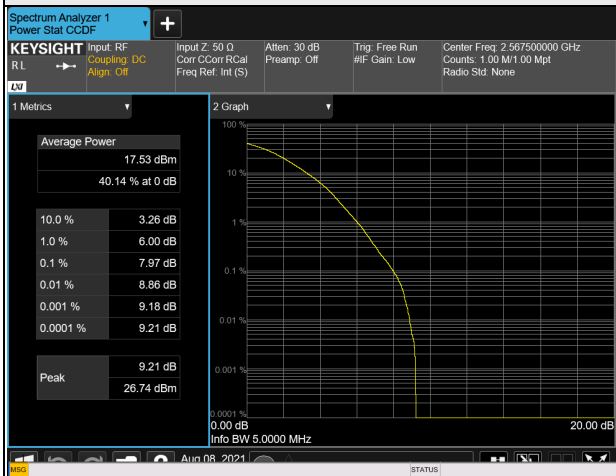
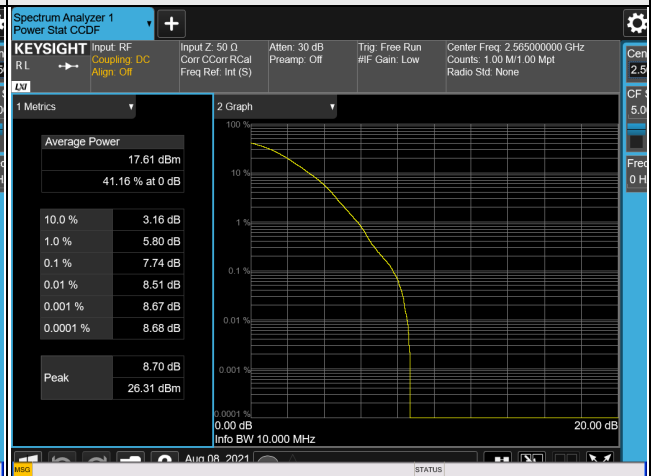


## Spectrum Plot of Worst Value

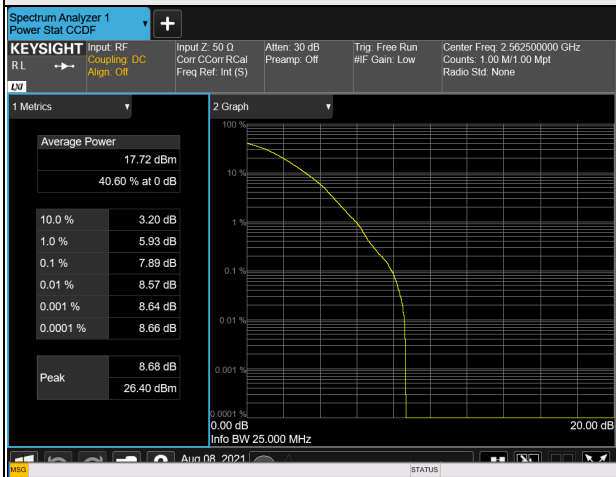
### 5MHz / 256QAM



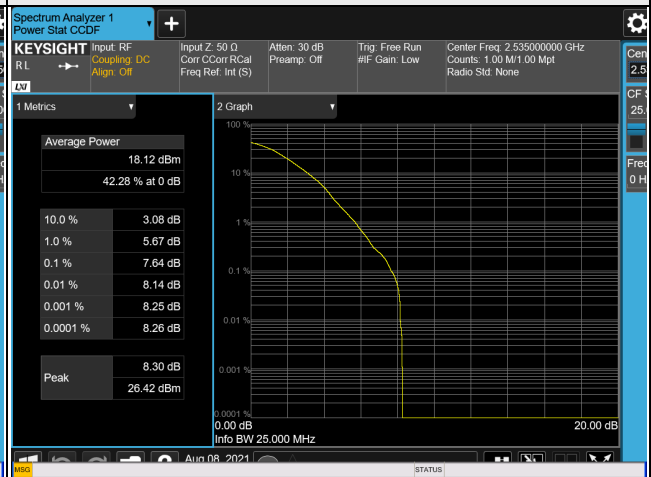
### 10MHz / 256QAM



### 15MHz / 256QAM



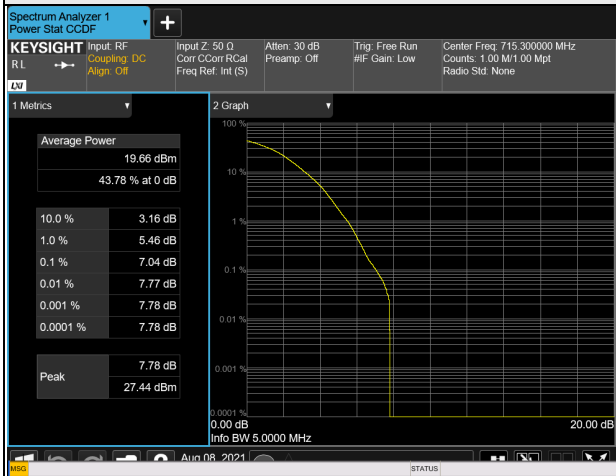
### 20MHz / 256QAM



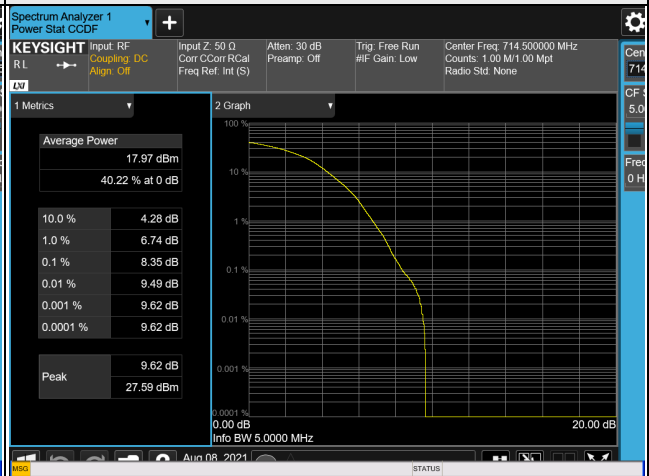
| LTE Band 12, Channel Bandwidth 1.4MHz |                 |                            |       |       |        |
|---------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23017                                 | 699.7           | 3.84                       | 5.43  | 6.23  | 6.52   |
| 23095                                 | 707.5           | 3.64                       | 5.14  | 6.01  | 6.63   |
| 23173                                 | 715.3           | 3.79                       | 5.40  | 5.97  | 7.04   |
| LTE Band 12, Channel Bandwidth 3MHz   |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23025                                 | 700.5           | 3.56                       | 5.28  | 6.20  | 6.65   |
| 23095                                 | 707.5           | 3.49                       | 5.01  | 5.85  | 6.58   |
| 23165                                 | 714.5           | 3.60                       | 5.37  | 6.44  | 8.35   |
| LTE Band 12, Channel Bandwidth 5MHz   |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23035                                 | 701.5           | 3.66                       | 5.34  | 6.33  | 6.66   |
| 23095                                 | 707.5           | 3.48                       | 4.89  | 5.76  | 6.45   |
| 23155                                 | 713.5           | 3.77                       | 5.51  | 6.52  | 6.92   |
| LTE Band 12, Channel Bandwidth 10MHz  |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23060                                 | 704.0           | 3.66                       | 5.39  | 6.42  | 6.77   |
| 23095                                 | 707.5           | 3.38                       | 4.92  | 5.92  | 6.65   |
| 23130                                 | 711.0           | 3.51                       | 4.92  | 5.90  | 6.80   |

## Spectrum Plot of Worst Value

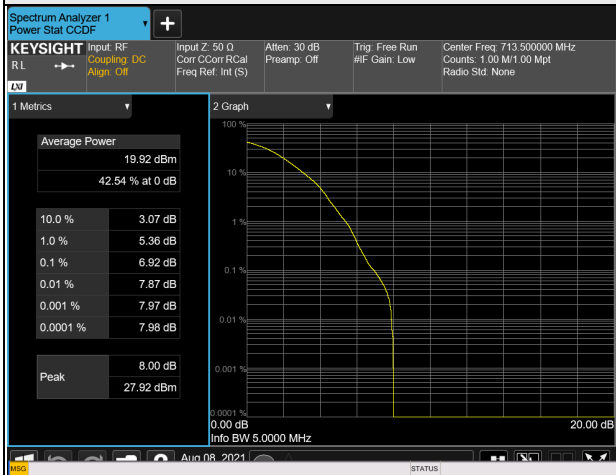
### 1.4MHz / 256QAM



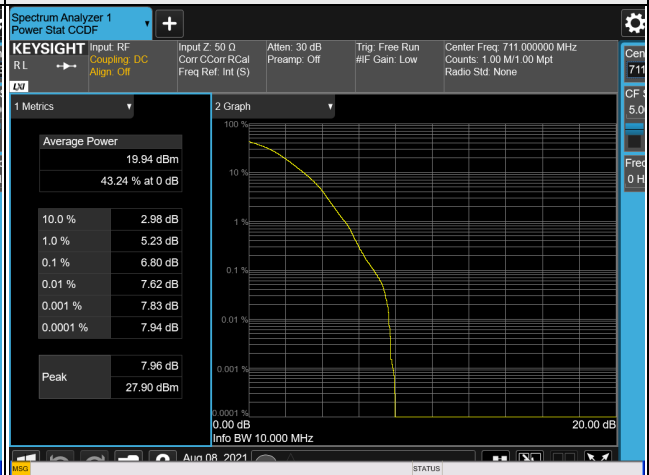
### 3MHz / 256QAM



### 5MHz / 256QAM



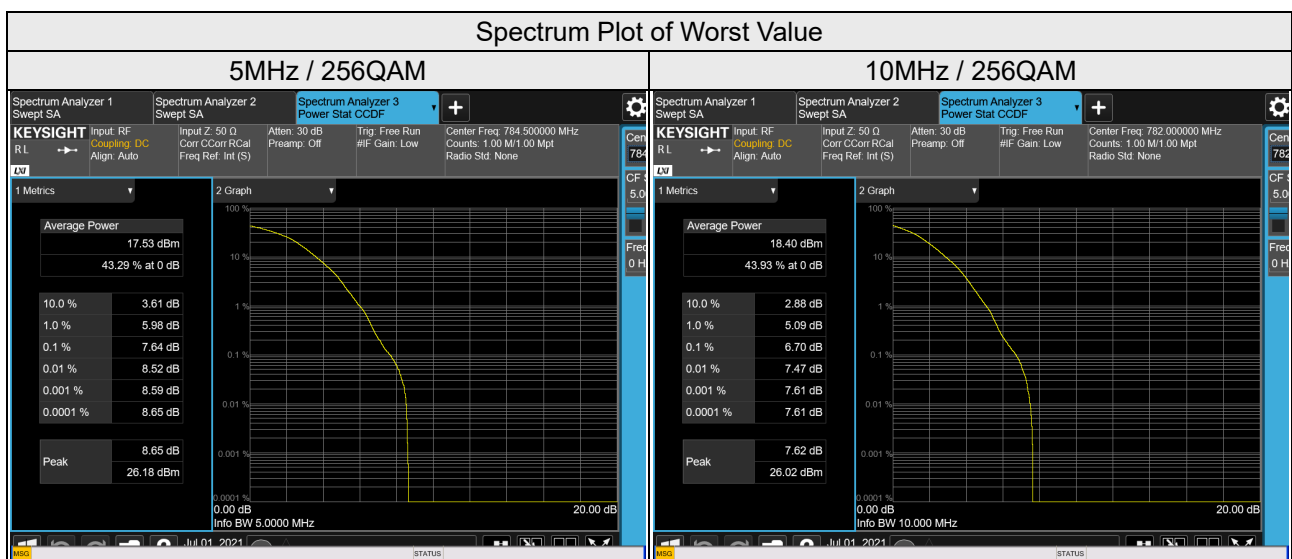
### 10MHz / 256QAM



| LTE Band 13, Channel Bandwidth 5MHz |                 |                            |       |       |        |
|-------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                             | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                     |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23205                               | 779.5           | 3.26                       | 3.98  | 6.14  | 6.78   |
| 23230                               | 782.0           | 3.25                       | 4.01  | 6.10  | 6.87   |
| 23255                               | 784.5           | 3.34                       | 4.04  | 6.52  | 7.64   |

| LTE Band 13, Channel Bandwidth 10MHz |                 |                            |       |       |        |
|--------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 23230                                | 782.0           | 3.18                       | 3.92  | 6.14  | 6.70   |

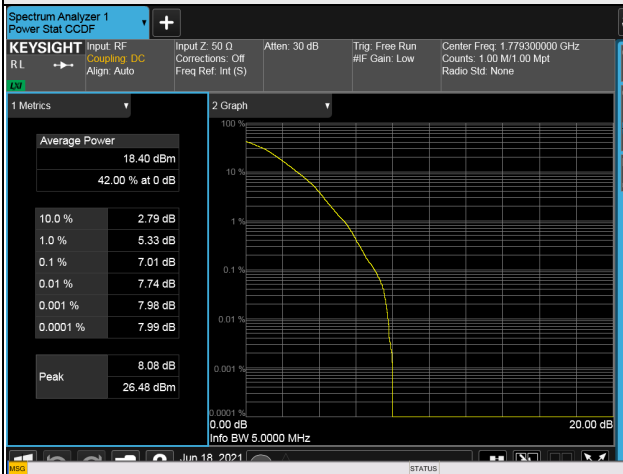


| LTE Band 66, Channel Bandwidth 1.4MHz |                 |                            |       |       |        |
|---------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 131979                                | 1710.7          | 3.51                       | 4.35  | 6.40  | 6.83   |
| 132322                                | 1745.0          | 3.90                       | 5.36  | 6.61  | 6.83   |
| 132665                                | 1779.3          | 3.91                       | 5.38  | 6.71  | 7.01   |
| LTE Band 66, Channel Bandwidth 3MHz   |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 131987                                | 1711.5          | 3.52                       | 4.27  | 6.30  | 7.03   |
| 132322                                | 1745.0          | 3.59                       | 5.34  | 6.64  | 7.18   |
| 132657                                | 1778.5          | 3.64                       | 5.53  | 6.69  | 7.19   |
| LTE Band 66, Channel Bandwidth 5MHz   |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 131997                                | 1712.5          | 3.49                       | 4.22  | 6.26  | 7.48   |
| 132322                                | 1745.0          | 3.62                       | 5.44  | 6.71  | 6.97   |
| 132647                                | 1777.5          | 3.71                       | 5.62  | 6.85  | 7.32   |
| LTE Band 66, Channel Bandwidth 10MHz  |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 132022                                | 1715.0          | 3.52                       | 4.39  | 6.26  | 6.97   |
| 132322                                | 1745.0          | 3.58                       | 5.53  | 6.82  | 7.02   |
| 132622                                | 1775.0          | 3.65                       | 5.52  | 6.93  | 7.41   |
| LTE Band 66, Channel Bandwidth 15MHz  |                 |                            |       |       |        |
| Channel                               | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                       |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 132047                                | 1717.5          | 3.54                       | 4.36  | 6.22  | 6.98   |
| 132322                                | 1745.0          | 3.57                       | 5.55  | 6.73  | 6.36   |
| 132597                                | 1772.5          | 3.60                       | 5.54  | 6.79  | 7.34   |

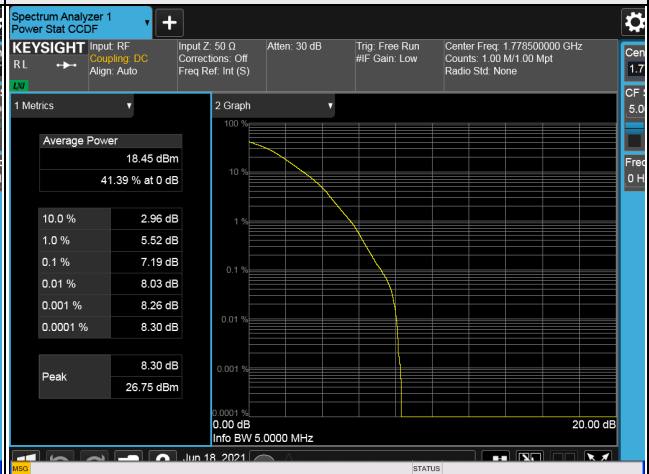
| LTE Band 66, Channel Bandwidth 20MHz |                 |                            |       |       |        |
|--------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 132072                               | 1720.0          | 3.50                       | 4.30  | 6.23  | 6.49   |
| 132322                               | 1745.0          | 3.58                       | 5.41  | 6.83  | 7.09   |
| 132572                               | 1770.0          | 3.51                       | 5.25  | 6.44  | 7.10   |

## Spectrum Plot of Worst Value

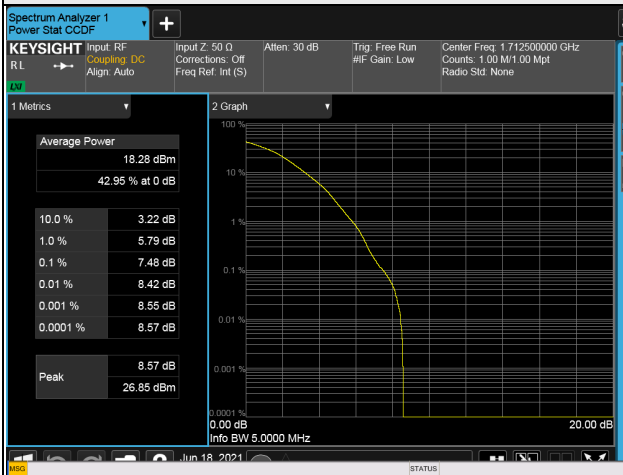
### 1.4MHz / 256QAM



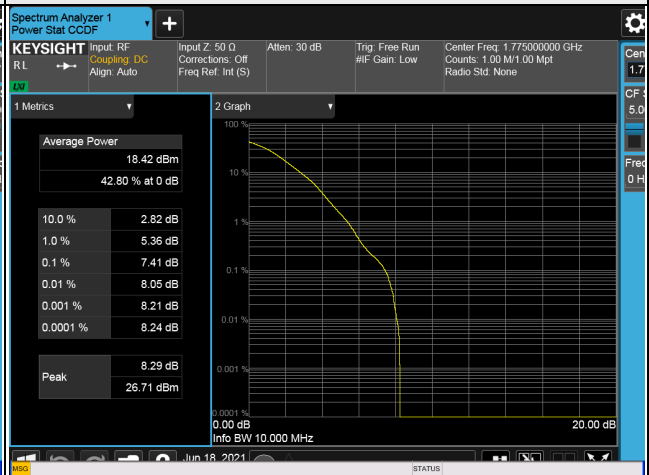
### 3MHz / 256QAM



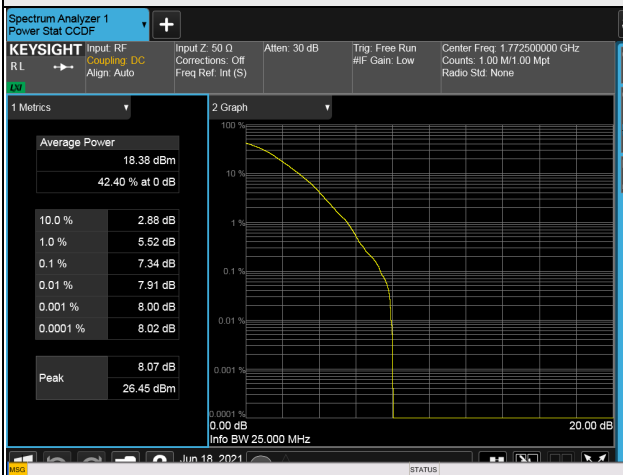
### 5MHz / 256QAM



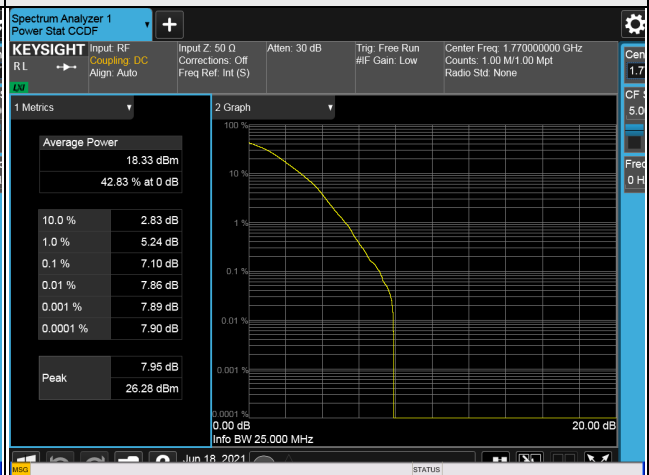
### 10MHz / 256QAM



### 15MHz / 256QAM



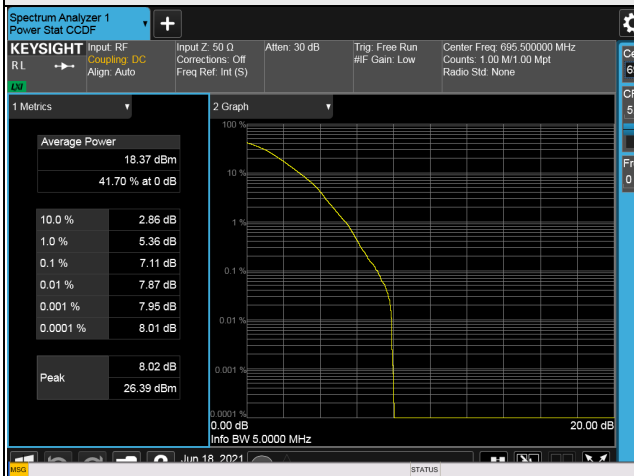
### 20MHz / 256QAM



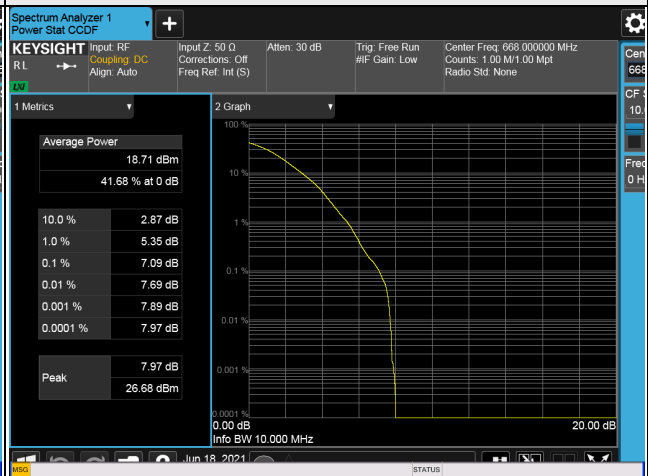
| LTE Band 71, Channel Bandwidth 5MHz  |                 |                            |       |       |        |
|--------------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 133147                               | 665.5           | 3.56                       | 5.16  | 6.26  | 7.07   |
| 133297                               | 680.5           | 3.72                       | 5.45  | 6.91  | 6.96   |
| 133447                               | 695.5           | 3.66                       | 5.39  | 6.80  | 7.11   |
| LTE Band 71, Channel Bandwidth 10MHz |                 |                            |       |       |        |
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 133172                               | 668.0           | 3.56                       | 5.29  | 6.18  | 7.09   |
| 133297                               | 680.5           | 3.61                       | 5.26  | 6.53  | 6.88   |
| 133422                               | 693.0           | 3.65                       | 5.41  | 6.79  | 7.06   |
| LTE Band 71, Channel Bandwidth 15MHz |                 |                            |       |       |        |
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 133197                               | 670.5           | 3.48                       | 5.28  | 6.59  | 7.27   |
| 133297                               | 680.5           | 3.48                       | 5.17  | 6.48  | 7.03   |
| 133397                               | 690.5           | 3.71                       | 5.63  | 6.54  | 7.64   |
| LTE Band 71, Channel Bandwidth 20MHz |                 |                            |       |       |        |
| Channel                              | Frequency (MHz) | Peak To Average Ratio (dB) |       |       |        |
|                                      |                 | QPSK                       | 16QAM | 64QAM | 256QAM |
| 133222                               | 673.0           | 3.49                       | 5.36  | 6.77  | 7.40   |
| 133297                               | 680.5           | 3.47                       | 5.20  | 6.59  | 7.13   |
| 133372                               | 688.0           | 3.61                       | 5.44  | 6.64  | 6.99   |

## Spectrum Plot of Worst Value

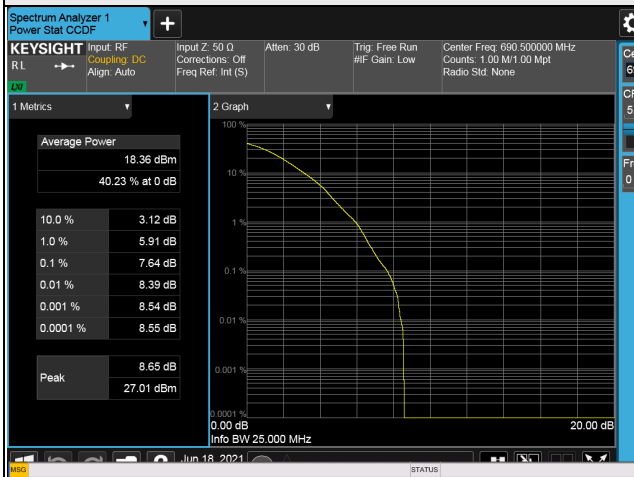
### 5MHz / 256QAM



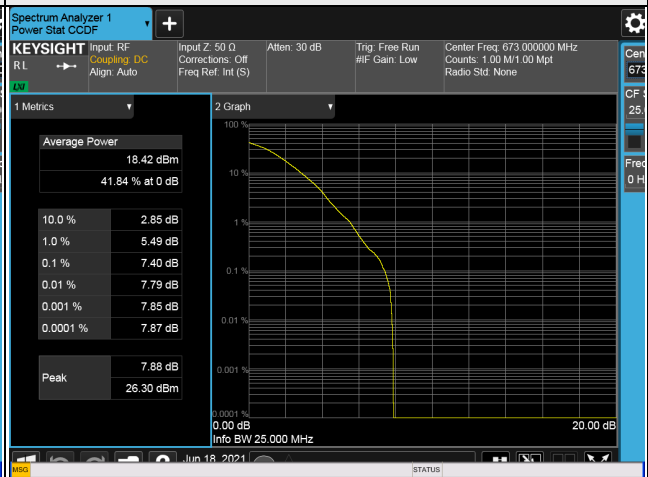
### 10MHz / 256QAM



### 15MHz / 256QAM



### 20MHz / 256QAM



## 4.7 Conducted Spurious Emissions

### 4.7.1 Limits of Conducted Spurious Emissions Measurement

For LTE Band 4, 66:

According to FCC 27.53(h), for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log (P)$  dB.

For LTE Band 7:

According to FCC 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log (P)$  dB. The emission limit equal to -25dBm.

For LTE Band 12, 71:

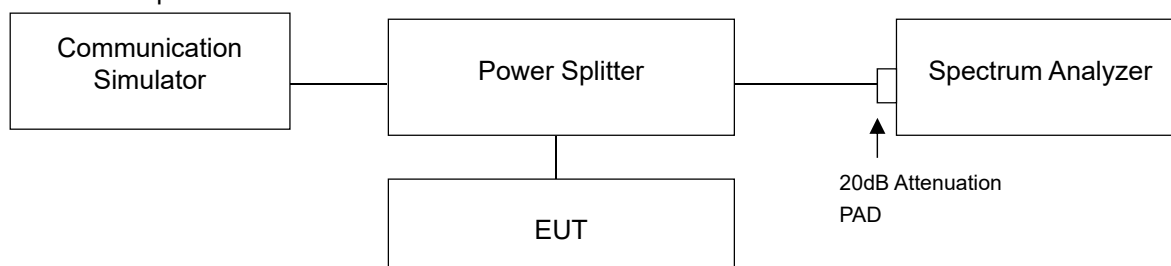
According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. The limit of emissions is equal to -13 dBm.

For LTE Band 13:

According to FCC 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB. The limit of emissions is equal to -13 dBm.

According to FCC 27.53(f), for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 dBm.

### 4.7.2 Test Setup



### 4.7.3 Test Procedure

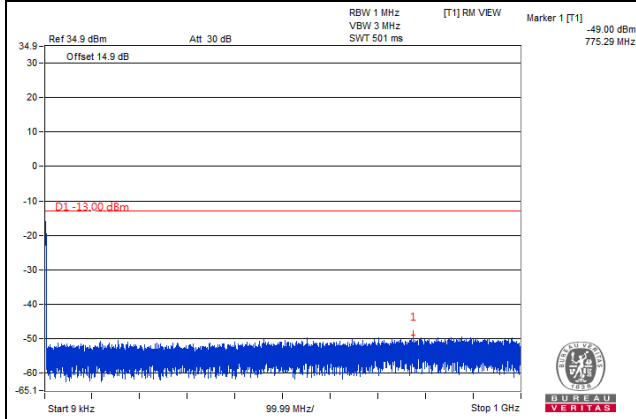
- All measurements were done at 3 channels: low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz up to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower. 20dB attenuation pad is connected with spectrum.
- The fundamental frequency above 1GHz, the spectrum set RBW = 1MHz, VBW = 3MHz.
- The fundamental frequency below 1GHz, the spectrum set RBW  $\geq 100$  kHz, VBW  $\geq 3 \times$  RBW.
- Measurement refer to ANSI C63.26 section 5.7.3.

