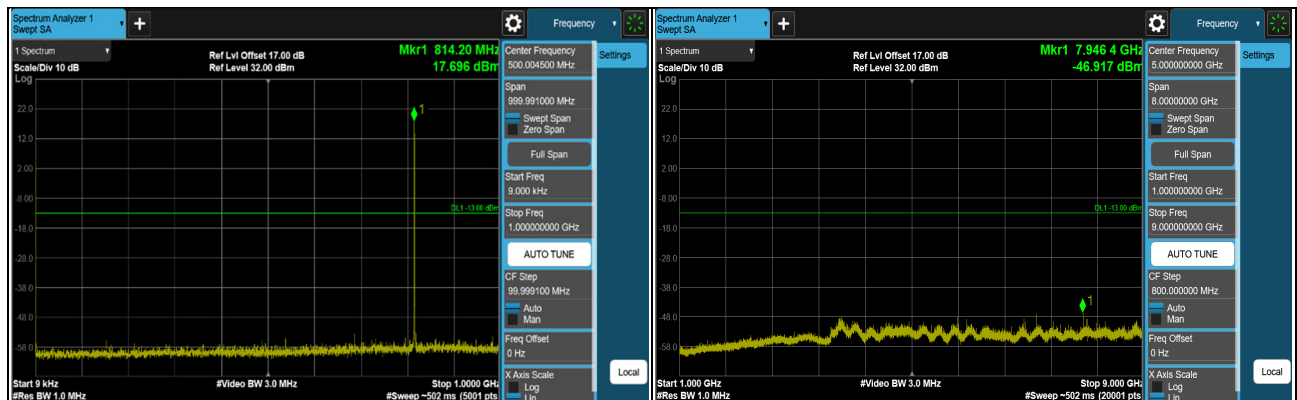
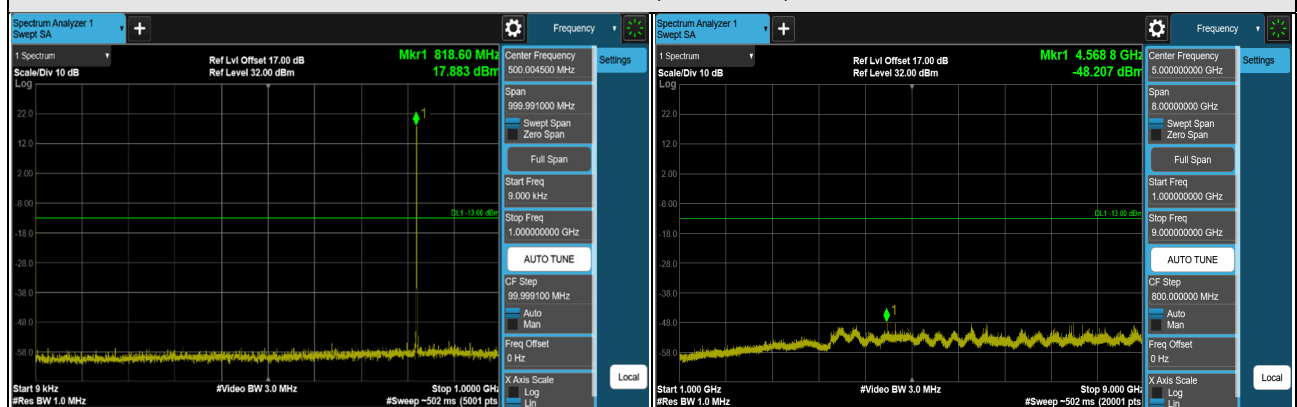


