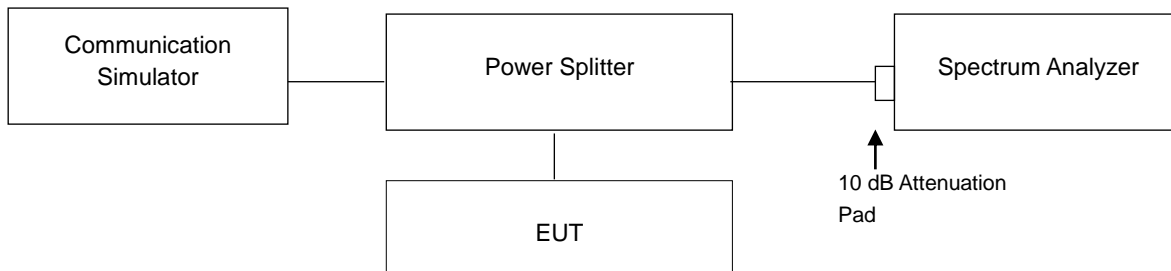


## 4.6 Peak to Average Ratio

### 4.6.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 4.6.2 Test Setup



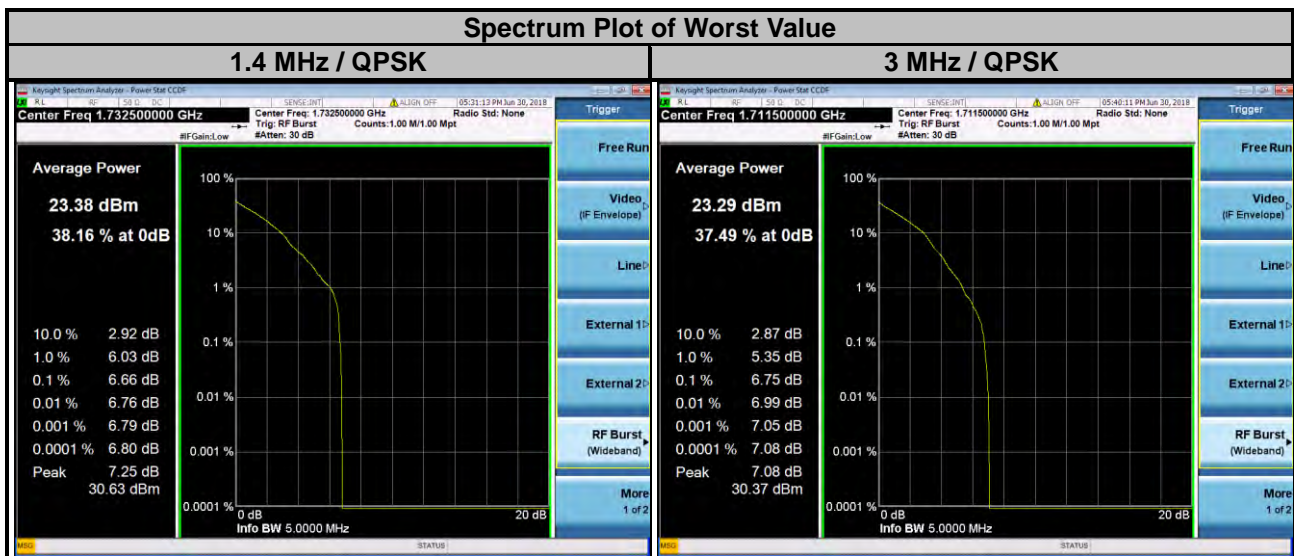
### 4.6.3 Test Procedures

1. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1 %.

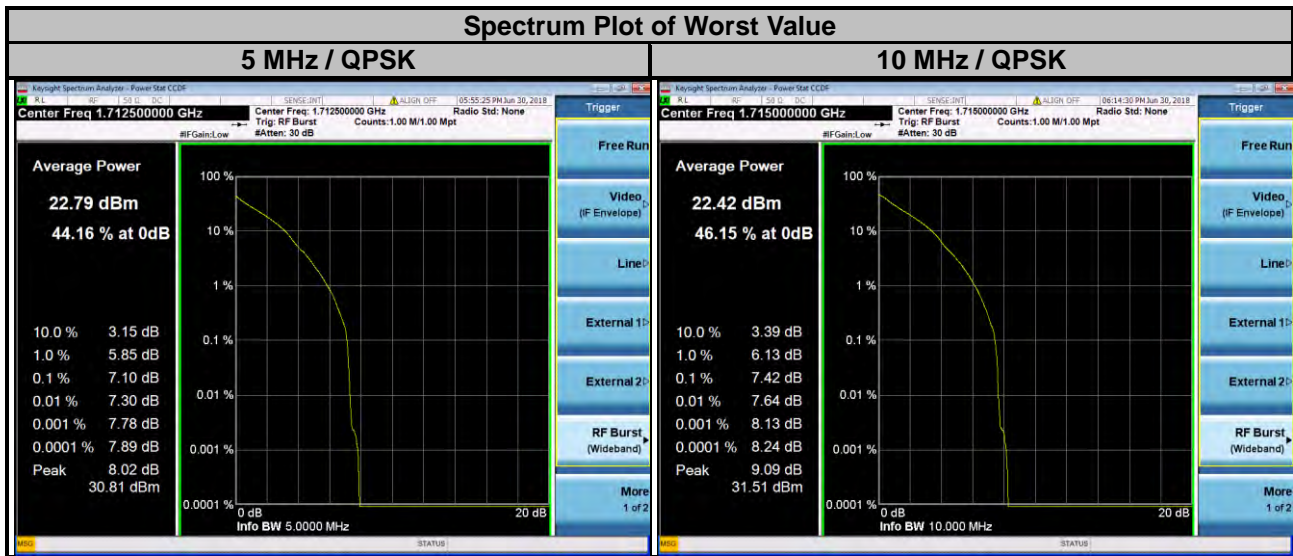
4.6.4 Test Results

Cat-M1

| LTE Band 4                 |                 |                            |       |                          |                 |                            |       |
|----------------------------|-----------------|----------------------------|-------|--------------------------|-----------------|----------------------------|-------|
| Channel Bandwidth: 1.4 MHz |                 |                            |       | Channel Bandwidth: 3 MHz |                 |                            |       |
| Channel                    | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                            |                 | QPSK                       | 16QAM |                          |                 | QPSK                       | 16QAM |
| 19957                      | 1710.7          | 6.25                       | 6.62  | 19965                    | 1711.5          | 6.75                       | 6.69  |
| 20175                      | 1732.5          | 6.66                       | 6.58  | 20175                    | 1732.5          | 6.75                       | 6.63  |
| 20393                      | 1754.3          | 6.50                       | 6.49  | 20385                    | 1753.5          | 6.63                       | 6.59  |



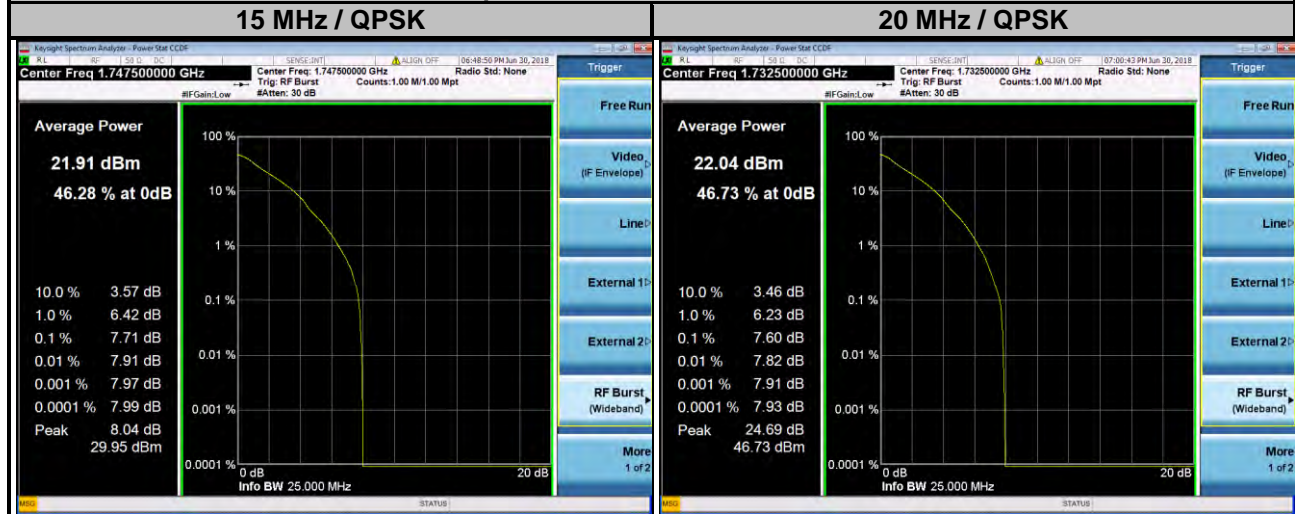
| LTE Band 4               |                 |                            |       |                           |                 |                            |       |
|--------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel Bandwidth: 5 MHz |                 |                            |       | Channel Bandwidth: 10 MHz |                 |                            |       |
| Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                          |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 19975                    | 1712.5          | 7.10                       | 6.98  | 20000                     | 1715.0          | 7.42                       | 7.37  |
| 20175                    | 1732.5          | 6.69                       | 6.88  | 20175                     | 1732.5          | 7.12                       | 6.74  |
| 20375                    | 1752.5          | 6.74                       | 6.54  | 20350                     | 1750.0          | 7.05                       | 6.94  |



### LTE Band 4

| Channel Bandwidth: 15 MHz |                 |                            |       | Channel Bandwidth: 20 MHz |                 |                            |       |
|---------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                           |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 20025                     | 1717.5          | 7.37                       | 7.09  | 20050                     | 1720.0          | 7.26                       | 6.85  |
| 20175                     | 1732.5          | 7.16                       | 7.10  | 20175                     | 1732.5          | 7.60                       | 7.44  |
| 20325                     | 1747.5          | 7.71                       | 7.42  | 20300                     | 1745.0          | 6.97                       | 7.02  |

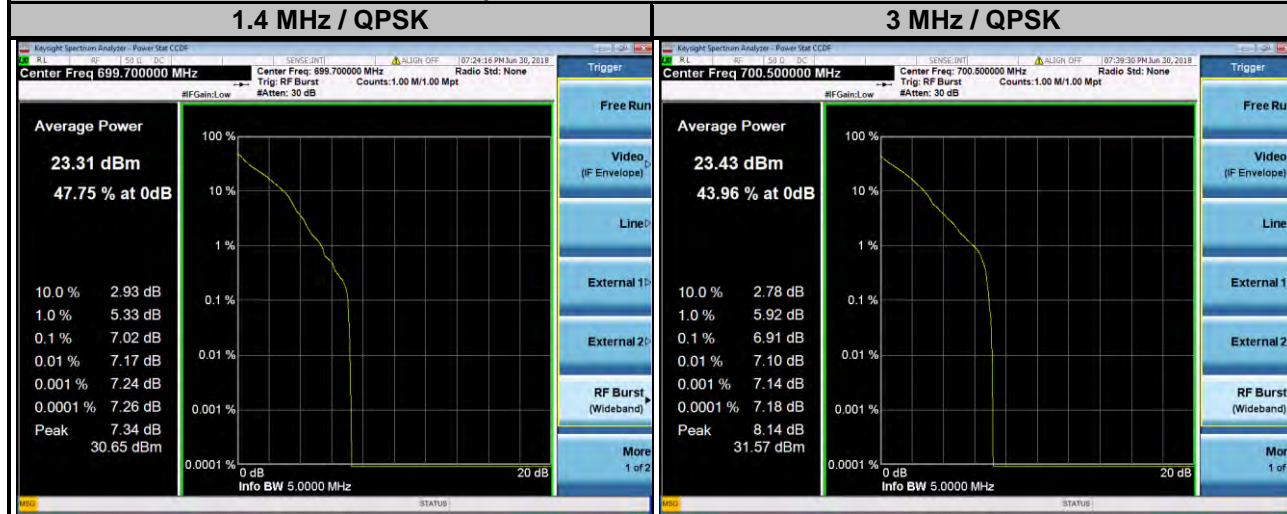
### Spectrum Plot of Worst Value



### LTE Band 12

| Channel Bandwidth: 1.4 MHz |                 |                            |       | Channel Bandwidth: 3 MHz |                 |                            |       |
|----------------------------|-----------------|----------------------------|-------|--------------------------|-----------------|----------------------------|-------|
| Channel                    | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                            |                 | QPSK                       | 16QAM |                          |                 | QPSK                       | 16QAM |
| 23017                      | 699.7           | 7.02                       | 6.30  | 23025                    | 700.5           | 6.91                       | 6.33  |
| 23095                      | 707.5           | 6.77                       | 6.30  | 23095                    | 707.5           | 6.70                       | 6.32  |
| 23173                      | 715.3           | 6.72                       | 6.26  | 23165                    | 714.5           | 6.84                       | 6.28  |

### Spectrum Plot of Worst Value



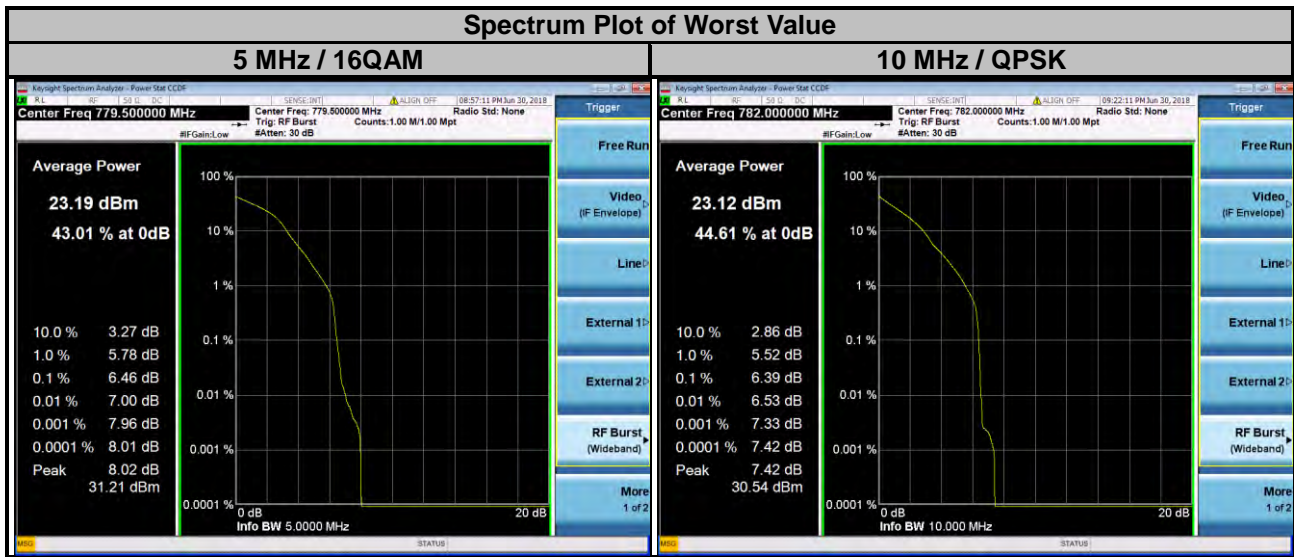
### LTE Band 12

| Channel Bandwidth: 5 MHz |                 |                            |       | Channel Bandwidth: 10 MHz |                 |                            |       |
|--------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                          |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 23035                    | 701.5           | 7.27                       | 7.07  | 23060                     | 704.0           | 7.59                       | 7.21  |
| 23095                    | 707.5           | 7.05                       | 7.05  | 23095                     | 707.5           | 7.09                       | 7.31  |
| 23155                    | 713.5           | 6.47                       | 7.06  | 23130                     | 711.0           | 7.94                       | 7.09  |

### Spectrum Plot of Worst Value



| LTE Band 13              |                 |                            |       |                           |                 |                            |       |
|--------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel Bandwidth: 5 MHz |                 |                            |       | Channel Bandwidth: 10 MHz |                 |                            |       |
| Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                          |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 23205                    | 779.5           | 6.29                       | 6.46  | 23230                     | 782.0           | 6.39                       | 6.32  |
| 23230                    | 782.0           | 6.27                       | 6.33  |                           |                 |                            |       |
| 23255                    | 784.5           | 6.10                       | 6.41  |                           |                 |                            |       |

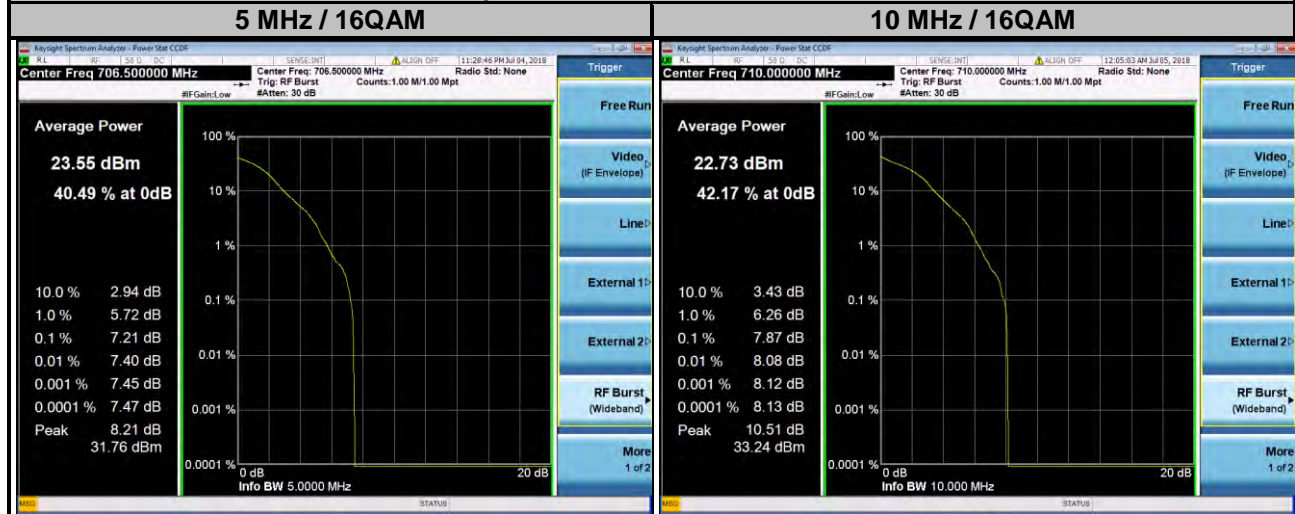




### LTE Band 17

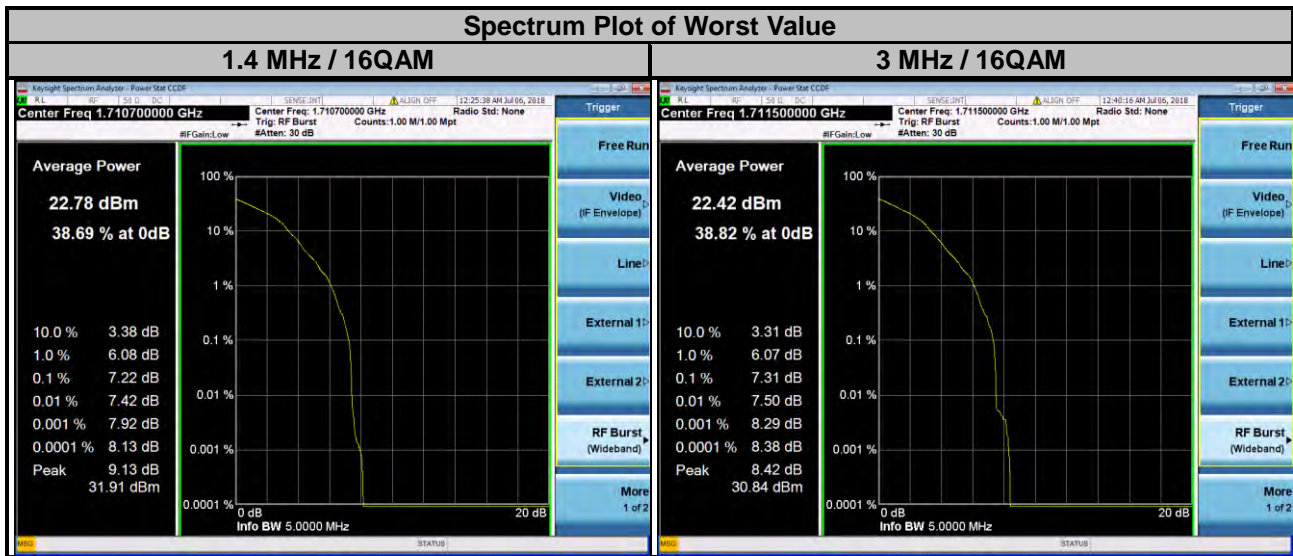
| Channel Bandwidth: 5 MHz |                 |                            |       | Channel Bandwidth: 10 MHz |                 |                            |       |
|--------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                          |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 23755                    | 706.5           | 6.82                       | 7.21  | 23780                     | 709.0           | 6.68                       | 7.18  |
| 23790                    | 710.0           | 6.43                       | 7.14  | 23790                     | 710.0           | 6.81                       | 7.87  |
| 23825                    | 713.5           | 6.73                       | 7.12  | 23800                     | 711.0           | 6.47                       | 7.12  |

### Spectrum Plot of Worst Value





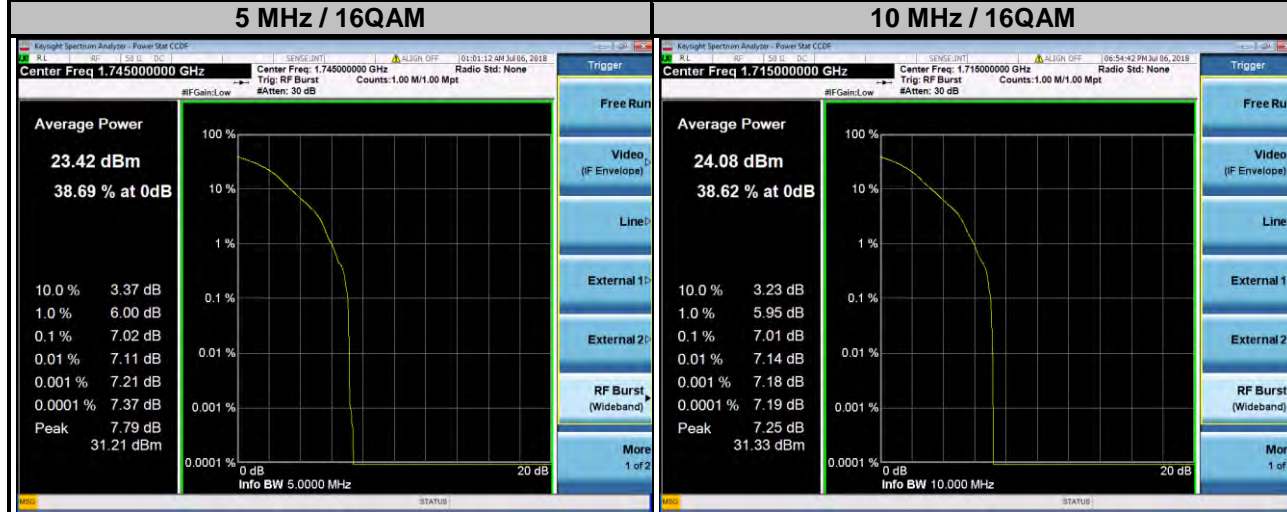
| LTE Band 66                |                 |                            |       |                          |                 |                            |       |
|----------------------------|-----------------|----------------------------|-------|--------------------------|-----------------|----------------------------|-------|
| Channel Bandwidth: 1.4 MHz |                 |                            |       | Channel Bandwidth: 3 MHz |                 |                            |       |
| Channel                    | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                            |                 | QPSK                       | 16QAM |                          |                 | QPSK                       | 16QAM |
| 131979                     | 1710.7          | 6.20                       | 7.22  | 131987                   | 1711.5          | 6.28                       | 7.31  |
| 132322                     | 1745.0          | 6.01                       | 7.00  | 132322                   | 1745.0          | 6.09                       | 7.17  |
| 132665                     | 1779.3          | 5.80                       | 6.78  | 132657                   | 1778.5          | 5.87                       | 7.08  |



### LTE Band 66

| Channel Bandwidth: 5 MHz |                 |                            |       | Channel Bandwidth: 10 MHz |                 |                            |       |
|--------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel                  | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                          |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 131997                   | 1712.5          | 6.69                       | 6.95  | 132022                    | 1715.0          | 6.57                       | 7.01  |
| 132322                   | 1745.0          | 6.84                       | 7.02  | 132322                    | 1745.0          | 6.55                       | 6.46  |
| 132647                   | 1777.5          | 6.16                       | 6.60  | 132622                    | 1775.0          | 6.25                       | 6.70  |

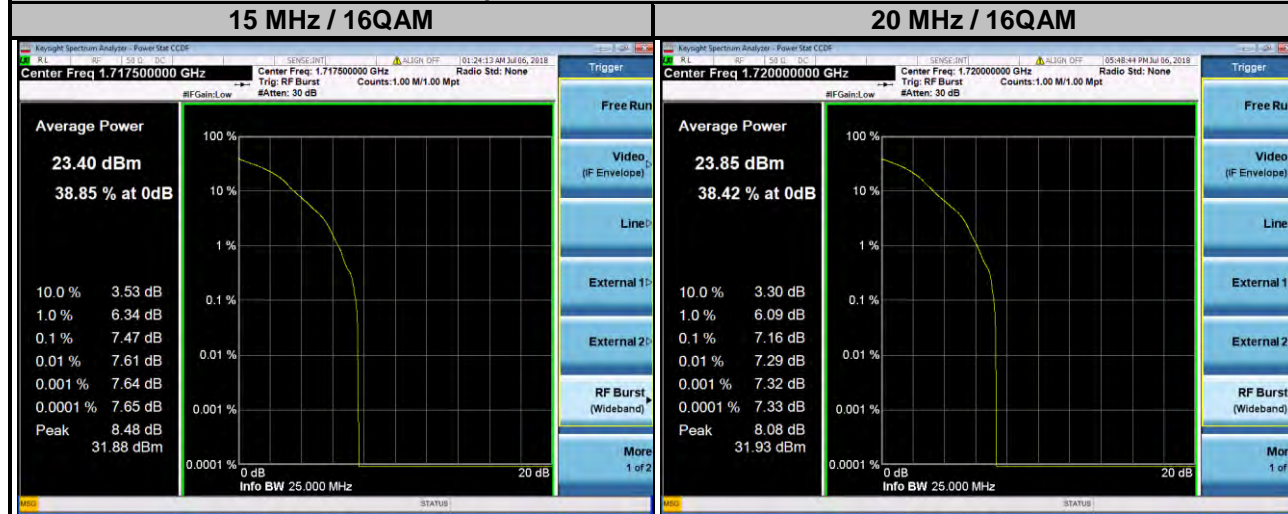
### Spectrum Plot of Worst Value



### LTE Band 66

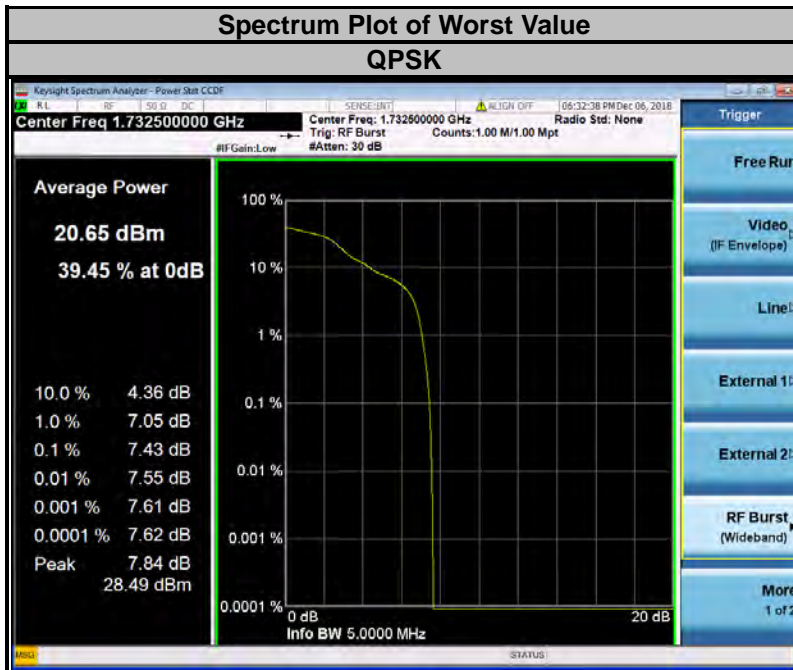
| Channel Bandwidth: 15 MHz |                 |                            |       | Channel Bandwidth: 20 MHz |                 |                            |       |
|---------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel                   | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|                           |                 | QPSK                       | 16QAM |                           |                 | QPSK                       | 16QAM |
| 132047                    | 1717.5          | 7.37                       | 7.47  | 132072                    | 1720.0          | 6.50                       | 7.16  |
| 132322                    | 1745.0          | 6.49                       | 7.12  | 132322                    | 1745.0          | 6.39                       | 6.80  |
| 132597                    | 1772.5          | 6.29                       | 6.62  | 132572                    | 1770.0          | 6.27                       | 6.45  |

### Spectrum Plot of Worst Value

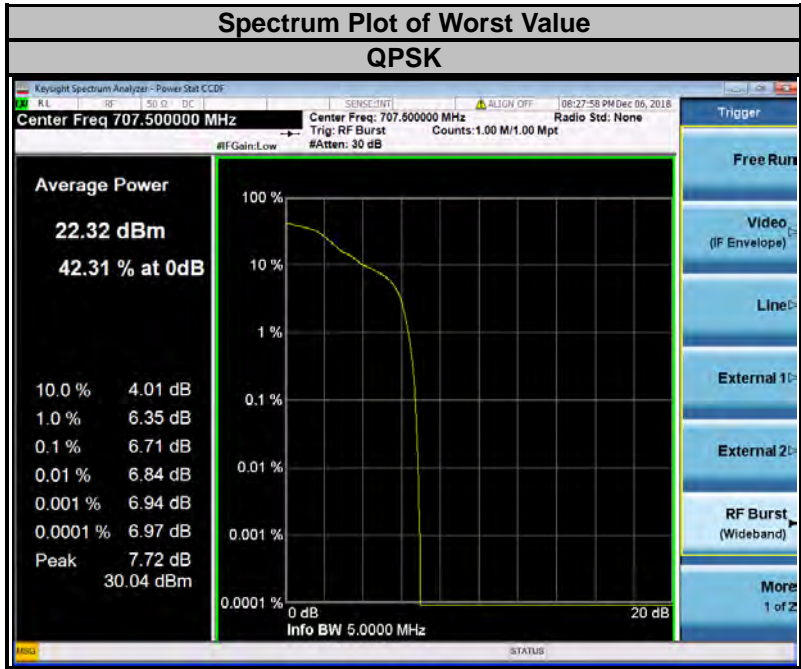


**NB-IoT**

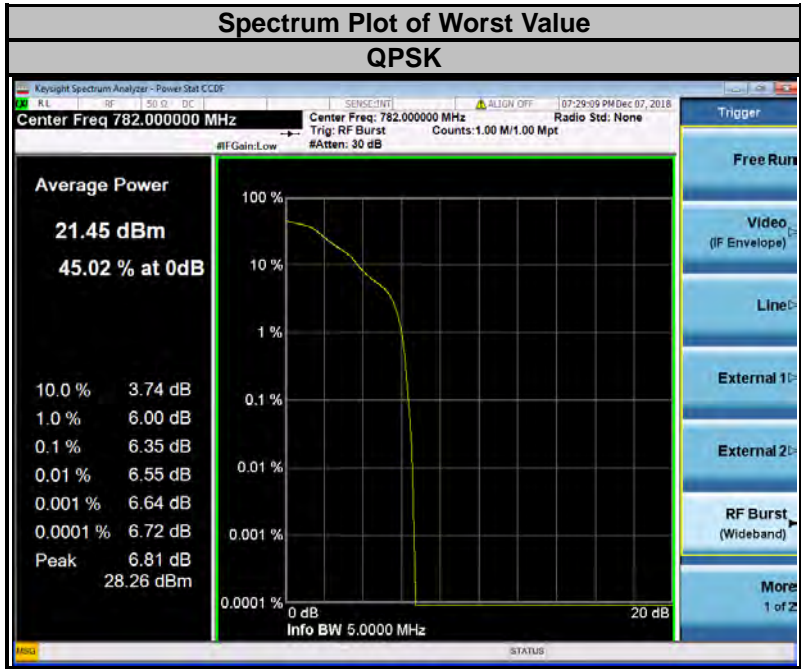
| LTE Band 4 |                 |            |                    |                           |           |
|------------|-----------------|------------|--------------------|---------------------------|-----------|
| Channel    | Frequency (MHz) | Modulation | N <sub>tones</sub> | Sub-carrier Spacing (kHz) | PAPR (dB) |
| 20175      | 1732.5          | BPSK       | 1@0                | 3.75                      | 1.92      |
| 20175      | 1732.5          | QPSK       | 1@0                | 15                        | 4.33      |
| 20175      | 1732.5          | QPSK       | 3@3                | 15                        | 7.43      |



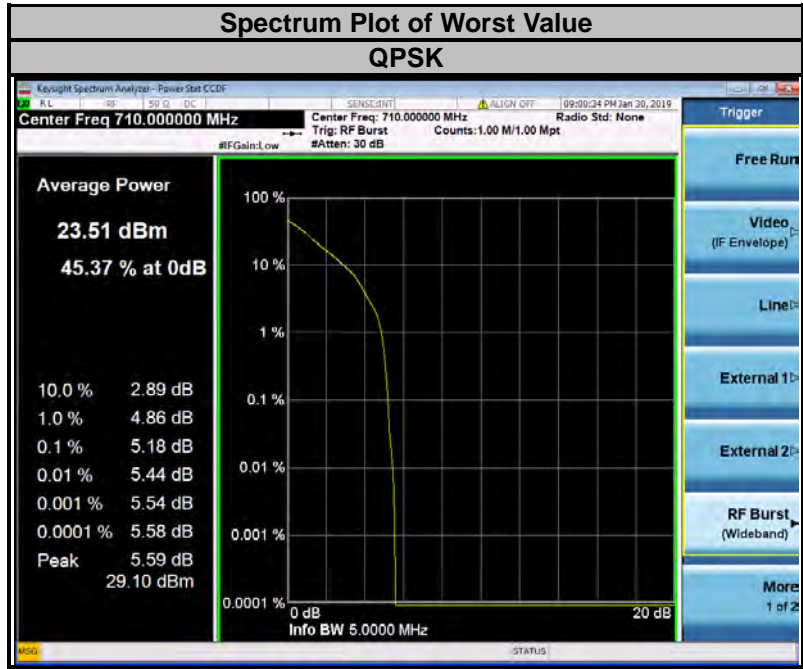
| LTE Band 12 |                 |            |                    |                           |           |
|-------------|-----------------|------------|--------------------|---------------------------|-----------|
| Channel     | Frequency (MHz) | Modulation | N <sub>tones</sub> | Sub-carrier Spacing (kHz) | PAPR (dB) |
| 23095       | 707.5           | BPSK       | 1@0                | 3.75                      | 1.74      |
| 23095       | 707.5           | QPSK       | 1@0                | 15                        | 3.92      |
| 23095       | 707.5           | QPSK       | 3@3                | 15                        | 6.71      |



| LTE Band 13 |                 |            |                    |                           |           |
|-------------|-----------------|------------|--------------------|---------------------------|-----------|
| Channel     | Frequency (MHz) | Modulation | N <sub>tones</sub> | Sub-carrier Spacing (kHz) | PAPR (dB) |
| 23230       | 782             | BPSK       | 1@0                | 3.75                      | 1.59      |
| 23230       | 782             | QPSK       | 1@0                | 15                        | 2.71      |
| 23230       | 782             | QPSK       | 3@3                | 15                        | 6.35      |

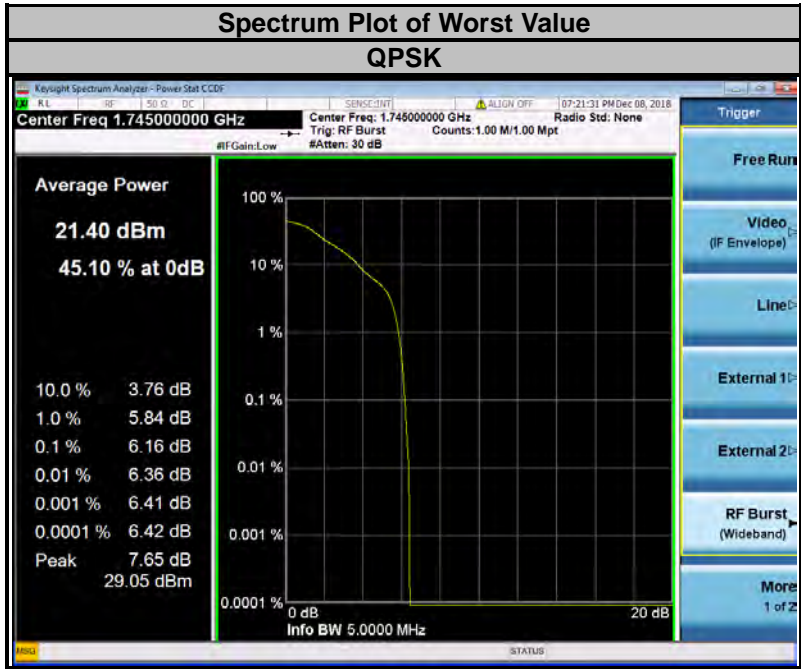


| LTE Band 17 |                 |            |                    |                           |           |
|-------------|-----------------|------------|--------------------|---------------------------|-----------|
| Channel     | Frequency (MHz) | Modulation | N <sub>tones</sub> | Sub-carrier Spacing (kHz) | PAPR (dB) |
| 23731       | 704.1           | BPSK       | 1@0                | 3.75                      | 2.75      |
| 23790       | 710             | QPSK       | 1@0                | 15                        | 3.12      |
| 23849       | 715.9           | QPSK       | 3@3                | 15                        | 5.18      |





| LTE Band 66 |                 |            |                    |                           |           |
|-------------|-----------------|------------|--------------------|---------------------------|-----------|
| Channel     | Frequency (MHz) | Modulation | N <sub>tones</sub> | Sub-carrier Spacing (kHz) | PAPR (dB) |
| 132322      | 1745            | BPSK       | 1@0                | 3.75                      | 1.92      |
| 132322      | 1745            | QPSK       | 1@0                | 15                        | 4.42      |
| 132322      | 1745            | QPSK       | 3@3                | 15                        | 6.16      |



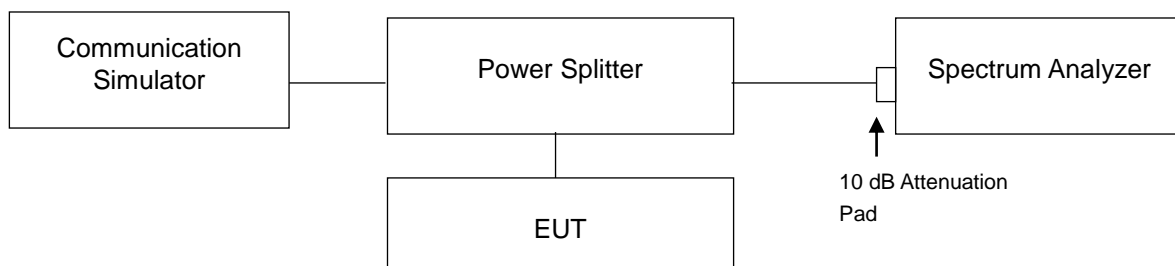
## 4.7 Conducted Spurious Emissions

### 4.7.1 Limits of Conducted Spurious Emissions Measurement

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

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 dBm.

### 4.7.2 Test Setup

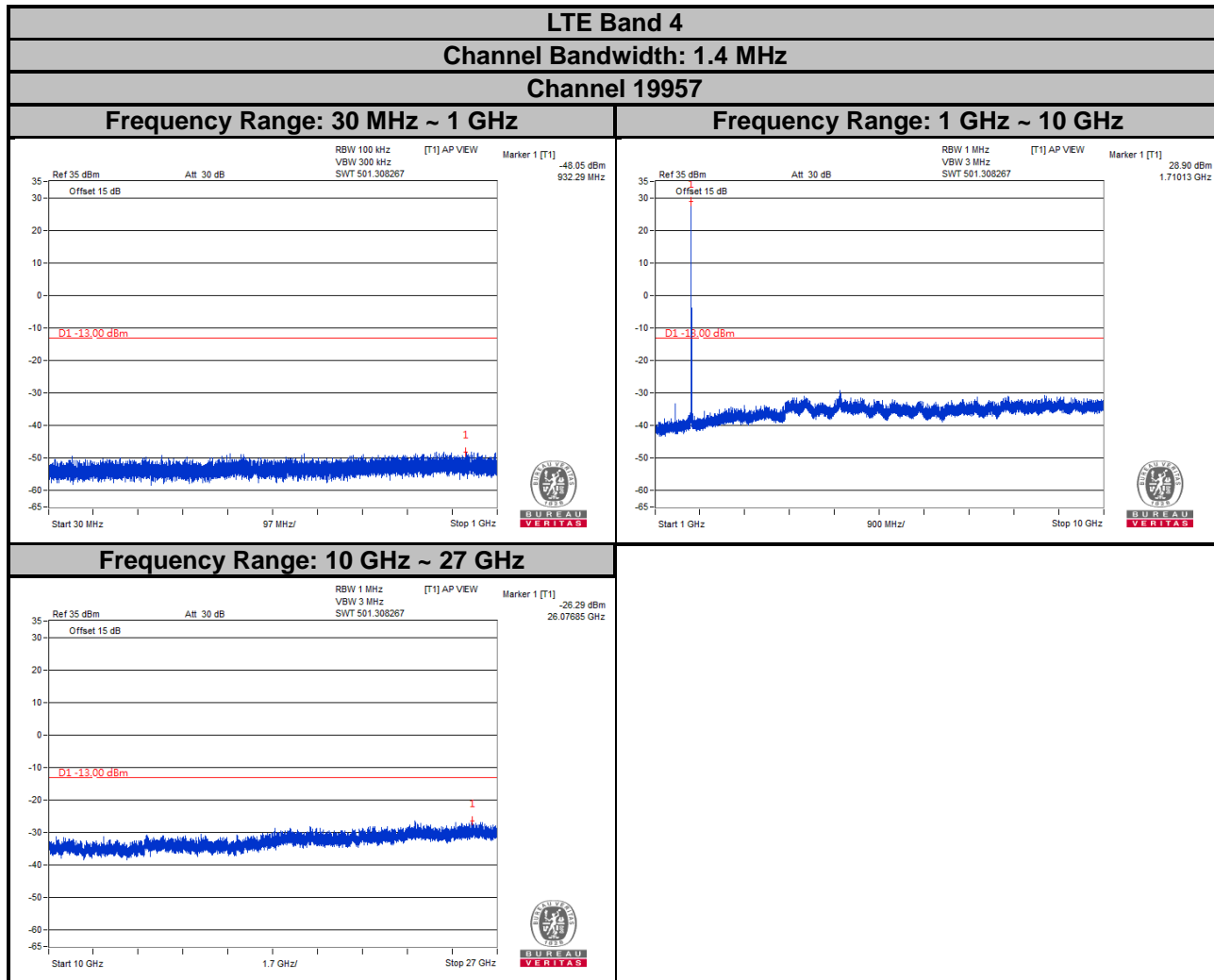


### 4.7.3 Test Procedure

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz to 1 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.
- Measuring frequency range is from 1 GHz to 8 GHz / 18 GHz / 27 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 1 MHz and VBW = 3 MHz is used for conducted emission measurement.

4.7.4 Test Results

Cat-M1



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



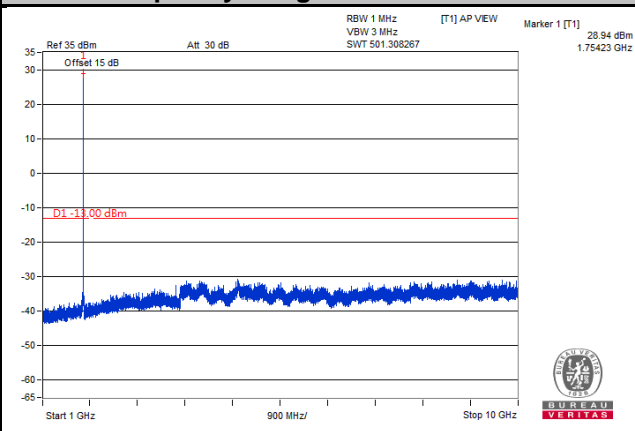
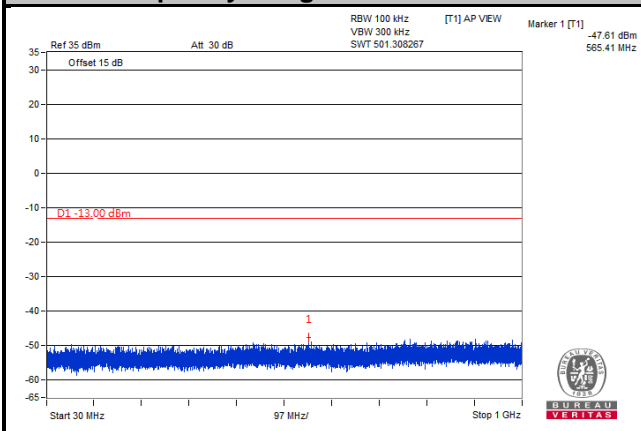
**LTE Band 4**

**Channel Bandwidth: 1.4 MHz**

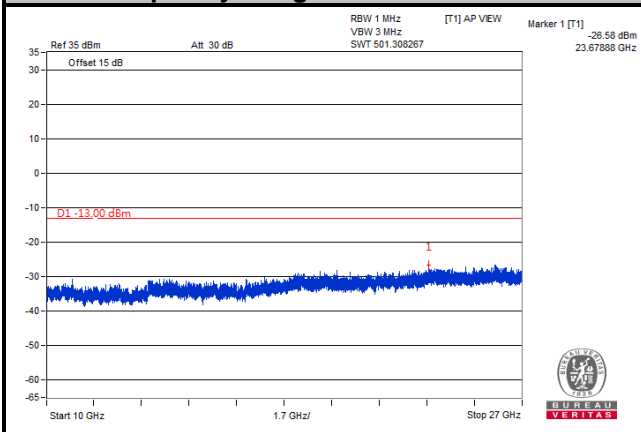
**Channel 20393**

**Frequency Range: 30 MHz ~ 1 GHz**

**Frequency Range: 1 GHz ~ 10 GHz**

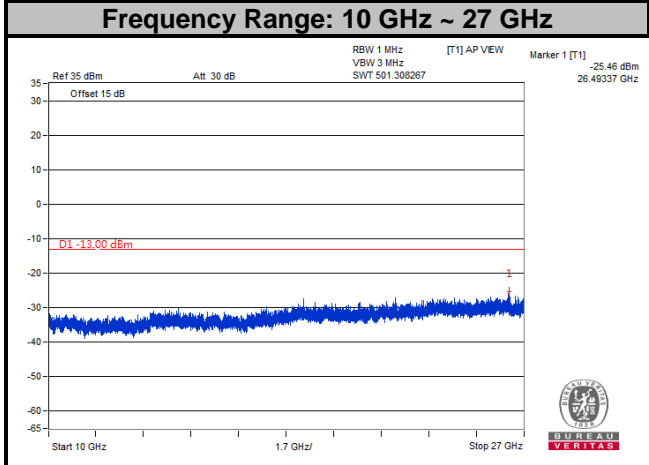
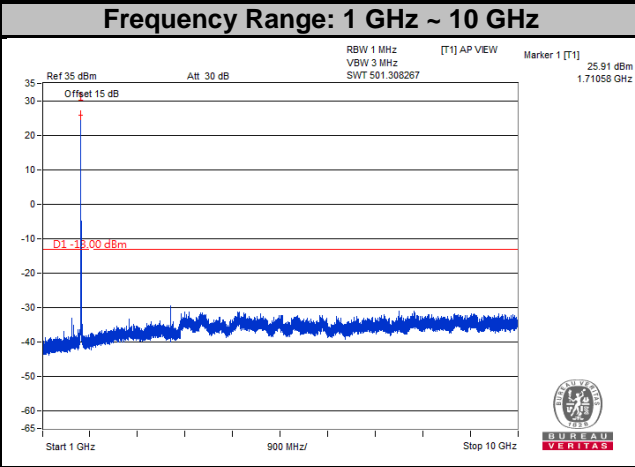
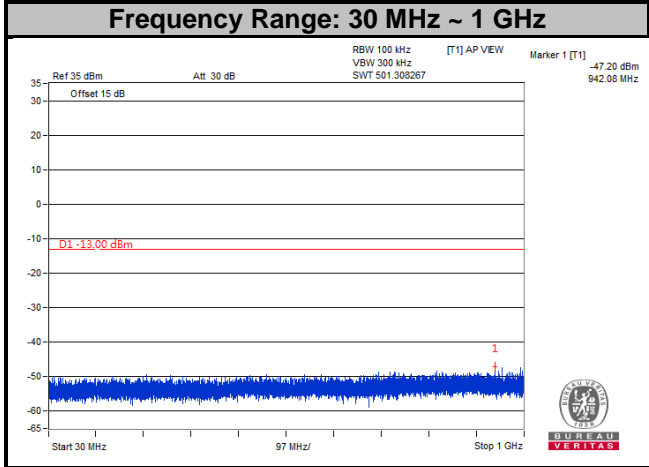


**Frequency Range: 10 GHz ~ 27 GHz**



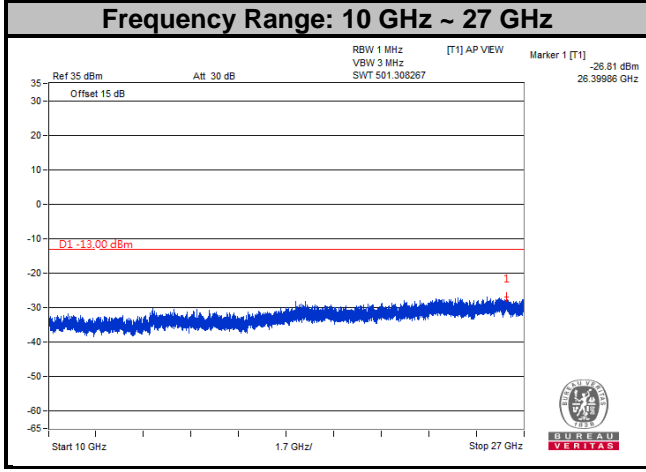
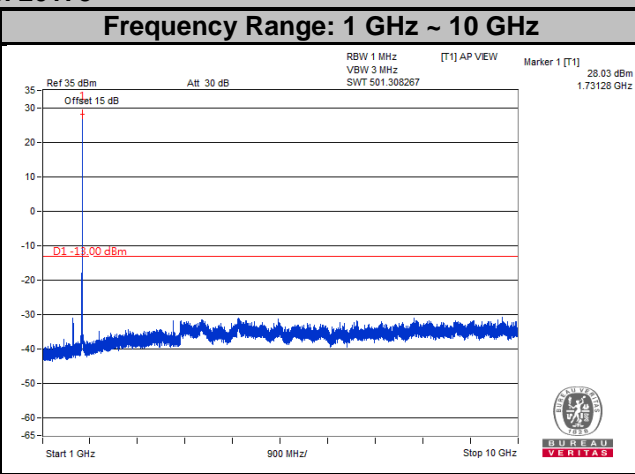
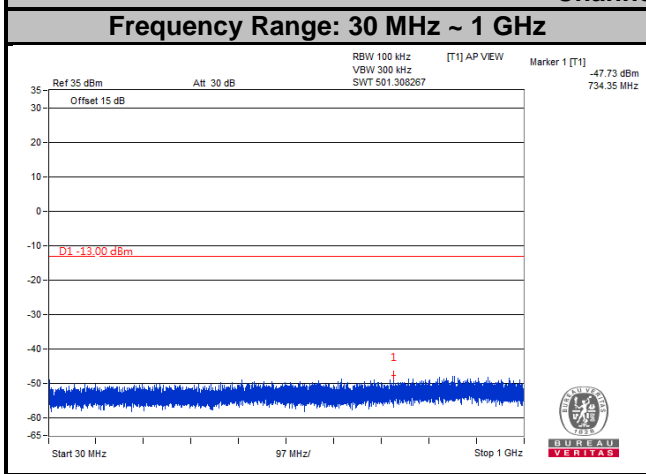
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 3 MHz**  
**Channel 19965**



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 3 MHz**  
**Channel 20175**



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

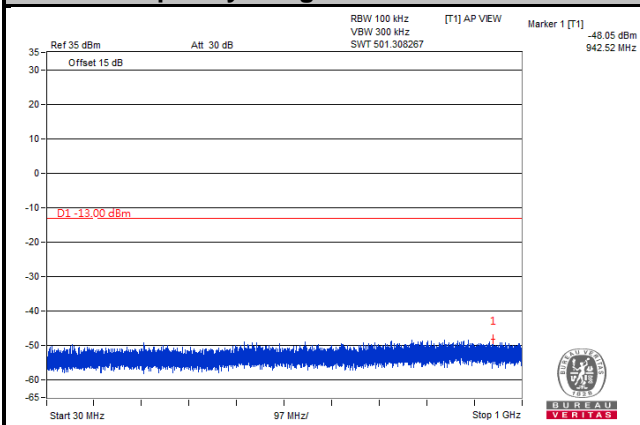


**LTE Band 4**

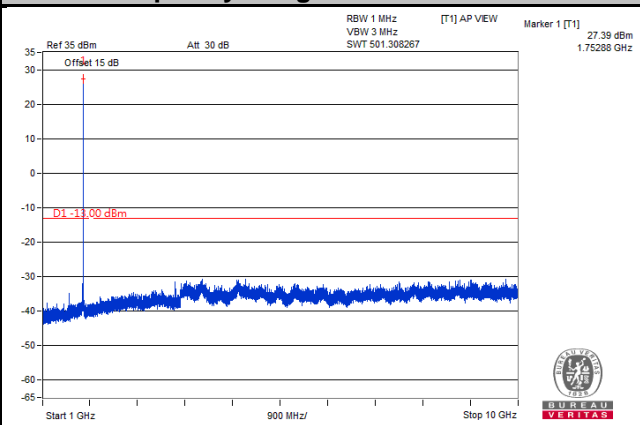
**Channel Bandwidth: 3 MHz**

**Channel 20385**

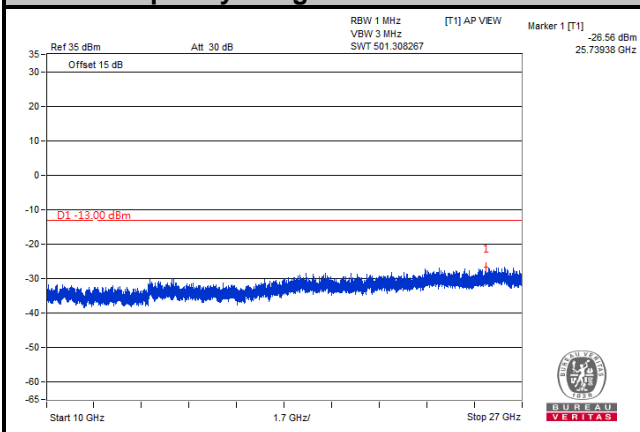
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**



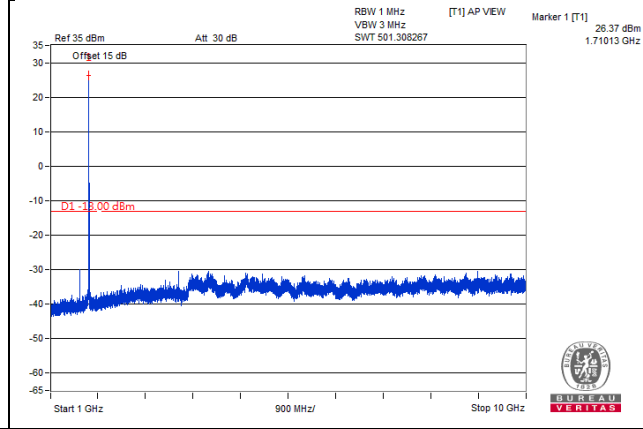
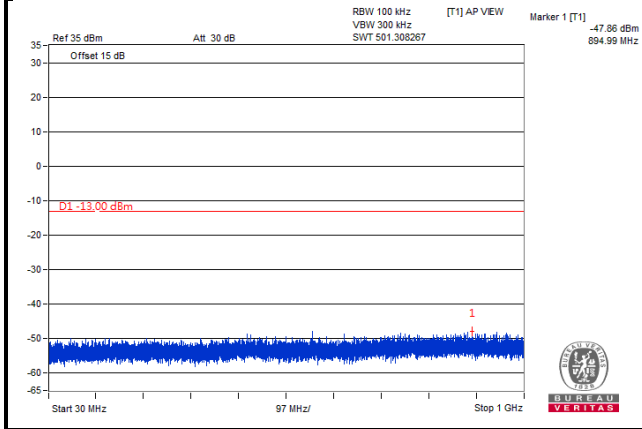
**Frequency Range: 10 GHz ~ 27 GHz**



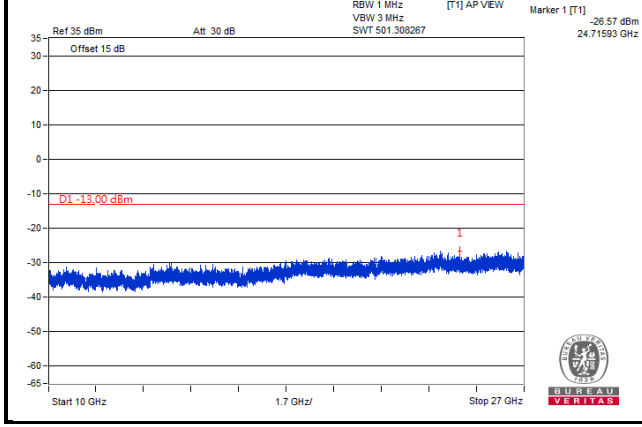
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 5 MHz**  
**Channel 19975**

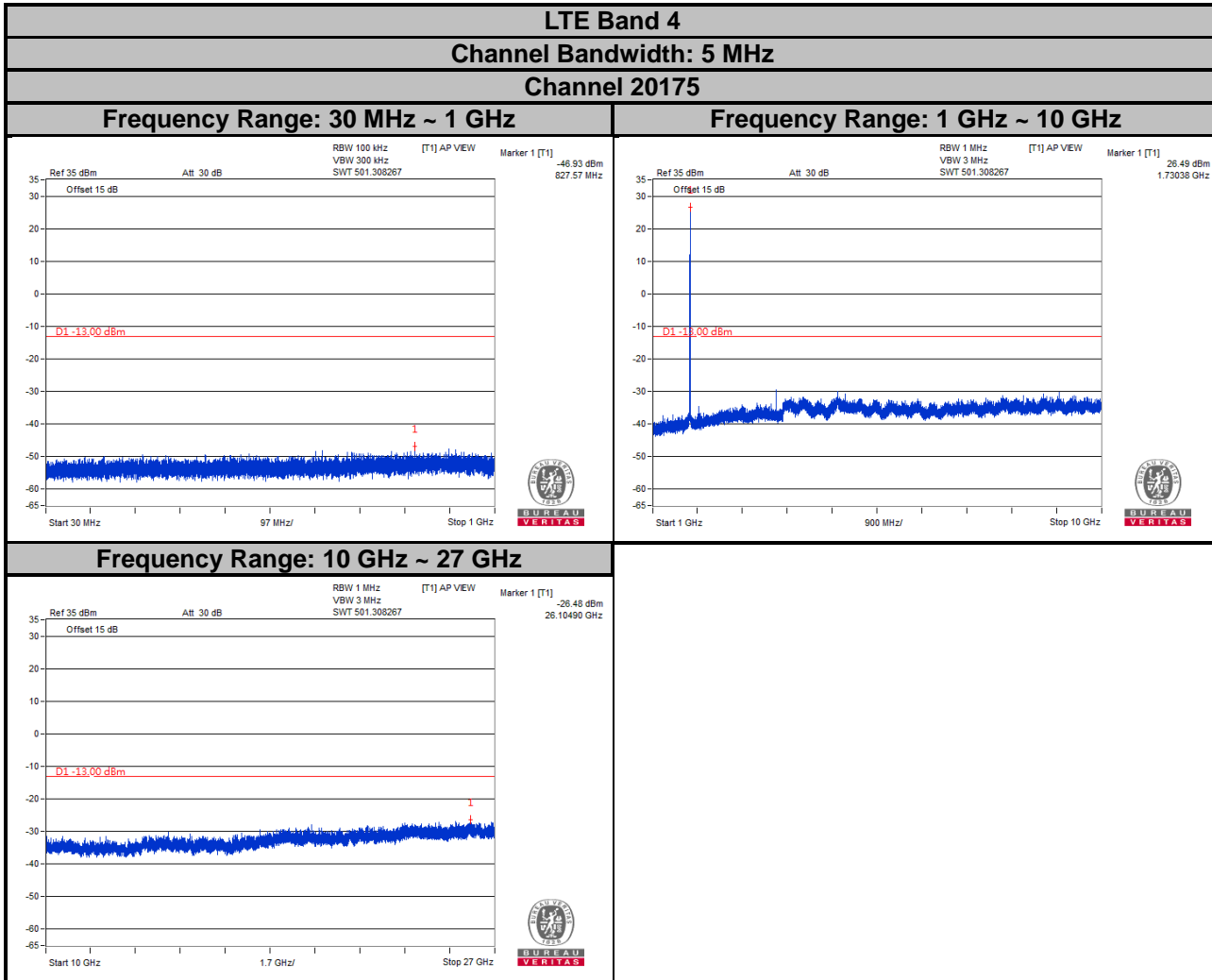
**Frequency Range: 30 MHz ~ 1 GHz**      **Frequency Range: 1 GHz ~ 10 GHz**



**Frequency Range: 10 GHz ~ 27 GHz**

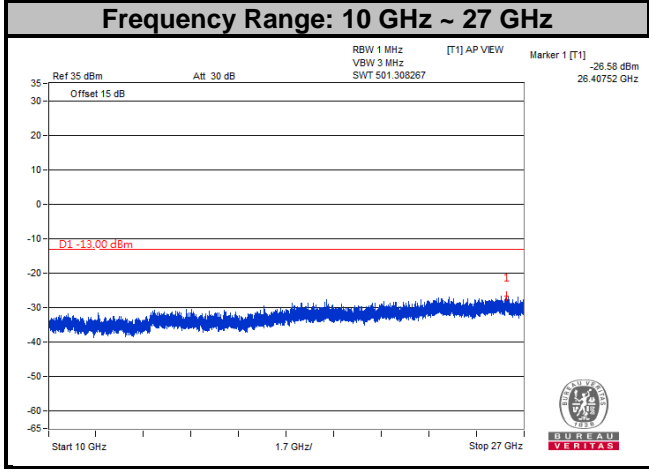
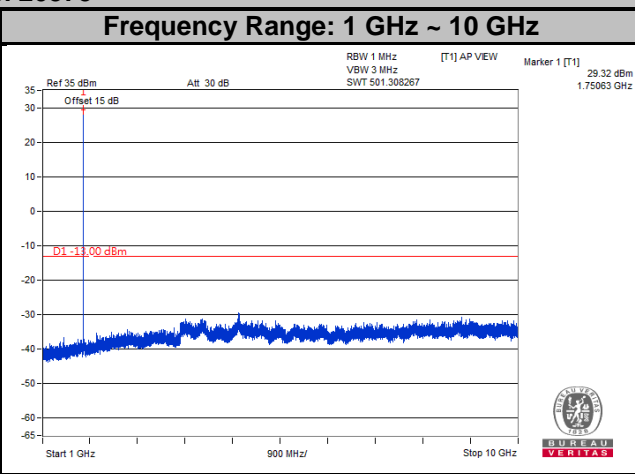
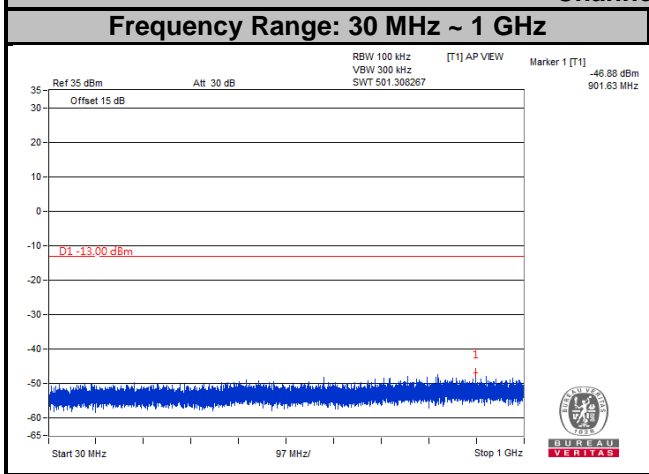


Note: The signal over the limit in 9 kHz is from spectrum analyzer.