#### 4.7.4 Test Results

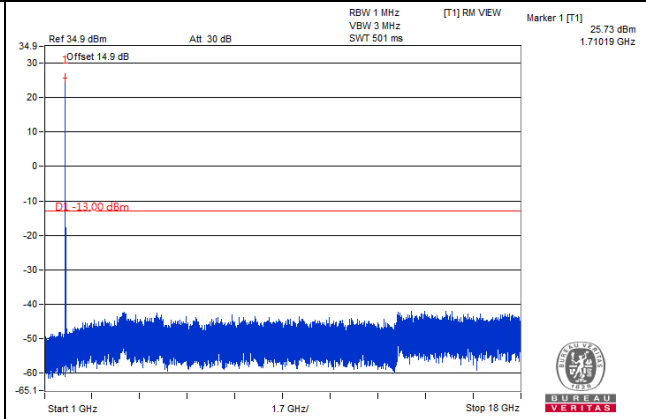
LTE Band 4, Channel Bandwidth 1.4MHz

Channel 19957 (1710.7MHz)

Frequency Range : 9kHz ~ 1GHz

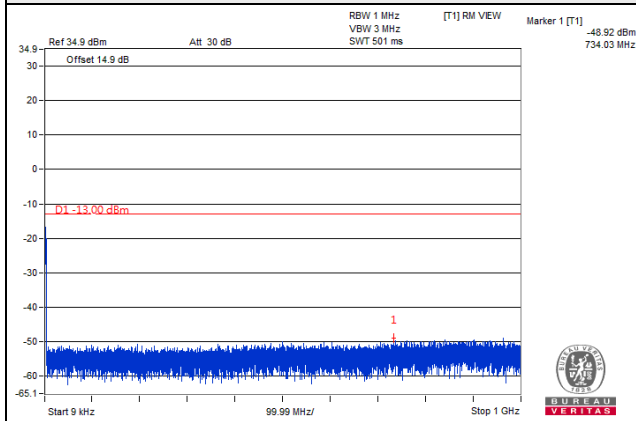


Frequency Range : 1GHz ~ 18GHz

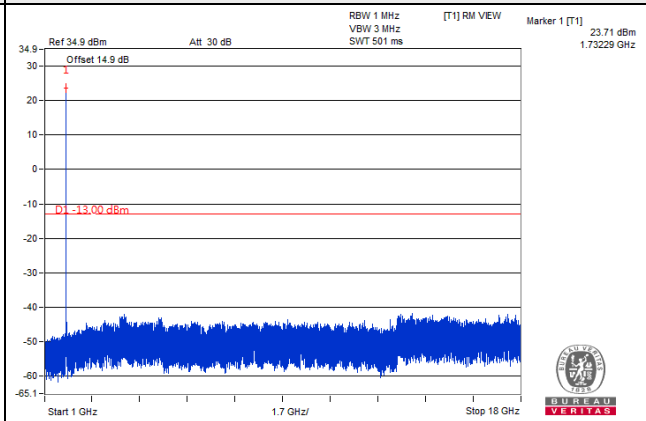


Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

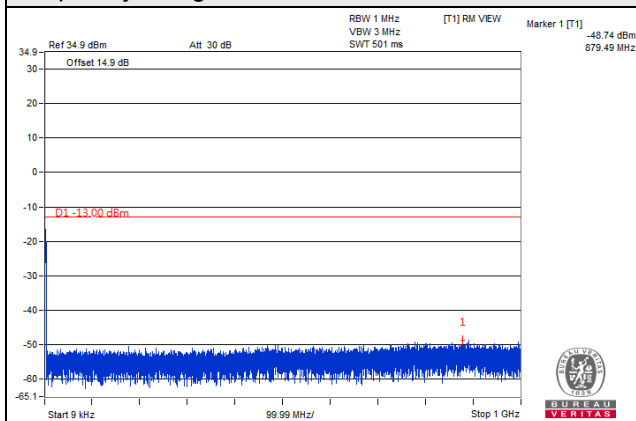


Frequency Range : 1GHz ~ 18GHz

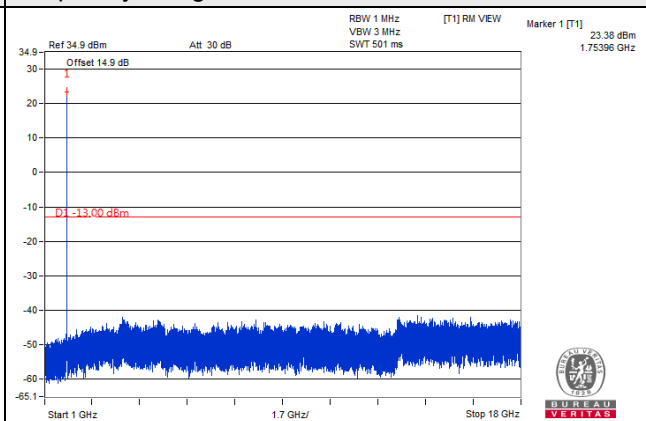


Channel 20393 (1754.3MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

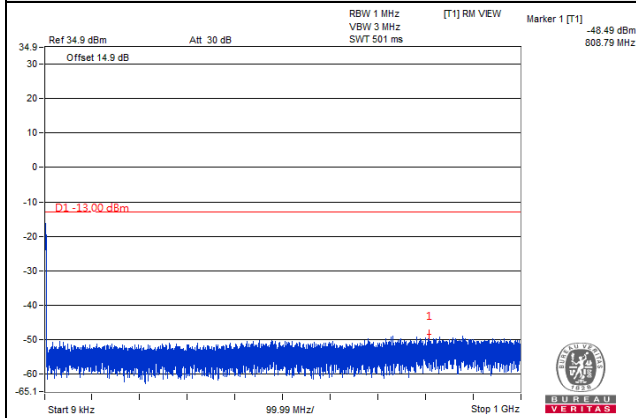


\*The 9 kHz tone is from the spectrum analyzer.

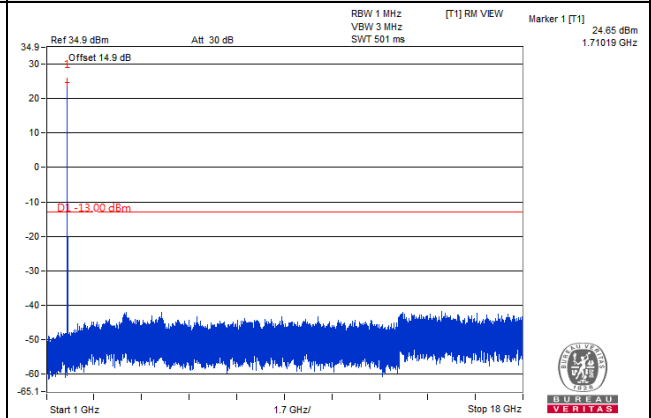
## LTE Band 4, Channel Bandwidth 3MHz

Channel 19965 (1711.5MHz)

Frequency Range : 9kHz ~ 1GHz

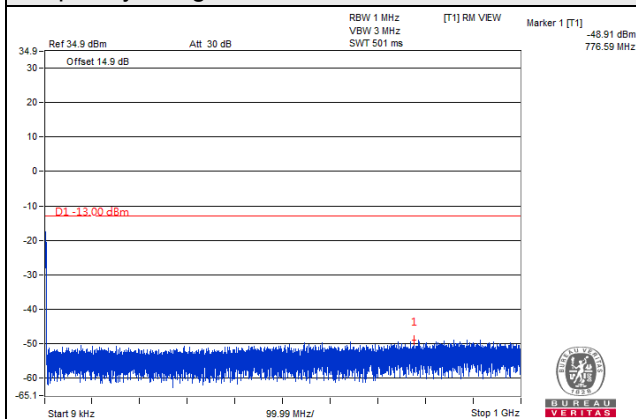


Frequency Range : 1GHz ~ 18GHz

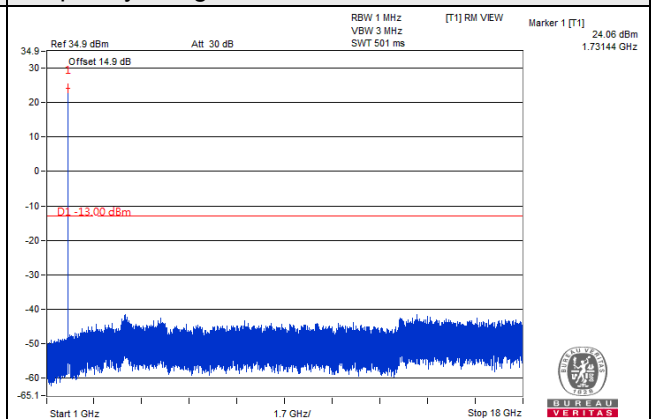


Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

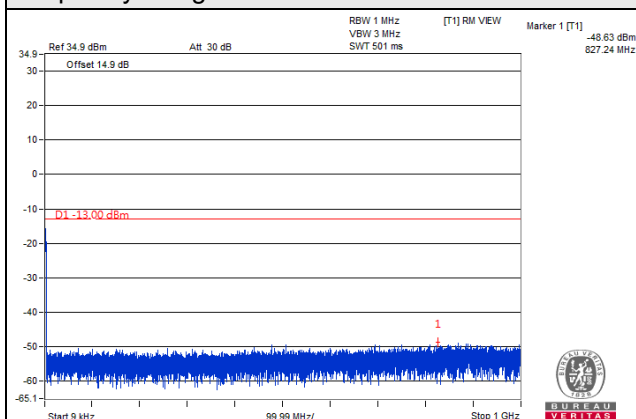


Frequency Range : 1GHz ~ 18GHz

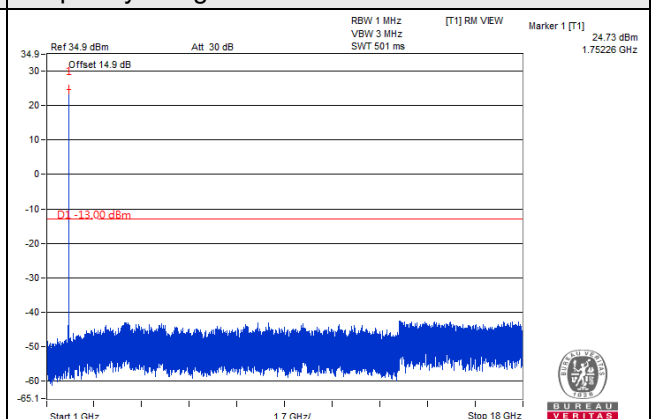


Channel 20385 (1753.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

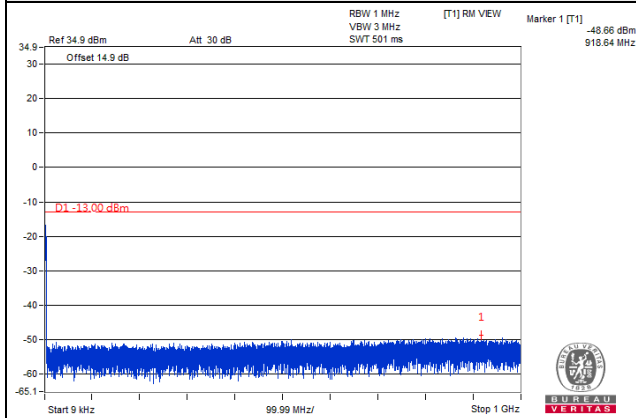


\*The 9 kHz tone is from the spectrum analyzer.

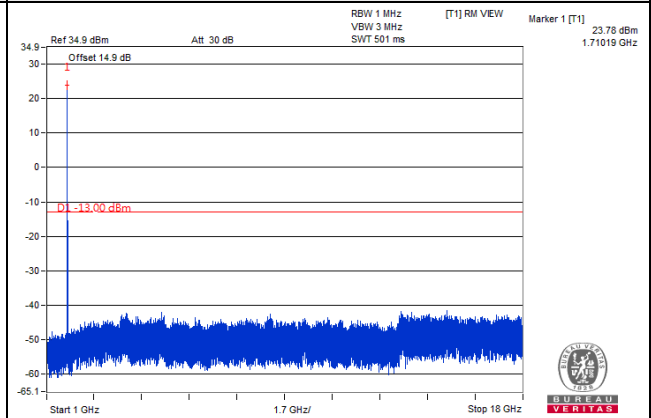
# LTE Band 4, Channel Bandwidth 5MHz

Channel 19975 (1712.5MHz)

Frequency Range : 9kHz ~ 1GHz

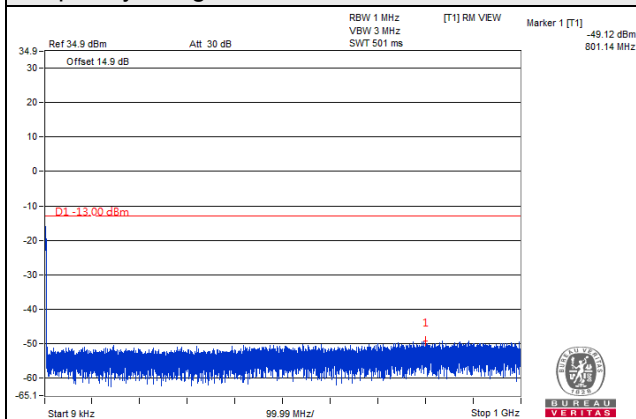


Frequency Range : 1GHz ~ 18GHz

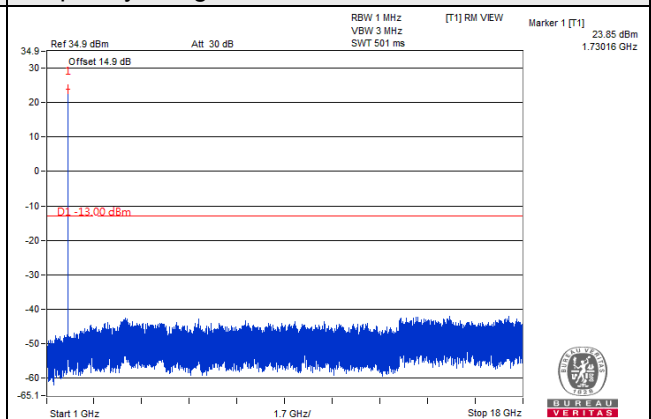


Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

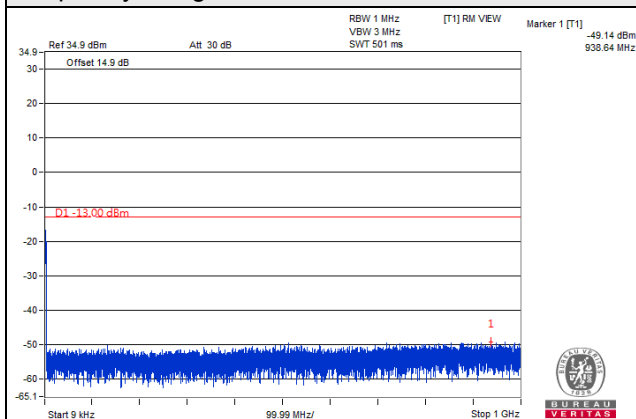


Frequency Range : 1GHz ~ 18GHz

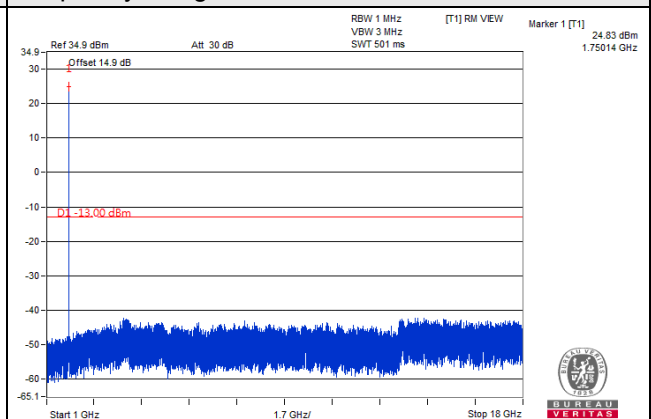


Channel 20375 (1752.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

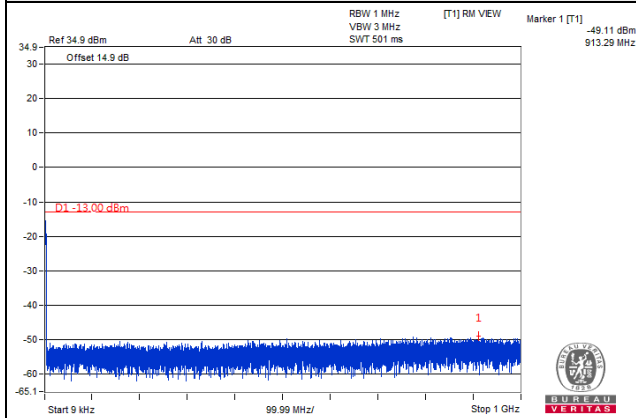


\*The 9 kHz tone is from the spectrum analyzer.

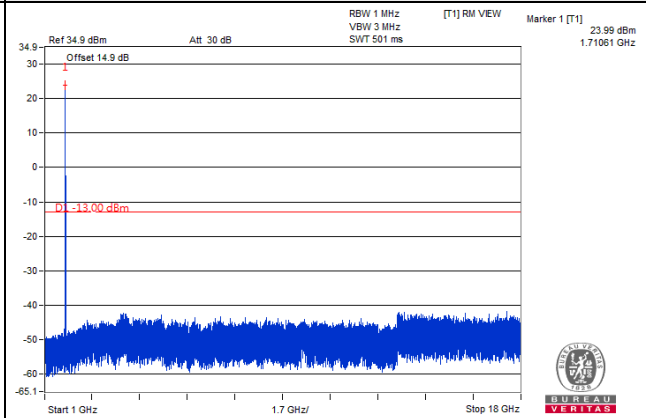
## LTE Band 4, Channel Bandwidth 10MHz

Channel 20000 (1715.0MHz)

Frequency Range : 9kHz ~ 1GHz

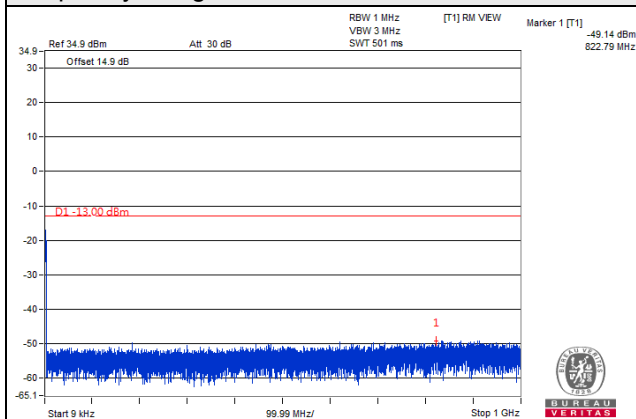


Frequency Range : 1GHz ~ 18GHz

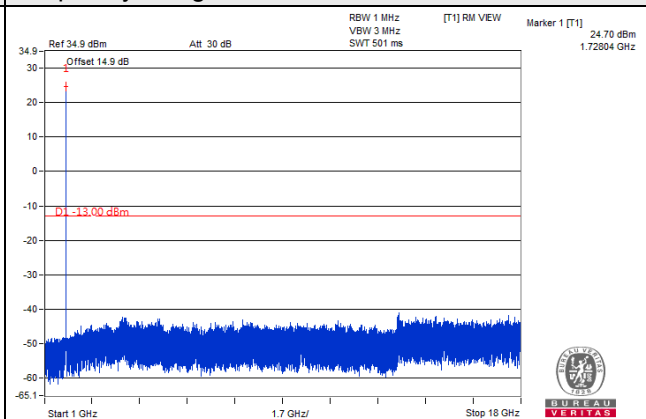


Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

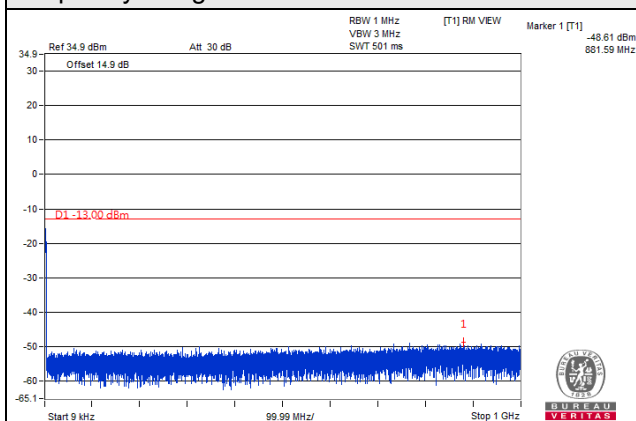


Frequency Range : 1GHz ~ 18GHz

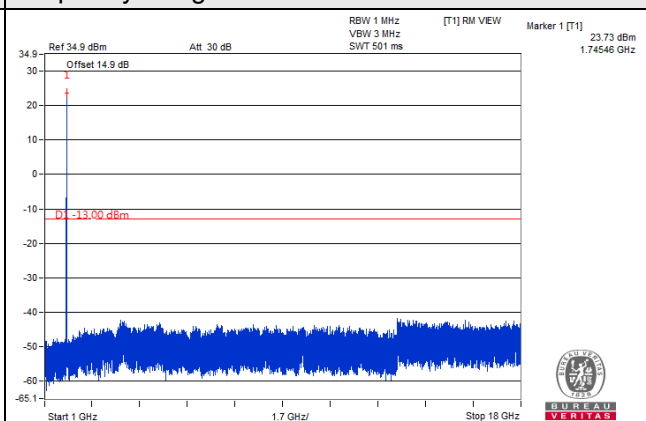


Channel 20350 (1750.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

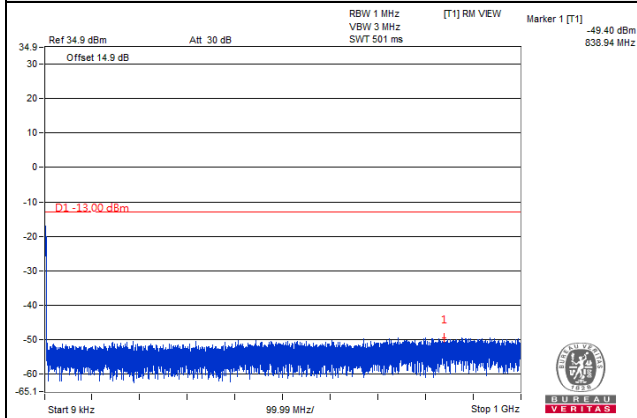


\*The 9 kHz tone is from the spectrum analyzer.

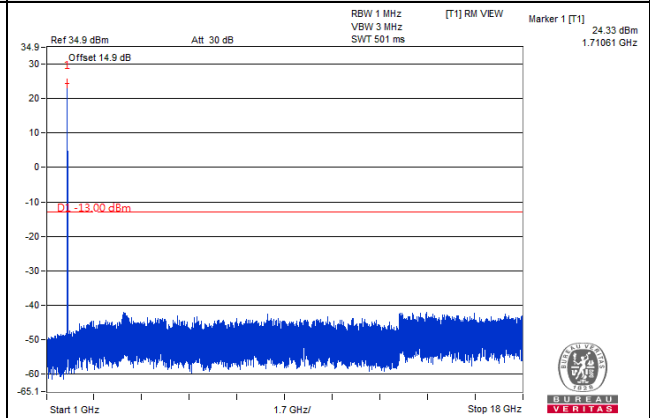
## LTE Band 4, Channel Bandwidth 15MHz

### Channel 20025 (1717.5MHz)

Frequency Range : 9kHz ~ 1GHz

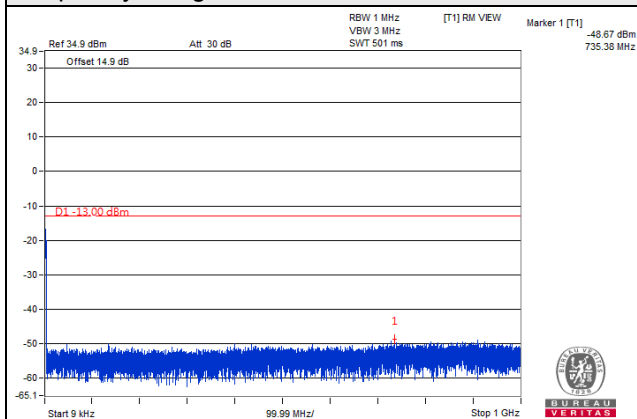


Frequency Range : 1GHz ~ 18GHz

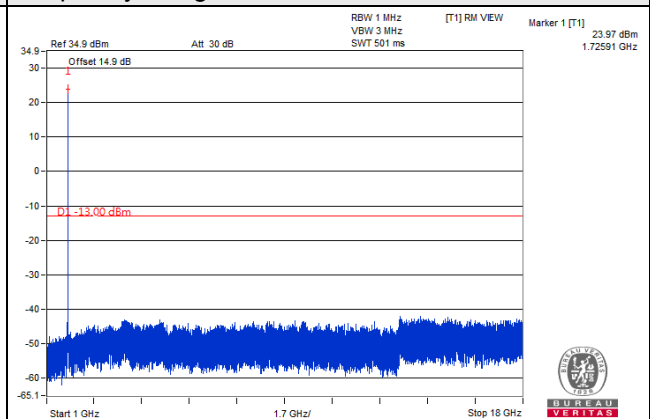


### Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

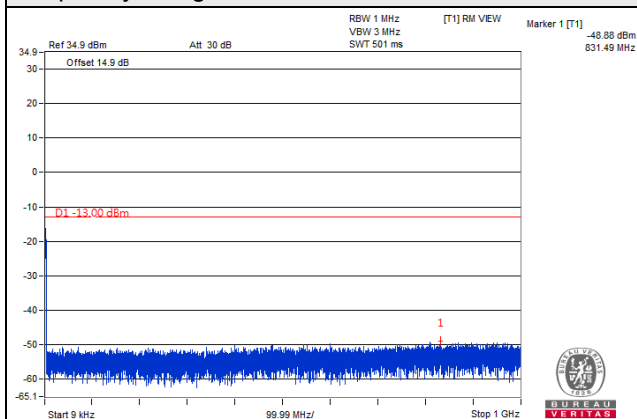


Frequency Range : 1GHz ~ 18GHz

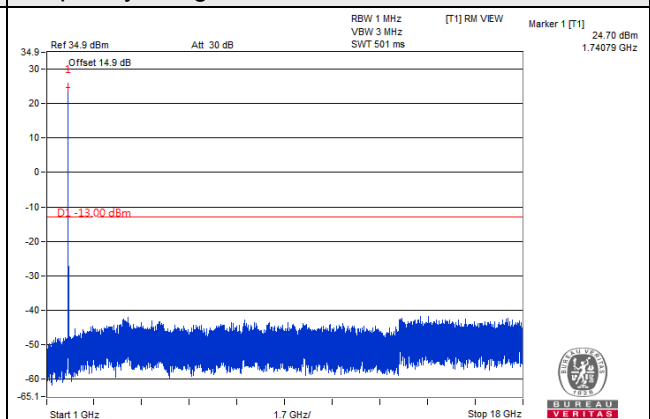


### Channel 20325 (1747.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

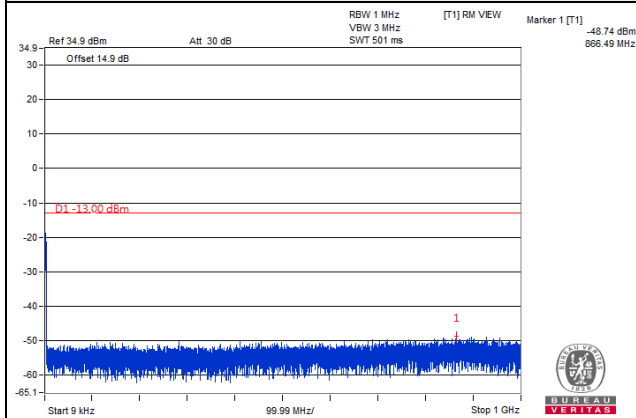


\*The 9 kHz tone is from the spectrum analyzer.