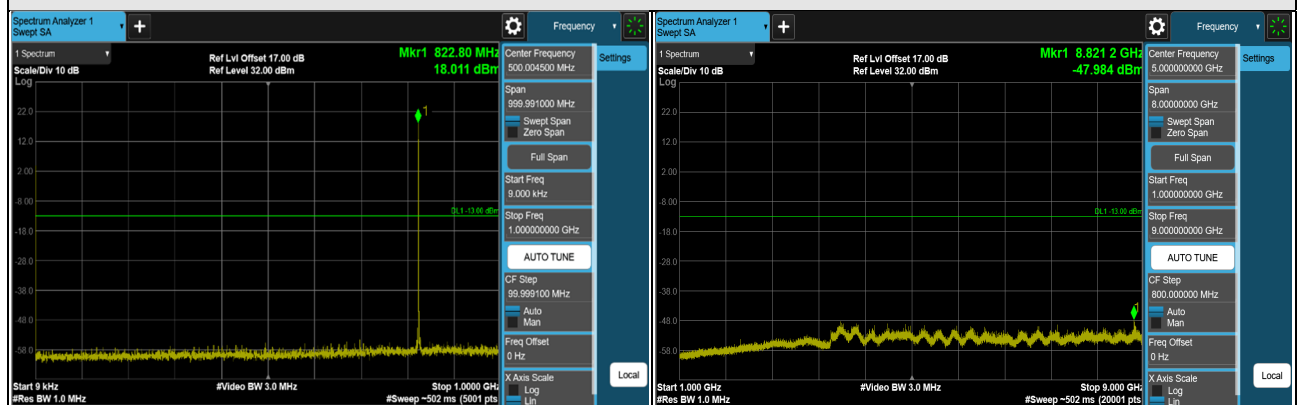
## LTE Band 26 (Channel Bandwidth 1.4MHz)



CH 26697 (814.7MHz)



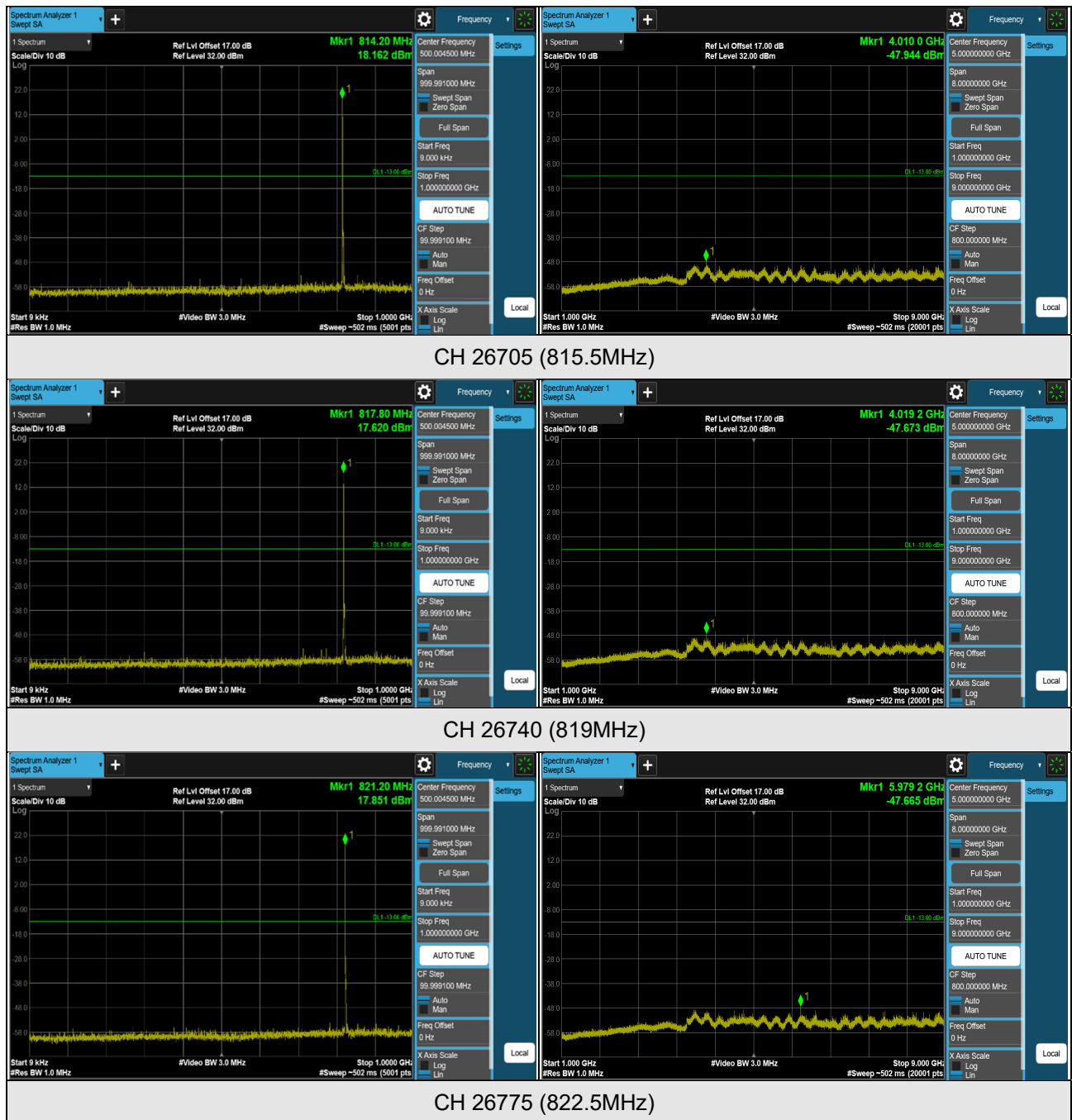
CH 26740 (819MHz)