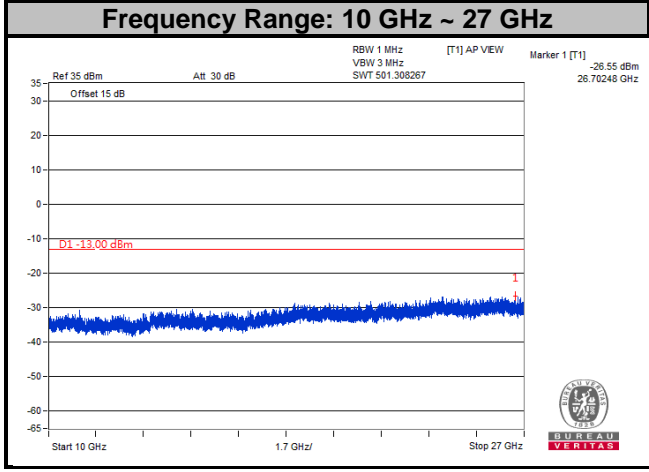
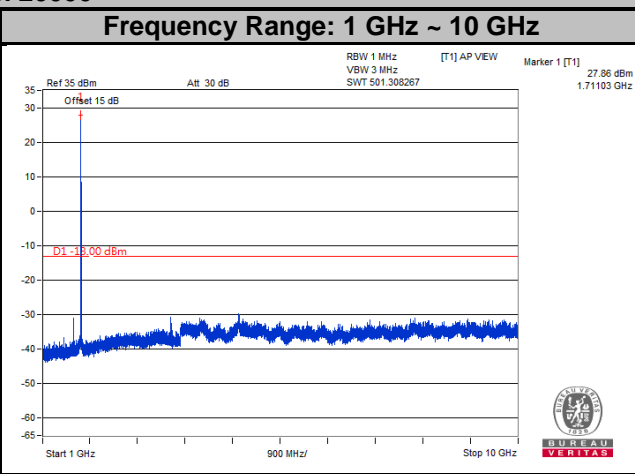
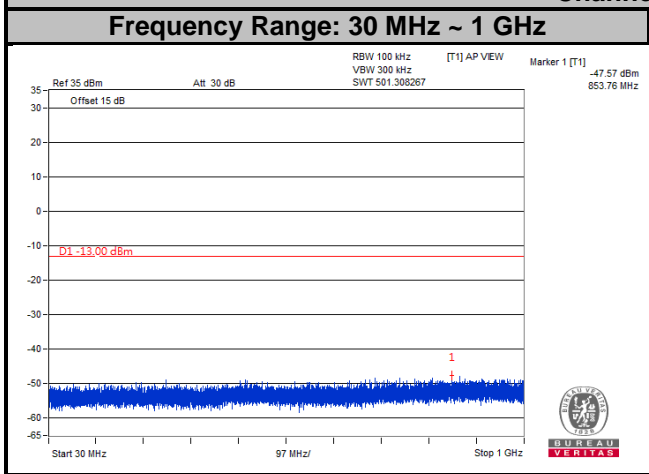
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 5 MHz**  
**Channel 20375**



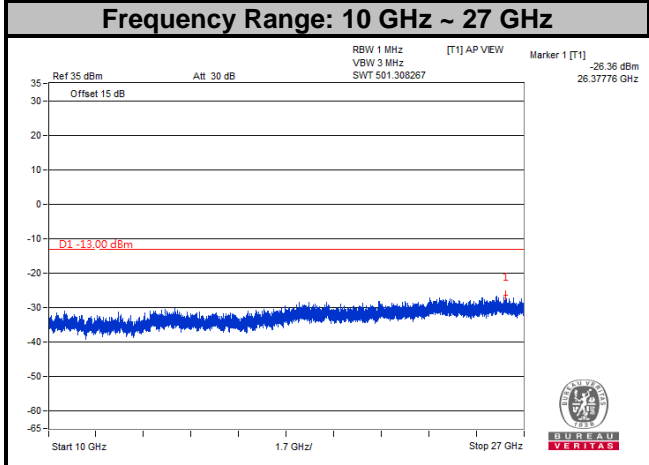
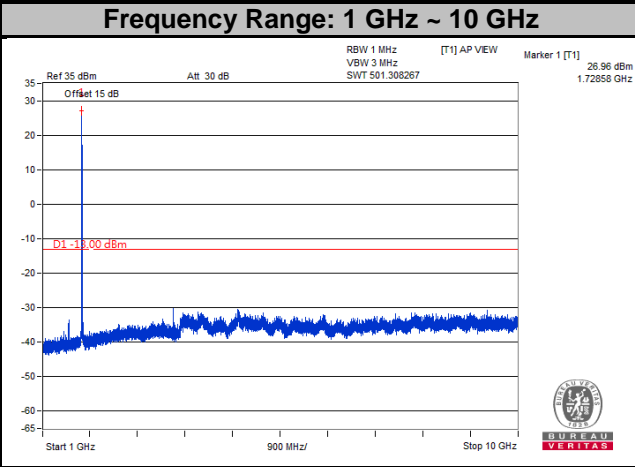
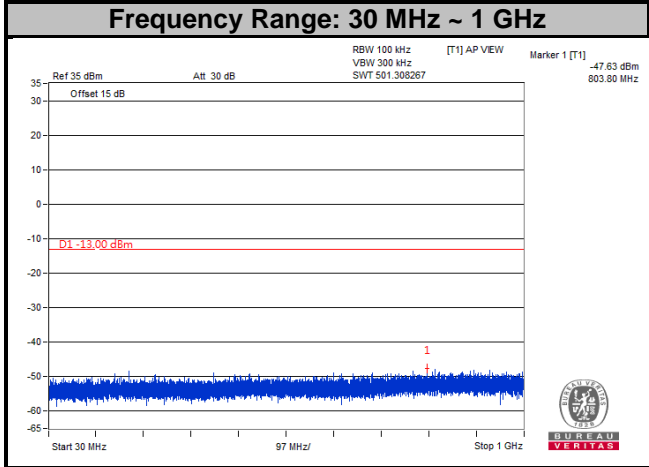
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 10 MHz**  
**Channel 20000**



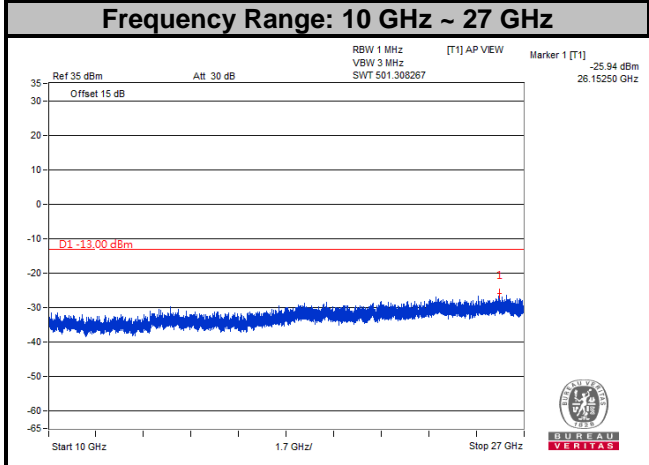
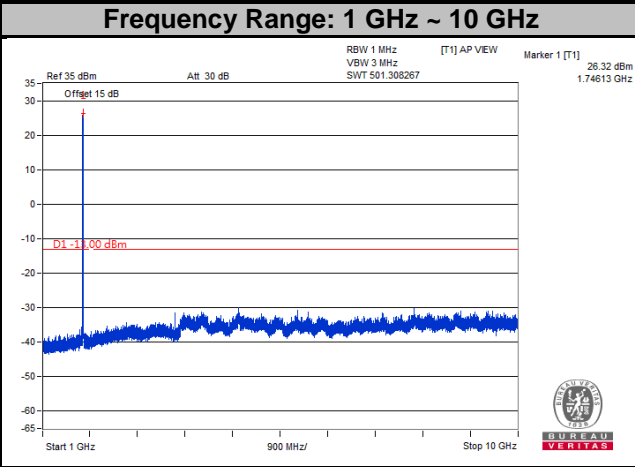
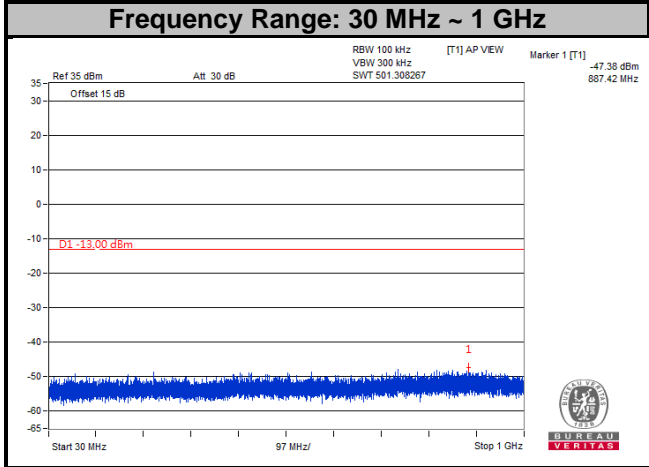
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 10 MHz**  
**Channel 20175**



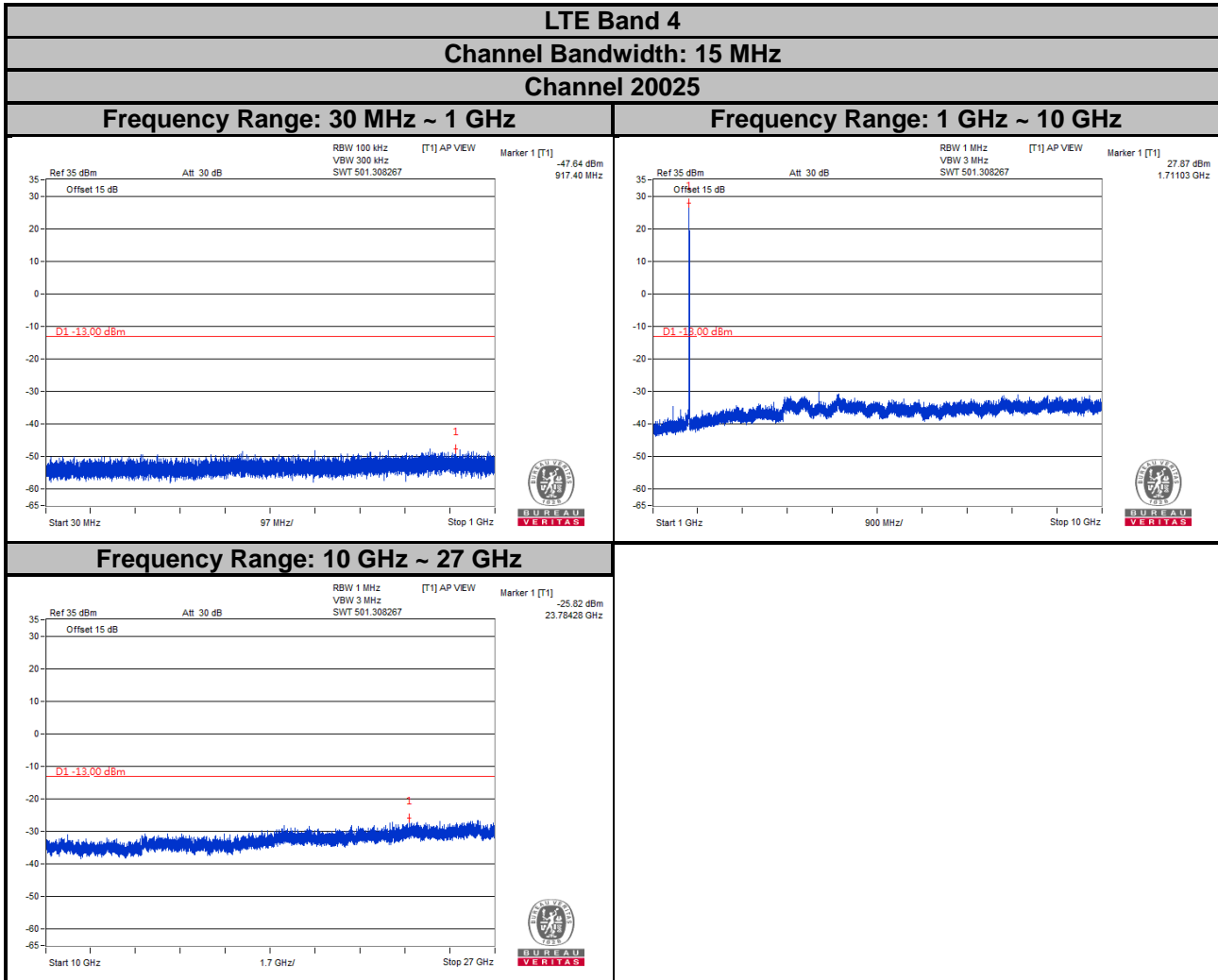
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 10 MHz**  
**Channel 20350**



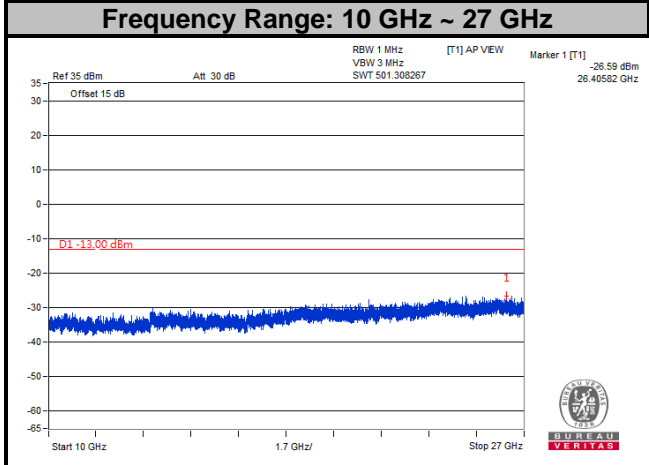
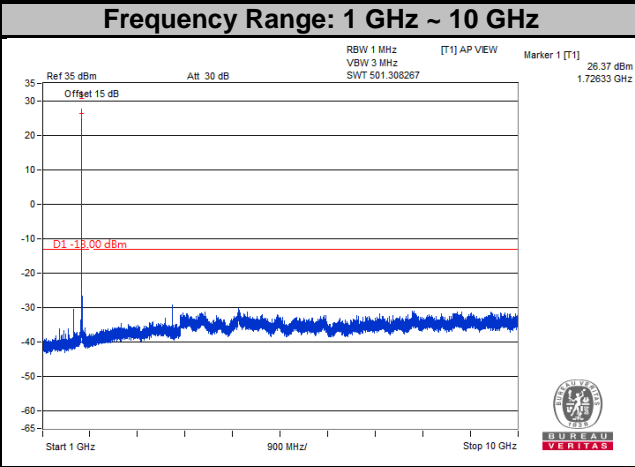
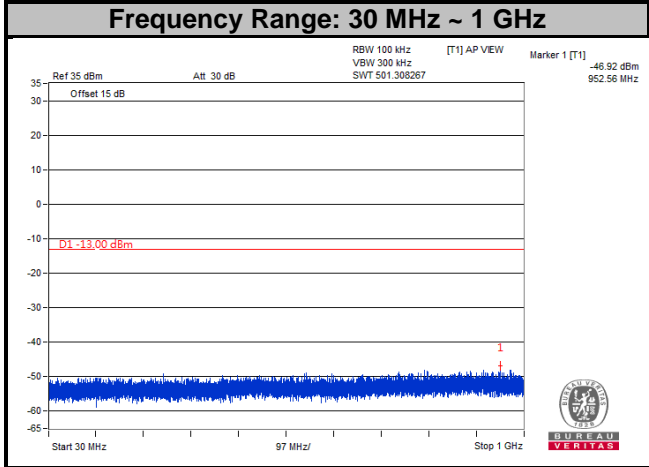
Note: The signal over the limit in 9 kHz is from spectrum analyzer.





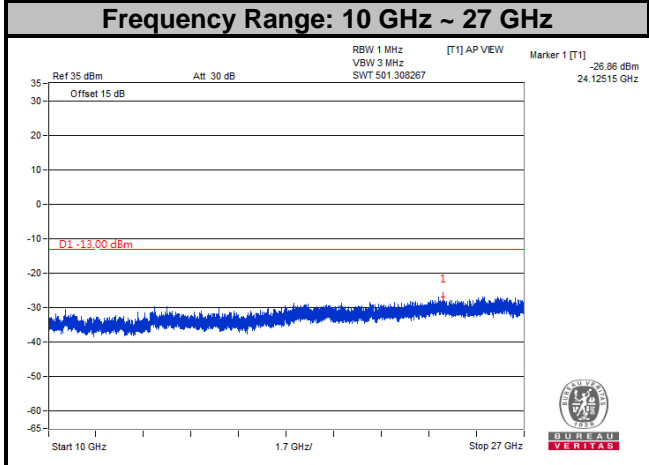
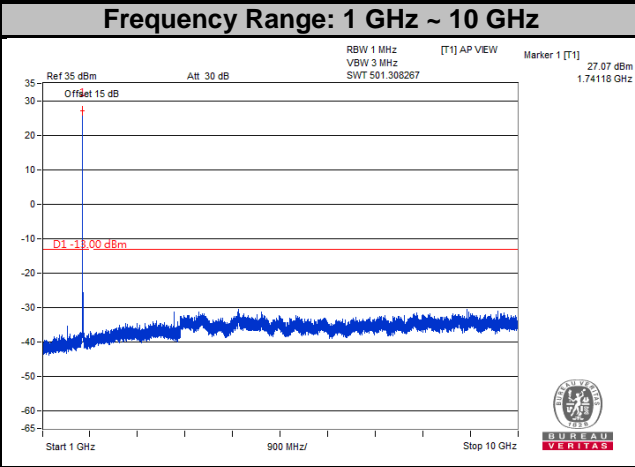
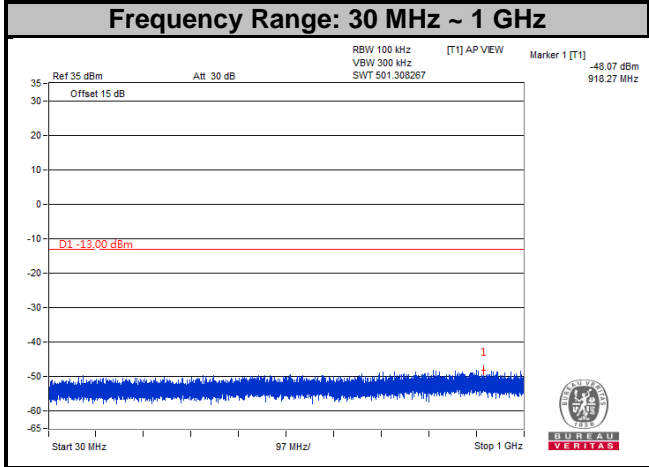
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 15 MHz**  
**Channel 20175**



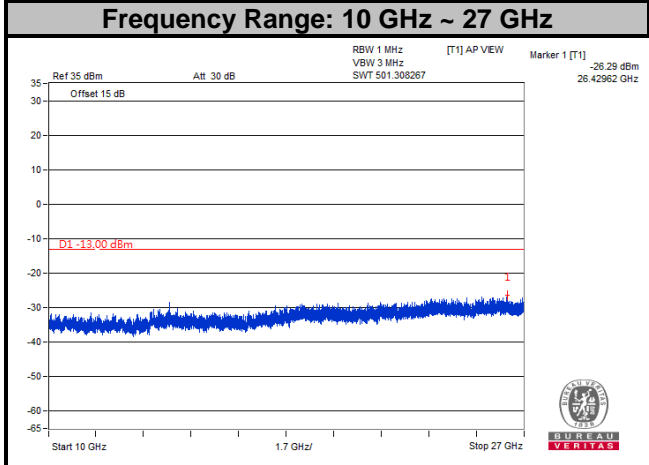
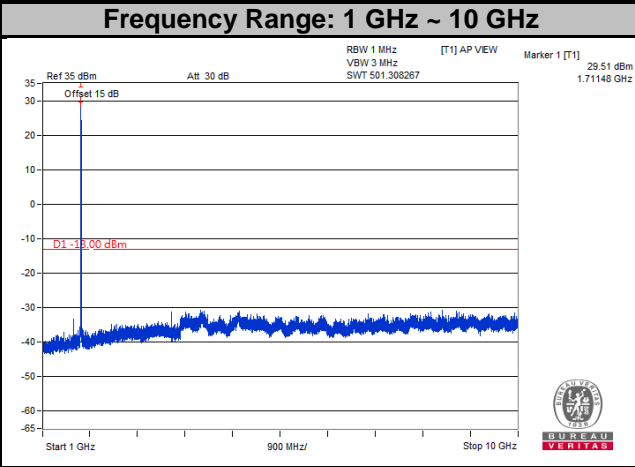
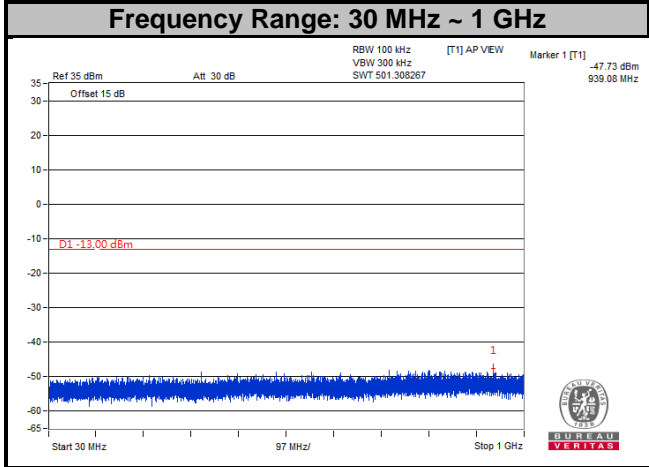
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 15 MHz**  
**Channel 20325**



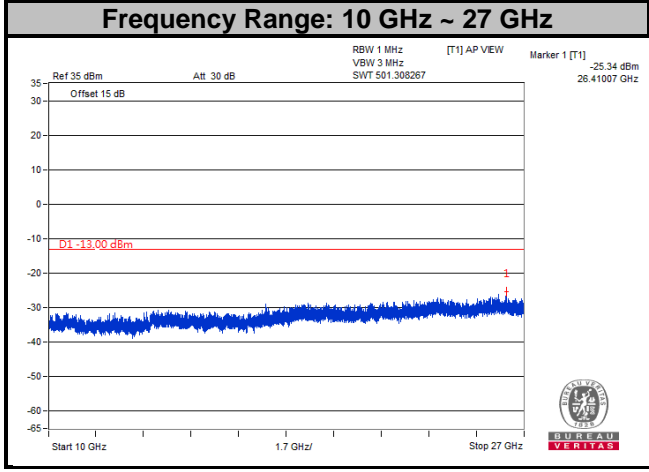
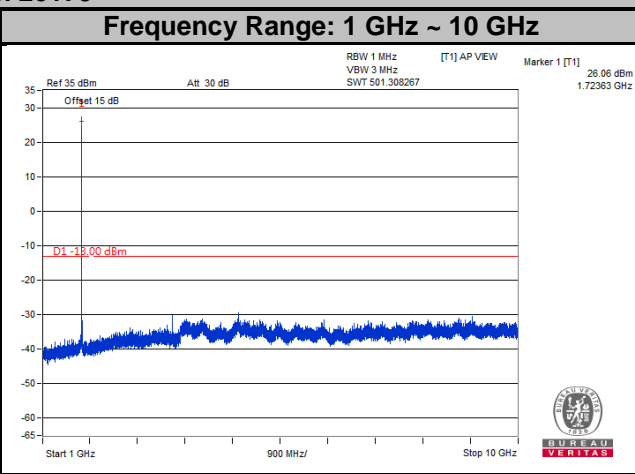
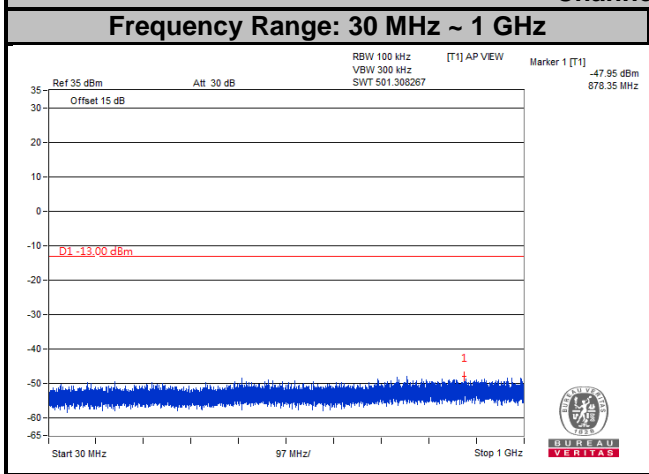
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 20 MHz**  
**Channel 20050**

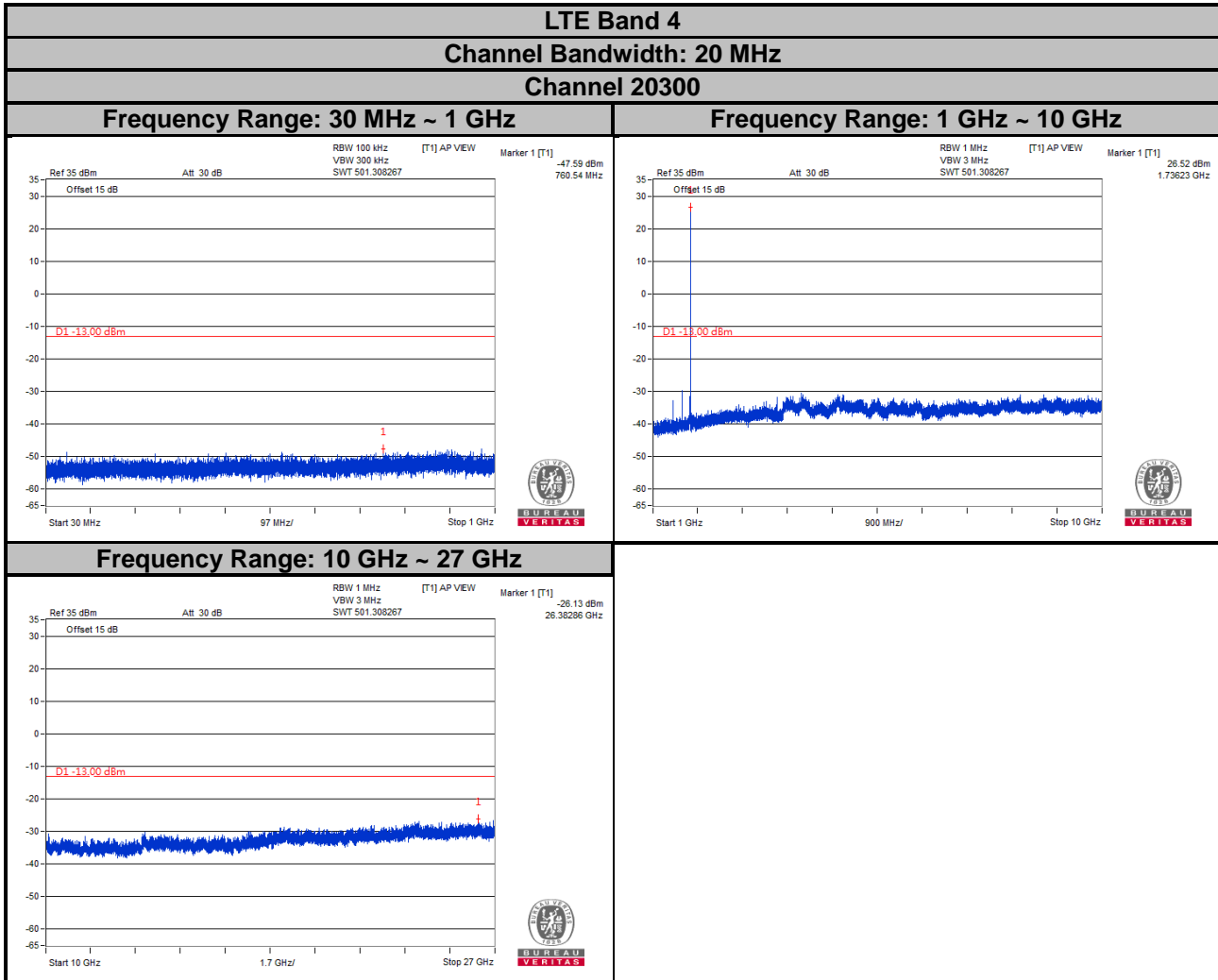


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 4**  
**Channel Bandwidth: 20 MHz**  
**Channel 20175**



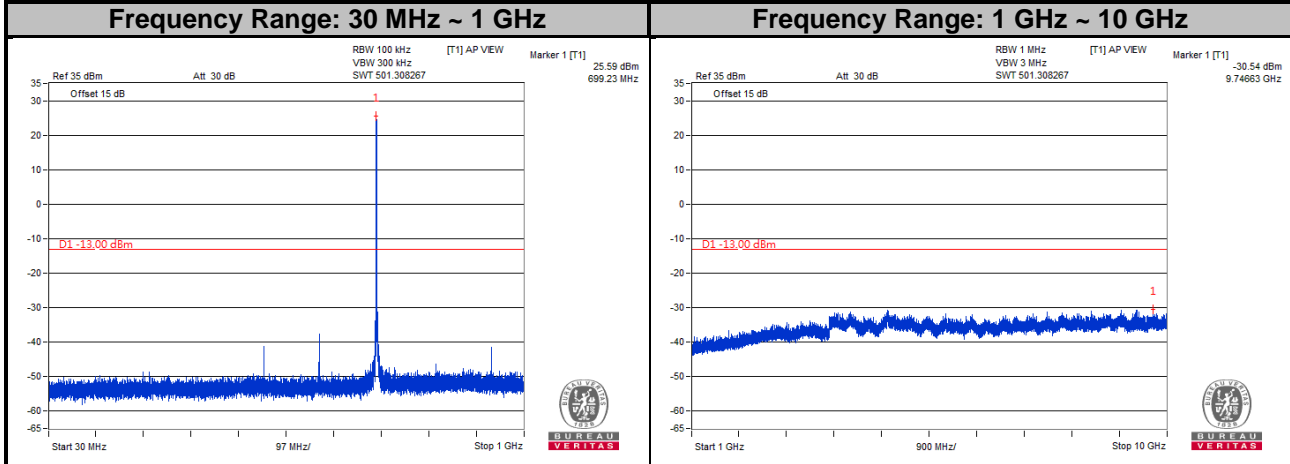
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



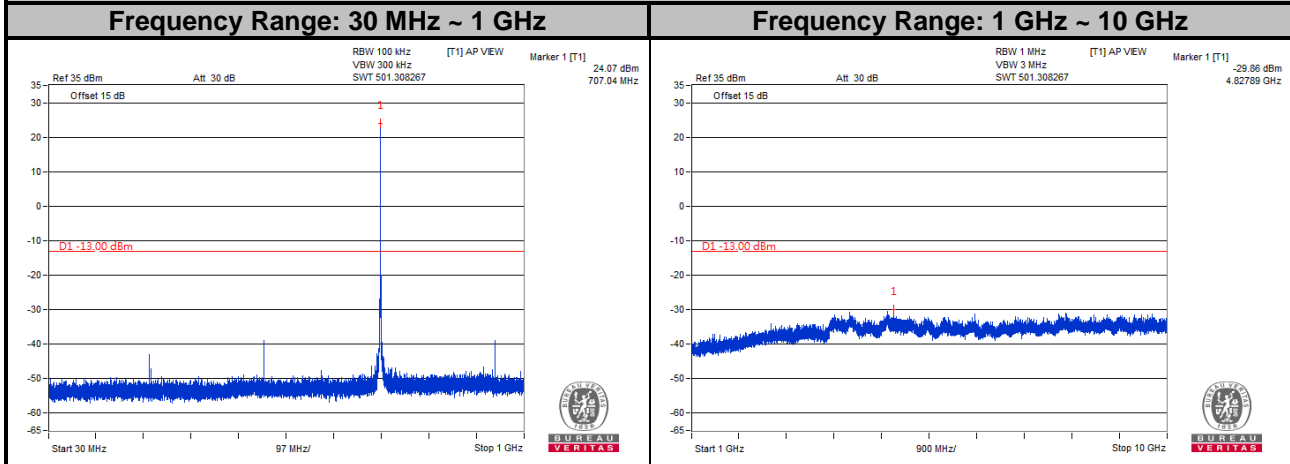
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 12**  
**Channel Bandwidth: 1.4 MHz**

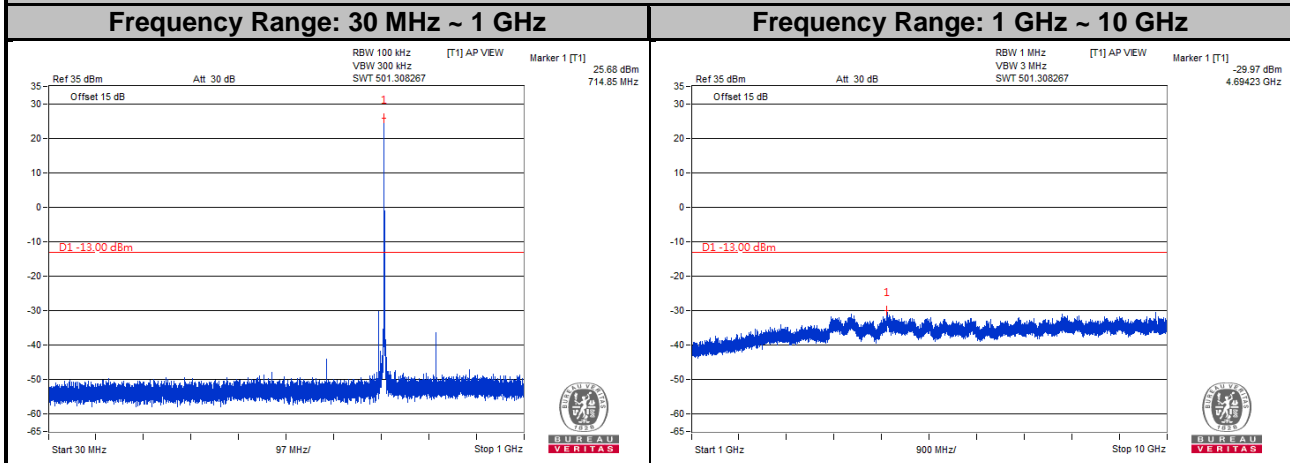
**Channel 23017**



**Channel 23095**



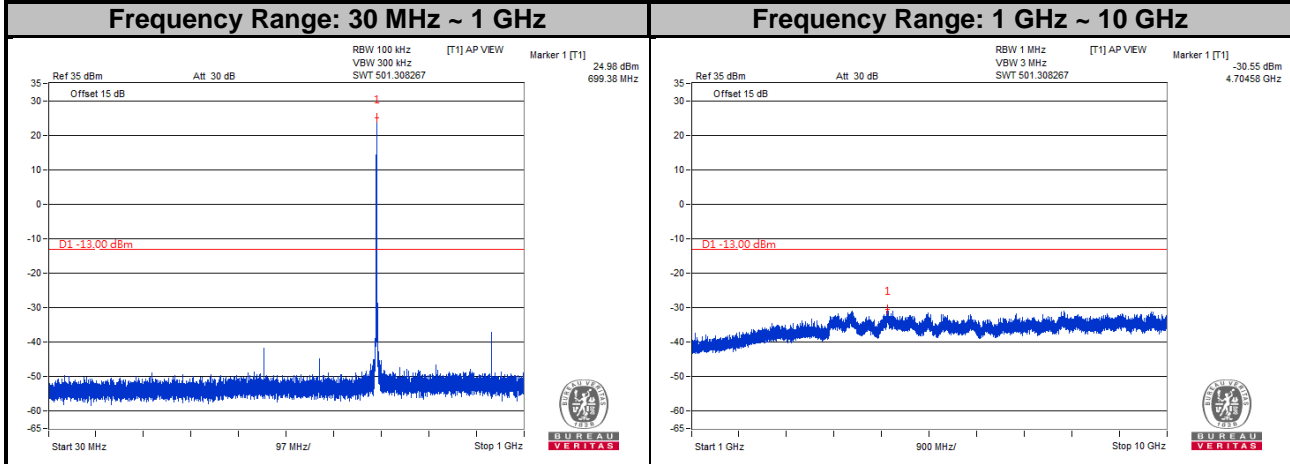
**Channel 23173**



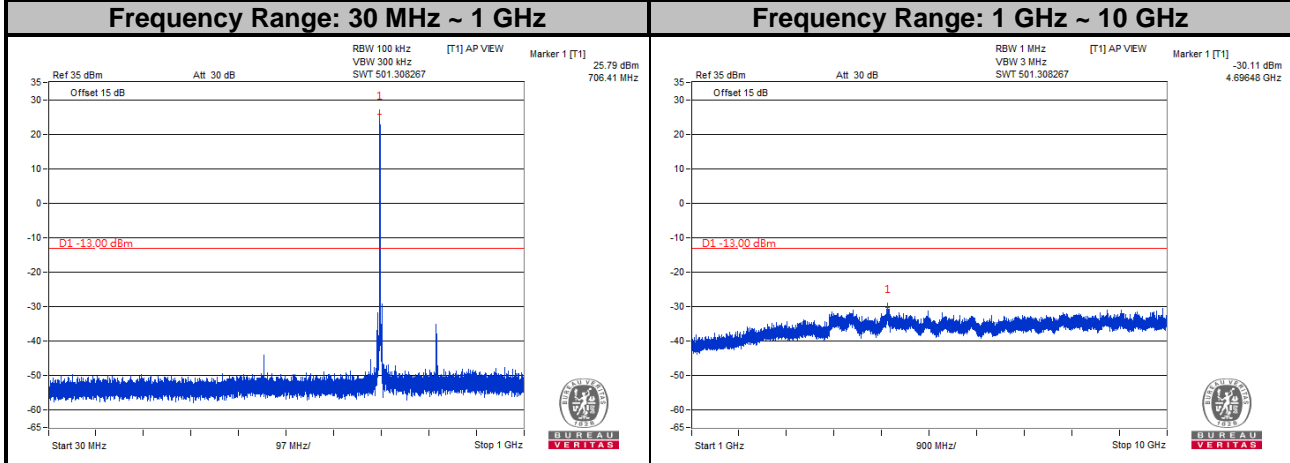
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



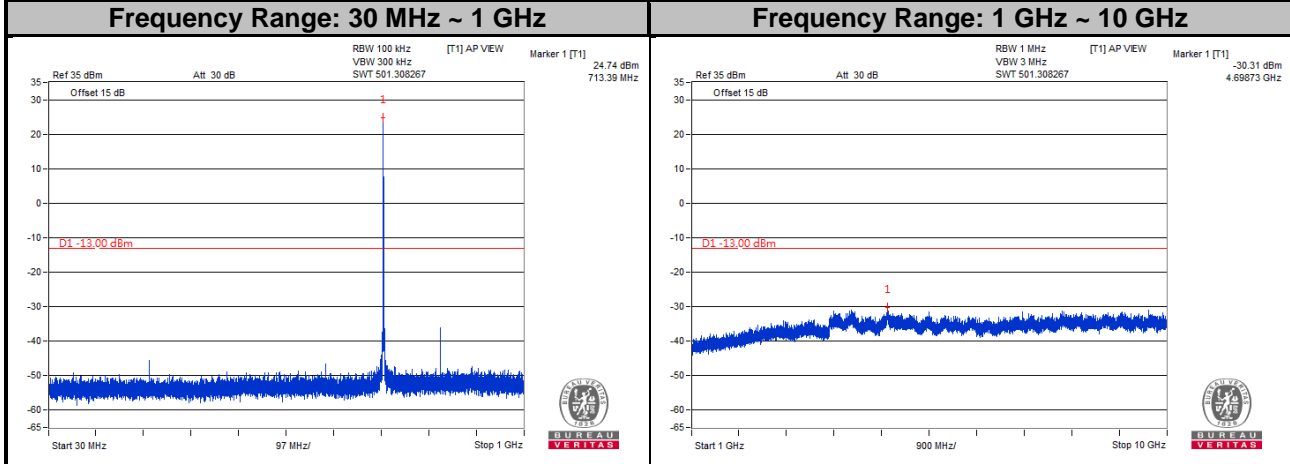
**LTE Band 12**  
**Channel Bandwidth: 3 MHz**  
**Channel 23025**



**Channel 23095**

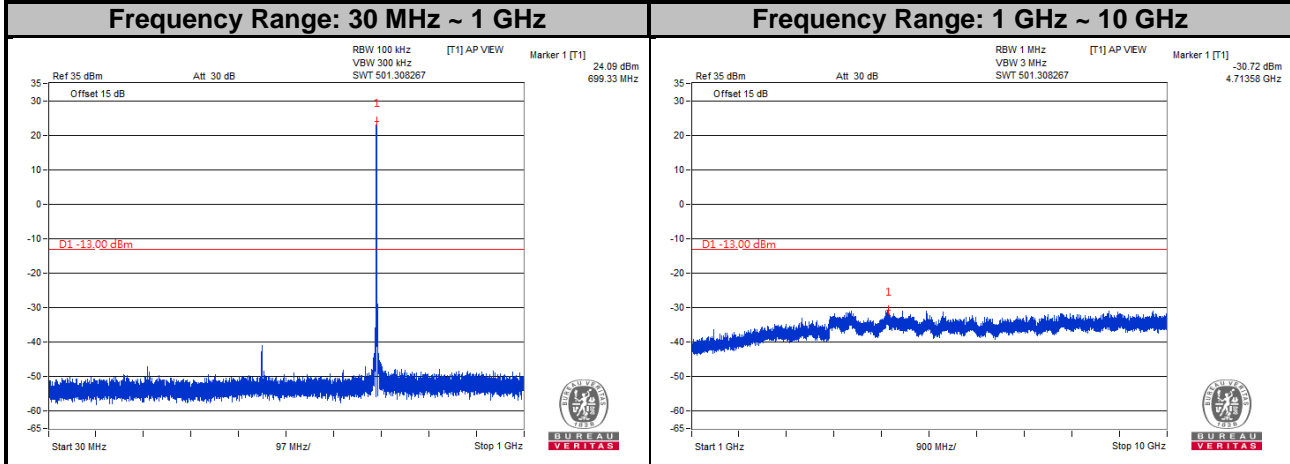


**Channel 23165**

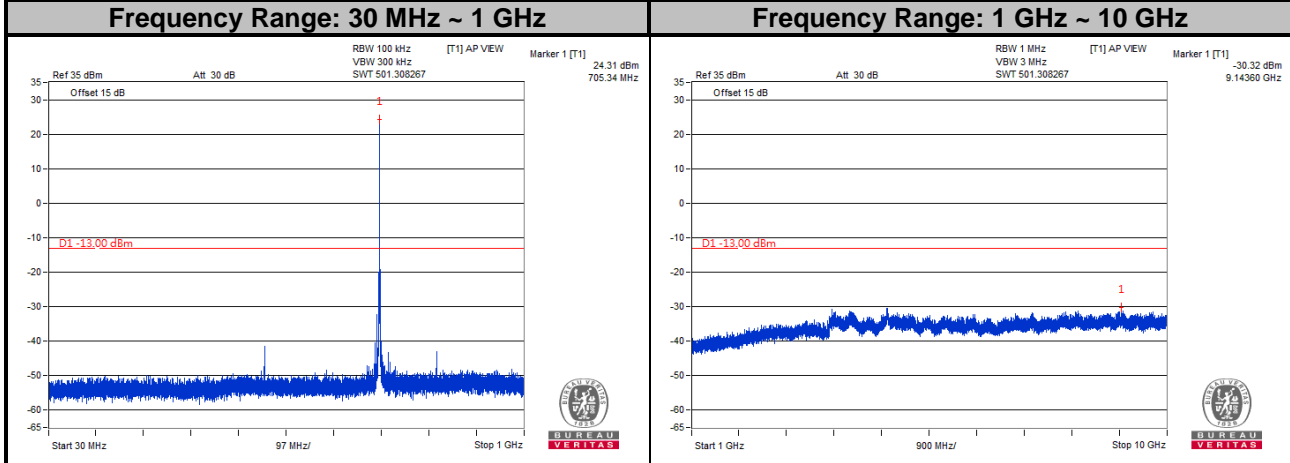


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

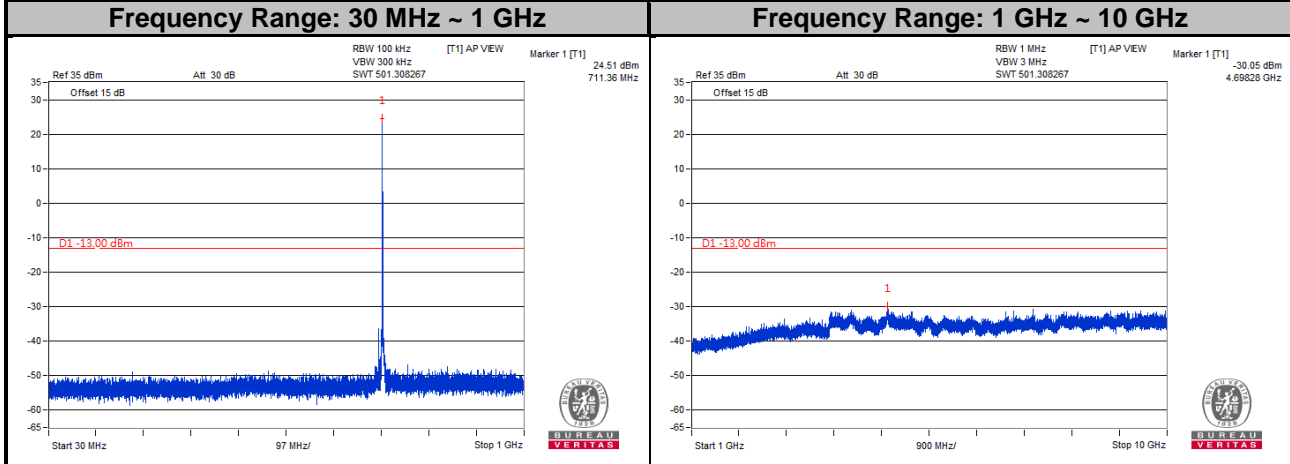
**LTE Band 12**  
**Channel Bandwidth: 5 MHz**  
**Channel 23035**



**Channel 23095**

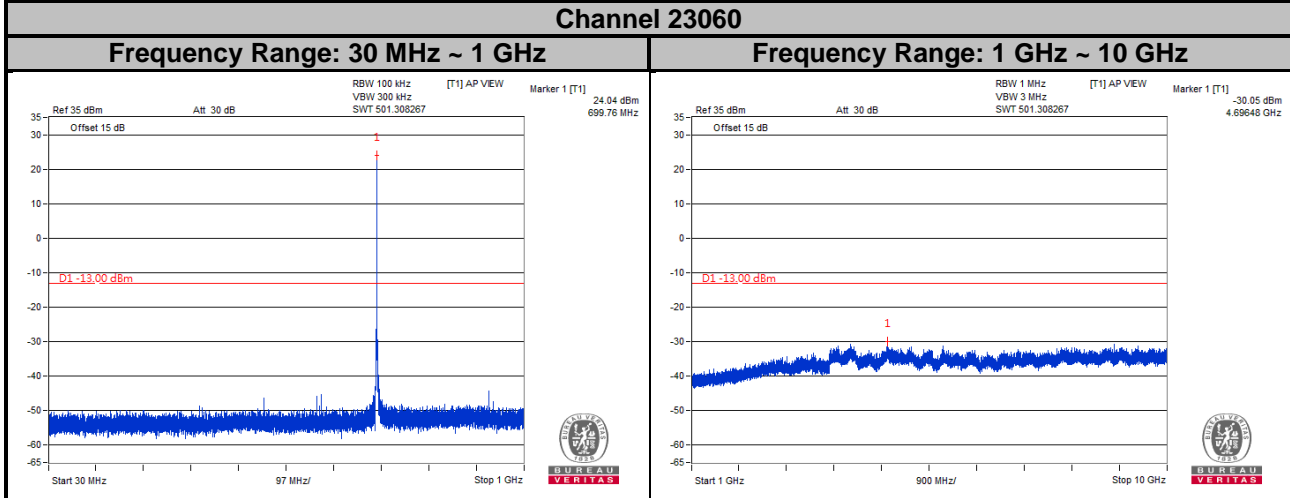


**Channel 23155**

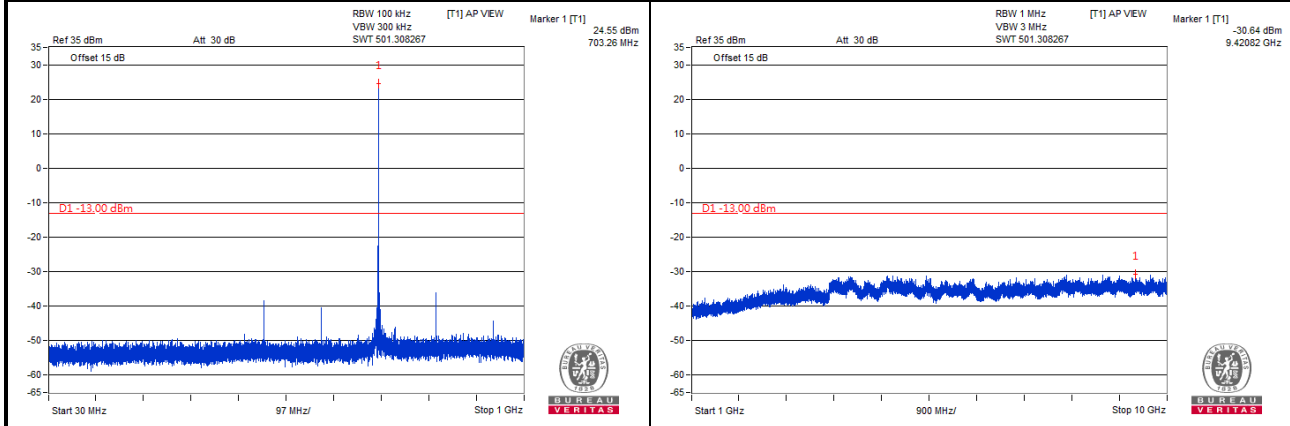


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

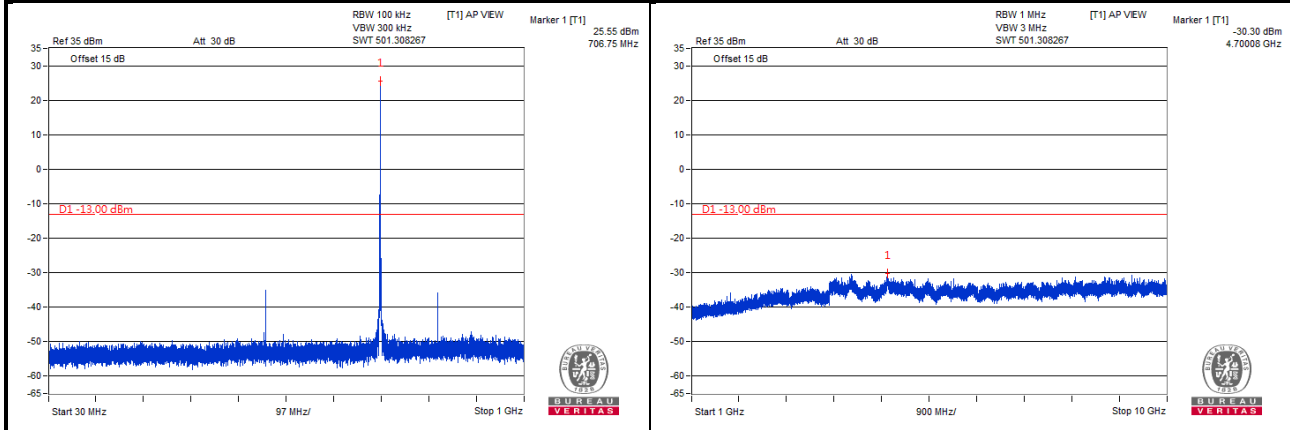
**LTE Band 12**  
**Channel Bandwidth: 10 MHz**  
**Channel 23060**



