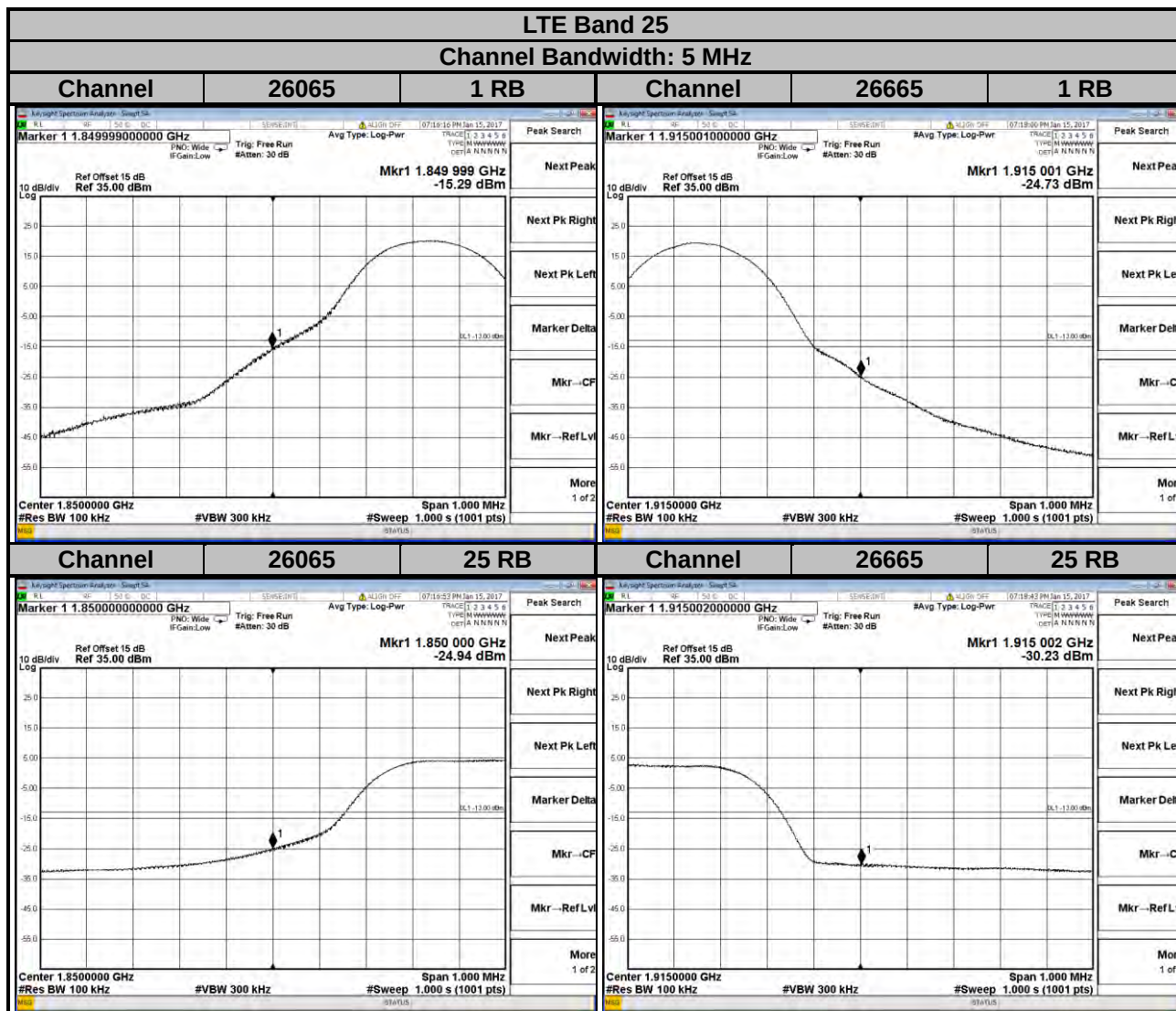
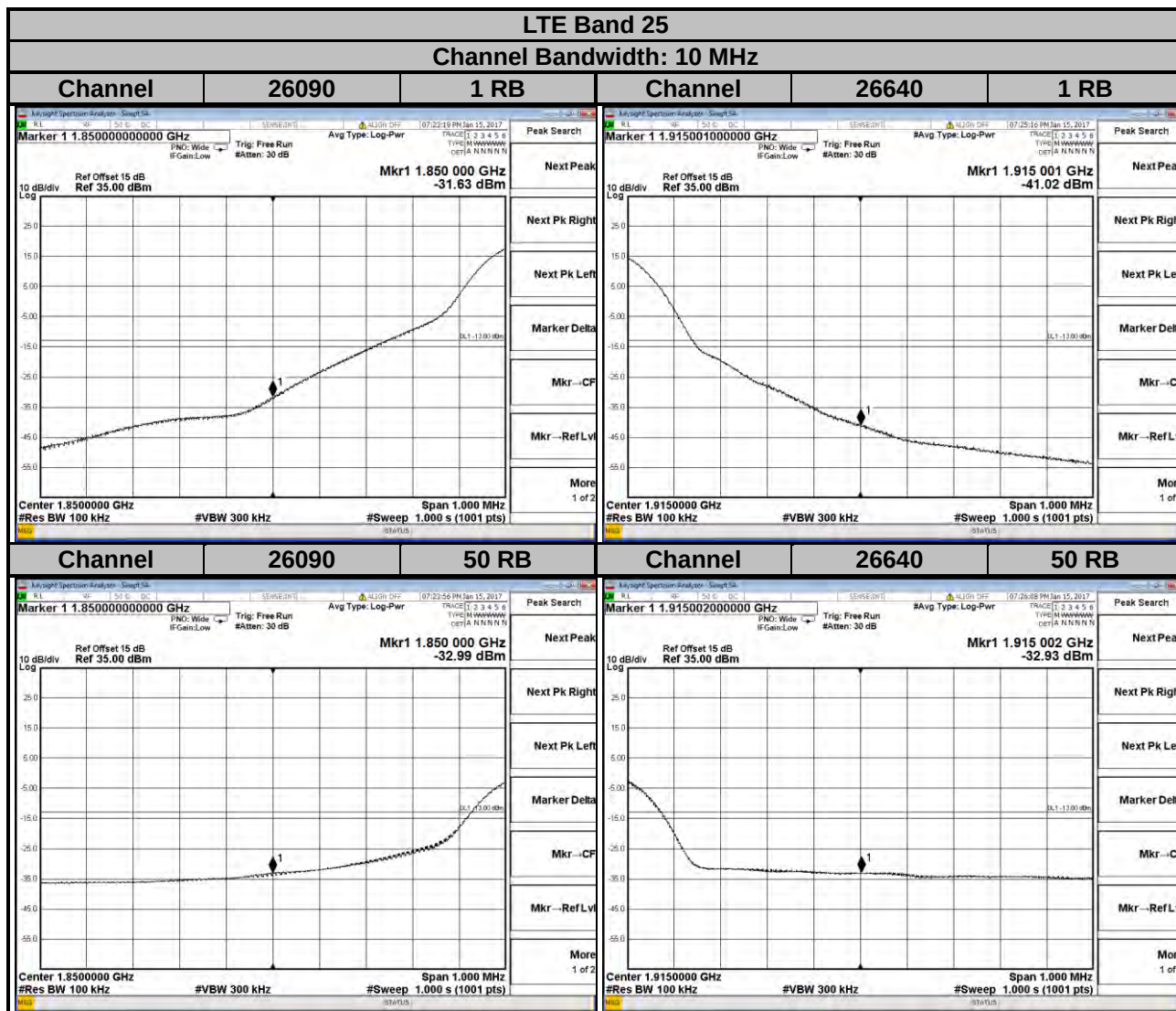
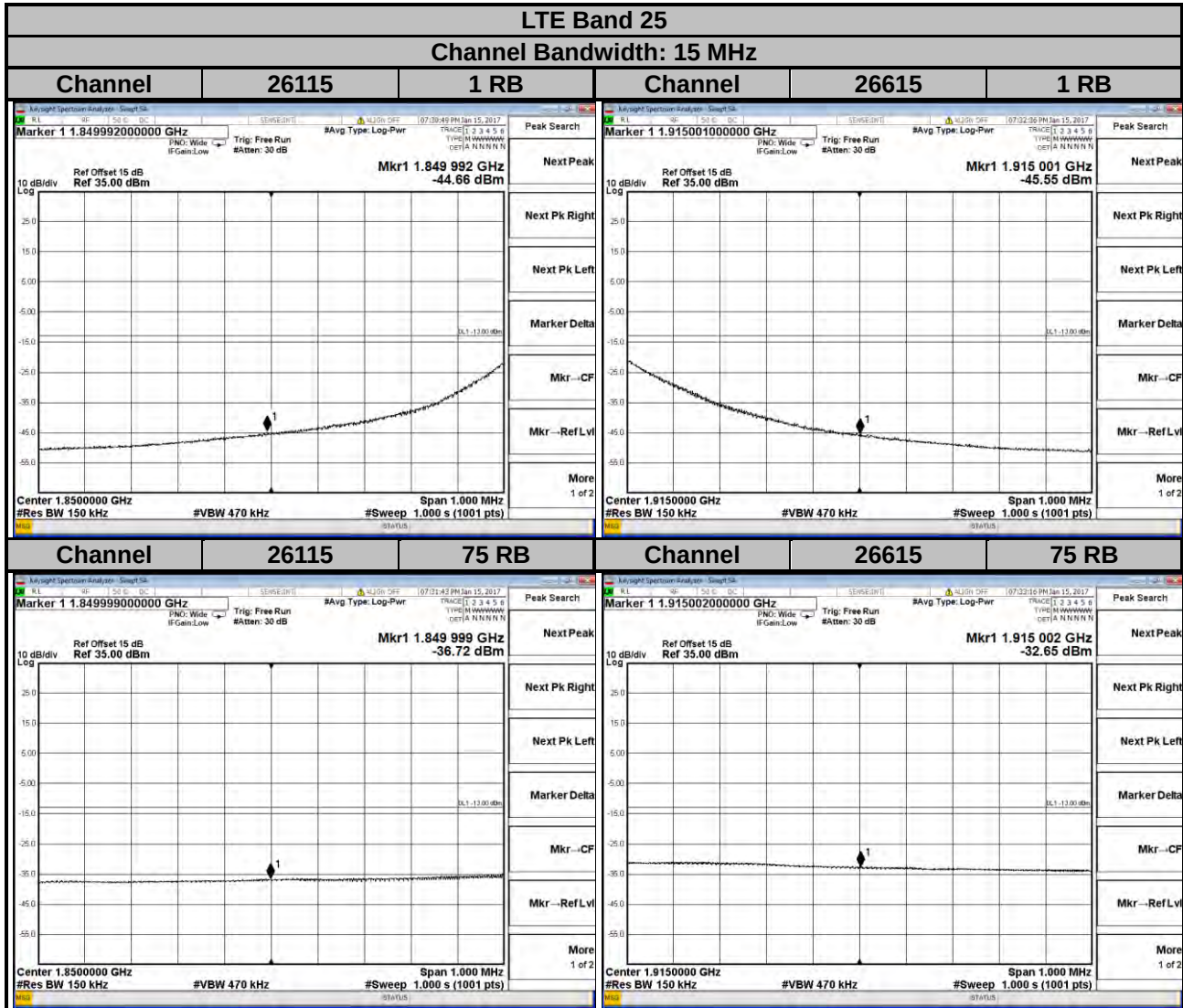
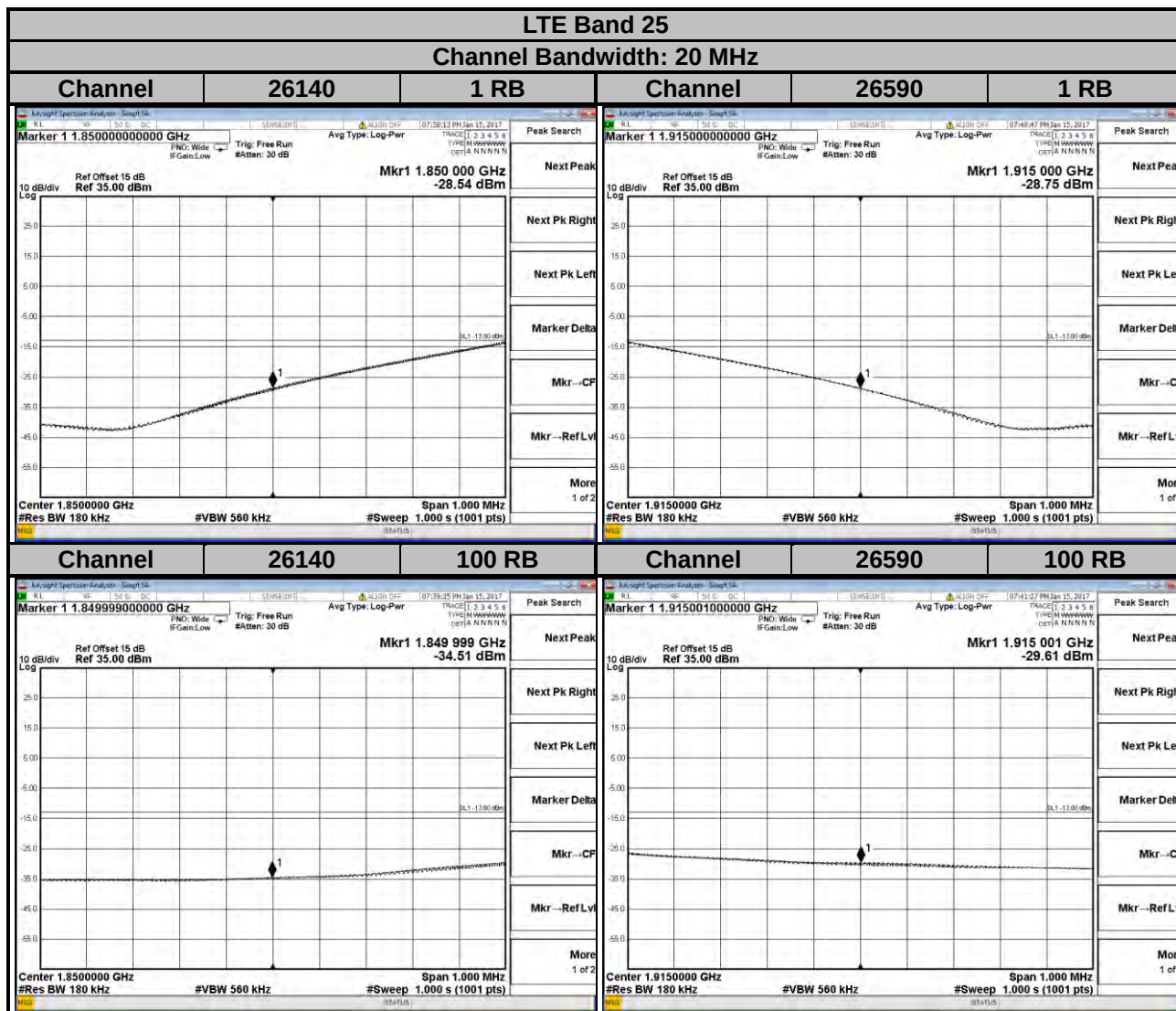