CH 26783 (823.3MHz)

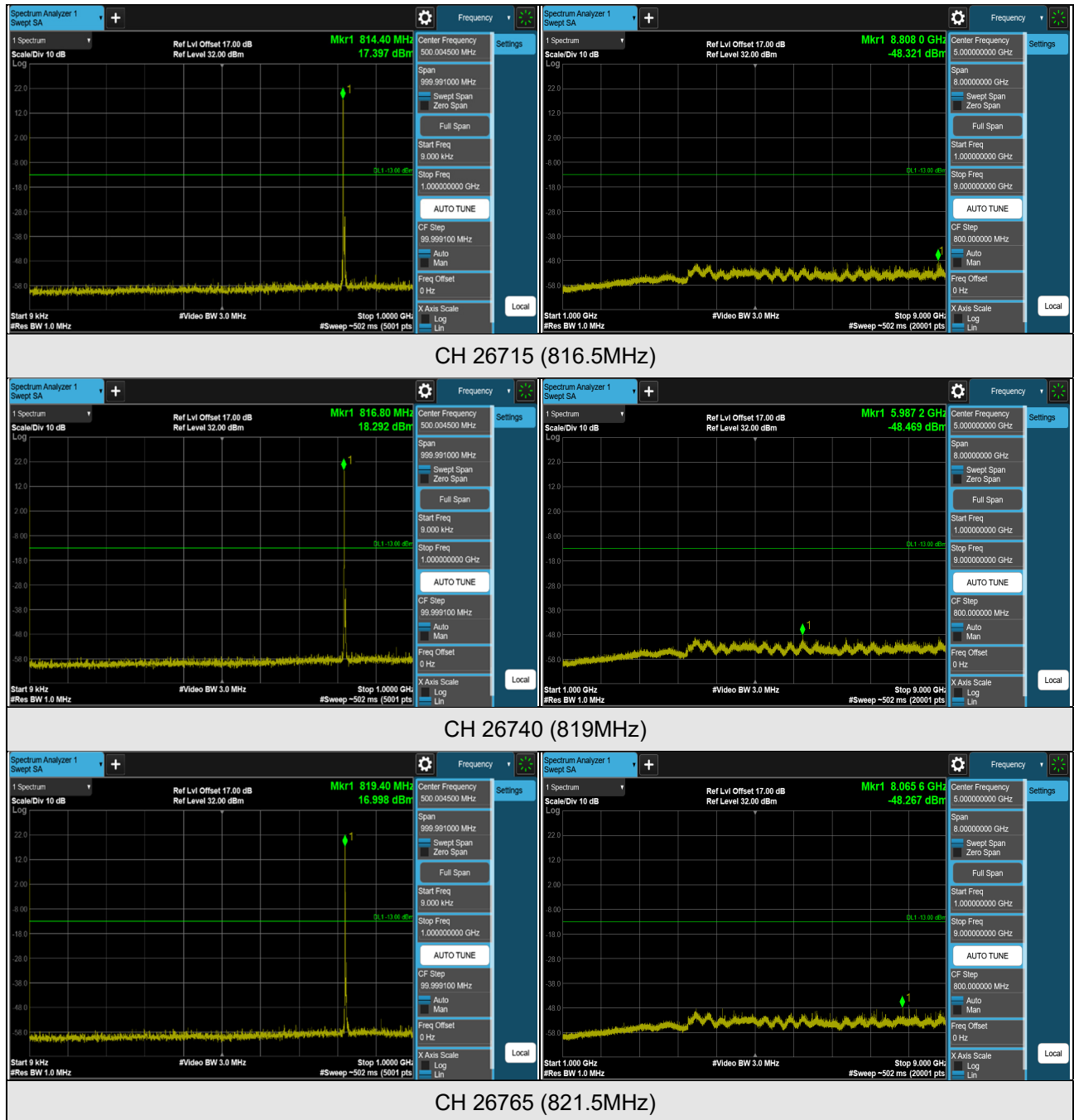
\*The 9kHz signal over the limit is from Spectrum.