**Channel 23095**

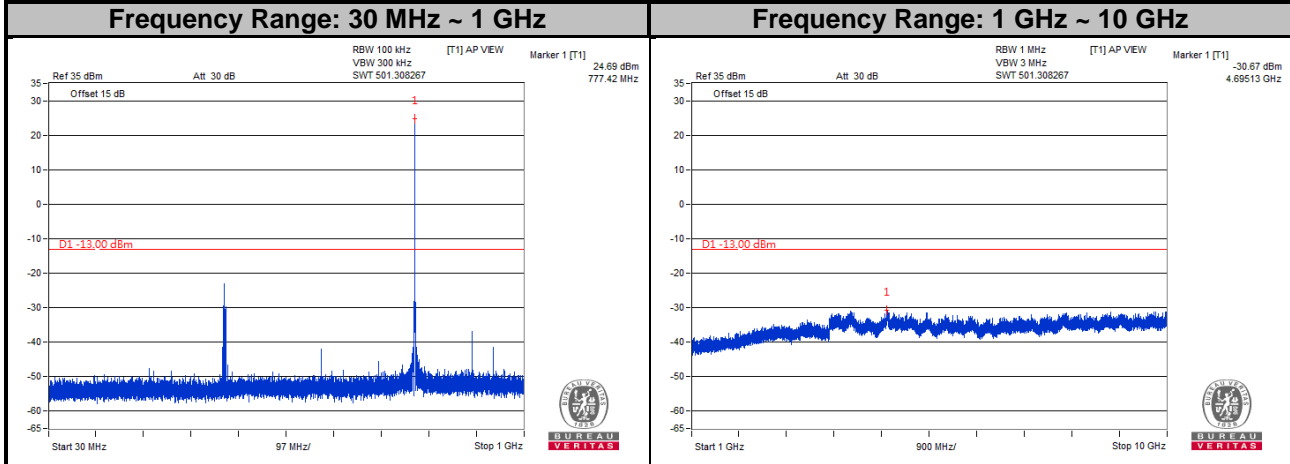


**Channel 23130**

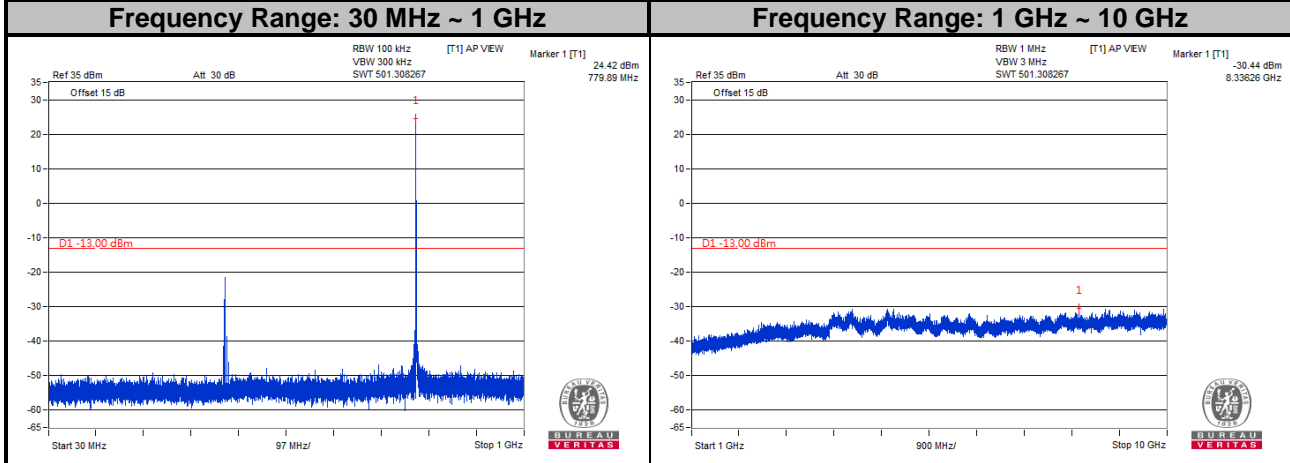


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

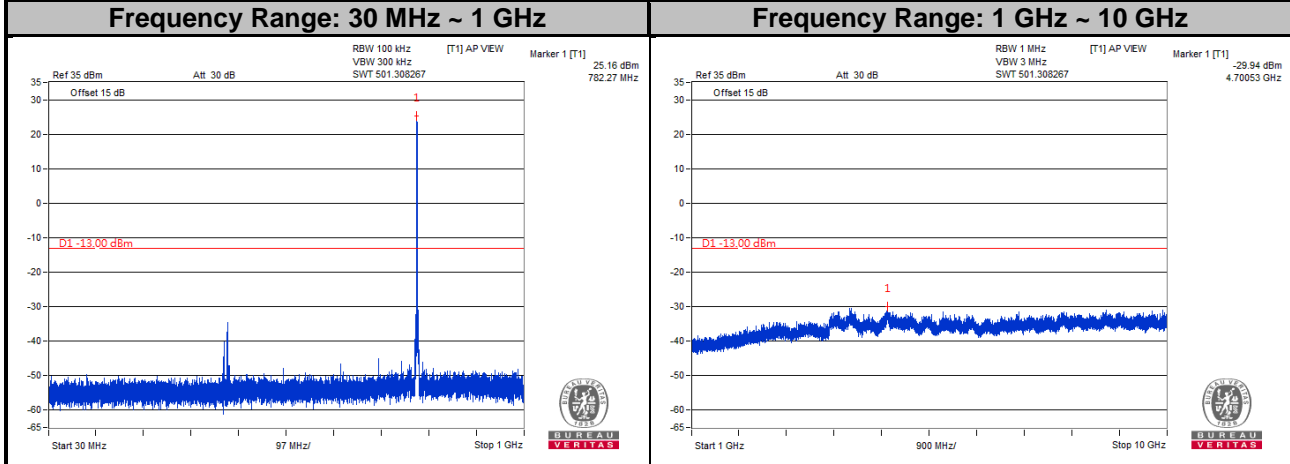
**LTE Band 13**  
**Channel Bandwidth: 5 MHz**  
**Channel 23205**



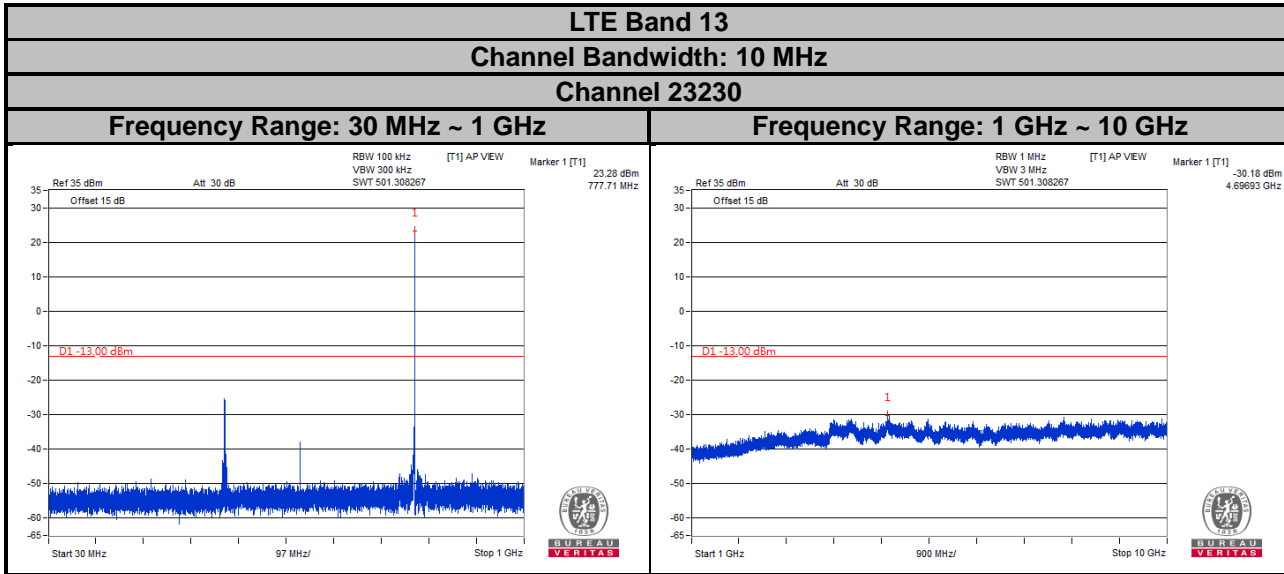
**Channel 23230**



**Channel 23255**

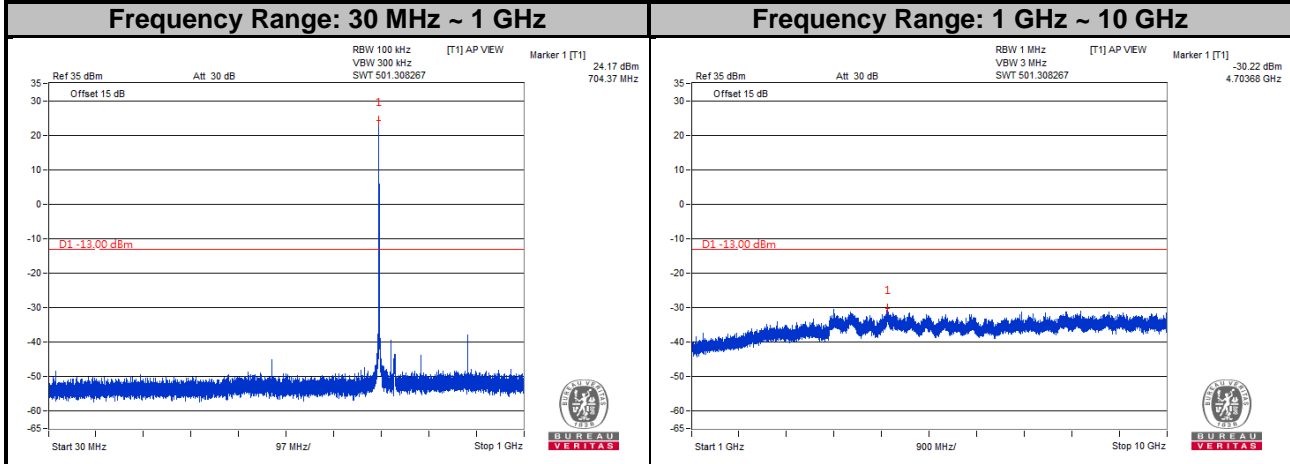


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

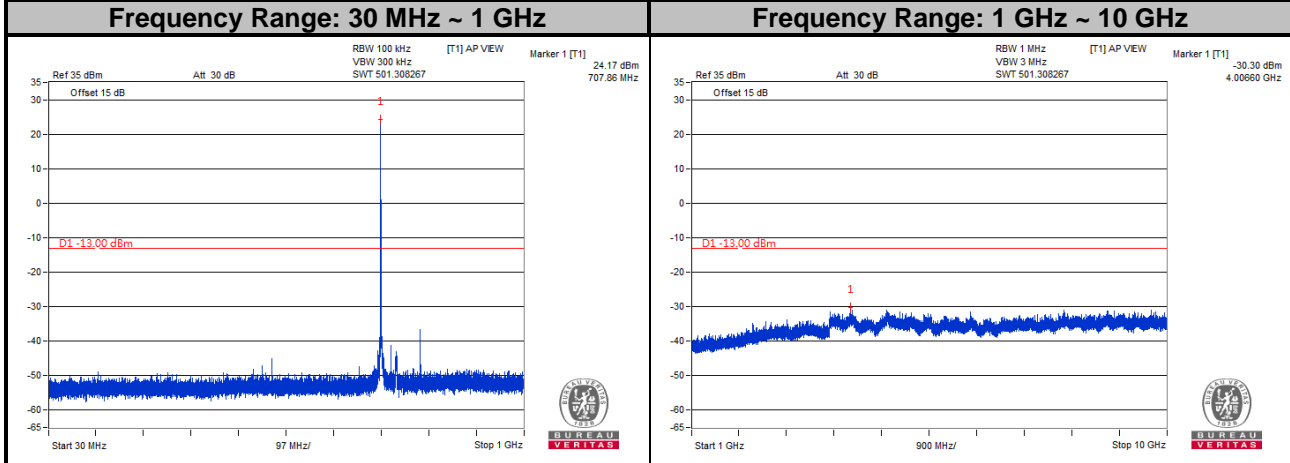


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

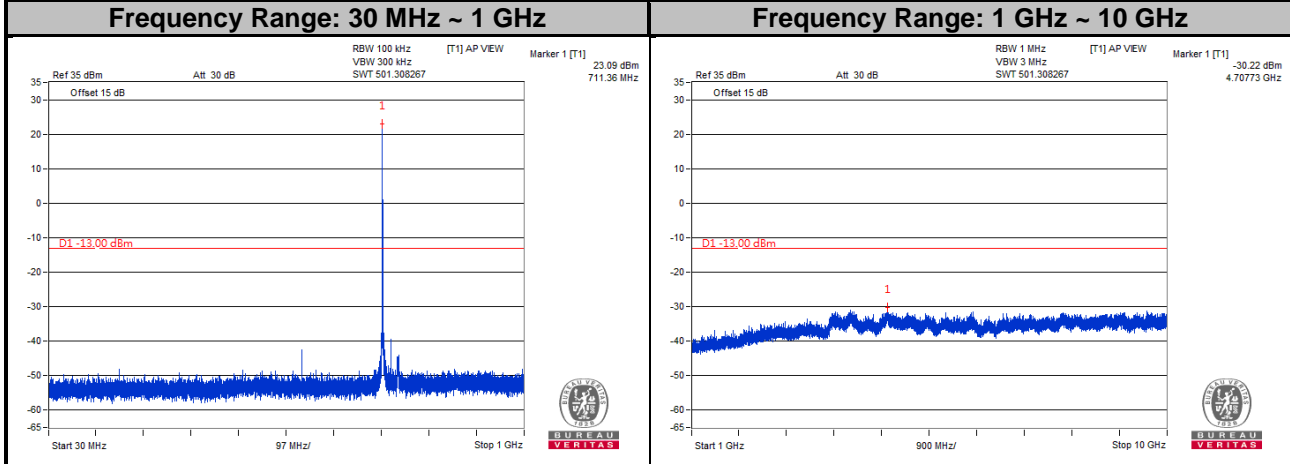
**LTE Band 17**  
**Channel Bandwidth: 5 MHz**  
**Channel 23755**



**Channel 23790**

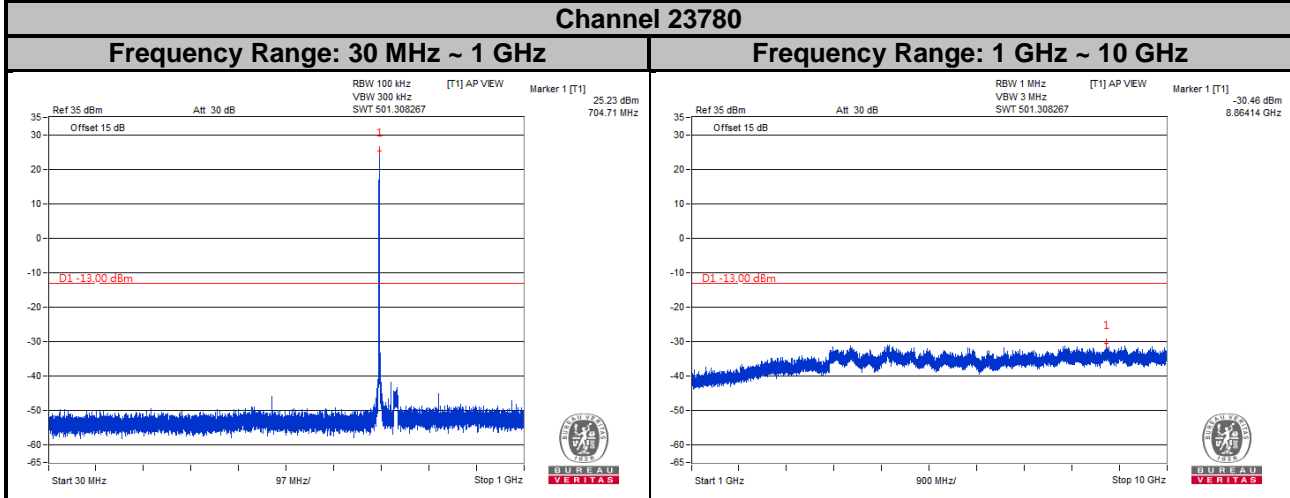


**Channel 23825**

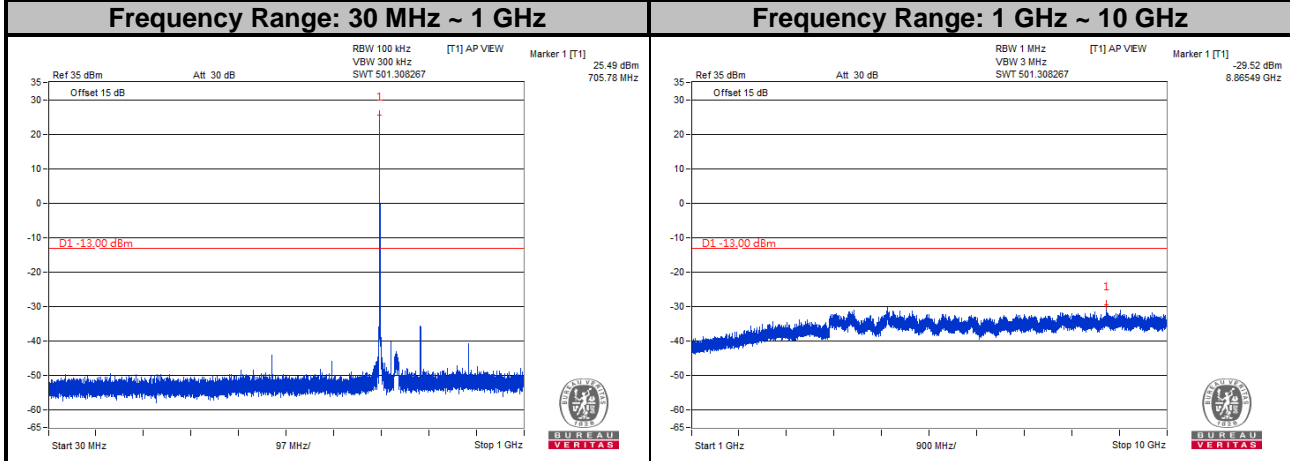


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

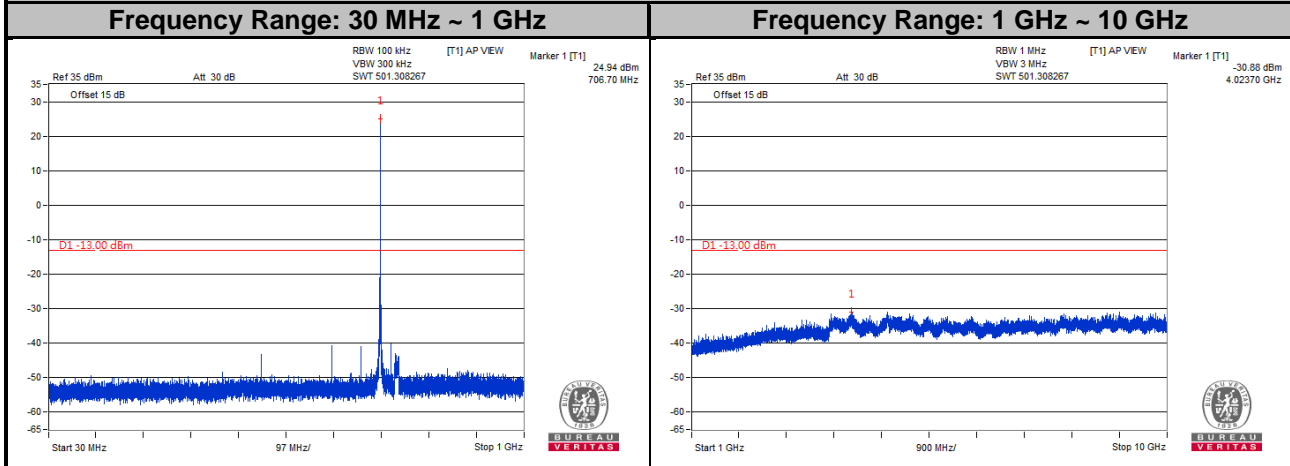
**LTE Band 17**  
**Channel Bandwidth: 10 MHz**  
**Channel 23780**



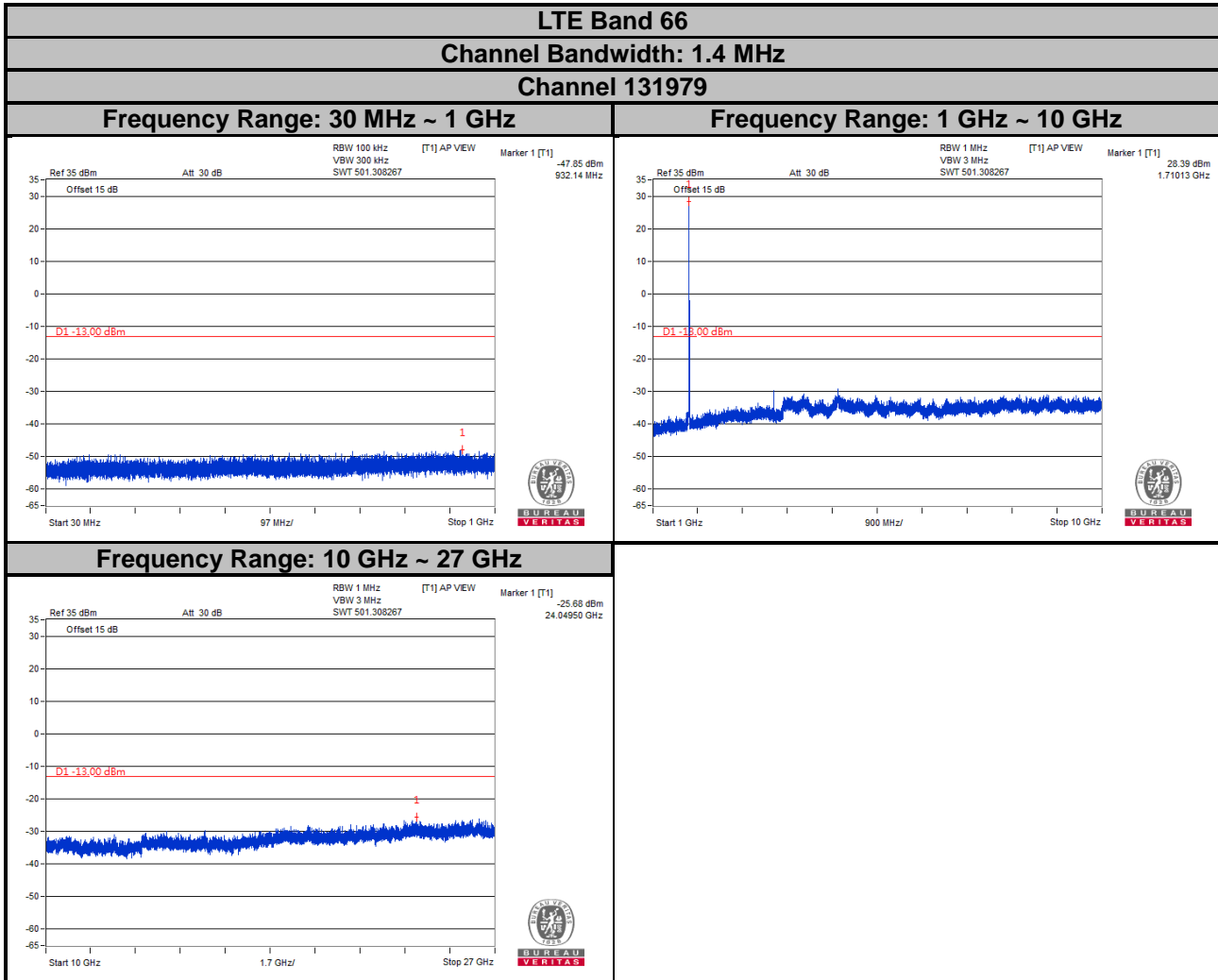
**Channel 23790**



**Channel 23800**

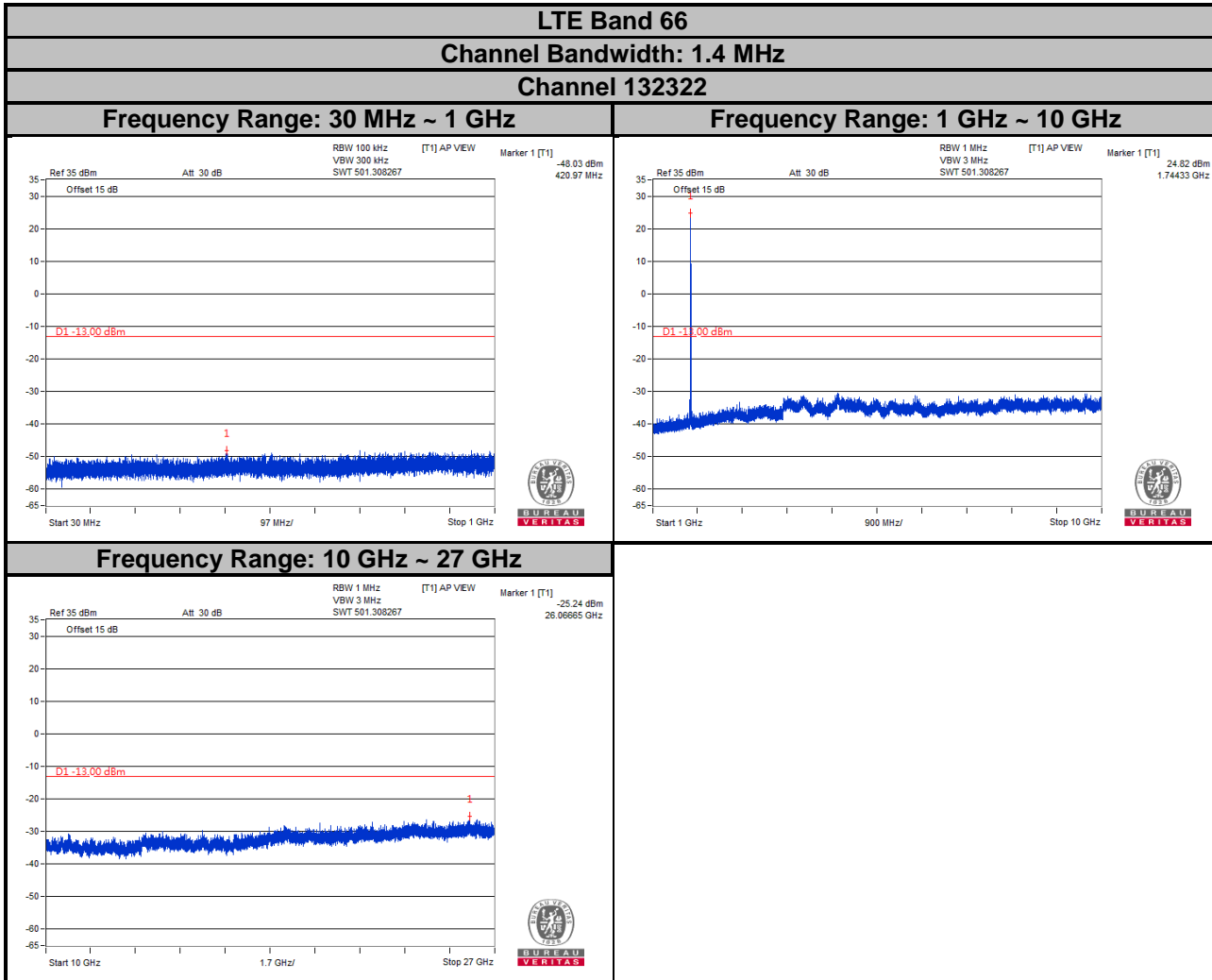


Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.





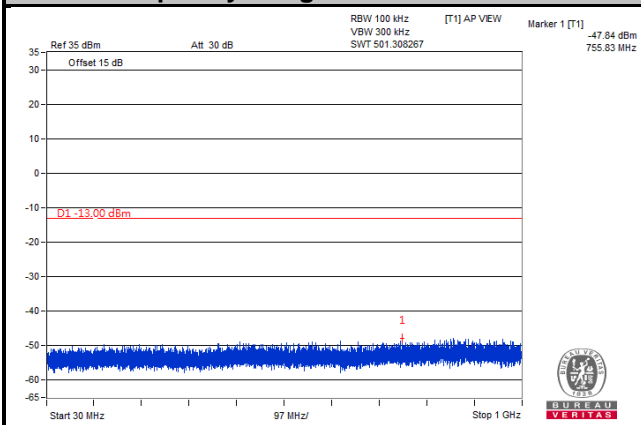
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

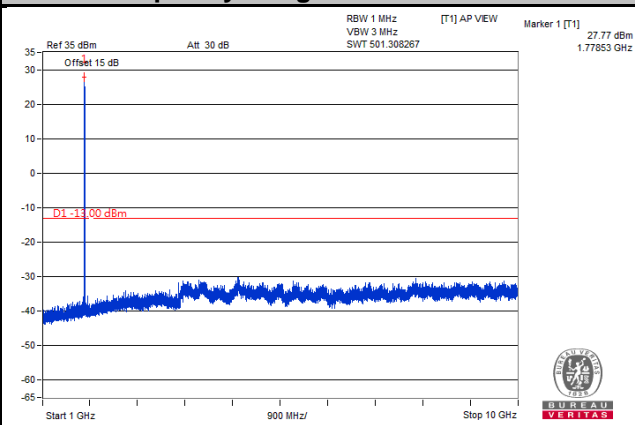
**Channel Bandwidth: 1.4 MHz**

**Channel 132655**

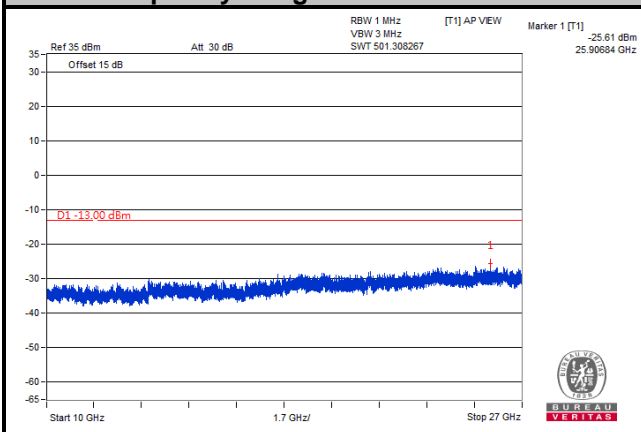
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**



**Frequency Range: 10 GHz ~ 27 GHz**



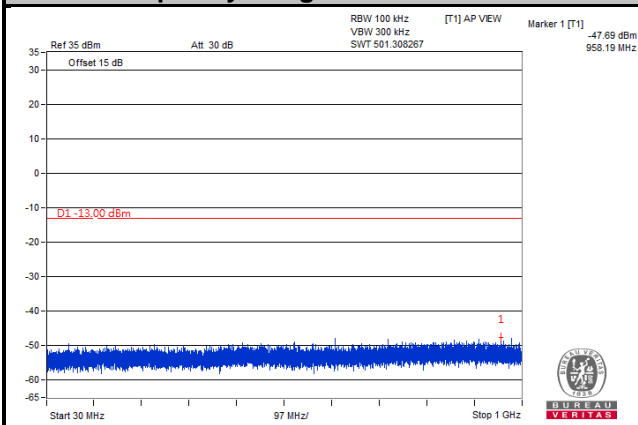
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

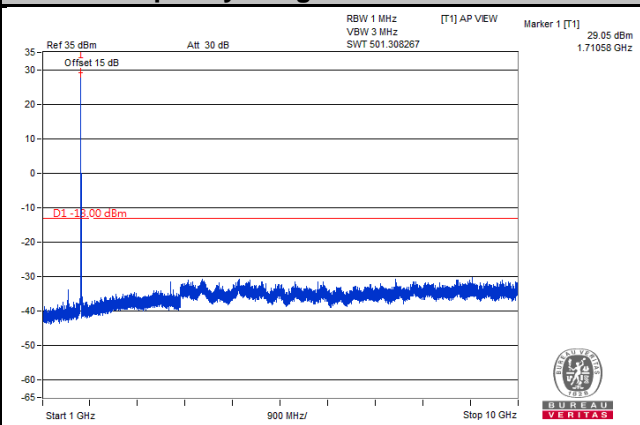
**Channel Bandwidth: 3 MHz**

**Channel 131987**

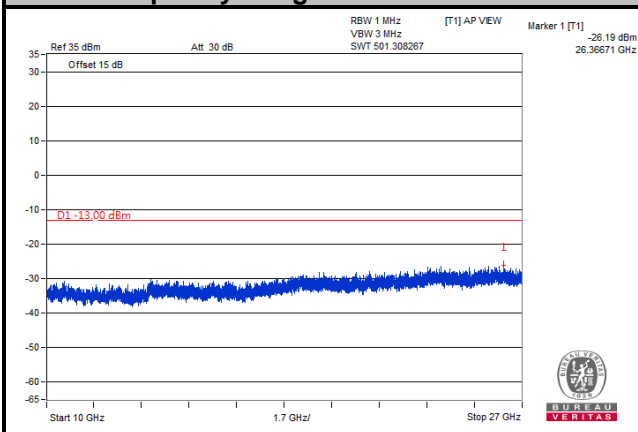
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**

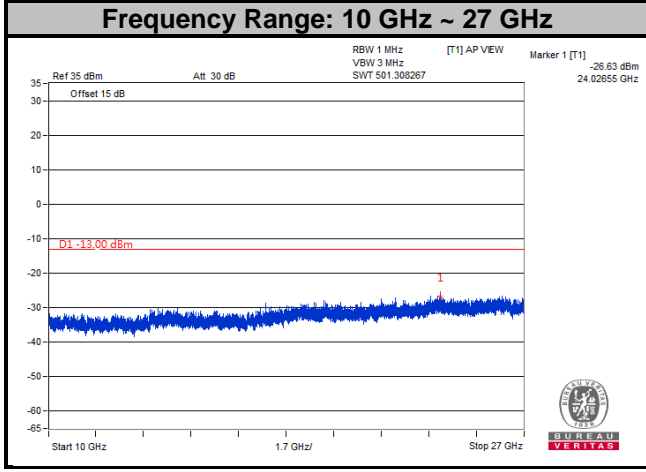
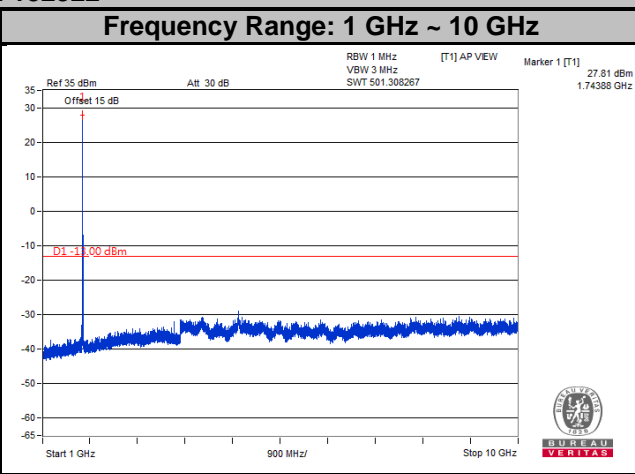
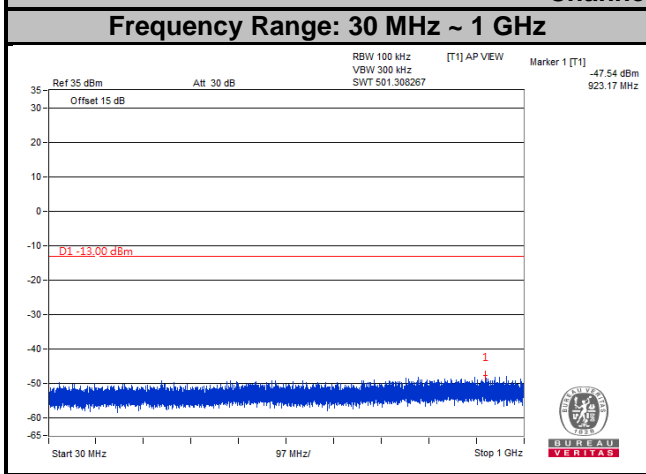


**Frequency Range: 10 GHz ~ 27 GHz**



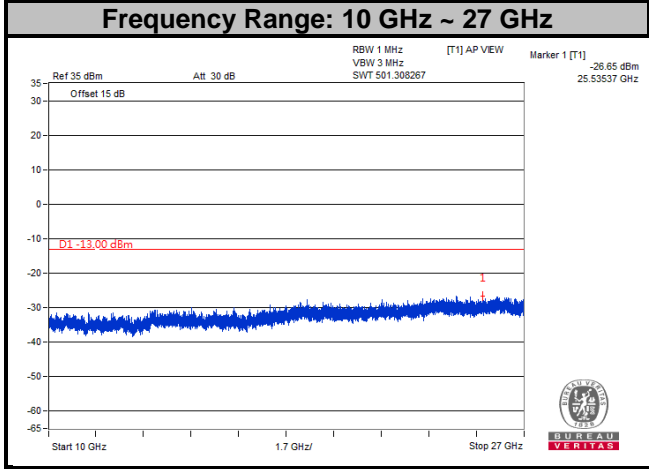
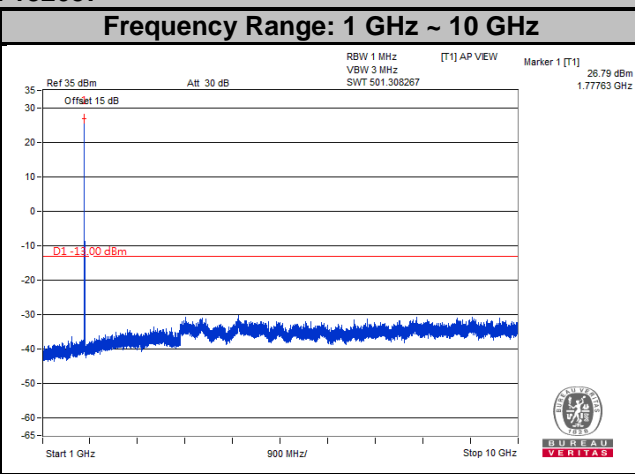
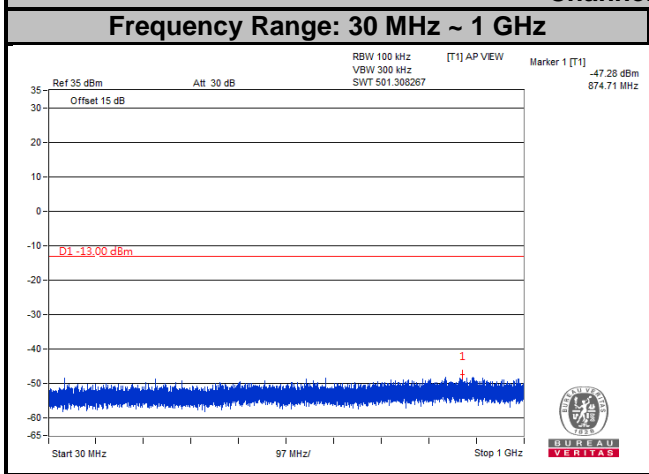
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel Bandwidth: 3 MHz**  
**Channel 132322**

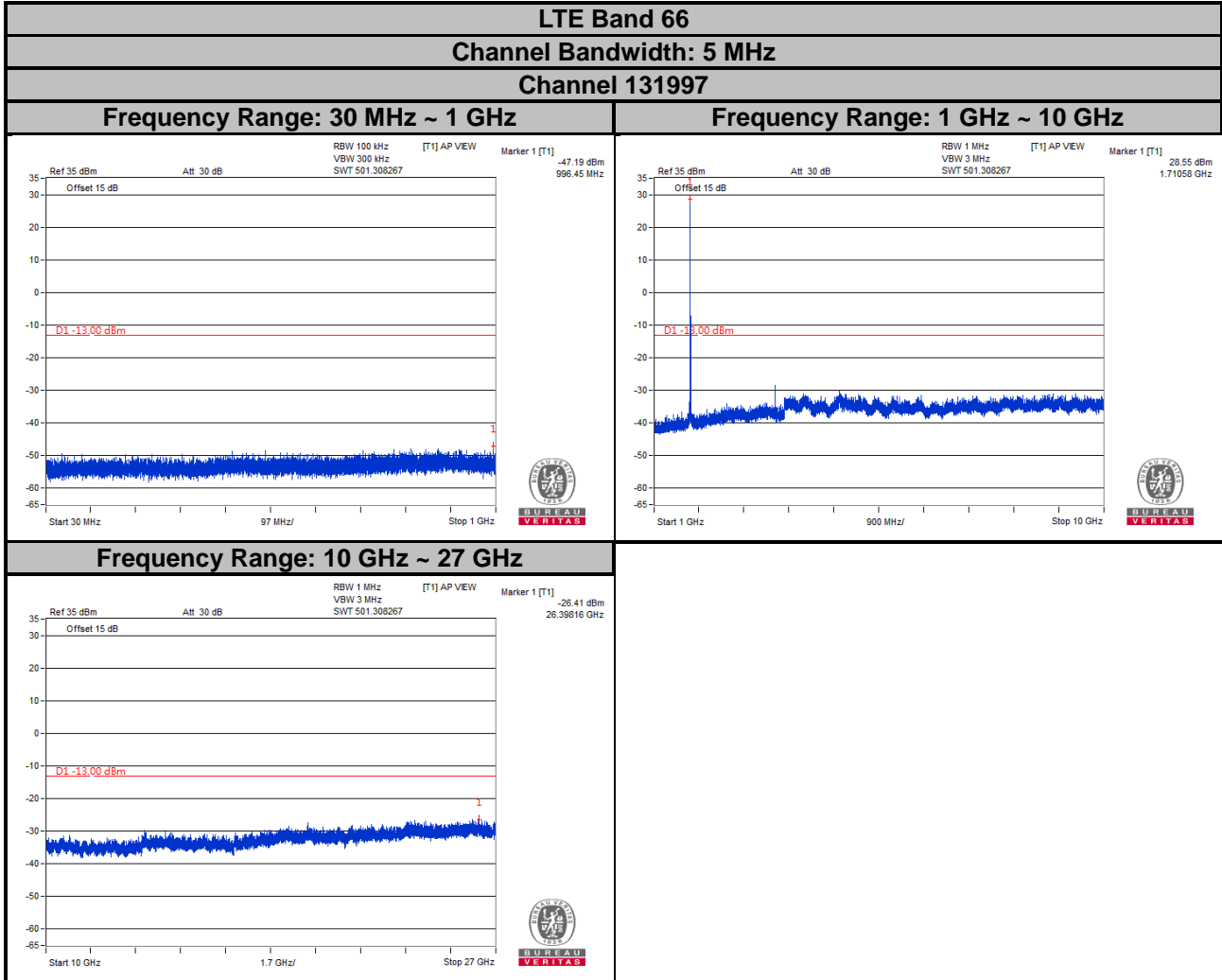


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel Bandwidth: 3 MHz**  
**Channel 132657**

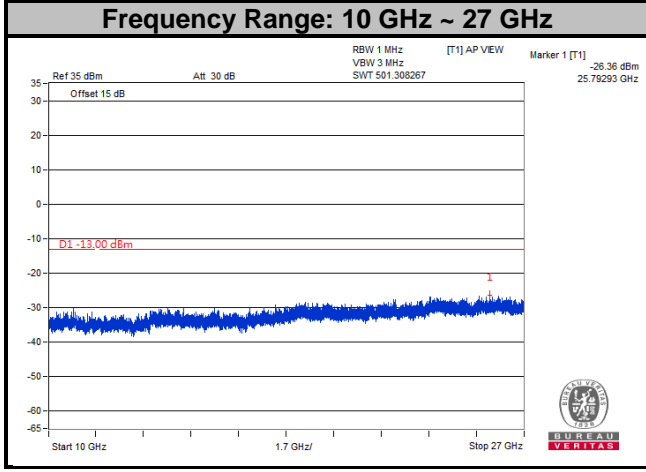
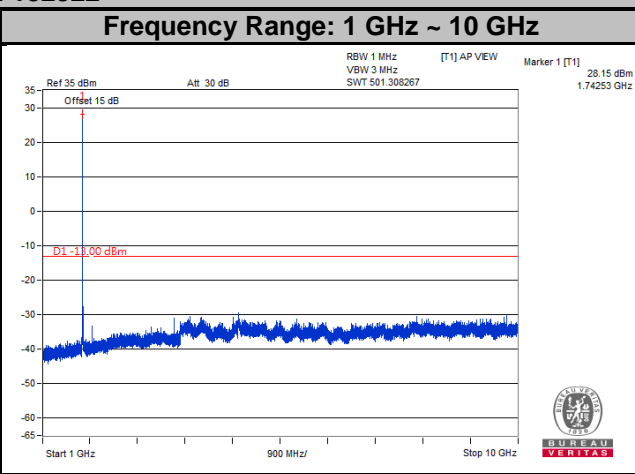
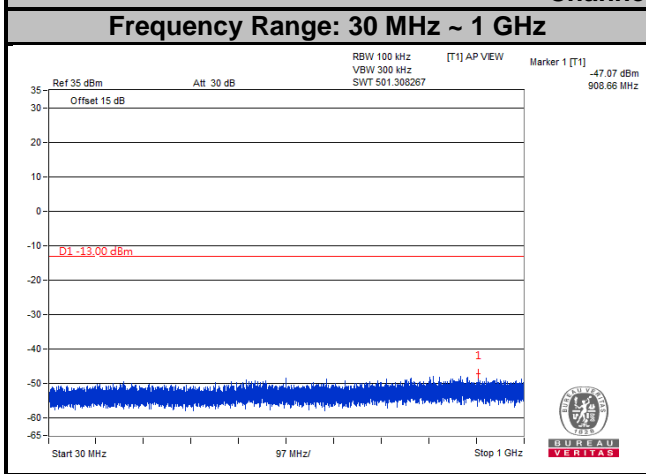


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

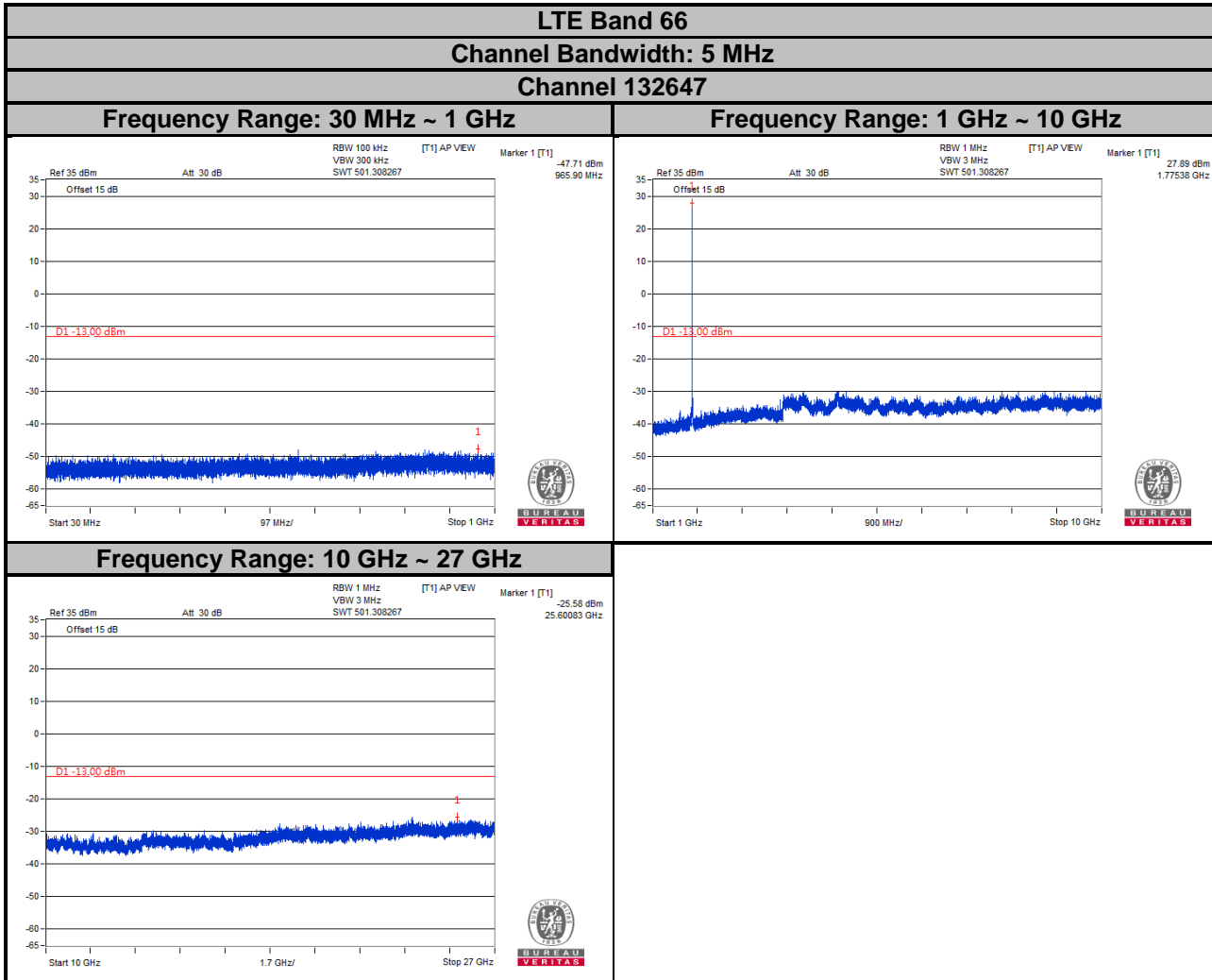


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel Bandwidth: 5 MHz**  
**Channel 132322**



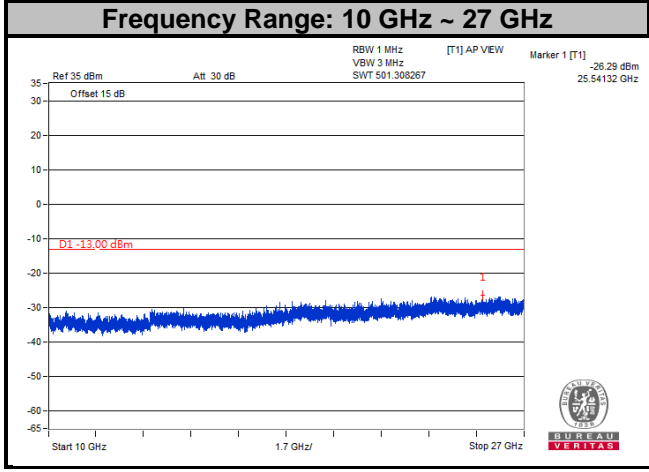
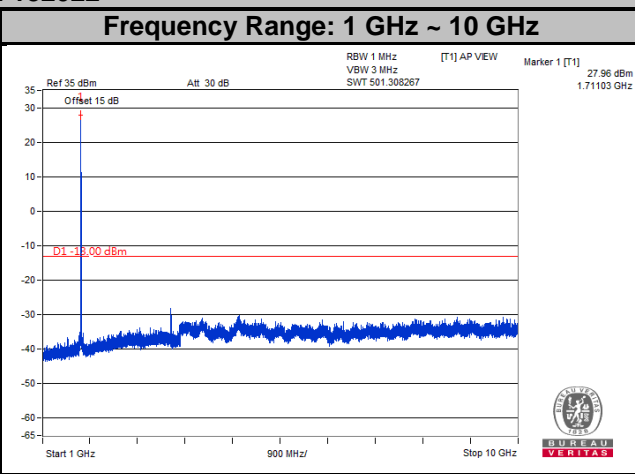
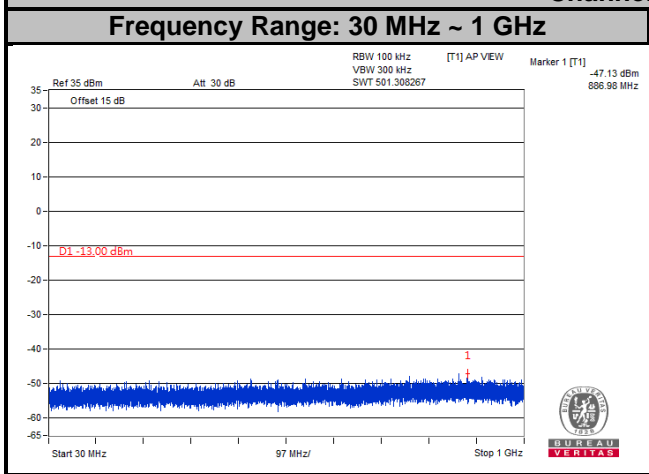
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



**LTE Band 66**  
**Channel Bandwidth: 10 MHz**  
**Channel 132022**



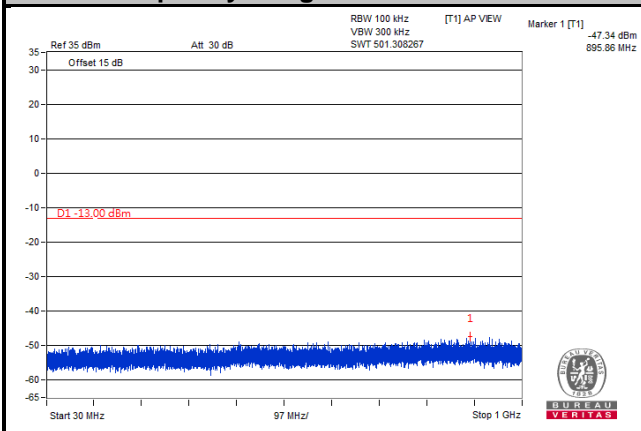
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

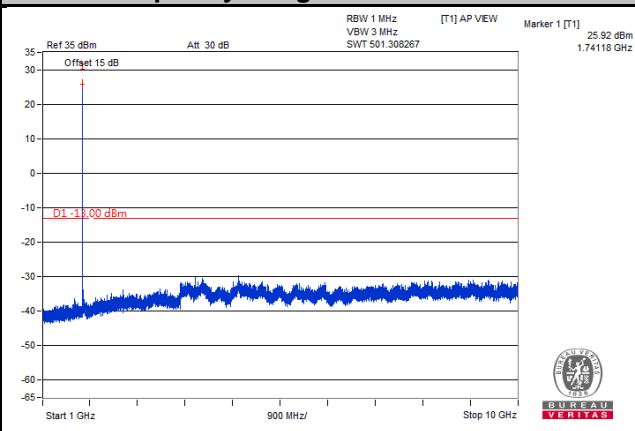
**Channel Bandwidth: 10 MHz**

**Channel 132322**

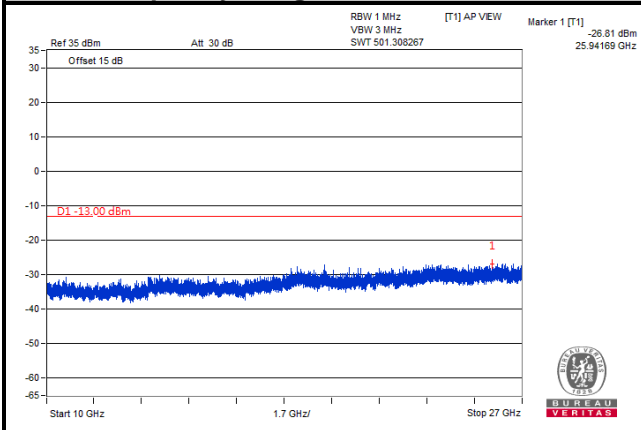
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**



**Frequency Range: 10 GHz ~ 27 GHz**



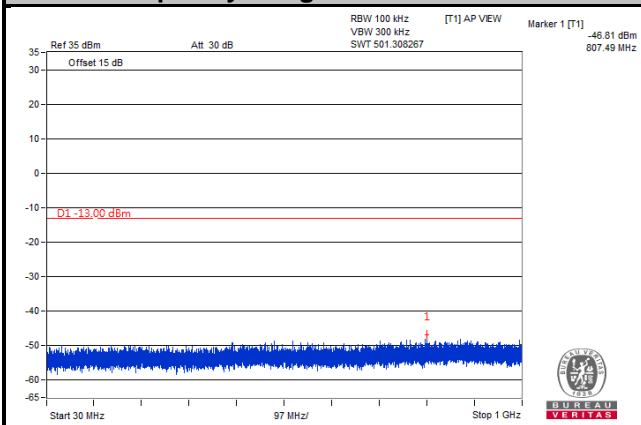
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

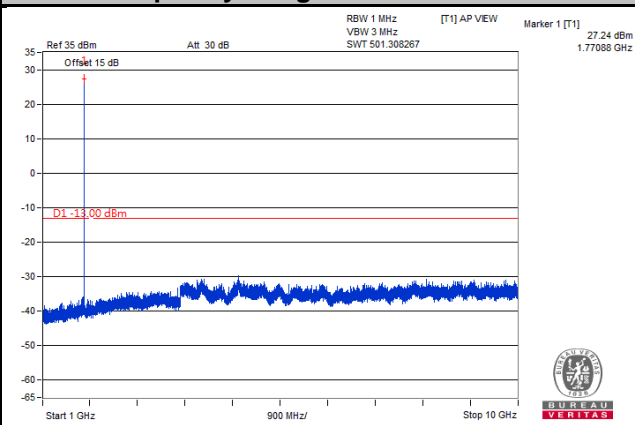
**Channel Bandwidth: 10 MHz**

**Channel 132622**

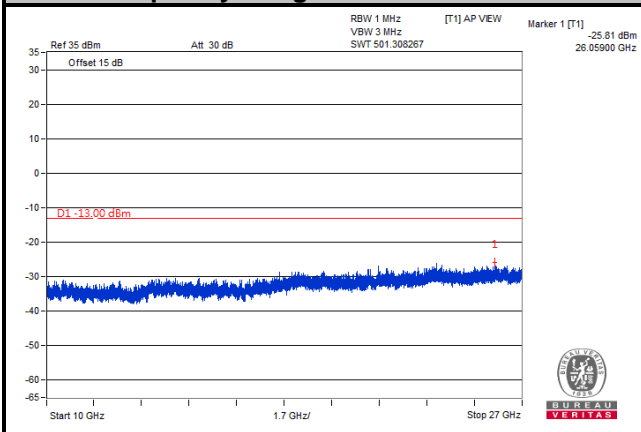
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**



**Frequency Range: 10 GHz ~ 27 GHz**



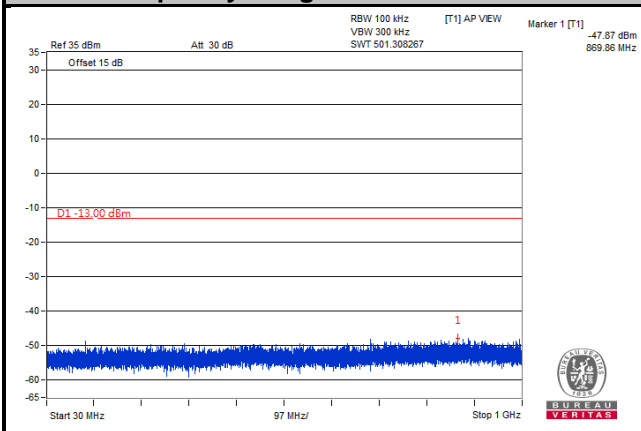
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

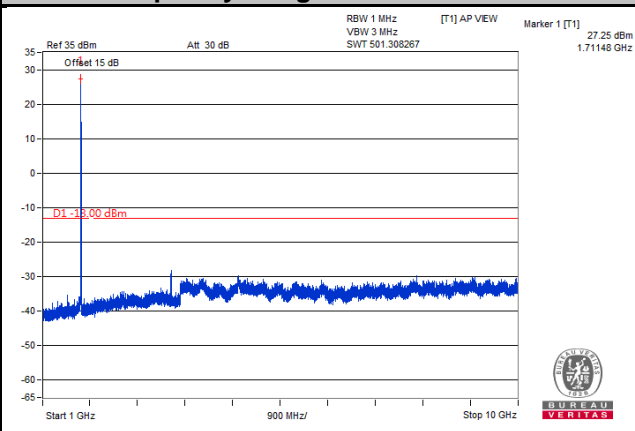
**Channel Bandwidth: 15 MHz**

**Channel 132047**

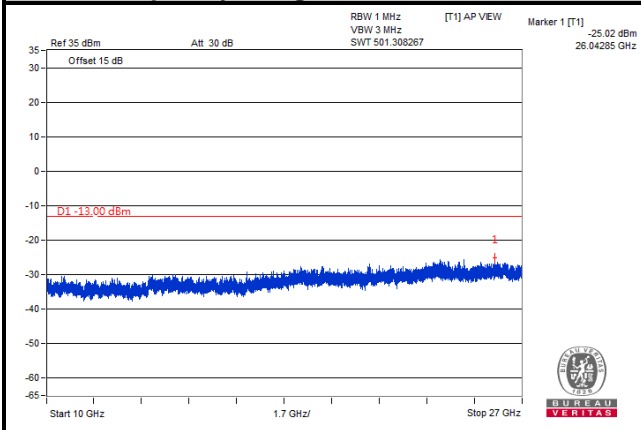
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**