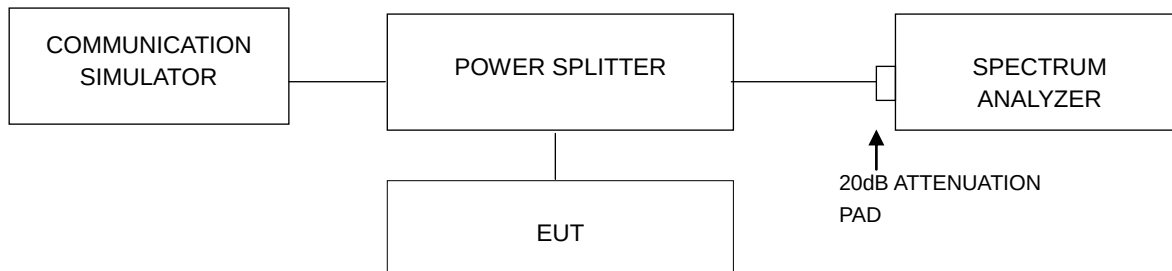


## 4.5 Peak to Average Ratio

### 4.5.1 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.

### 4.5.2 Test Setup

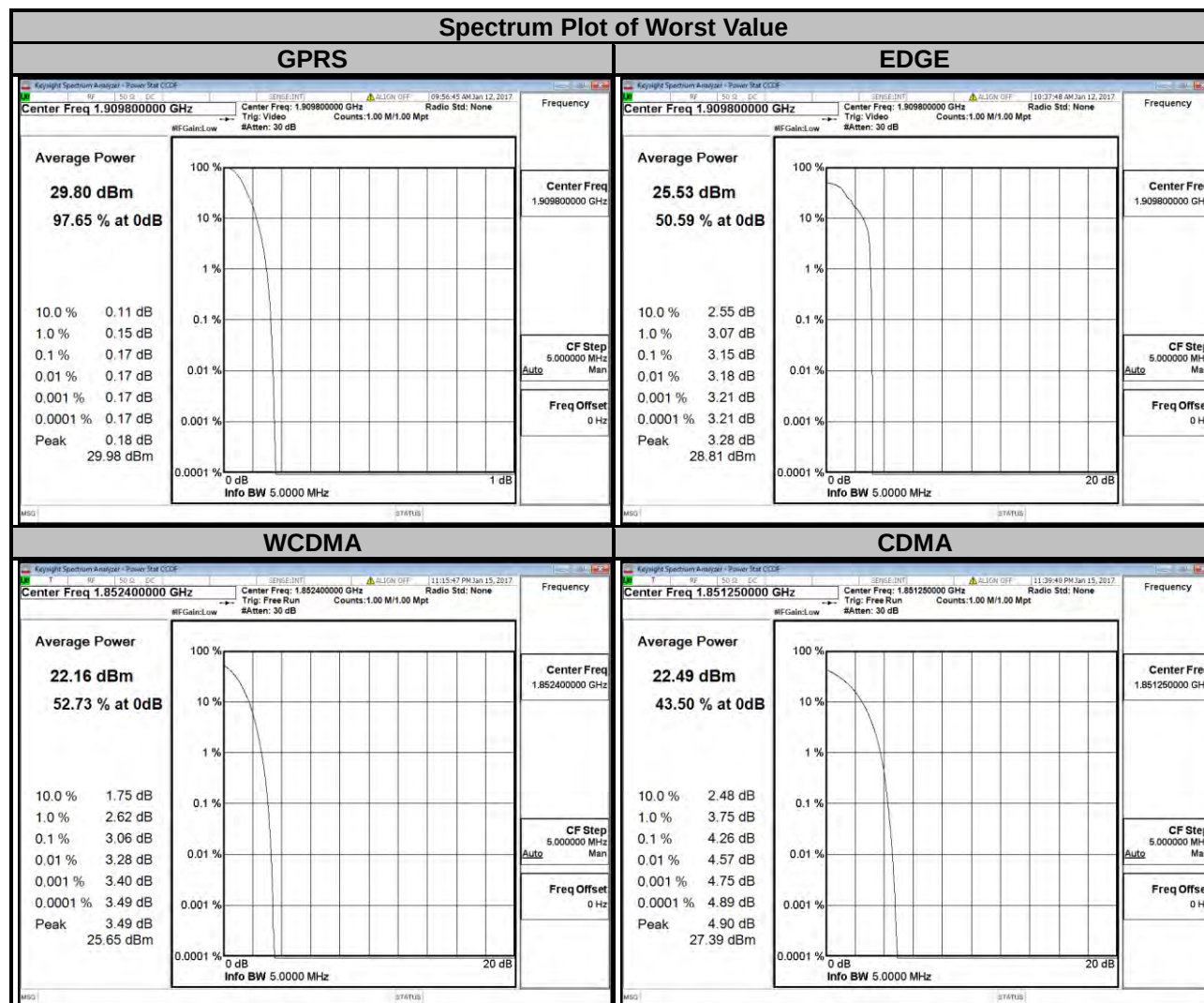


### 4.5.3 Test Procedures

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 %.

#### 4.5.4 Test Results

| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |      | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |
|---------|-----------------|----------------------------|------|---------|-----------------|----------------------------|
|         |                 | GPRS                       | EDGE |         |                 |                            |
| 512     | 1850.2          | 0.16                       | 3.14 | 9262    | 1852.4          | 3.06                       |
| 661     | 1880.0          | 0.16                       | 3.14 | 9400    | 1880.0          | 2.96                       |
| 810     | 1909.8          | 0.17                       | 3.15 | 9538    | 1907.6          | 2.95                       |
| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |      |         |                 |                            |
|         |                 | CDMA                       |      |         |                 |                            |
| 25      | 1851.25         | 4.26                       |      |         |                 |                            |
| 600     | 1880.00         | 3.90                       |      |         |                 |                            |
| 1175    | 1908.75         | 3.94                       |      |         |                 |                            |



## LTE Band 2

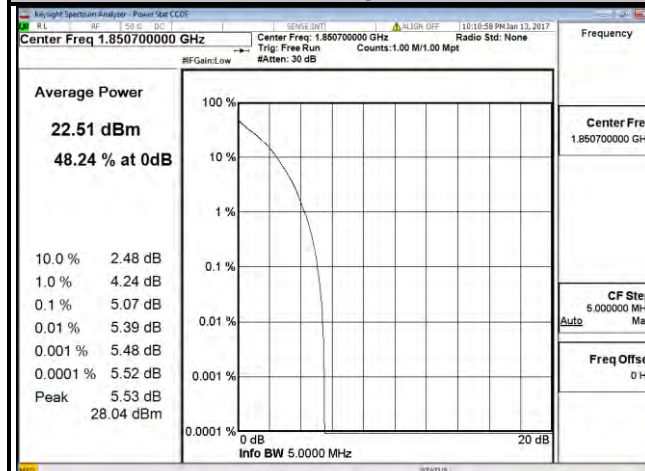
### Channel Bandwidth: 1.4 MHz

### Channel Bandwidth: 3 MHz

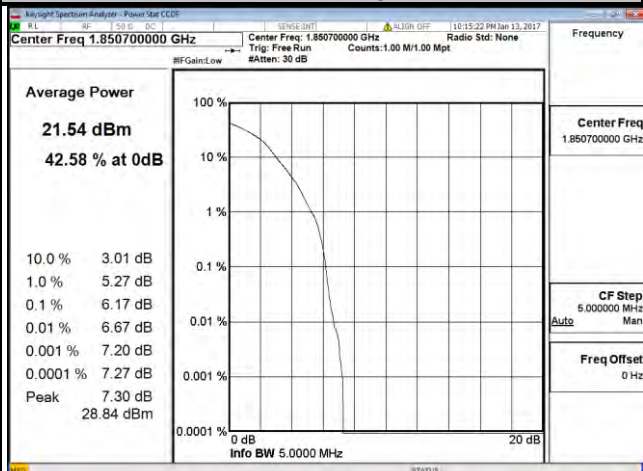
| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|---------|-----------------|----------------------------|-------|---------|-----------------|----------------------------|-------|
|         |                 | QPSK                       | 16QAM |         |                 | QPSK                       | 16QAM |
| 18607   | 1850.7          | 5.07                       | 6.17  | 18615   | 1851.5          | 4.99                       | 6.15  |
| 18900   | 1880.0          | 4.54                       | 5.63  | 18900   | 1880.0          | 4.41                       | 5.51  |
| 19193   | 1909.3          | 4.63                       | 5.66  | 19185   | 1908.5          | 4.45                       | 5.61  |

## Spectrum Plot of Worst Value

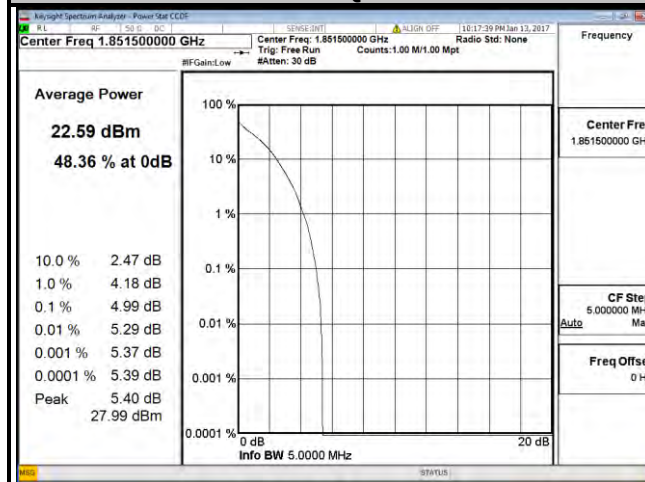
### 1.4 MHz / QPSK



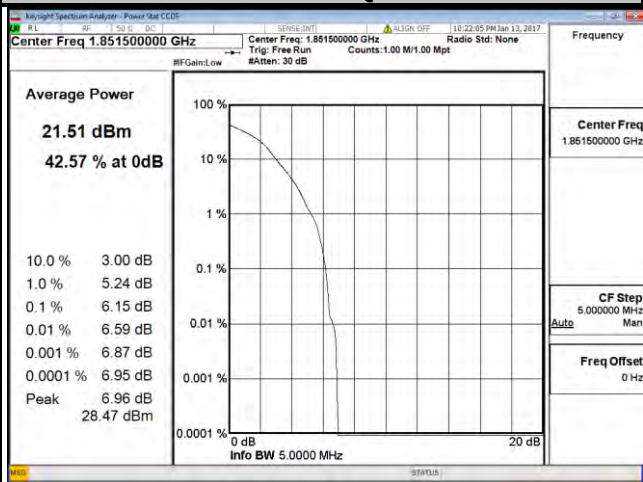
### 1.4 MHz / 16QAM



### 3 MHz / QPSK



### 3 MHz / 16QAM



## LTE Band 2

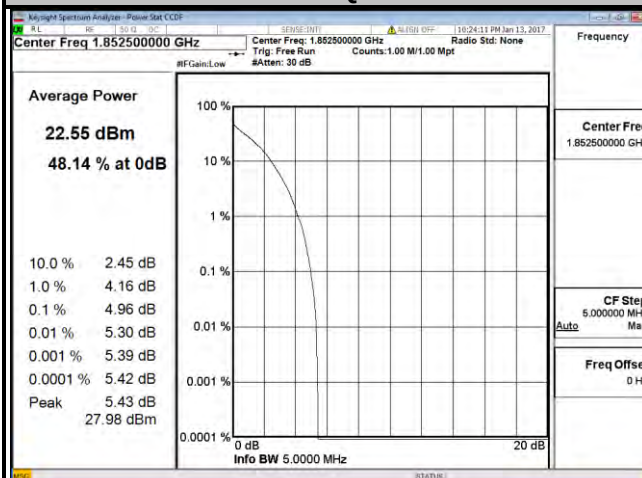
### Channel Bandwidth: 5 MHz

### Channel Bandwidth: 10 MHz

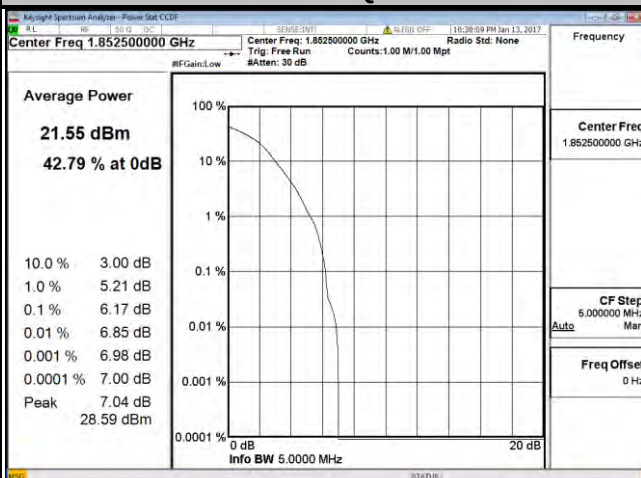
| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|---------|-----------------|----------------------------|-------|---------|-----------------|----------------------------|-------|
|         |                 | QPSK                       | 16QAM |         |                 | QPSK                       | 16QAM |
| 18625   | 1852.5          | 4.96                       | 6.17  | 18650   | 1855.0          | 4.92                       | 6.10  |
| 18900   | 1880.0          | 4.28                       | 5.39  | 18900   | 1880.0          | 4.09                       | 5.18  |
| 19175   | 1907.5          | 4.22                       | 5.36  | 19150   | 1905.0          | 4.00                       | 5.17  |