## LTE Band 26 (Channel Bandwidth 3MHz)



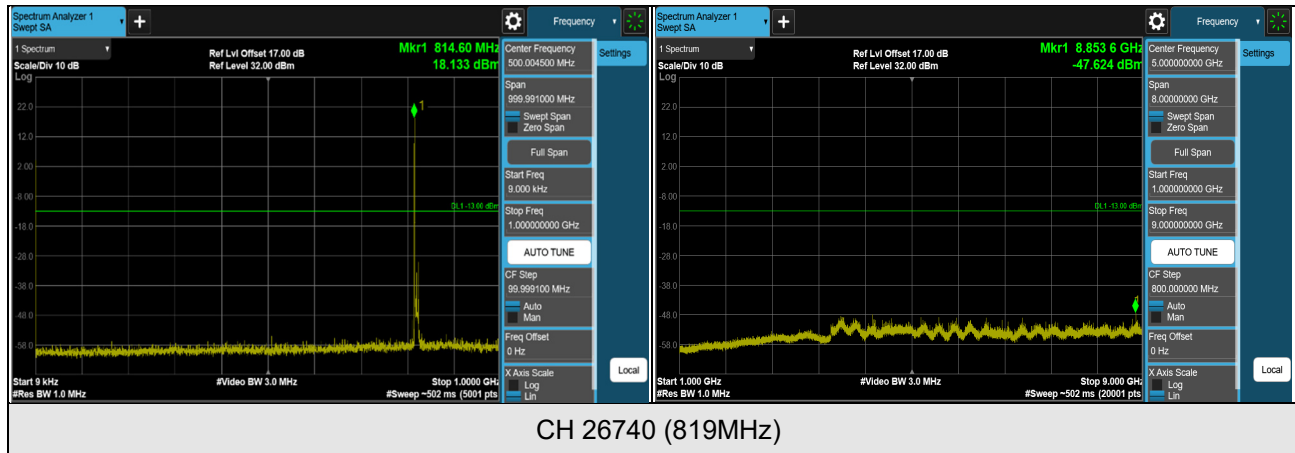
\*The 9kHz signal over the limit is from Spectrum.

## LTE Band 26 (Channel Bandwidth 5MHz)



\*The 9kHz signal over the limit is from Spectrum.

## LTE Band 26 (Channel Bandwidth 10MHz)



\*The 9kHz signal over the limit is from Spectrum.

## 4.7 Radiated Emission Measurement

### 4.7.1 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  $-40\text{ dBm}$ .

### 4.7.2 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:

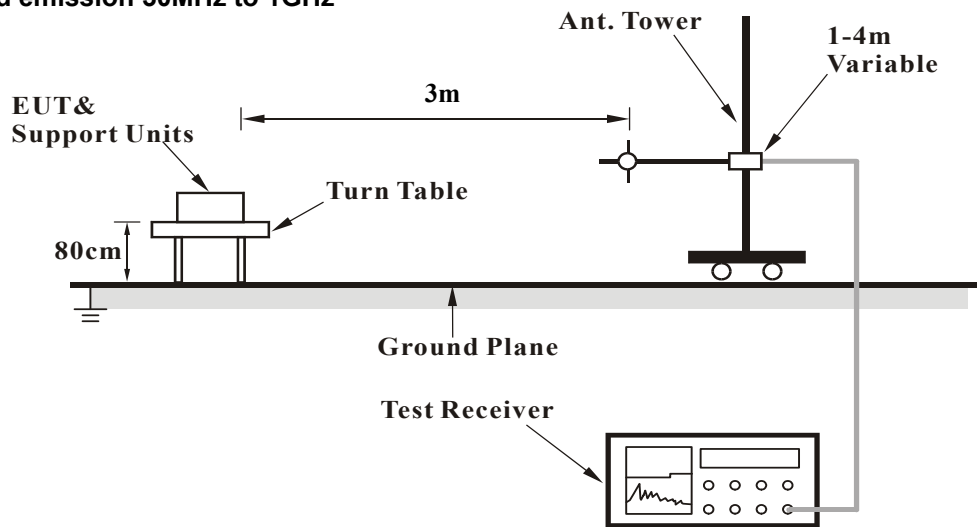
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:  
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