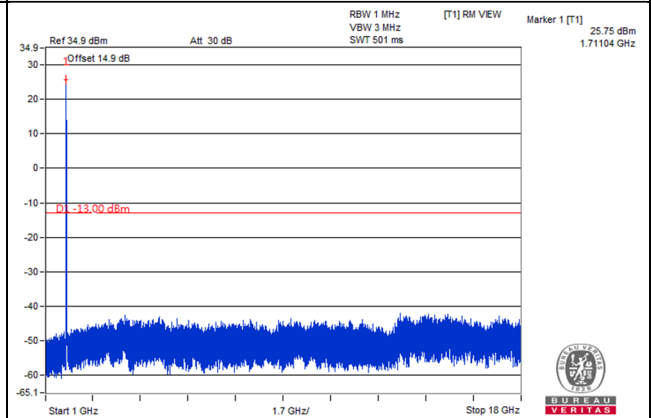
## LTE Band 4, Channel Bandwidth 20MHz

### Channel 20050 (1720.0MHz)

Frequency Range : 9kHz ~ 1GHz

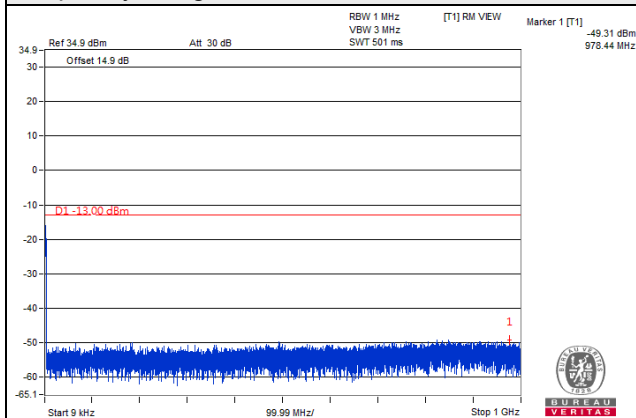


Frequency Range : 1GHz ~ 18GHz

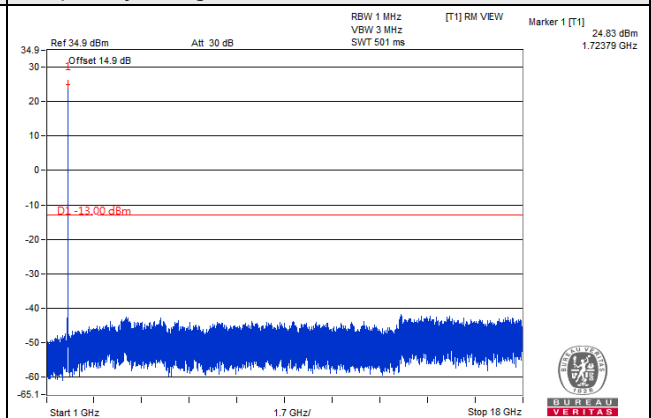


### Channel 20175 (1732.5MHz)

Frequency Range : 9kHz ~ 1GHz

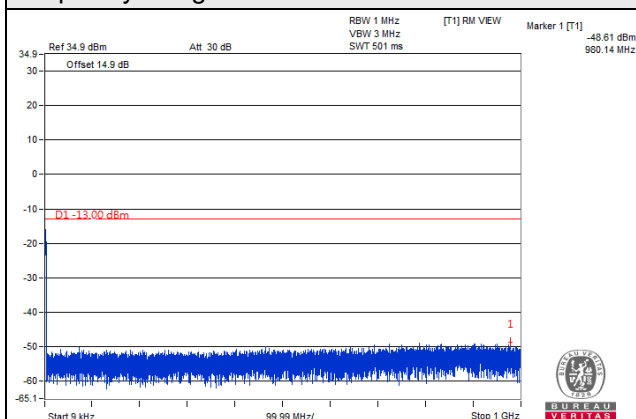


Frequency Range : 1GHz ~ 18GHz

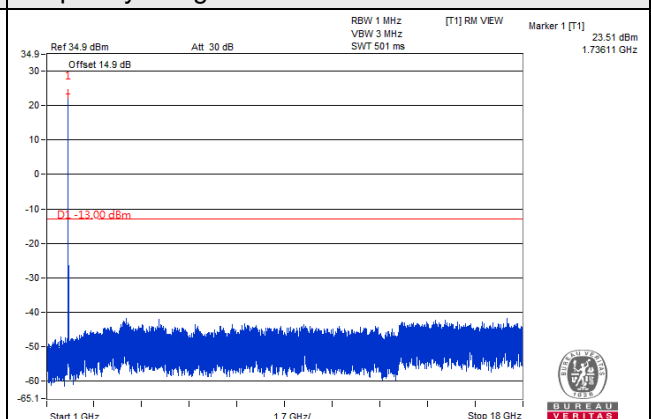


### Channel 20300 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

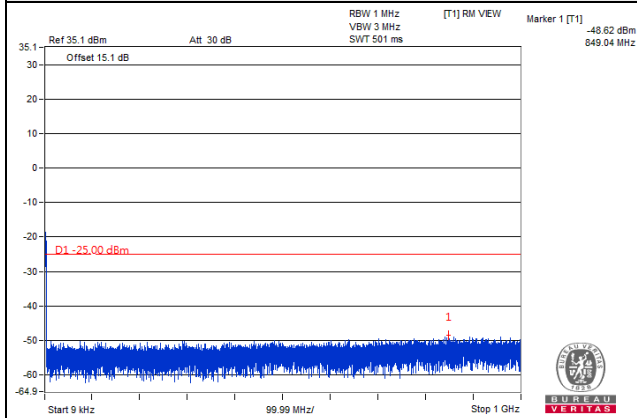


\*The 9 kHz tone is from the spectrum analyzer.

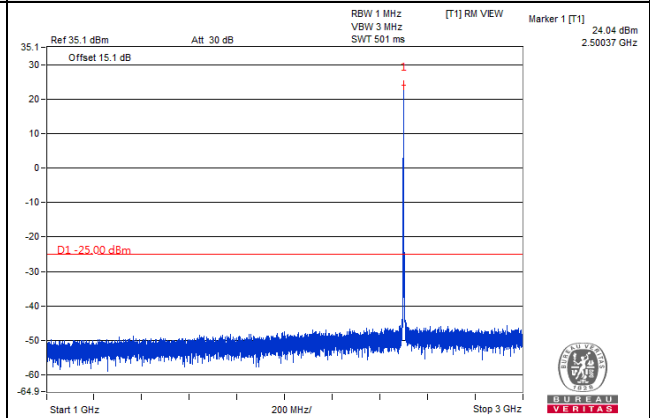
# LTE Band 7, Channel Bandwidth 5MHz

Channel 20775 (2502.5MHz)

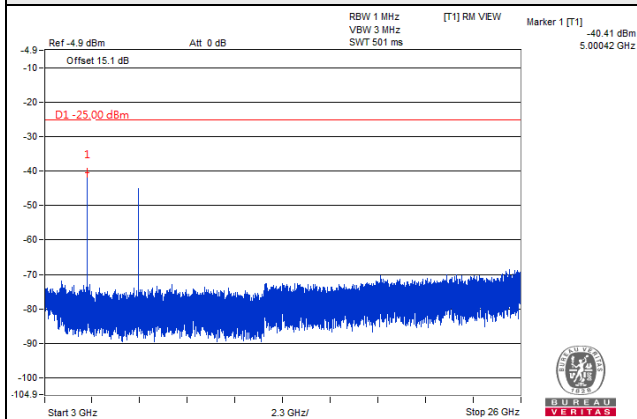
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

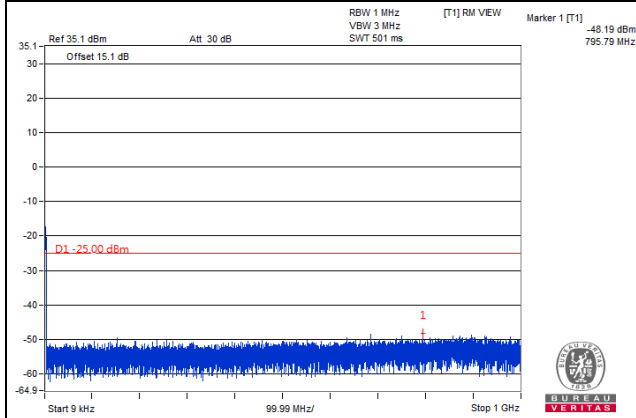


\*The 9 kHz tone is from the spectrum analyzer.

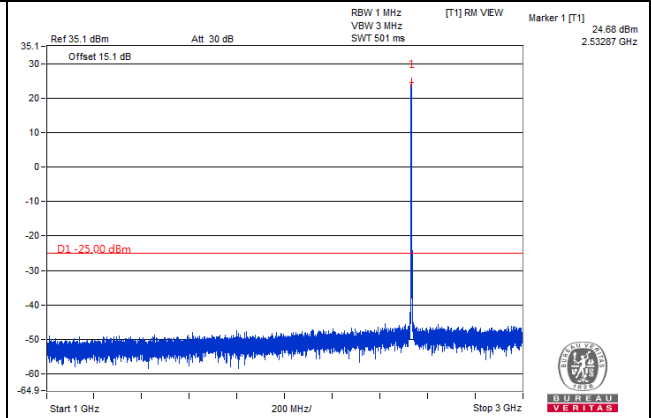
# LTE Band 7, Channel Bandwidth 5MHz

Channel 21100 (2535.0MHz)

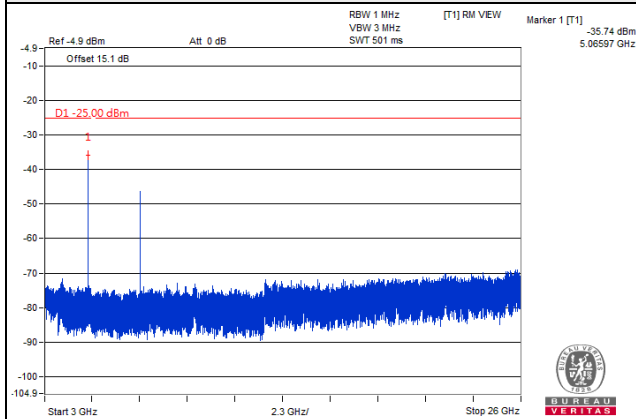
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

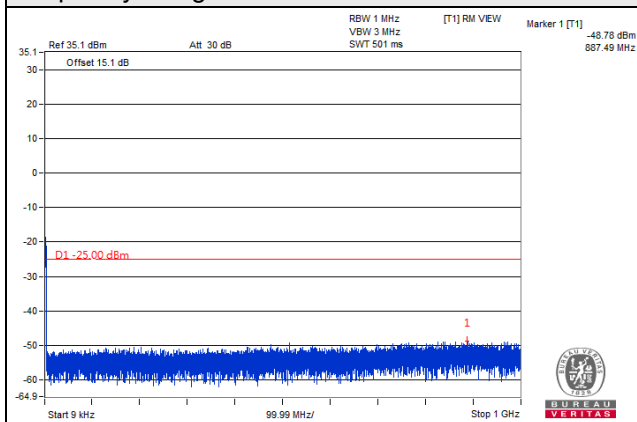


\*The 9 kHz tone is from the spectrum analyzer.

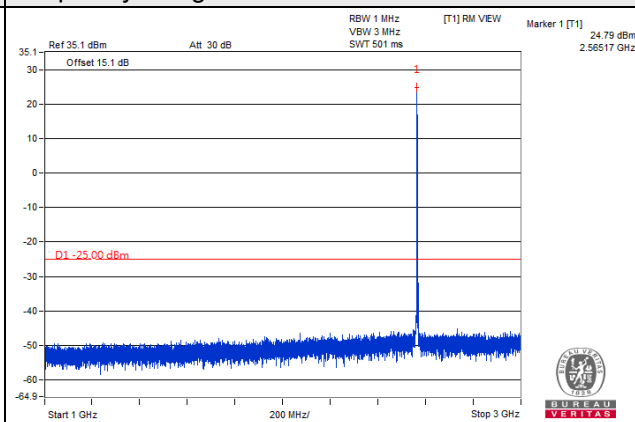
# LTE Band 7, Channel Bandwidth 5MHz

Channel 21425 (2567.5MHz)

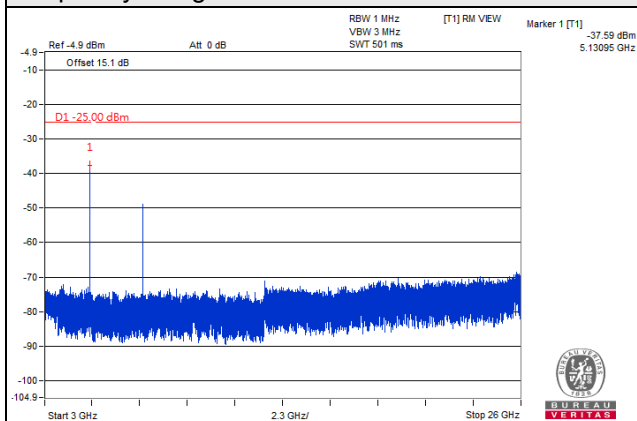
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

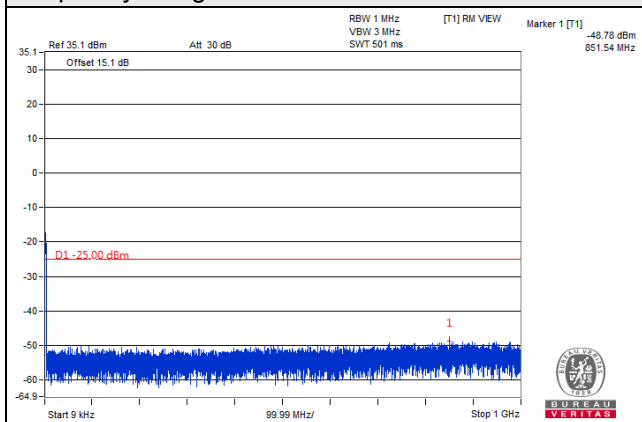


\*The 9 kHz tone is from the spectrum analyzer.

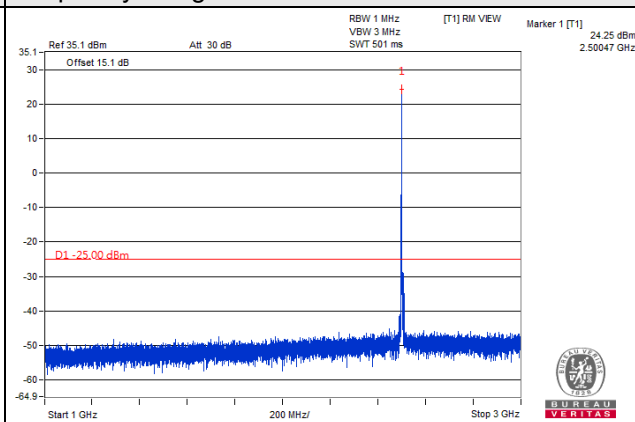
# LTE Band 7, Channel Bandwidth 10MHz

Channel 20800 (2505.0MHz)

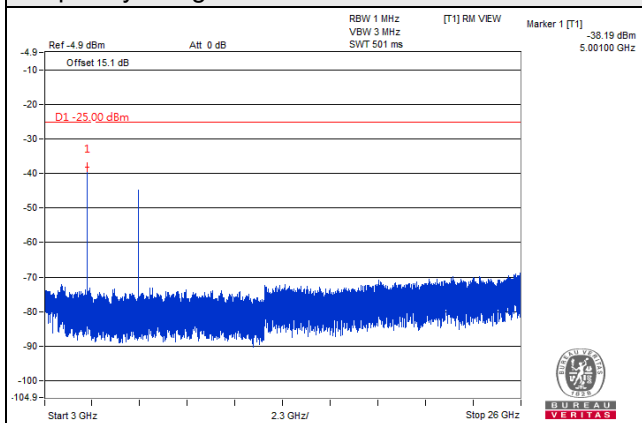
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

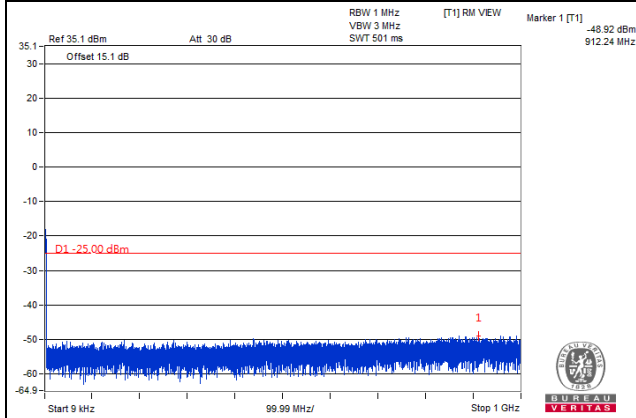


\*The 9 kHz tone is from the spectrum analyzer.

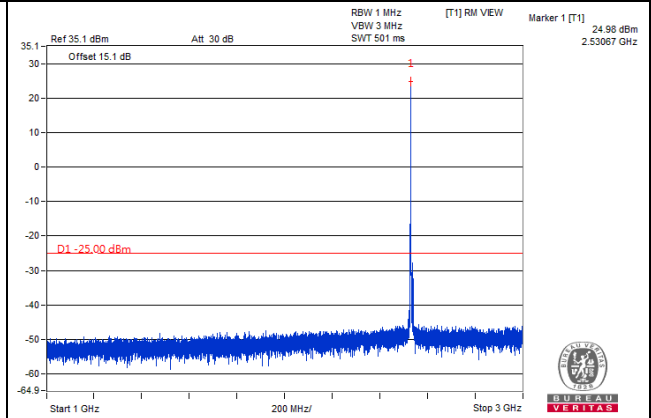
# LTE Band 7, Channel Bandwidth 10MHz

Channel 21100 (2535.0MHz)

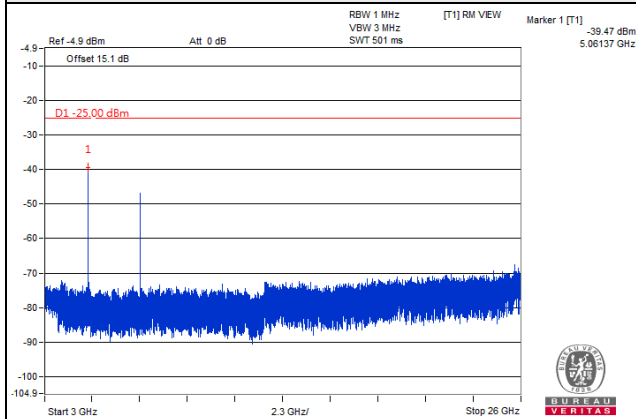
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

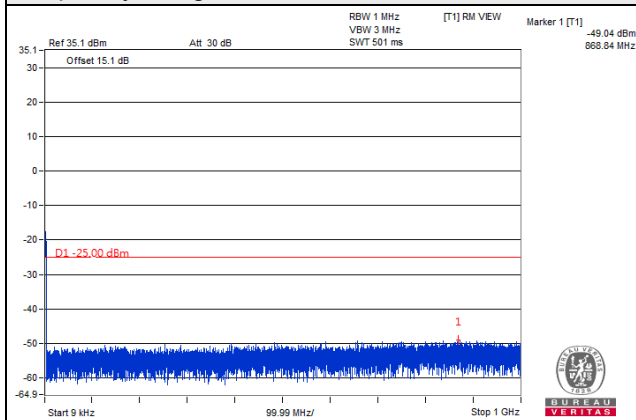


\*The 9 kHz tone is from the spectrum analyzer.

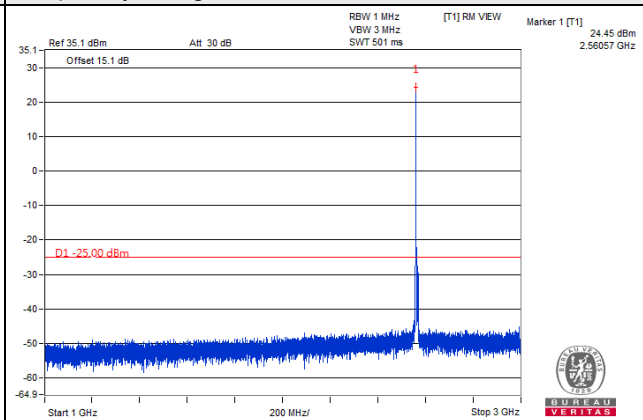
# LTE Band 7, Channel Bandwidth 10MHz

Channel 21400 (2565.0MHz)

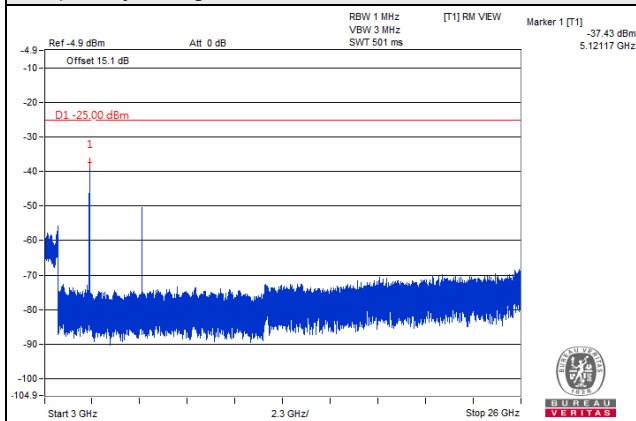
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

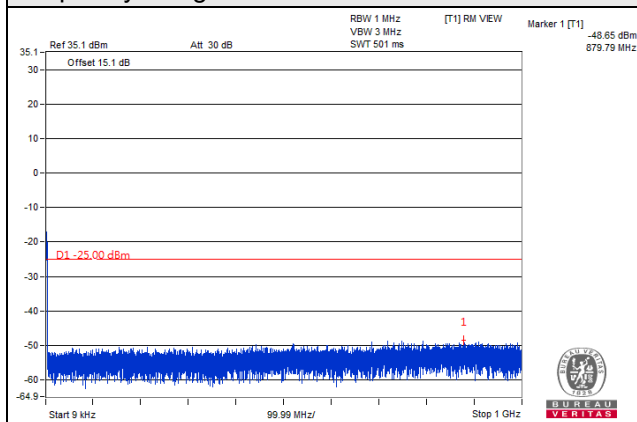


\*The 9 kHz tone is from the spectrum analyzer.

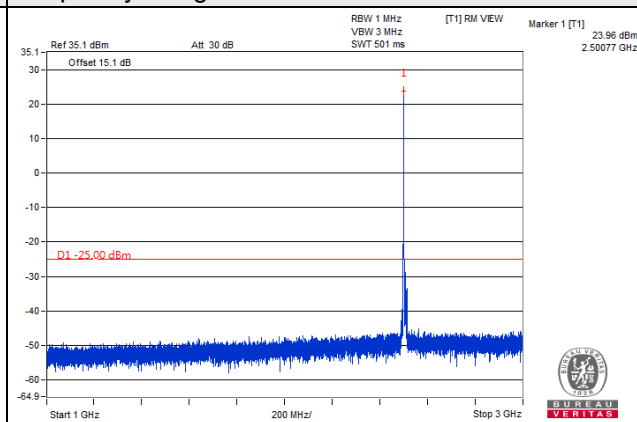
# LTE Band 7, Channel Bandwidth 15MHz

Channel 20825 (2507.5MHz)

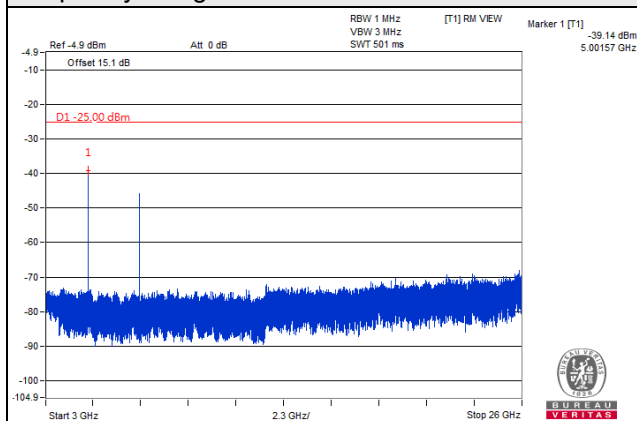
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

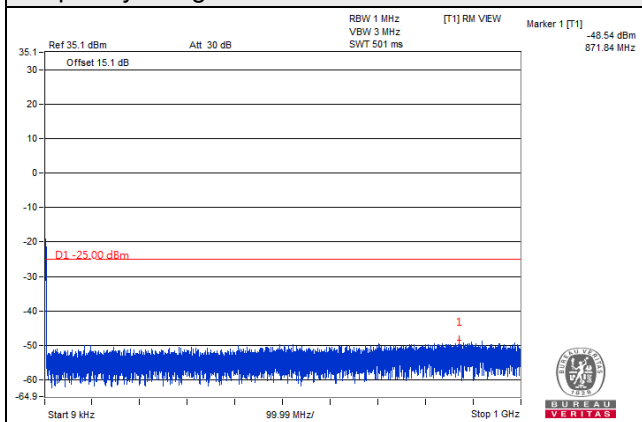


\*The 9 kHz tone is from the spectrum analyzer.

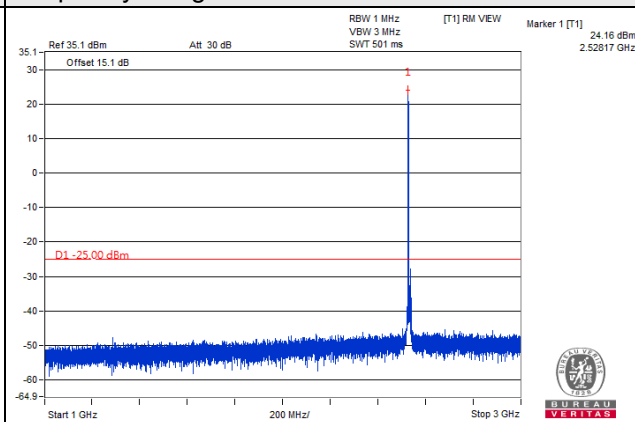
# LTE Band 7, Channel Bandwidth 15MHz

Channel 21100 (2535.0MHz)

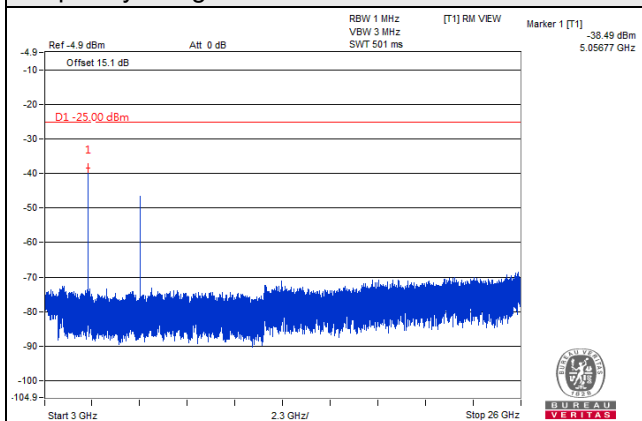
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

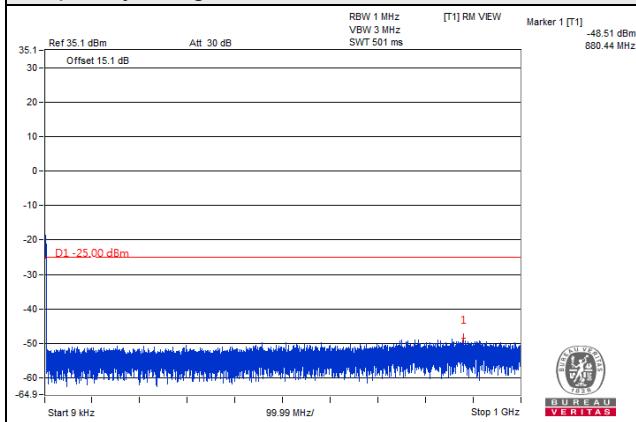


\*The 9 kHz tone is from the spectrum analyzer.

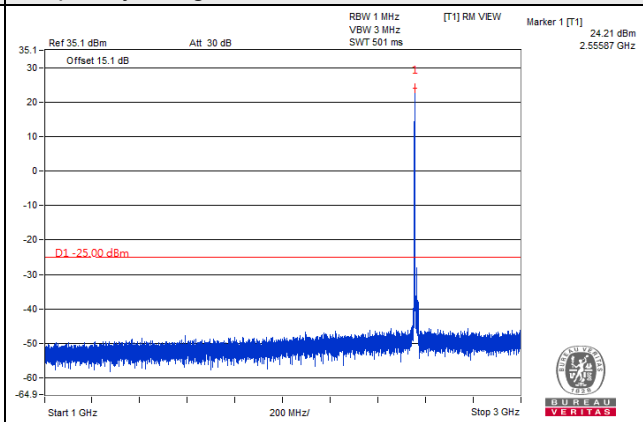
# LTE Band 7, Channel Bandwidth 15MHz

Channel 21375 (2562.5MHz)

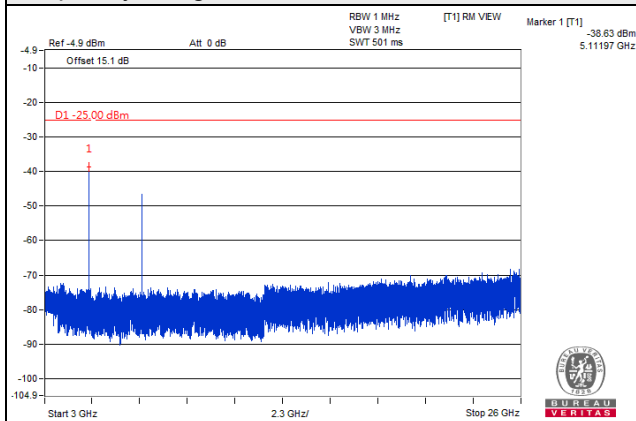
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

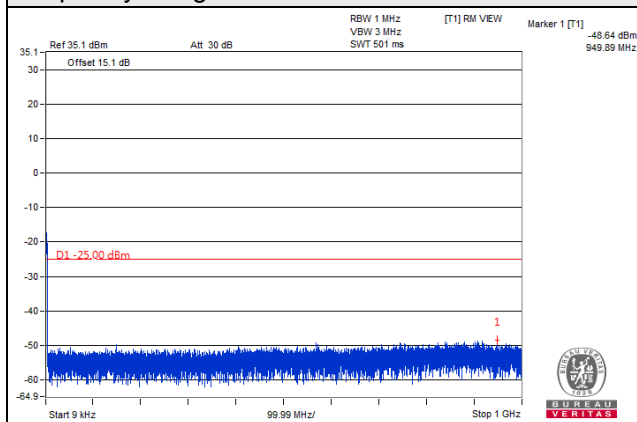


\*The 9 kHz tone is from the spectrum analyzer.