## Spectrum Plot of Worst Value

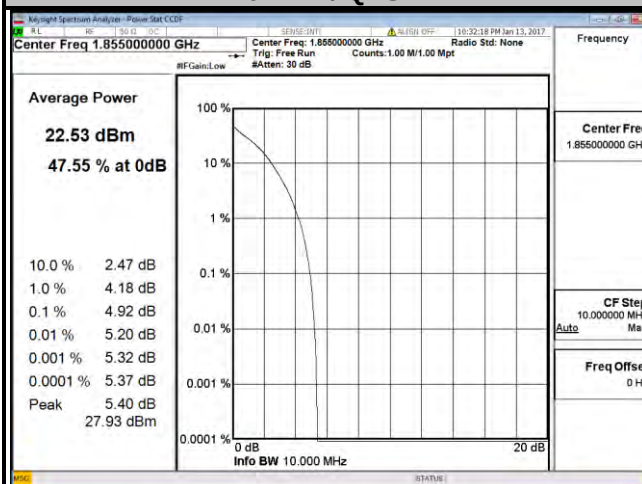
### 5 MHz / QPSK



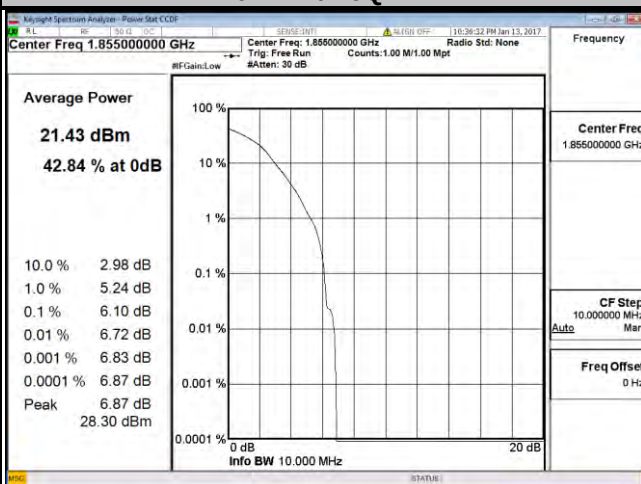
### 5 MHz / 16QAM



### 10 MHz / QPSK



### 10 MHz / 16QAM





## LTE Band 2

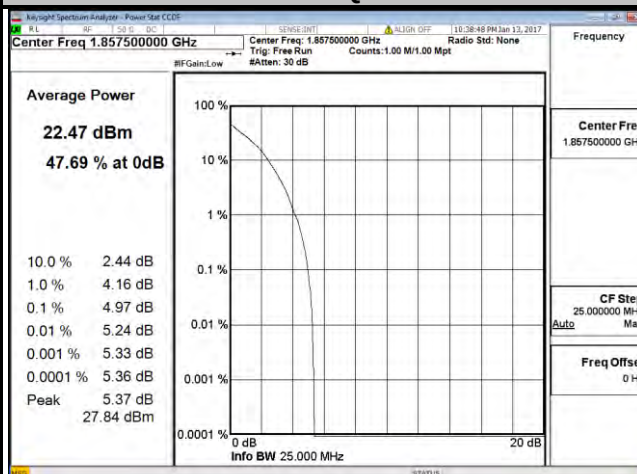
### Channel Bandwidth: 15 MHz

### Channel Bandwidth: 20 MHz

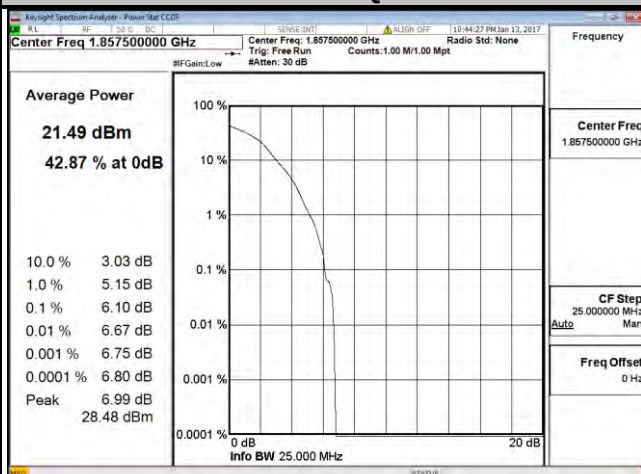
| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|---------|-----------------|----------------------------|-------|---------|-----------------|----------------------------|-------|
|         |                 | QPSK                       | 16QAM |         |                 | QPSK                       | 16QAM |
| 18675   | 1857.5          | 4.97                       | 6.10  | 18700   | 1860.0          | 4.83                       | 5.88  |
| 18900   | 1880.0          | 3.94                       | 5.04  | 18900   | 1880.0          | 3.80                       | 5.03  |
| 19125   | 1902.5          | 4.08                       | 5.21  | 19100   | 1900.0          | 4.55                       | 5.64  |

## Spectrum Plot of Worst Value

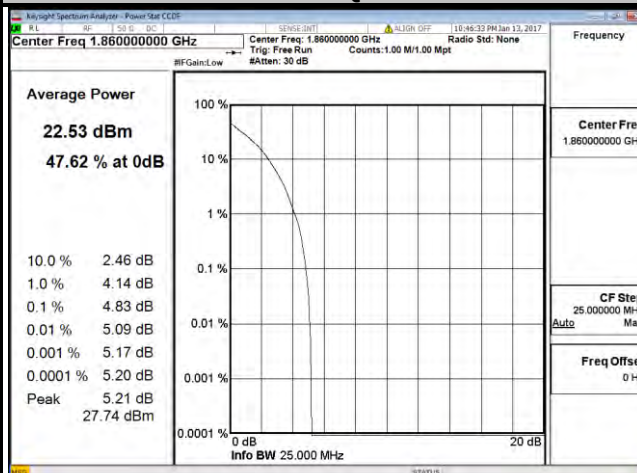
### 15 MHz / QPSK



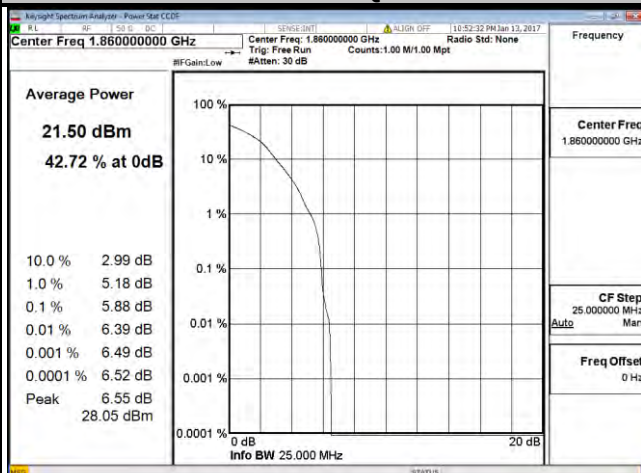
### 15 MHz / 16QAM



### 20 MHz / QPSK



### 20 MHz / 16QAM



## LTE Band 25

### Channel Bandwidth: 1.4 MHz

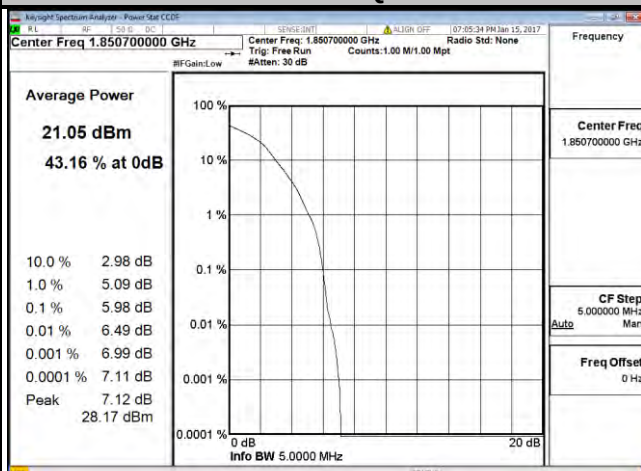
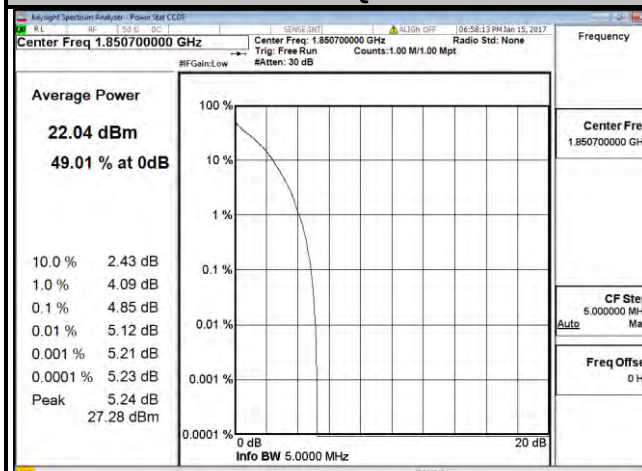
### Channel Bandwidth: 3 MHz

| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|---------|-----------------|----------------------------|-------|---------|-----------------|----------------------------|-------|
|         |                 | QPSK                       | 16QAM |         |                 | QPSK                       | 16QAM |
| 26047   | 1850.7          | 4.85                       | 5.98  | 26055   | 1851.5          | 4.86                       | 6.01  |
| 26365   | 1882.5          | 4.77                       | 5.90  | 26365   | 1882.5          | 4.64                       | 5.77  |
| 26683   | 1914.3          | 2.94                       | 3.96  | 26675   | 1913.5          | 3.33                       | 4.45  |

## Spectrum Plot of Worst Value

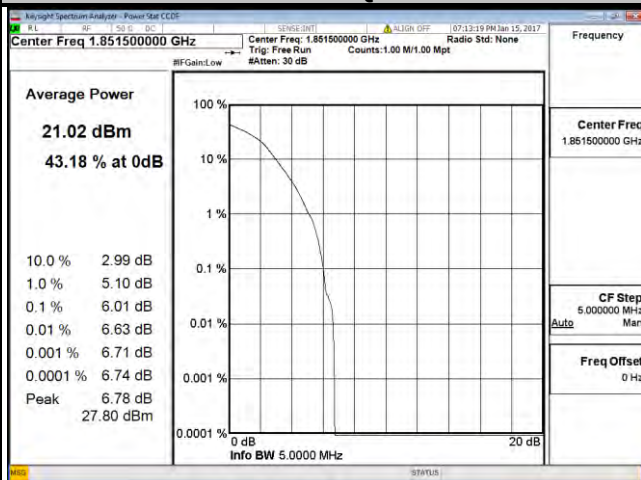
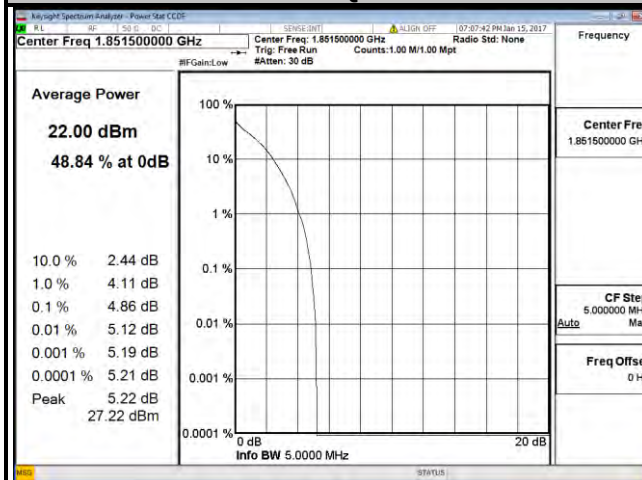
### 1.4 MHz / QPSK

### 1.4 MHz / 16QAM



### 3 MHz / QPSK

### 3 MHz / 16QAM



## LTE Band 25

### Channel Bandwidth: 5 MHz

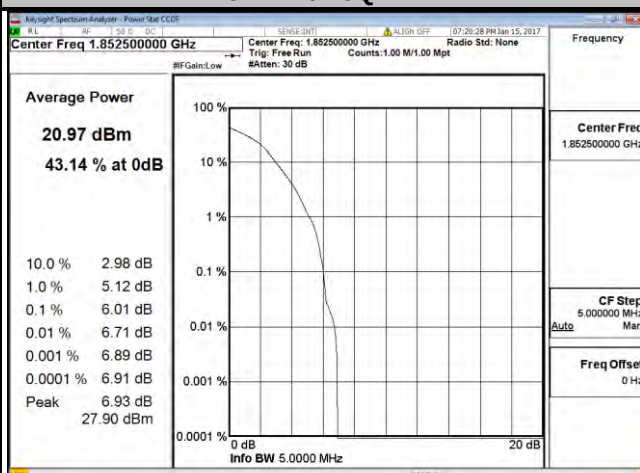
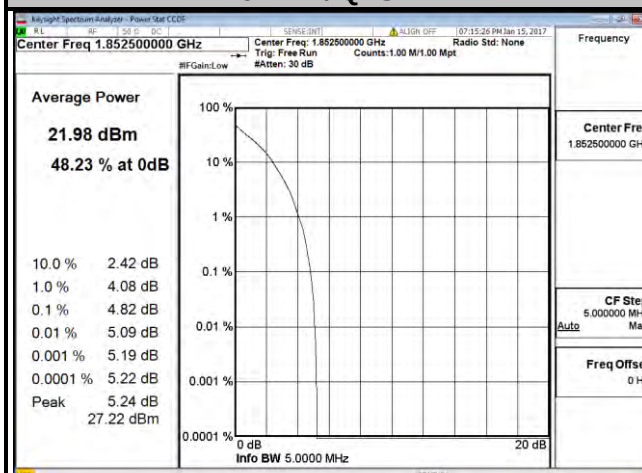
### Channel Bandwidth: 10 MHz

| Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       | Channel | Frequency (MHz) | Peak to Average Ratio (dB) |       |
|---------|-----------------|----------------------------|-------|---------|-----------------|----------------------------|-------|
|         |                 | QPSK                       | 16QAM |         |                 | QPSK                       | 16QAM |
| 26065   | 1852.5          | 4.82                       | 6.01  | 26090   | 1855.0          | 4.76                       | 5.87  |
| 26365   | 1882.5          | 4.48                       | 5.59  | 26365   | 1882.5          | 4.15                       | 5.24  |
| 26665   | 1912.5          | 3.91                       | 5.09  | 26640   | 1910.0          | 4.13                       | 5.21  |