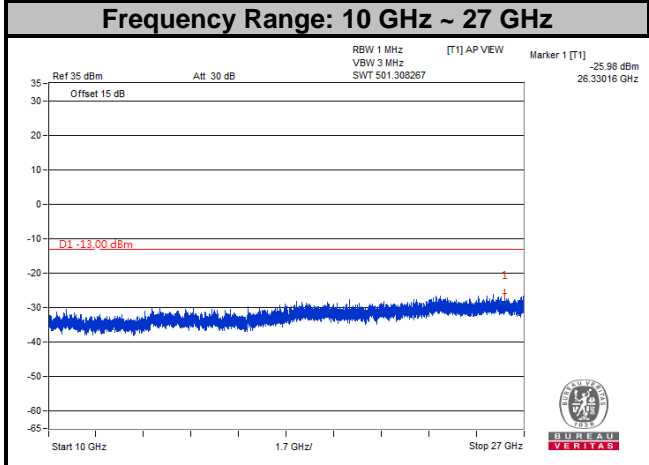
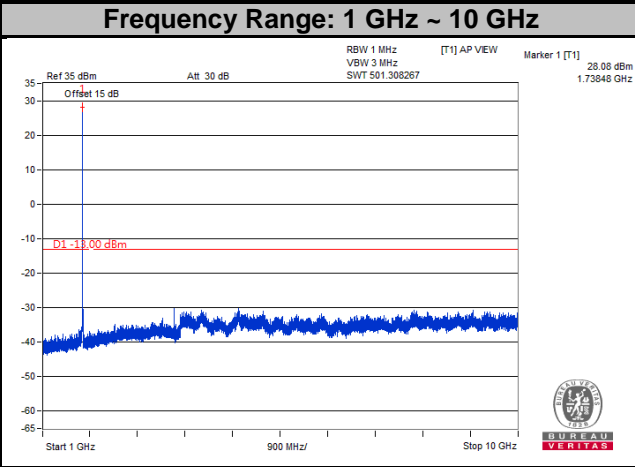
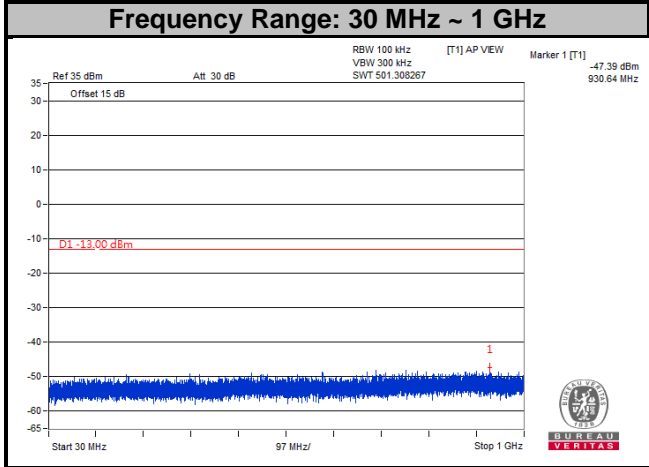


**Frequency Range: 10 GHz ~ 27 GHz**



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel Bandwidth: 15 MHz**  
**Channel 132322**



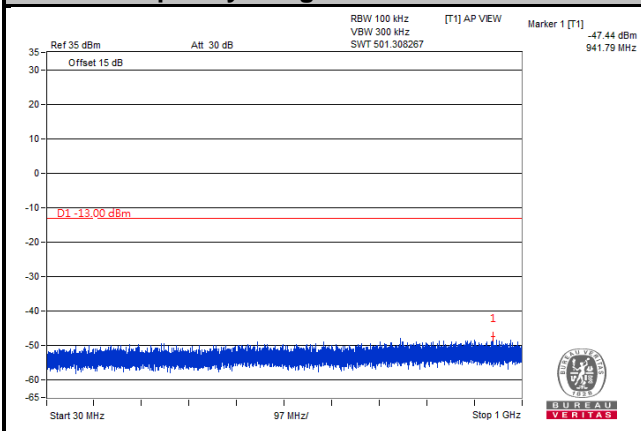
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**

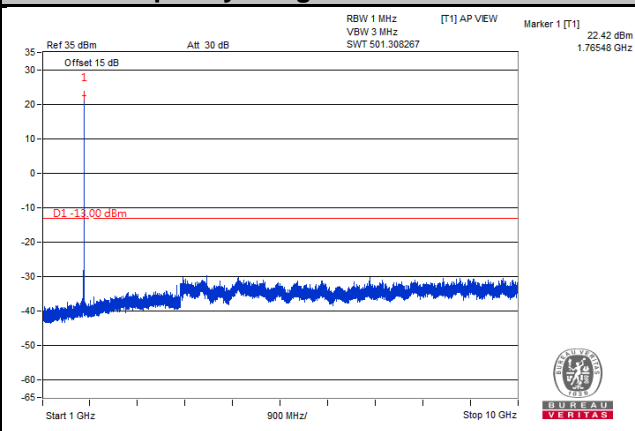
**Channel Bandwidth: 15 MHz**

**Channel 132597**

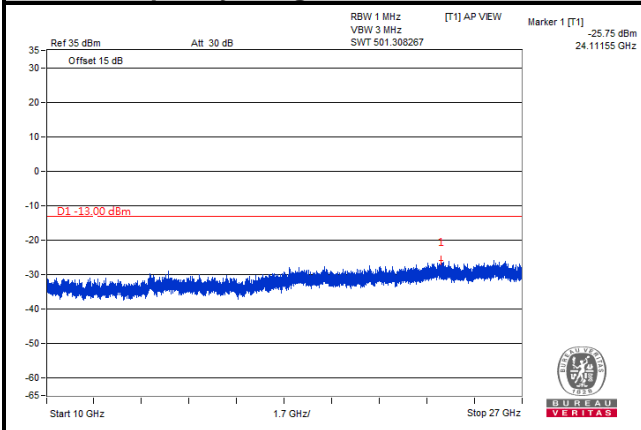
**Frequency Range: 30 MHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 10 GHz**

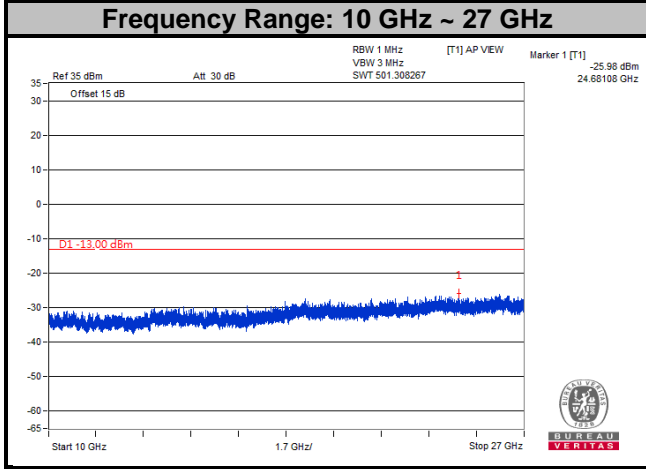
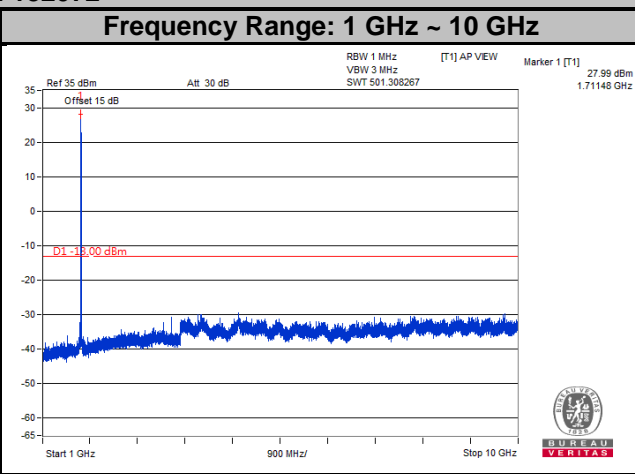
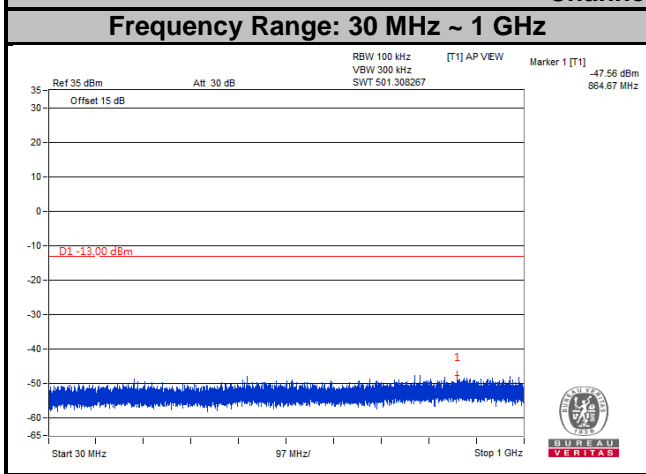


**Frequency Range: 10 GHz ~ 27 GHz**

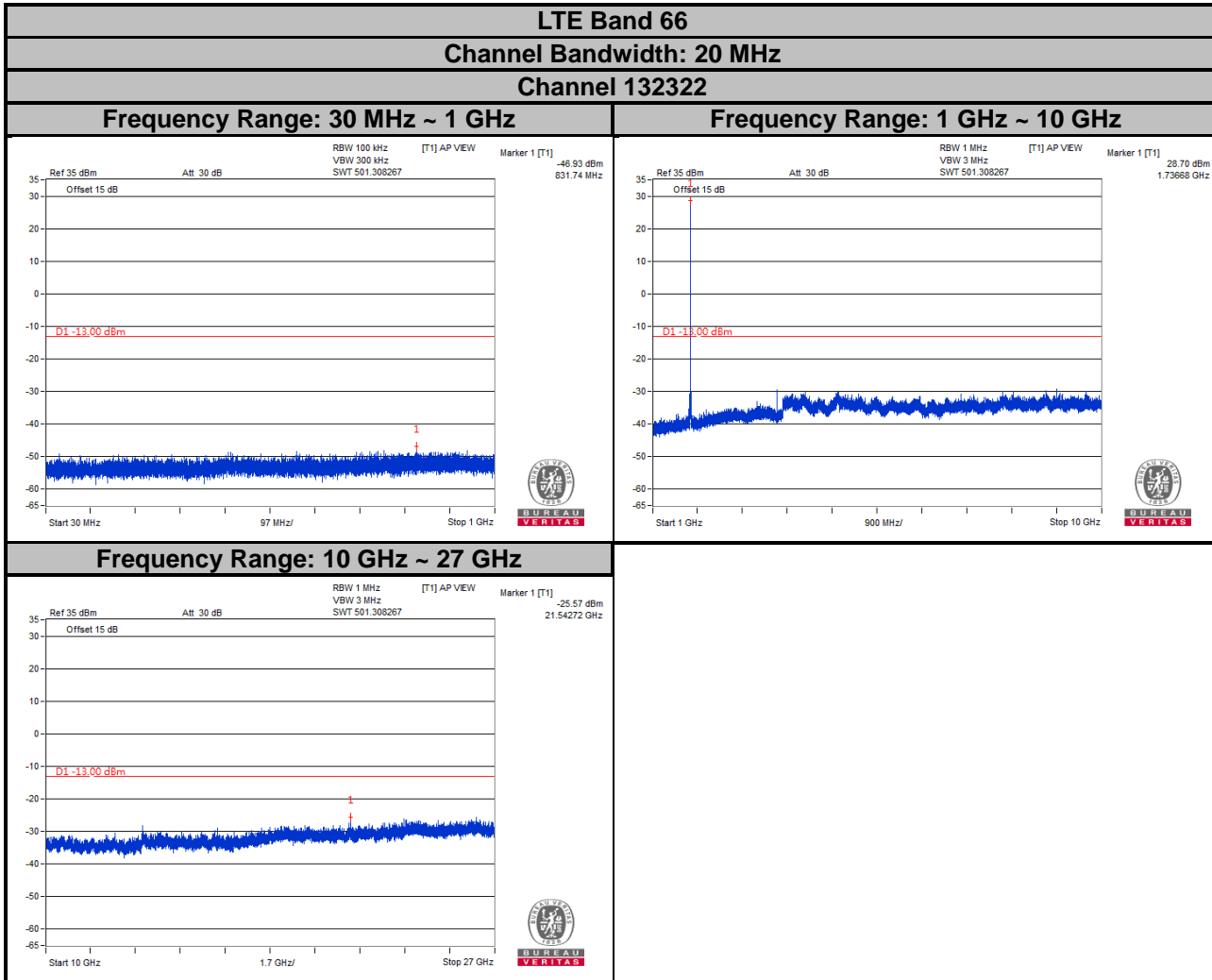


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel Bandwidth: 20 MHz**  
**Channel 132072**



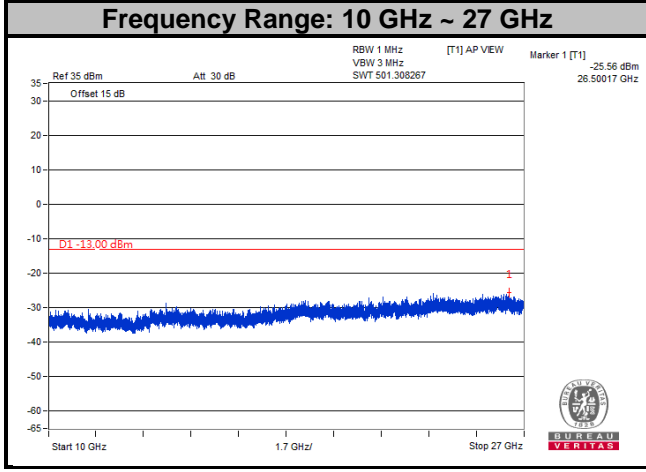
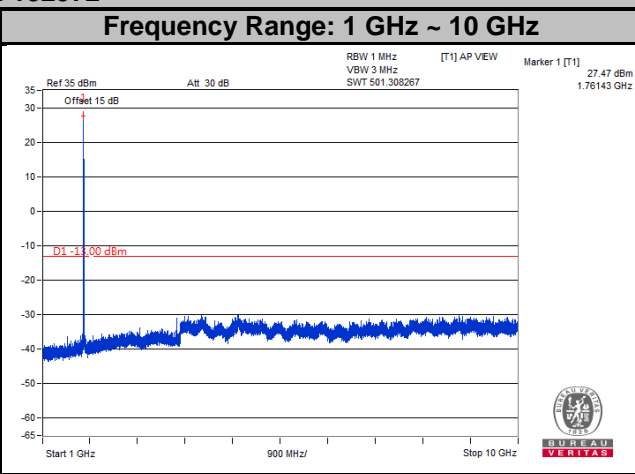
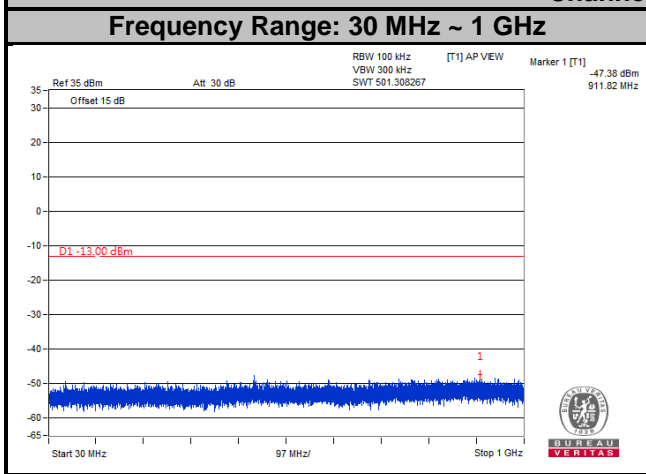
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



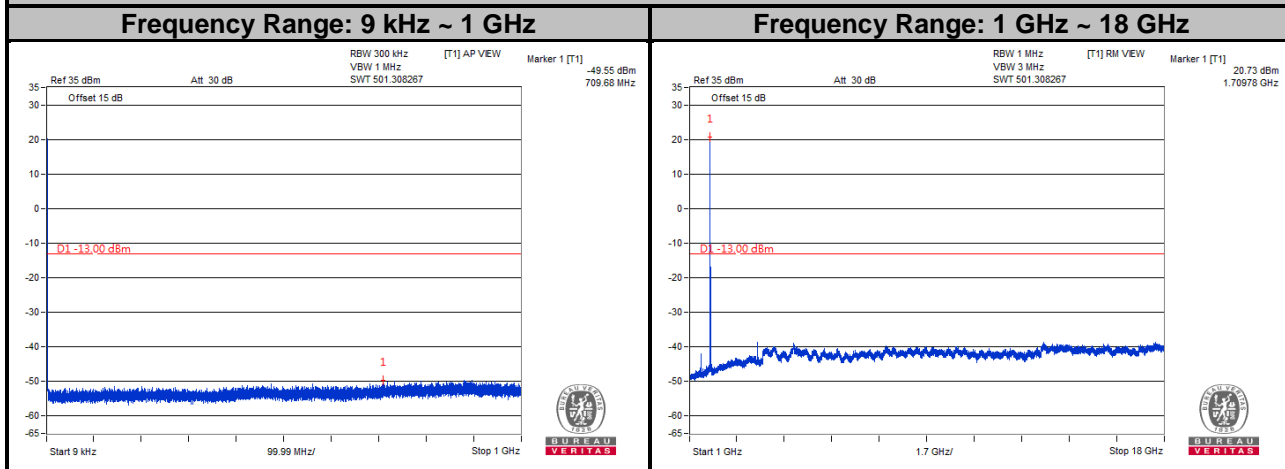
**LTE Band 66**  
**Channel Bandwidth: 20 MHz**  
**Channel 132572**



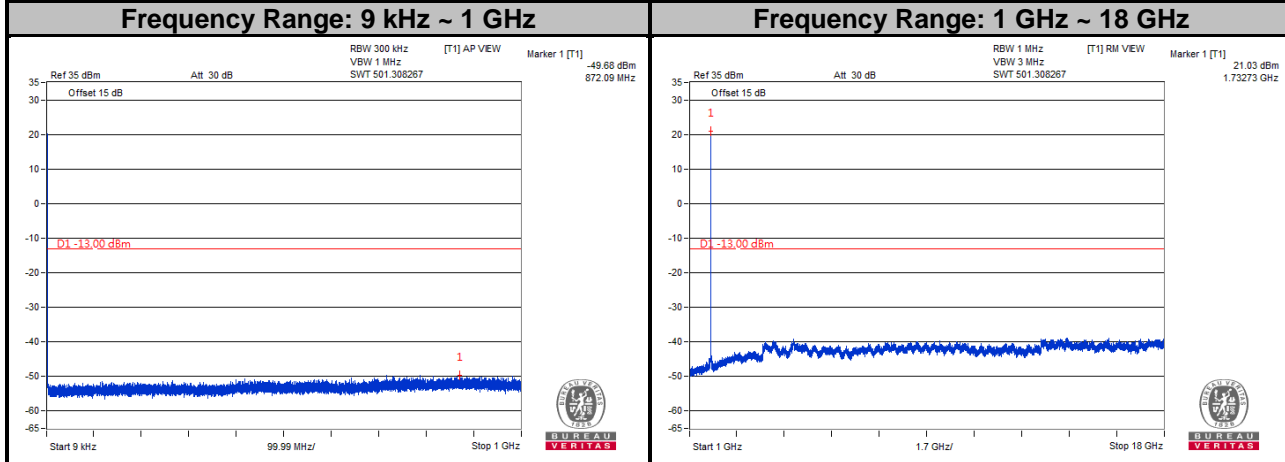
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

NB-IoT

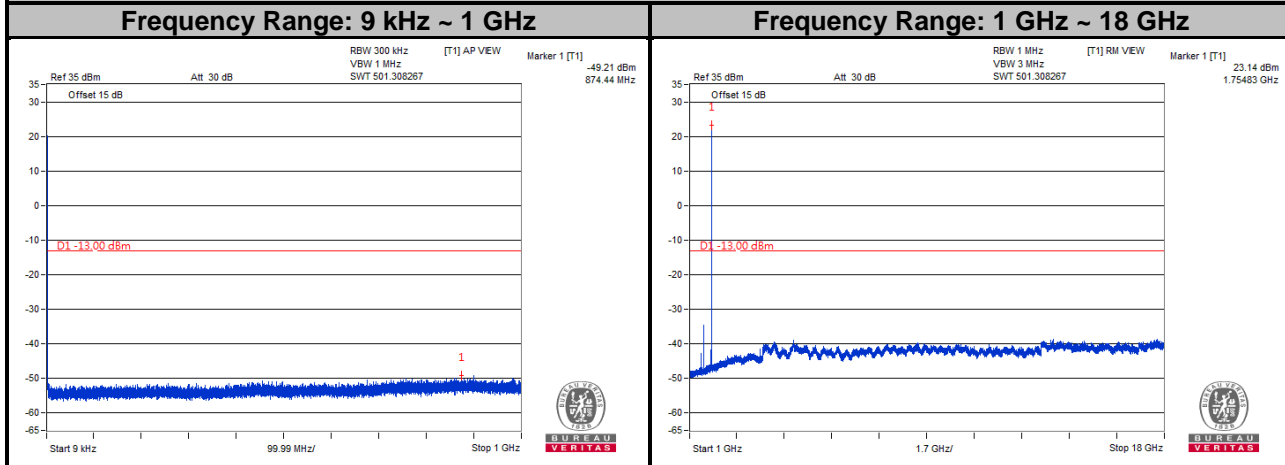
**LTE Band 4**  
**Channel 19951**



**Channel 20175**



**Channel 20399**

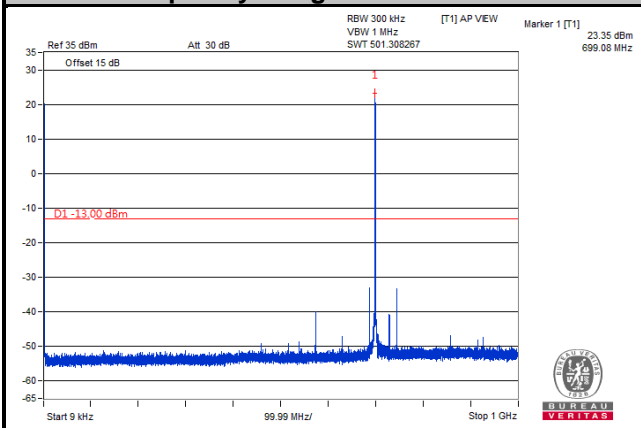


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

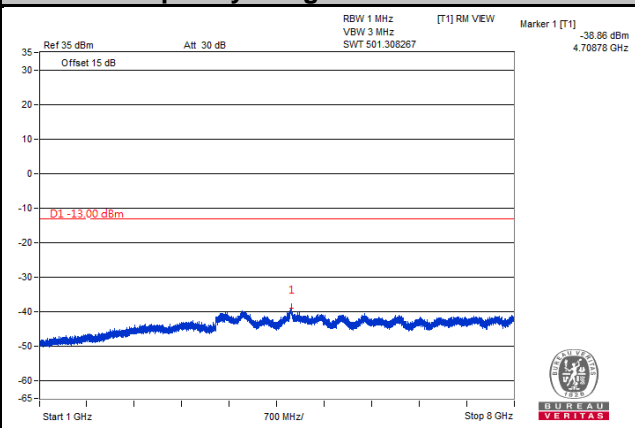
### LTE Band 12

### Channel 23011

#### Frequency Range: 9 kHz ~ 1 GHz

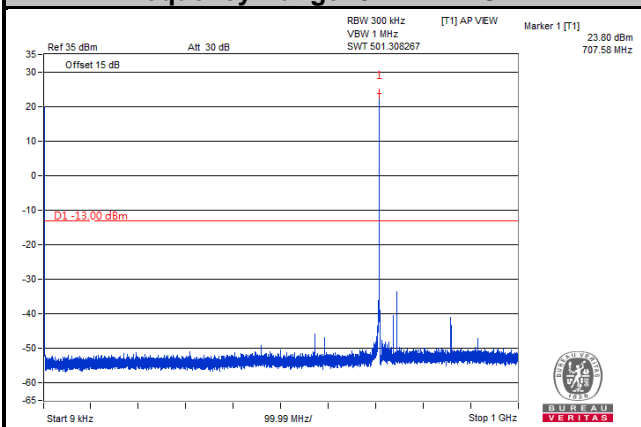


#### Frequency Range: 1 GHz ~ 8 GHz

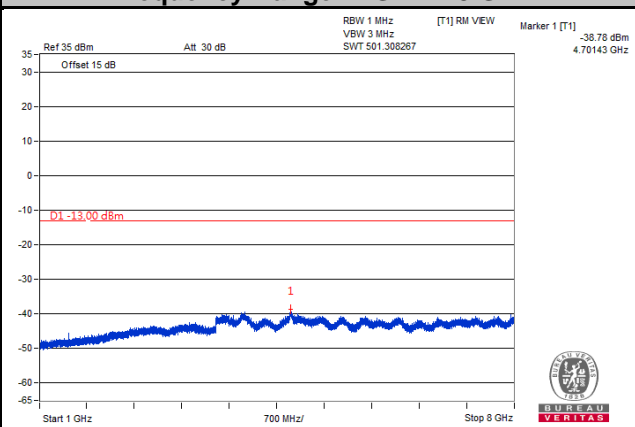


### Channel 23095

#### Frequency Range: 9 kHz ~ 1 GHz

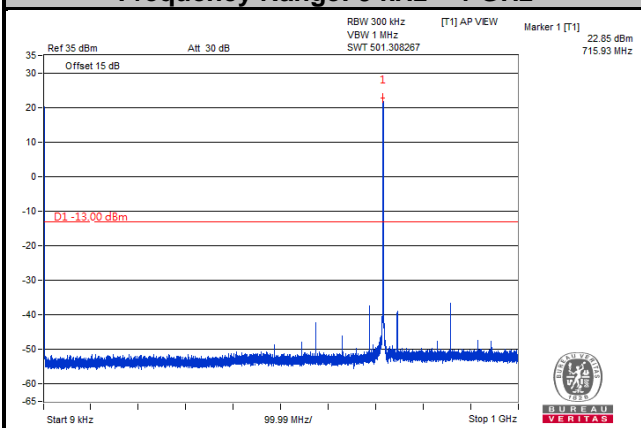


#### Frequency Range: 1 GHz ~ 8 GHz

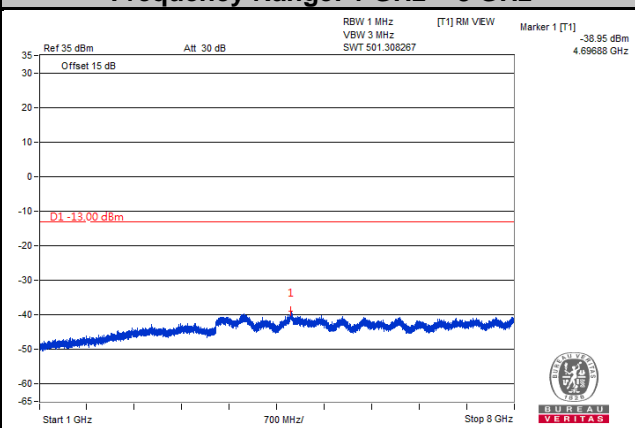


### Channel 23179

#### Frequency Range: 9 kHz ~ 1 GHz



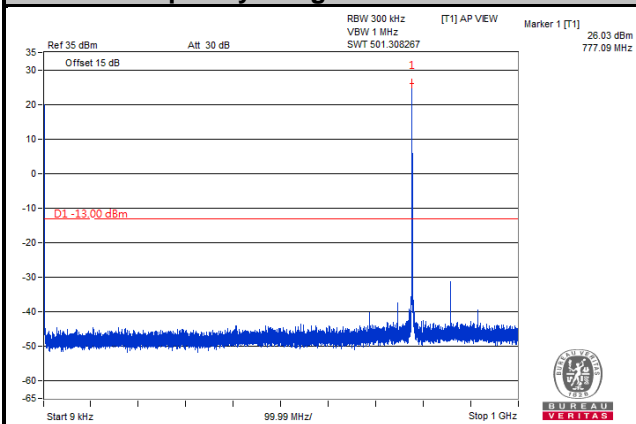
#### Frequency Range: 1 GHz ~ 8 GHz



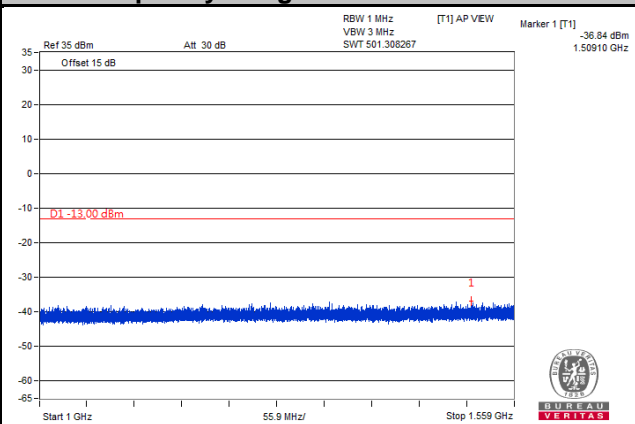
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 13  
Channel 23181**

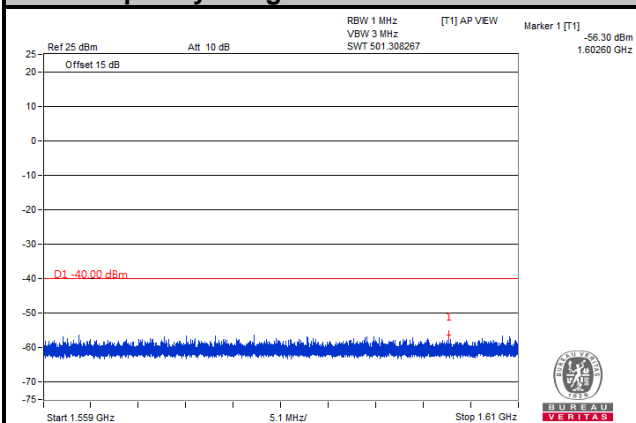
**Frequency Range: 9 kHz ~ 1 GHz**



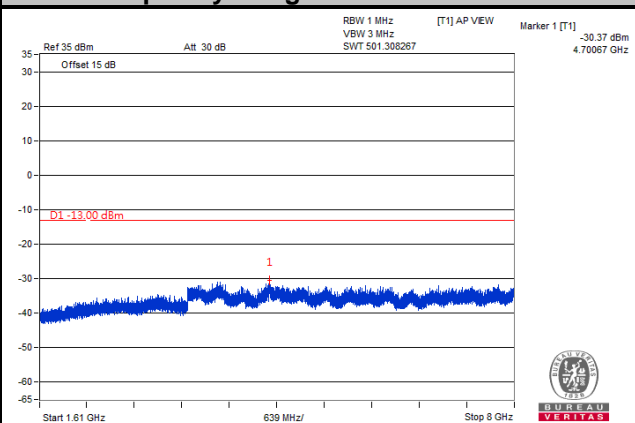
**Frequency Range: 1 GHz ~ 1.559 GHz**



**Frequency Range: 1.559 kHz ~ 1.61 GHz**



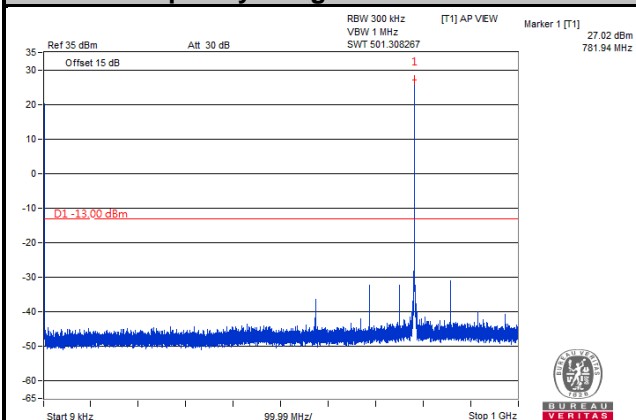
**Frequency Range: 1.61 GHz ~ 8 GHz**



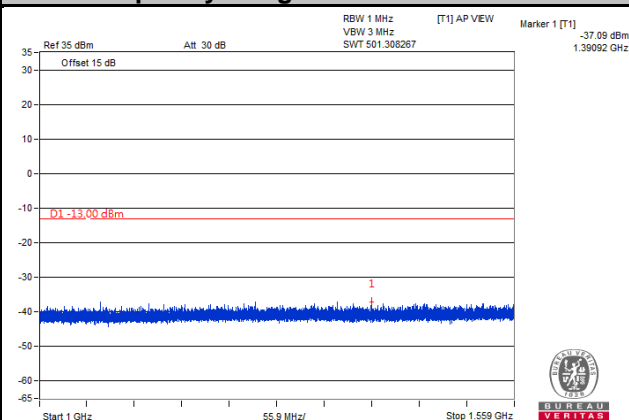
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 13  
Channel 23230**

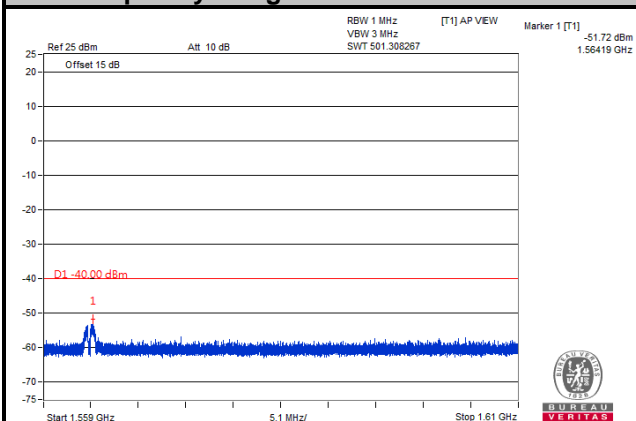
**Frequency Range: 9 kHz ~ 1 GHz**



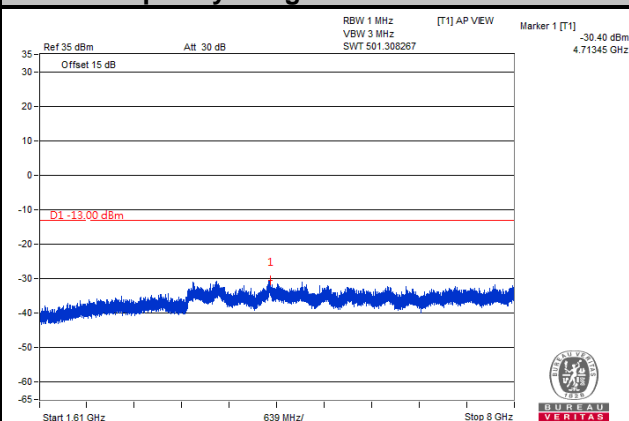
**Frequency Range: 1 GHz ~ 1.559 GHz**



**Frequency Range: 1.559 kHz ~ 1.61 GHz**



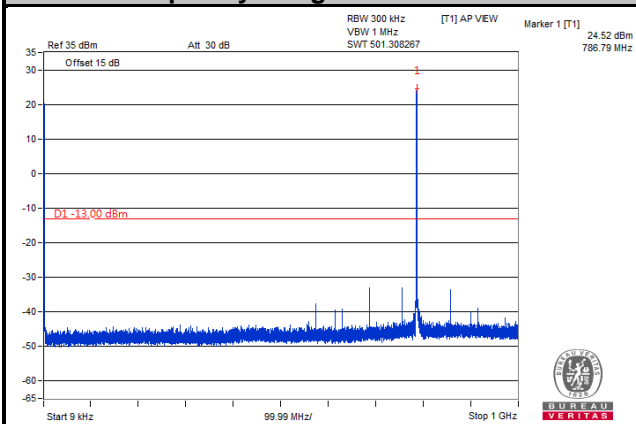
**Frequency Range: 1.61 GHz ~ 8 GHz**



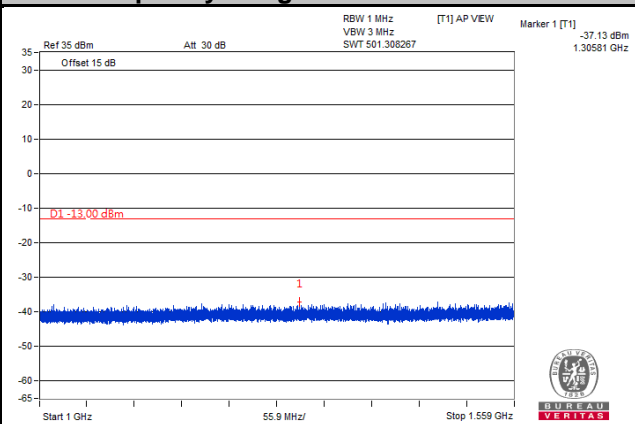
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 13**  
**Channel 23279**

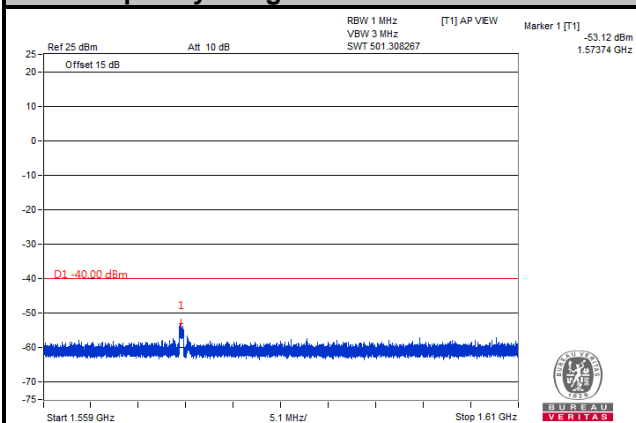
**Frequency Range: 9 kHz ~ 1 GHz**



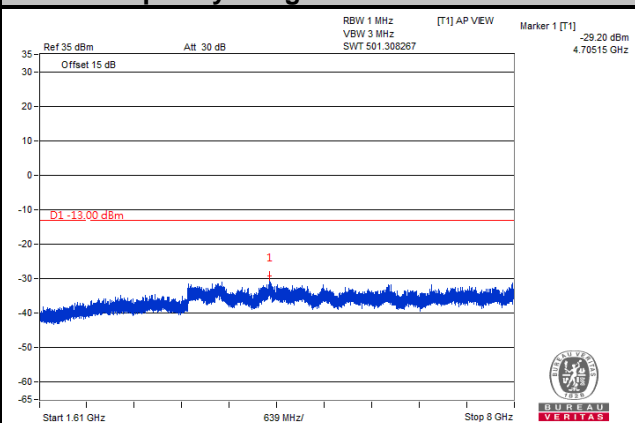
**Frequency Range: 1 GHz ~ 1.559 GHz**



**Frequency Range: 1.559 kHz ~ 1.61 GHz**



**Frequency Range: 1.61 GHz ~ 8 GHz**

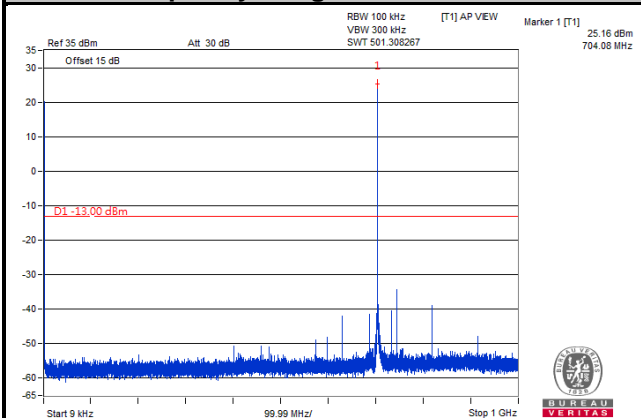


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

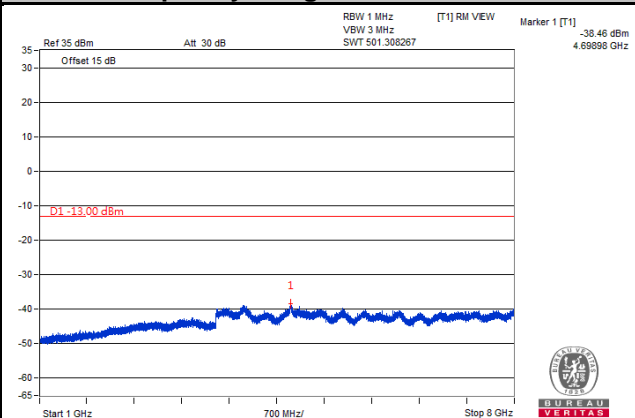
LTE Band 17

Channel 23731

Frequency Range: 9 kHz ~ 1 GHz

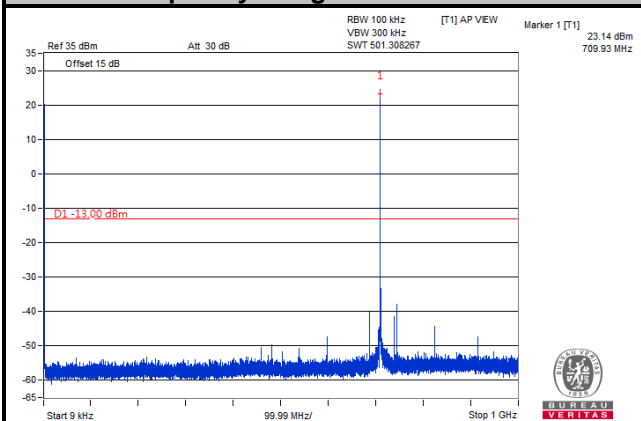


Frequency Range: 1 GHz ~ 8 GHz

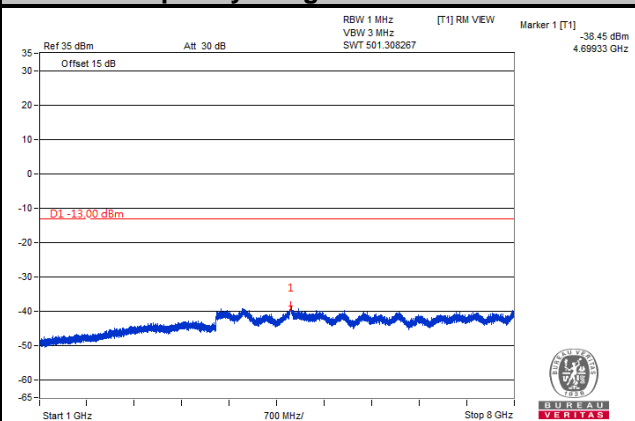


Channel 23790

Frequency Range: 9 kHz ~ 1 GHz

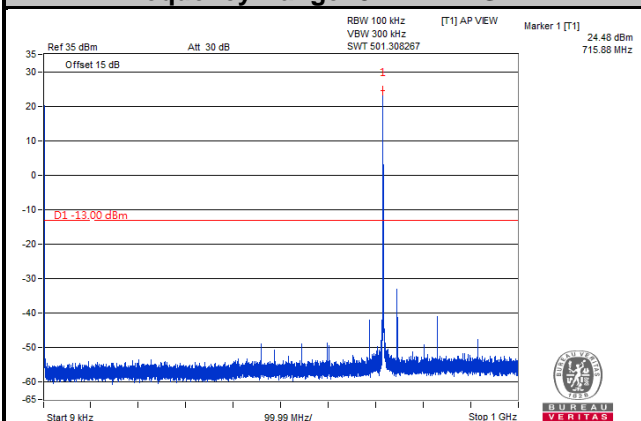


Frequency Range: 1 GHz ~ 8 GHz

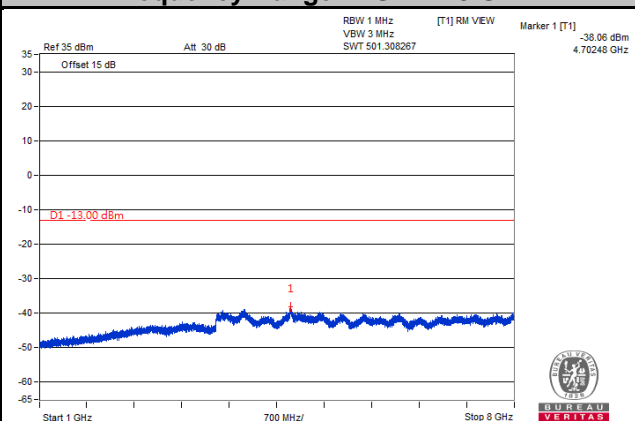


Channel 23849

Frequency Range: 9 kHz ~ 1 GHz



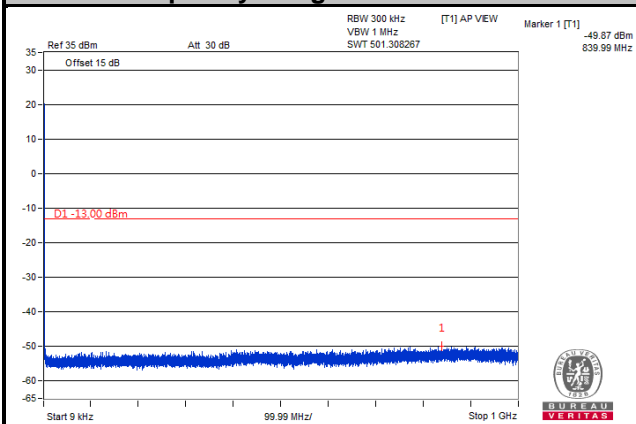
Frequency Range: 1 GHz ~ 8 GHz



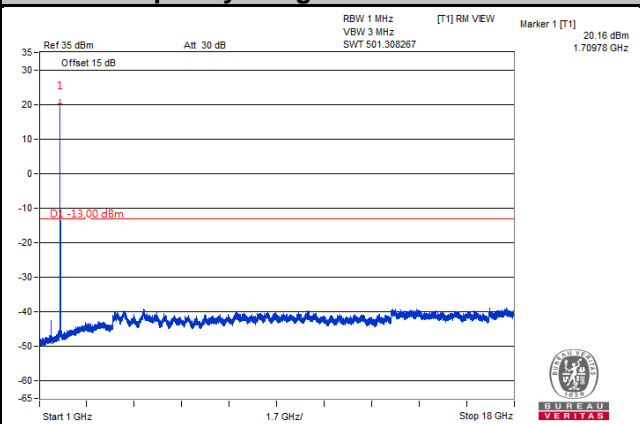
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

**LTE Band 66**  
**Channel 131973**

**Frequency Range: 9 kHz ~ 1 GHz**

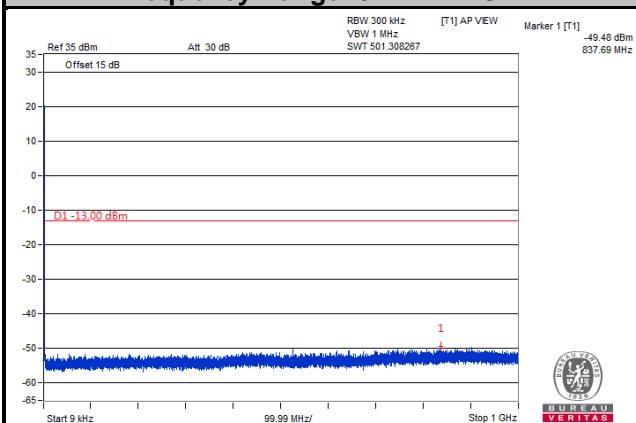


**Frequency Range: 1 GHz ~ 18 GHz**

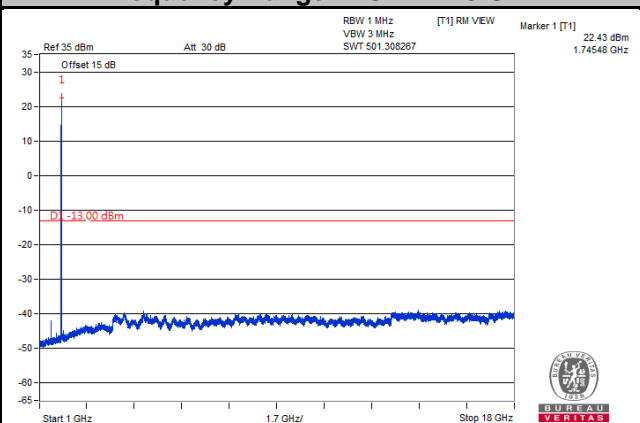


**Channel 132322**

**Frequency Range: 9 kHz ~ 1 GHz**

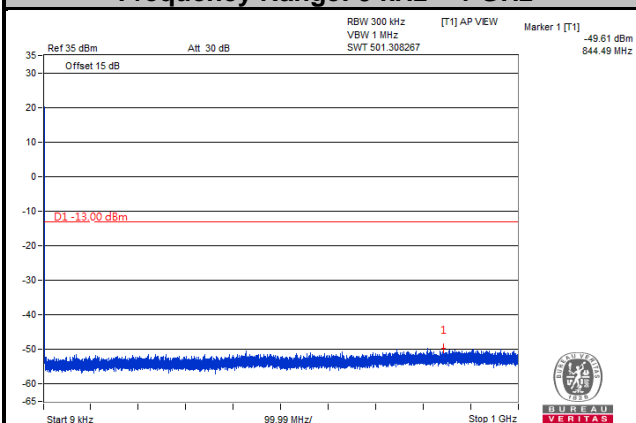


**Frequency Range: 1 GHz ~ 18 GHz**

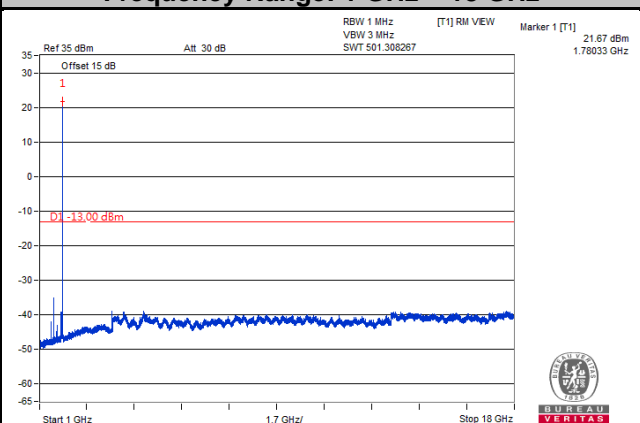


**Channel 132671**

**Frequency Range: 9 kHz ~ 1 GHz**



**Frequency Range: 1 GHz ~ 18 GHz**



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



## 4.8 Radiated Emission Measurement

### 4.8.1 Limits of Radiated Emission Measurement

- a. The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB. The limit of emission is equal to -13 dBm.
- b. For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 dBm.

### 4.8.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) 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 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- c.  $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$ .
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,  $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$ .

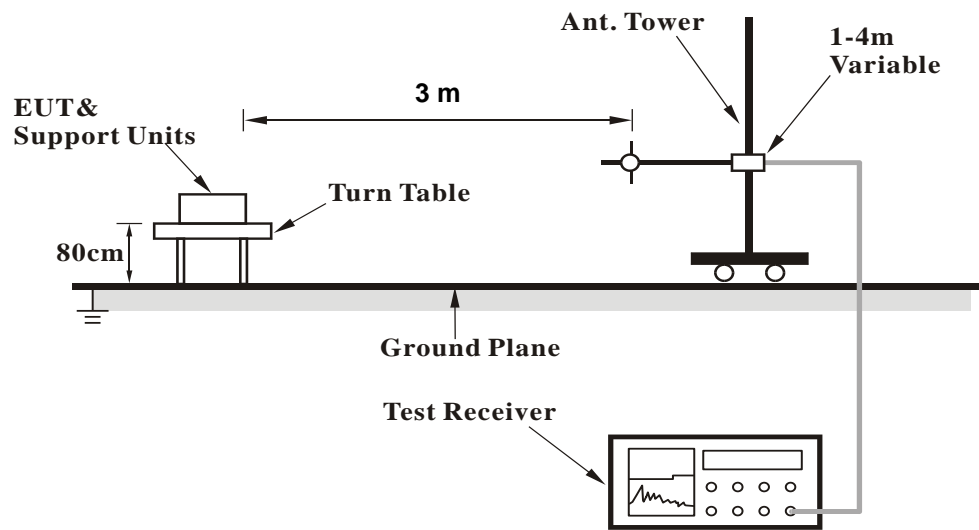
**Note:** The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

### 4.8.3 Deviation from Test Standard

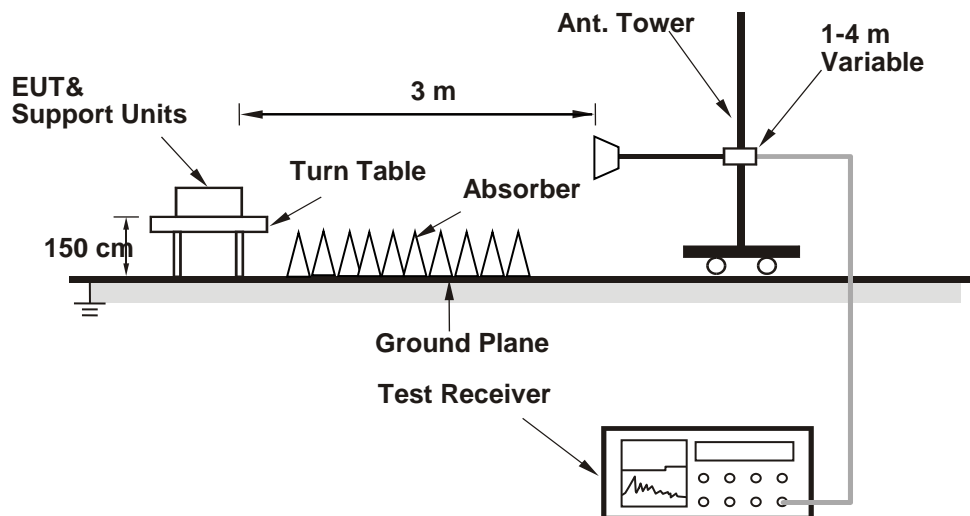
No deviation.