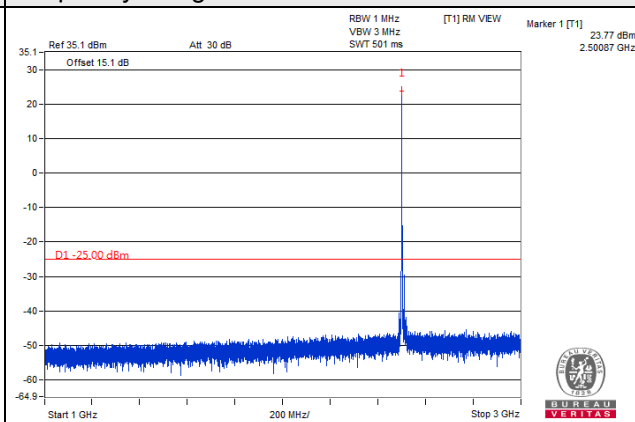
# LTE Band 7, Channel Bandwidth 20MHz

Channel 20850 (2510.0MHz)

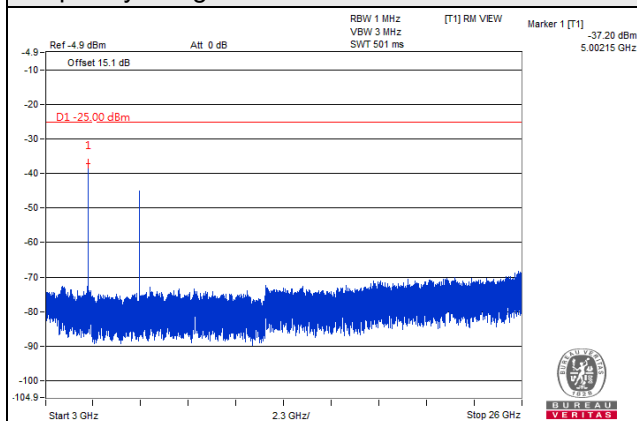
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

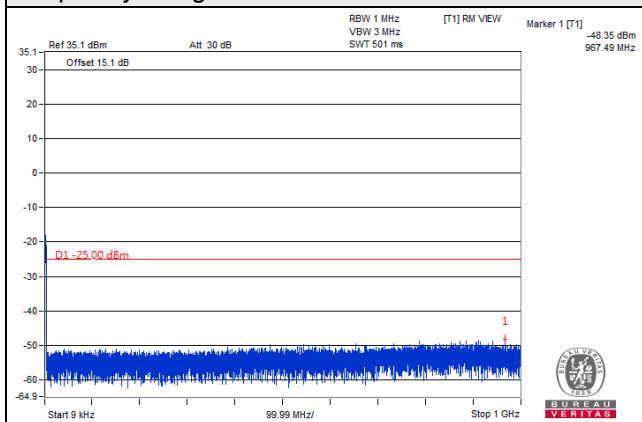


\*The 9 kHz tone is from the spectrum analyzer.

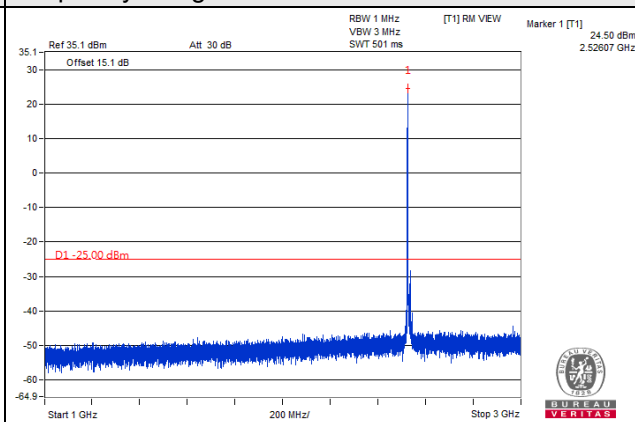
# LTE Band 7, Channel Bandwidth 20MHz

Channel 21100 (2535.0MHz)

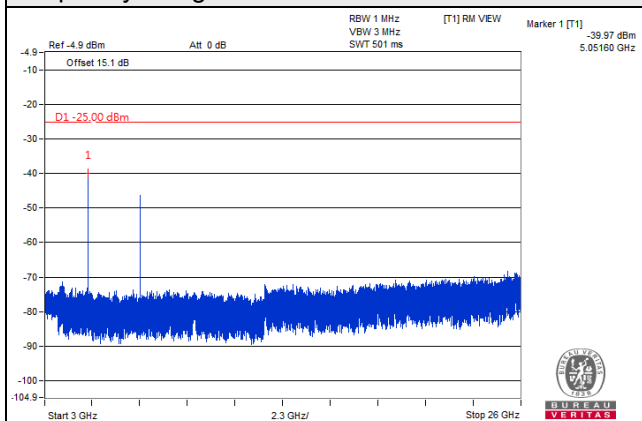
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

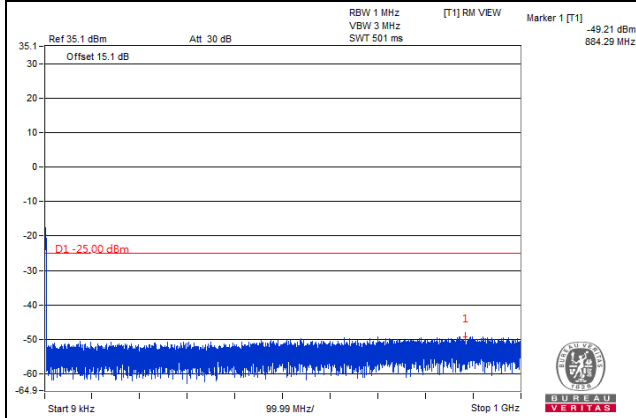


\*The 9 kHz tone is from the spectrum analyzer.

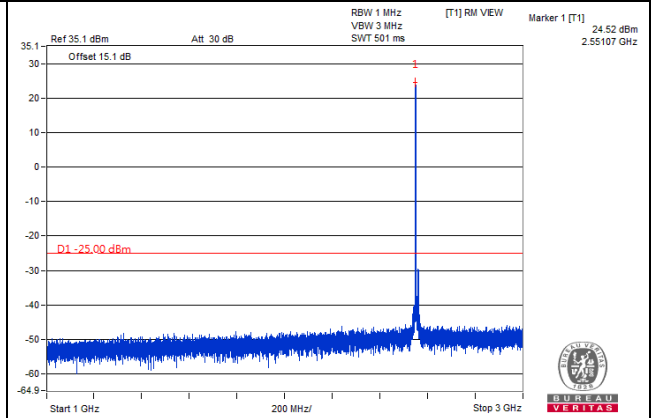
# LTE Band 7, Channel Bandwidth 20MHz

Channel 21350 (2560.0MHz)

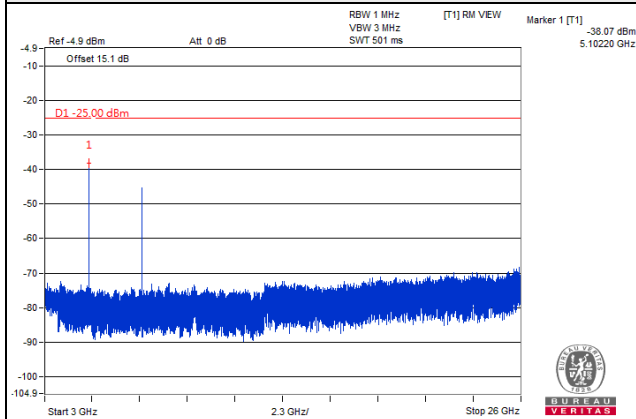
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 3GHz



Frequency Range : 3GHz ~ 26GHz

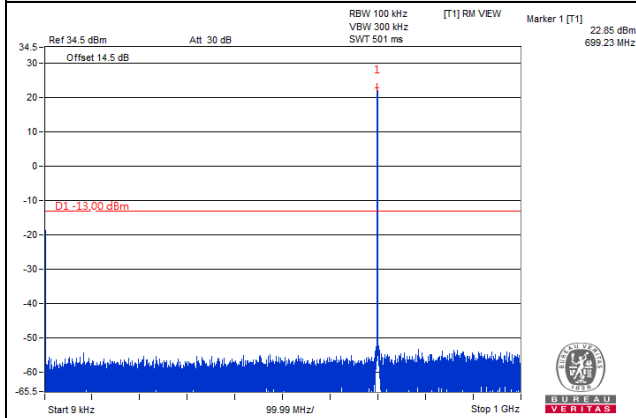


\*The 9 kHz tone is from the spectrum analyzer.

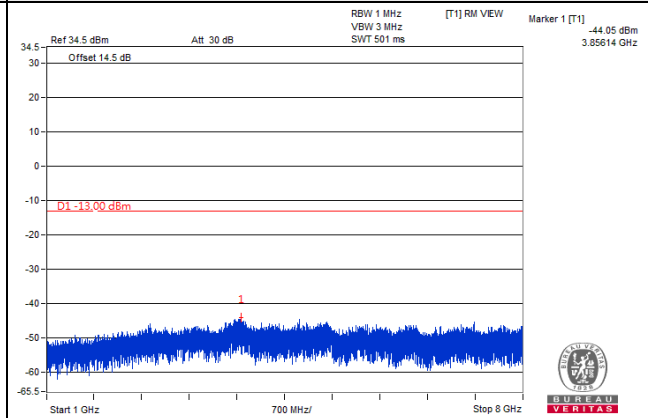
## LTE Band 12, Channel Bandwidth 1.4MHz

### Channel 23017 (699.7MHz)

Frequency Range : 9kHz ~ 1GHz

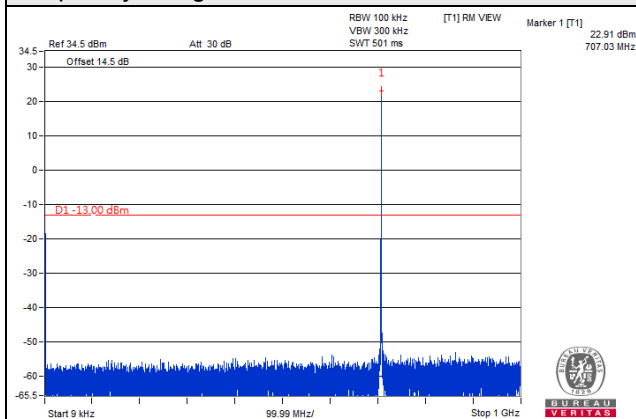


Frequency Range : 1GHz ~ 8GHz

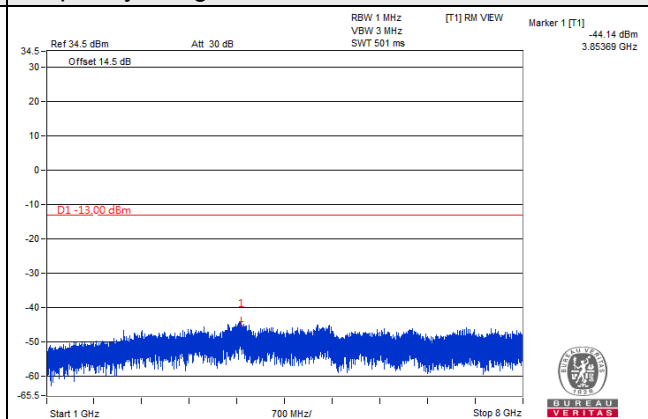


### Channel 23095 (707.5MHz)

Frequency Range : 9kHz ~ 1GHz

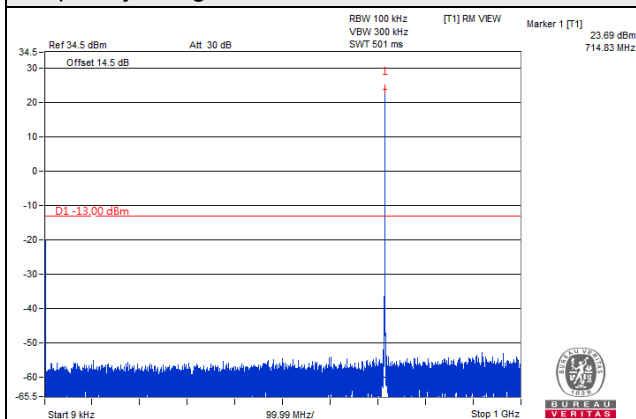


Frequency Range : 1GHz ~ 8GHz

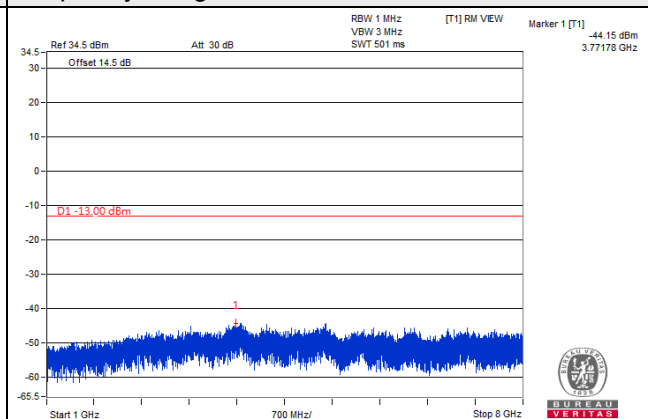


### Channel 23173 (715.3MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 8GHz

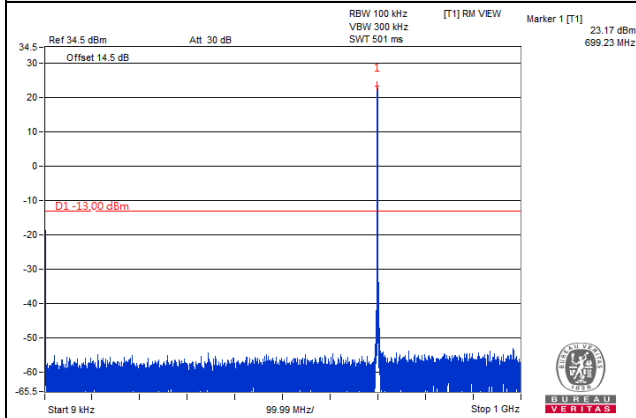


\*The 9 kHz tone is from the spectrum analyzer.

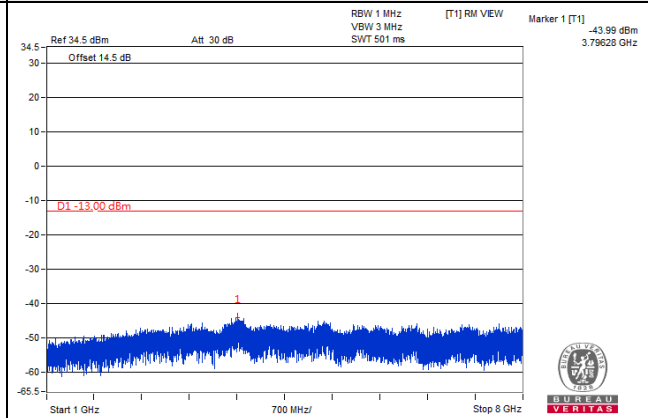
## LTE Band 12, Channel Bandwidth 3MHz

### Channel 23025 (700.5MHz)

Frequency Range : 9kHz ~ 1GHz

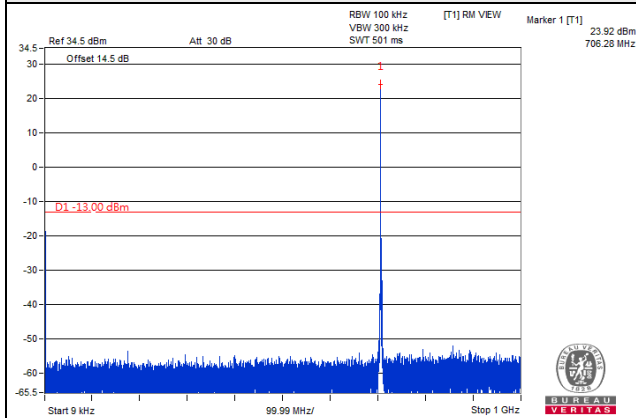


Frequency Range : 1GHz ~ 8GHz

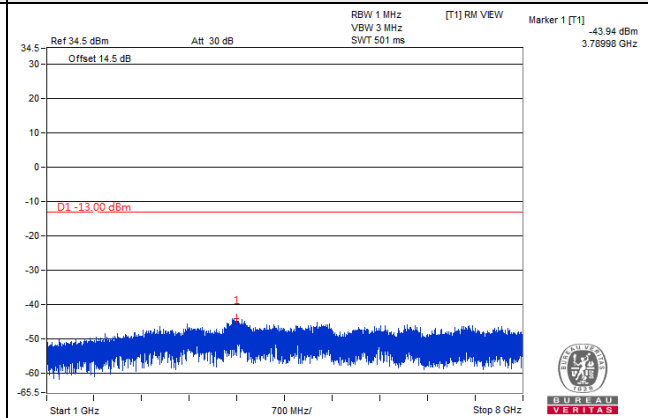


### Channel 23095 (707.5MHz)

Frequency Range : 9kHz ~ 1GHz

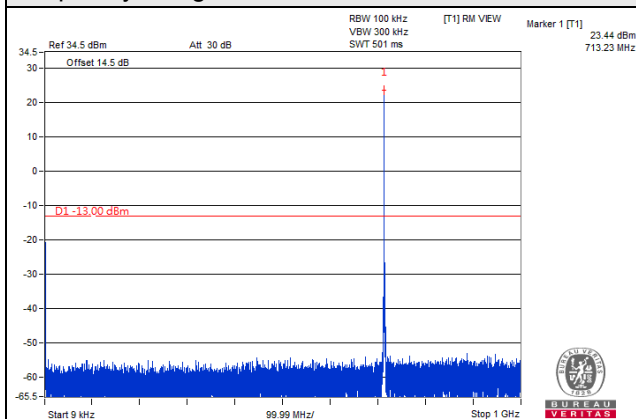


Frequency Range : 1GHz ~ 8GHz

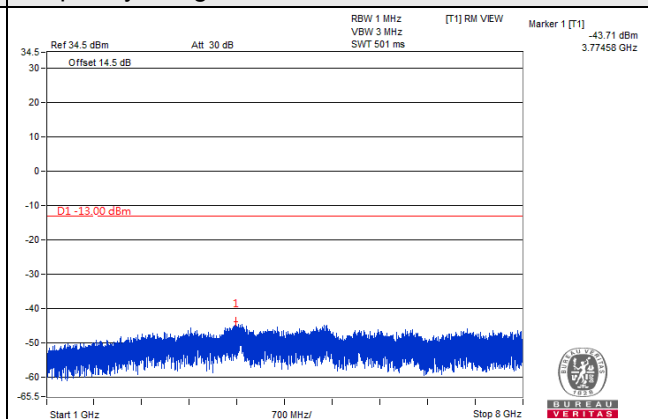


### Channel 23165 (714.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 8GHz

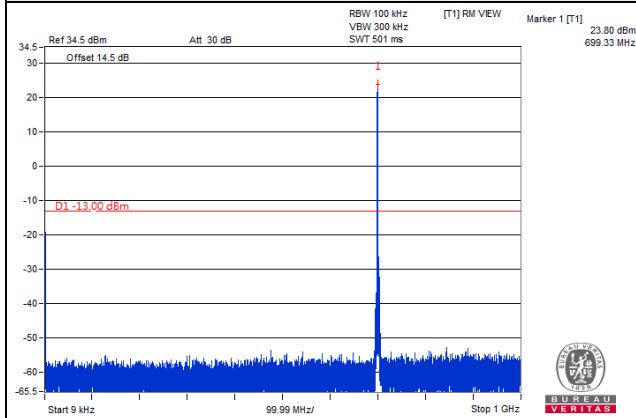


\*The 9 kHz tone is from the spectrum analyzer.

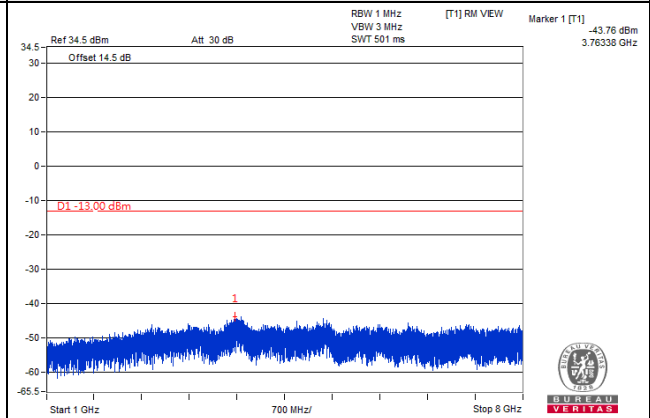
## LTE Band 12, Channel Bandwidth 5MHz

### Channel 23035 (701.5MHz)

Frequency Range : 9kHz ~ 1GHz

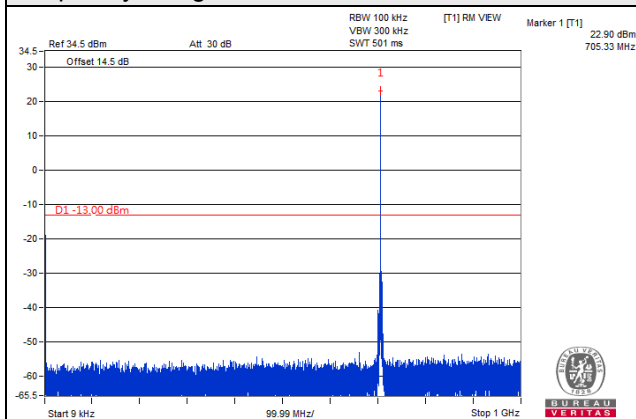


Frequency Range : 1GHz ~ 8GHz

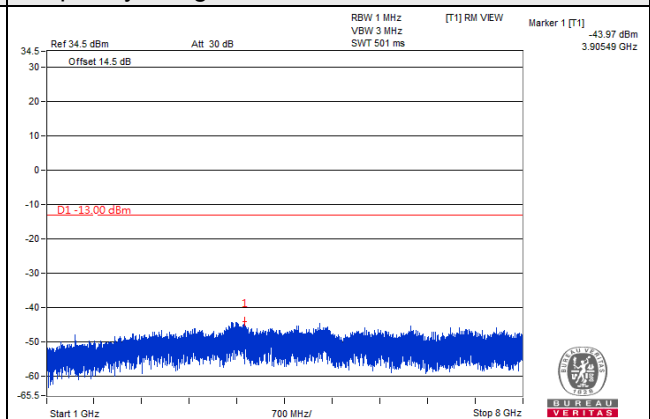


### Channel 23095 (707.5MHz)

Frequency Range : 9kHz ~ 1GHz

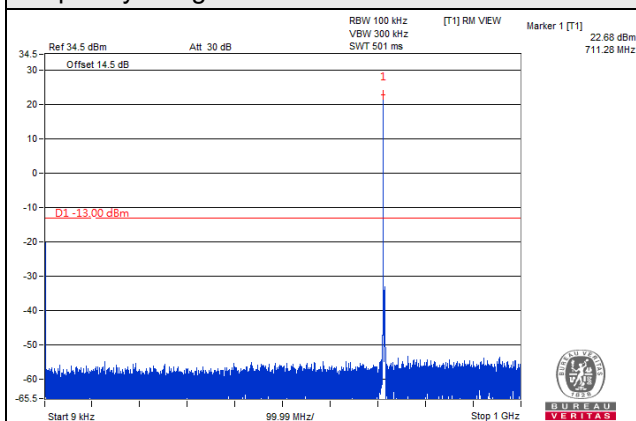


Frequency Range : 1GHz ~ 8GHz

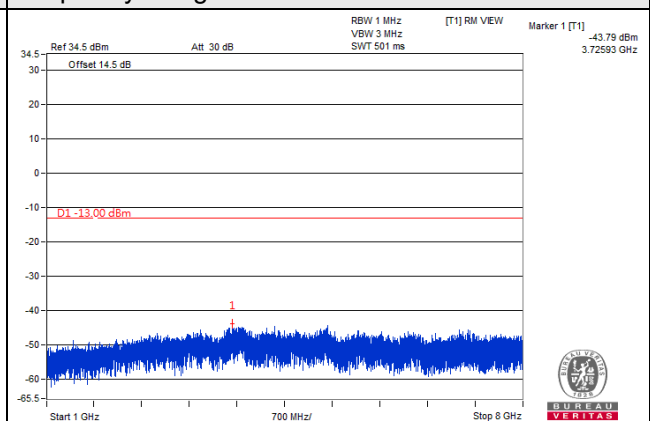


### Channel 23155 (713.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 8GHz

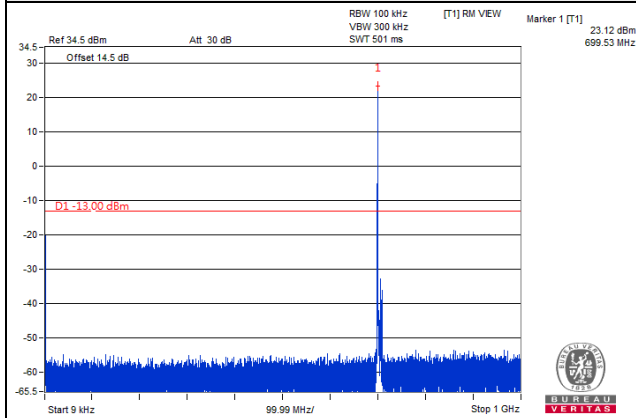


\*The 9 kHz tone is from the spectrum analyzer.

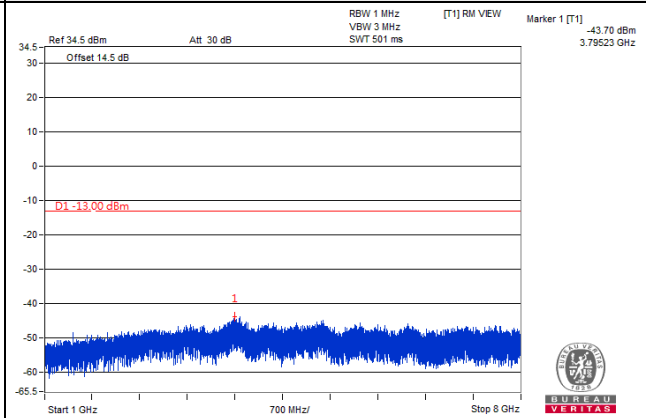
## LTE Band 12, Channel Bandwidth 10MHz

### Channel 23060 (704.0MHz)

Frequency Range : 9kHz ~ 1GHz

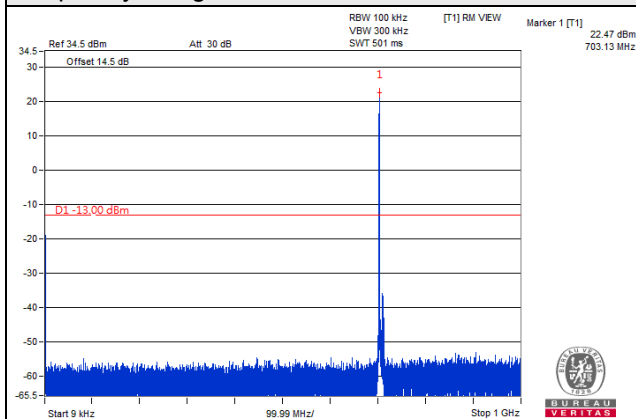


Frequency Range : 1GHz ~ 8GHz

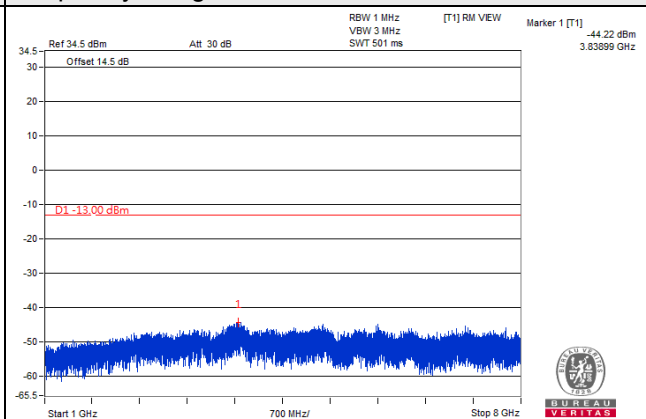


### Channel 23095 (707.5MHz)

Frequency Range : 9kHz ~ 1GHz

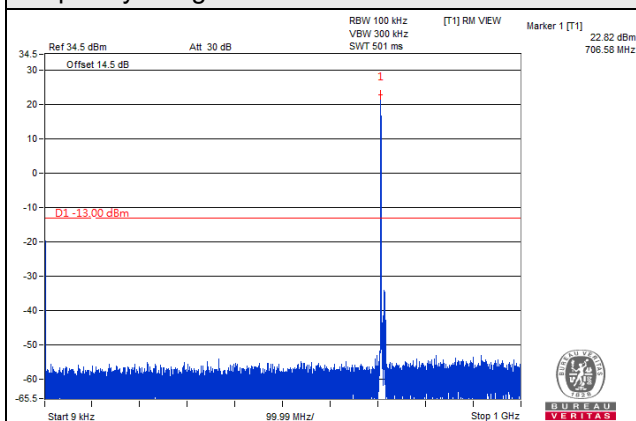


Frequency Range : 1GHz ~ 8GHz

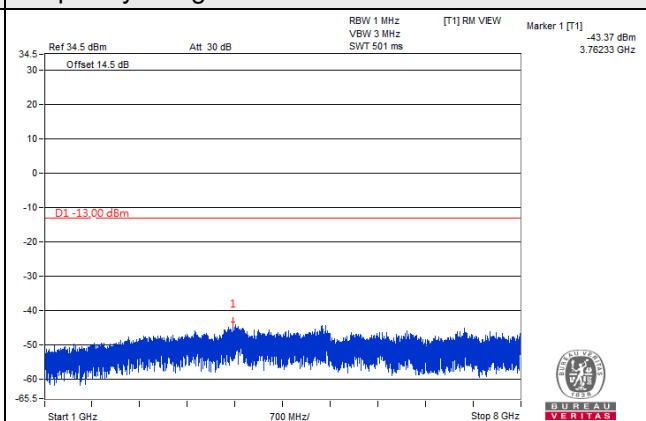


### Channel 23130 (711.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 8GHz

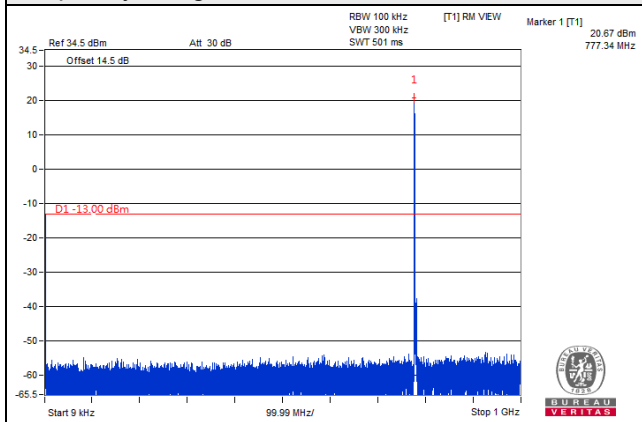


\*The 9 kHz tone is from the spectrum analyzer.