## Spectrum Plot of Worst Value

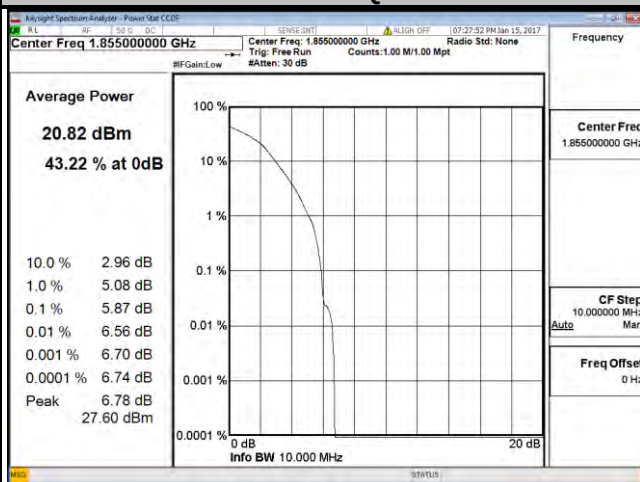
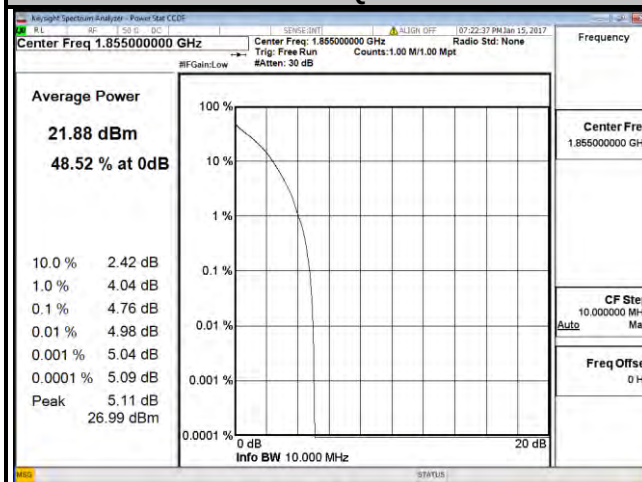
### 5 MHz / QPSK

### 5 MHz / 16QAM

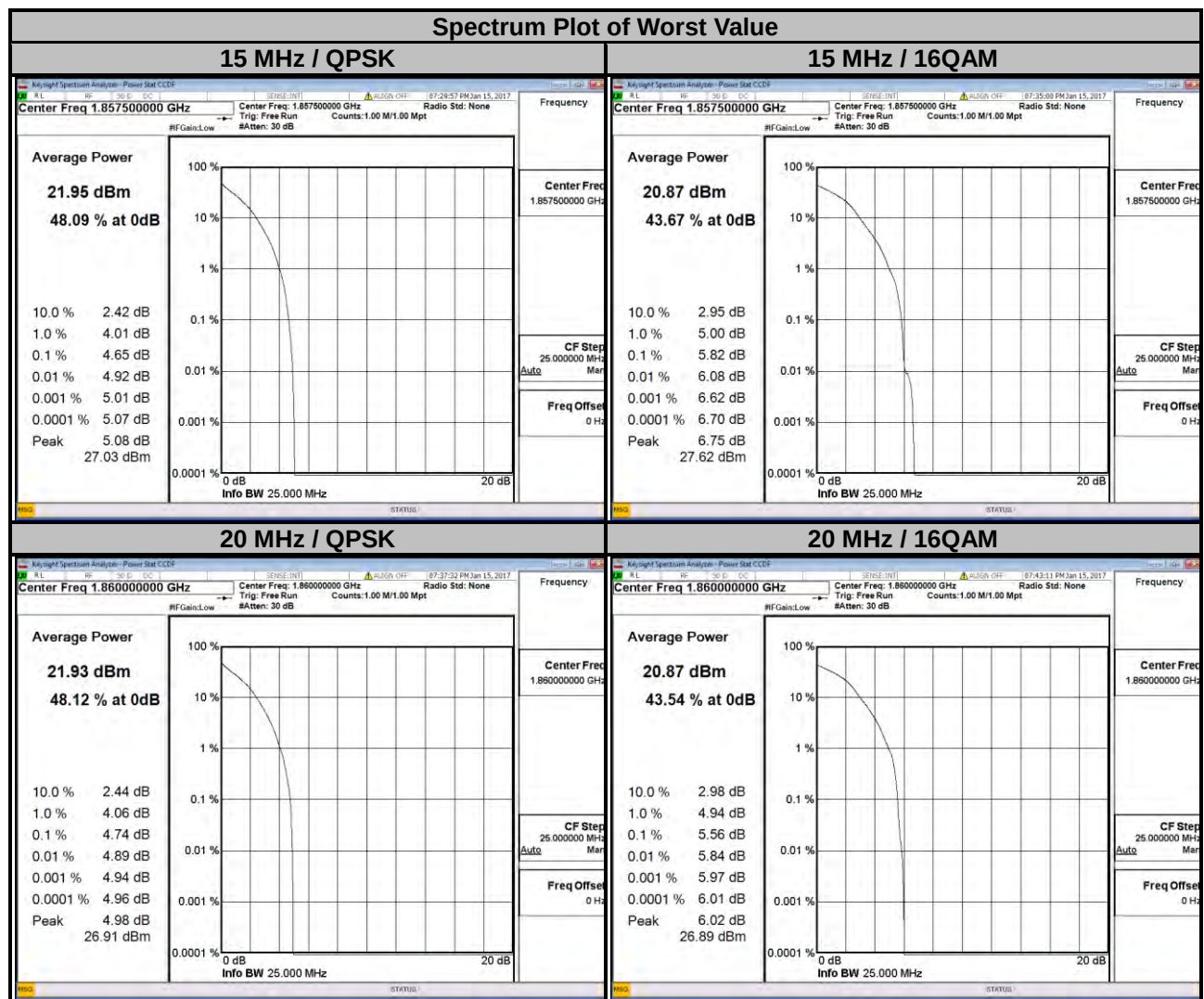


### 10 MHz / QPSK

### 10 MHz / 16QAM



| LTE Band 25               |                 |                            |       |                           |                 |                            |       |
|---------------------------|-----------------|----------------------------|-------|---------------------------|-----------------|----------------------------|-------|
| 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 |
| 26115                     | 1857.5          | 4.65                       | 5.82  | 26140                     | 1860            | 4.74                       | 5.56  |
| 26365                     | 1882.5          | 3.87                       | 5.05  | 26365                     | 1882.5          | 3.76                       | 4.86  |
| 26615                     | 1907.5          | 3.73                       | 5.05  | 26590                     | 1905            | 3.98                       | 5.11  |



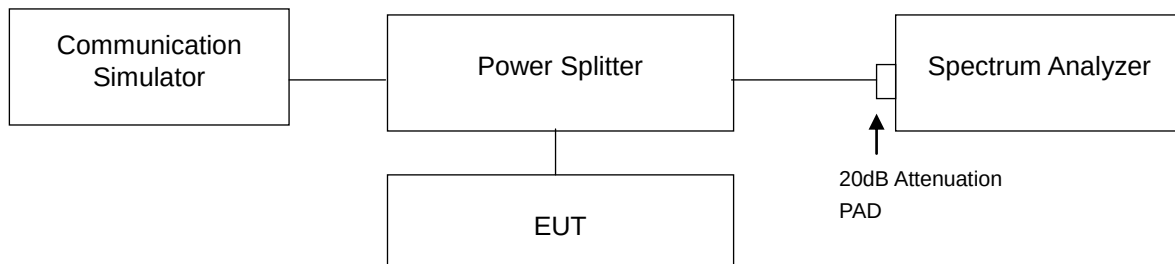


## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to  $-13$  dBm.

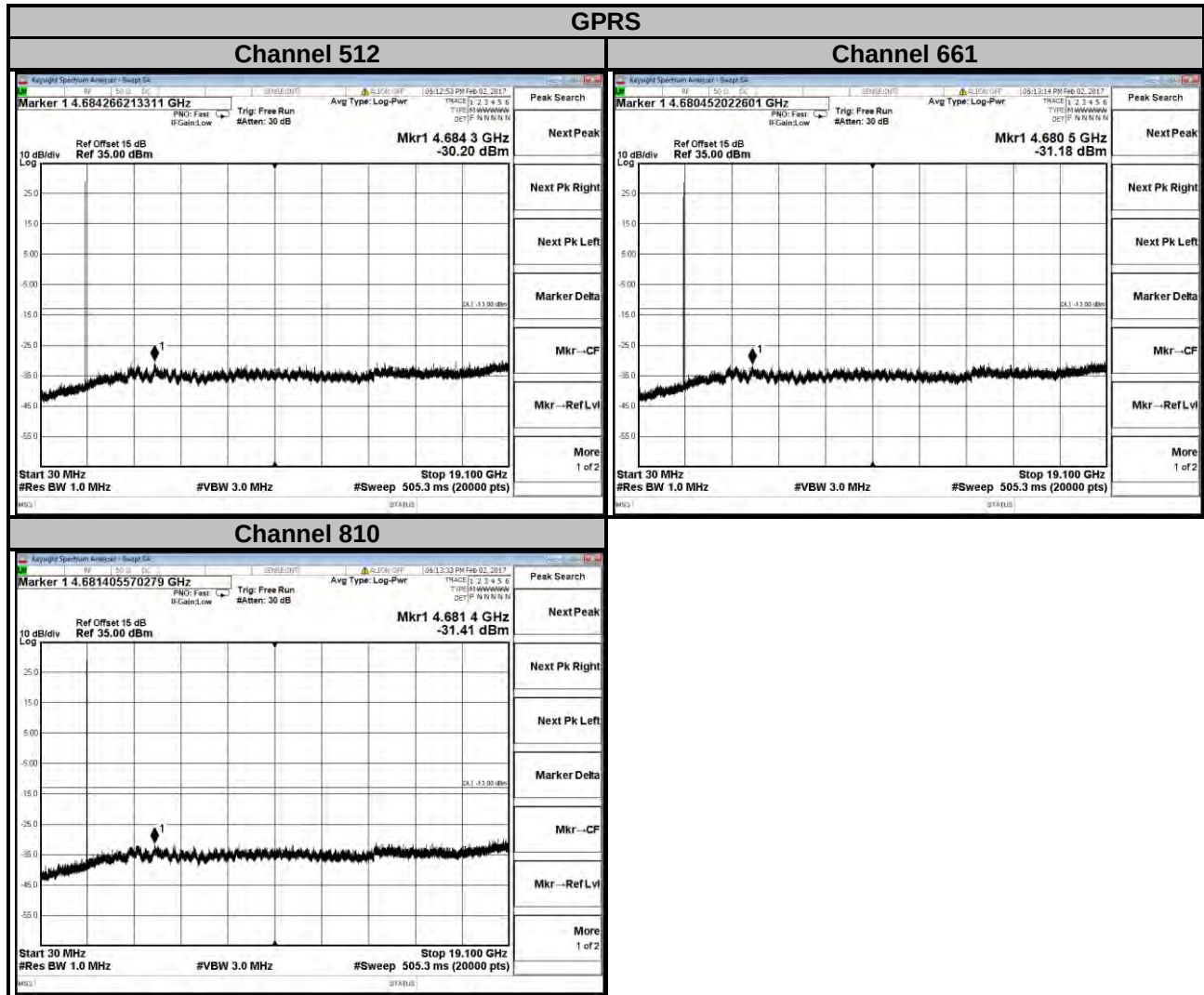
### 4.6.2 Test Setup



### 4.6.3 Test Procedure

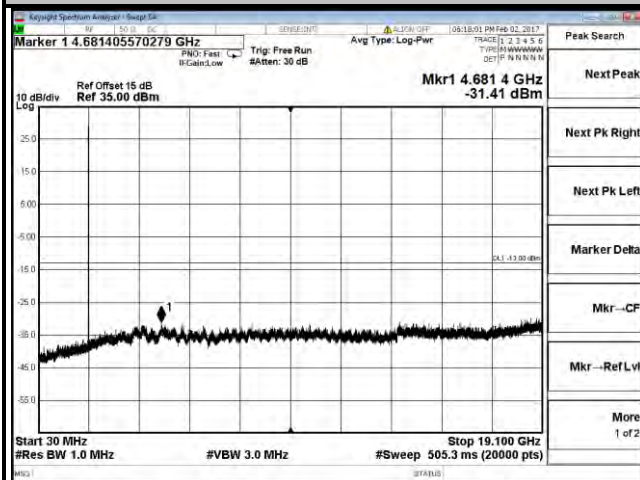
- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz to 9 GHz. 20 dB attenuation pad is connected with spectrum. RBW=1 MHz and VBW=3 MHz is used for conducted emission measurement.