### 4.7.3 Deviation from Test Standard

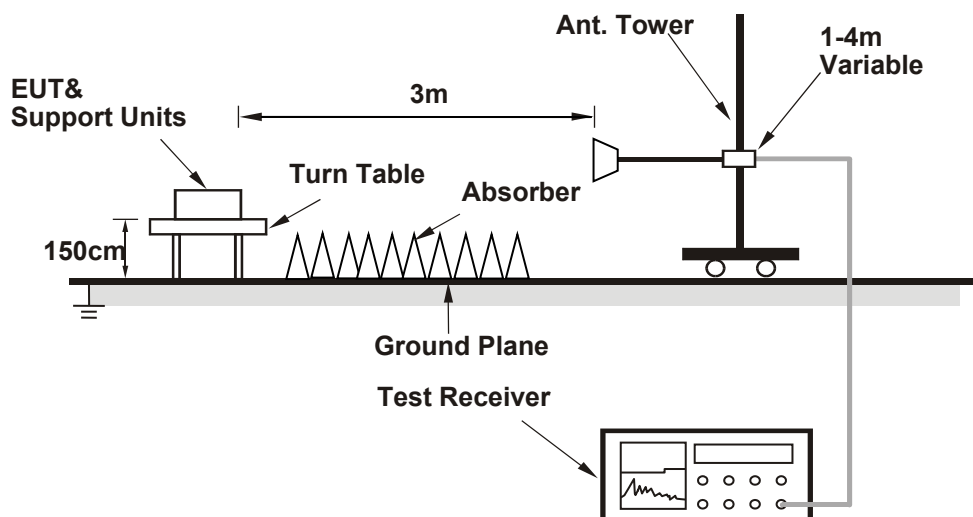
No deviation.

#### 4.7.4 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).

#### 4.7.5 Test Results

Below 1GHz

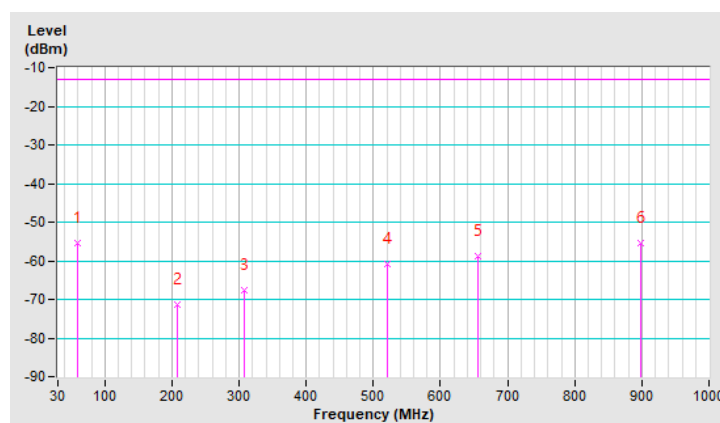
LTE Band 14 (Channel Bandwidth 10MHz)

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 64%RH                | Input Power     | 4.0Vdc         |
| Tested By                | Vincent 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                                                    | 60.07              | -55.37       | -13.00         | -42.37         | 1.20 H                   | 17                         | 55.51                  | -110.88                        |
| 2                                                    | 207.51             | -71.27       | -13.00         | -58.27         | 1.39 H                   | 260                        | 42.36                  | -113.63                        |
| 3                                                    | 307.42             | -67.76       | -13.00         | -54.76         | 2.21 H                   | 124                        | 41.39                  | -109.15                        |
| 4                                                    | 521.79             | -60.80       | -13.00         | -47.80         | 2.37 H                   | 13                         | 42.30                  | -103.10                        |
| 5                                                    | 656.62             | -58.80       | -13.00         | -45.80         | 2.51 H                   | 10                         | 41.11                  | -99.91                         |
| 6                                                    | 898.15             | -55.58       | -13.00         | -42.58         | 3.41 H                   | 95                         | 40.31                  | -95.89                         |

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.