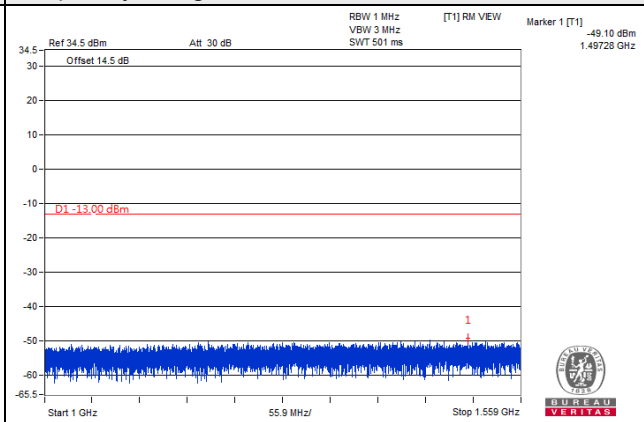
# LTE Band 13, Channel Bandwidth 5MHz

Channel 23205 (779.5MHz)

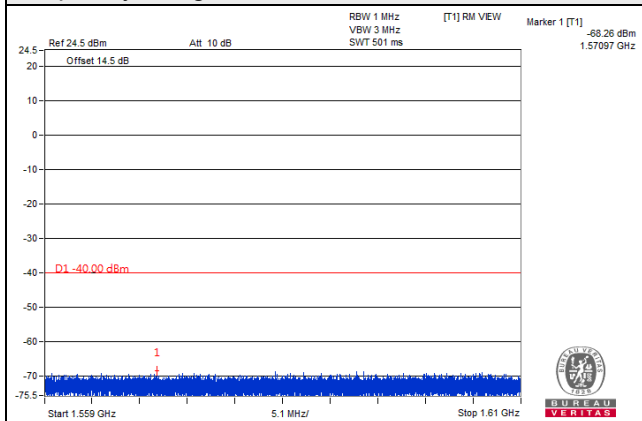
Frequency Range : 9kHz ~ 1GHz



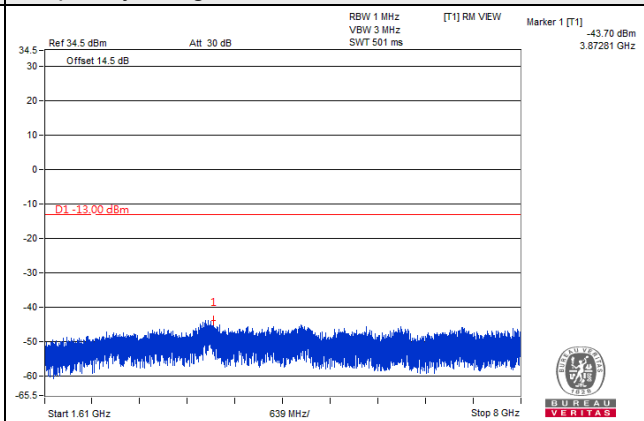
Frequency Range : 1GHz ~ 1.559GHz



Frequency Range : 1.559GHz ~ 1.61GHz



Frequency Range : 1.61GHz ~ 8GHz

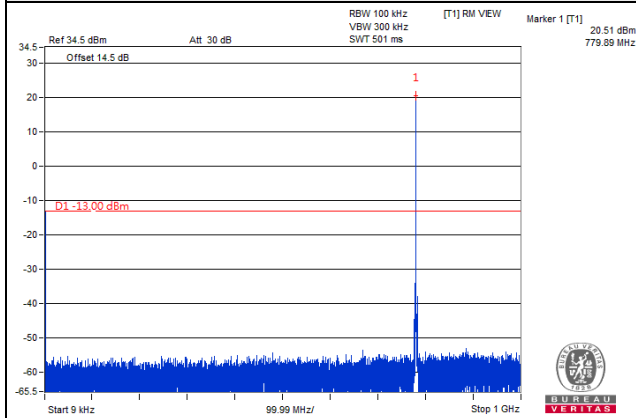


\*The 9 kHz tone is from the spectrum analyzer.

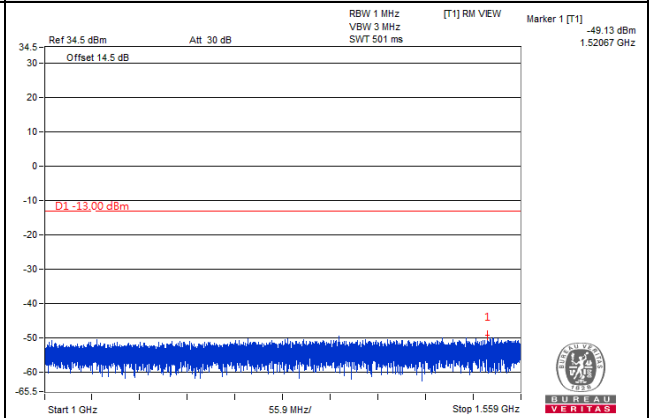
LTE Band 13, Channel Bandwidth 5MHz

Channel 23230 (782.0MHz)

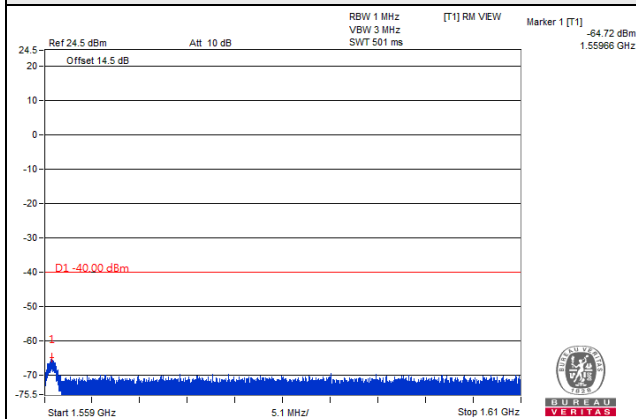
Frequency Range : 9kHz ~ 1GHz



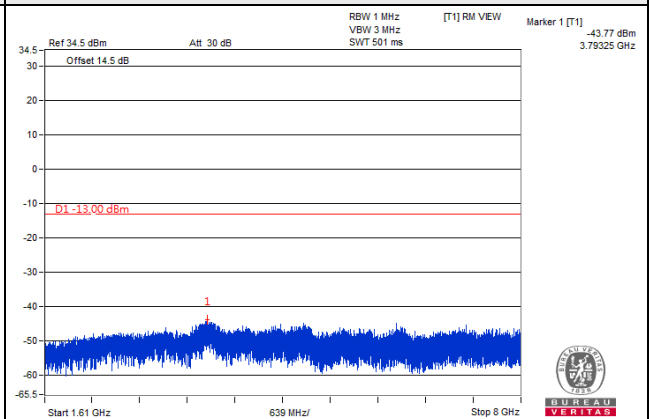
Frequency Range : 1GHz ~ 1.559GHz



Frequency Range : 1.559GHz ~ 1.61GHz



Frequency Range : 1.61GHz ~ 8GHz

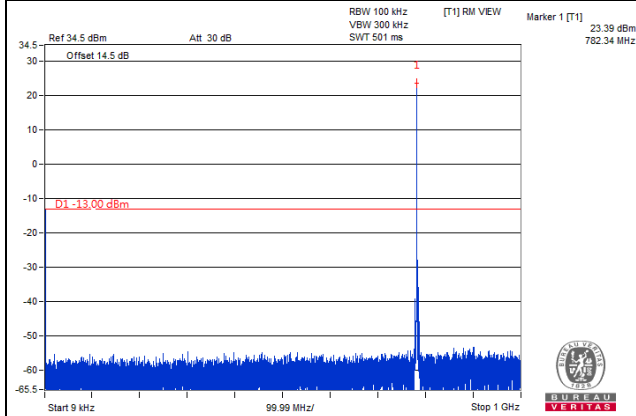


\*The 9 kHz tone is from the spectrum analyzer.

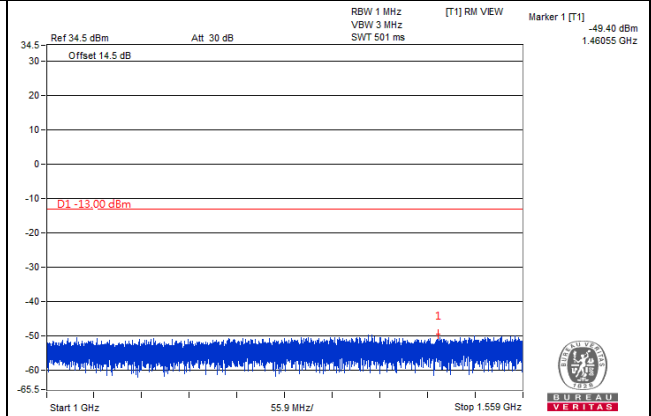
# LTE Band 13, Channel Bandwidth 5MHz

Channel 23255 (784.5MHz)

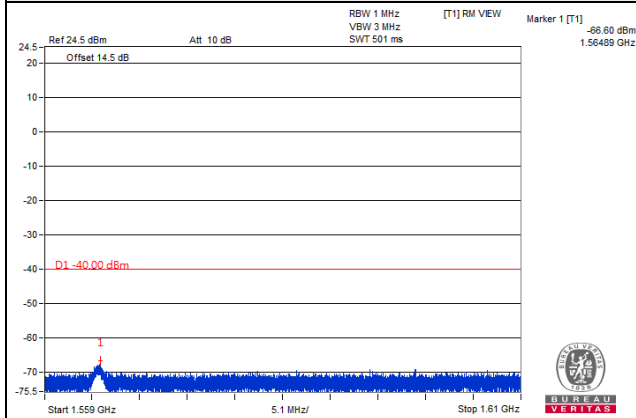
Frequency Range : 9kHz ~ 1GHz



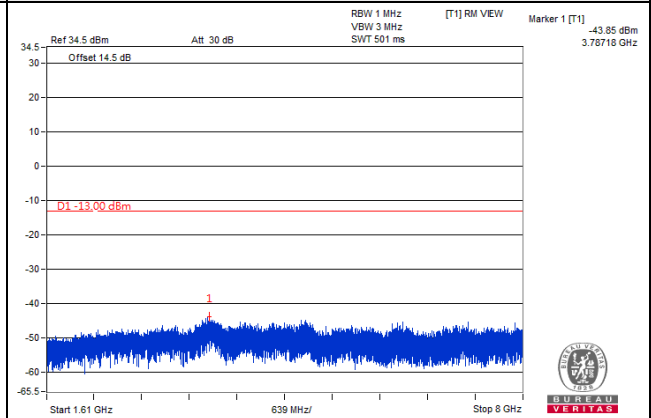
Frequency Range : 1GHz ~ 1.559GHz



Frequency Range : 1.559GHz ~ 1.61GHz



Frequency Range : 1.61GHz ~ 8GHz

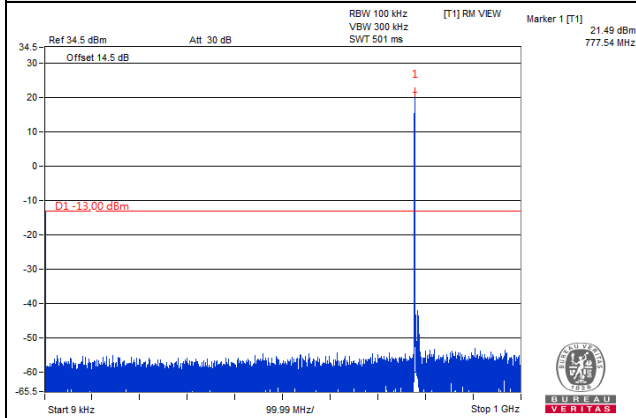


\*The 9 kHz tone is from the spectrum analyzer.

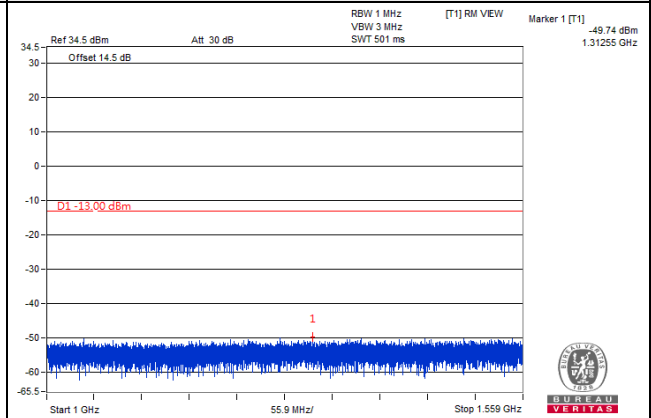
# LTE Band 13, Channel Bandwidth 10MHz

Channel 23230 (782.0MHz)

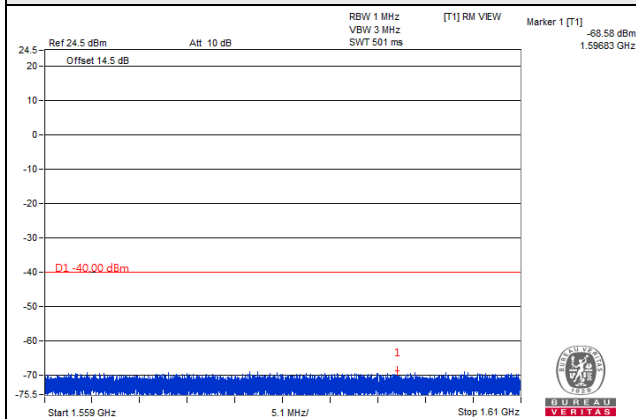
Frequency Range : 9kHz ~ 1GHz



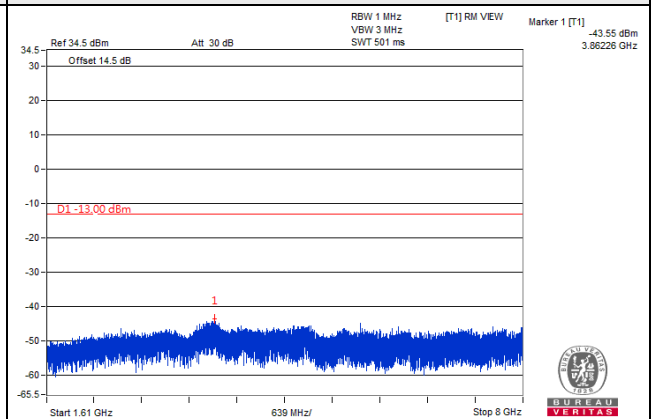
Frequency Range : 1GHz ~ 1.559GHz



Frequency Range : 1.559GHz ~ 1.61GHz



Frequency Range : 1.61GHz ~ 8GHz

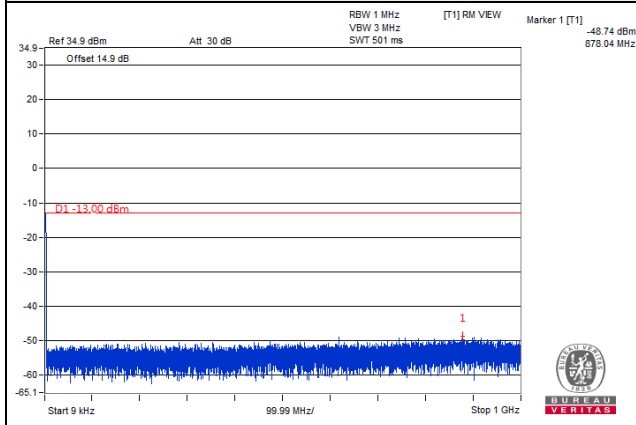


\*The 9 kHz tone is from the spectrum analyzer.

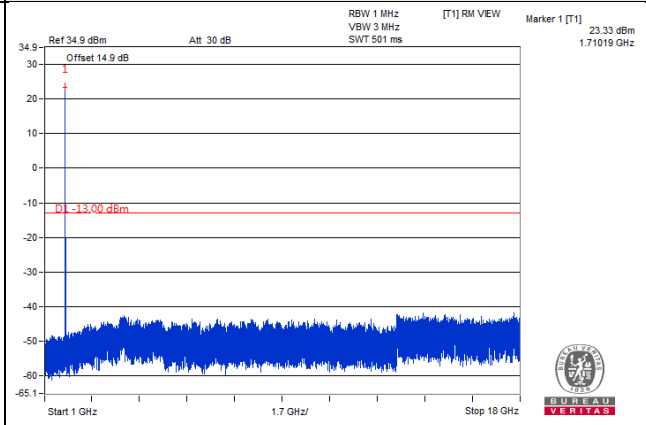
# LTE Band 66, Channel Bandwidth 1.4MHz

Channel 131979 (1710.7MHz)

Frequency Range : 9kHz ~ 1GHz

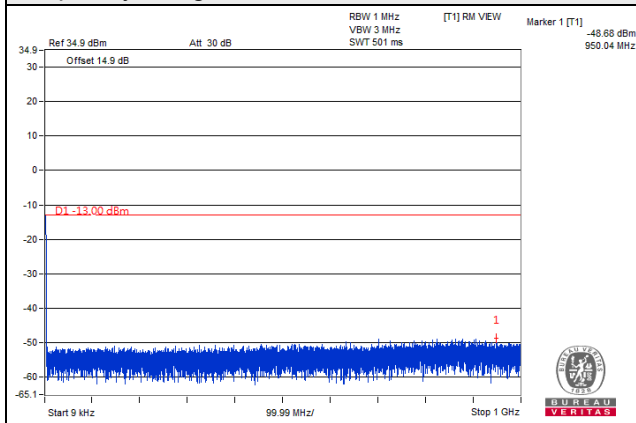


Frequency Range : 1GHz ~ 18GHz

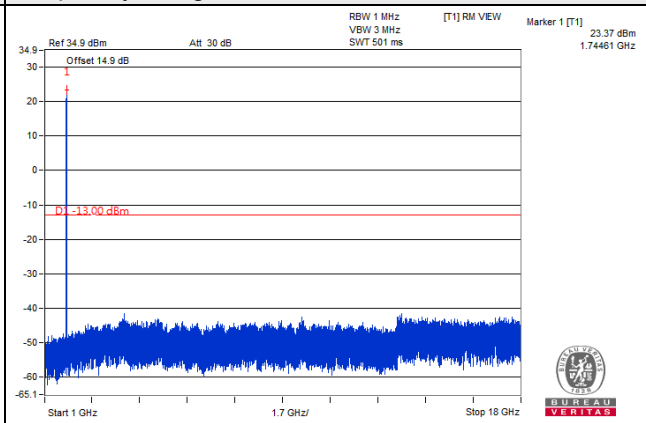


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

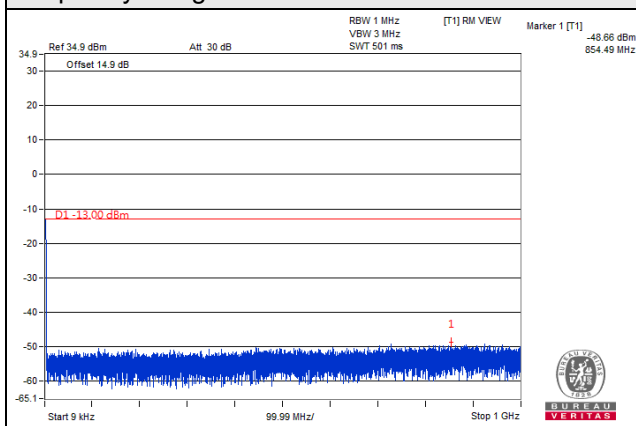


Frequency Range : 1GHz ~ 18GHz

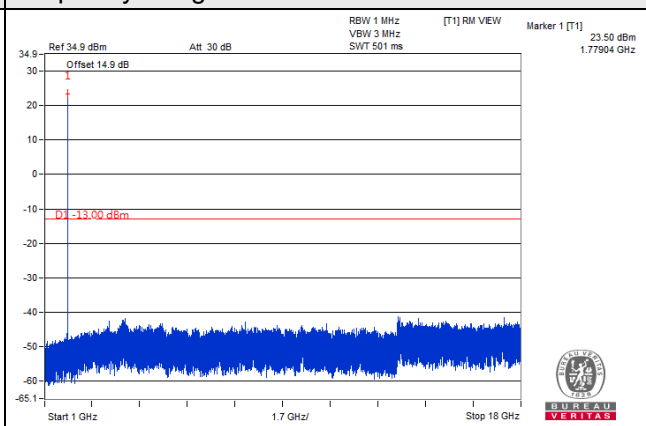


Channel 132665 (1779.3MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

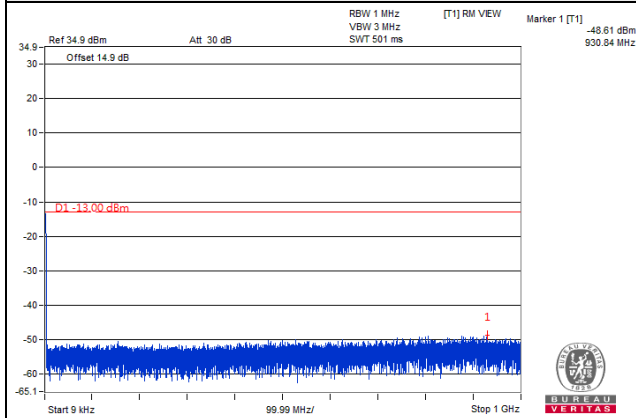


\*The 9 kHz tone is from the spectrum analyzer.

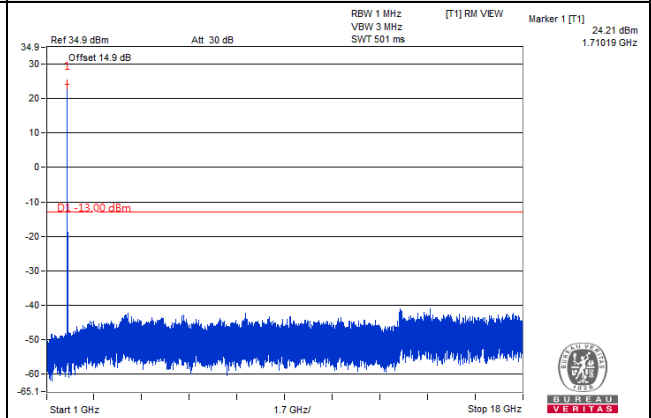
# LTE Band 66, Channel Bandwidth 3MHz

Channel 131987 (1711.5MHz)

Frequency Range : 9kHz ~ 1GHz

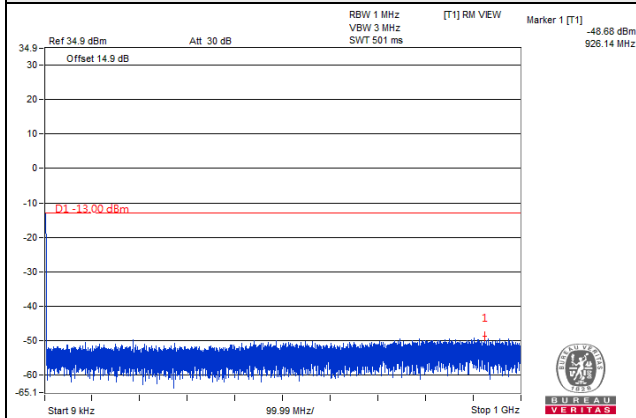


Frequency Range : 1GHz ~ 18GHz

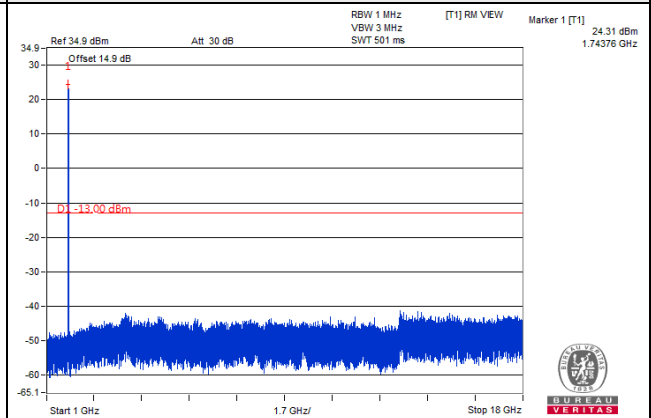


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

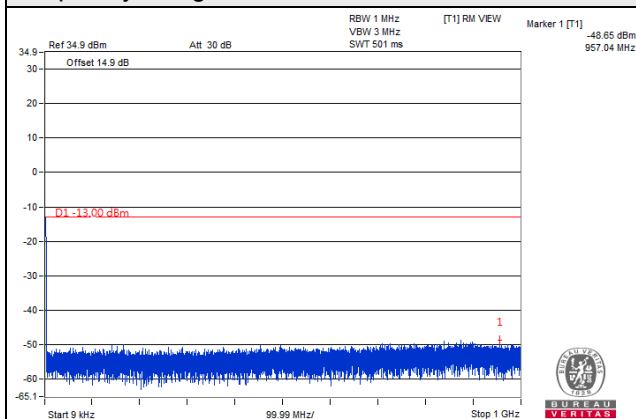


Frequency Range : 1GHz ~ 18GHz

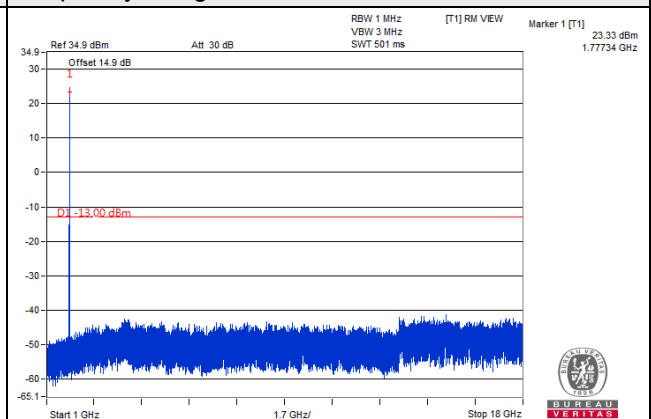


Channel 132657 (1778.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

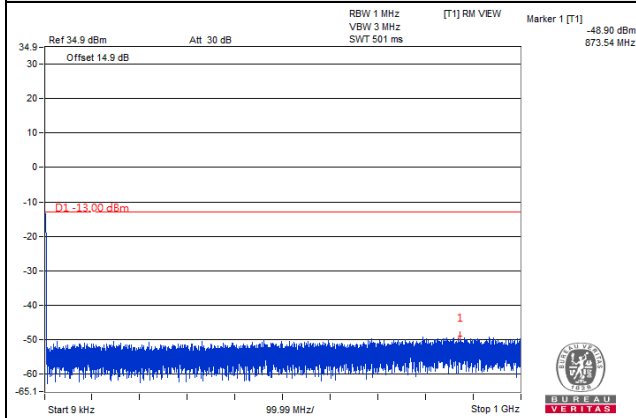


\*The 9 kHz tone is from the spectrum analyzer.