#### 4.6.4 Test Results

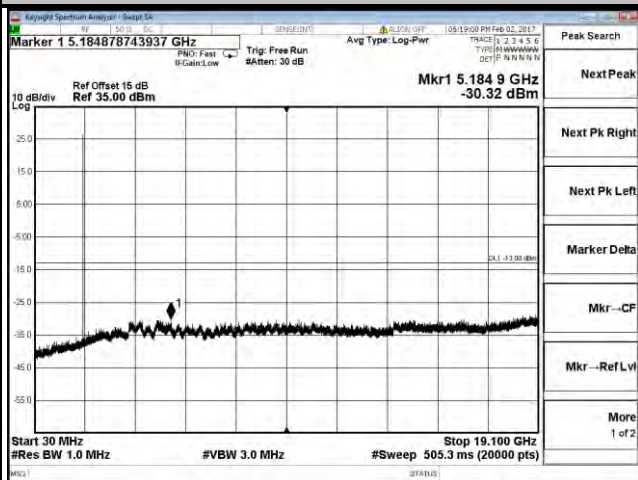


# EDGE

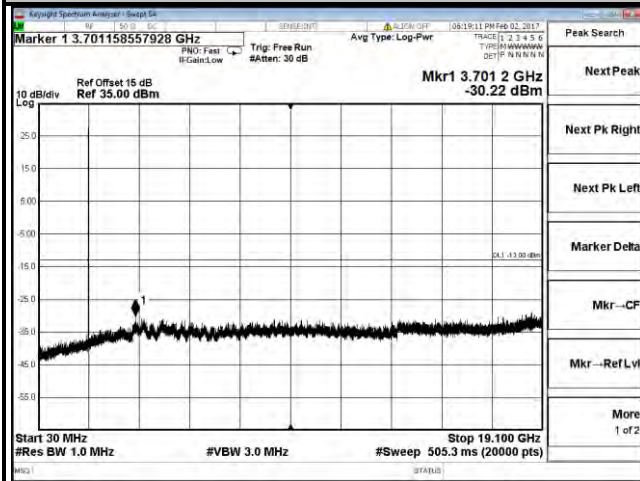
## Channel 512



## Channel 661

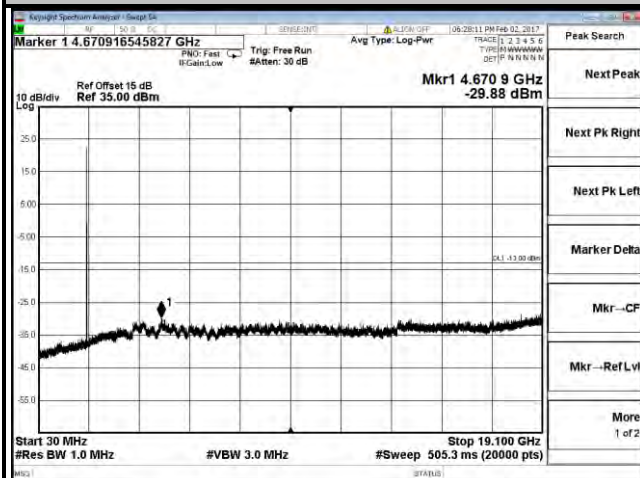


## Channel 810

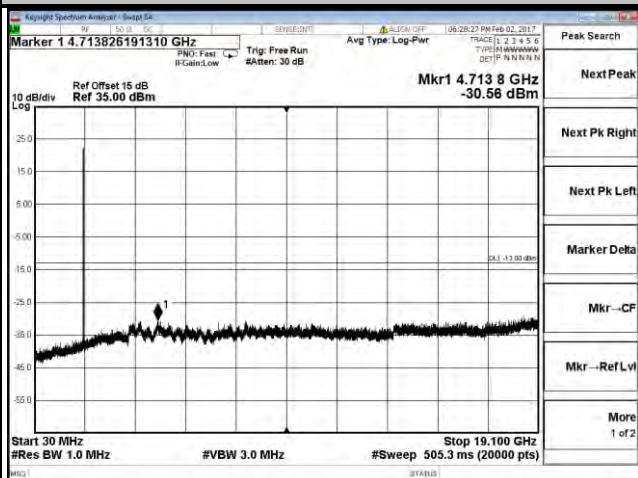


# WCDMA

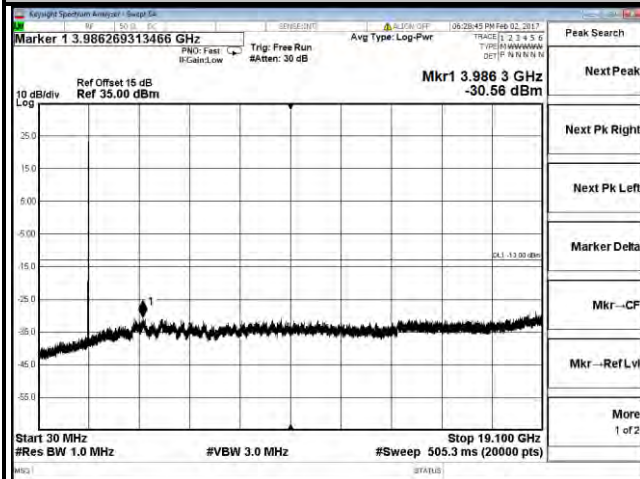
## Channel 9262



## Channel 9400



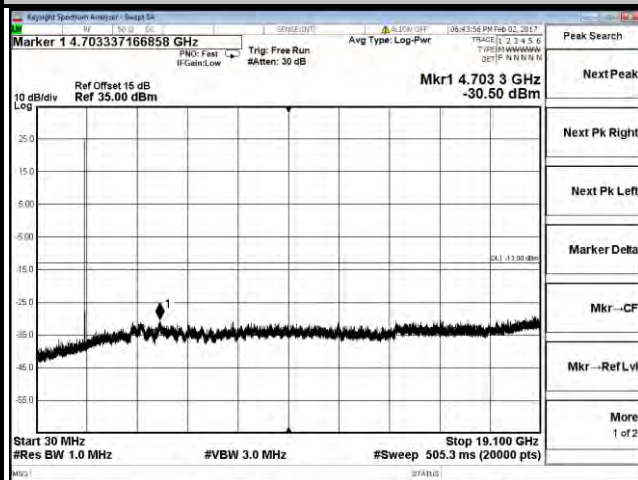
## Channel 9538



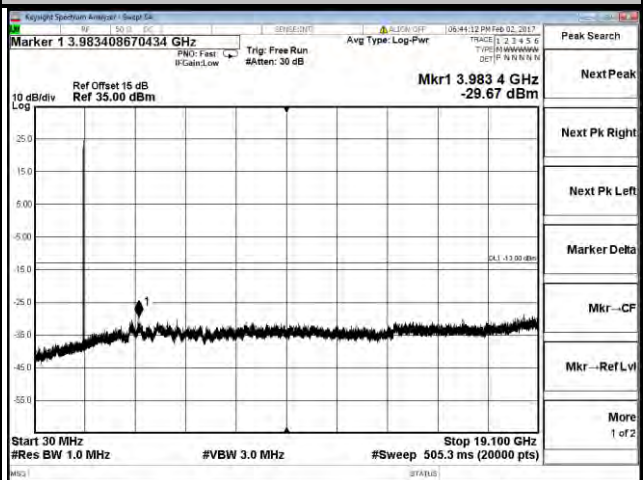


## CDMA

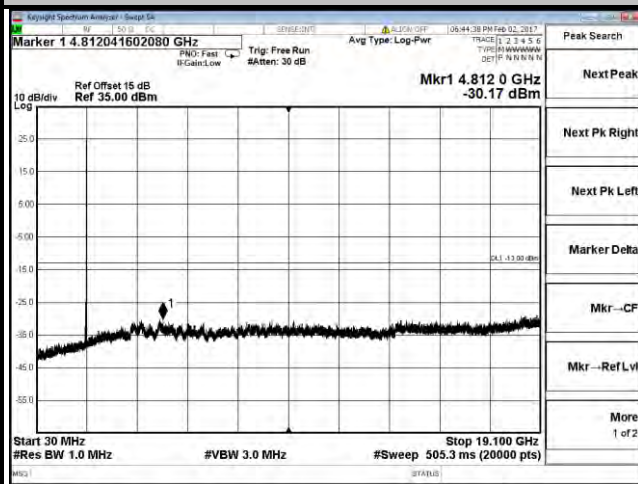
### Channel 25



### Channel 600



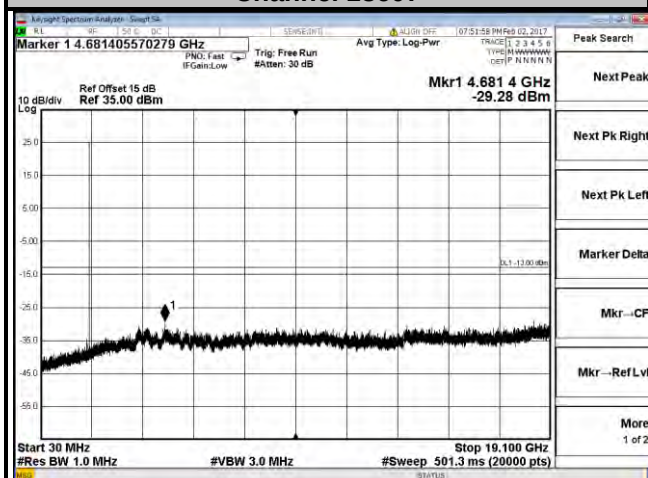
### Channel 1175



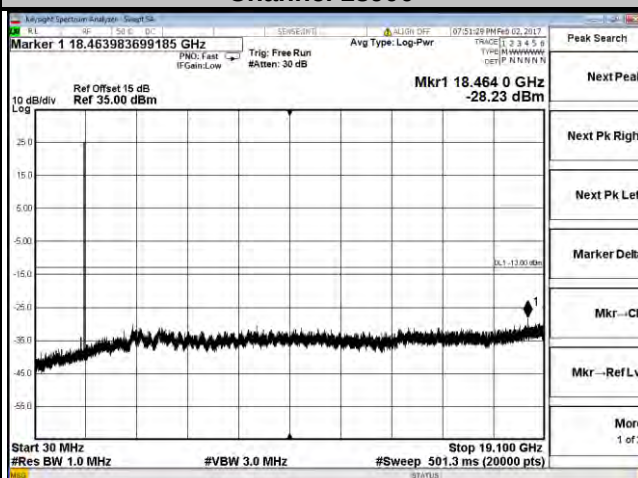
## LTE Band 2

Channel Bandwidth: 1.4 MHz

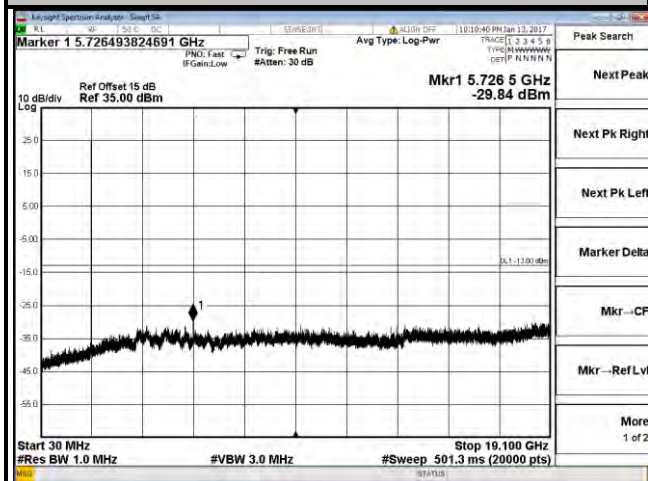
### Channel 18607

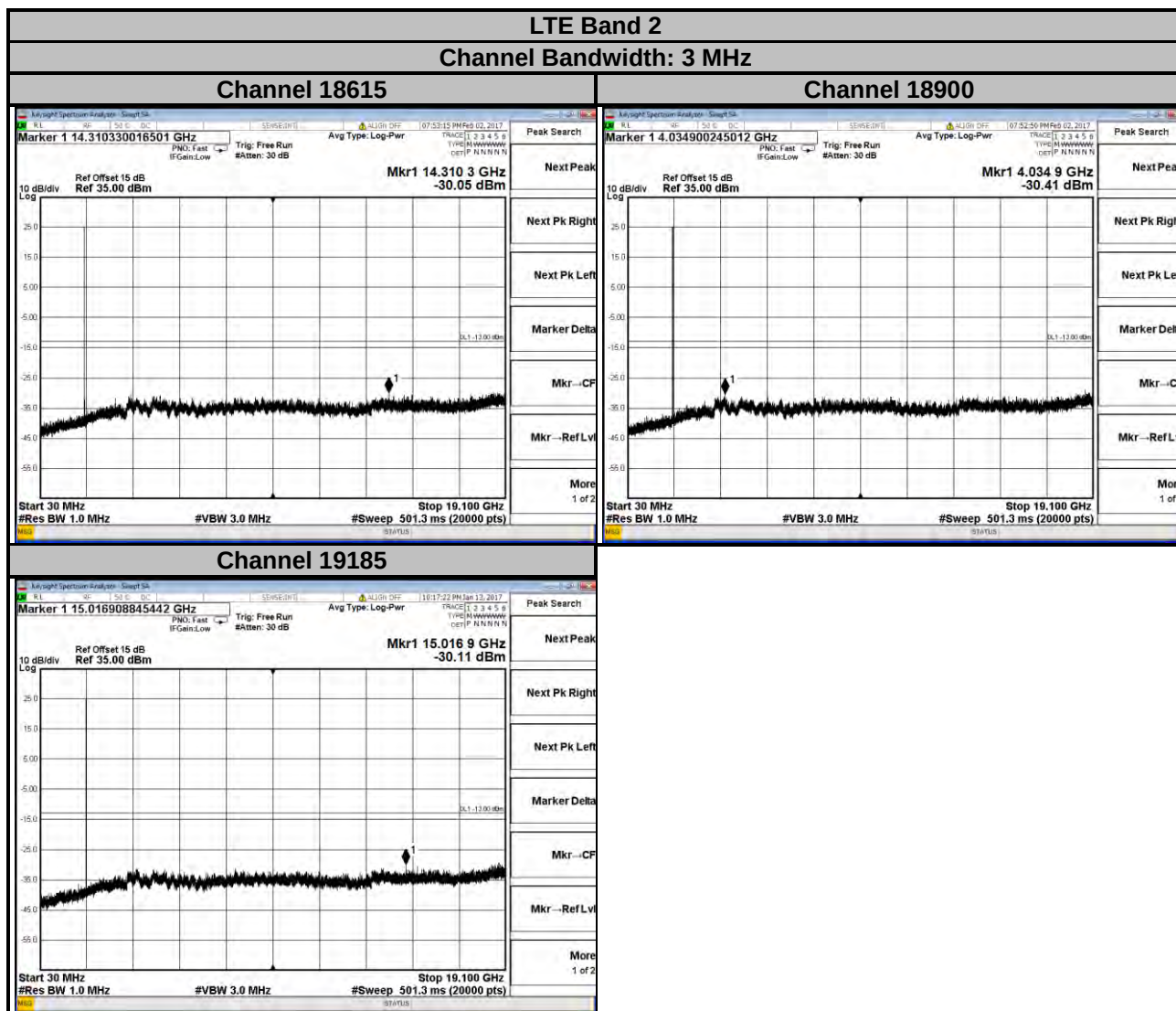


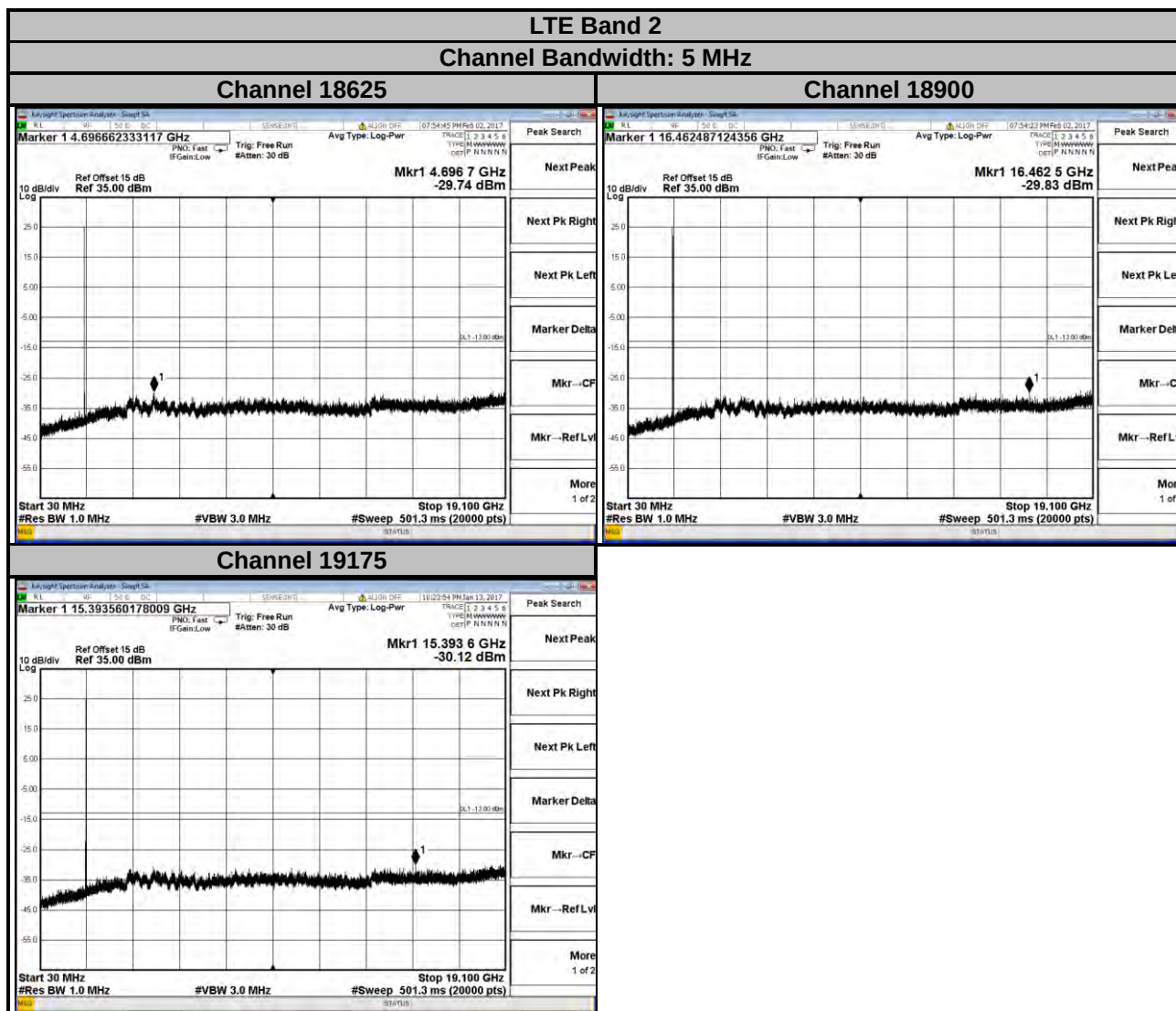