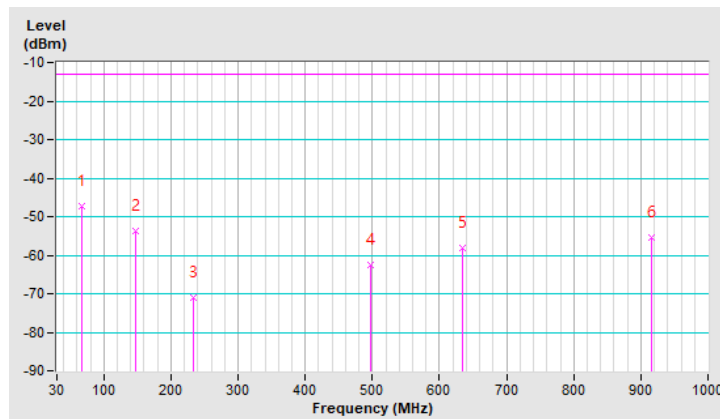


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23330<br>(793.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 64%RH                | Input Power     | 4.0Vdc         |
| Tested By                | Vincent Chen                   |                 |                |

| 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                                                 | 66.86           | -47.16    | -13.00      | -34.16      | 1.52 V             | 2                    | 64.50            | -111.66                  |
| 2                                                 | 147.37          | -53.75    | -13.00      | -40.75      | 3.57 V             | 53                   | 55.83            | -109.58                  |
| 3                                                 | 232.73          | -71.01    | -13.00      | -58.01      | 1.41 V             | 150                  | 41.82            | -112.83                  |
| 4                                                 | 496.57          | -62.55    | -13.00      | -49.55      | 2.96 V             | 299                  | 41.01            | -103.56                  |
| 5                                                 | 634.31          | -58.28    | -13.00      | -45.28      | 2.57 V             | 292                  | 41.85            | -100.13                  |
| 6                                                 | 916.58          | -55.37    | -13.00      | -42.37      | 1.32 V             | 246                  | 40.03            | -95.40                   |

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.



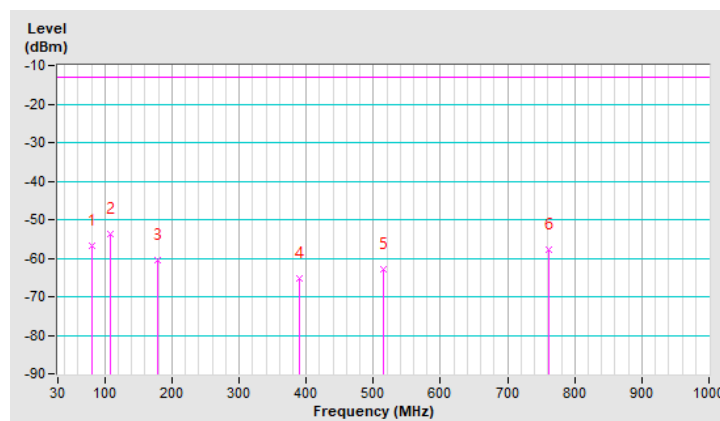
### LTE Band 26 (Channel Bandwidth 5MHz)

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26715<br>(816.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 64%RH                | Input Power     | 4.0Vdc         |
| Tested By                | Vincent 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                                                    | 80.44              | -56.89       | -13.00         | -43.89         | 1.20 H                   | 55                         | 58.22                  | -115.11                        |
| 2                                                    | 108.57             | -53.72       | -13.00         | -40.72         | 1.37 H                   | 64                         | 58.96                  | -112.68                        |
| 3                                                    | 179.38             | -60.54       | -13.00         | -47.54         | 2.59 H                   | 72                         | 51.04                  | -111.58                        |
| 4                                                    | 388.90             | -65.12       | -13.00         | -52.12         | 1.41 H                   | 356                        | 41.69                  | -106.81                        |
| 5                                                    | 514.03             | -62.86       | -13.00         | -49.86         | 3.73 H                   | 4                          | 40.40                  | -103.26                        |
| 6                                                    | 761.38             | -57.76       | -13.00         | -44.76         | 2.47 H                   | 18                         | 40.12                  | -97.88                         |