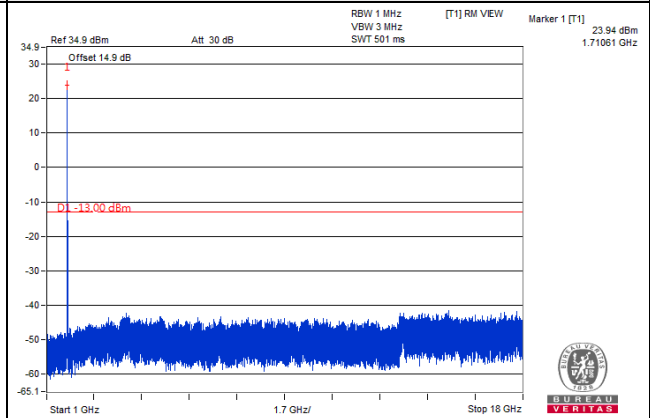
# LTE Band 66, Channel Bandwidth 5MHz

Channel 131997 (1712.5MHz)

Frequency Range : 9kHz ~ 1GHz

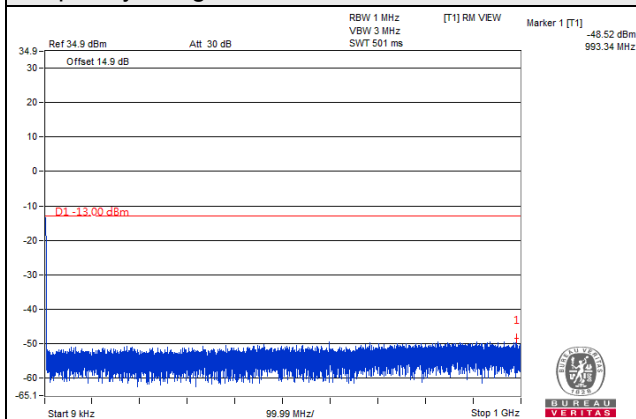


Frequency Range : 1GHz ~ 18GHz

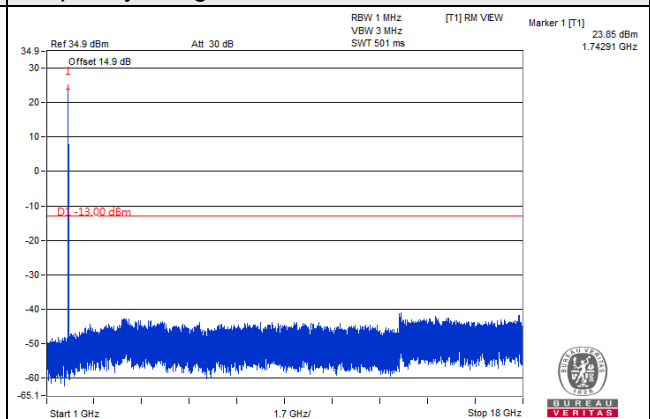


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

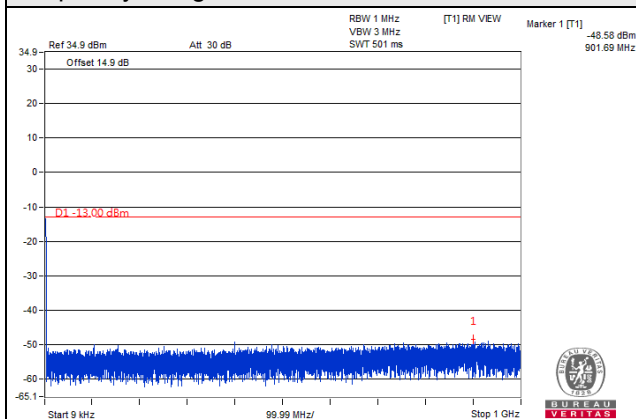


Frequency Range : 1GHz ~ 18GHz

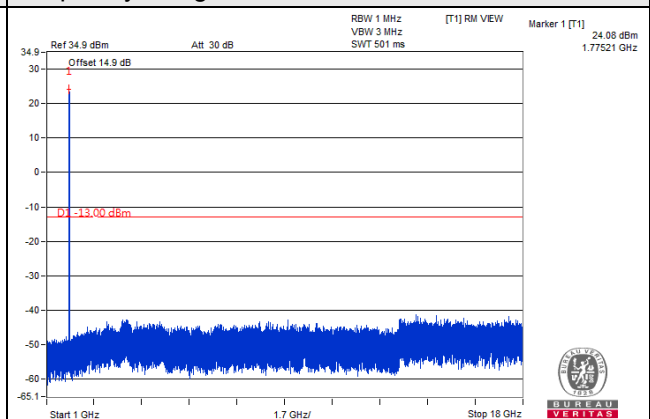


Channel 132647 (1777.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

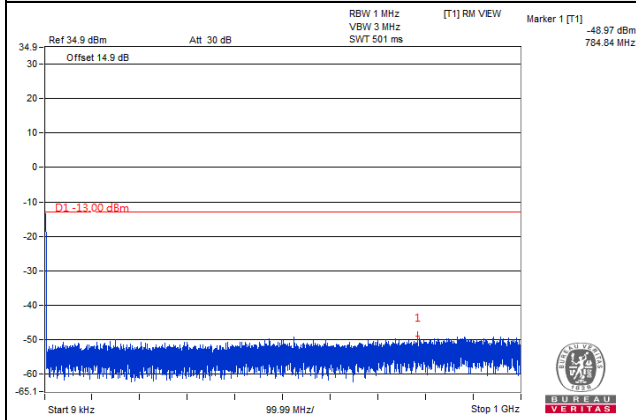


\*The 9 kHz tone is from the spectrum analyzer.

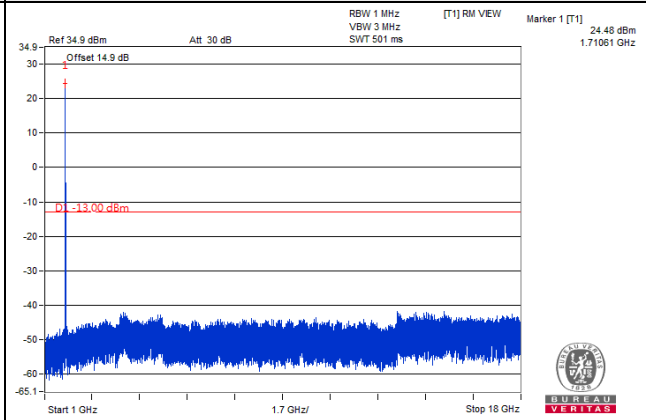
# LTE Band 66, Channel Bandwidth 10MHz

Channel 132022 (1715.0MHz)

Frequency Range : 9kHz ~ 1GHz

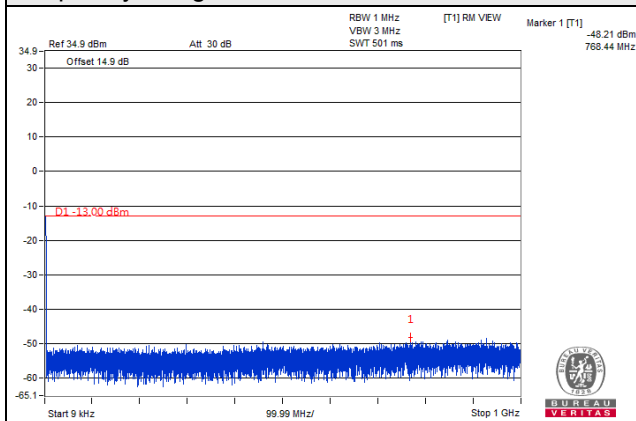


Frequency Range : 1GHz ~ 18GHz

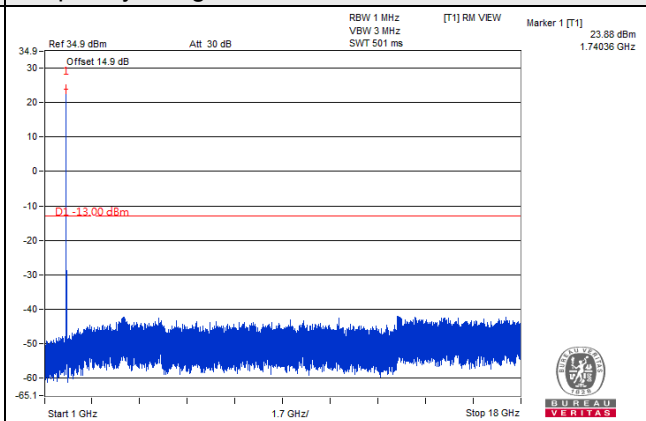


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

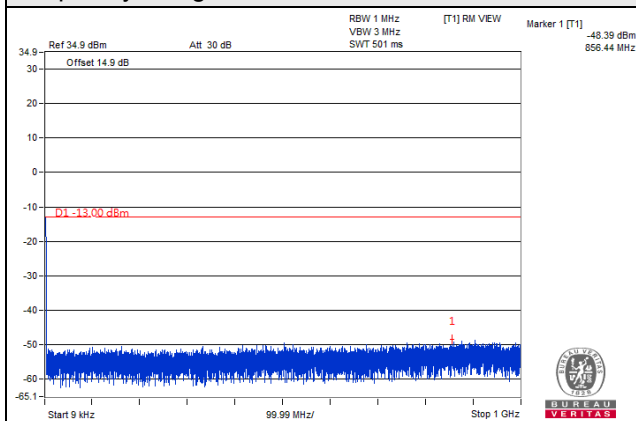


Frequency Range : 1GHz ~ 18GHz

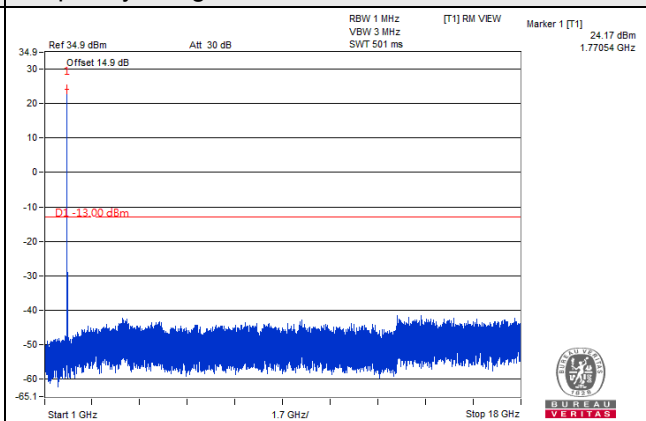


Channel 132622 (1775.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

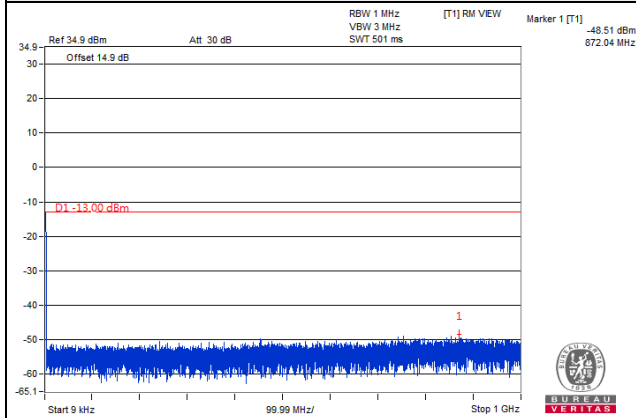


\*The 9 kHz tone is from the spectrum analyzer.

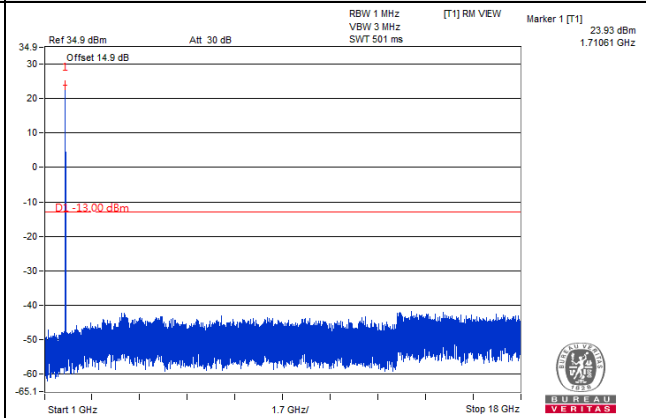
# LTE Band 66, Channel Bandwidth 15MHz

Channel 132047 (1717.5MHz)

Frequency Range : 9kHz ~ 1GHz

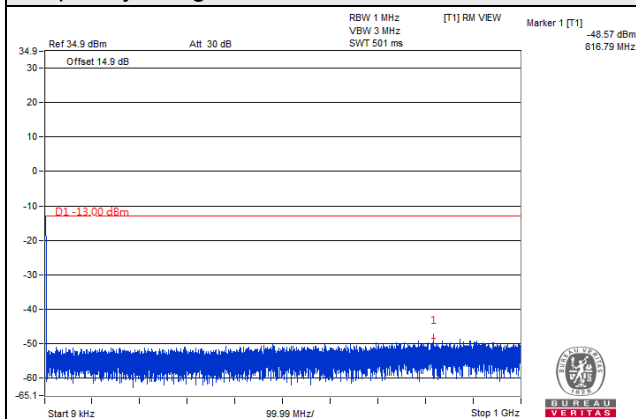


Frequency Range : 1GHz ~ 18GHz

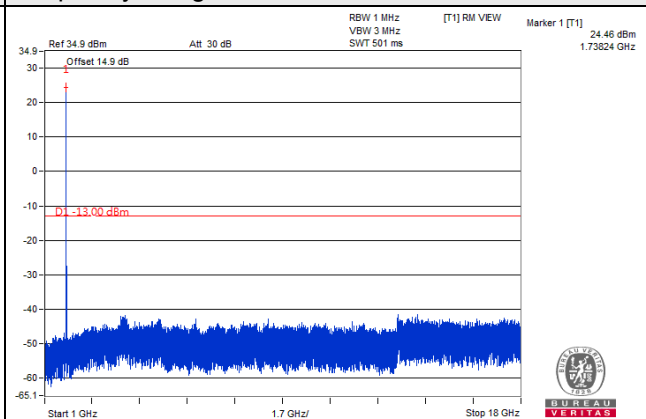


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

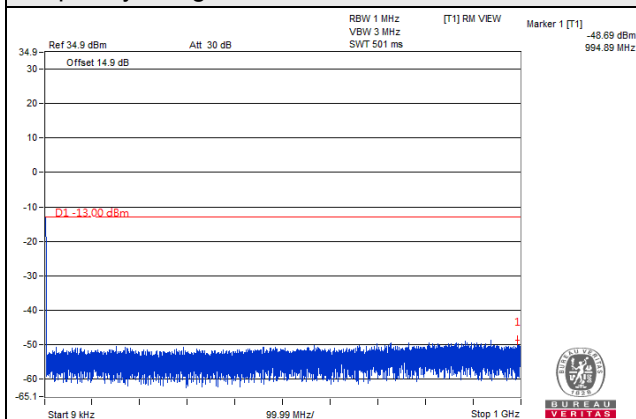


Frequency Range : 1GHz ~ 18GHz

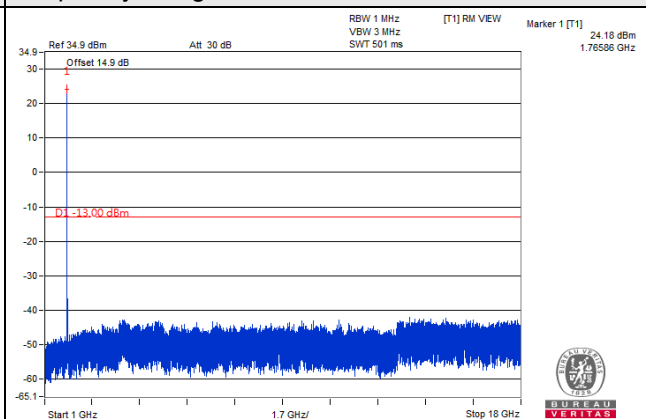


Channel 132597 (1772.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

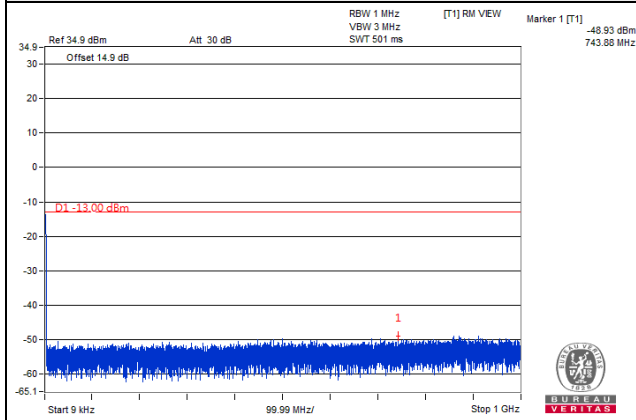


\*The 9 kHz tone is from the spectrum analyzer.

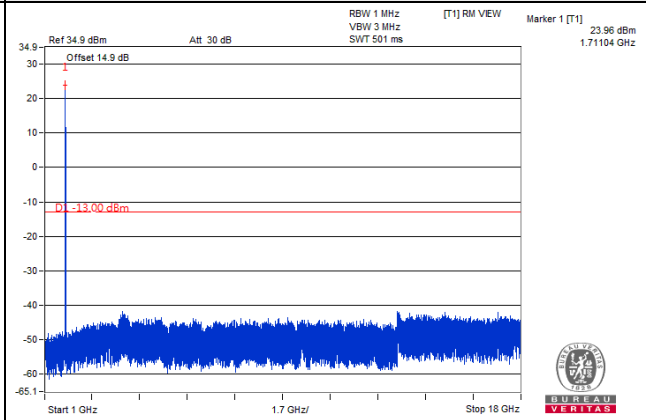
# LTE Band 66, Channel Bandwidth 20MHz

Channel 132072 (1720.0MHz)

Frequency Range : 9kHz ~ 1GHz

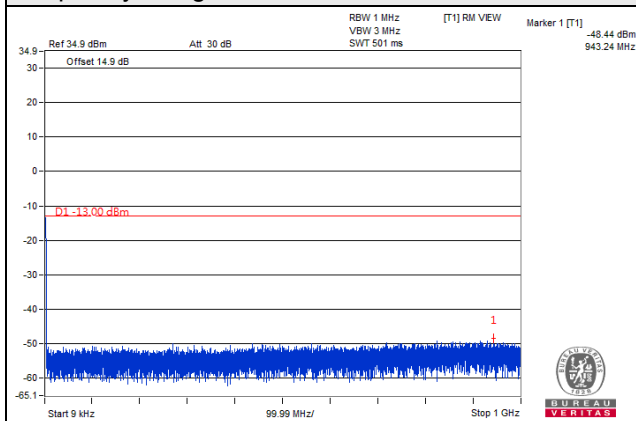


Frequency Range : 1GHz ~ 18GHz

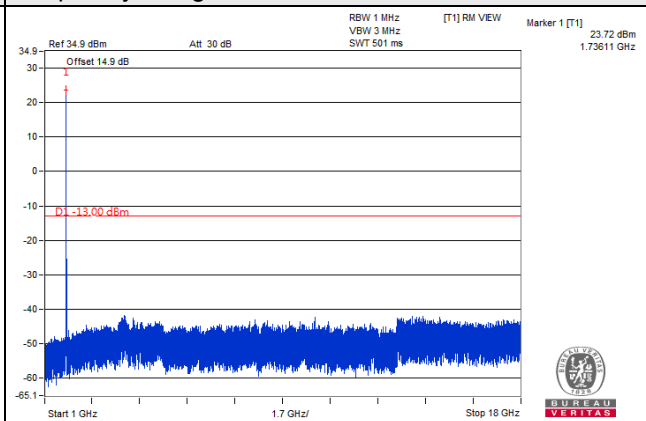


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

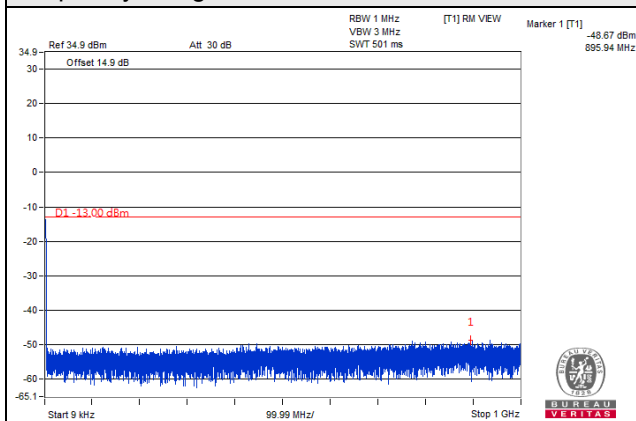


Frequency Range : 1GHz ~ 18GHz

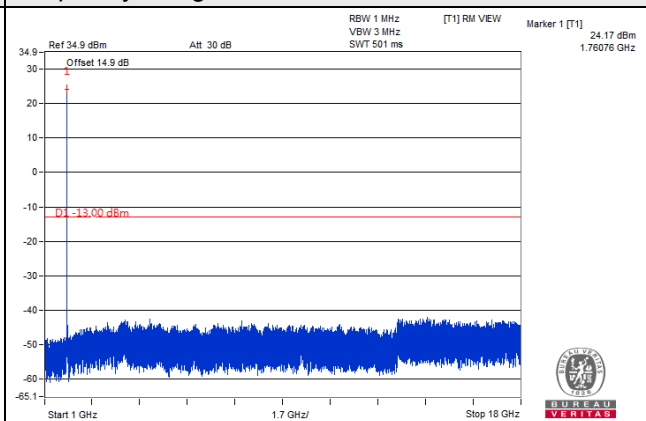


Channel 132572 (1770.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz

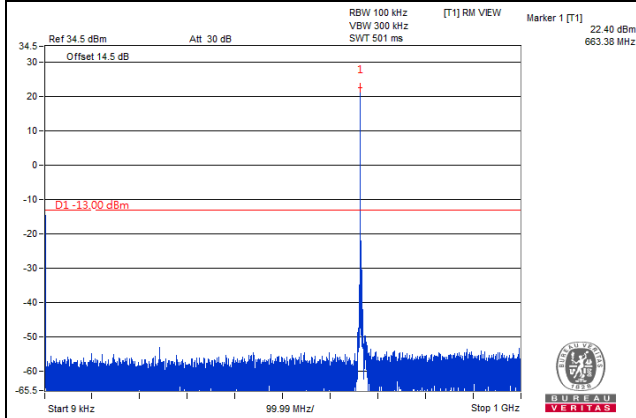


\*The 9 kHz tone is from the spectrum analyzer.

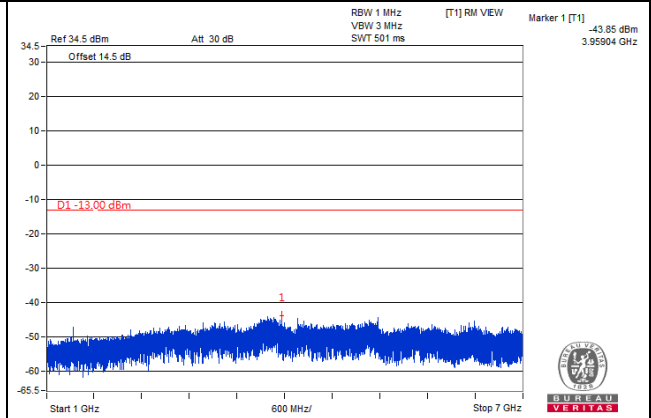
## LTE Band 71, Channel Bandwidth 5MHz

Channel 133147 (665.5MHz)

Frequency Range : 9kHz ~ 1GHz

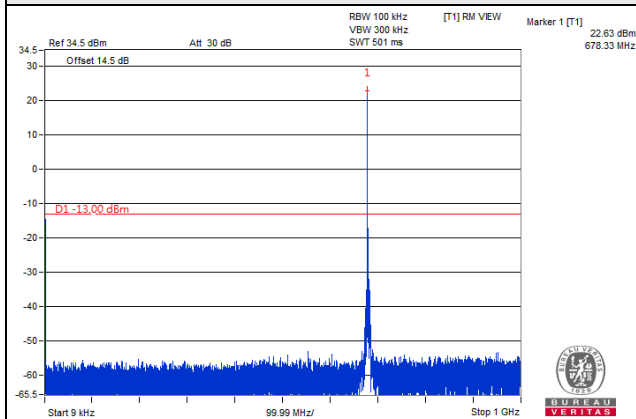


Frequency Range : 1GHz ~ 7GHz

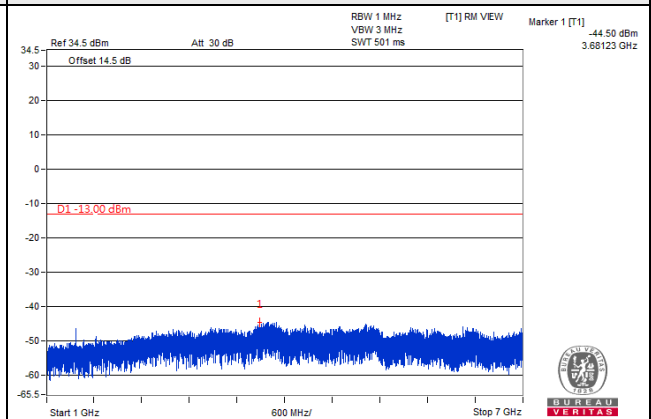


Channel 133297 (680.5MHz)

Frequency Range : 9kHz ~ 1GHz

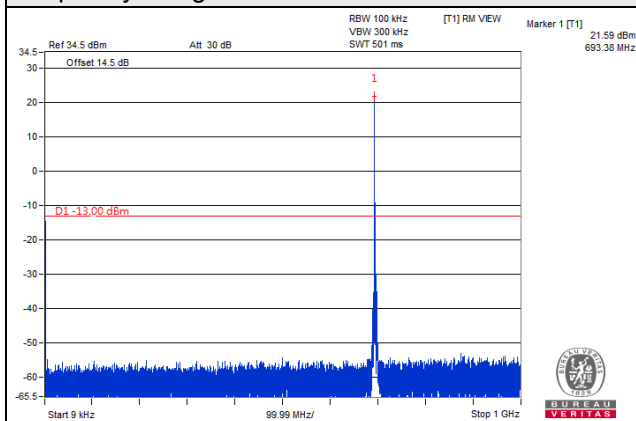


Frequency Range : 1GHz ~ 7GHz

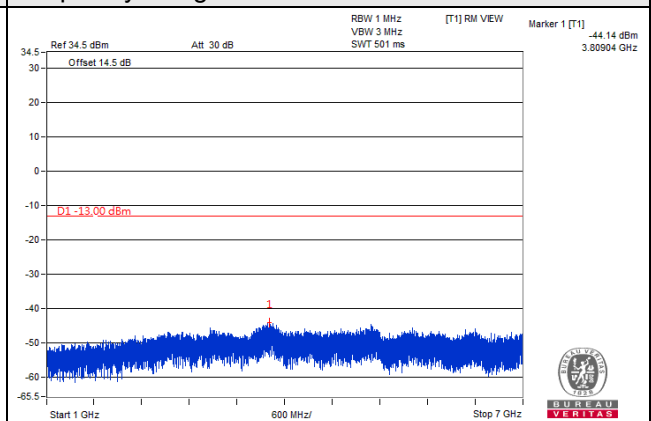


Channel 133447 (695.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 7GHz

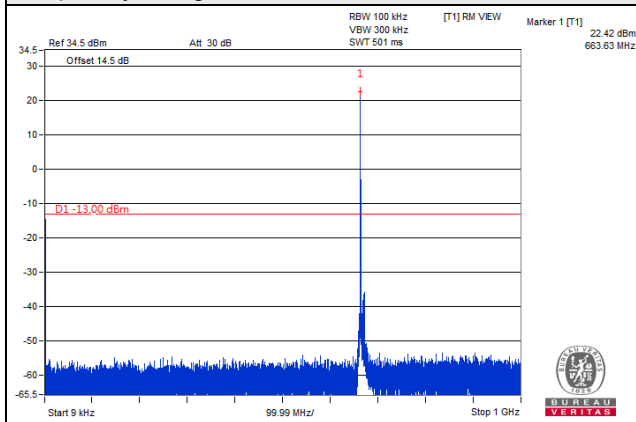


\*The 9 kHz tone is from the spectrum analyzer.