#### 4.8.4 Test Setup

##### <Radiated Emission below or equal 1 GHz>



##### <Radiated Emission above 1 GHz>



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

4.8.5 Test Results

Cat-M1

LTE Band 4

Channel Bandwidth: 1.4 MHz / QPSK

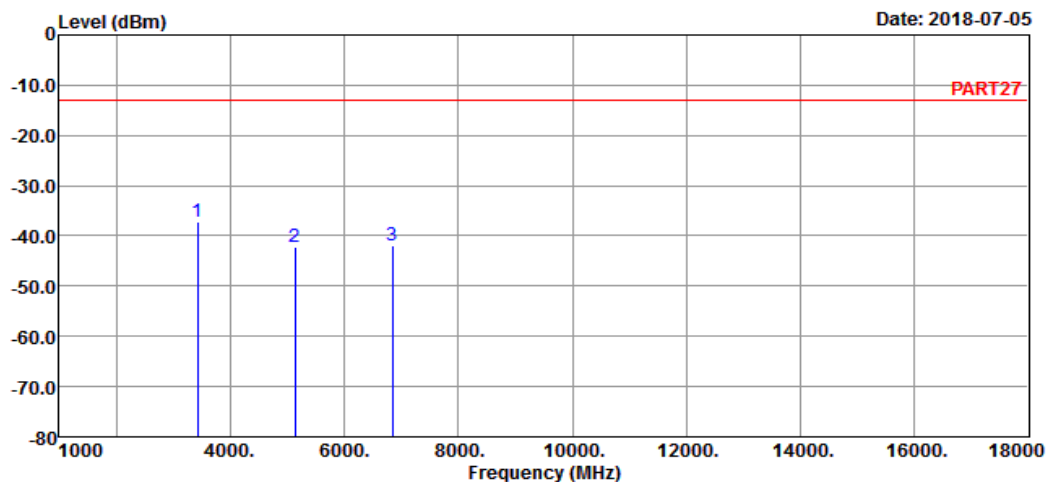
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3421.40 | -37.26 | -28.92     | -13.00     | -24.26     | -8.34  | Peak   |
| 2    | 5132.10 | -42.16 | -40.42     | -13.00     | -29.16     | -1.74  | Peak   |
| 3    | 6842.80 | -41.83 | -44.14     | -13.00     | -28.83     | 2.31   | Peak   |

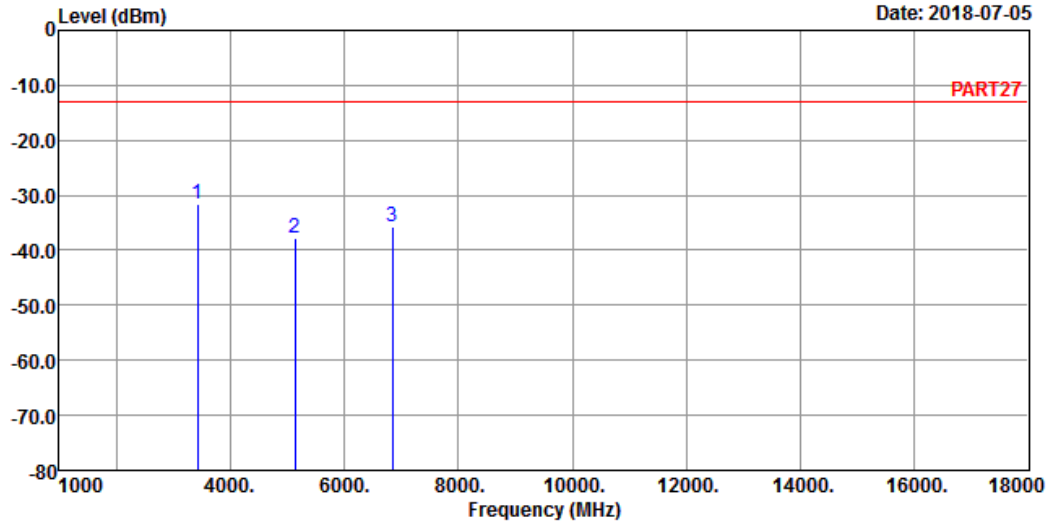


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3421.40 | -31.72 | -23.38     | -13.00     | -18.72     | -8.34  | Peak   |
| 2    | 5132.10 | -37.70 | -35.96     | -13.00     | -24.70     | -1.74  | Peak   |
| 3    | 6842.80 | -35.62 | -37.93     | -13.00     | -22.62     | 2.31   | Peak   |

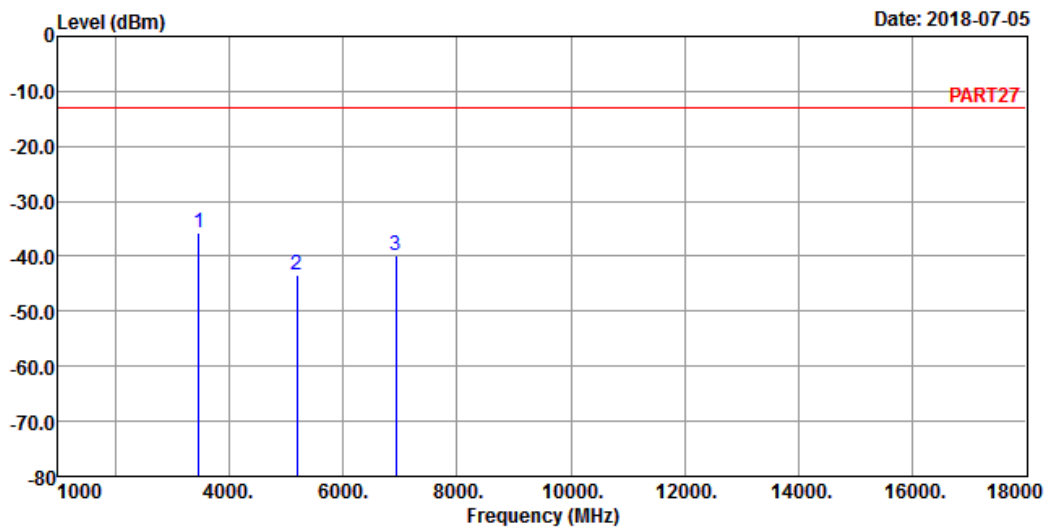
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3465.00 | -35.77 | -27.89     | -13.00     | -22.77     | -7.88  | Peak   |
| 2    | 5197.50 | -43.44 | -41.37     | -13.00     | -30.44     | -2.07  | Peak   |
| 3    | 6930.00 | -39.98 | -42.67     | -13.00     | -26.98     | 2.69   | Peak   |

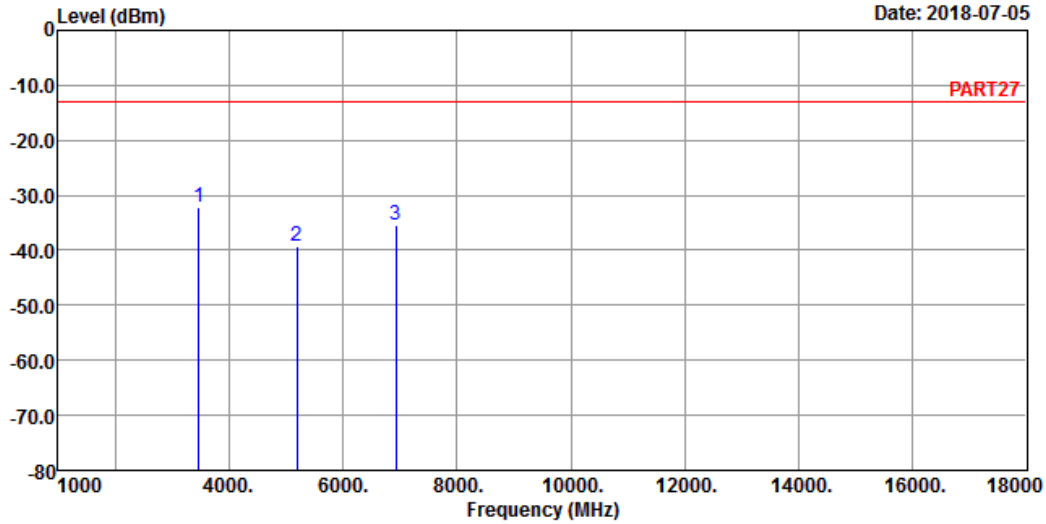


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3465.00 | -32.18 | -24.30     | -13.00     | -19.18     | -7.88  | Peak   |
| 2    | 5197.50 | -39.36 | -37.29     | -13.00     | -26.36     | -2.07  | Peak   |
| 3    | 6930.00 | -35.45 | -38.14     | -13.00     | -22.45     | 2.69   | Peak   |

# High Channel

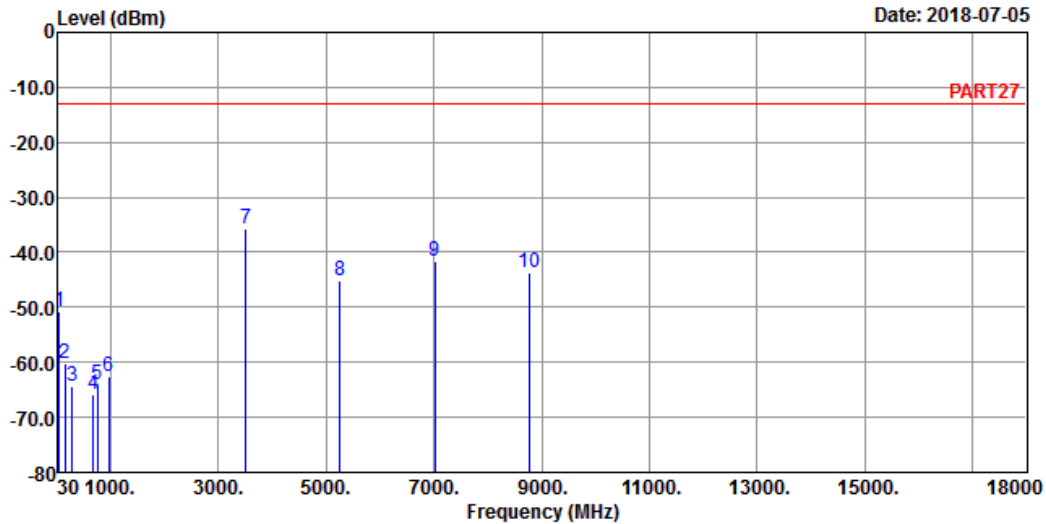


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 44.55   | -50.66 | -48.67     | -13.00 | -37.66 | -1.99  | Peak   |
| 2    | 161.92  | -60.22 | -55.24     | -13.00 | -47.22 | -4.98  | Peak   |
| 3    | 296.75  | -64.33 | -57.38     | -13.00 | -51.33 | -6.95  | Peak   |
| 4    | 683.78  | -65.76 | -65.40     | -13.00 | -52.76 | -0.36  | Peak   |
| 5    | 763.32  | -63.98 | -64.82     | -13.00 | -50.98 | 0.84   | Peak   |
| 6    | 965.08  | -62.66 | -65.01     | -13.00 | -49.66 | 2.35   | Peak   |
| 7 pp | 3508.60 | -35.83 | -28.38     | -13.00 | -22.83 | -7.45  | Peak   |
| 8    | 5262.90 | -45.12 | -42.60     | -13.00 | -32.12 | -2.52  | Peak   |
| 9    | 7017.20 | -41.70 | -44.89     | -13.00 | -28.70 | 3.19   | Peak   |
| 10   | 8771.50 | -43.71 | -48.44     | -13.00 | -30.71 | 4.73   | Peak   |

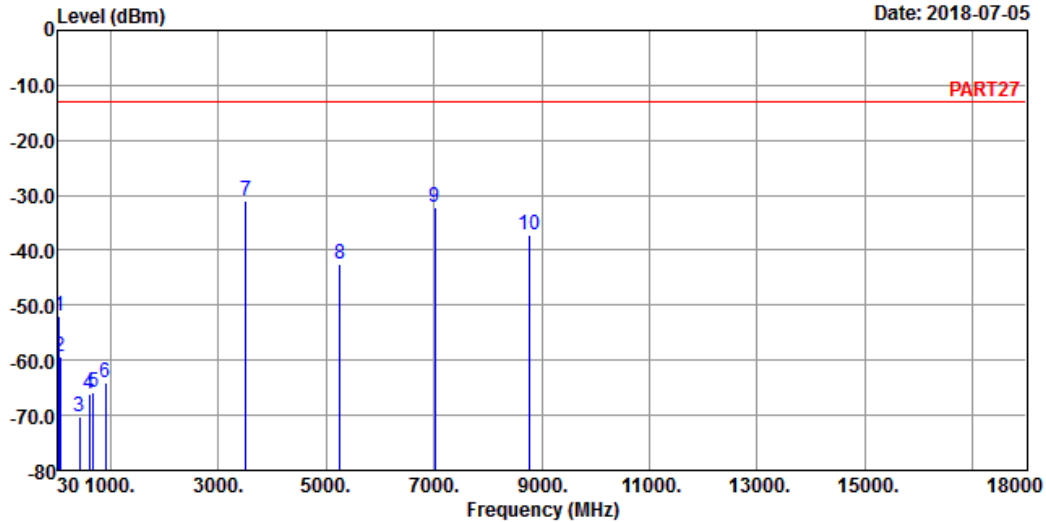


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A D T

Data: 6

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_1.4M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 43.58   | -51.92 | -50.45     | -13.00     | -38.92     | -1.47  | Peak   |
| 2    | 68.80   | -59.27 | -50.95     | -13.00     | -46.27     | -8.32  | Peak   |
| 3    | 425.76  | -70.36 | -64.62     | -13.00     | -57.36     | -5.74  | Peak   |
| 4    | 612.00  | -66.14 | -65.36     | -13.00     | -53.14     | -0.78  | Peak   |
| 5    | 676.99  | -65.73 | -65.27     | -13.00     | -52.73     | -0.46  | Peak   |
| 6    | 901.06  | -64.11 | -64.71     | -13.00     | -51.11     | 0.60   | Peak   |
| 7 pp | 3508.60 | -31.00 | -23.55     | -13.00     | -18.00     | -7.45  | Peak   |
| 8    | 5262.90 | -42.51 | -39.99     | -13.00     | -29.51     | -2.52  | Peak   |
| 9    | 7017.20 | -32.15 | -35.34     | -13.00     | -19.15     | 3.19   | Peak   |
| 10   | 8771.50 | -37.09 | -41.82     | -13.00     | -24.09     | 4.73   | Peak   |



Channel Bandwidth: 5 MHz / QPSK  
Low Channel

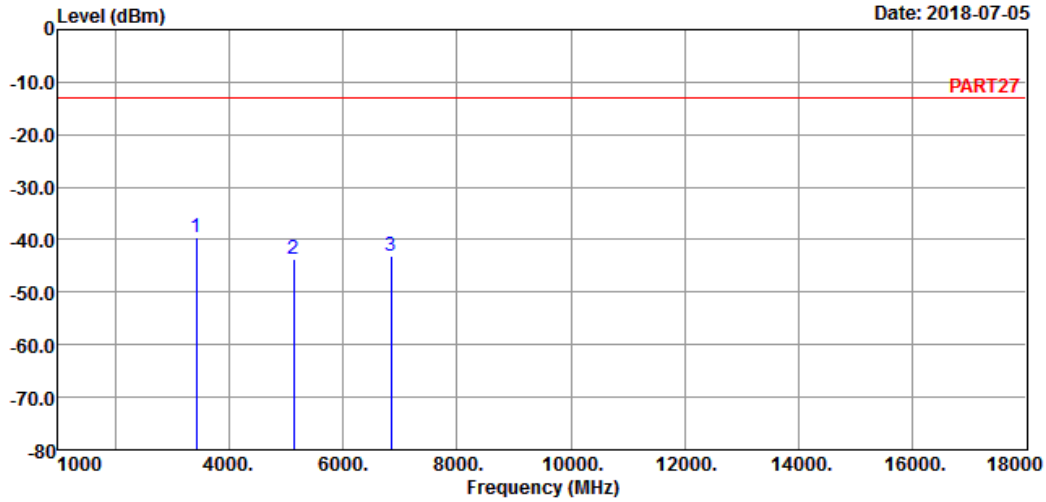


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1

Date: 2018-07-05



Site : 966 Chamber 5  
Condition: PART27 VERTICAL  
Remak : Cat-M1 Band 4 QPSK\_5M Link\_L-CH  
Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3425.00 | -39.52 | -31.18     | -13.00     | -26.52     | -8.34  | Peak   |
| 2    | 5137.50 | -43.69 | -41.95     | -13.00     | -30.69     | -1.74  | Peak   |
| 3    | 6850.00 | -42.99 | -45.30     | -13.00     | -29.99     | 2.31   | Peak   |

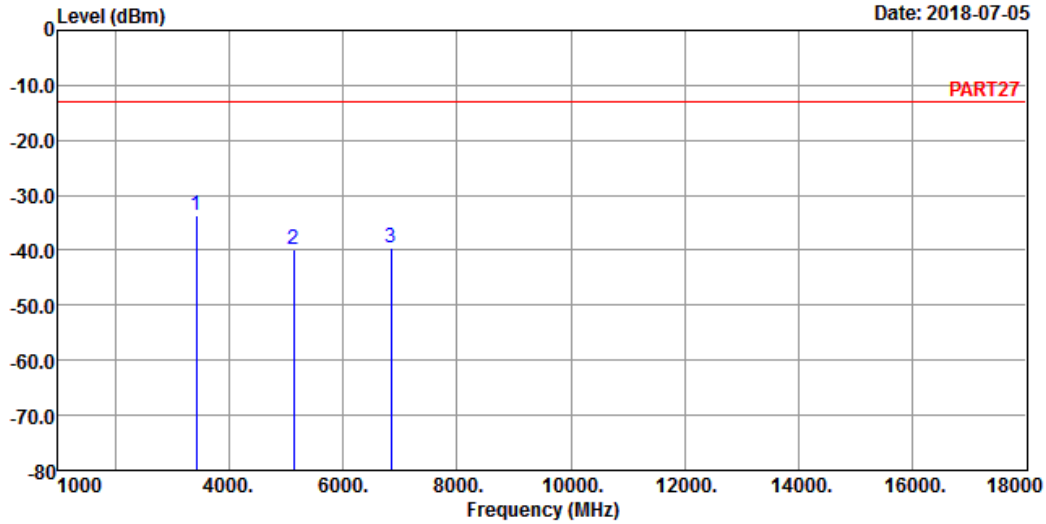


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_5M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3425.00 | -33.69 | -25.35     | -13.00     | -20.69     | -8.34  | Peak   |
| 2    | 5137.50 | -39.98 | -38.24     | -13.00     | -26.98     | -1.74  | Peak   |
| 3    | 6850.00 | -39.63 | -41.94     | -13.00     | -26.63     | 2.31   | Peak   |

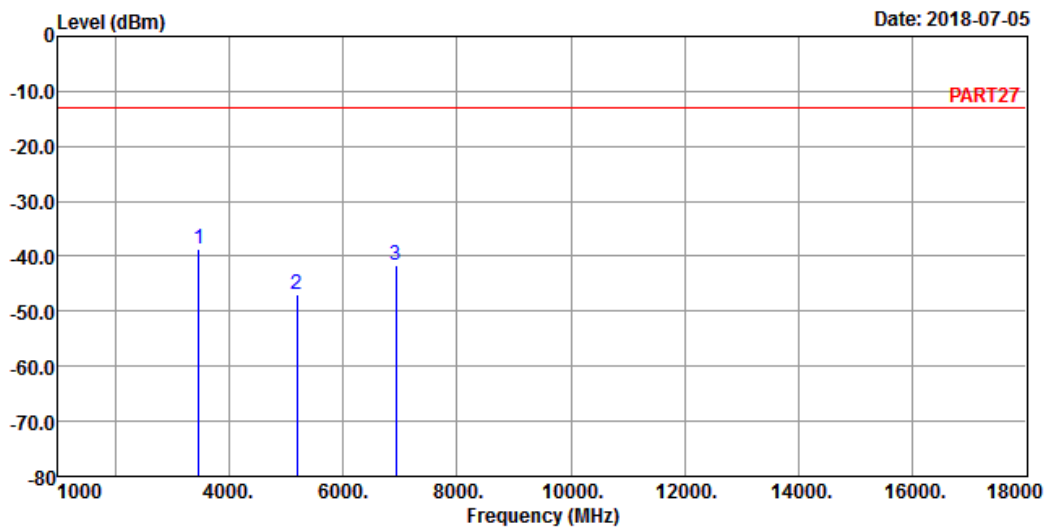
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 4 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3465.00 | -38.62 | -30.74     | -13.00     | -25.62     | -7.88  | Peak   |
| 2    | 5197.50 | -46.85 | -44.78     | -13.00     | -33.85     | -2.07  | Peak   |
| 3    | 6930.00 | -41.52 | -44.21     | -13.00     | -28.52     | 2.69   | Peak   |

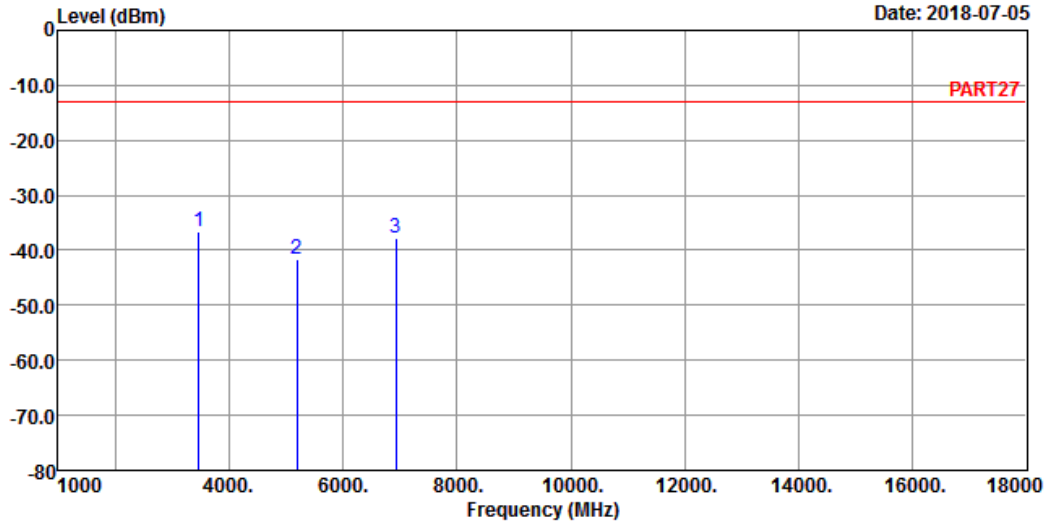


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3465.00 | -36.52 | -28.64     | -13.00     | -23.52     | -7.88  | Peak   |
| 2    | 5197.50 | -41.52 | -39.45     | -13.00     | -28.52     | -2.07  | Peak   |
| 3    | 6930.00 | -37.65 | -40.34     | -13.00     | -24.65     | 2.69   | Peak   |

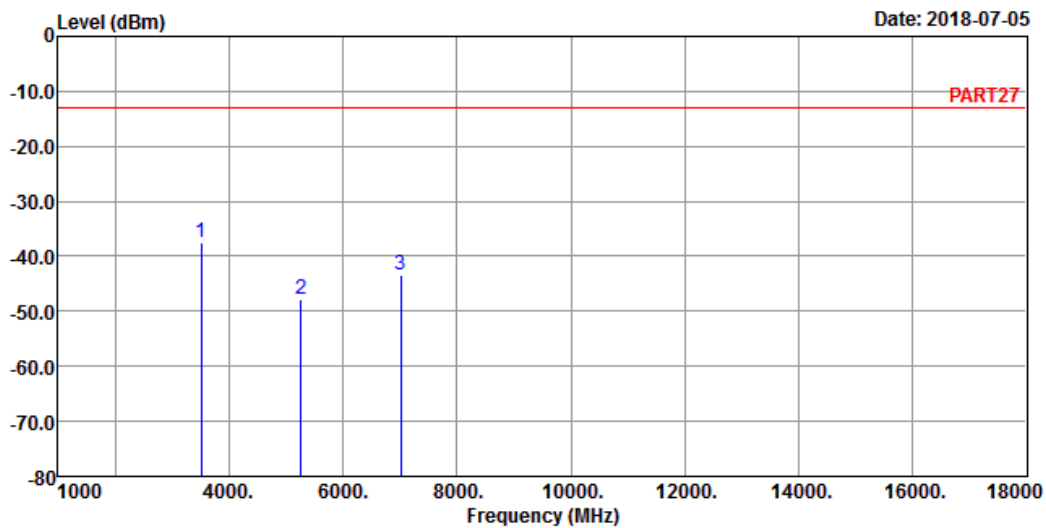
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 4 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3505.00 | -37.52 | -30.07     | -13.00     | -24.52     | -7.45  | Peak   |
| 2    | 5257.50 | -47.96 | -45.44     | -13.00     | -34.96     | -2.52  | Peak   |
| 3    | 7010.00 | -43.52 | -46.71     | -13.00     | -30.52     | 3.19   | Peak   |

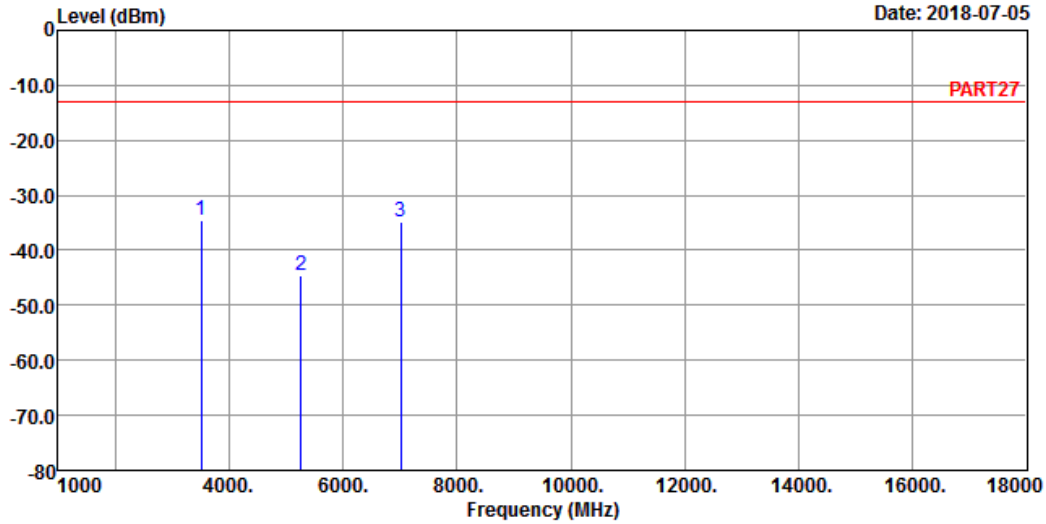


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3505.00 | -34.52 | -27.07     | -13.00     | -21.52     | -7.45  | Peak   |
| 2    | 5257.50 | -44.63 | -42.11     | -13.00     | -31.63     | -2.52  | Peak   |
| 3    | 7010.00 | -34.69 | -37.88     | -13.00     | -21.69     | 3.19   | Peak   |

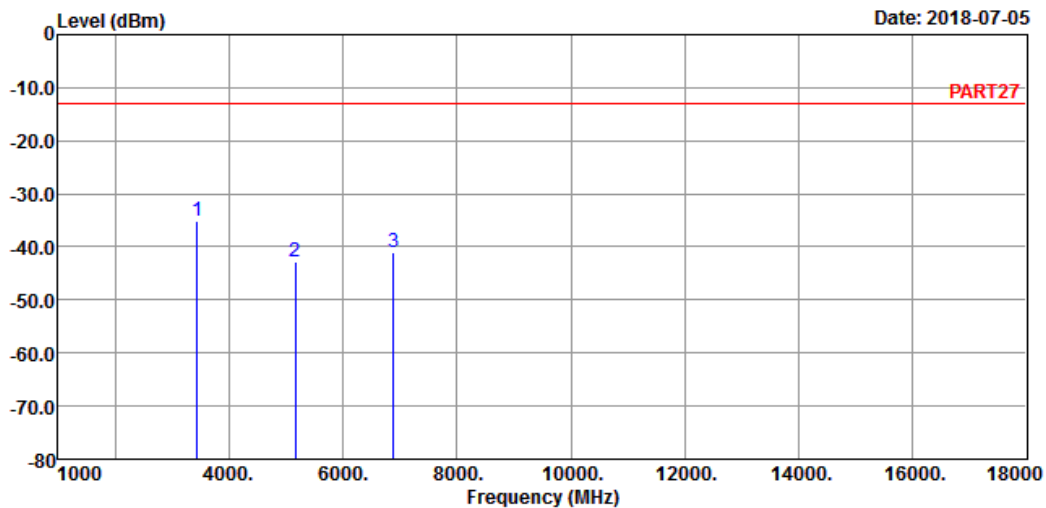
Channel Bandwidth: 20 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 4 QPSK\_20M Link\_L-CH  
Tested by: Thomas Wei

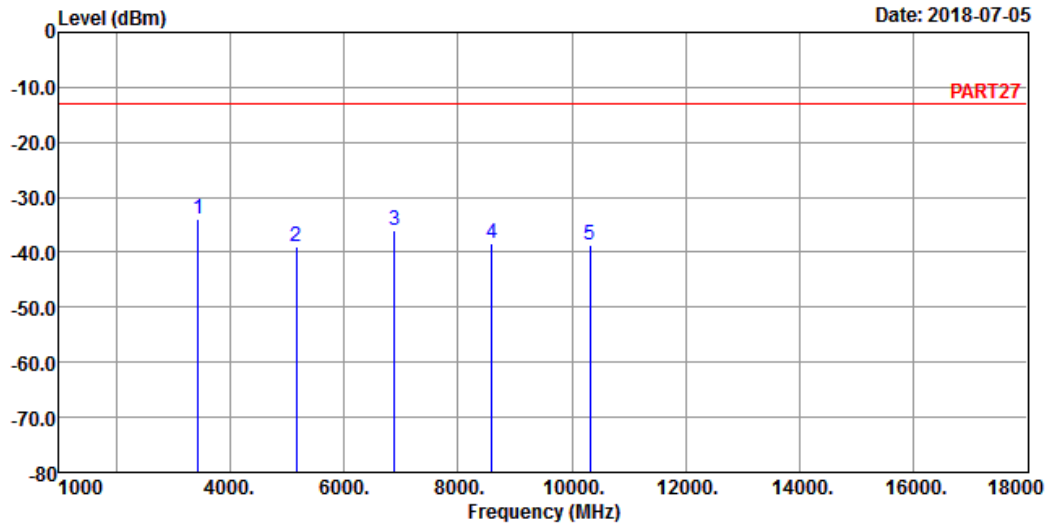
|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3440.00 | -35.25 | -27.03     | -13.00     | -22.25     | -8.22  | Peak   |
| 2    | 5160.00 | -42.85 | -40.94     | -13.00     | -29.85     | -1.91  | Peak   |
| 3    | 6880.00 | -41.02 | -43.50     | -13.00     | -28.02     | 2.48   | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Date: 2018-07-05

Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_20M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq     | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|----------|--------|------------|------------|------------|--------|--------|
|      | MHz      | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3440.00  | -33.85 | -25.63     | -13.00     | -20.85     | -8.22  | Peak   |
| 2    | 5160.00  | -38.91 | -37.00     | -13.00     | -25.91     | -1.91  | Peak   |
| 3    | 6880.00  | -36.00 | -38.48     | -13.00     | -23.00     | 2.48   | Peak   |
| 4    | 8600.00  | -38.32 | -42.93     | -13.00     | -25.32     | 4.61   | Peak   |
| 5    | 10320.00 | -38.53 | -44.45     | -13.00     | -25.53     | 5.92   | Peak   |



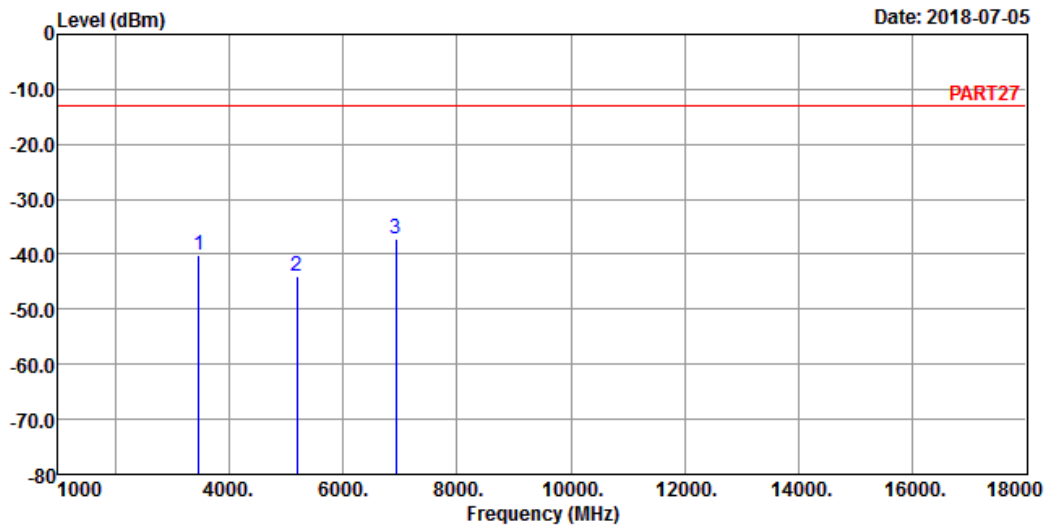
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_20M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 3465.00 | -40.07 | -32.19     | -13.00     | -27.07     | -7.88  | Peak   |
| 2    | 5197.50 | -43.91 | -41.84     | -13.00     | -30.91     | -2.07  | Peak   |
| 3 pp | 6930.00 | -37.33 | -40.02     | -13.00     | -24.33     | 2.69   | Peak   |

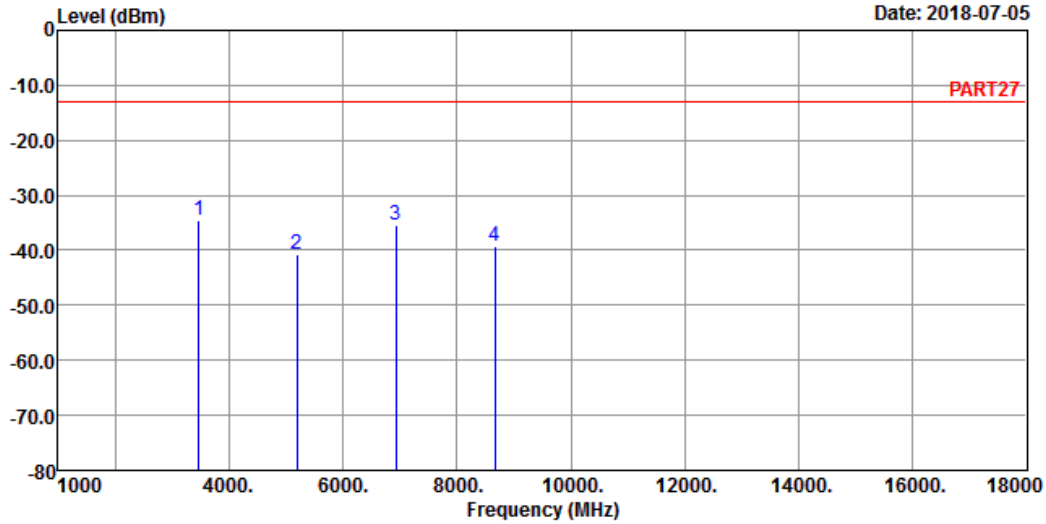


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 4 QPSK\_20M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 3465.00 | -34.50 | -26.62     | -13.00     | -21.50     | -7.88  | Peak   |
| 2    | 5197.50 | -40.71 | -38.64     | -13.00     | -27.71     | -2.07  | Peak   |
| 3    | 6930.00 | -35.45 | -38.14     | -13.00     | -22.45     | 2.69   | Peak   |
| 4    | 8662.50 | -39.27 | -44.01     | -13.00     | -26.27     | 4.74   | Peak   |

# High Channel

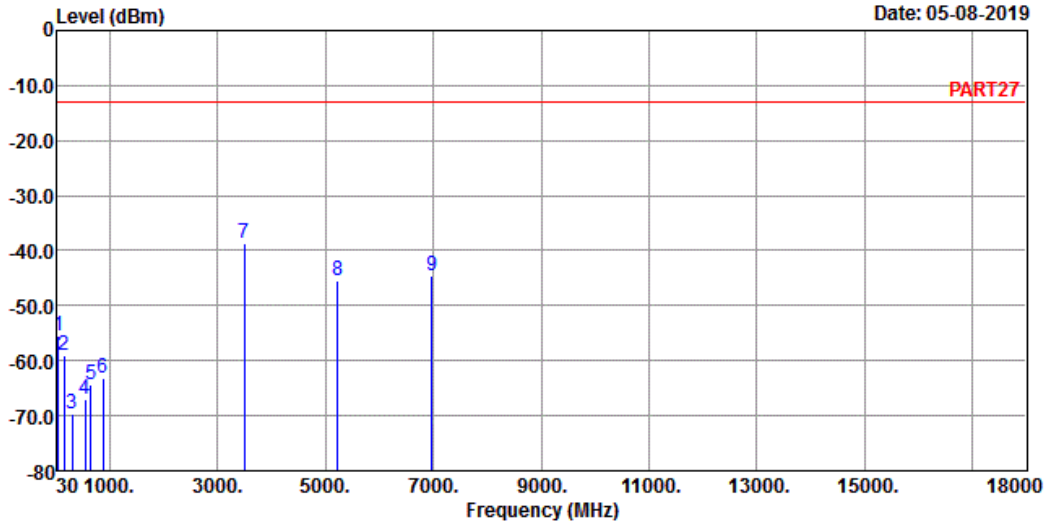


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 05-08-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : CAT M1 Band 4 QPSK\_20M Link\_H-CH  
 Tested by: Getaz Yang

|      | Freq    | Level  | Read Level | Limit  | Line   | Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|--------|--------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dBm    | dB     | dB         |        |
| 1    | 46.49   | -55.58 | -52.58     | -13.00 | -13.00 | -3.00  | -42.58     | Peak   |
| 2    | 160.95  | -58.95 | -54.04     | -13.00 | -13.00 | -4.91  | -45.95     | Peak   |
| 3    | 303.54  | -69.54 | -62.59     | -13.00 | -13.00 | -6.95  | -56.54     | Peak   |
| 4    | 545.07  | -67.15 | -64.13     | -13.00 | -13.00 | -3.02  | -54.15     | Peak   |
| 5    | 650.80  | -64.34 | -63.47     | -13.00 | -13.00 | -0.87  | -51.34     | Peak   |
| 6    | 883.60  | -63.21 | -63.69     | -13.00 | -13.00 | 0.48   | -50.21     | Peak   |
| 7 pp | 3490.00 | -38.65 | -31.00     | -13.00 | -13.00 | -7.65  | -25.65     | Peak   |
| 8    | 5235.00 | -45.33 | -42.92     | -13.00 | -13.00 | -2.41  | -32.33     | Peak   |
| 9    | 6980.00 | -44.46 | -47.52     | -13.00 | -13.00 | 3.06   | -31.46     | Peak   |

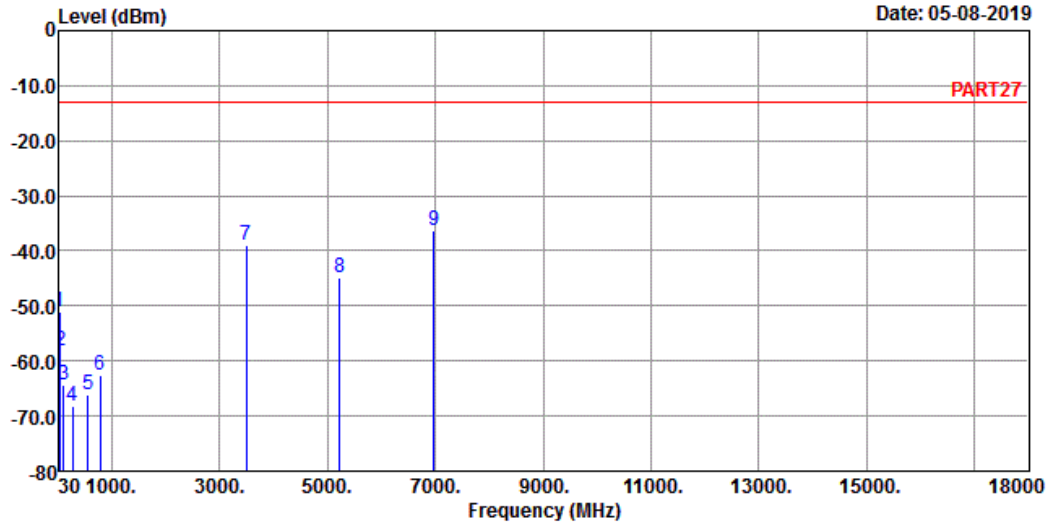


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 05-08-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : CAT M1 Band 4 QPSK\_20M Link\_H-CH  
 Tested by: Getaz Yang

|      | Freq    | Level  | Read Level | Limit  | Line | Factor | Over   | Limit | Remark |
|------|---------|--------|------------|--------|------|--------|--------|-------|--------|
|      | MHz     | dBm    | dBm        | dBm    |      | dB     | dB     |       |        |
| 1    | 30.97   | -51.07 | -50.96     | -13.00 |      | -0.11  | -38.07 |       | Peak   |
| 2    | 54.25   | -58.27 | -52.20     | -13.00 |      | -6.07  | -45.27 |       | Peak   |
| 3    | 112.45  | -64.28 | -54.08     | -13.00 |      | -10.20 | -51.28 |       | Peak   |
| 4    | 279.29  | -68.12 | -61.53     | -13.00 |      | -6.59  | -55.12 |       | Peak   |
| 5    | 560.59  | -66.14 | -63.73     | -13.00 |      | -2.41  | -53.14 |       | Peak   |
| 6    | 790.48  | -62.59 | -63.35     | -13.00 |      | 0.76   | -49.59 |       | Peak   |
| 7    | 3490.00 | -38.83 | -31.18     | -13.00 |      | -7.65  | -25.83 |       | Peak   |
| 8    | 5235.00 | -44.74 | -42.33     | -13.00 |      | -2.41  | -31.74 |       | Peak   |
| 9 pp | 6980.00 | -36.28 | -39.34     | -13.00 |      | 3.06   | -23.28 |       | Peak   |

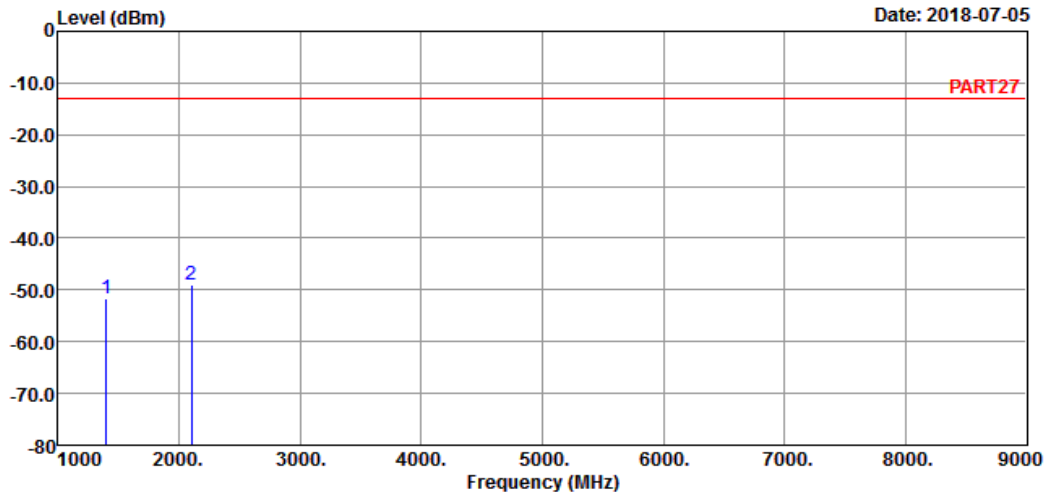
LTE Band 12  
 Channel Bandwidth: 1.4 MHz / QPSK  
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

**A D T**

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_L-CH  
 Tested by: Jisyong Wang

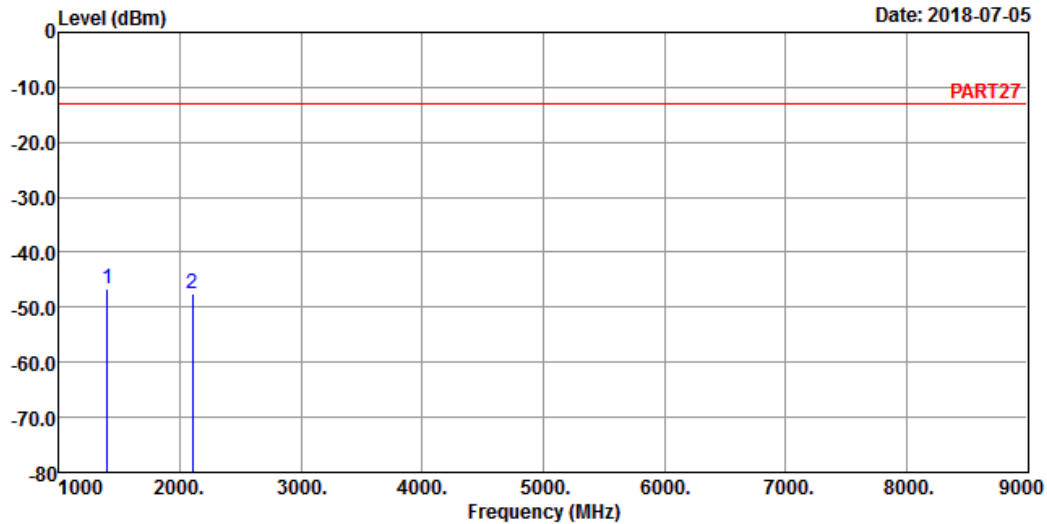
|      | Read       | Limit  | Over   |        |        |        |      |
|------|------------|--------|--------|--------|--------|--------|------|
| Freq | Level      | Level  | Line   | Limit  | Factor | Remark |      |
| MHz  | dBm        | dBm    | dBm    | dB     | dB     |        |      |
| 1    | 1399.40    | -51.52 | -39.67 | -13.00 | -38.52 | -11.85 | Peak |
| 2    | pp 2099.10 | -49.03 | -38.87 | -13.00 | -36.03 | -10.16 | Peak |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1399.40 | -46.74 | -34.89     | -13.00     | -33.74     | -11.85 | Peak   |
| 2    | 2099.10 | -47.52 | -37.36     | -13.00     | -34.52     | -10.16 | Peak   |

Middle Channel

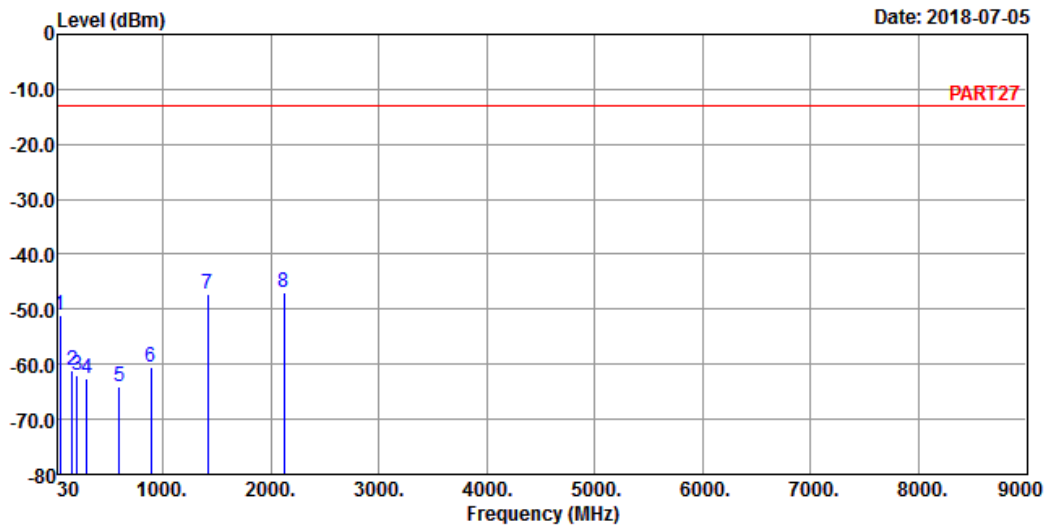


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 44.55   | -51.10 | -49.11     | -13.00     | -38.10     | -1.99  | Peak   |
| 2    | 161.92  | -61.19 | -56.21     | -13.00     | -48.19     | -4.98  | Peak   |
| 3    | 208.48  | -61.96 | -54.29     | -13.00     | -48.96     | -7.67  | Peak   |
| 4    | 297.72  | -62.64 | -55.67     | -13.00     | -49.64     | -6.97  | Peak   |
| 5    | 593.57  | -64.00 | -62.96     | -13.00     | -51.00     | -1.04  | Peak   |
| 6    | 885.54  | -60.56 | -61.05     | -13.00     | -47.56     | 0.49   | Peak   |
| 7    | 1415.00 | -47.25 | -35.17     | -13.00     | -34.25     | -12.08 | Peak   |
| 8 pp | 2122.50 | -46.85 | -36.98     | -13.00     | -33.85     | -9.87  | Peak   |

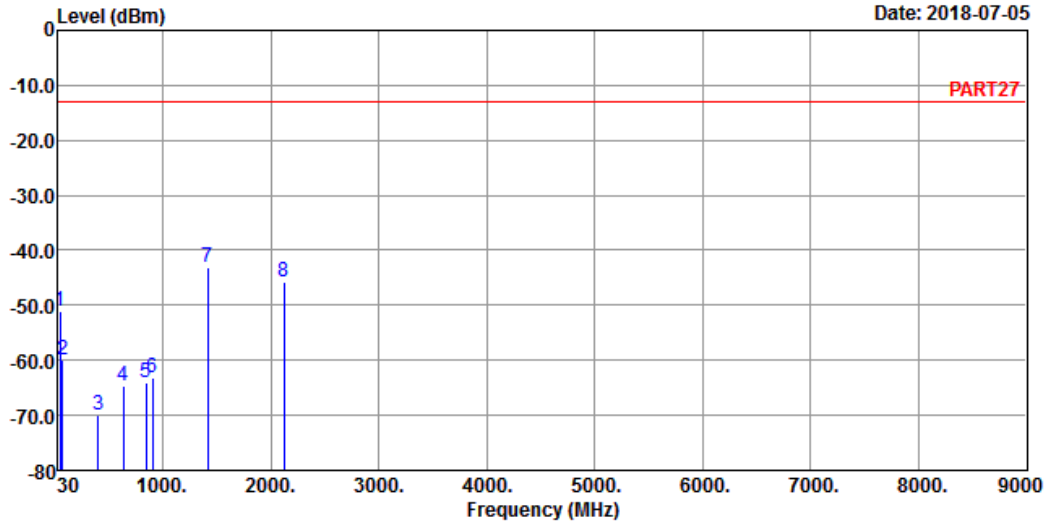


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 44.55   | -51.18 | -49.19     | -13.00     | -38.18     | -1.99  | Peak   |
| 2    | 68.80   | -59.95 | -51.63     | -13.00     | -46.95     | -8.32  | Peak   |
| 3    | 398.60  | -69.96 | -64.01     | -13.00     | -56.96     | -5.95  | Peak   |
| 4    | 633.34  | -64.64 | -63.80     | -13.00     | -51.64     | -0.84  | Peak   |
| 5    | 844.80  | -64.02 | -64.36     | -13.00     | -51.02     | 0.34   | Peak   |
| 6    | 903.97  | -63.31 | -63.98     | -13.00     | -50.31     | 0.67   | Peak   |
| 7 pp | 1415.00 | -43.13 | -31.05     | -13.00     | -30.13     | -12.08 | Peak   |
| 8    | 2122.50 | -45.85 | -35.98     | -13.00     | -32.85     | -9.87  | Peak   |



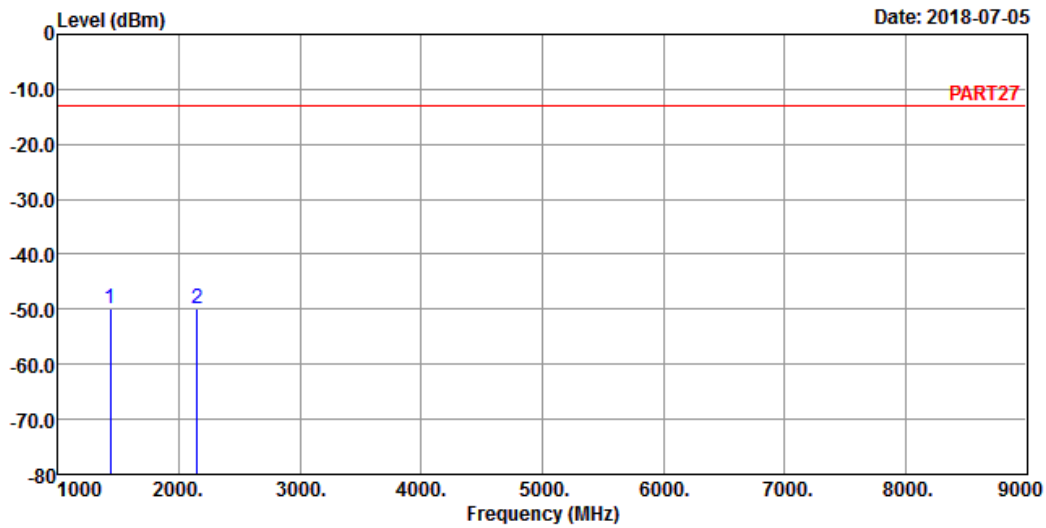
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_H-CH  
 Tested by: Jisyong Wang

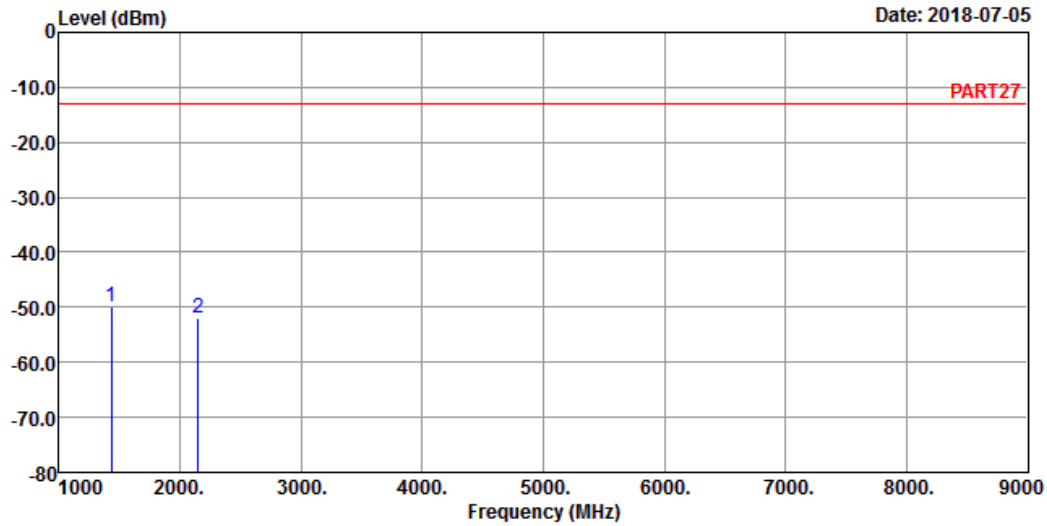
|   | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|---|---------|--------|------------|--------|--------|--------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 | 1430.60 | -50.02 | -37.71     | -13.00 | -37.02 | -12.31 | Peak   |
| 2 | 2145.90 | -49.85 | -40.38     | -13.00 | -36.85 | -9.47  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_1.4M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1430.60 | -49.85 | -37.54     | -13.00     | -36.85     | -12.31 | Peak   |
| 2    | 2145.98 | -51.85 | -42.38     | -13.00     | -38.85     | -9.47  | Peak   |

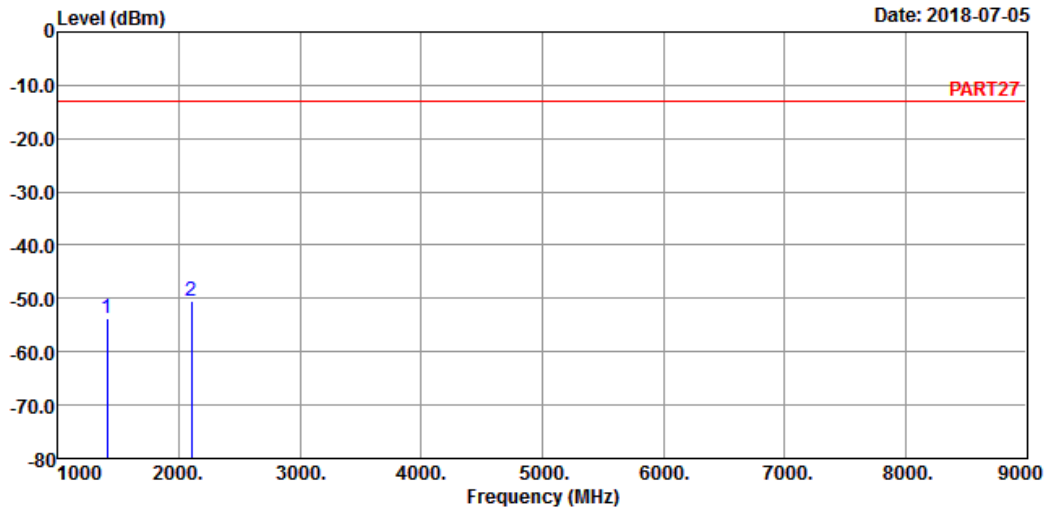
Channel Bandwidth: 5 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 12 QPSK\_5M Link\_L-CH  
Tested by: Jisyong Wang

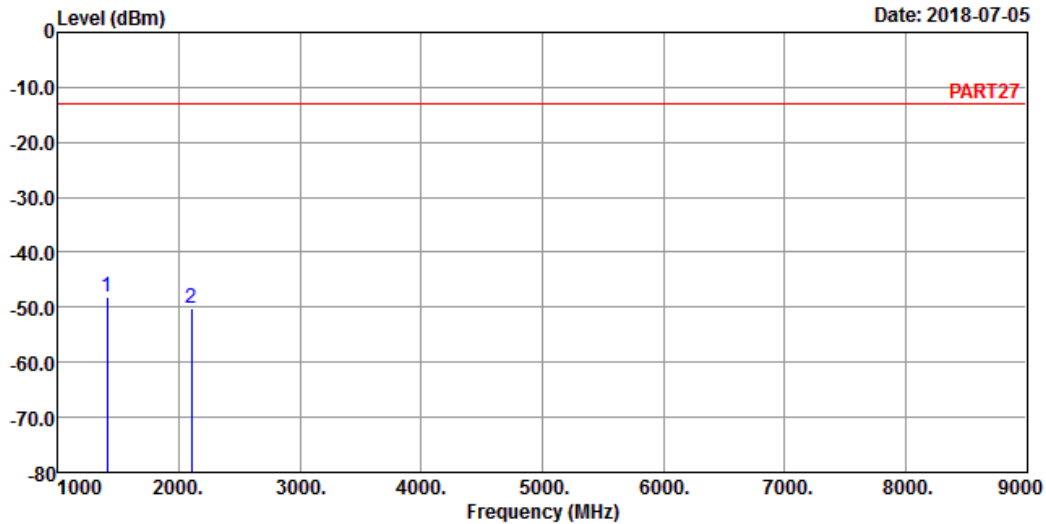
|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 1403.00 | -53.63 | -41.72     | -13.00     | -40.63     | -11.91 | Peak   |
| 2 pp | 2104.50 | -50.52 | -40.36     | -13.00     | -37.52     | -10.16 | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_5M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1403.00 | -48.02 | -36.11     | -13.00     | -35.02     | -11.91 | Peak   |
| 2    | 2104.50 | -50.18 | -40.02     | -13.00     | -37.18     | -10.16 | Peak   |

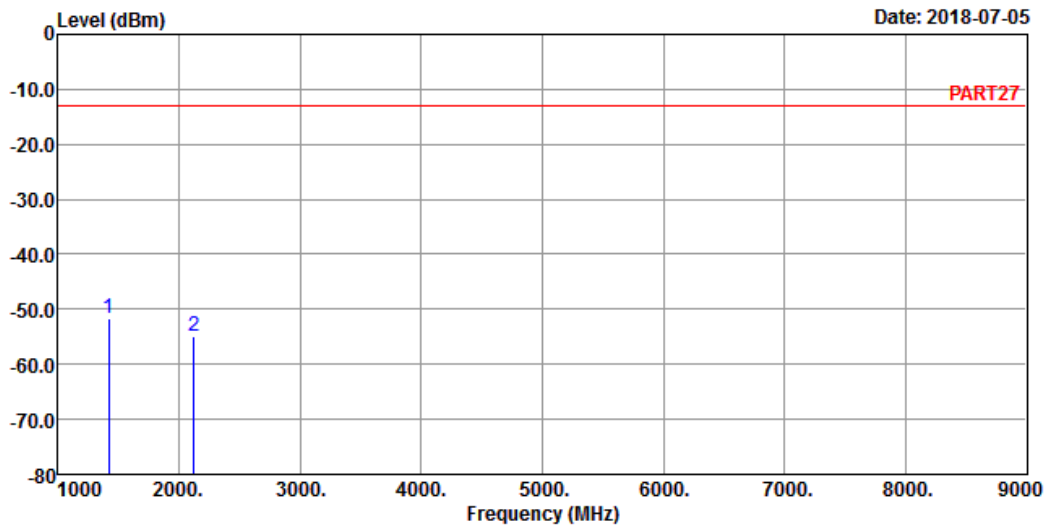
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_5M Link\_M-CH  
 Tested by: Jisyong Wang

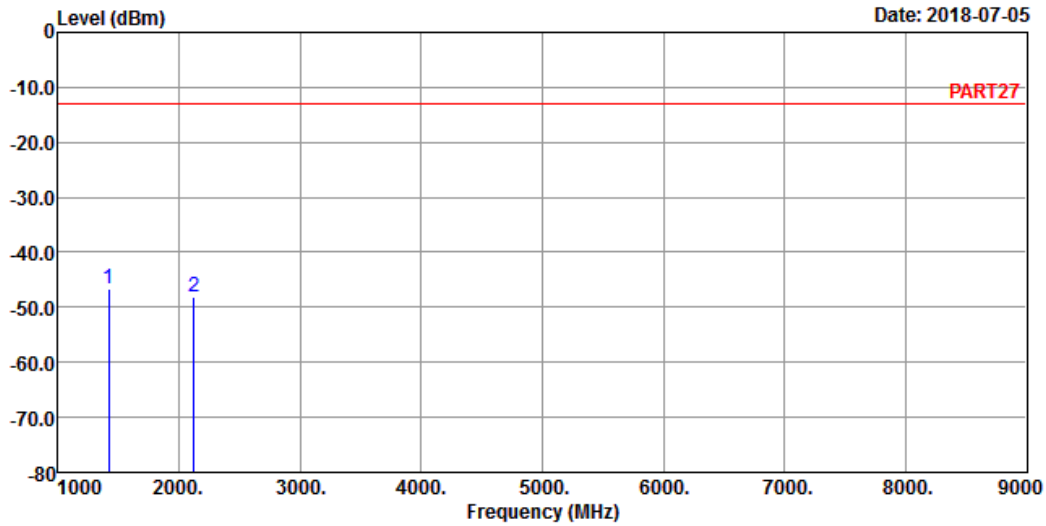
|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 pp | 1415.00 | -51.60 | -39.52     | -13.00 | -38.60 | -12.08 | Peak   |
| 2    | 2122.50 | -54.96 | -45.09     | -13.00 | -41.96 | -9.87  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_5M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1415.00 | -46.71 | -34.63     | -13.00     | -33.71     | -12.08 | Peak   |
| 2    | 2122.50 | -48.12 | -38.25     | -13.00     | -35.12     | -9.87  | Peak   |

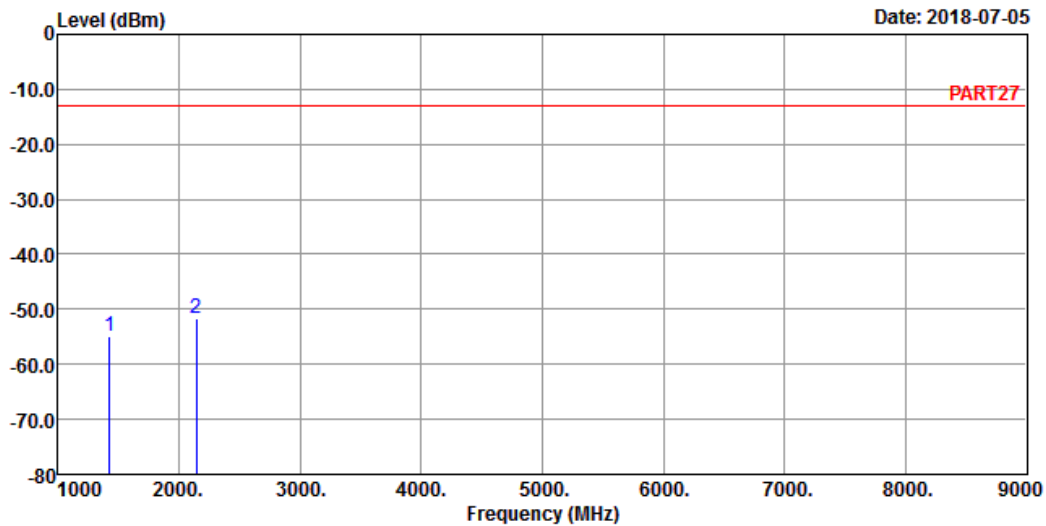
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_5M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 1427.00 | -54.77 | -42.52     | -13.00 | -41.77 | -12.25 | Peak   |
| 2 pp | 2140.50 | -51.56 | -41.99     | -13.00 | -38.56 | -9.57  | Peak   |