#### 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.

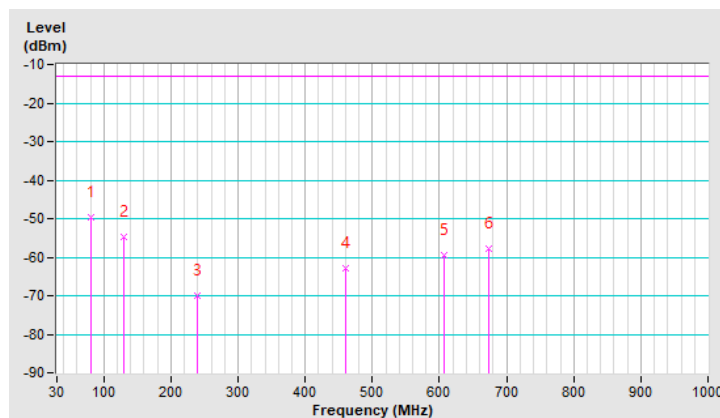


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 26715<br>(816.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 64%RH                | Input Power     | 4.0Vdc         |
| Tested By                | Vincent Chen                   |                 |                |

| 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                                                 | 80.44           | -49.76    | -13.00      | -36.76      | 1.22 V             | 11                   | 65.35            | -115.11                  |
| 2                                                 | 128.94          | -54.65    | -13.00      | -41.65      | 1.38 V             | 18                   | 56.22            | -110.87                  |
| 3                                                 | 238.55          | -70.11    | -13.00      | -57.11      | 2.95 V             | 110                  | 42.16            | -112.27                  |
| 4                                                 | 459.71          | -62.98    | -13.00      | -49.98      | 3.36 V             | 157                  | 41.50            | -104.48                  |
| 5                                                 | 606.18          | -59.64    | -13.00      | -46.64      | 1.04 V             | 2                    | 41.15            | -100.79                  |
| 6                                                 | 674.08          | -57.85    | -13.00      | -44.85      | 2.04 V             | 116                  | 41.65            | -99.50                   |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -60.08        | -40.00         | -20.08         | 2.45 H                   | 119                        | 59.87                  | -119.95                        |
| 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            | -57.23        | -40.00         | -17.23         | 1.59 V                   | 182                        | 62.72                  | -119.95                        |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -60.26        | -40.00         | -20.26         | 2.51 H                   | 123                        | 59.72                  | -119.98                        |
| 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            | -57.60        | -40.00         | -17.60         | 1.64 V                   | 185                        | 62.38                  | -119.98                        |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -60.88        | -40.00         | -20.88         | 2.57 H                   | 127                        | 59.13                  | -120.01                        |
| 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            | -57.97        | -40.00         | -17.97         | 1.69 V                   | 183                        | 62.04                  | -120.01                        |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -59.78        | -40.00         | -19.78         | 2.43 H                   | 116                        | 60.20                  | -119.98                        |
| 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>-56.89</b> | <b>-40.00</b>  | <b>-16.89</b>  | <b>1.56 V</b>            | <b>178</b>                 | <b>63.09</b>           | <b>-119.98</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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -59.05       | -13.00         | -46.05         | 2.43 H                   | 121                        | 63.16                  | -122.21                        |
| 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            | -59.55       | -13.00         | -46.55         | 1.35 V                   | 177                        | 62.66                  | -122.21                        |

## 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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.86       | -13.00         | -45.86         | 2.41 H                   | 182                        | 63.35                  | -122.21                        |
| 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            | -59.49       | -13.00         | -46.49         | 1.53 V                   | 202                        | 62.72                  | -122.21                        |

## 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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.82       | -13.00         | -45.82         | 2.21 H                   | 152                        | 63.38                  | -122.20                        |
| 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            | -59.45       | -13.00         | -46.45         | 2.41 V                   | 139                        | 62.75                  | -122.20                        |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.86       | -13.00         | -45.86         | 2.42 H                   | 136                        | 63.35                  | -122.21                        |
| 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            | -59.34       | -13.00         | -46.34         | 1.12 V                   | 162                        | 62.87                  | -122.21                        |

#### 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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.53       | -13.00         | -45.53         | 2.55 H                   | 140                        | 63.68                  | -122.21                        |
| 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            | -59.06       | -13.00         | -46.06         | 1.08 V                   | 184                        | 63.15                  | -122.21                        |

#### 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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.78       | -13.00         | -45.78         | 2.42 H                   | 138                        | 63.42                  | -122.20                        |
| 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            | -59.22       | -13.00         | -46.22         | 1.23 V                   | 164                        | 62.98                  | -122.20                        |

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 | 22deg. C, 64%RH                | Input Power     | 4.0Vdc      |
| Tested By                | Vincent 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            | -58.64       | -13.00         | -45.64         | 2.63 H                   | 139                        | 63.57                  | -122.21                        |
| 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            | -59.19       | -13.00         | -46.19         | 1.28 V                   | 166                        | 63.02                  | -122.21                        |

#### 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.

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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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