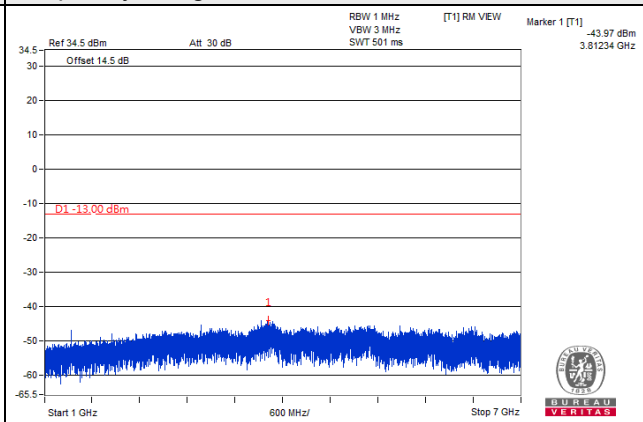
# LTE Band 71, Channel Bandwidth 10MHz

Channel 133172 (668.0MHz)

Frequency Range : 9kHz ~ 1GHz

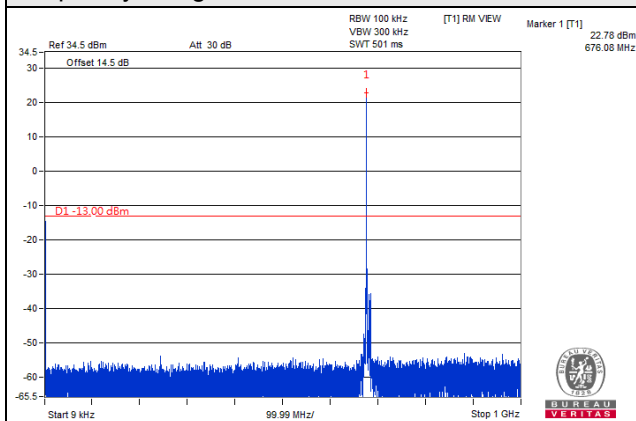


Frequency Range : 1GHz ~ 7GHz

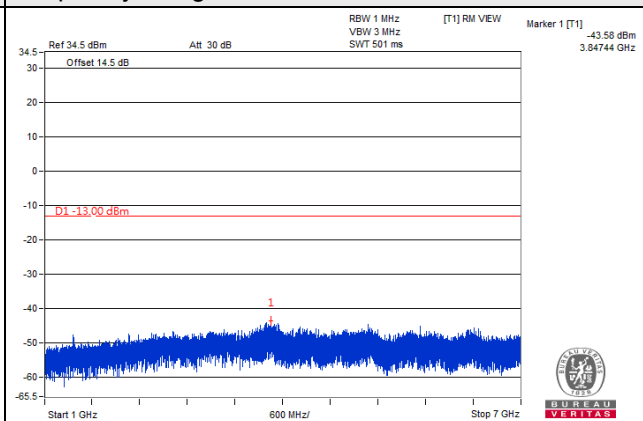


Channel 133297 (680.5MHz)

Frequency Range : 9kHz ~ 1GHz

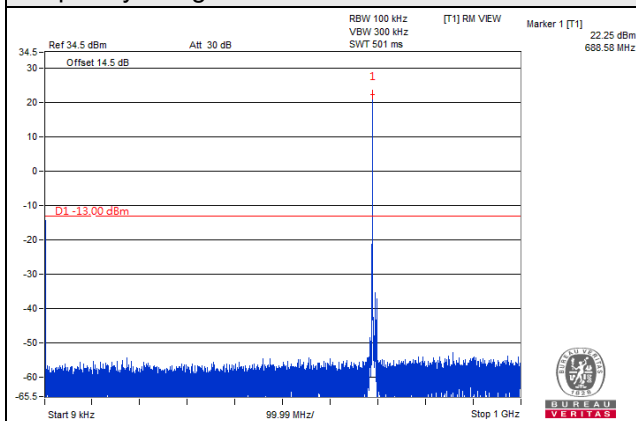


Frequency Range : 1GHz ~ 7GHz

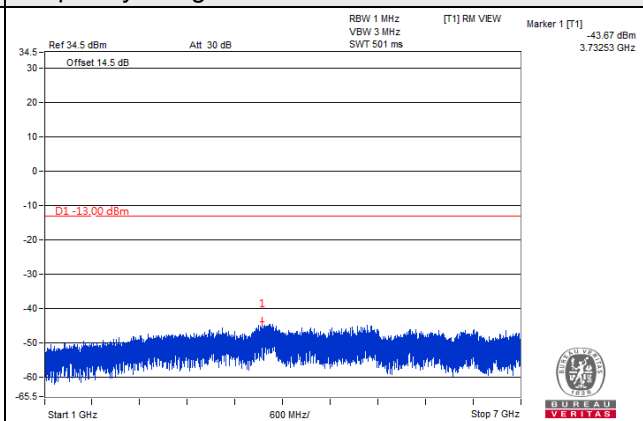


Channel 133422 (693.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 7GHz

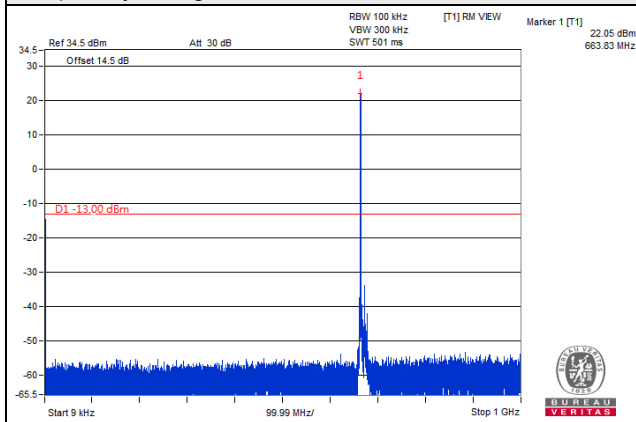


\*The 9 kHz tone is from the spectrum analyzer.

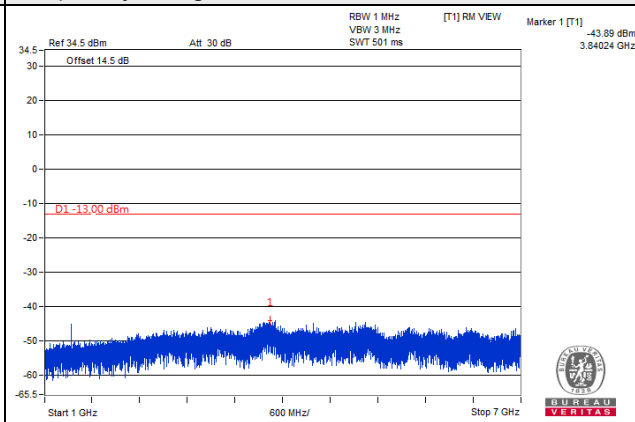
# LTE Band 71, Channel Bandwidth 15MHz

Channel 133197 (670.5MHz)

Frequency Range : 9kHz ~ 1GHz

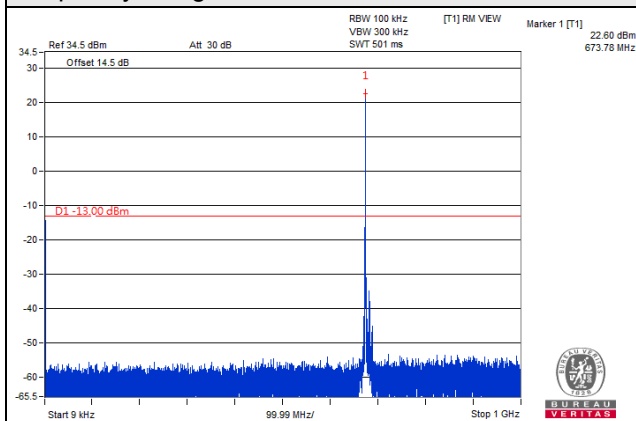


Frequency Range : 1GHz ~ 7GHz

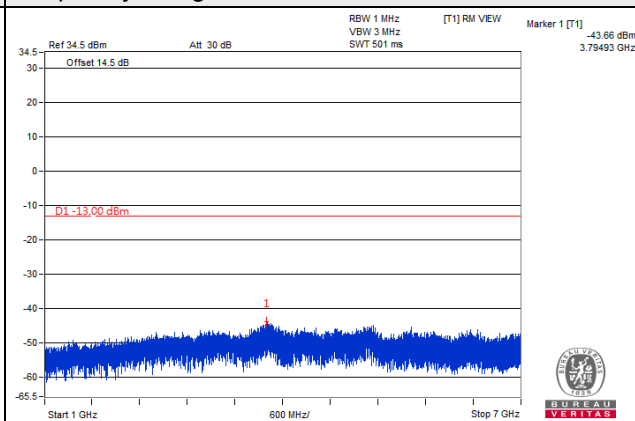


Channel 133297 (680.5MHz)

Frequency Range : 9kHz ~ 1GHz

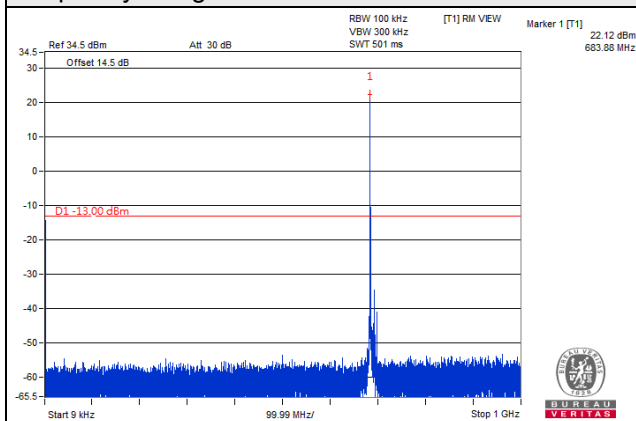


Frequency Range : 1GHz ~ 7GHz

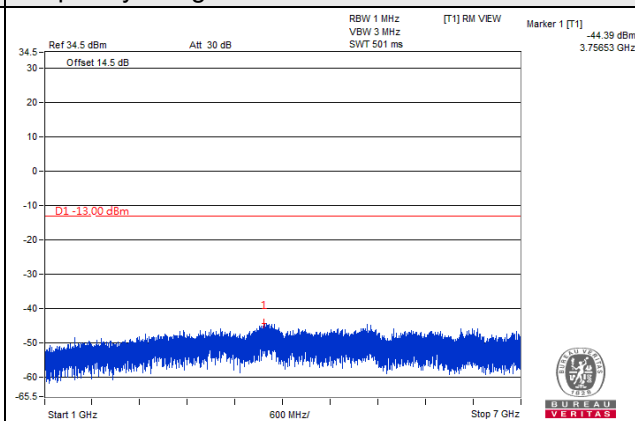


Channel 133397 (690.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 7GHz

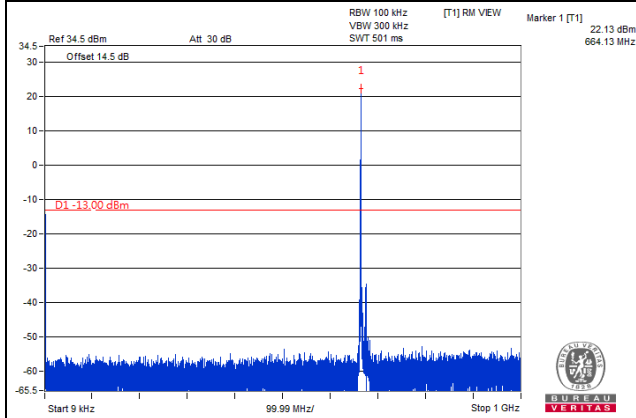


\*The 9 kHz tone is from the spectrum analyzer.

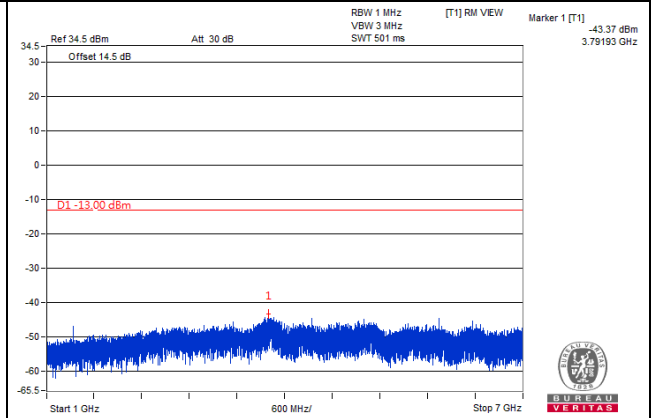
# LTE Band 71, Channel Bandwidth 20MHz

Channel 133222 (673.0MHz)

Frequency Range : 9kHz ~ 1GHz

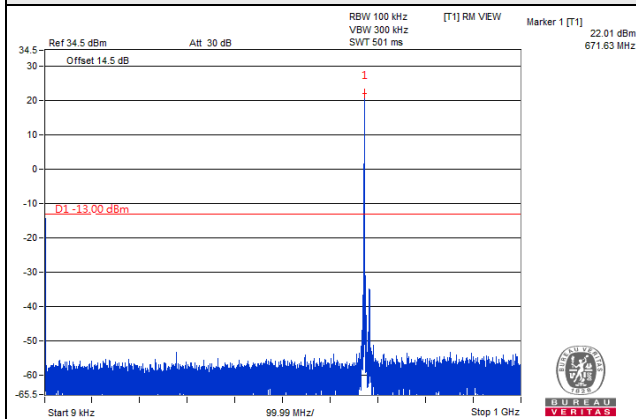


Frequency Range : 1GHz ~ 7GHz

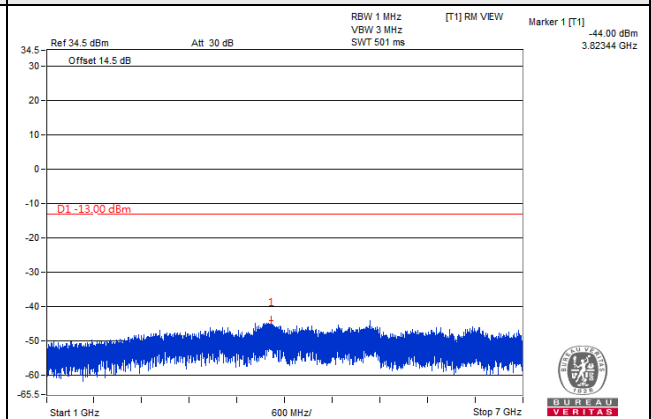


Channel 133297 (680.5MHz)

Frequency Range : 9kHz ~ 1GHz

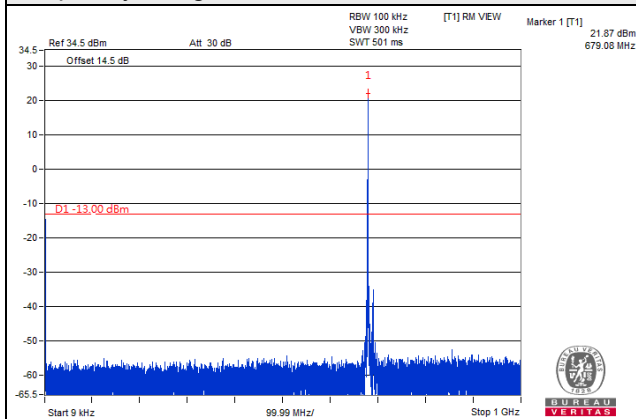


Frequency Range : 1GHz ~ 7GHz

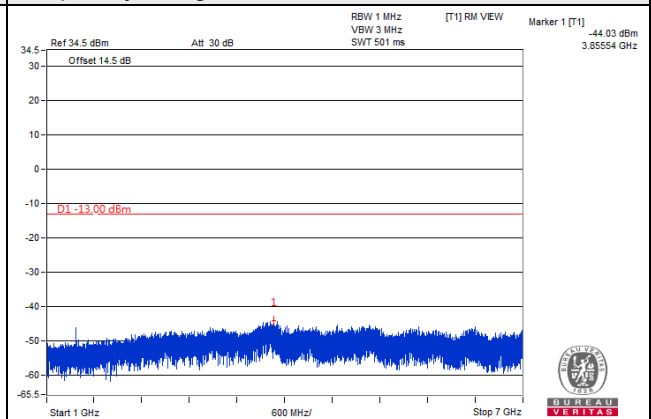


Channel 133372 (688.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 7GHz



\*The 9 kHz tone is from the spectrum analyzer.

## 4.8 Radiated Emission Measurement

### 4.8.1 Limits of Radiated Emission Measurement

For LTE Band 7:

According to FCC 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log (P)$  dB. The emission limit equal to -25dBm.

For LTE Band 12, 71:

According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. The limit of emissions is equal to -13 dBm.

For LTE Band 13:

According to FCC 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB. The limit of emissions is equal to -13 dBm.

According to FCC 27.53(f), for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 dBm.

For LTE Band 4, 66:

According to FCC 27.53(h), for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log (P)$  dB.

#### 4.8.2 Test Procedure

- 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.
- 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.
- 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.
- Following C63.26 section 5.5 and 5.2.7
  - $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
  - $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

#### Note:

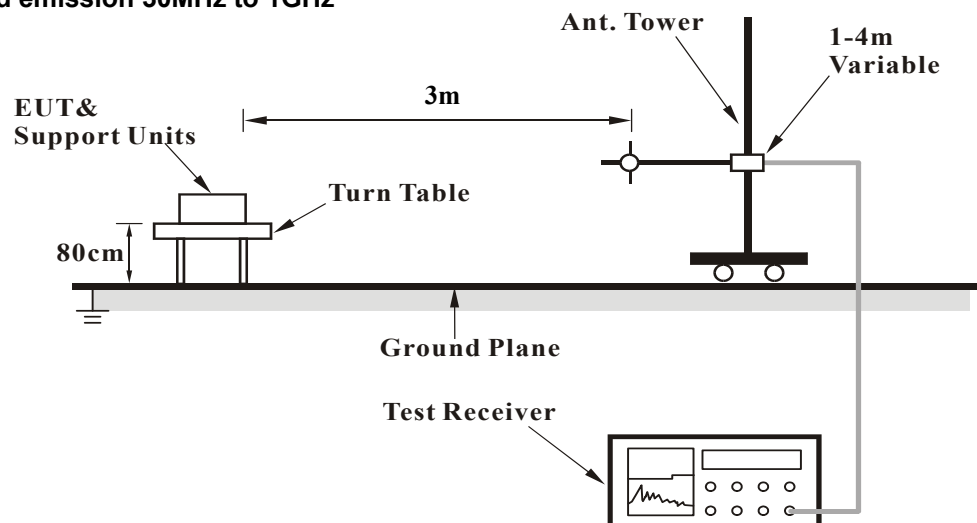
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
- The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:  
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

#### 4.8.3 Deviation from Test Standard

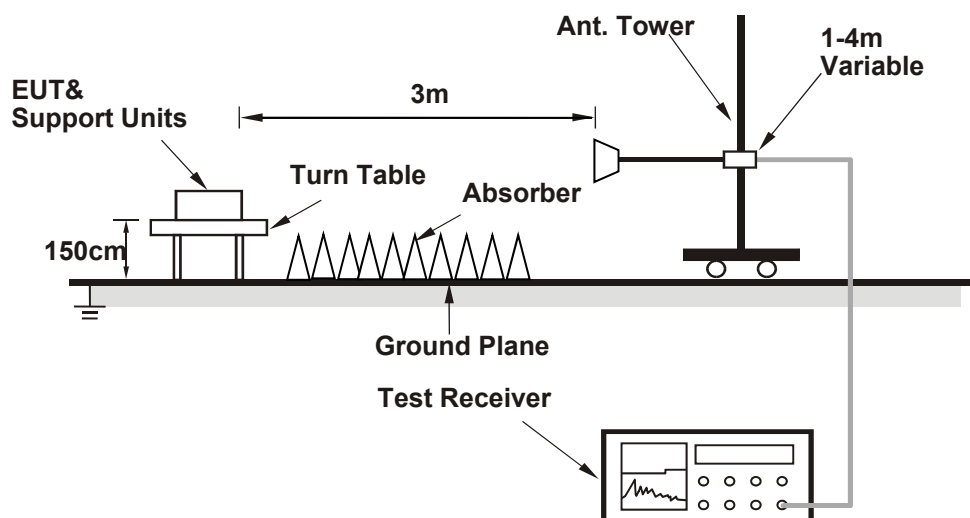
No deviation.

#### 4.8.4 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).

#### 4.8.5 Test Results

Below 1GHz

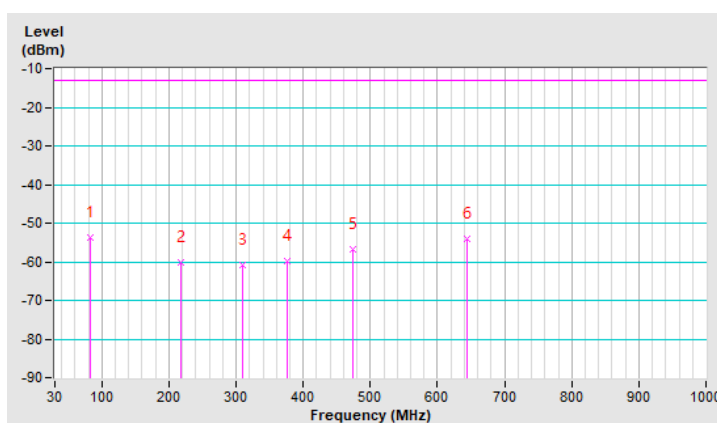
LTE Band 4, Channel Bandwidth 5MHz

|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 20375<br>(1752.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 83.35           | -53.67     | -13.00      | -40.67      | 1.11 H             | 297                  | 55.68            | -109.35                  |
| 2                                                    | 217.21          | -60.04     | -13.00      | -47.04      | 3.18 H             | 23                   | 46.12            | -106.16                  |
| 3                                                    | 309.36          | -60.94     | -13.00      | -47.94      | 2.28 H             | 256                  | 40.66            | -101.60                  |
| 4                                                    | 376.29          | -59.77     | -13.00      | -46.77      | 1.72 H             | 151                  | 40.57            | -100.34                  |
| 5                                                    | 473.29          | -56.77     | -13.00      | -43.77      | 2.96 H             | 225                  | 41.28            | -98.05                   |
| 6                                                    | 644.98          | -54.15     | -13.00      | -41.15      | 3.77 H             | 312                  | 40.50            | -94.65                   |

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.

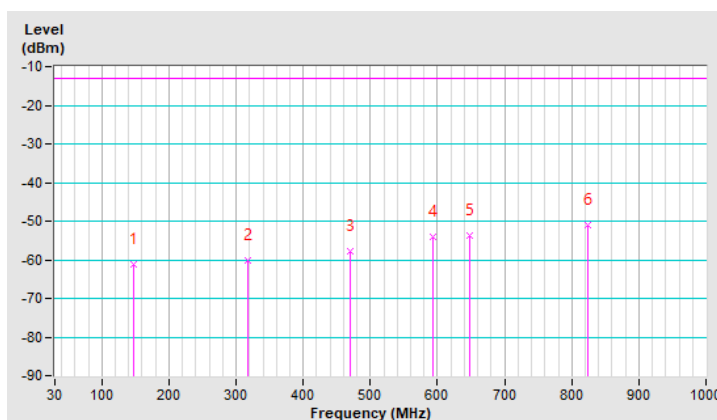


|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 20375<br>(1752.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |            |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 147.37          | -61.16     | -13.00      | -48.16      | 1.96 V             | 10                   | 42.78            | -103.94                  |
| 2                                                 | 317.12          | -60.30     | -13.00      | -47.30      | 1.05 V             | 119                  | 41.18            | -101.48                  |
| 3                                                 | 469.41          | -57.72     | -13.00      | -44.72      | 1.66 V             | 167                  | 40.40            | -98.12                   |
| 4                                                 | 593.57          | -54.17     | -13.00      | -41.17      | 3.88 V             | 130                  | 41.43            | -95.60                   |
| 5                                                 | 648.86          | -53.80     | -13.00      | -40.80      | 3.50 V             | 272                  | 40.88            | -94.68                   |
| 6                                                 | 824.43          | -51.15     | -13.00      | -38.15      | 3.79 V             | 277                  | 40.20            | -91.35                   |

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.



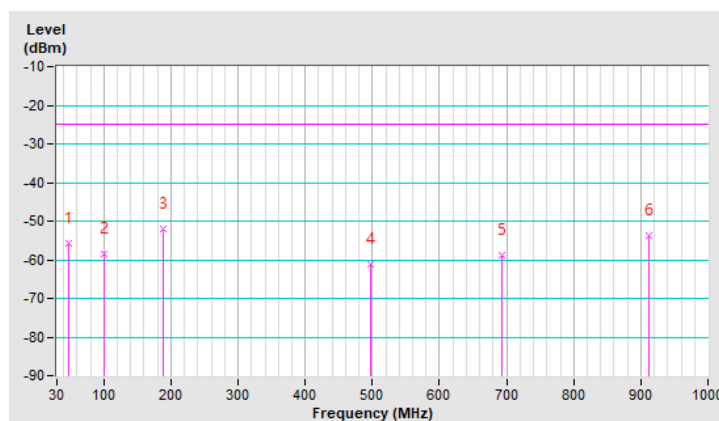
# LTE Band 7, Channel Bandwidth 5MHz

|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 21100<br>(2535.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 48.43           | -55.60     | -25.00      | -30.60      | 1.25 H             | 214                  | 48.54            | -104.14                  |
| 2                                                    | 100.81          | -58.55     | -25.00      | -33.55      | 1.00 H             | 60                   | 49.94            | -108.49                  |
| 3                                                    | 189.08          | -52.10     | -25.00      | -27.10      | 1.50 H             | 251                  | 54.30            | -106.40                  |
| 4                                                    | 497.54          | -61.30     | -25.00      | -36.30      | 1.00 H             | 212                  | 36.31            | -97.61                   |
| 5                                                    | 692.51          | -58.93     | -25.00      | -33.93      | 1.00 H             | 5                    | 35.21            | -94.14                   |
| 6                                                    | 911.73          | -53.70     | -25.00      | -28.70      | 1.25 H             | 113                  | 35.61            | -89.31                   |

## 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.

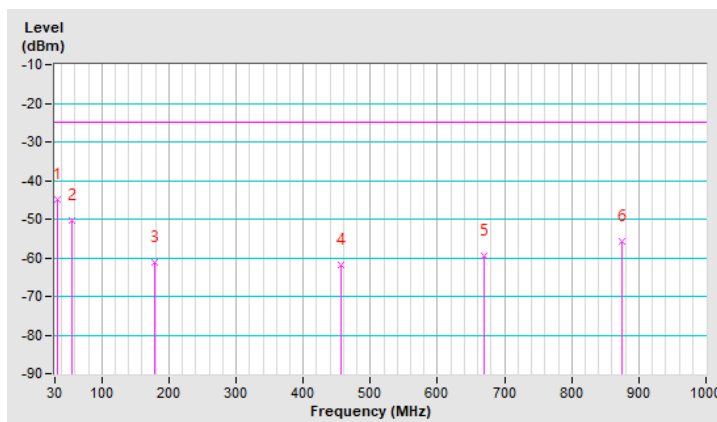


|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 21100<br>(2535.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                    |               |                |                |                          |                            |                        |                                |
|---------------------------------------------------|--------------------|---------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 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                                                 | 33.88              | -44.96        | -25.00         | -19.96         | 1.25 V                   | 214                        | 60.34                  | -105.30                        |
| 2                                                 | 56.19              | -50.26        | -25.00         | -25.26         | 1.00 V                   | 242                        | 54.11                  | -104.37                        |
| 3                                                 | 179.38             | -61.14        | -25.00         | -36.14         | 1.50 V                   | 149                        | 44.03                  | -105.17                        |
| 4                                                 | 455.83             | -62.00        | -25.00         | -37.00         | 1.25 V                   | 263                        | 36.29                  | -98.29                         |
| 5                                                 | 670.20             | -59.40        | -25.00         | -34.40         | 1.00 V                   | 14                         | 35.08                  | -94.48                         |
| 6                                                 | 874.87             | -55.77        | -25.00         | -30.77         | 1.25 V                   | 345                        | 34.57                  | -90.34                         |

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.