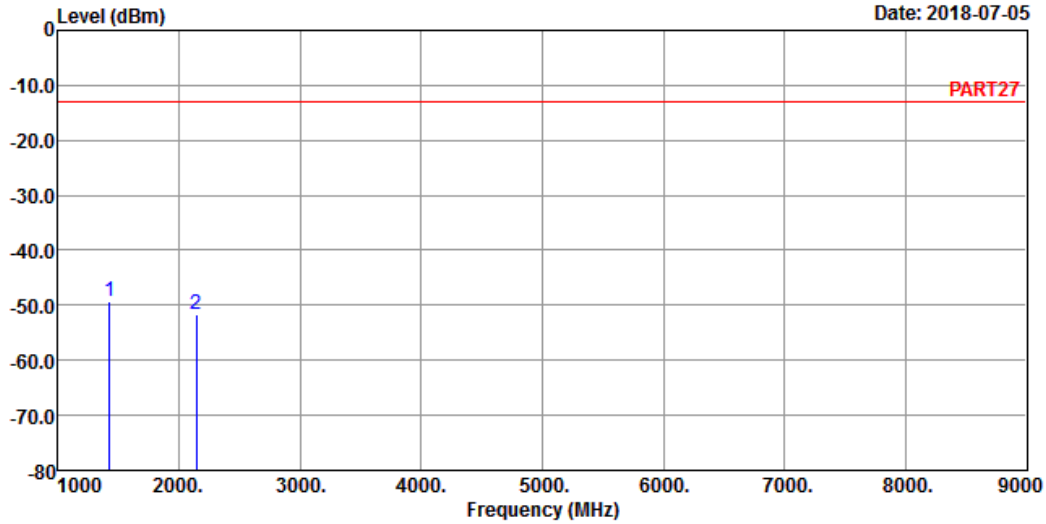


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_5M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1427.00 | -49.27 | -37.02     | -13.00     | -36.27     | -12.25 | Peak   |
| 2    | 2140.50 | -51.58 | -42.01     | -13.00     | -38.58     | -9.57  | Peak   |



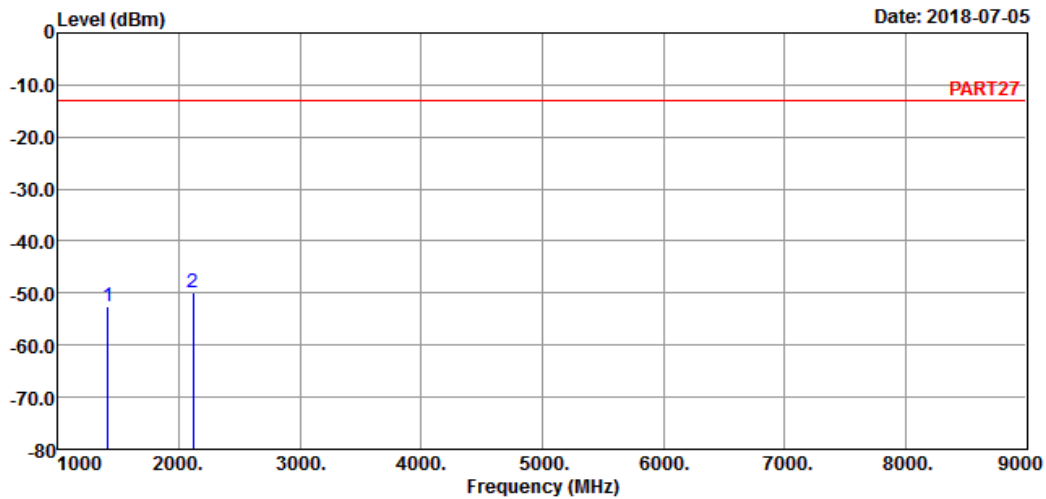
Channel Bandwidth: 10 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 12 QPSK\_10M Link\_L-CH  
Tested by: Jisyong Wang

|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | 1408.00    | -52.69 | -40.73     | -13.00     | -39.69     | -11.96 | Peak   |
| 2 | pp 2112.00 | -49.93 | -39.97     | -13.00     | -36.93     | -9.96  | Peak   |

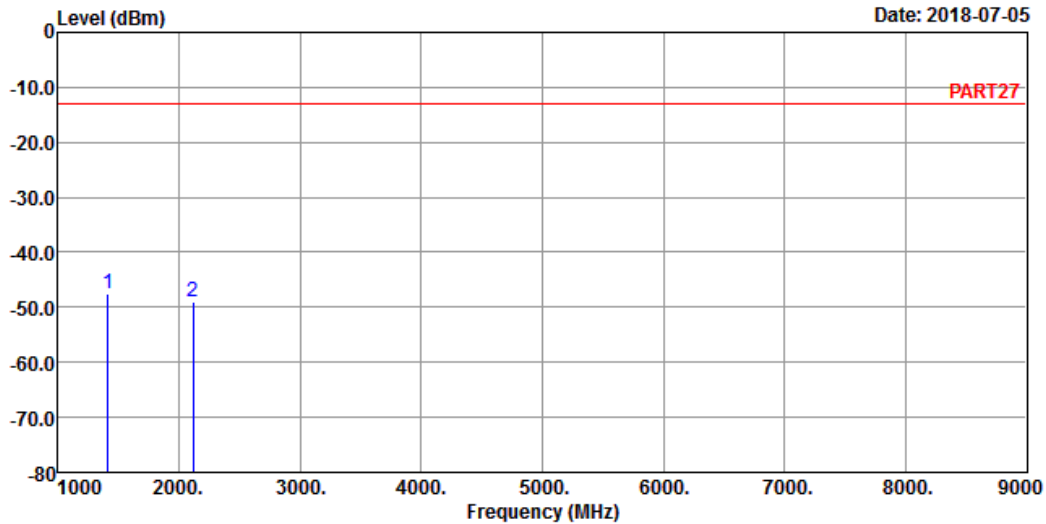


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_10M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1408.00 | -47.60 | -35.64     | -13.00     | -34.60     | -11.96 | Peak   |
| 2    | 2112.00 | -48.90 | -38.94     | -13.00     | -35.90     | -9.96  | Peak   |

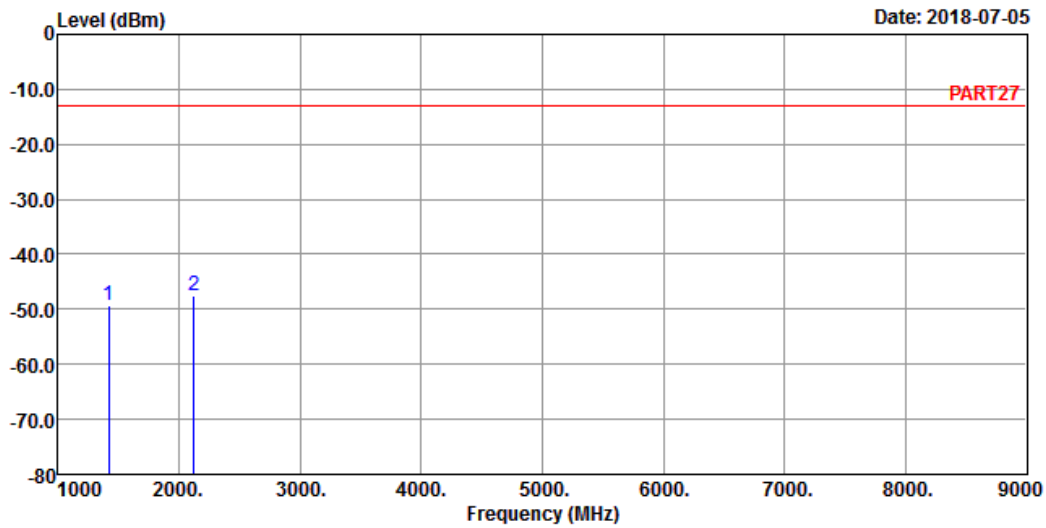
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 1415.00 | -49.21 | -37.13     | -13.00 | -36.21 | -12.08 | Peak   |
| 2 pp | 2122.50 | -47.53 | -37.66     | -13.00 | -34.53 | -9.87  | Peak   |

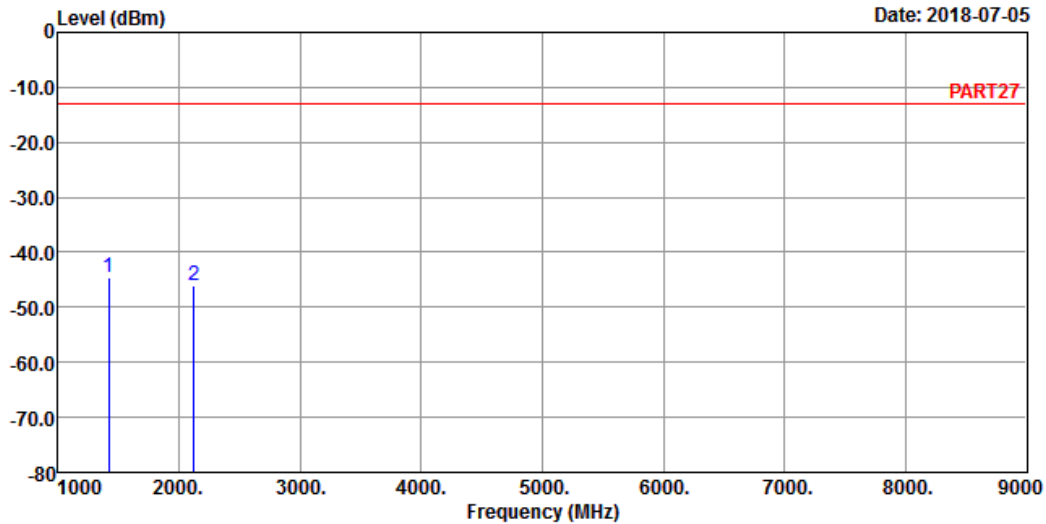


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1415.00 | -44.60 | -32.52     | -13.00     | -31.60     | -12.08 | Peak   |
| 2    | 2122.50 | -46.19 | -36.32     | -13.00     | -33.19     | -9.87  | Peak   |

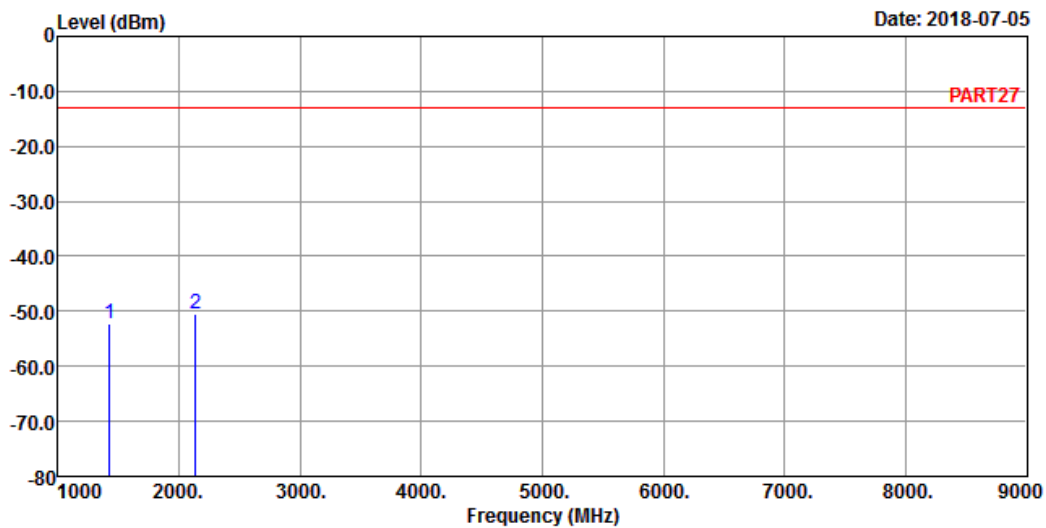
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 12 QPSK\_10M Link\_H-CH  
 Tested by: Jisyong Wang

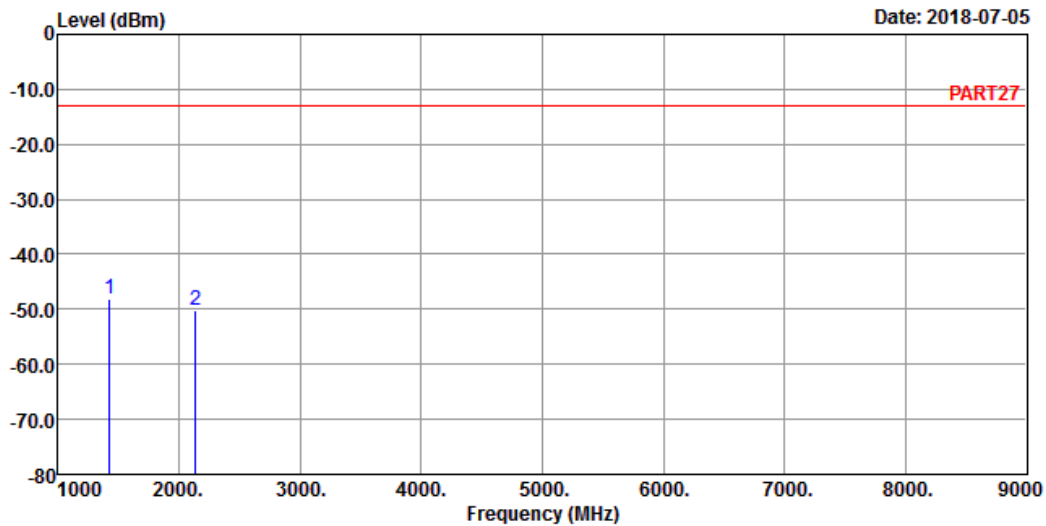
|   | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|---|---------|--------|------------|--------|--------|--------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 | 1422.00 | -52.29 | -40.10     | -13.00 | -39.29 | -12.19 | Peak   |
| 2 | 2133.00 | -50.58 | -40.91     | -13.00 | -37.58 | -9.67  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 12 QPSK\_10M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1422.00 | -48.01 | -35.82     | -13.00     | -35.01     | -12.19 | Peak   |
| 2    | 2133.00 | -50.24 | -40.57     | -13.00     | -37.24     | -9.67  | Peak   |

LTE Band 13\_1 RB  
 Channel Bandwidth: 5 MHz / QPSK  
 Low Channel

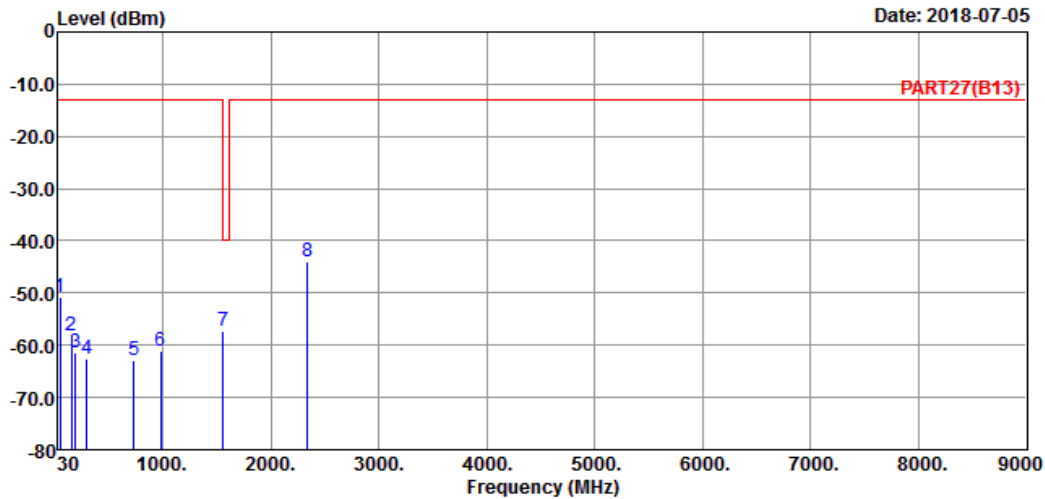


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : CAT M1 Band 13 QPSK\_5M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 44.55   | -50.66 | -48.67     | -13.00     | -37.66     | -1.99  | Peak   |
| 2    | 154.16  | -58.25 | -51.77     | -13.00     | -45.25     | -6.48  | Peak   |
| 3    | 190.05  | -61.35 | -54.26     | -13.00     | -48.35     | -7.09  | Peak   |
| 4    | 292.87  | -62.47 | -55.60     | -13.00     | -49.47     | -6.87  | Peak   |
| 5    | 729.37  | -62.97 | -63.45     | -13.00     | -49.97     | 0.48   | Peak   |
| 6    | 982.54  | -61.13 | -64.09     | -13.00     | -48.13     | 2.96   | Peak   |
| 7 pp | 1559.00 | -57.35 | -44.03     | -40.00     | -17.35     | -13.32 | Peak   |
| 8    | 2338.50 | -43.88 | -34.50     | -13.00     | -30.88     | -9.38  | Peak   |

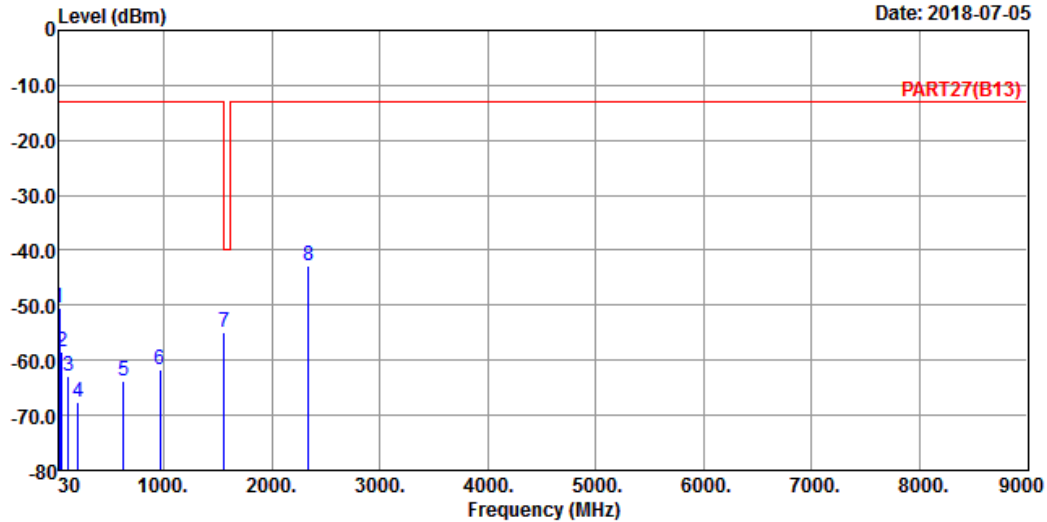


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : CAT M1 Band 13 QPSK\_5M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 30.97   | -50.55 | -50.44     | -13.00     | -37.55     | -0.11  | Peak   |
| 2    | 54.25   | -58.52 | -52.45     | -13.00     | -45.52     | -6.07  | Peak   |
| 3    | 112.45  | -62.83 | -52.63     | -13.00     | -49.83     | -10.20 | Peak   |
| 4    | 207.51  | -67.46 | -59.75     | -13.00     | -54.46     | -7.71  | Peak   |
| 5    | 626.55  | -63.69 | -62.87     | -13.00     | -50.69     | -0.82  | Peak   |
| 6    | 962.17  | -61.56 | -63.80     | -13.00     | -48.56     | 2.24   | Peak   |
| 7 pp | 1559.00 | -54.81 | -41.49     | -40.00     | -14.81     | -13.32 | Peak   |
| 8    | 2338.50 | -42.92 | -33.54     | -13.00     | -29.92     | -9.38  | Peak   |



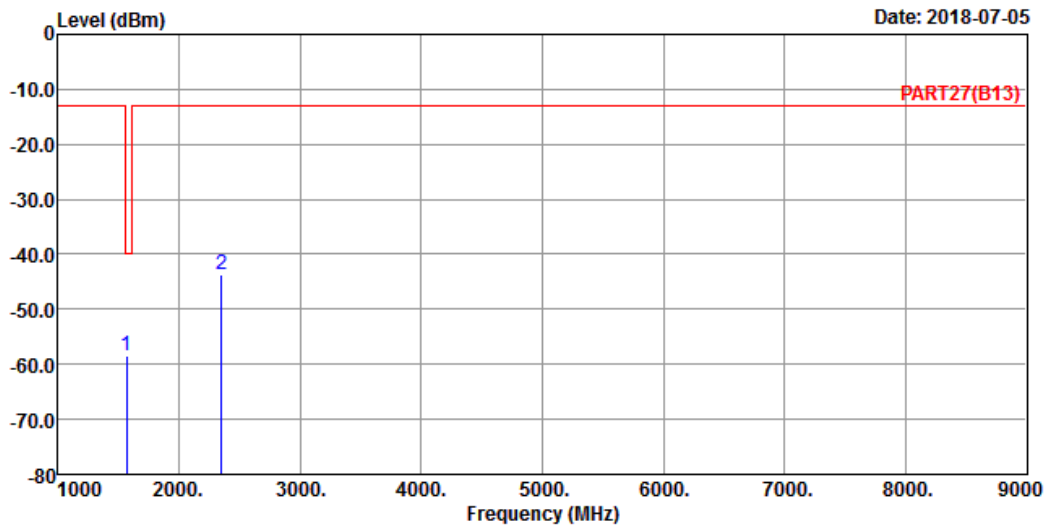
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1564.00 | -58.49 | -45.15     | -40.00     | -18.49     | -13.34 | Peak   |
| 2    | 2346.00 | -43.82 | -34.38     | -13.00     | -30.82     | -9.44  | Peak   |

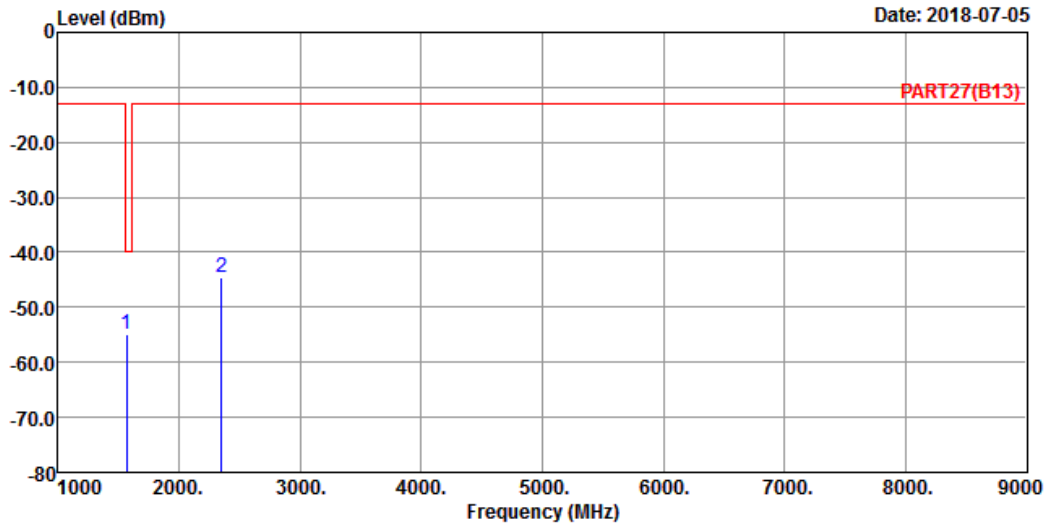


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1564.00 | -54.80 | -41.46     | -40.00     | -14.80     | -13.34 | Peak   |
| 2    | 2346.00 | -44.66 | -35.22     | -13.00     | -31.66     | -9.44  | Peak   |

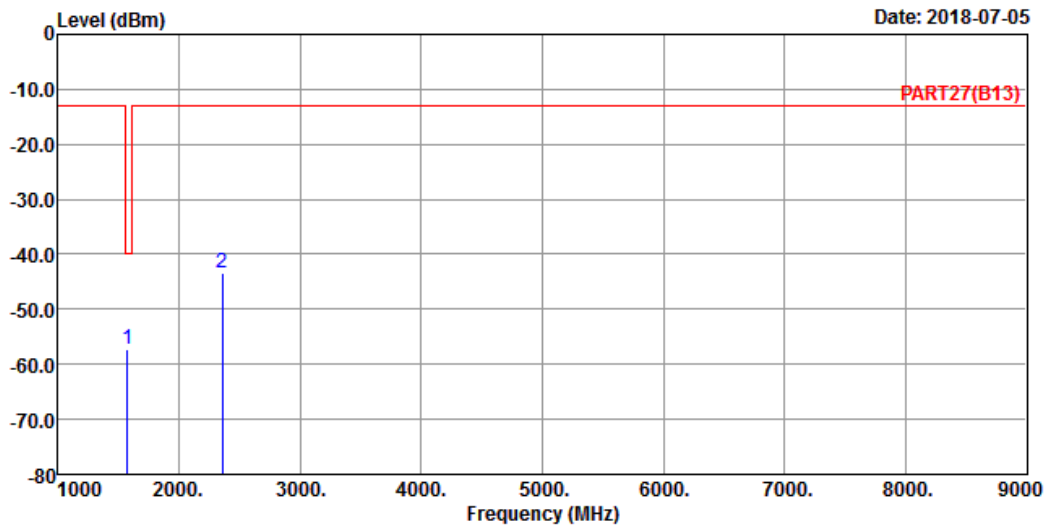
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

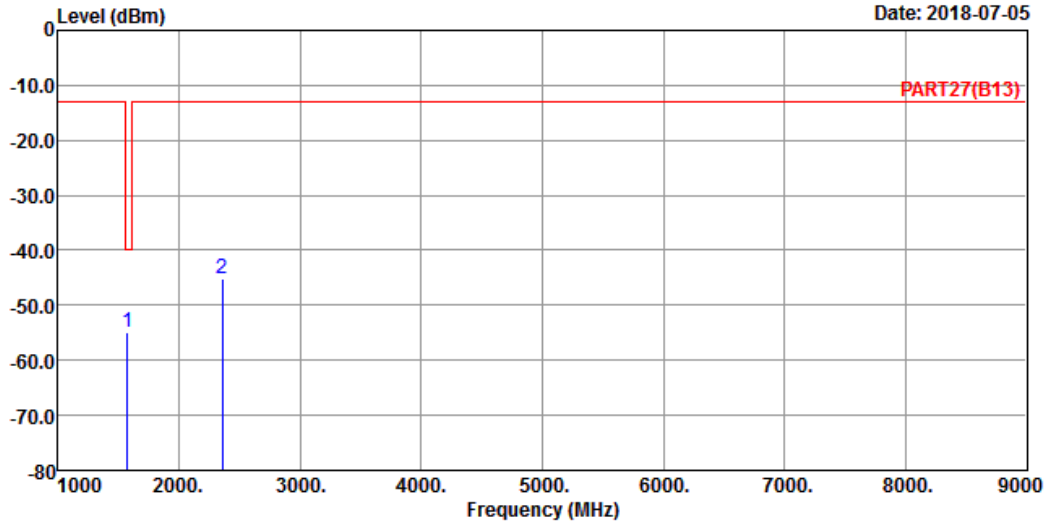
|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | pp 1569.00 | -57.35 | -44.00     | -40.00     | -17.35     | -13.35 | Peak   |
| 2 | 2353.50    | -43.30 | -33.79     | -13.00     | -30.30     | -9.51  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1569.00 | -54.88 | -41.53     | -40.00     | -14.88     | -13.35 | Peak   |
| 2    | 2353.50 | -45.11 | -35.60     | -13.00     | -32.11     | -9.51  | Peak   |

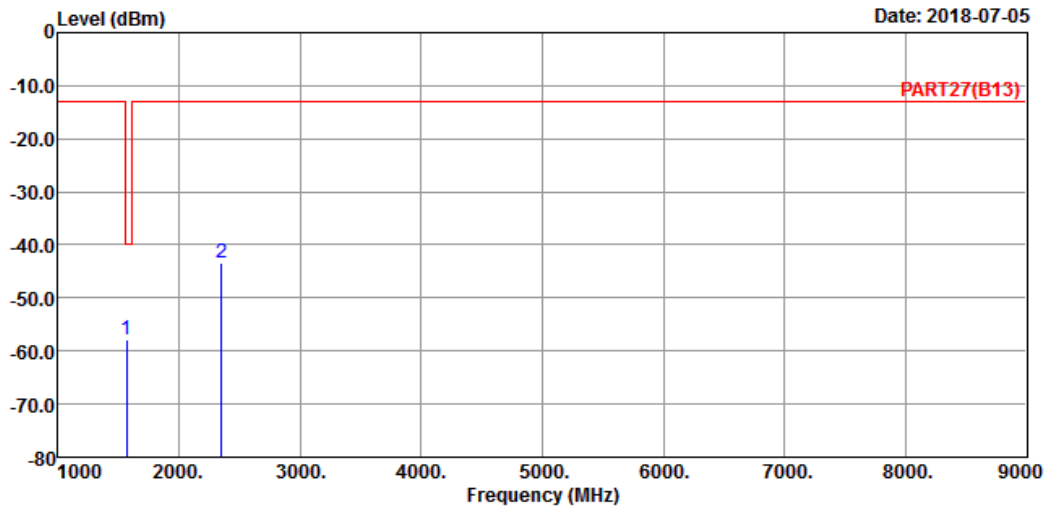
Channel Bandwidth: 10 MHz / QPSK  
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27(B13) HORIZONTAL  
Remak : Cat-M1 Band 13 QPSK\_10M Link\_M-CH  
Tested by: Thomas Wei

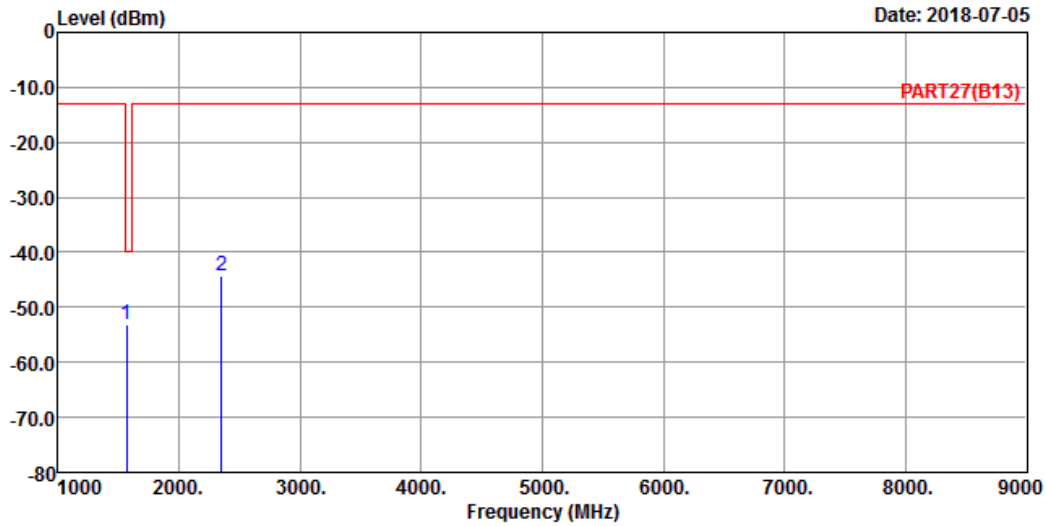
|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | pp 1564.00 | -57.99 | -44.65     | -40.00     | -17.99     | -13.34 | Peak   |
| 2 | 2346.00    | -43.48 | -34.04     | -13.00     | -30.48     | -9.44  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_10M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1564.00 | -53.24 | -39.90     | -40.00     | -13.24     | -13.34 | Peak   |
| 2    | 2346.00 | -44.17 | -34.73     | -13.00     | -31.17     | -9.44  | Peak   |

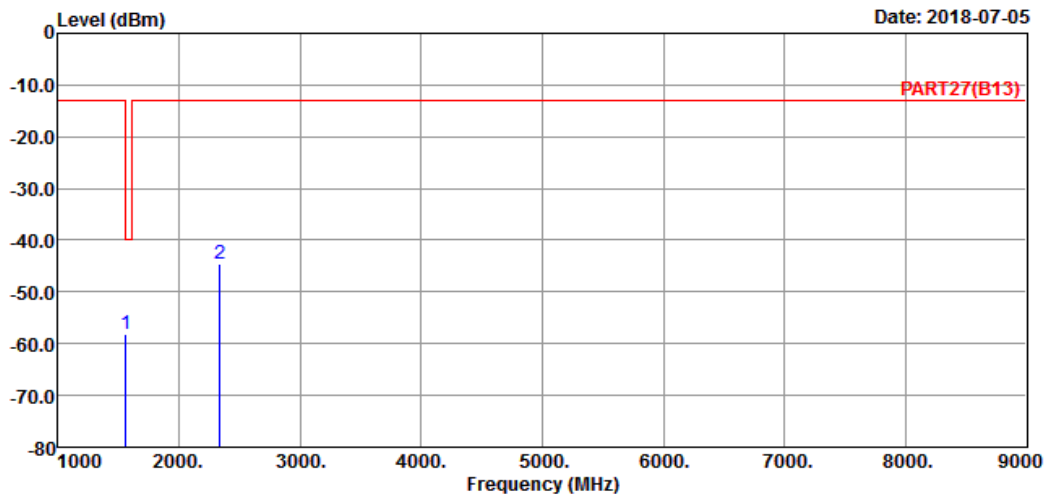
LTE Band 13\_Full RB  
 Channel Bandwidth: 5 MHz / QPSK  
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



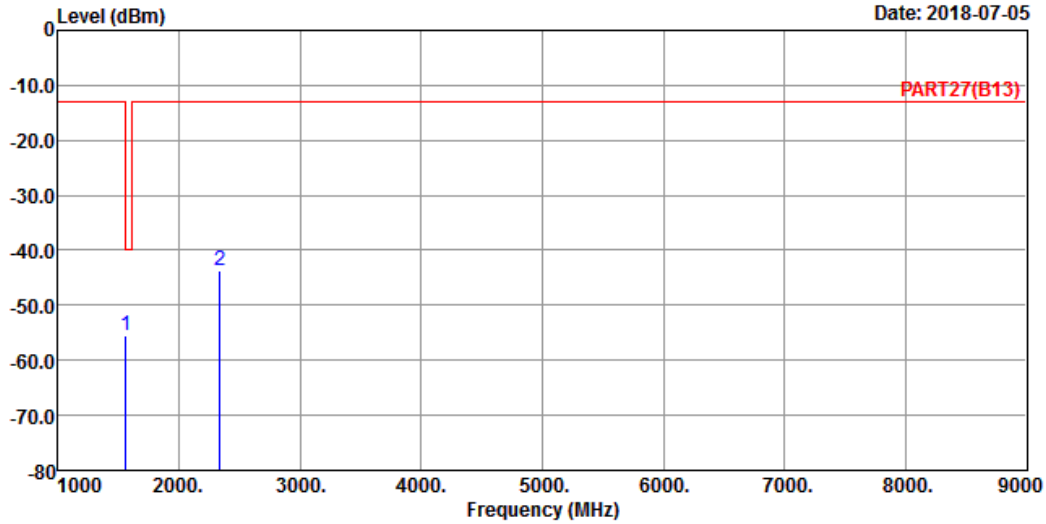
Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_L-CH  
 Tested by: Thomas Wei

|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | pp 1559.00 | -58.11 | -44.79     | -40.00     | -18.11     | -13.32 | Peak   |
| 2 | 2338.50    | -44.59 | -35.21     | -13.00     | -31.59     | -9.38  | Peak   |



A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_L-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1559.00 | -55.37 | -42.05     | -40.00     | -15.37     | -13.32 | Peak   |
| 2    | 2338.50 | -43.58 | -34.20     | -13.00     | -30.58     | -9.38  | Peak   |



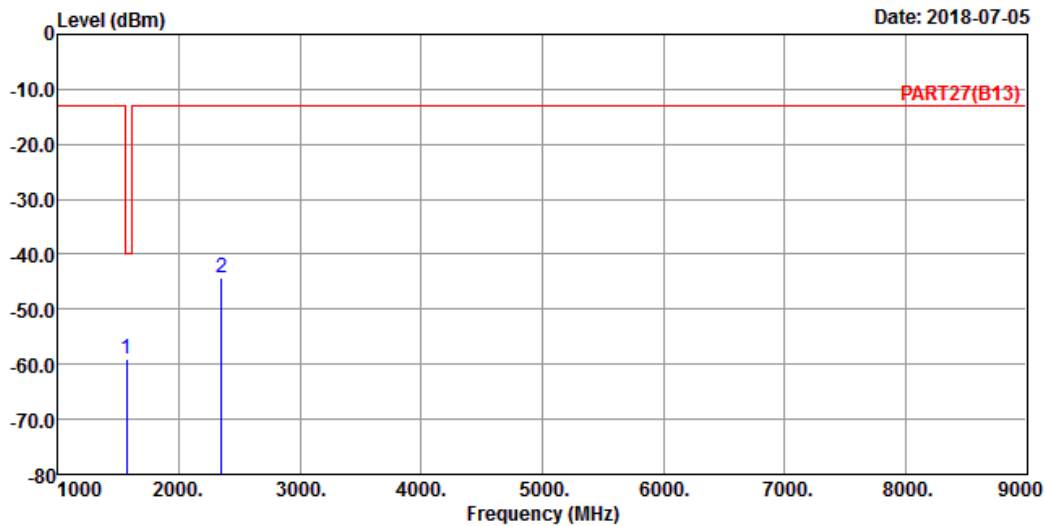
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

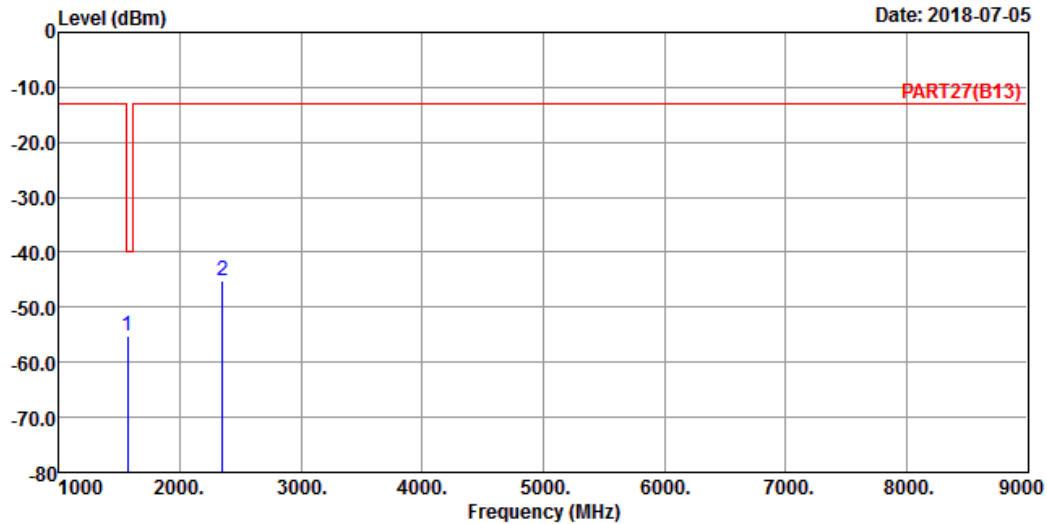
|   | Freq       | Level  | Read Level | Limit  | Over   | Factor | Remark |
|---|------------|--------|------------|--------|--------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 | pp 1564.00 | -59.01 | -45.67     | -40.00 | -19.01 | -13.34 | Peak   |
| 2 | 2346.00    | -44.16 | -34.72     | -13.00 | -31.16 | -9.44  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1564.00 | -55.23 | -41.89     | -40.00     | -15.23     | -13.34 | Peak   |
| 2    | 2346.00 | -45.06 | -35.62     | -13.00     | -32.06     | -9.44  | Peak   |

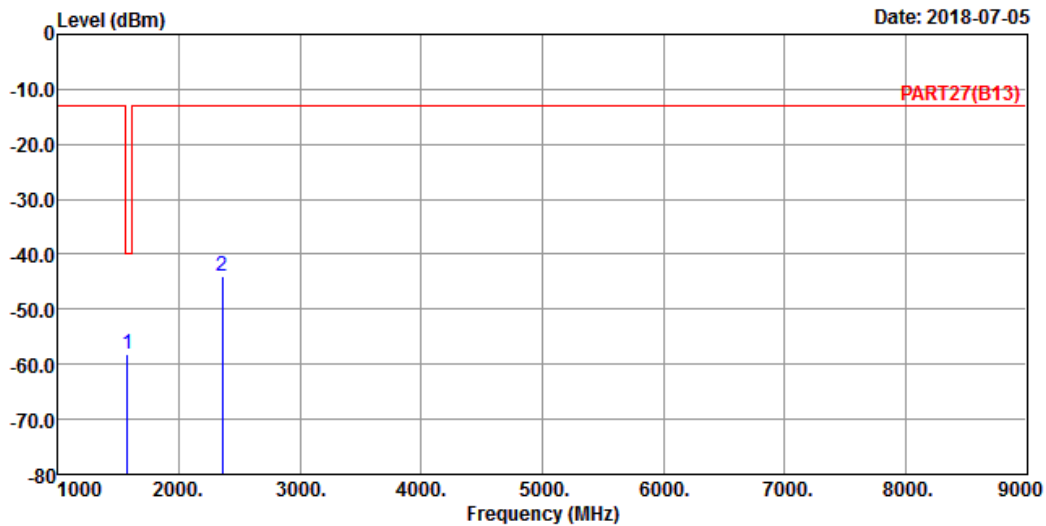
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1569.00 | -58.01 | -44.66     | -40.00     | -18.01     | -13.35 | Peak   |
| 2    | 2353.50 | -44.01 | -34.50     | -13.00     | -31.01     | -9.51  | Peak   |

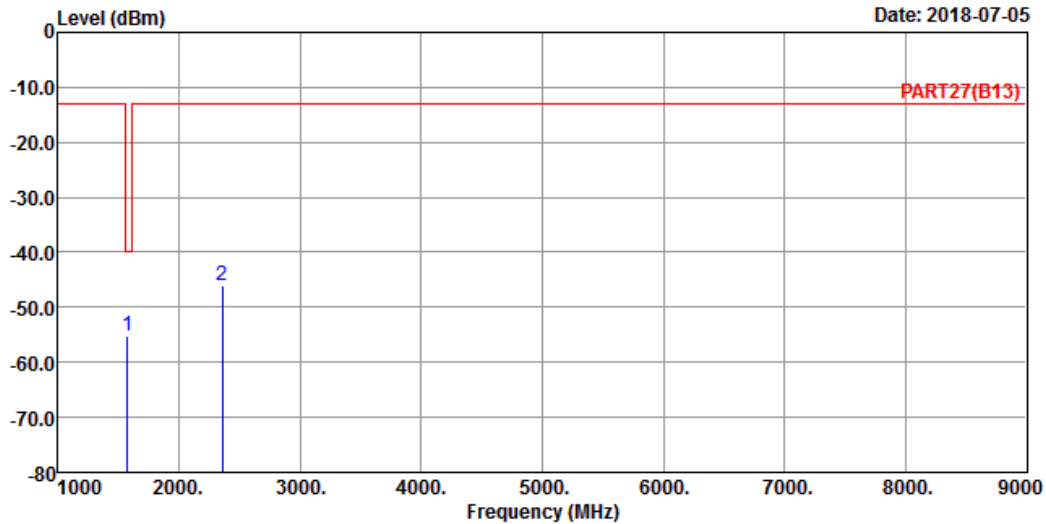


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_5M Link\_H-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1569.00 | -55.31 | -41.96     | -40.00     | -15.31     | -13.35 | Peak   |
| 2    | 2353.50 | -45.99 | -36.48     | -13.00     | -32.99     | -9.51  | Peak   |

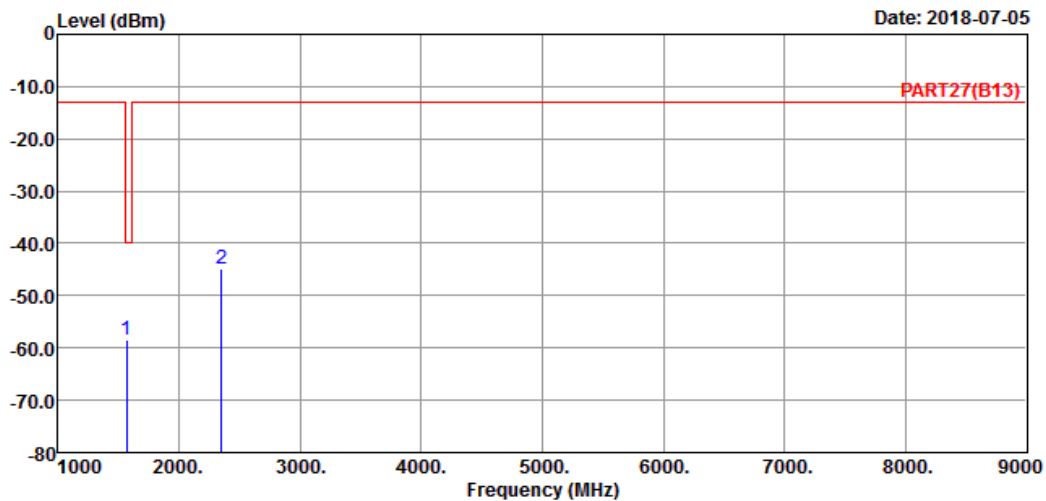
Channel Bandwidth: 10 MHz / QPSK  
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27(B13) HORIZONTAL  
Remak : Cat-M1 Band 13 QPSK\_10M Link\_M-CH  
Tested by: Thomas Wei

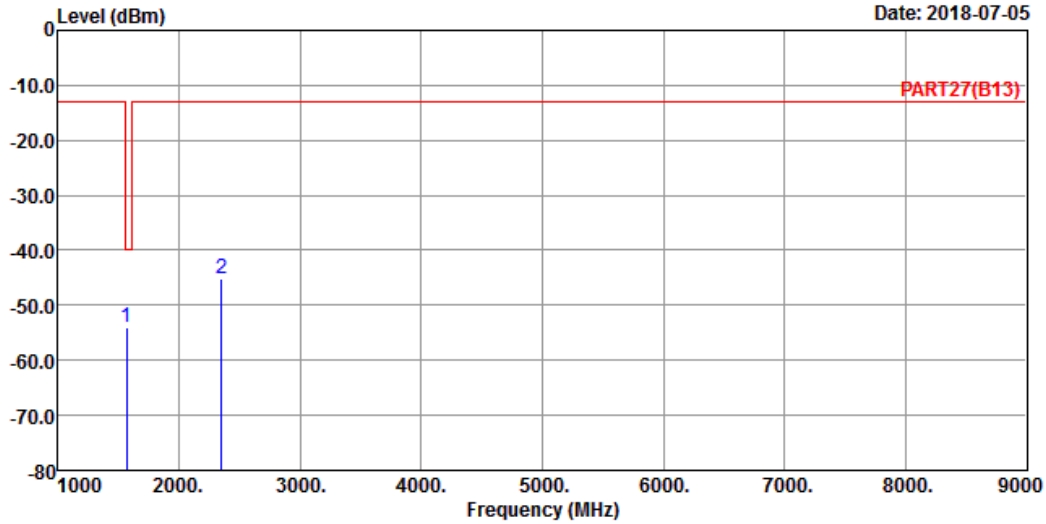
|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | pp 1564.00 | -58.48 | -45.14     | -40.00     | -18.48     | -13.34 | Peak   |
| 2 | 2346.00    | -44.75 | -35.31     | -13.00     | -31.75     | -9.44  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : Cat-M1 Band 13 QPSK\_10M Link\_M-CH  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1564.00 | -54.02 | -40.68     | -40.00     | -14.02     | -13.34 | Peak   |
| 2    | 2346.00 | -45.22 | -35.78     | -13.00     | -32.22     | -9.44  | Peak   |

LTE Band 17  
 Channel Bandwidth: 5 MHz / QPSK  
 Low Channel

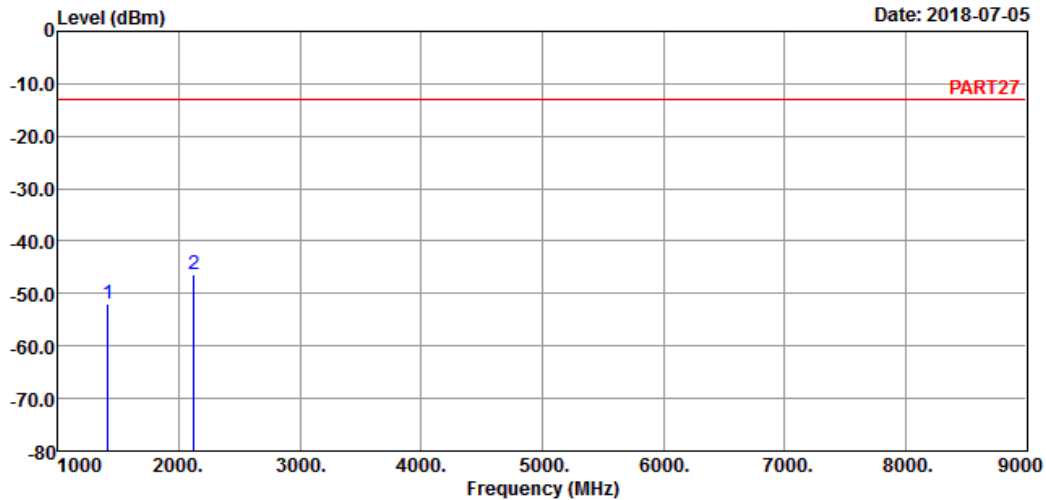


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 17 QPSK\_5M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 1413.00 | -52.01 | -39.99     | -13.00     | -39.01     | -12.02 | Peak   |
| 2 pp | 2119.50 | -46.31 | -36.44     | -13.00     | -33.31     | -9.87  | Peak   |

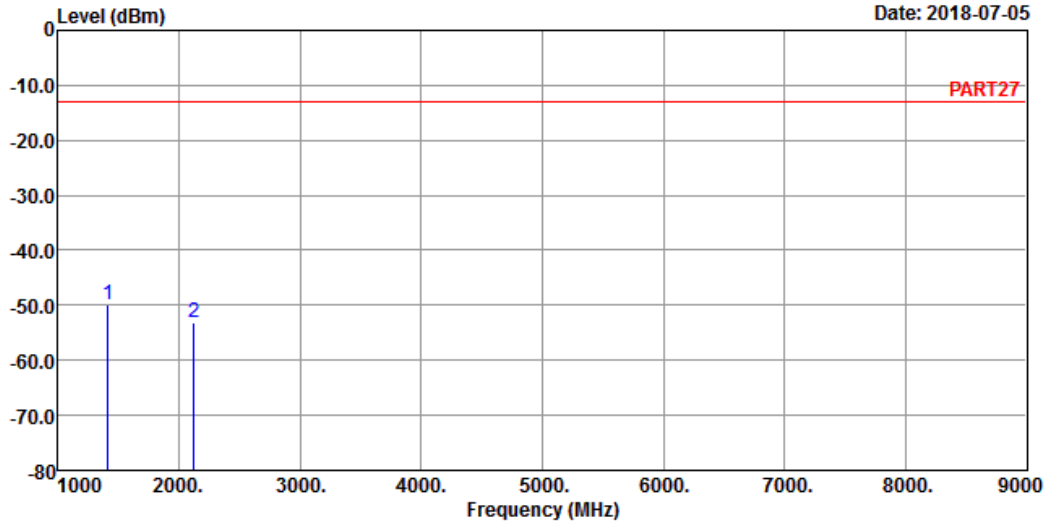


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_5M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1413.00 | -50.03 | -38.01     | -13.00     | -37.03     | -12.02 | Peak   |
| 2    | 2119.50 | -53.05 | -43.18     | -13.00     | -40.05     | -9.87  | Peak   |



Middle Channel

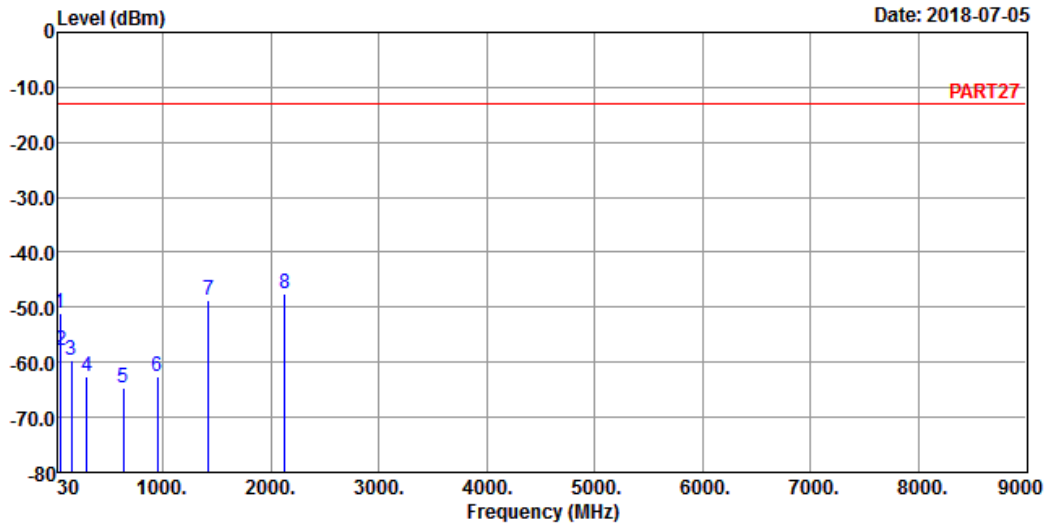


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

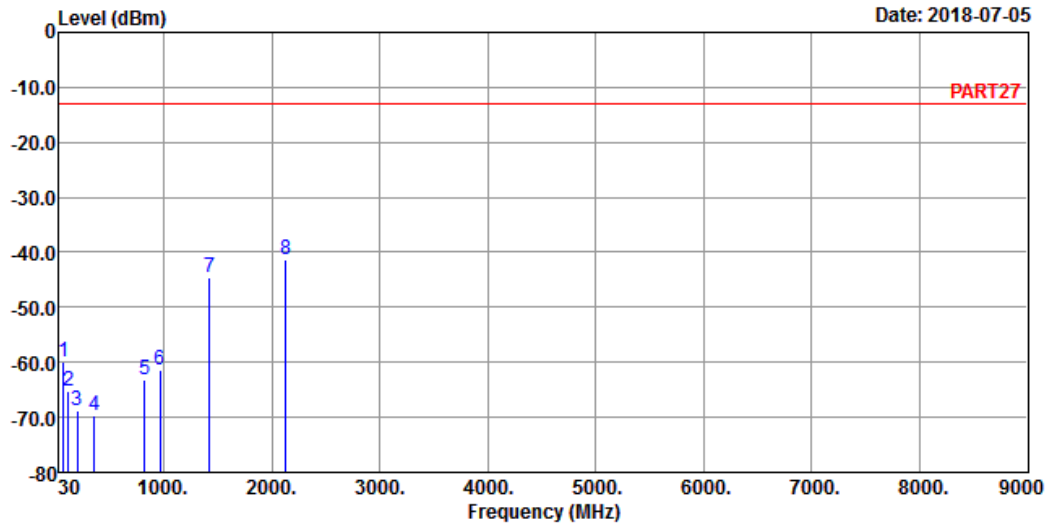
|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 44.55   | -51.10 | -49.11     | -13.00 | -38.10 | -1.99  | Peak   |
| 2    | 54.25   | -57.96 | -51.89     | -13.00 | -44.96 | -6.07  | Peak   |
| 3    | 153.19  | -59.50 | -52.74     | -13.00 | -46.50 | -6.76  | Peak   |
| 4    | 297.72  | -62.64 | -55.67     | -13.00 | -49.64 | -6.97  | Peak   |
| 5    | 632.37  | -64.69 | -63.85     | -13.00 | -51.69 | -0.84  | Peak   |
| 6    | 952.47  | -62.68 | -64.58     | -13.00 | -49.68 | 1.90   | Peak   |
| 7    | 1420.00 | -48.85 | -36.71     | -13.00 | -35.85 | -12.14 | Peak   |
| 8 pp | 2130.00 | -47.65 | -37.88     | -13.00 | -34.65 | -9.77  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 69.77   | -60.05 | -51.65     | -13.00     | -47.05     | -8.40  | Peak   |
| 2    | 112.45  | -65.35 | -55.15     | -13.00     | -52.35     | -10.20 | Peak   |
| 3    | 194.90  | -68.64 | -61.09     | -13.00     | -55.64     | -7.55  | Peak   |
| 4    | 355.92  | -69.59 | -63.39     | -13.00     | -56.59     | -6.20  | Peak   |
| 5    | 821.52  | -63.11 | -63.65     | -13.00     | -50.11     | 0.54   | Peak   |
| 6    | 966.05  | -61.29 | -63.67     | -13.00     | -48.29     | 2.38   | Peak   |
| 7    | 1420.00 | -44.48 | -32.34     | -13.00     | -31.48     | -12.14 | Peak   |
| 8 pp | 2130.00 | -41.40 | -31.63     | -13.00     | -28.40     | -9.77  | Peak   |

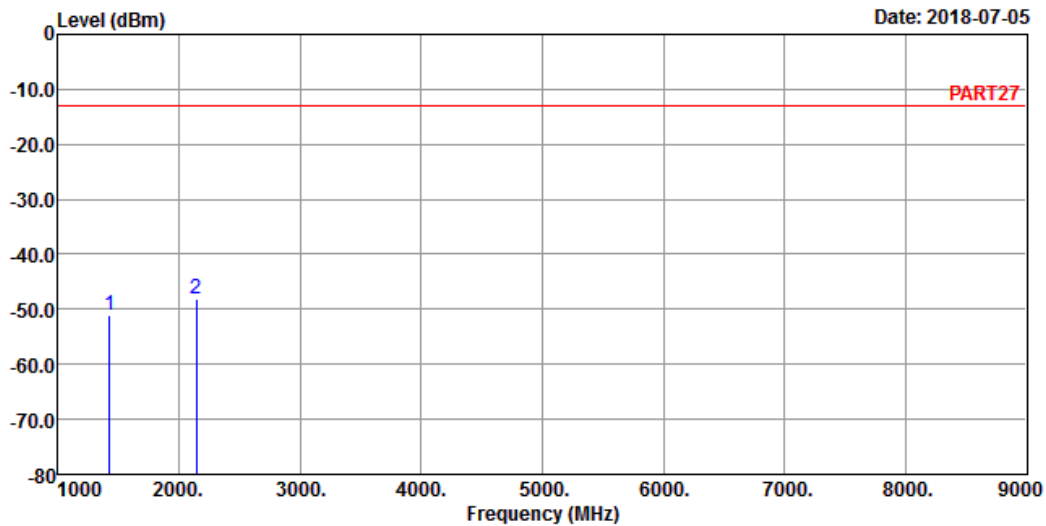
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 17 QPSK\_5M Link\_H-CH  
 Tested by: Jisyong Wang

|   | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|---|---------|--------|------------|--------|--------|--------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 | 1427.00 | -51.14 | -38.89     | -13.00 | -38.14 | -12.25 | Peak   |
| 2 | 2140.50 | -48.02 | -38.45     | -13.00 | -35.02 | -9.57  | Peak   |

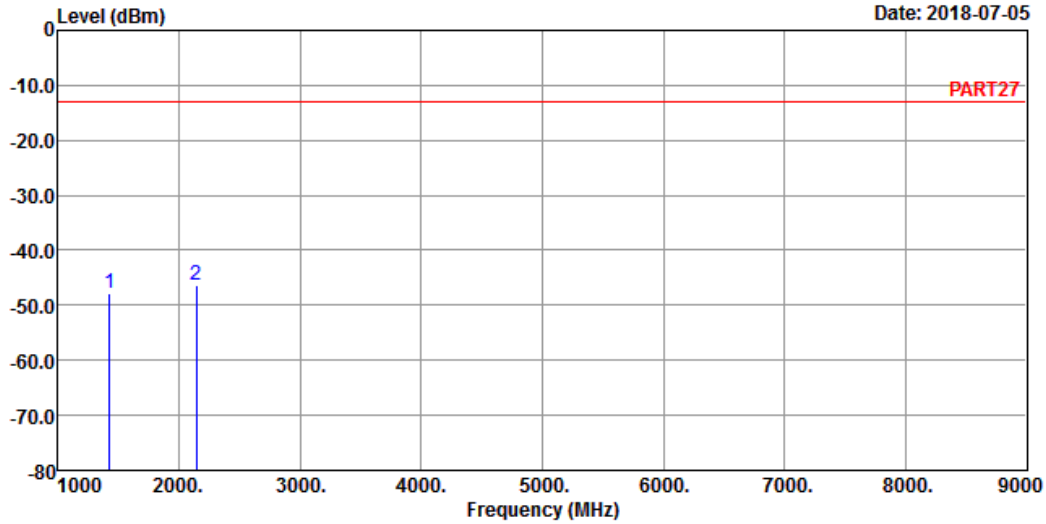


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_5M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 1427.00 | -47.85 | -35.60     | -13.00     | -34.85     | -12.25 | Peak   |
| 2 pp | 2140.50 | -46.25 | -36.68     | -13.00     | -33.25     | -9.57  | Peak   |