### Channel 18900



### Channel 19193





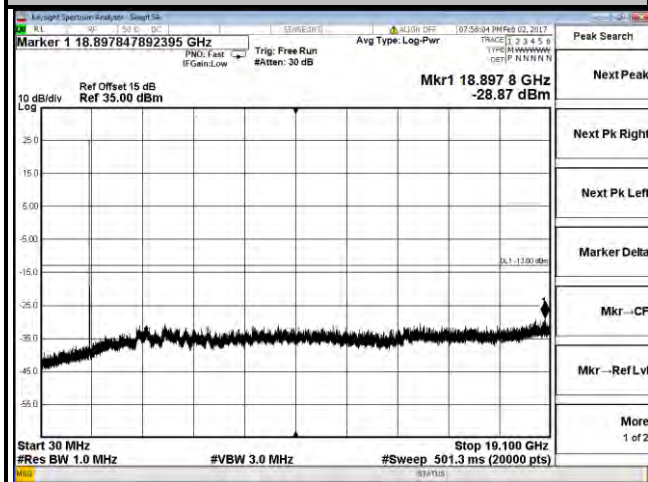




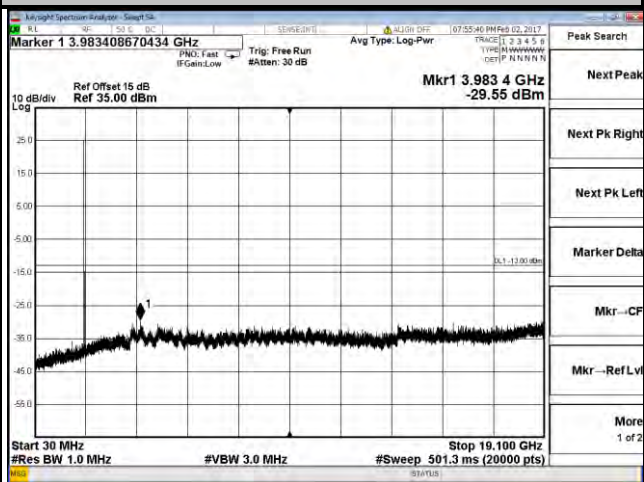
## LTE Band 2

Channel Bandwidth: 10 MHz

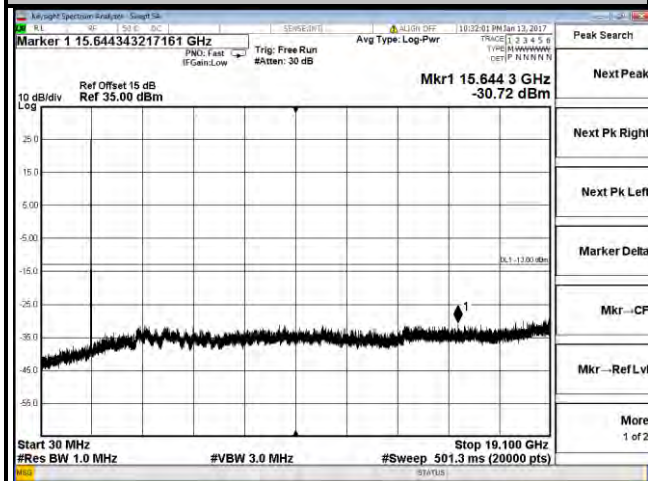
### Channel 18650

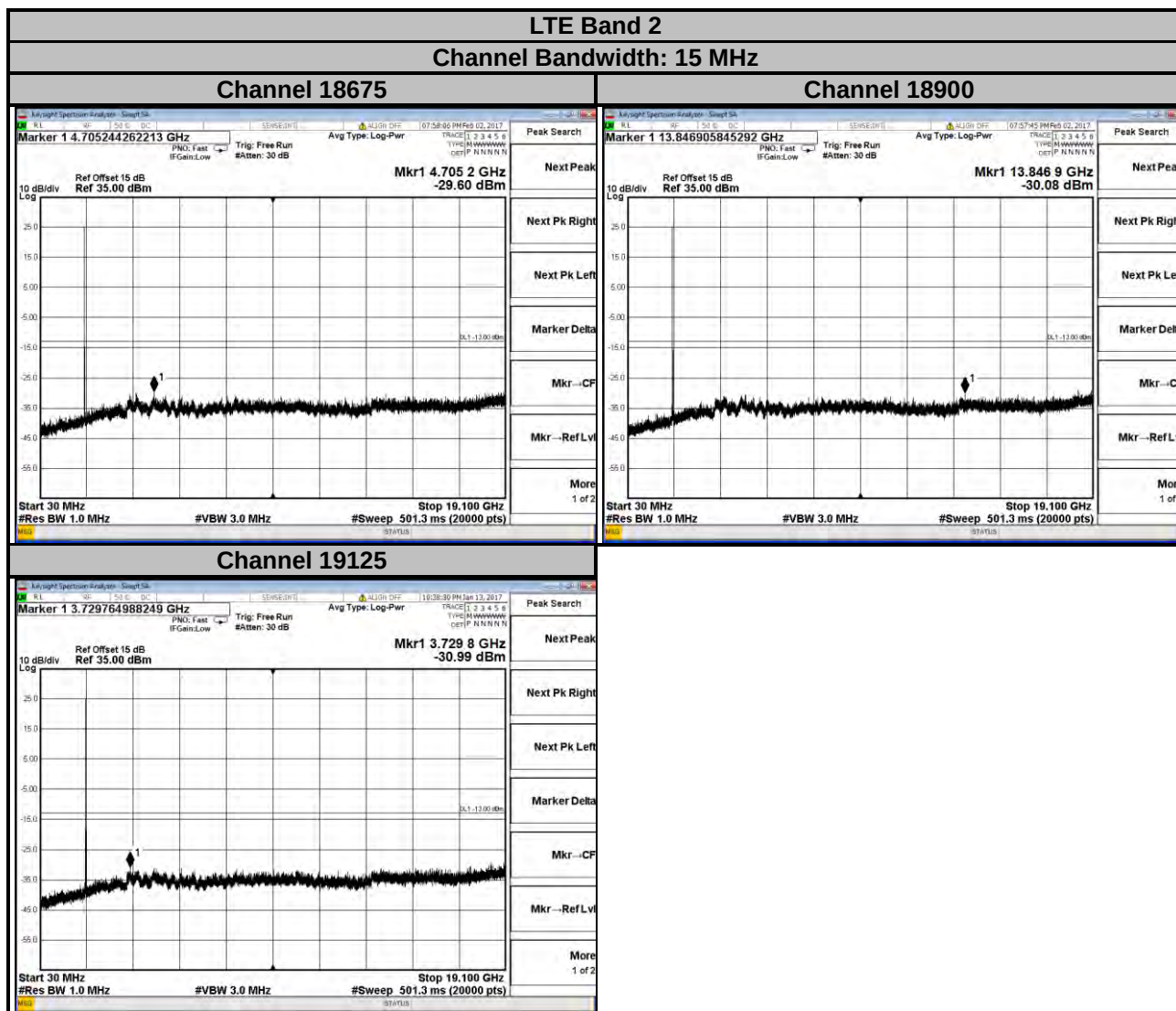


### Channel 18900



### Channel 19150

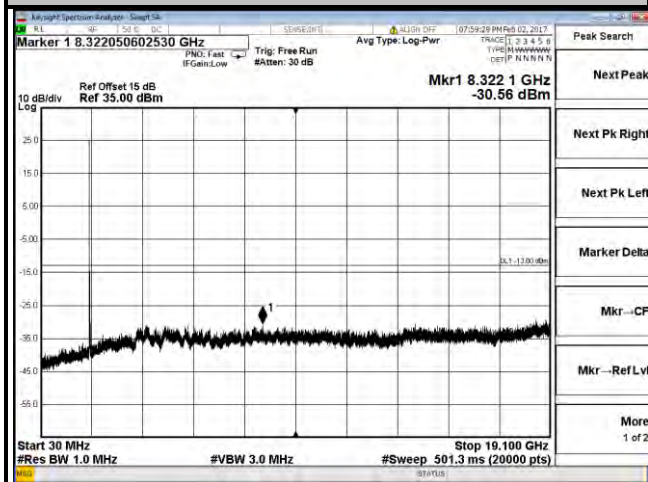




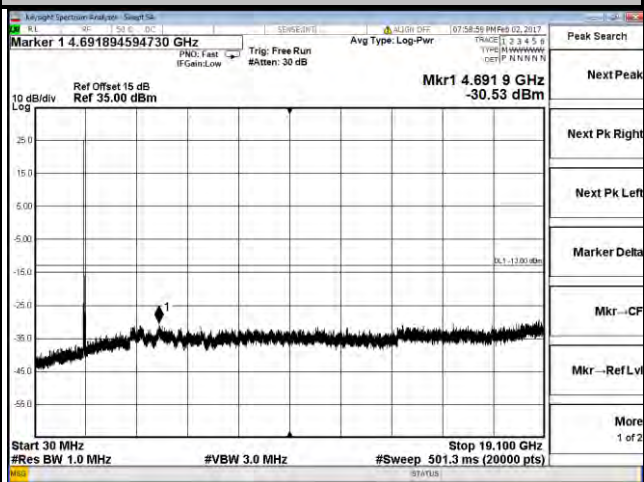
## LTE Band 2

Channel Bandwidth: 20 MHz

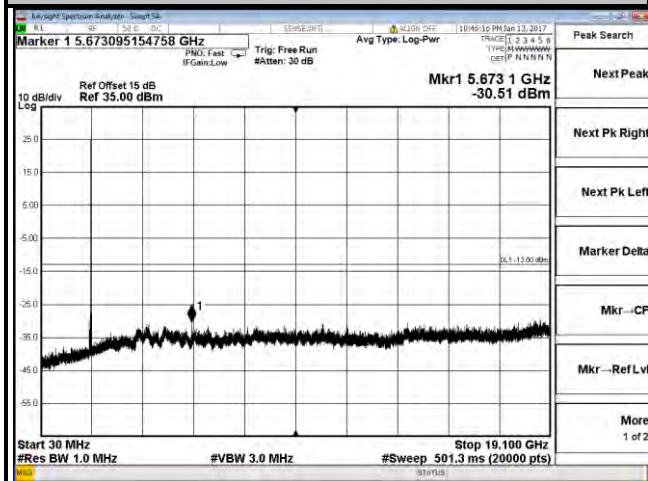
### Channel 18700



### Channel 18900



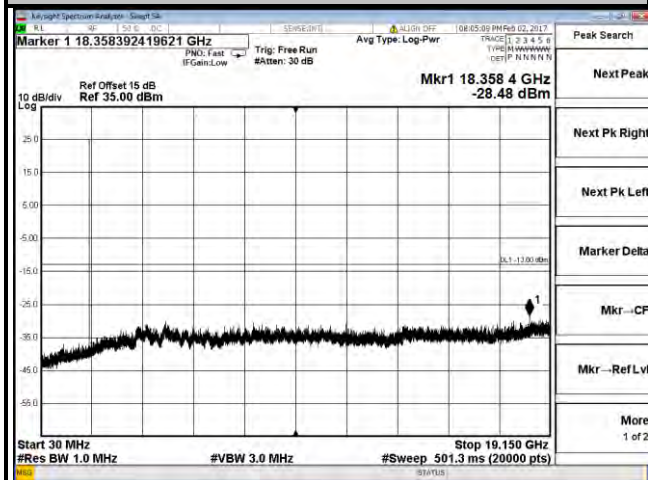
### Channel 19100



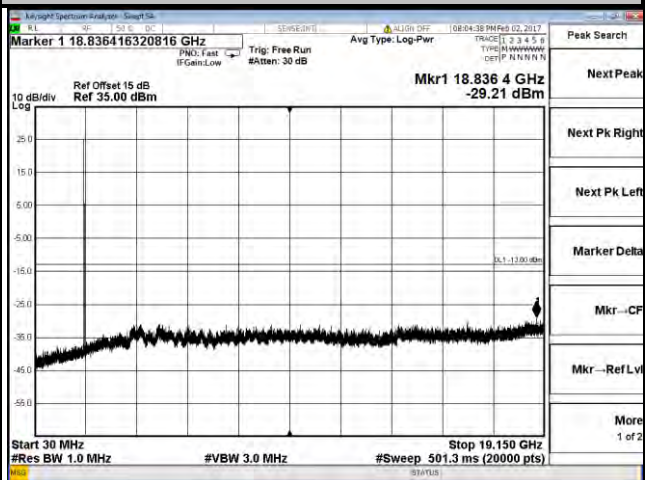
## LTE Band 25

Channel Bandwidth: 1.4 MHz

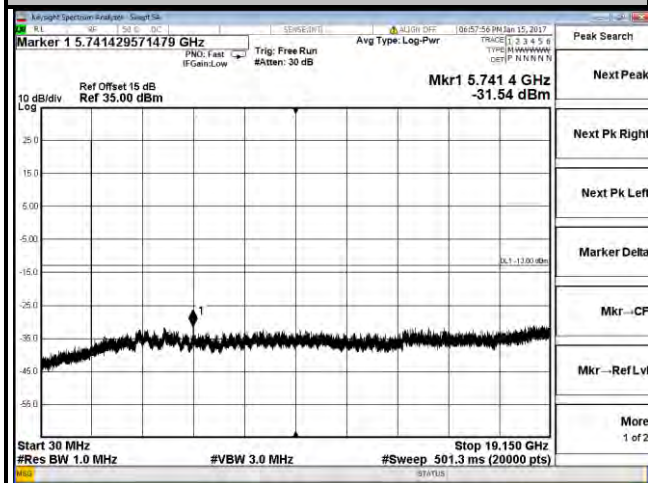
### Channel 26047



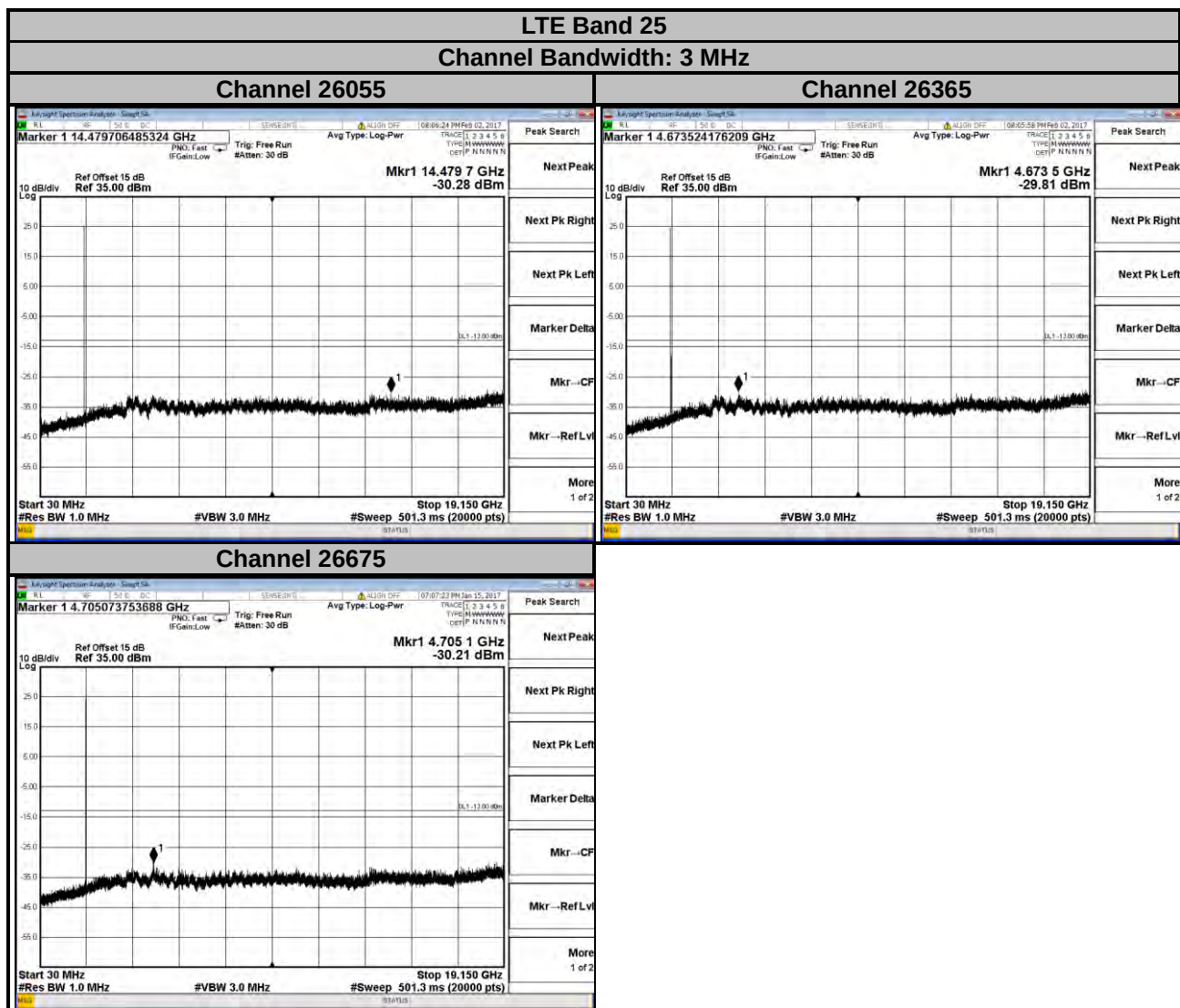
### Channel 26365

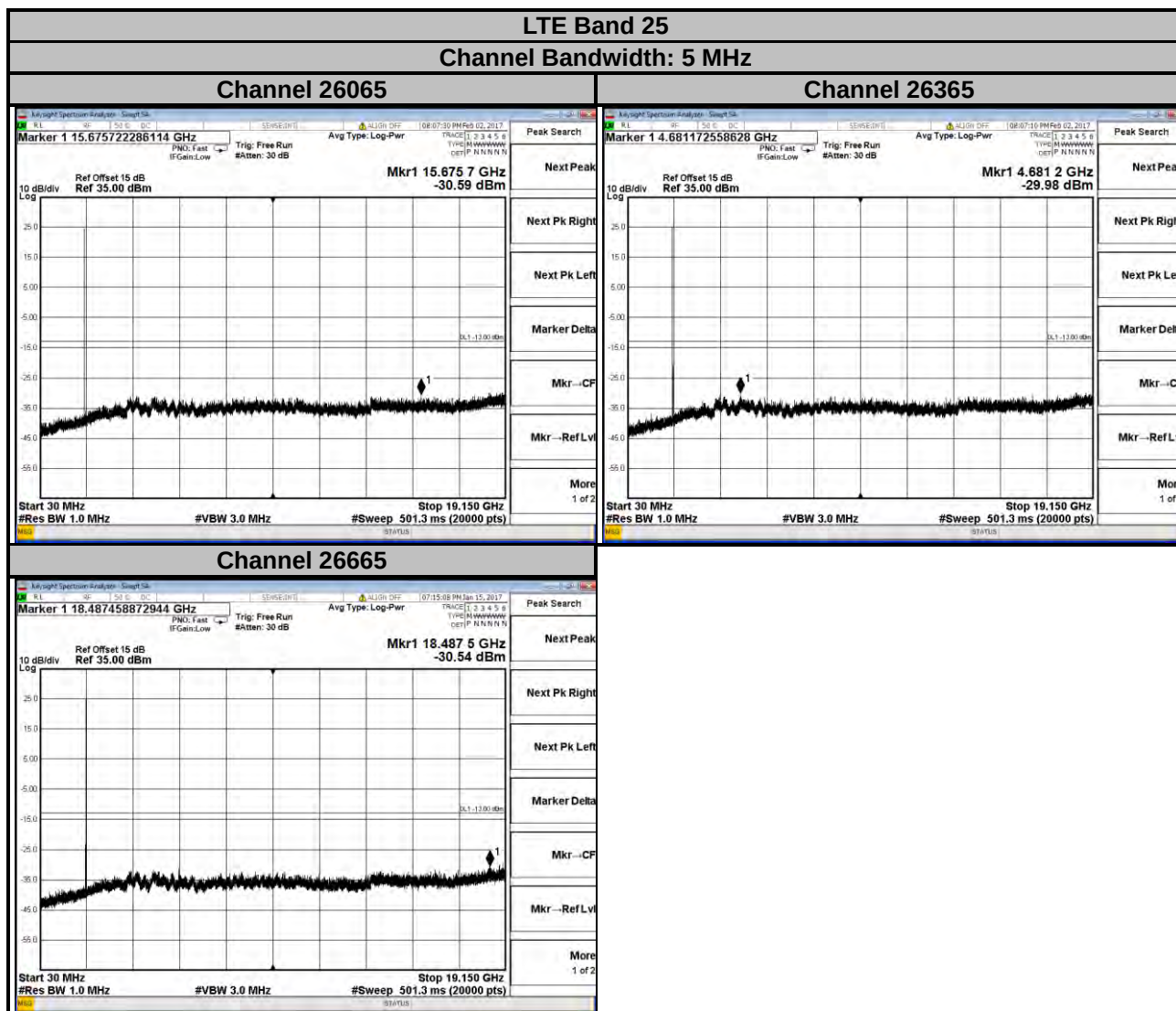