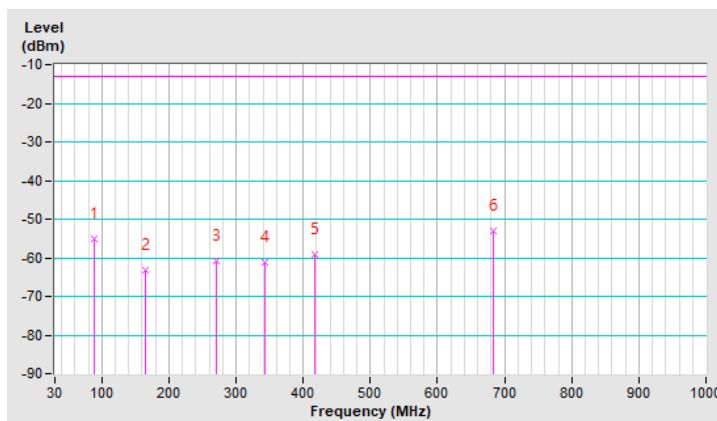
# LTE Band 12, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23095<br>(707.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                         |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 89.17           | -54.97    | -13.00      | -41.97      | 3.72 H             | 173                  | -38.27           | -16.70                   |
| 2                                                    | 164.83          | -63.23    | -13.00      | -50.23      | 3.98 H             | 240                  | -52.40           | -10.83                   |
| 3                                                    | 270.56          | -60.88    | -13.00      | -47.88      | 1.31 H             | 277                  | -51.05           | -9.83                    |
| 4                                                    | 343.31          | -61.17    | -13.00      | -48.17      | 1.55 H             | 236                  | -53.17           | -8.00                    |
| 5                                                    | 417.03          | -59.02    | -13.00      | -46.02      | 2.09 H             | 317                  | -52.62           | -6.40                    |
| 6                                                    | 682.81          | -53.00    | -13.00      | -40.00      | 3.00 H             | 205                  | -51.87           | -1.13                    |

## 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.

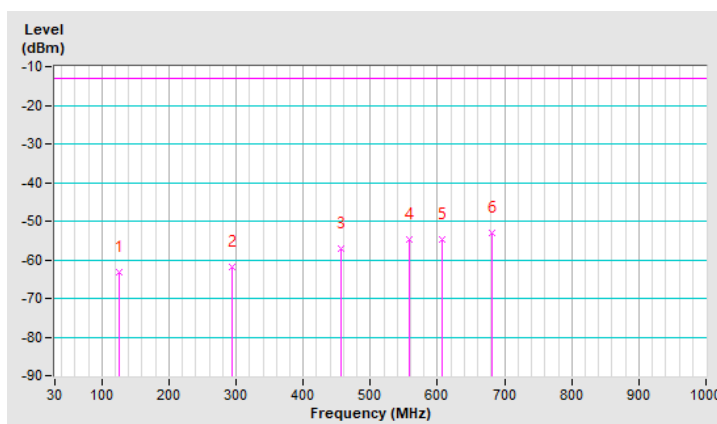


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23095<br>(707.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                         |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                    |              |                |                |                          |                            |                        |                                |
|---------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                 | 126.03             | -63.30       | -13.00         | -50.30         | 2.01 V                   | 232                        | -50.84                 | -12.46                         |
| 2                                                 | 294.81             | -62.03       | -13.00         | -49.03         | 2.90 V                   | 28                         | -53.00                 | -9.03                          |
| 3                                                 | 455.83             | -57.03       | -13.00         | -44.03         | 1.33 V                   | 324                        | -51.85                 | -5.18                          |
| 4                                                 | 558.65             | -54.78       | -13.00         | -41.78         | 2.53 V                   | 32                         | -51.33                 | -3.45                          |
| 5                                                 | 606.18             | -54.77       | -13.00         | -41.77         | 2.84 V                   | 279                        | -52.49                 | -2.28                          |
| 6                                                 | 680.87             | -53.18       | -13.00         | -40.18         | 1.15 V                   | 55                         | -52.02                 | -1.16                          |

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.



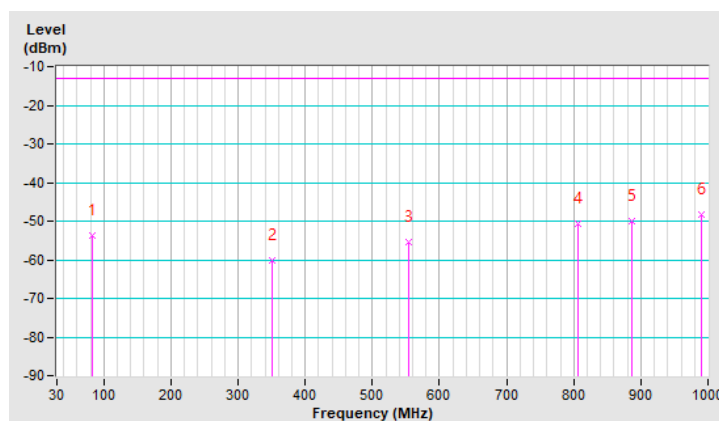
LTE Band 13, Channel Bandwidth 10MHz

|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23230<br>(782.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                         |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 83.35           | -53.67    | -13.00      | -40.67      | 2.34 H             | 186                  | -37.43           | -16.24                   |
| 2                                                    | 350.10          | -60.25    | -13.00      | -47.25      | 2.97 H             | 127                  | -52.30           | -7.95                    |
| 3                                                    | 554.77          | -55.39    | -13.00      | -42.39      | 1.83 H             | 307                  | -51.84           | -3.55                    |
| 4                                                    | 806.00          | -50.64    | -13.00      | -37.64      | 1.09 H             | 153                  | -51.98           | 1.34                     |
| 5                                                    | 886.51          | -49.86    | -13.00      | -36.86      | 3.53 H             | 302                  | -52.77           | 2.91                     |
| 6                                                    | 989.33          | -48.44    | -13.00      | -35.44      | 2.77 H             | 188                  | -52.80           | 4.36                     |

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.

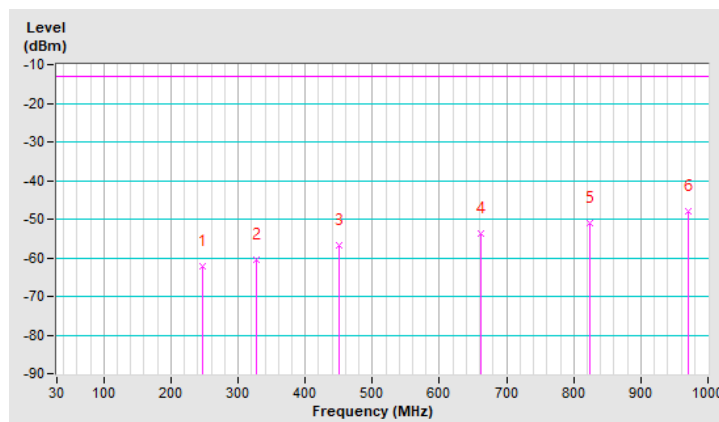


|                          |                                |                 |                |
|--------------------------|--------------------------------|-----------------|----------------|
| Mode                     | TX channel 23230<br>(782.0MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                         |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                    |              |                |                |                          |                            |                        |                                |
|---------------------------------------------------|--------------------|--------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| No                                                | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                 | 247.28             | -62.26       | -13.00         | -49.26         | 1.94 V                   | 231                        | -51.23                 | -11.03                         |
| 2                                                 | 327.79             | -60.67       | -13.00         | -47.67         | 3.80 V                   | 259                        | -52.59                 | -8.08                          |
| 3                                                 | 450.01             | -56.78       | -13.00         | -43.78         | 3.13 V                   | 16                         | -51.48                 | -5.30                          |
| 4                                                 | 662.44             | -53.82       | -13.00         | -40.82         | 2.24 V                   | 29                         | -52.33                 | -1.49                          |
| 5                                                 | 824.43             | -51.15       | -13.00         | -38.15         | 1.25 V                   | 359                        | -52.91                 | 1.76                           |
| 6                                                 | 969.93             | -47.91       | -13.00         | -34.91         | 2.02 V                   | 138                        | -52.37                 | 4.46                           |

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.



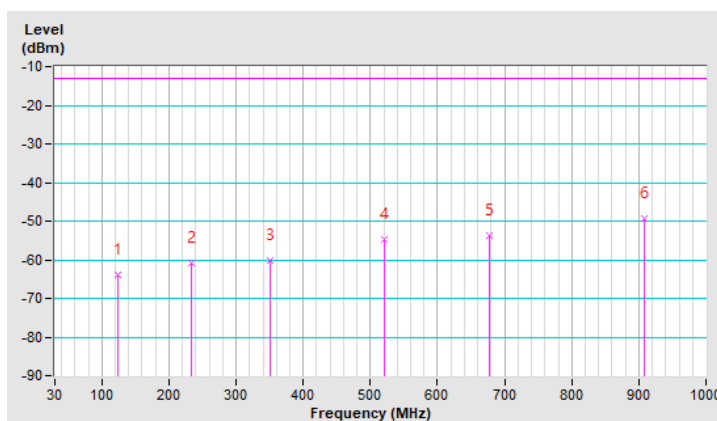
LTE Band 66, Channel Bandwidth 1.4MHz

|                          |                                  |                 |                |
|--------------------------|----------------------------------|-----------------|----------------|
| Mode                     | TX channel 132665<br>(1779.3MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                           |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 124.09          | -63.83     | -13.00      | -50.83      | 2.37 H             | 69                   | 42.07            | -105.90                  |
| 2                                                    | 233.70          | -61.01     | -13.00      | -48.01      | 1.82 H             | 166                  | 44.16            | -105.17                  |
| 3                                                    | 350.10          | -60.25     | -13.00      | -47.25      | 2.79 H             | 4                    | 40.81            | -101.06                  |
| 4                                                    | 521.79          | -54.78     | -13.00      | -41.78      | 3.90 H             | 228                  | 42.33            | -97.11                   |
| 5                                                    | 676.99          | -53.66     | -13.00      | -40.66      | 3.35 H             | 297                  | 40.69            | -94.35                   |
| 6                                                    | 907.85          | -49.17     | -13.00      | -36.17      | 2.26 H             | 304                  | 40.26            | -89.43                   |

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.

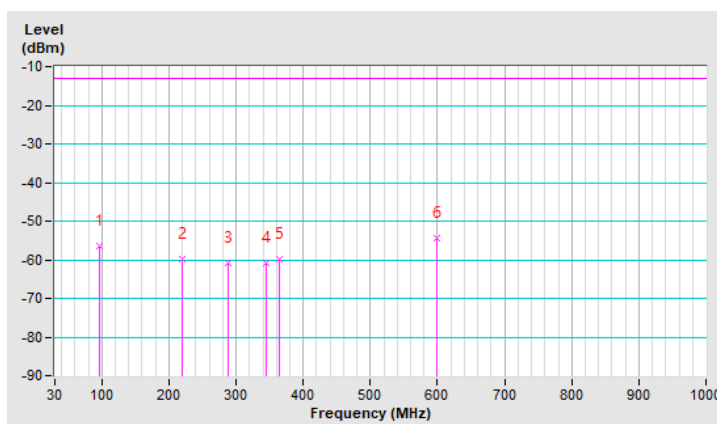


|                          |                                  |                 |                |
|--------------------------|----------------------------------|-----------------|----------------|
| Mode                     | TX channel 132665<br>(1779.3MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                           |                 |                |

| Antenna Polarity & Test Distance : Vertical at 3m |                 |            |             |             |                    |                      |                  |                          |
|---------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                 | 96.93           | -56.41     | -13.00      | -43.41      | 2.58 V             | 193                  | 52.87            | -109.28                  |
| 2                                                 | 220.12          | -59.70     | -13.00      | -46.70      | 2.68 V             | 330                  | 46.43            | -106.13                  |
| 3                                                 | 288.99          | -60.93     | -13.00      | -47.93      | 2.52 V             | 335                  | 41.35            | -102.28                  |
| 4                                                 | 344.28          | -60.84     | -13.00      | -47.84      | 3.37 V             | 14                   | 40.29            | -101.13                  |
| 5                                                 | 364.65          | -59.90     | -13.00      | -46.90      | 3.74 V             | 295                  | 40.79            | -100.69                  |
| 6                                                 | 599.39          | -54.38     | -13.00      | -41.38      | 2.94 V             | 223                  | 41.09            | -95.47                   |

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.



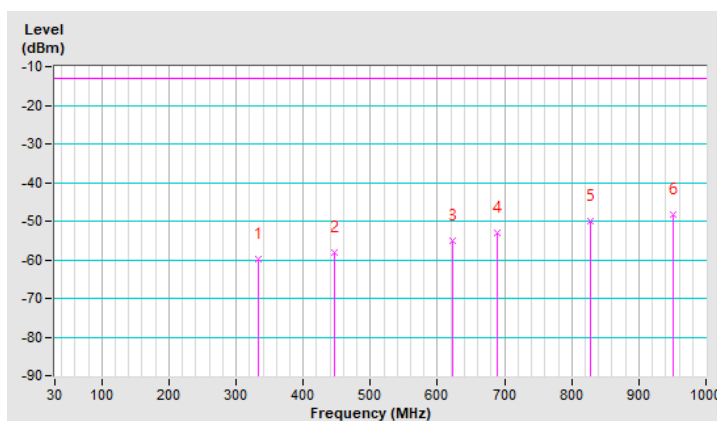
# LTE Band 71, Channel Bandwidth 20MHz

|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 133297<br>(680.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 333.61          | -59.93    | -13.00      | -46.93      | 3.99 H             | 149                  | -51.95           | -7.98                    |
| 2                                                    | 446.13          | -58.05    | -13.00      | -45.05      | 1.00 H             | 32                   | -52.63           | -5.42                    |
| 3                                                    | 621.70          | -55.00    | -13.00      | -42.00      | 3.43 H             | 41                   | -53.07           | -1.93                    |
| 4                                                    | 689.60          | -53.10    | -13.00      | -40.10      | 1.77 H             | 355                  | -52.04           | -1.06                    |
| 5                                                    | 828.31          | -50.16    | -13.00      | -37.16      | 3.05 H             | 35                   | -51.98           | 1.82                     |
| 6                                                    | 950.53          | -48.16    | -13.00      | -35.16      | 1.65 H             | 113                  | -52.49           | 4.33                     |

## 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.

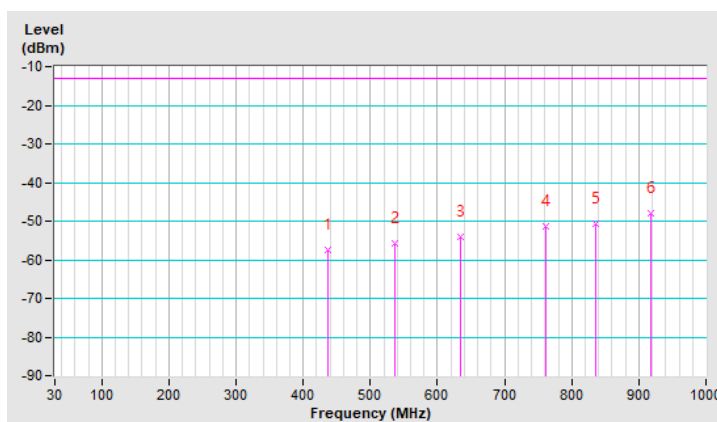


|                          |                                 |                 |                |
|--------------------------|---------------------------------|-----------------|----------------|
| Mode                     | TX channel 133297<br>(680.5MHz) | Frequency Range | Below 1000 MHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz   |
| Tested By                | Han Wu                          |                 |                |

| 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                                                 | 437.40          | -57.42        | -13.00        | -44.42        | 2.61 V             | 103                  | -51.79           | -5.63                    |
| 2                                                 | 536.34          | -55.78        | -13.00        | -42.78        | 1.20 V             | 90                   | -51.94           | -3.84                    |
| 3                                                 | 634.31          | -53.90        | -13.00        | -40.90        | 1.83 V             | 201                  | -52.20           | -1.70                    |
| 4                                                 | 761.38          | -51.49        | -13.00        | -38.49        | 2.62 V             | 115                  | -52.11           | 0.62                     |
| 5                                                 | 835.10          | -50.54        | -13.00        | -37.54        | 3.25 V             | 268                  | -52.43           | 1.89                     |
| <b>6</b>                                          | <b>918.52</b>   | <b>-48.07</b> | <b>-13.00</b> | <b>-35.07</b> | <b>2.56 V</b>      | <b>123</b>           | <b>-52.00</b>    | <b>3.93</b>              |

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 4, Channel Bandwidth 1.4MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 19957<br>(1710.7MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3421.40            | -49.73        | -13.00         | -36.73         | 1.85 H                   | 173                        | 43.47                  | -93.20                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3421.40            | -50.31        | -13.00         | -37.31         | 1.22 V                   | 167                        | 42.89                  | -93.20                         |

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 20175<br>(1732.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3465.00            | -49.74        | -13.00         | -36.74         | 1.91 H                   | 174                        | 43.13                  | -92.87                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3465.00            | -50.15        | -13.00         | -37.15         | 1.30 V                   | 165                        | 42.72                  | -92.87                         |

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 20393<br>(1754.3MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3508.60            | -48.94        | -13.00         | -35.94         | 1.86 H                   | 177                        | 43.57                  | -92.51                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3508.60            | -49.67        | -13.00         | -36.67         | 1.27 V                   | 165                        | 42.84                  | -92.51                         |

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 4, Channel Bandwidth 5MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 19975<br>(1712.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3425.00            | -49.93        | -13.00         | -36.93         | 1.90 H                   | 177                        | 43.24                  | -93.17                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3425.00            | -49.74        | -13.00         | -36.74         | 1.29 V                   | 162                        | 43.43                  | -93.17                         |

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 20175<br>(1732.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3465.00            | -49.14        | -13.00         | -36.14         | 1.93 H                   | 174                        | 43.73                  | -92.87                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3465.00            | -50.04        | -13.00         | -37.04         | 1.27 V                   | 162                        | 42.83                  | -92.87                         |

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 20375<br>(1752.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3505.00            | -48.60        | -13.00         | -35.60         | 1.85 H                   | 172                        | 43.94                  | -92.54                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3505.00            | -49.75        | -13.00         | -36.75         | 1.31 V                   | 166                        | 42.79                  | -92.54                         |

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 4, Channel Bandwidth 20MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 20050<br>(1720.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3440.00            | -49.69        | -13.00         | -36.69         | 1.86 H                   | 174                        | 43.39                  | -93.08                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3440.00            | -50.42        | -13.00         | -37.42         | 1.29 V                   | 161                        | 42.66                  | -93.08                         |

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 20175<br>(1732.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3465.00            | -48.77        | -13.00         | -35.77         | 1.84 H                   | 176                        | 44.10                  | -92.87                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3465.00            | -49.29        | -13.00         | -36.29         | 1.22 V                   | 168                        | 43.58                  | -92.87                         |

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 20300<br>(1745.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 3490.00            | -49.16        | -13.00         | -36.16         | 1.83 H                   | 174                        | 43.50                  | -92.66                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3490.00            | -50.08        | -13.00         | -37.08         | 1.21 V                   | 164                        | 42.58                  | -92.66                         |

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 7, Channel Bandwidth 5MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 20775<br>(2502.5MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5005.00            | -43.74        | -25.00         | -18.74         | 1.91 H                   | 224                        | 44.36                  | -88.10                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5005.00            | -45.06        | -25.00         | -20.06         | 2.61 V                   | 92                         | 43.04                  | -88.10                         |

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 21100<br>(2535.0MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5070.00            | -43.34        | -25.00         | -18.34         | 1.90 H                   | 222                        | 44.48                  | -87.82                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5070.00            | -44.69        | -25.00         | -19.69         | 2.58 V                   | 93                         | 43.13                  | -87.82                         |

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 21425<br>(2567.5MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5135.00            | -43.82        | -25.00         | -18.82         | 1.86 H                   | 229                        | 44.13                  | -87.95                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5135.00            | -44.80        | -25.00         | -19.80         | 2.62 V                   | 87                         | 43.15                  | -87.95                         |

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.

LTE Band 7, Channel Bandwidth 20MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 20850<br>(2510.0MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5020.00            | -43.71        | -25.00         | -18.71         | 1.82 H                   | 227                        | 44.29                  | -88.00                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5020.00            | -44.71        | -25.00         | -19.71         | 2.59 V                   | 91                         | 43.29                  | -88.00                         |

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 21100<br>(2535.0MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5070.00            | -43.50        | -25.00         | -18.50         | 1.87 H                   | 219                        | 44.32                  | -87.82                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5070.00            | -44.58        | -25.00         | -19.58         | 2.58 V                   | 89                         | 43.24                  | -87.82                         |

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 21350<br>(2560.0MHz) | Frequency Range | 1GHz ~ 26GHz |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 5120.00            | -43.75        | -25.00         | -18.75         | 1.94 H                   | 221                        | 44.16                  | -87.91                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 5120.00            | -44.63        | -25.00         | -19.63         | 2.63 V                   | 97                         | 43.28                  | -87.91                         |

Remarks:

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

LTE Band 12, Channel Bandwidth 1.4MHz

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23017<br>(699.7MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1399.40            | -58.22       | -13.00         | -45.22         | 1.63 H                   | 95                         | 43.38                  | -101.60                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1399.40            | -58.66       | -13.00         | -45.66         | 1.11 V                   | 331                        | 42.94                  | -101.60                        |

Remarks:

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

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23095<br>(707.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1415.00            | -57.73       | -13.00         | -44.73         | 1.61 H                   | 89                         | 43.90                  | -101.63                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1415.00            | -58.32       | -13.00         | -45.32         | 1.18 V                   | 335                        | 43.31                  | -101.63                        |

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 23173<br>(715.3MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1430.60            | -58.33       | -13.00         | -45.33         | 1.66 H                   | 95                         | 43.34                  | -101.67                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1430.60            | -59.00       | -13.00         | -46.00         | 1.18 V                   | 338                        | 42.67                  | -101.67                        |

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 12, Channel Bandwidth 5MHz

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23035<br>(701.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1403.00            | -58.24       | -13.00         | -45.24         | 1.63 H                   | 95                         | 43.37                  | -101.61                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1403.00            | -58.49       | -13.00         | -45.49         | 1.14 V                   | 338                        | 43.12                  | -101.61                        |

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 23095<br>(707.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1415.00            | -58.38       | -13.00         | -45.38         | 1.69 H                   | 91                         | 43.25                  | -101.63                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1415.00            | -58.92       | -13.00         | -45.92         | 1.18 V                   | 332                        | 42.71                  | -101.63                        |

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 23155<br>(713.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1427.00            | -58.20       | -13.00         | -45.20         | 1.61 H                   | 95                         | 43.45                  | -101.65                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1427.00            | -58.50       | -13.00         | -45.50         | 1.08 V                   | 336                        | 43.15                  | -101.65                        |

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 12, Channel Bandwidth 10MHz

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23060<br>(704.0MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1408.00            | -58.13       | -13.00         | -45.13         | 1.61 H                   | 89                         | 43.48                  | -101.61                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1408.00            | -58.83       | -13.00         | -45.83         | 1.08 V                   | 334                        | 42.78                  | -101.61                        |

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 23095<br>(707.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1415.00            | -57.47       | -13.00         | -44.47         | 1.67 H                   | 91                         | 44.16                  | -101.63                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1415.00            | -58.18       | -13.00         | -45.18         | 1.15 V                   | 331                        | 43.45                  | -101.63                        |

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 23130<br>(711.0MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1422.00            | -57.77       | -13.00         | -44.77         | 1.60 H                   | 91                         | 43.87                  | -101.64                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1422.00            | -59.03       | -13.00         | -46.03         | 1.17 V                   | 337                        | 42.61                  | -101.64                        |

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 13, Channel Bandwidth 5MHz

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23205<br>(779.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1559.00            | -57.19        | -40.00         | -17.19         | 3.46 H                   | 116                        | 42.63                  | -99.82                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 1559.00            | -56.70        | -40.00         | -16.70         | 2.11 V                   | 162                        | 43.12                  | -99.82                         |

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 23230<br>(782.0MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1564.00            | -56.82        | -40.00         | -16.82         | 3.52 H                   | 116                        | 43.02                  | -99.84                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 1564.00            | -57.11        | -40.00         | -17.11         | 2.10 V                   | 166                        | 42.73                  | -99.84                         |

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 23255<br>(784.5MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1569.00            | -57.13        | -40.00         | -17.13         | 3.49 H                   | 112                        | 42.72                  | -99.85                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 1569.00            | -56.27        | -40.00         | -16.27         | 2.12 V                   | 166                        | 43.58                  | -99.85                         |

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 13, Channel Bandwidth 10MHz

|                          |                                |                 |              |
|--------------------------|--------------------------------|-----------------|--------------|
| Mode                     | TX channel 23230<br>(782.0MHz) | Frequency Range | 1GHz ~ 8GHz  |
| Environmental Conditions | 22deg. C, 66%RH                | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                         |                 |              |

| 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                                                    | 1564.00            | -56.45        | -40.00         | -16.45         | 3.46 H                   | 116                        | 43.39                  | -99.84                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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>1564.00</b>     | <b>-56.15</b> | <b>-40.00</b>  | <b>-16.15</b>  | <b>2.11 V</b>            | <b>165</b>                 | <b>43.69</b>           | <b>-99.84</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 66, Channel Bandwidth 1.4MHz

|                          |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Mode                     | TX channel 131979<br>(1710.7MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3421.40            | -44.43        | -13.00         | -31.43         | 2.14 H                   | 193                        | 48.77                  | -93.20                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3421.40            | -45.89        | -13.00         | -32.89         | 2.62 V                   | 52                         | 47.31                  | -93.20                         |

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) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                          |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Mode                     | TX channel 132322<br>(1745.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3490.00            | -43.80        | -13.00         | -30.80         | 2.18 H                   | 200                        | 48.86                  | -92.66                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3490.00            | -45.34        | -13.00         | -32.34         | 2.71 V                   | 48                         | 47.32                  | -92.66                         |

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) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                          |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Mode                     | TX channel 132665<br>(1779.3MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3558.60            | -42.90        | -13.00         | -29.90         | 2.23 H                   | 195                        | 49.31                  | -92.21                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3558.60            | -45.13        | -13.00         | -32.13         | 2.68 V                   | 48                         | 47.08                  | -92.21                         |

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 66, Channel Bandwidth 5MHz

|                          |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Mode                     | TX channel 131997<br>(1712.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3425.00            | -44.33        | -13.00         | -31.33         | 2.20 H                   | 197                        | 48.84                  | -93.17                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3425.00            | -46.36        | -13.00         | -33.36         | 2.62 V                   | 52                         | 46.81                  | -93.17                         |

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 132322<br>(1745.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3490.00            | -43.59        | -13.00         | -30.59         | 2.16 H                   | 197                        | 49.07                  | -92.66                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3490.00            | -45.21        | -13.00         | -32.21         | 2.71 V                   | 49                         | 47.45                  | -92.66                         |

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 132647<br>(1777.5MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3555.00            | -43.49        | -13.00         | -30.49         | 2.18 H                   | 197                        | 48.73                  | -92.22                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3555.00            | -44.82        | -13.00         | -31.82         | 2.71 V                   | 49                         | 47.40                  | -92.22                         |

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 66, Channel Bandwidth 20MHz

|                          |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Mode                     | TX channel 132072<br>(1720.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -44.06     | -13.00      | -31.06      | 2.22 H             | 199                  | 49.02            | -93.08                   |
| Antenna Polarity & Test Distance : Vertical at 3m    |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -45.74     | -13.00      | -32.74      | 2.70 V             | 49                   | 47.34            | -93.08                   |

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 132322<br>(1745.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.04     | -13.00      | -30.04      | 2.13 H             | 193                  | 49.62            | -92.66                   |
| Antenna Polarity & Test Distance : Vertical at 3m    |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -44.89     | -13.00      | -31.89      | 2.66 V             | 46                   | 47.77            | -92.66                   |

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 132572<br>(1770.0MHz) | Frequency Range | 1GHz ~ 18GHz |
| Environmental Conditions | 22deg. C, 66%RH                  | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                           |                 |              |

| 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                                                    | 3540.00            | -43.24        | -13.00         | -30.24         | 2.13 H                   | 199                        | 49.06                  | -92.30                         |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |               |                |                |                          |                            |                        |                                |
| 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                                                    | 3540.00            | -45.07        | -13.00         | -32.07         | 2.63 V                   | 52                         | 47.23                  | -92.30                         |

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 71, Channel Bandwidth 5MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 133147<br>(665.5MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 1331.00            | -58.66       | -13.00         | -45.66         | 3.00 H                   | 176                        | 43.20                  | -101.86                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1331.00            | -59.41       | -13.00         | -46.41         | 2.14 V                   | 265                        | 42.45                  | -101.86                        |

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 133297<br>(680.5MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 1361.00            | -58.79       | -13.00         | -45.79         | 3.04 H                   | 175                        | 42.97                  | -101.76                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1361.00            | -59.37       | -13.00         | -46.37         | 2.15 V                   | 261                        | 42.39                  | -101.76                        |

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 133447<br>(695.5MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 1391.00            | -58.69       | -13.00         | -45.69         | 3.05 H                   | 174                        | 42.95                  | -101.64                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1391.00            | -59.37       | -13.00         | -46.37         | 2.14 V                   | 263                        | 42.27                  | -101.64                        |

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 71, Channel Bandwidth 20MHz

|                          |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Mode                     | TX channel 133222<br>(673.0MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1346.00         | -58.28    | -13.00      | -45.28      | 3.03 H             | 176                  | 43.53            | -101.81                  |
| 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                                                    | 1346.00         | -59.02    | -13.00      | -46.02      | 2.21 V             | 266                  | 42.79            | -101.81                  |

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 133297<br>(680.5MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1361.00         | -57.89    | -13.00      | -44.89      | 2.97 H             | 177                  | 43.87            | -101.76                  |
| 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                                                    | 1361.00         | -58.52    | -13.00      | -45.52      | 2.21 V             | 263                  | 43.24            | -101.76                  |

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 133372<br>(688.0MHz) | Frequency Range | 1GHz ~ 7GHz  |
| Environmental Conditions | 22deg. C, 66%RH                 | Input Power     | 120Vac, 60Hz |
| Tested By                | Han Wu                          |                 |              |

| 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                                                    | 1376.00            | -58.18       | -13.00         | -45.18         | 2.97 H                   | 176                        | 43.52                  | -101.70                        |
| Antenna Polarity & Test Distance : Vertical at 3m    |                    |              |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | ERP<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 1376.00            | -59.06       | -13.00         | -46.06         | 2.19 V                   | 268                        | 42.64                  | -101.70                        |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
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 according to ISO/IEC 17025.

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

**Linkou EMC/RF Lab**

Tel: 886-2-26052180

Fax: 886-2-26051924

**Hsin Chu EMC/RF/Telecom Lab**

Tel: 886-3-6668565

Fax: 886-3-6668323

**Hwa Ya EMC/RF/Safety Lab**

Tel: 886-3-3183232

Fax: 886-3-3270892

**Email:** [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)

**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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

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