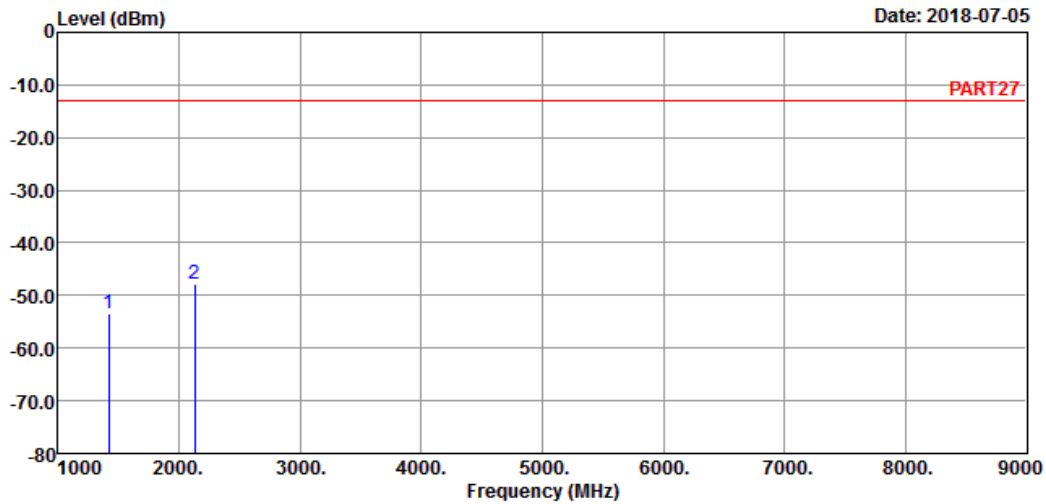
Channel Bandwidth: 10 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 17 QPSK\_10M Link\_L-CH  
Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 1418.00 | -53.37 | -41.23     | -13.00 | -40.37 | -12.14 | Peak   |
| 2 pp | 2127.00 | -47.95 | -38.18     | -13.00 | -34.95 | -9.77  | Peak   |

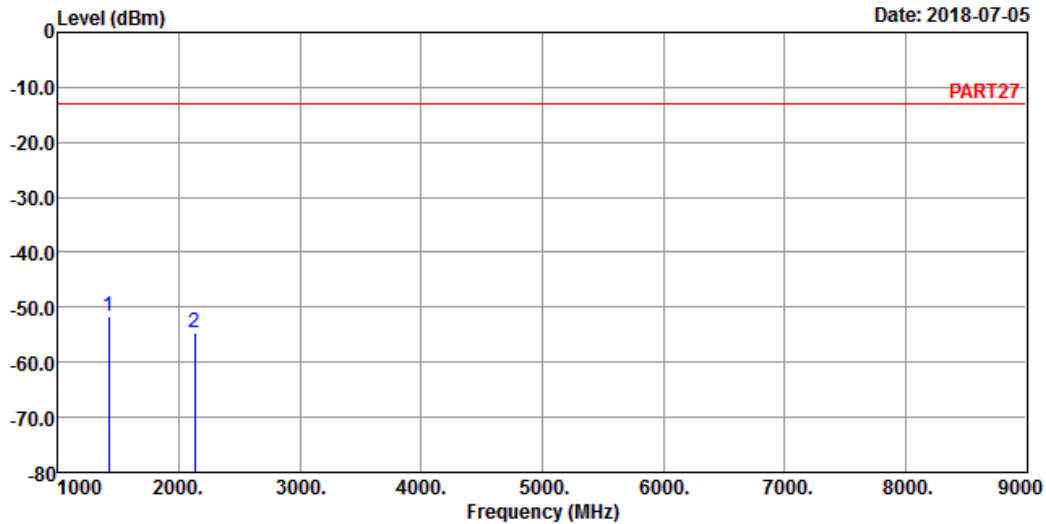


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_L-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp | 1418.00 | -51.53 | -39.39     | -13.00     | -38.53     | -12.14 | Peak   |
| 2    | 2127.00 | -54.52 | -44.75     | -13.00     | -41.52     | -9.77  | Peak   |

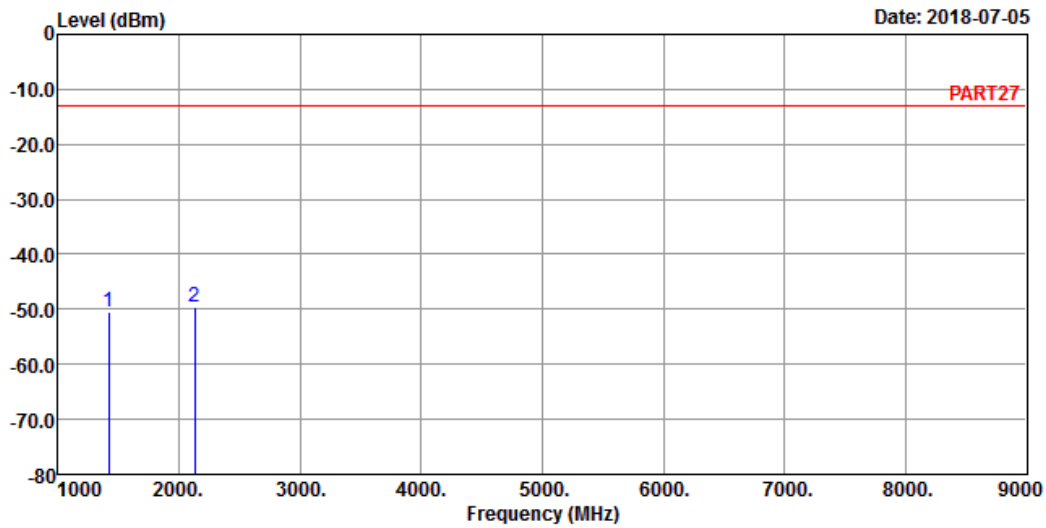
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

|   | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|---|---------|--------|------------|--------|--------|--------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1 | 1420.00 | -50.45 | -38.31     | -13.00 | -37.45 | -12.14 | Peak   |
| 2 | 2130.00 | -49.56 | -39.79     | -13.00 | -36.56 | -9.77  | Peak   |

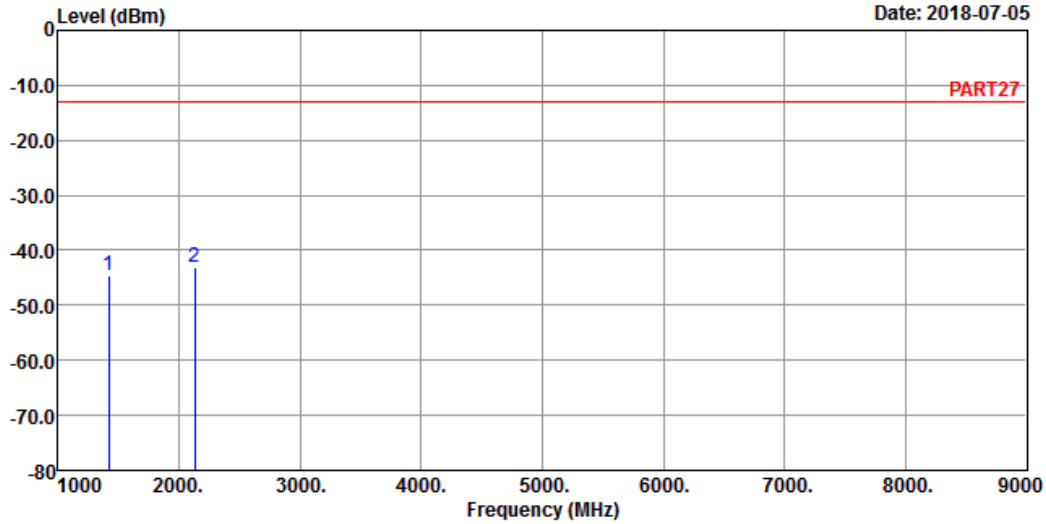


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_M-CH  
 Tested by: Jisyong Wang

|   | Freq       | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|---|------------|--------|------------|------------|------------|--------|--------|
|   | MHz        | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 | 1420.00    | -44.48 | -32.34     | -13.00     | -31.48     | -12.14 | Peak   |
| 2 | pp 2130.00 | -43.01 | -33.24     | -13.00     | -30.01     | -9.77  | Peak   |



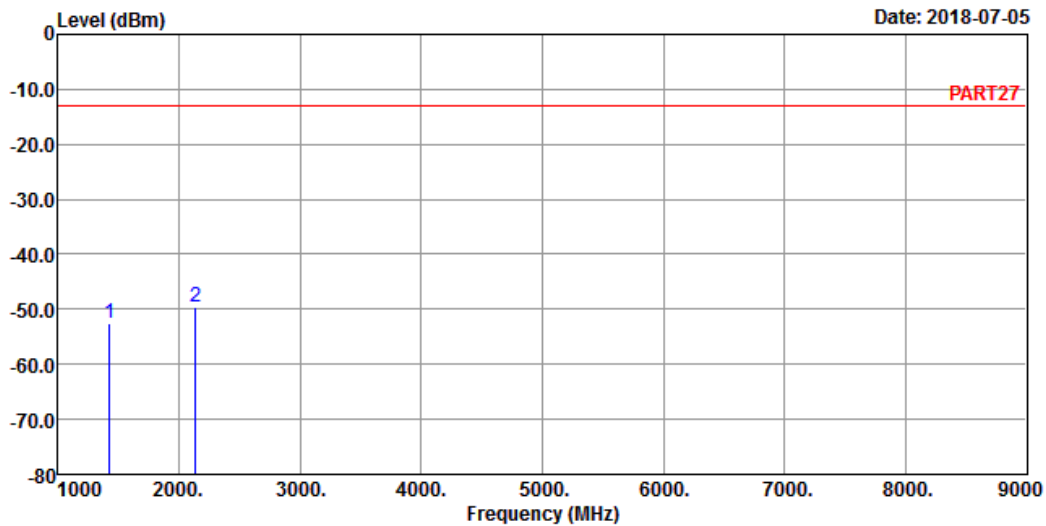
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_H-CH  
 Tested by: Jisyong Wang

|   |            | Read   | Limit  | Over   |        |        |        |
|---|------------|--------|--------|--------|--------|--------|--------|
|   | Freq       | Level  | Level  | Line   | Limit  | Factor | Remark |
|   | MHz        | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 | 1422.00    | -52.52 | -40.33 | -13.00 | -39.52 | -12.19 | Peak   |
| 2 | pp 2133.00 | -49.62 | -39.95 | -13.00 | -36.62 | -9.67  | Peak   |

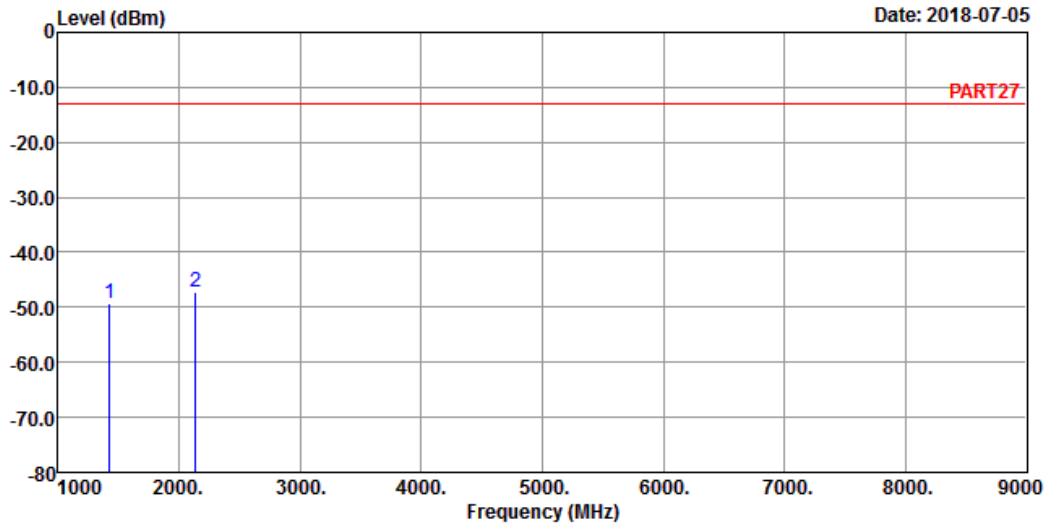


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 17 QPSK\_10M Link\_H-CH  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 1422.00 | -49.38 | -37.19     | -13.00     | -36.38     | -12.19 | Peak   |
| 2 pp | 2133.00 | -47.12 | -37.45     | -13.00     | -34.12     | -9.67  | Peak   |

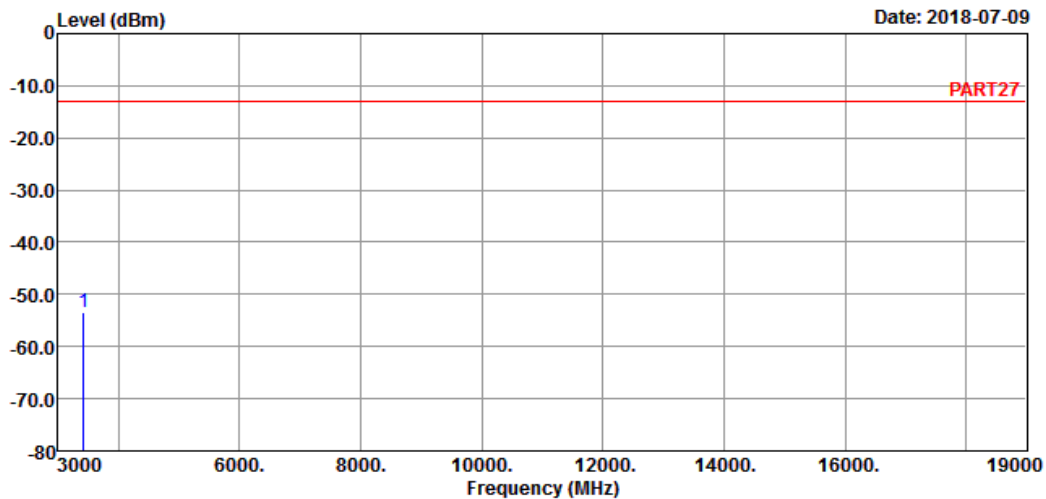
LTE Band 66:  
 Channel Bandwidth: 1.4 MHz / QPSK  
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_L-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
|              |        |            |            |            |        |        |
| 1 pp 3421.40 | -53.52 | -45.18     | -13.00     | -40.52     | -8.34  | Peak   |

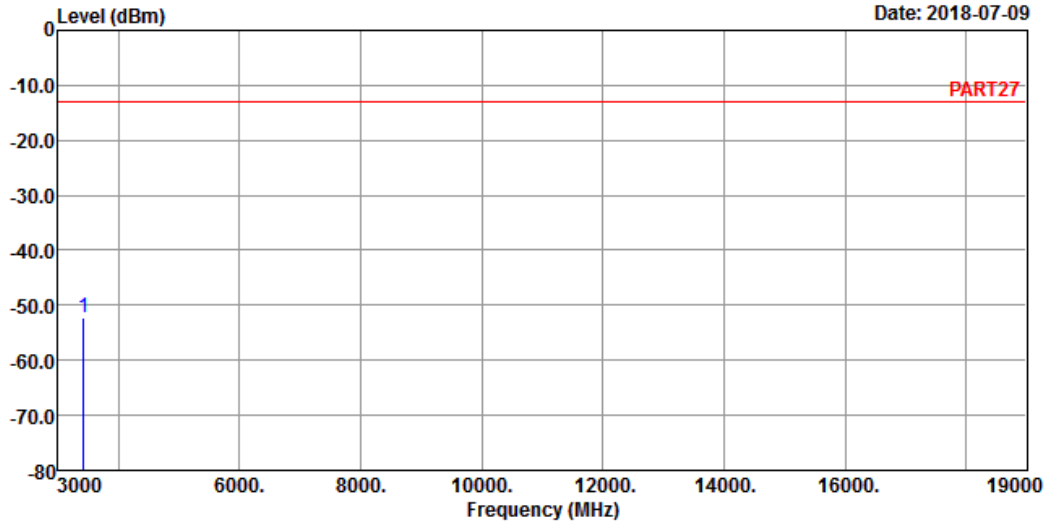


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_L-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3421.40 | -52.14 | -43.80     | -13.00     | -39.14     | -8.34  | Peak   |

Middle Channel

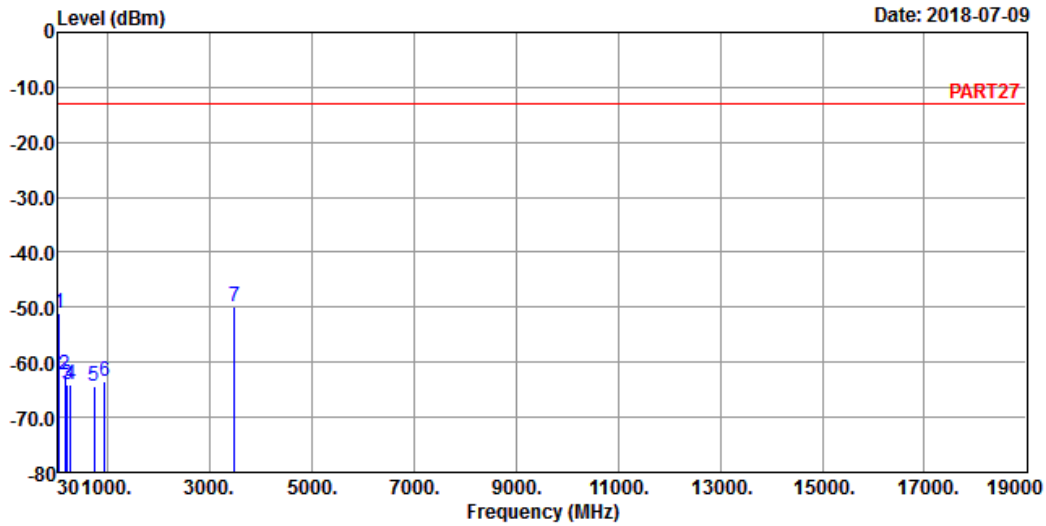


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_M-CH Link  
 Tested by: Jisyong Wang

|      | Freq    | Level  | Read Level | Limit  | Over   | Factor | Remark |
|------|---------|--------|------------|--------|--------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB     | dB     |        |
| 1    | 45.52   | -51.15 | -48.65     | -13.00 | -38.15 | -2.50  | Peak   |
| 2    | 159.98  | -62.37 | -57.53     | -13.00 | -49.37 | -4.84  | Peak   |
| 3    | 207.51  | -64.03 | -56.32     | -13.00 | -51.03 | -7.71  | Peak   |
| 4    | 274.44  | -64.03 | -57.54     | -13.00 | -51.03 | -6.49  | Peak   |
| 5    | 727.43  | -64.33 | -64.77     | -13.00 | -51.33 | 0.44   | Peak   |
| 6    | 933.07  | -63.42 | -64.81     | -13.00 | -50.42 | 1.39   | Peak   |
| 7 pp | 3490.00 | -50.01 | -42.36     | -13.00 | -37.01 | -7.65  | Peak   |

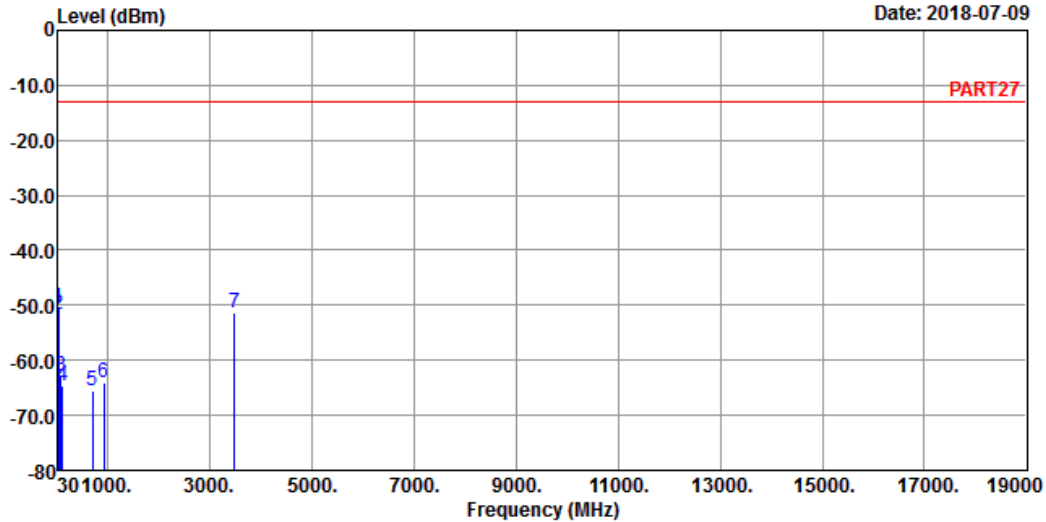


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_M-CH Link  
 Tested by: Jisyong Wang

|      | Read    | Limit  | Over   |        |        |        |      |
|------|---------|--------|--------|--------|--------|--------|------|
| Freq | Level   | Level  | Line   | Limit  | Factor | Remark |      |
| MHz  | dBm     | dBm    | dBm    | dB     | dB     |        |      |
| 1 pp | 30.97   | -50.55 | -50.44 | -13.00 | -37.55 | -0.11  | Peak |
| 2    | 42.61   | -51.60 | -50.66 | -13.00 | -38.60 | -0.94  | Peak |
| 3    | 78.50   | -62.83 | -52.40 | -13.00 | -49.83 | -10.43 | Peak |
| 4    | 113.42  | -64.63 | -54.48 | -13.00 | -51.63 | -10.15 | Peak |
| 5    | 705.12  | -65.48 | -65.48 | -13.00 | -52.48 | 0.00   | Peak |
| 6    | 930.16  | -64.04 | -65.36 | -13.00 | -51.04 | 1.32   | Peak |
| 7    | 3490.00 | -51.25 | -43.60 | -13.00 | -38.25 | -7.65  | Peak |

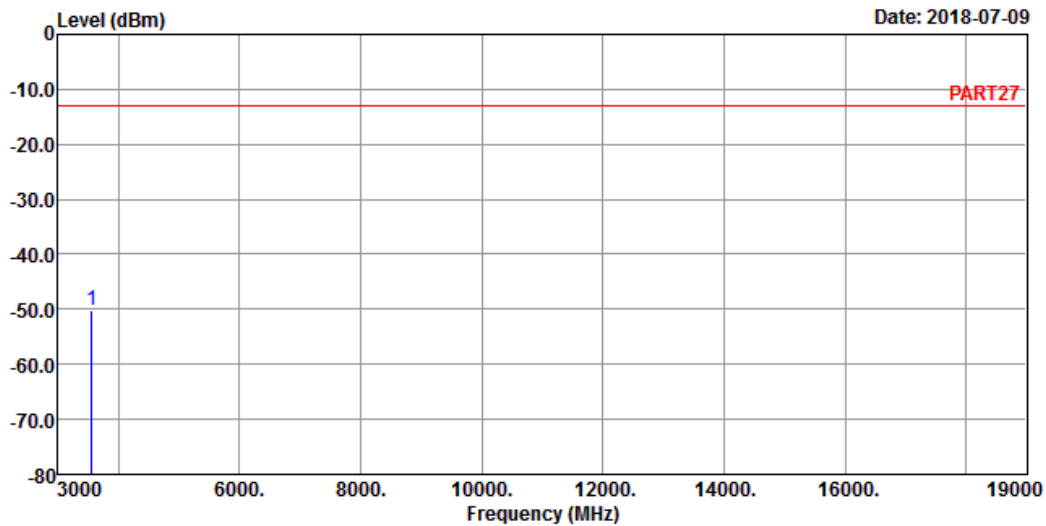
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_H-CH Link  
 Tested by: Jisyong Wang

|              | Read   | Limit  | Over   |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3558.60 | -50.12 | -43.05 | -13.00 | -37.12 | -7.07  | Peak   |

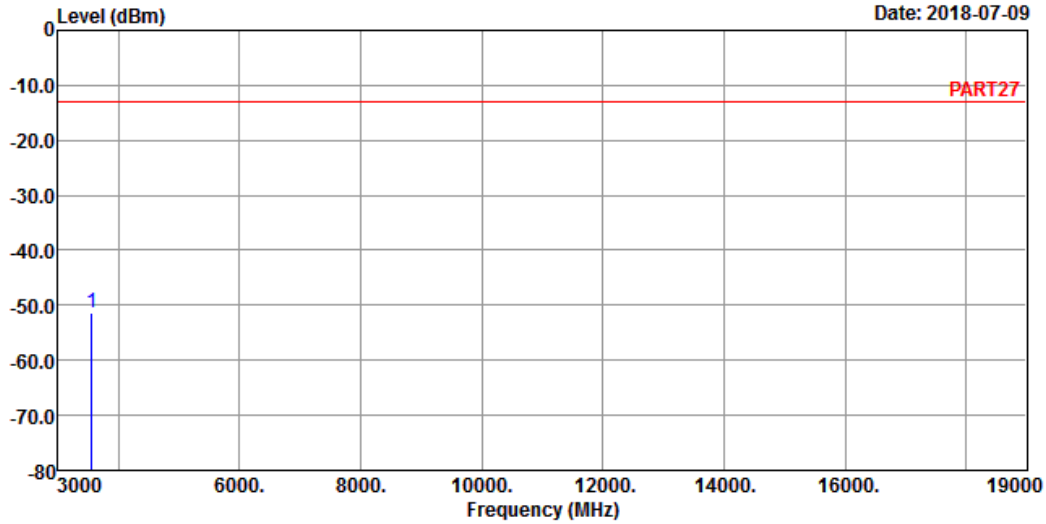


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_1.4M\_H-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3558.60 | -51.25 | -44.18     | -13.00     | -38.25     | -7.07  | Peak   |



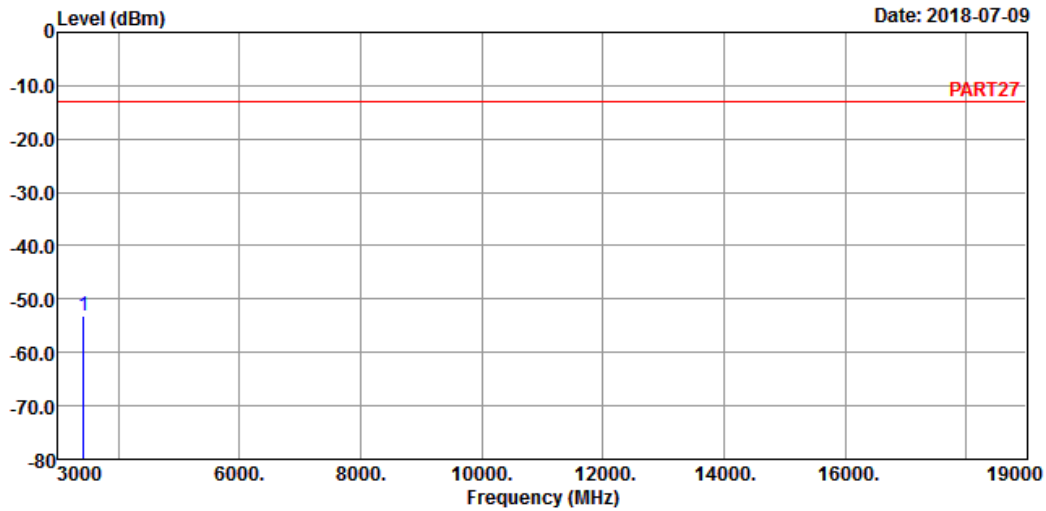
Channel Bandwidth: 5 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 66 QPSK\_5M\_L-CH Link  
Tested by: Jisyong Wang

| Freq | Level | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|-------|------------|------------|------------|--------|--------|
| MHz  | dBm   | dBm        | dBm        | dB         | dB     |        |

1 pp 3425.00 -53.25 -44.91 -13.00 -40.25 -8.34 Peak

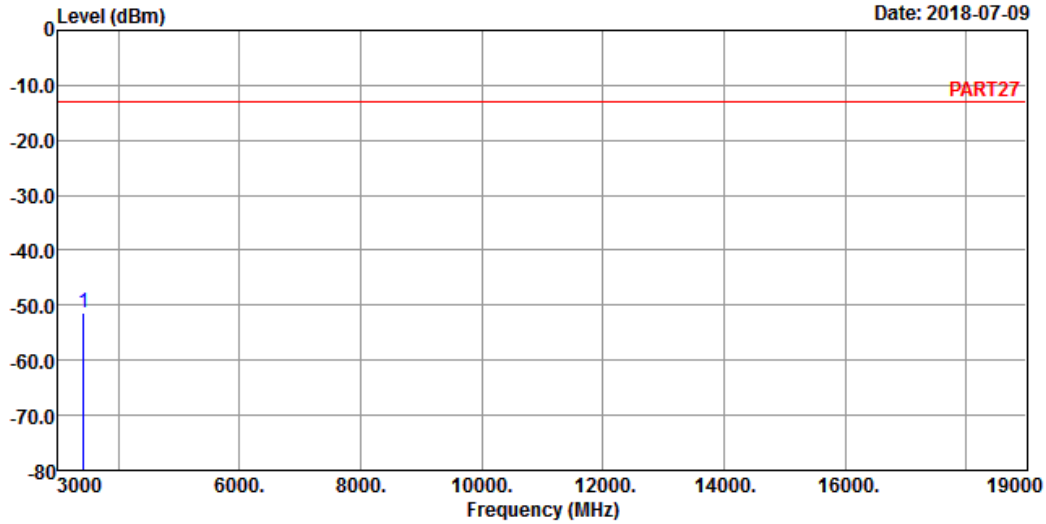


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_5M\_L-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3425.00 | -51.48 | -43.14     | -13.00     | -38.48     | -8.34  | Peak   |

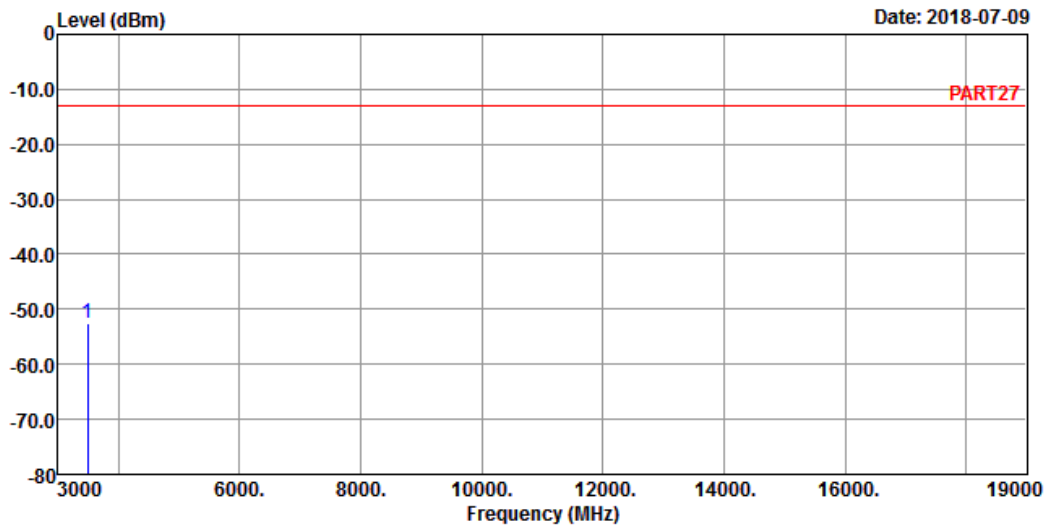
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_5M\_M-CH Link  
 Tested by: Jisyong Wang

|              | Read   | Limit  | Over   |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3490.00 | -52.58 | -44.93 | -13.00 | -39.58 | -7.65  | Peak   |

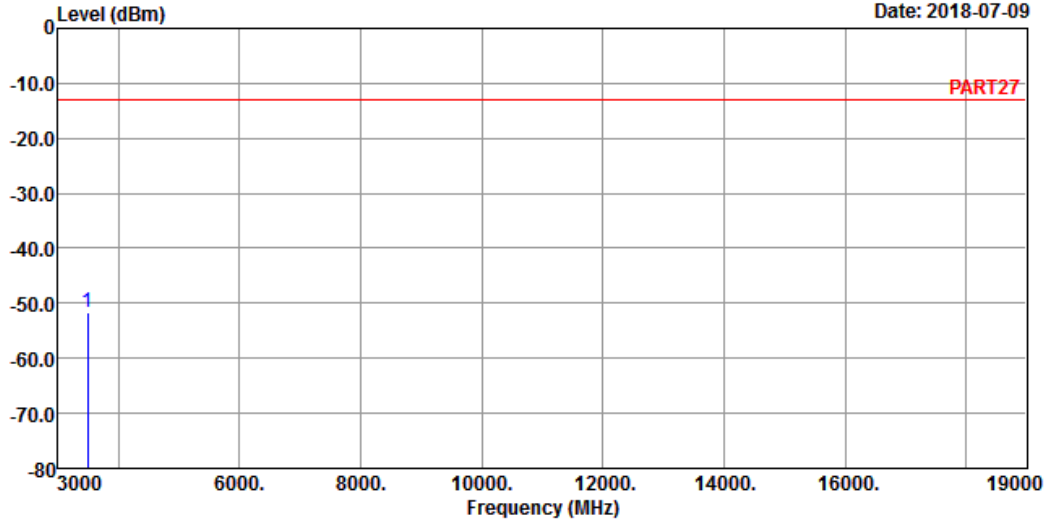


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_5M\_M-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3490.00 | -51.65 | -44.00     | -13.00     | -38.65     | -7.65  | Peak   |

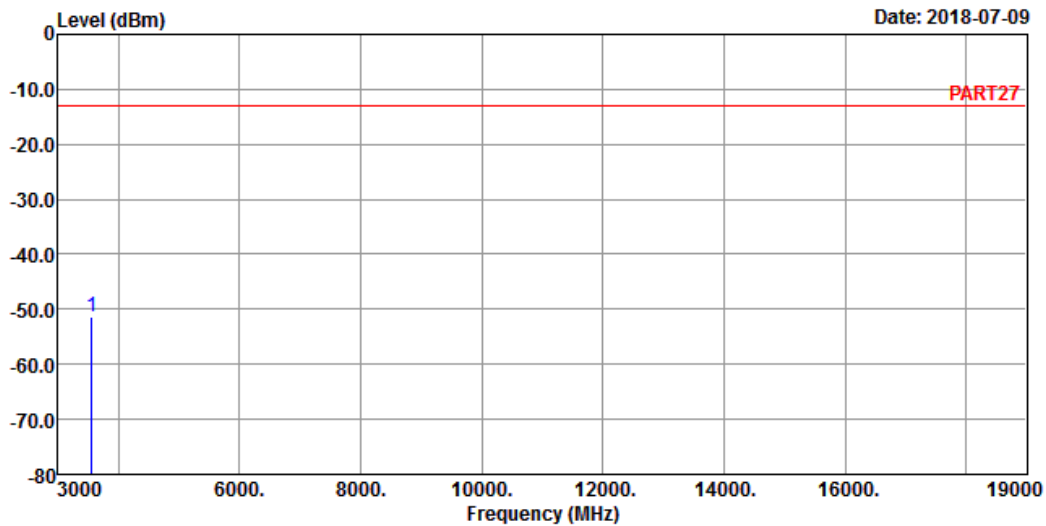
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_5M\_H-CH Link  
 Tested by: Jisyong Wang

|              | Read   | Limit  | Over   |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3555.00 | -51.23 | -44.08 | -13.00 | -38.23 | -7.15  | Peak   |

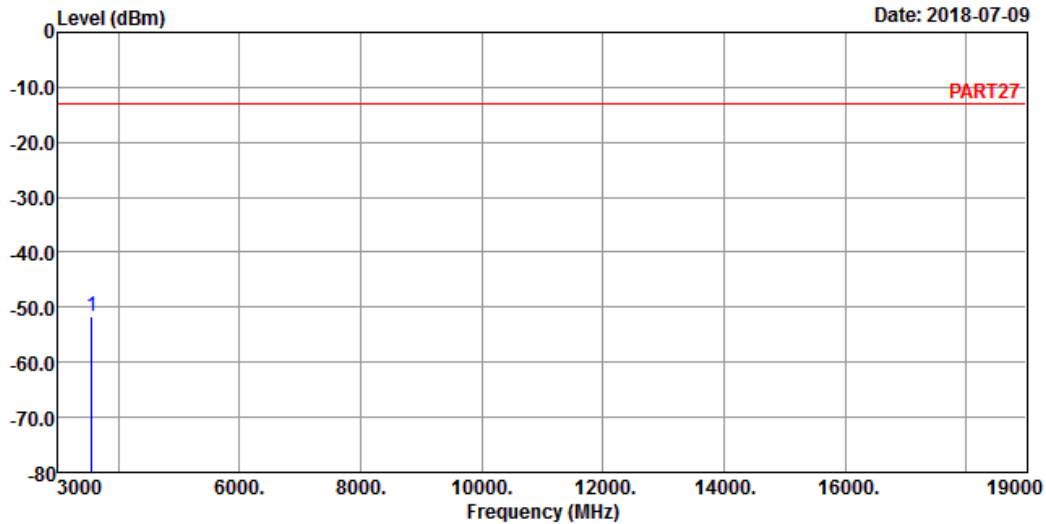


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_5M\_H-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3555.00 | -51.69 | -44.54     | -13.00     | -38.69     | -7.15  | Peak   |

Channel Bandwidth: 20 MHz / QPSK  
Low Channel

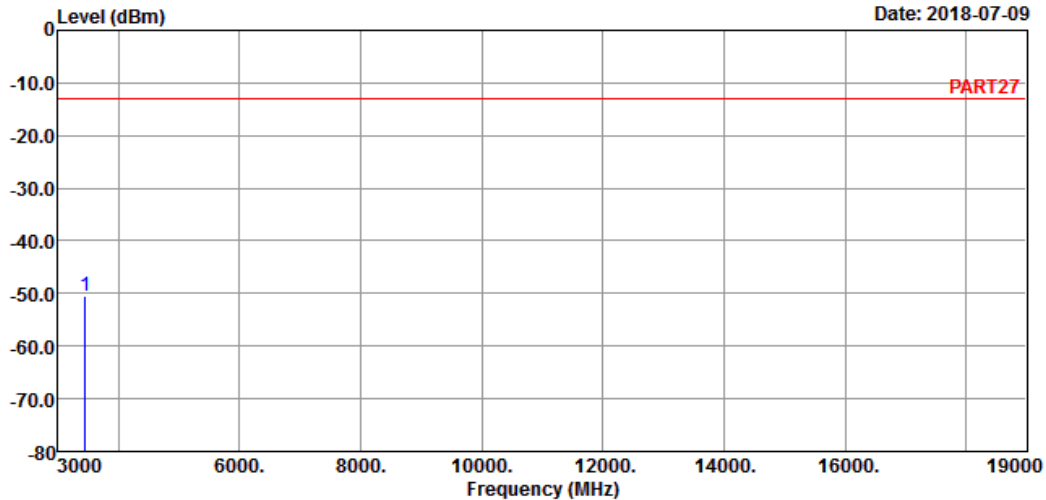


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2018-07-09



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : Cat-M1 Band 66 QPSK\_20M\_L-CH Link  
Tested by: Jisyong Wang

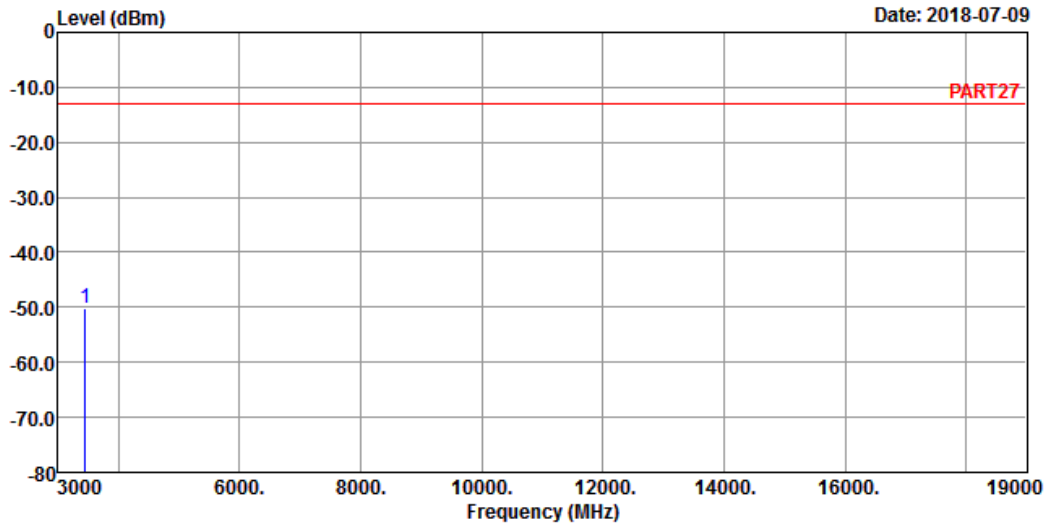
|              | Read   | Limit  | Over   |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3440.00 | -50.41 | -42.19 | -13.00 | -37.41 | -8.22  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_20M\_L-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3440.00 | -50.23 | -42.01     | -13.00     | -37.23     | -8.22  | Peak   |



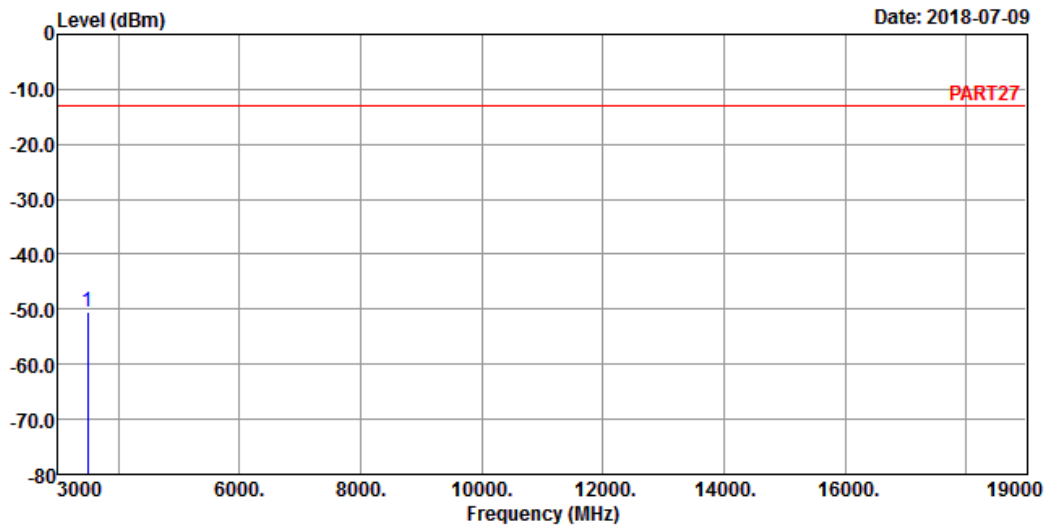
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_20M\_M-CH Link  
 Tested by: Jisyong Wang

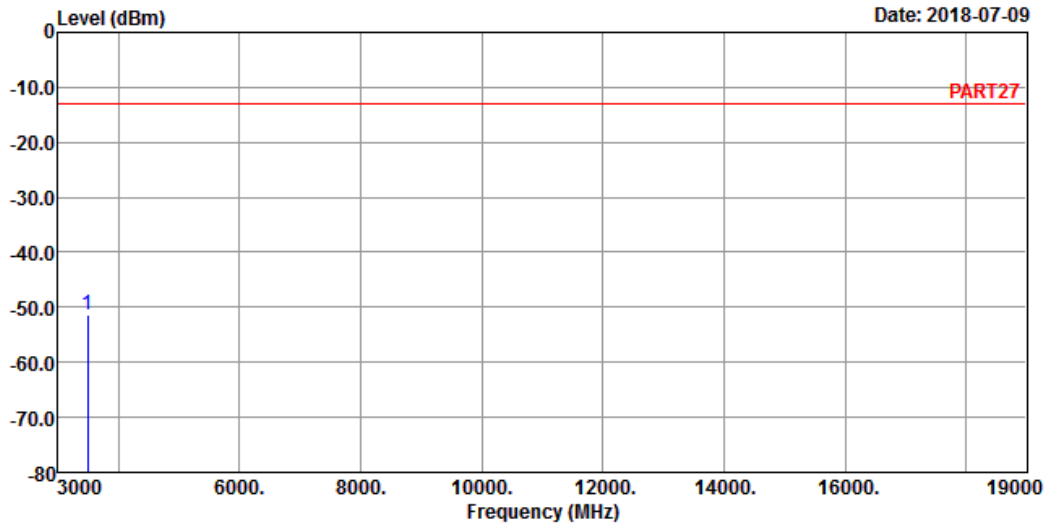
|              | Read   | Limit  | Over   |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3490.00 | -50.41 | -42.76 | -13.00 | -37.41 | -7.65  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_20M\_M-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3490.00 | -51.23 | -43.58     | -13.00     | -38.23     | -7.65  | Peak   |

High Channel

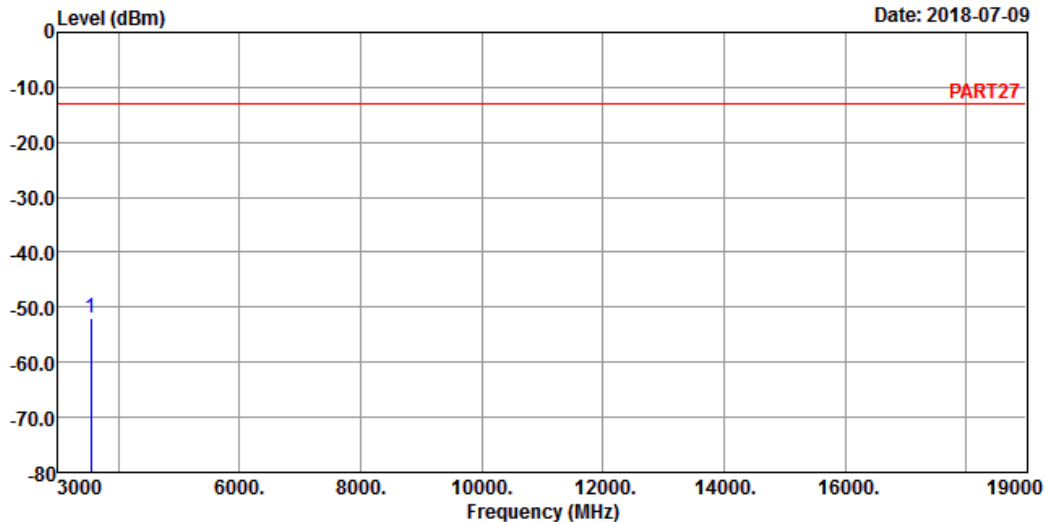


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2018-07-09



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : Cat-M1 Band 66 QPSK\_20M\_H-CH Link  
 Tested by: Jisyong Wang

|      | Read  | Limit | Over |       |        |
|------|-------|-------|------|-------|--------|
| Freq | Level | Level | Line | Limit | Factor |
| MHz  | dBm   | dBm   | dBm  | dB    | dB     |

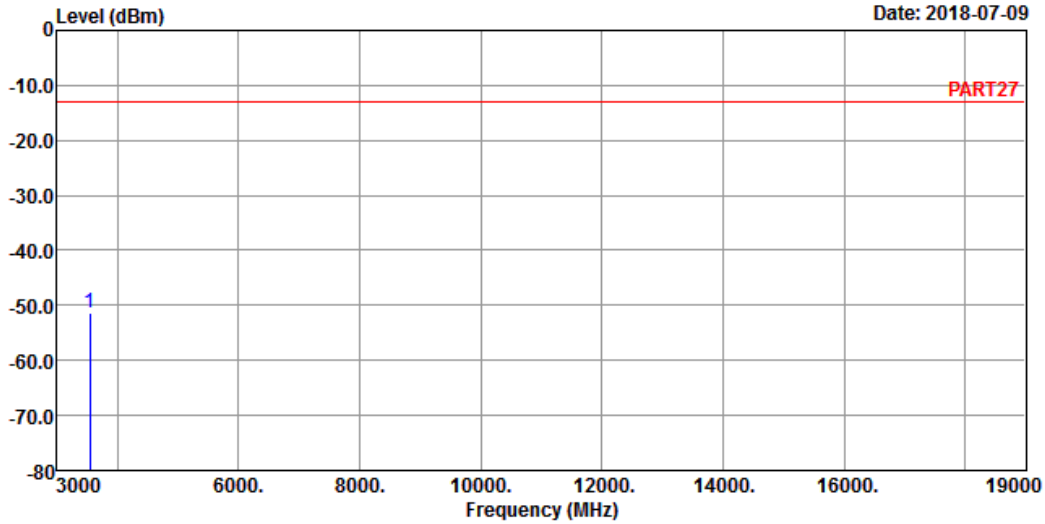
1 pp 3540.00 -51.99 -44.77 -13.00 -38.99 -7.22 Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : Cat-M1 Band 66 QPSK\_20M\_H-CH Link  
 Tested by: Jisyong Wang

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3540.00 | -51.25 | -44.03     | -13.00     | -38.25     | -7.22  | Peak   |

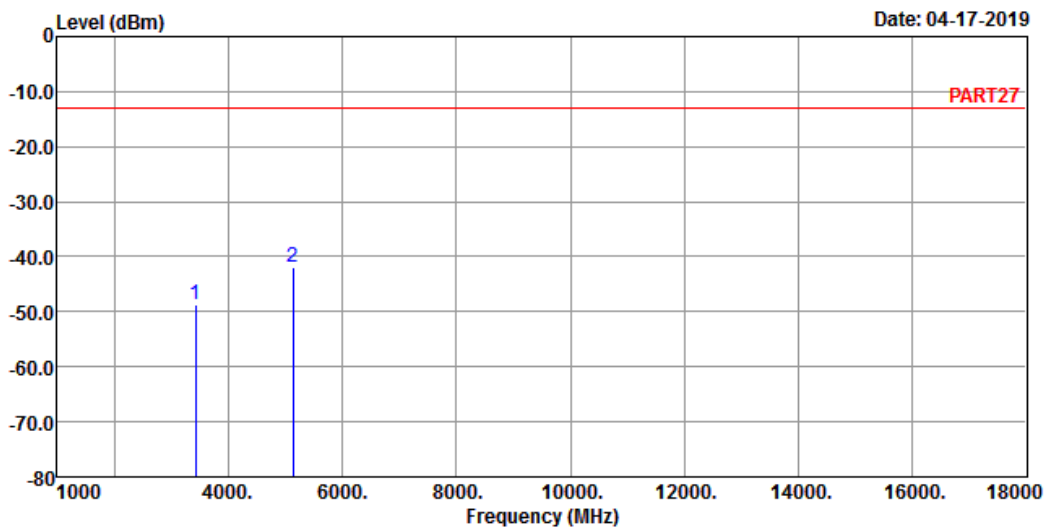
NB-IoT  
 LTE Band 4  
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_L-Ch  
 Tested by: Thomas Wei

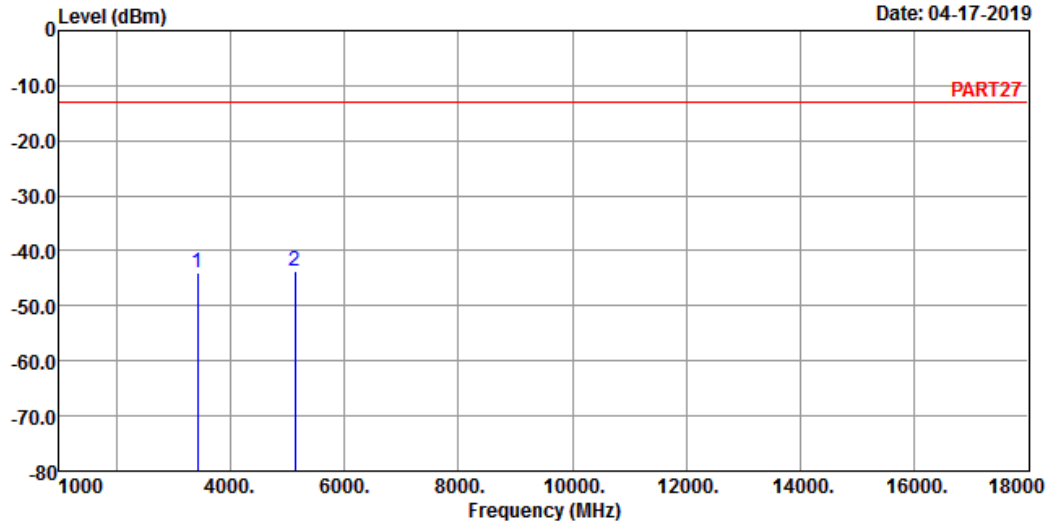
|   | Freq    | Level  | Read Level | Limit  | Line | Factor | Over Limit | Remark |
|---|---------|--------|------------|--------|------|--------|------------|--------|
|   | MHz     | dBm    | dBm        | dBm    |      | dB     | dB         |        |
| 1 | 3420.20 | -48.73 | -40.28     | -13.00 |      | -8.45  | -35.73     | Peak   |
| 2 | 5130.30 | -41.78 | -40.04     | -13.00 |      | -1.74  | -28.78     | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_L-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 3420.20 | -43.85 | -35.40     | -13.00 | -8.45       | -30.85     | Peak   |
| 2 pp | 5130.30 | -43.61 | -41.87     | -13.00 | -1.74       | -30.61     | Peak   |

Middle Channel

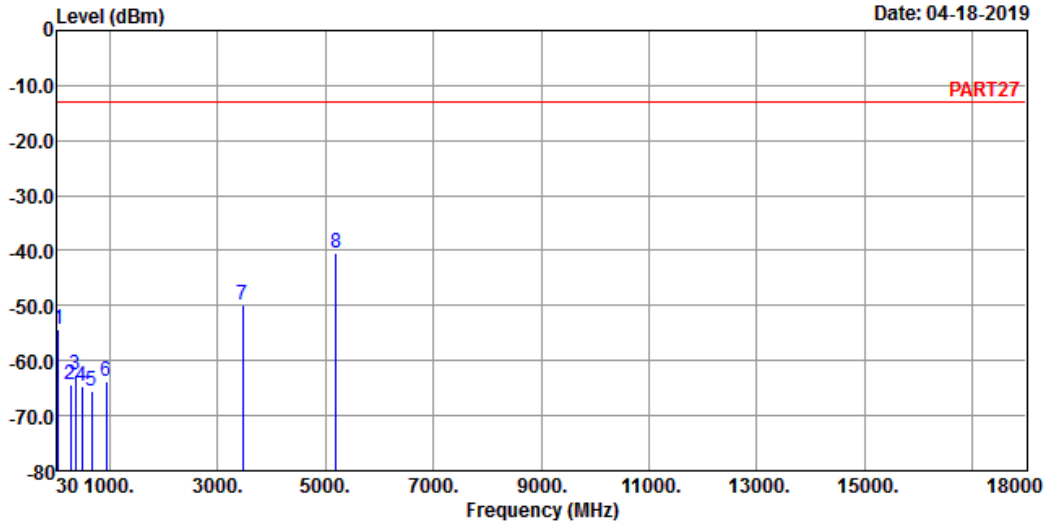


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 43.58   | -54.46 | -52.99     | -13.00 | -1.47       | -41.46     | Peak   |
| 2    | 282.20  | -64.36 | -57.71     | -13.00 | -6.65       | -51.36     | Peak   |
| 3    | 360.77  | -62.53 | -56.35     | -13.00 | -6.18       | -49.53     | Peak   |
| 4    | 481.05  | -64.53 | -59.56     | -13.00 | -4.97       | -51.53     | Peak   |
| 5    | 671.17  | -65.59 | -65.04     | -13.00 | -0.55       | -52.59     | Peak   |
| 6    | 933.07  | -63.71 | -65.10     | -13.00 | 1.39        | -50.71     | Peak   |
| 7    | 3465.00 | -49.81 | -41.93     | -13.00 | -7.88       | -36.81     | Peak   |
| 8 pp | 5205.00 | -40.43 | -38.25     | -13.00 | -2.18       | -27.43     | Peak   |

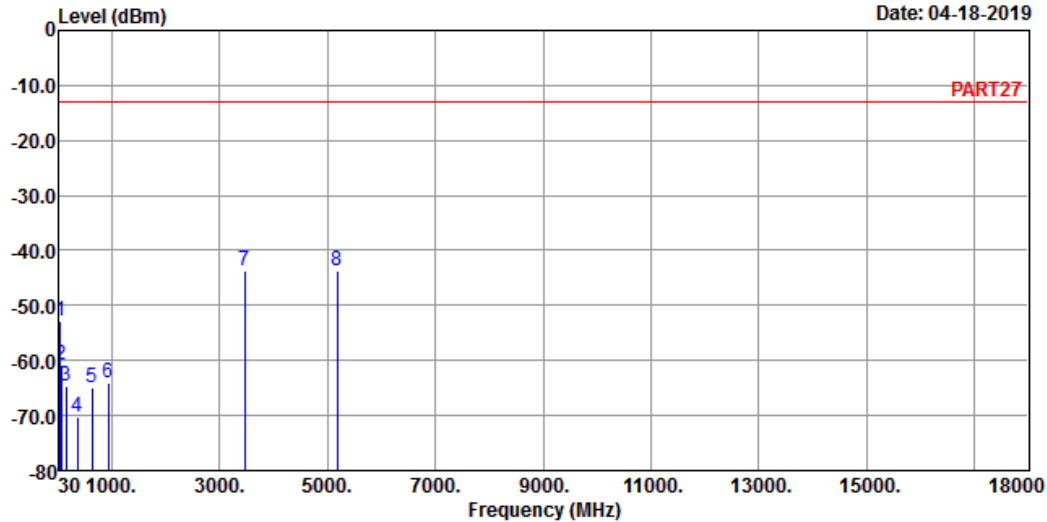


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over   | Limit Remark |
|------|---------|--------|------------|--------|-------------|--------|--------------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB     |              |
| 1    | 43.58   | -52.97 | -51.50     | -13.00 | -1.47       | -39.97 | Peak         |
| 2    | 68.80   | -60.95 | -52.63     | -13.00 | -8.32       | -47.95 | Peak         |
| 3    | 159.98  | -64.51 | -59.67     | -13.00 | -4.84       | -51.51 | Peak         |
| 4    | 360.77  | -70.14 | -63.96     | -13.00 | -6.18       | -57.14 | Peak         |
| 5    | 640.13  | -64.95 | -64.09     | -13.00 | -0.86       | -51.95 | Peak         |
| 6    | 935.98  | -64.10 | -65.56     | -13.00 | 1.46        | -51.10 | Peak         |
| 7 pp | 3465.00 | -43.55 | -35.67     | -13.00 | -7.88       | -30.55 | Peak         |
| 8    | 5190.00 | -43.84 | -41.77     | -13.00 | -2.07       | -30.84 | Peak         |



# High Channel

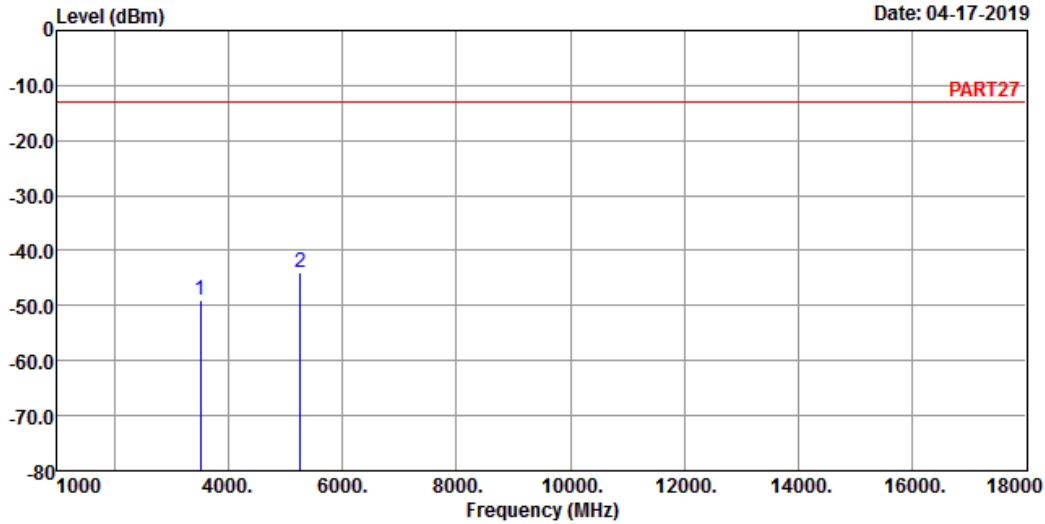


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

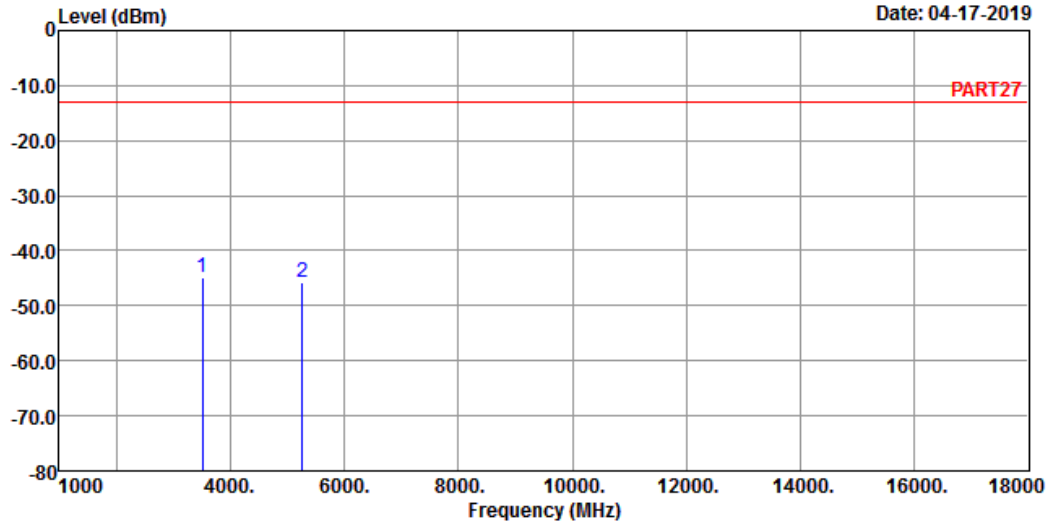
|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 3509.80 | -49.11 | -41.66     | -13.00 | -7.45       | -36.11     | Peak   |
| 2 pp | 5264.70 | -43.89 | -41.37     | -13.00 | -2.52       | -30.89     | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 4 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 3509.80 | -44.95 | -37.50     | -13.00 | -7.45       | -31.95     | Peak   |
| 2    | 5264.70 | -45.66 | -43.14     | -13.00 | -2.52       | -32.66     | Peak   |

LTE Band 12  
Low Channel

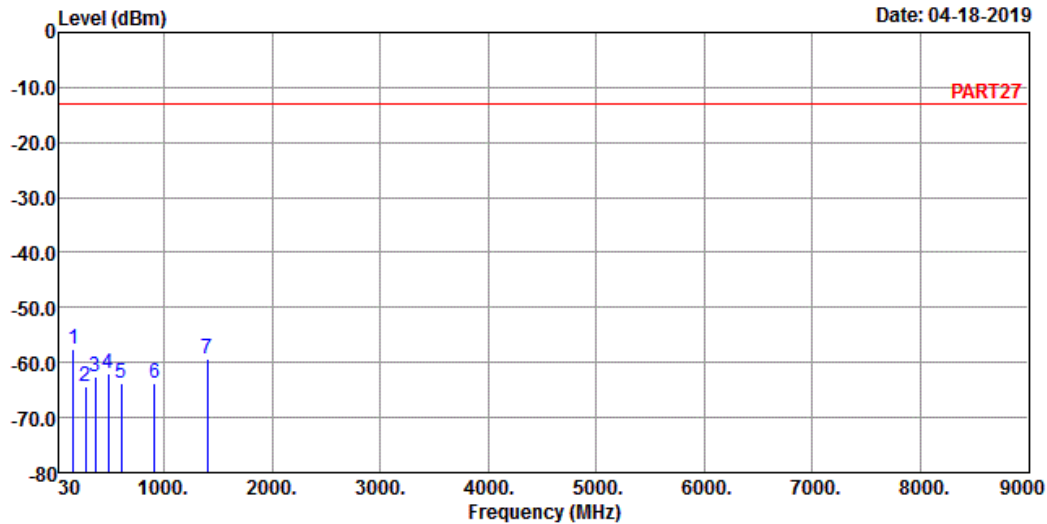


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : NB-IOT Band 12 Stand-alone\_Link\_L-Ch  
Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 161.92  | -57.55 | -52.57     | -13.00 | -4.98       | -44.55     | Peak   |
| 2    | 273.47  | -64.31 | -57.84     | -13.00 | -6.47       | -51.31     | Peak   |
| 3    | 360.77  | -62.51 | -56.33     | -13.00 | -6.18       | -49.51     | Peak   |
| 4    | 480.08  | -62.12 | -57.13     | -13.00 | -4.99       | -49.12     | Peak   |
| 5    | 601.33  | -63.91 | -63.15     | -13.00 | -0.76       | -50.91     | Peak   |
| 6    | 908.82  | -63.79 | -64.58     | -13.00 | 0.79        | -50.79     | Peak   |
| 7    | 1398.20 | -59.21 | -47.36     | -13.00 | -11.85      | -46.21     | Peak   |

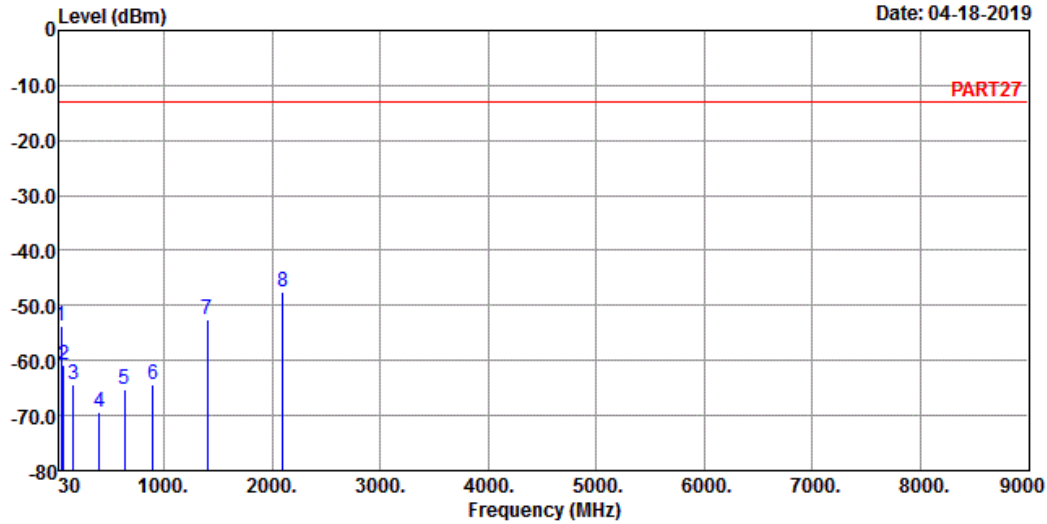


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 12 Stand-alone\_Link\_L-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 43.58   | -53.64 | -52.17     | -13.00 | -1.47       | -40.64     | Peak   |
| 2    | 68.80   | -60.86 | -52.54     | -13.00 | -8.32       | -47.86     | Peak   |
| 3    | 159.98  | -64.46 | -59.62     | -13.00 | -4.84       | -51.46     | Peak   |
| 4    | 397.63  | -69.52 | -63.56     | -13.00 | -5.96       | -56.52     | Peak   |
| 5    | 631.40  | -65.22 | -64.38     | -13.00 | -0.84       | -52.22     | Peak   |
| 6    | 900.09  | -64.23 | -64.80     | -13.00 | 0.57        | -51.23     | Peak   |
| 7    | 1398.20 | -52.44 | -40.59     | -13.00 | -11.85      | -39.44     | Peak   |
| 8 pp | 2097.30 | -47.60 | -37.35     | -13.00 | -10.25      | -34.60     | Peak   |

Middle Channel

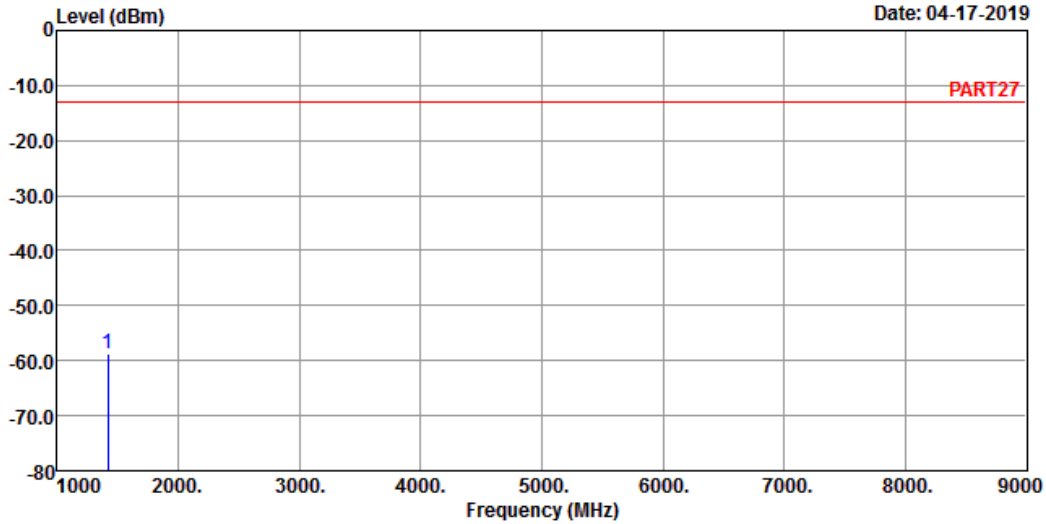


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 12 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

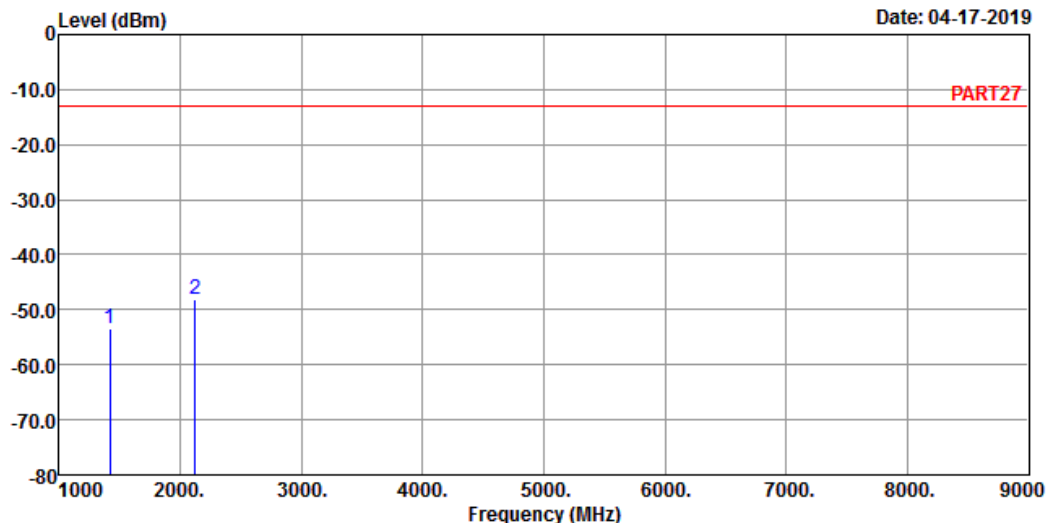
|              | Read   | Limit  | Over   |        |              |
|--------------|--------|--------|--------|--------|--------------|
| Freq         | Level  | Level  | Line   | Factor | Limit Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB           |
| 1 pp 1415.00 | -58.76 | -46.68 | -13.00 | -12.08 | -45.76 Peak  |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 12 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|   | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|---|---------|--------|------------|--------|-------------|------------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 | 1415.00 | -53.38 | -41.30     | -13.00 | -12.08      | -40.38     | Peak   |
| 2 | 2122.50 | -48.26 | -38.39     | -13.00 | -9.87       | -35.26     | Peak   |

# High Channel

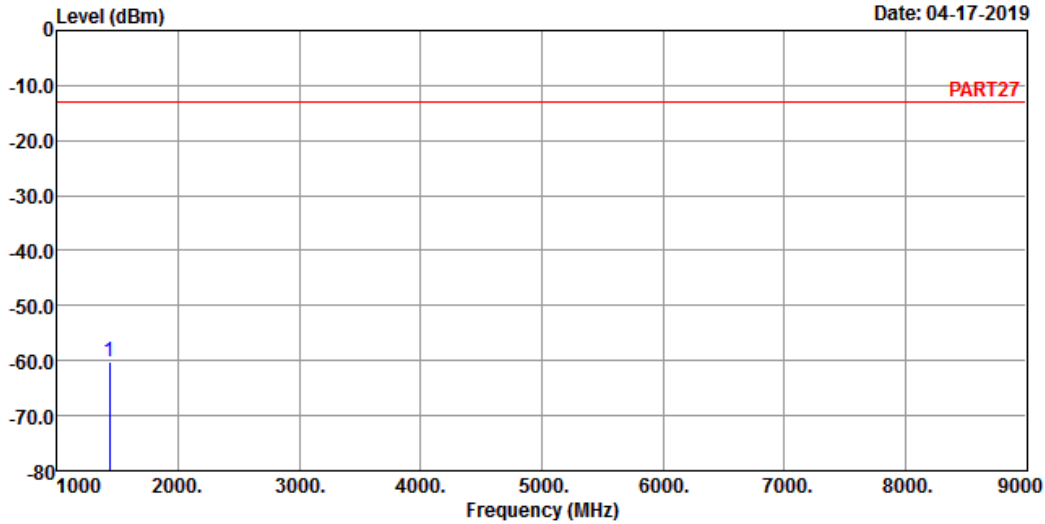


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 12 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

| Freq | Level | Read Level | Limit | Line Factor | Over Limit | Remark |
|------|-------|------------|-------|-------------|------------|--------|
| MHz  | dBm   | dBm        | dBm   | dB          | dB         |        |

1 pp 1431.80 -60.14 -47.83 -13.00 -12.31 -47.14 Peak

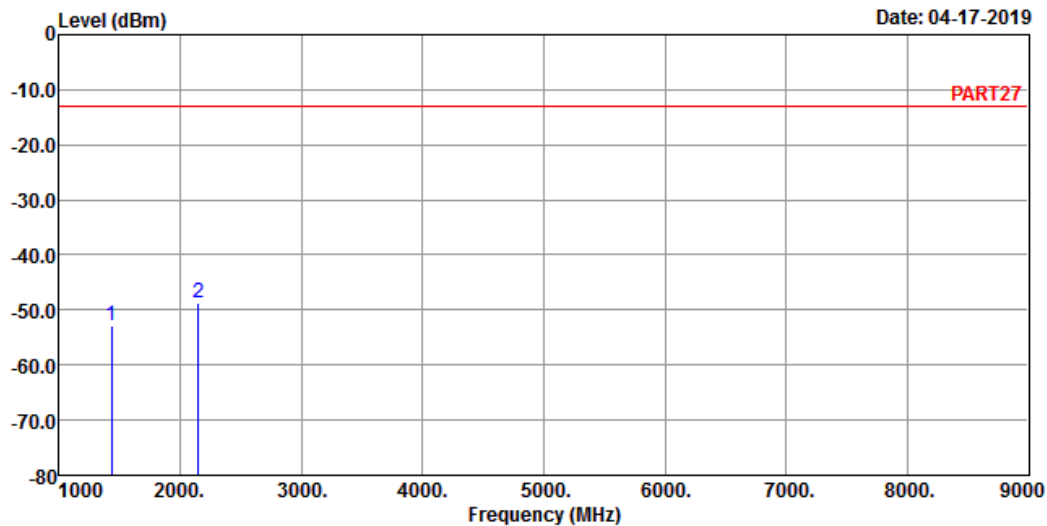


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 12 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 1431.80 | -52.88 | -40.57     | -13.00 | -12.31      | -39.88     | Peak   |
| 2 pp | 2147.70 | -48.79 | -39.32     | -13.00 | -9.47       | -35.79     | Peak   |



LTE Band 13  
Low Channel

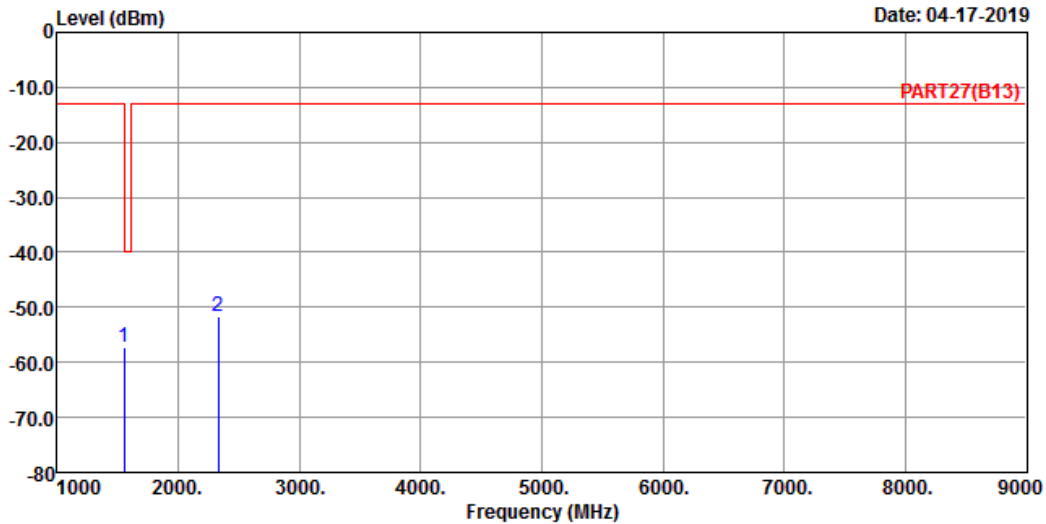


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5  
Condition: PART27(B13) HORIZONTAL  
Remak : NB-IOT Band 13 Stand-alone\_Link\_L-Ch  
Tested by: Thomas Wei

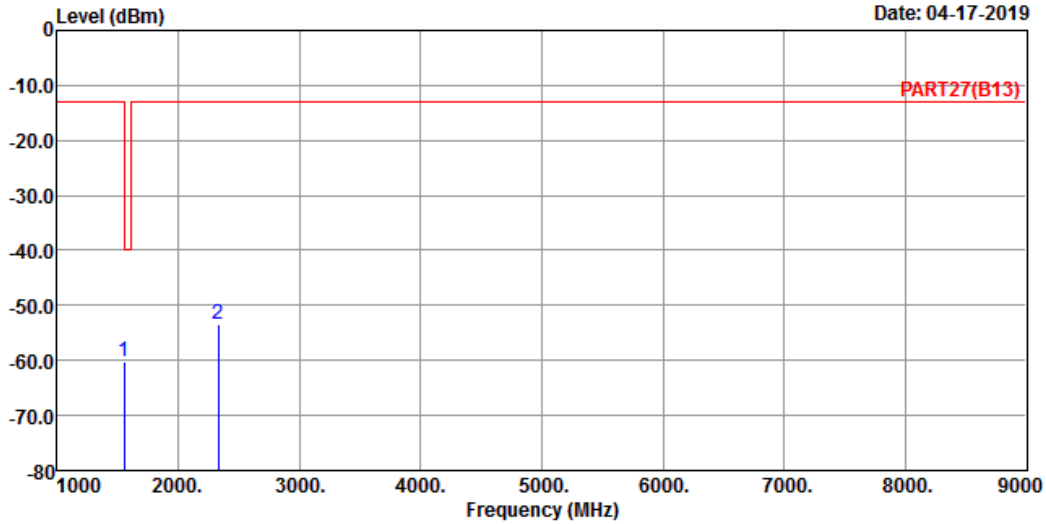
|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 1554.20 | -57.32 | -44.01     | -13.00 | -13.31      | -44.32     | Peak   |
| 2 pp | 2331.30 | -51.68 | -42.36     | -13.00 | -9.32       | -38.68     | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : NB-IOT Band 13 Stand-alone\_Link\_L-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 1554.20 | -60.35 | -47.04     | -13.00 | -13.31      | -47.35     | Peak   |
| 2 pp | 2331.30 | -53.55 | -44.23     | -13.00 | -9.32       | -40.55     | Peak   |

Middle Channel

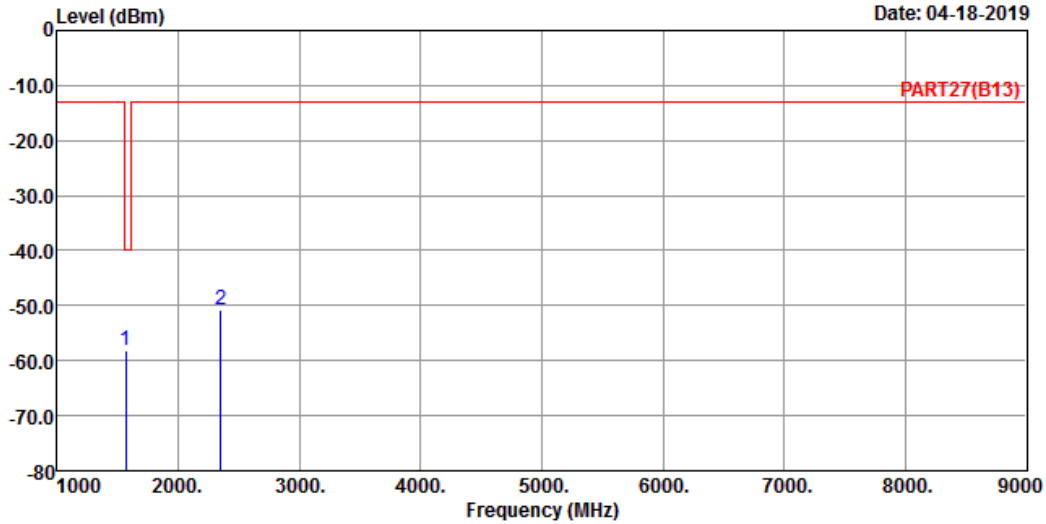


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : NB-IOT Band 13 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|   | Freq       | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|---|------------|--------|------------|--------|-------------|------------|--------|
|   | MHz        | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 | pp 1564.00 | -58.19 | -44.85     | -40.00 | -13.34      | -18.19     | Peak   |
| 2 | 2346.00    | -50.77 | -41.33     | -13.00 | -9.44       | -37.77     | Peak   |

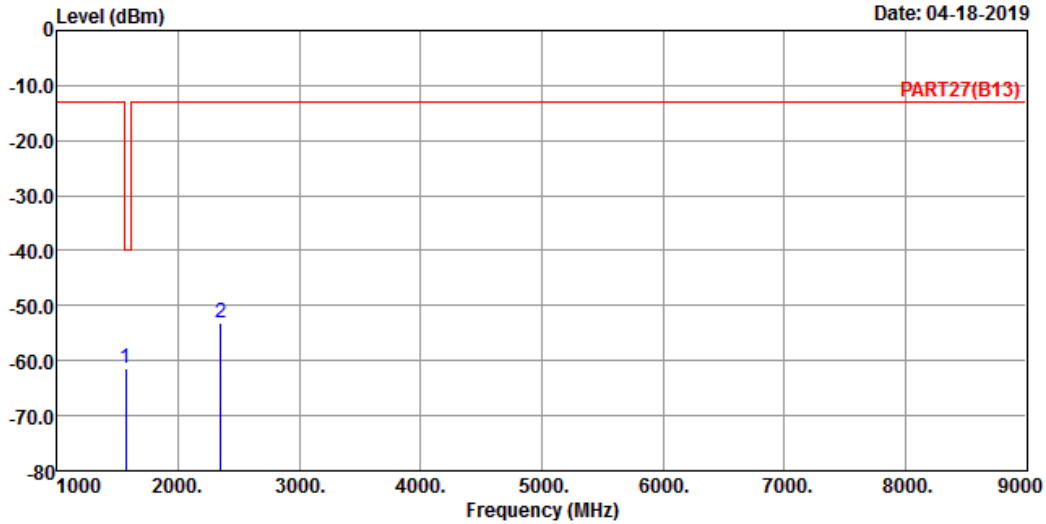


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : NB-IOT Band 13 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 1564.00 | -61.50 | -48.16     | -40.00 | -13.34      | -21.50     | Peak   |
| 2    | 2346.00 | -53.07 | -43.63     | -13.00 | -9.44       | -40.07     | Peak   |

# High Channel

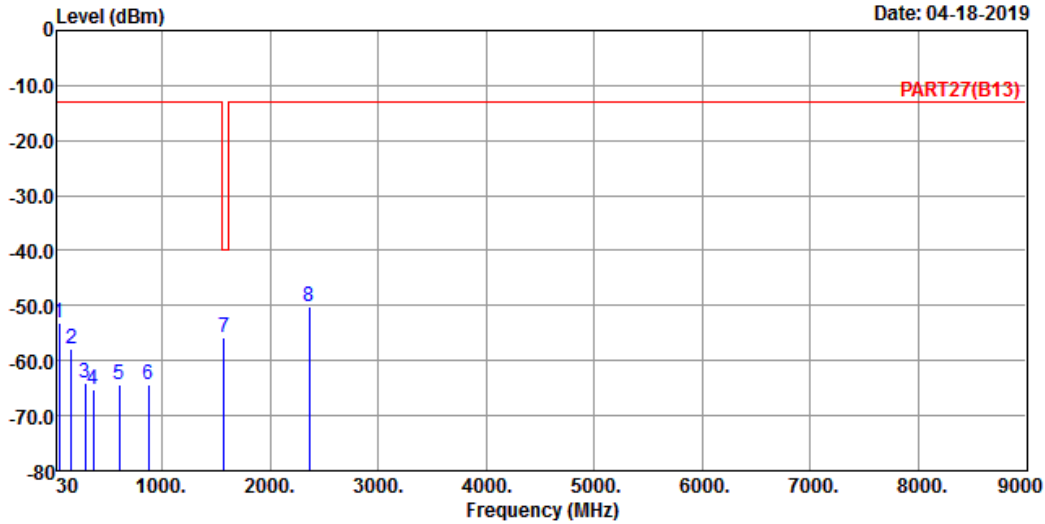


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27(B13) HORIZONTAL  
 Remak : NB-IOT Band 13 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 43.58   | -53.24 | -51.77     | -13.00 | -1.47       | -40.24     | Peak   |
| 2    | 160.95  | -57.80 | -52.89     | -13.00 | -4.91       | -44.80     | Peak   |
| 3    | 286.08  | -64.18 | -57.45     | -13.00 | -6.73       | -51.18     | Peak   |
| 4    | 360.77  | -65.16 | -58.98     | -13.00 | -6.18       | -52.16     | Peak   |
| 5    | 601.33  | -64.40 | -63.64     | -13.00 | -0.76       | -51.40     | Peak   |
| 6    | 875.84  | -64.33 | -64.77     | -13.00 | 0.44        | -51.33     | Peak   |
| 7 pp | 1573.80 | -55.91 | -42.55     | -40.00 | -13.36      | -15.91     | Peak   |
| 8    | 2360.70 | -50.16 | -40.59     | -13.00 | -9.57       | -37.16     | Peak   |

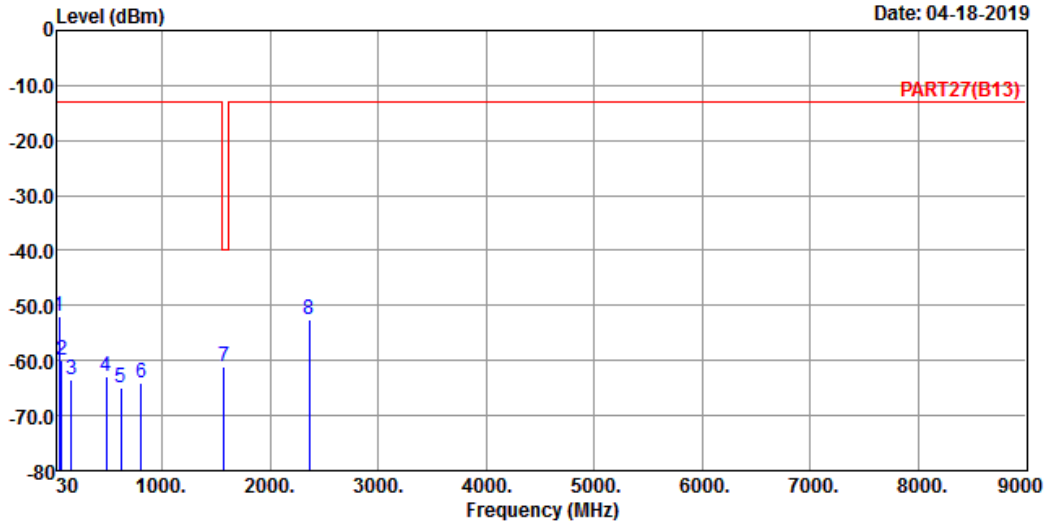


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27(B13) VERTICAL  
 Remak : NB-IOT Band 13 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 44.55   | -52.00 | -50.01     | -13.00 | -1.99       | -39.00     | Peak   |
| 2    | 68.80   | -59.95 | -51.63     | -13.00 | -8.32       | -46.95     | Peak   |
| 3    | 159.98  | -63.59 | -58.75     | -13.00 | -4.84       | -50.59     | Peak   |
| 4    | 481.05  | -62.97 | -58.00     | -13.00 | -4.97       | -49.97     | Peak   |
| 5    | 618.79  | -64.94 | -64.14     | -13.00 | -0.80       | -51.94     | Peak   |
| 6    | 808.91  | -64.14 | -64.80     | -13.00 | 0.66        | -51.14     | Peak   |
| 7 pp | 1573.80 | -61.13 | -47.77     | -40.00 | -13.36      | -21.13     | Peak   |
| 8    | 2360.70 | -52.60 | -43.03     | -13.00 | -9.57       | -39.60     | Peak   |

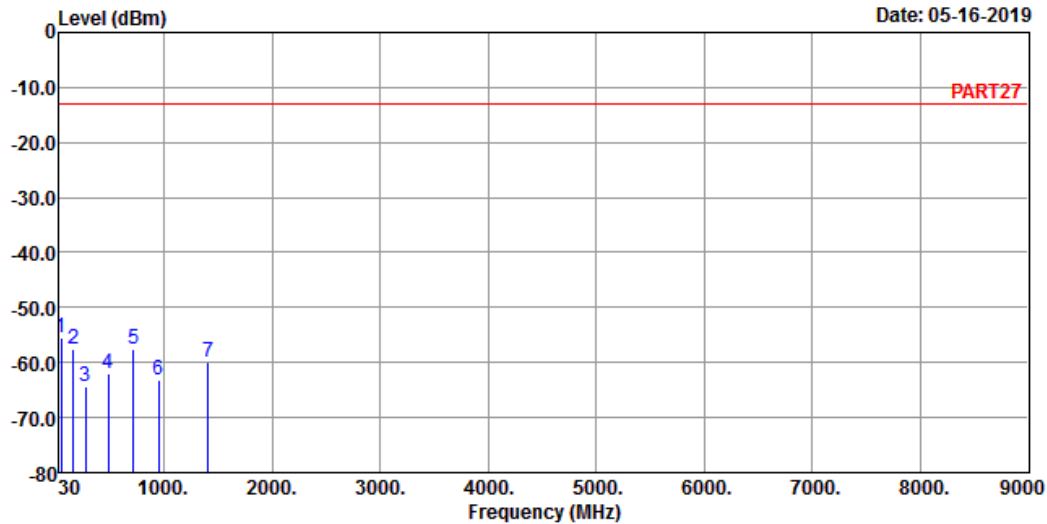
LTE Band 17  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : NB-IOT Band 17 Stand-alone\_Link\_L-Ch  
Tested by: Getaz Yang

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 43.58   | -55.49 | -54.02     | -13.00 | -1.47       | -42.49     | Peak   |
| 2    | 161.92  | -57.55 | -52.57     | -13.00 | -4.98       | -44.55     | Peak   |
| 3    | 273.47  | -64.31 | -57.84     | -13.00 | -6.47       | -51.31     | Peak   |
| 4    | 480.08  | -62.12 | -57.13     | -13.00 | -4.99       | -49.12     | Peak   |
| 5    | 716.76  | -57.70 | -57.93     | -13.00 | 0.23        | -44.70     | Peak   |
| 6    | 951.50  | -63.30 | -65.17     | -13.00 | 1.87        | -50.30     | Peak   |
| 7    | 1408.20 | -59.96 | -48.00     | -13.00 | -11.96      | -46.96     | Peak   |

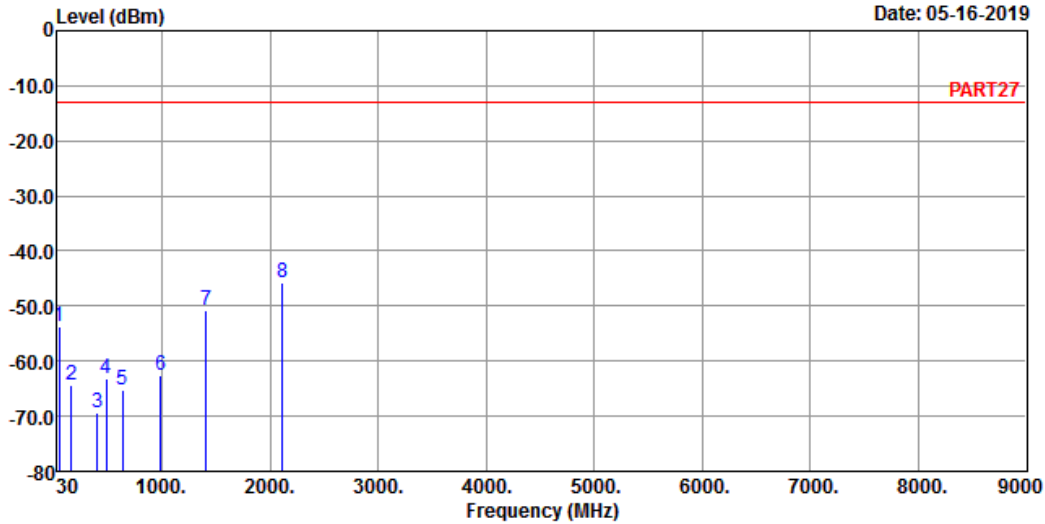


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 05-16-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 17 Stand-alone\_Link\_L-Ch  
 Tested by: Getaz Yang

|      | Freq    | Level  | Read Level | Limit Line | Over Factor | Over Limit | Remark |
|------|---------|--------|------------|------------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB          | dB         |        |
| 1    | 43.58   | -53.64 | -52.17     | -13.00     | -1.47       | -40.64     | Peak   |
| 2    | 159.98  | -64.46 | -59.62     | -13.00     | -4.84       | -51.46     | Peak   |
| 3    | 397.63  | -69.52 | -63.56     | -13.00     | -5.96       | -56.52     | Peak   |
| 4    | 481.05  | -63.28 | -58.31     | -13.00     | -4.97       | -50.28     | Peak   |
| 5    | 631.40  | -65.22 | -64.38     | -13.00     | -0.84       | -52.22     | Peak   |
| 6    | 987.39  | -62.46 | -65.59     | -13.00     | 3.13        | -49.46     | Peak   |
| 7    | 1408.20 | -50.88 | -38.92     | -13.00     | -11.96      | -37.88     | Peak   |
| 8 pp | 2112.30 | -45.86 | -35.90     | -13.00     | -9.96       | -32.86     | Peak   |



Middle Channel

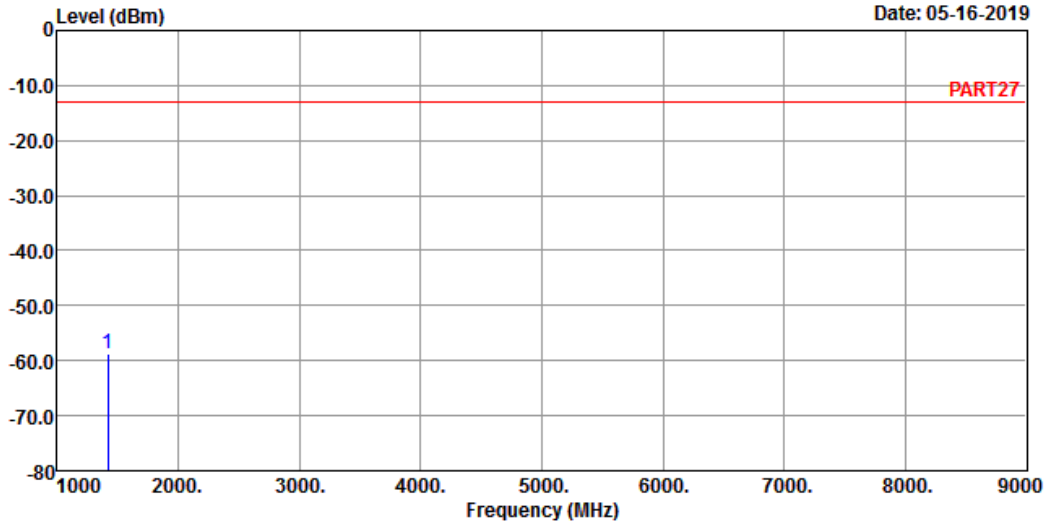


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 05-16-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 17 Stand-alone\_Link\_M-Ch  
 Tested by: Getaz Yang

| Freq | Level | Read Level | Limit | Line Factor | Over Limit | Remark |
|------|-------|------------|-------|-------------|------------|--------|
| MHz  | dBm   | dBm        | dBm   | dB          | dB         |        |

1 pp 1420.00 -58.77 -46.63 -13.00 -12.14 -45.77 Peak

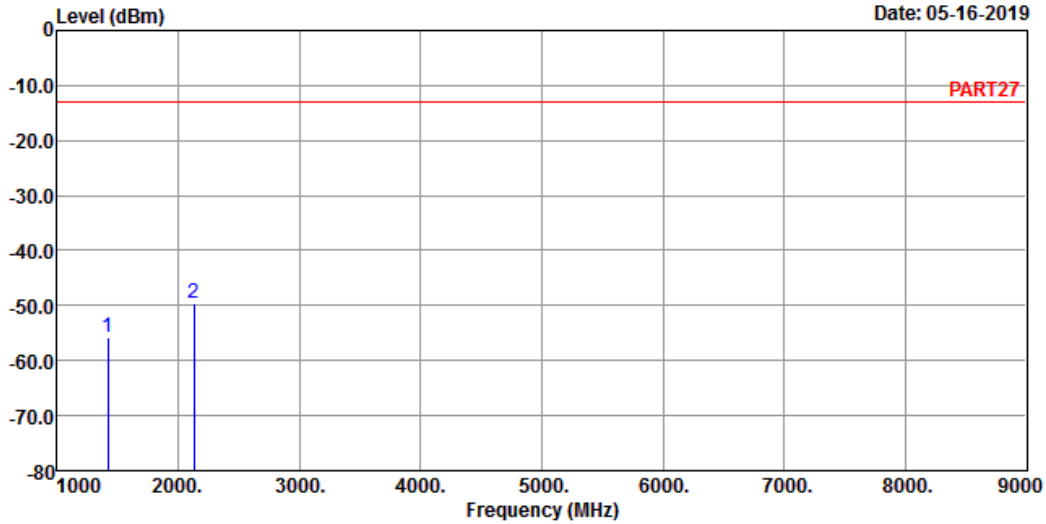


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 05-16-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 17 Stand-alone\_Link\_M-Ch  
 Tested by: Getaz Yang

|   | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|---|---------|--------|------------|--------|-------------|------------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 | 1420.00 | -55.91 | -43.77     | -13.00 | -12.14      | -42.91     | Peak   |
| 2 | 2130.00 | -49.62 | -39.85     | -13.00 | -9.77       | -36.62     | Peak   |

High Channel

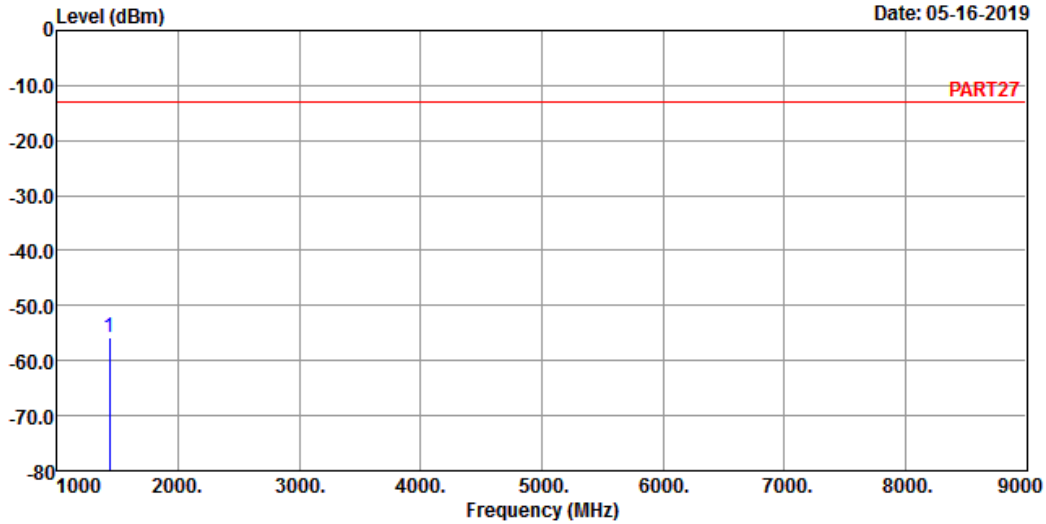


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 05-16-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 17 Stand-alone\_Link\_H-Ch  
 Tested by: Getaz Yang

| Freq | Level | Read Level | Limit | Line Factor | Over Limit | Remark |
|------|-------|------------|-------|-------------|------------|--------|
| MHz  | dBm   | dBm        | dBm   | dB          | dB         |        |

1 pp 1431.80 -55.84 -43.53 -13.00 -12.31 -42.84 Peak

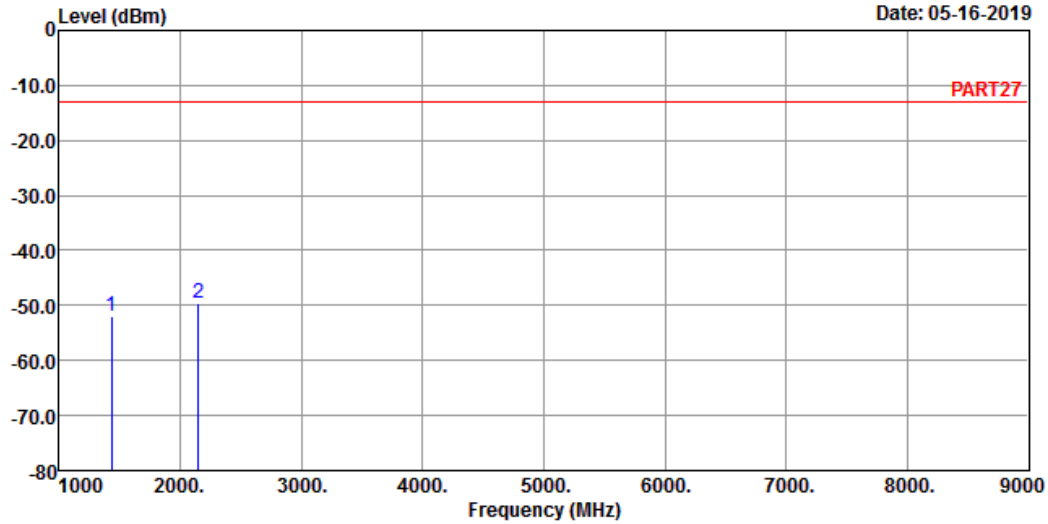


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 05-16-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 17 Stand-alone\_Link\_H-Ch  
 Tested by: Getaz Yang

|   | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|---|---------|--------|------------|--------|-------------|------------|--------|
|   | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 | 1431.80 | -51.88 | -39.57     | -13.00 | -12.31      | -38.88     | Peak   |
| 2 | 2147.70 | -49.51 | -40.04     | -13.00 | -9.47       | -36.51     | Peak   |

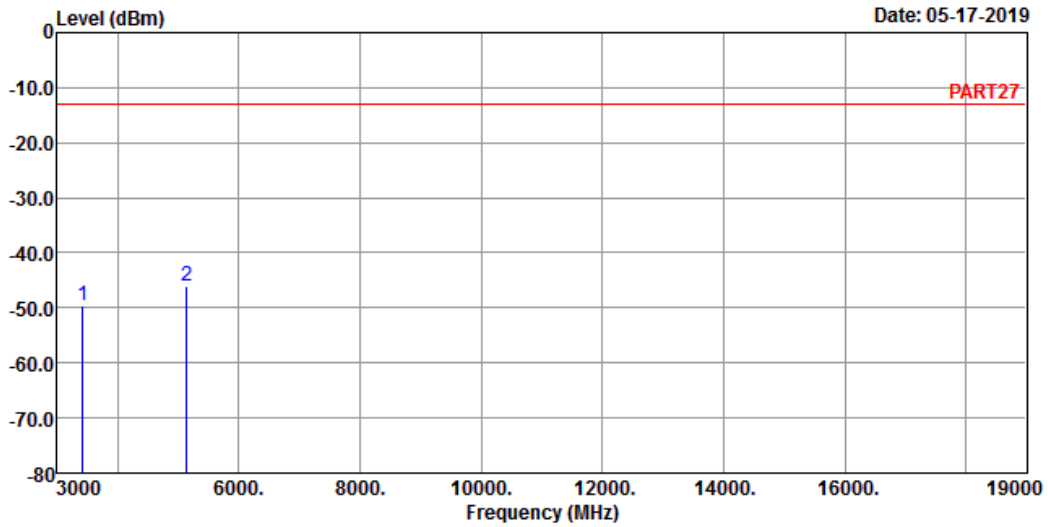
LTE Band 66:  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART27 HORIZONTAL  
Remak : NB-IOT Band 66 Stand-alone\_Link\_L-Ch  
Tested by: Thomas Wei

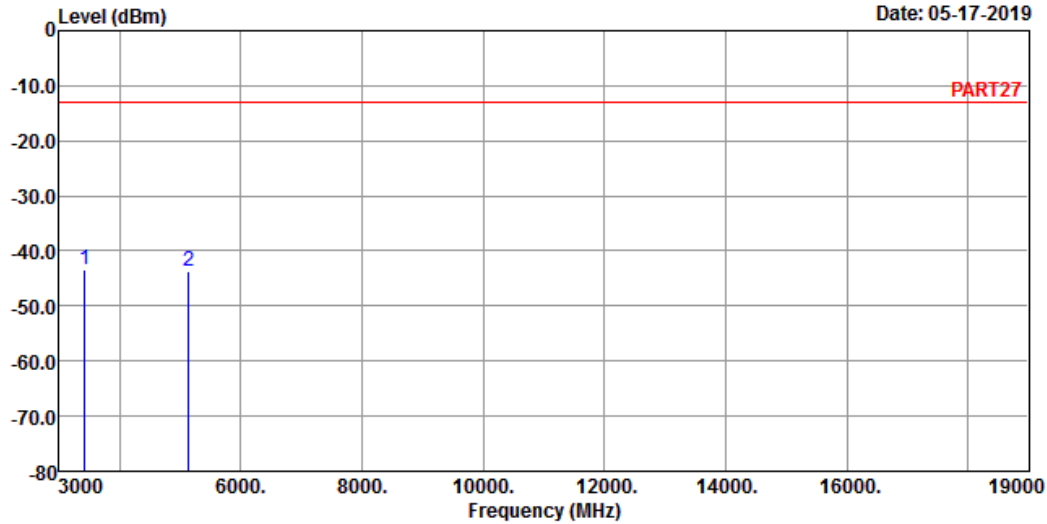
|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 3420.20 | -49.58 | -41.13     | -13.00 | -8.45       | -36.58     | Peak   |
| 2 pp | 5130.30 | -46.01 | -44.27     | -13.00 | -1.74       | -33.01     | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 66 Stand-alone\_Link\_L-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 3420.20 | -43.37 | -34.92     | -13.00 | -8.45       | -30.37     | Peak   |
| 2    | 5130.30 | -43.59 | -41.85     | -13.00 | -1.74       | -30.59     | Peak   |

Middle Channel

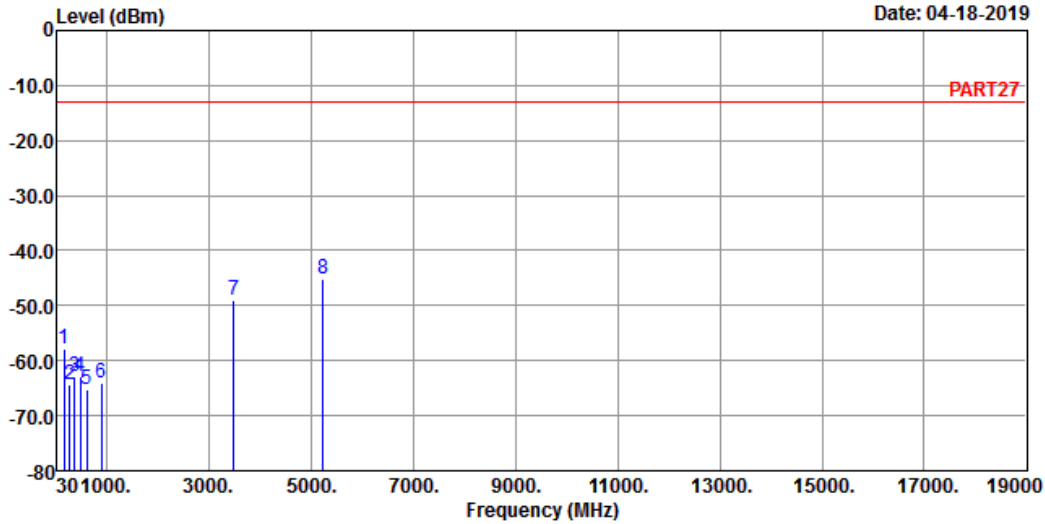


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 66 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 161.92  | -57.88 | -52.90     | -13.00 | -4.98       | -44.88     | Peak   |
| 2    | 276.38  | -64.44 | -57.91     | -13.00 | -6.53       | -51.44     | Peak   |
| 3    | 360.77  | -62.87 | -56.69     | -13.00 | -6.18       | -49.87     | Peak   |
| 4    | 480.08  | -62.92 | -57.93     | -13.00 | -4.99       | -49.92     | Peak   |
| 5    | 607.15  | -65.19 | -64.42     | -13.00 | -0.77       | -52.19     | Peak   |
| 6    | 890.39  | -63.93 | -64.45     | -13.00 | 0.52        | -50.93     | Peak   |
| 7    | 3490.00 | -49.13 | -41.48     | -13.00 | -7.65       | -36.13     | Peak   |
| 8 pp | 5235.00 | -45.25 | -42.84     | -13.00 | -2.41       | -32.25     | Peak   |

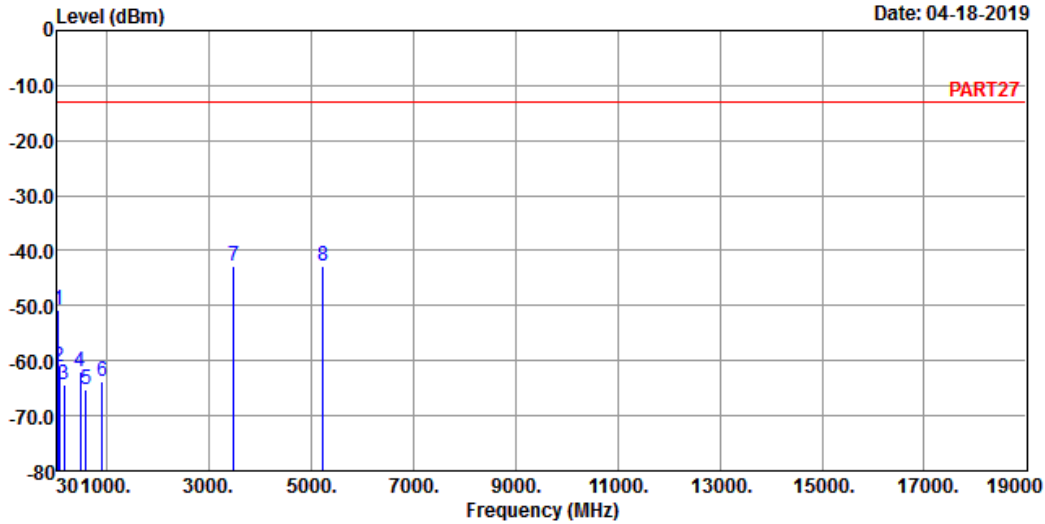


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 66 Stand-alone\_Link\_M-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit Line | Over Factor | Over Limit | Remark |
|------|---------|--------|------------|------------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB          | dB         |        |
| 1    | 43.58   | -50.66 | -49.19     | -13.00     | -1.47       | -37.66     | Peak   |
| 2    | 66.86   | -61.14 | -52.96     | -13.00     | -8.18       | -48.14     | Peak   |
| 3    | 160.95  | -64.28 | -59.37     | -13.00     | -4.91       | -51.28     | Peak   |
| 4    | 480.08  | -62.10 | -57.11     | -13.00     | -4.99       | -49.10     | Peak   |
| 5    | 596.48  | -65.24 | -64.33     | -13.00     | -0.91       | -52.24     | Peak   |
| 6    | 902.03  | -63.81 | -64.43     | -13.00     | 0.62        | -50.81     | Peak   |
| 7 pp | 3490.00 | -42.69 | -35.04     | -13.00     | -7.65       | -29.69     | Peak   |
| 8    | 5235.00 | -42.80 | -40.39     | -13.00     | -2.41       | -29.80     | Peak   |



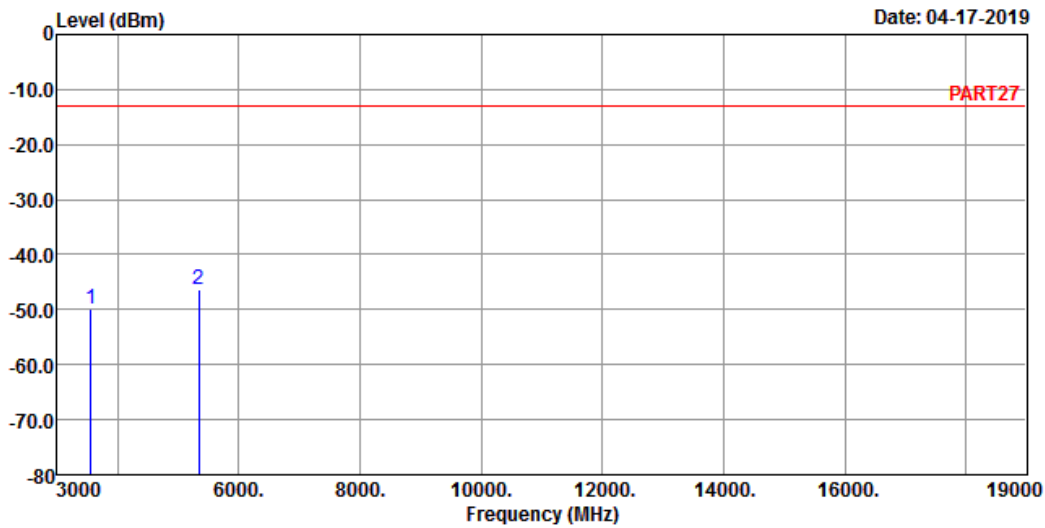
# High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART27 HORIZONTAL  
 Remak : NB-IOT Band 66 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

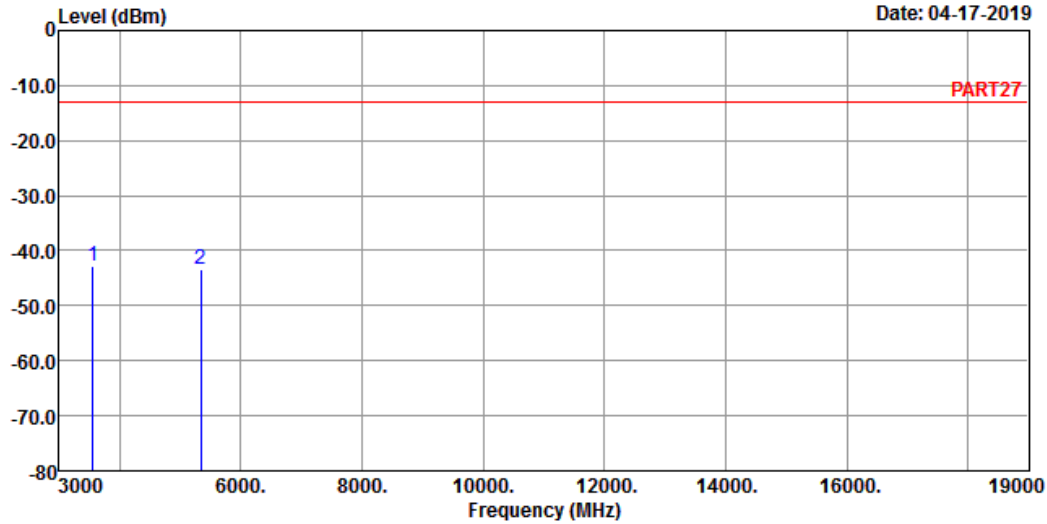
|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1    | 3559.80 | -49.79 | -42.72     | -13.00 | -7.07       | -36.79     | Peak   |
| 2 pp | 5339.70 | -46.28 | -43.65     | -13.00 | -2.63       | -33.28     | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART27 VERTICAL  
 Remak : NB-IOT Band 66 Stand-alone\_Link\_H-Ch  
 Tested by: Thomas Wei

|      | Freq    | Level  | Read Level | Limit  | Line Factor | Over Limit | Remark |
|------|---------|--------|------------|--------|-------------|------------|--------|
|      | MHz     | dBm    | dBm        | dBm    | dB          | dB         |        |
| 1 pp | 3559.80 | -42.81 | -35.74     | -13.00 | -7.07       | -29.81     | Peak   |
| 2    | 5339.70 | -43.36 | -40.73     | -13.00 | -2.63       | -30.36     | Peak   |

## 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:

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Fax: 886-2-26051924

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**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.

--- END ---