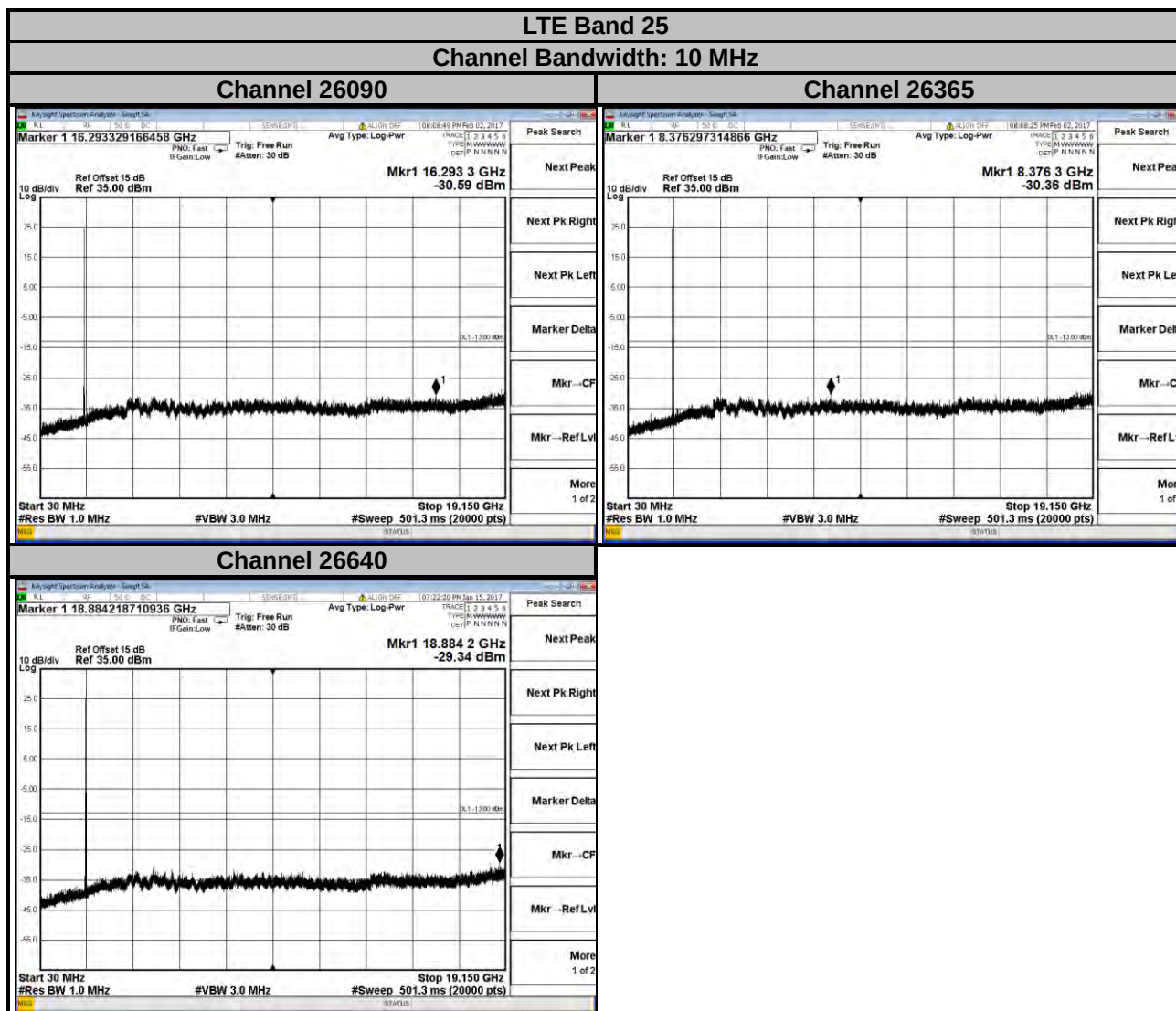
### Channel 26683

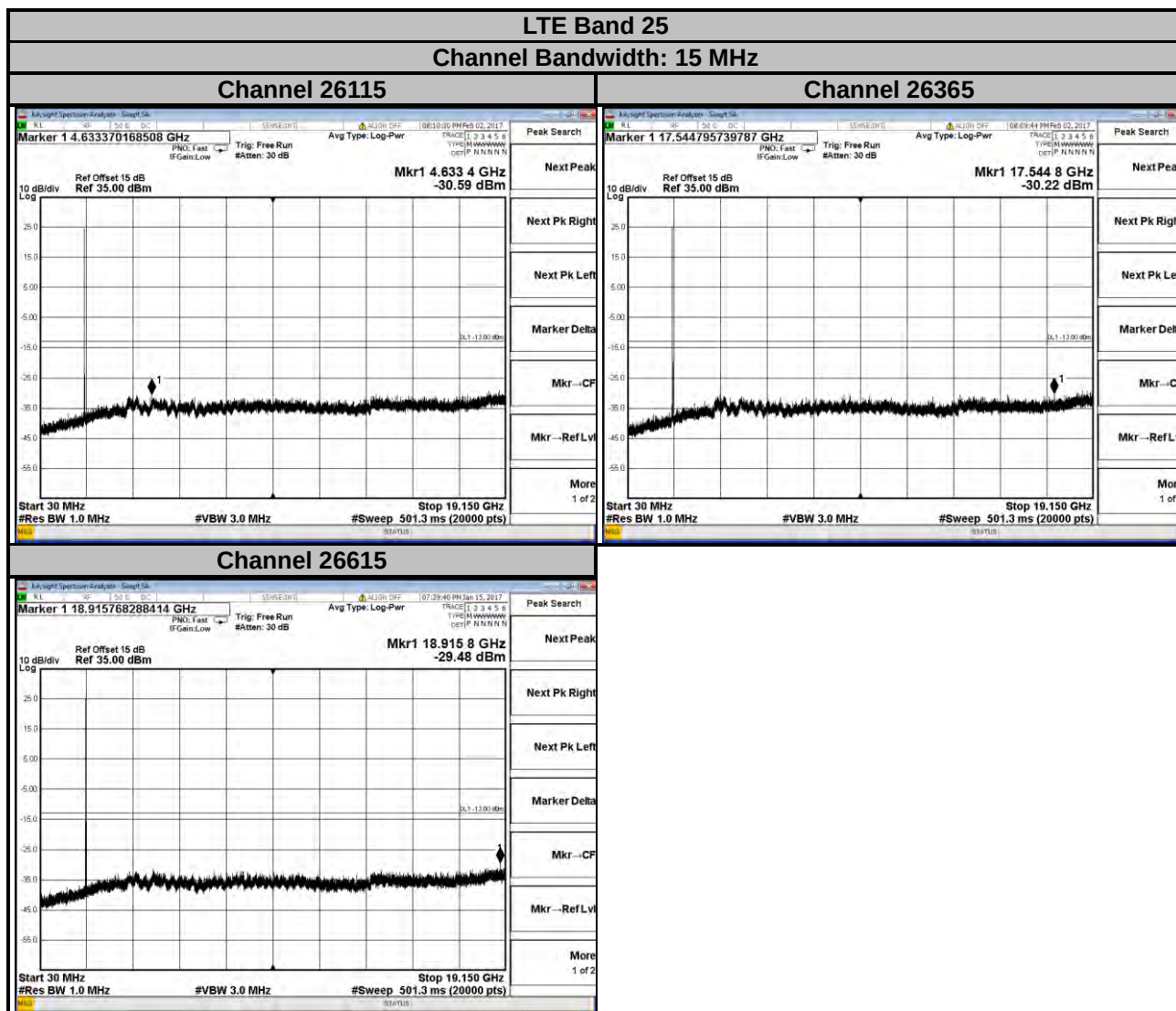




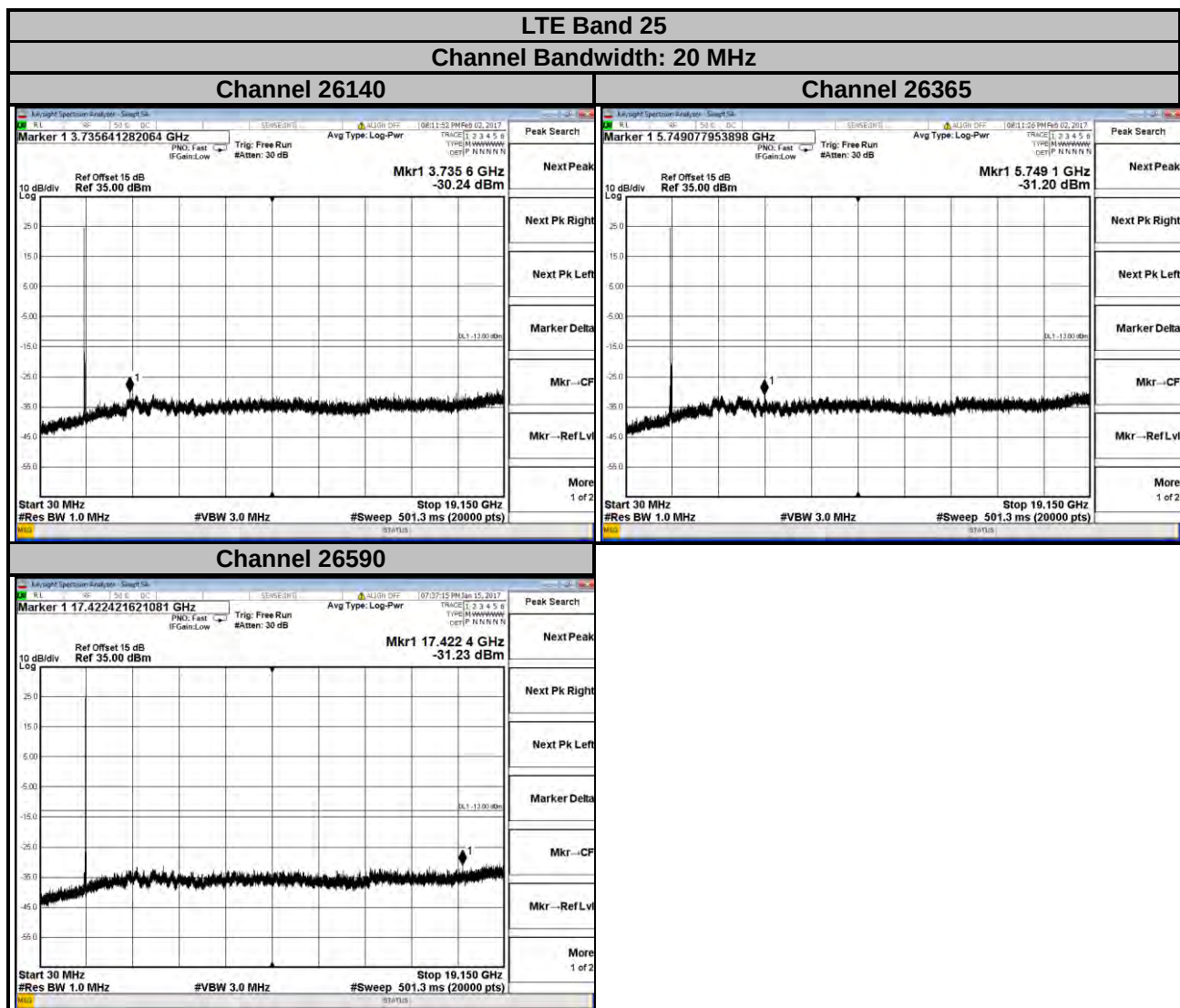












## 4.7 Radiated Emission Measurement

### 4.7.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit is equal to  $-13$  dBm.

### 4.7.2 Test Procedure

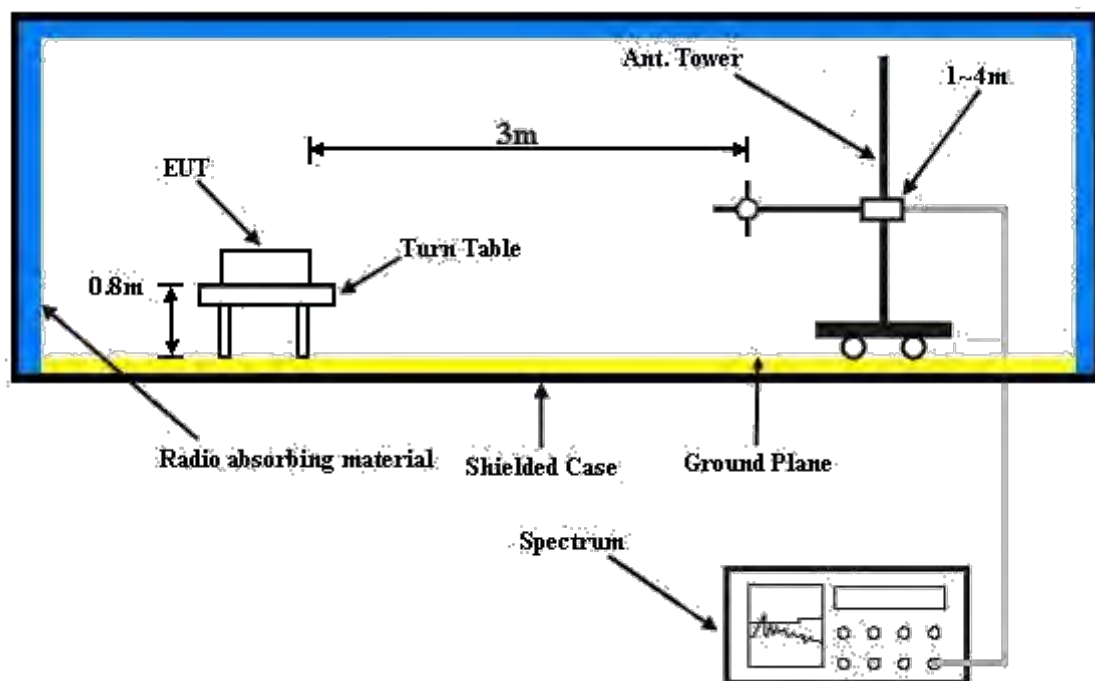
- Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 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.
- EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15 dBi.

**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

### 4.7.3 Deviation from Test Standard

No deviation.

### 4.7.4 Test Setup



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

# 4.7.5 Test Results

GPRS:

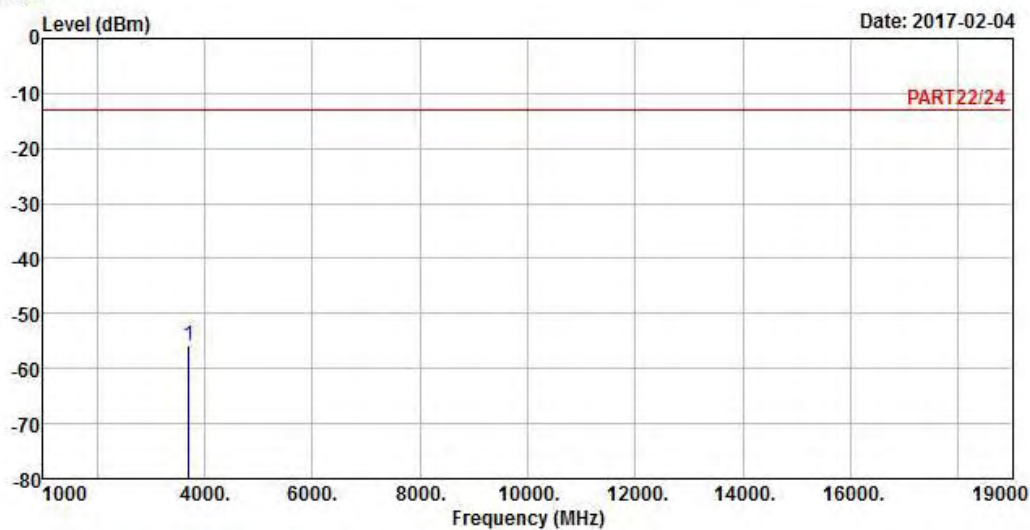
Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : GPRS 1900\_L-CH  
Tested by: Toby Tian

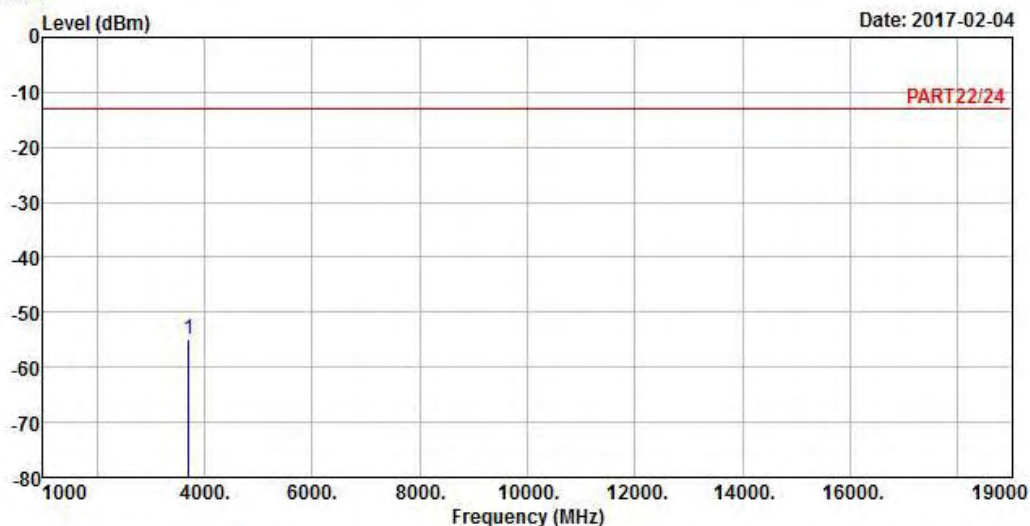
| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3700.40 | -55.78 | -47.61     | -13.00     | -42.78     | -8.17  | Peak   |



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : GPRS 1900\_L-CH  
Tested by: Toby Tian

|              |        |        | Read   | Limit  | Over   |        |  |
|--------------|--------|--------|--------|--------|--------|--------|--|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |  |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |  |
| 1 pp 3700.40 | -54.94 | -46.77 | -13.00 | -41.94 | -8.17  | Peak   |  |

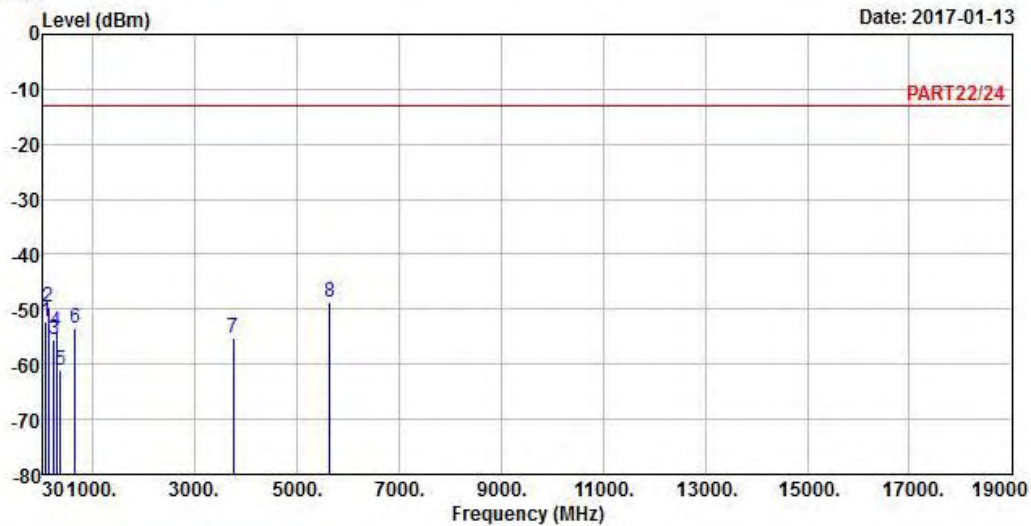
## Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 7



Site : 966 Chamber 5  
 Condition: PART22/24 HORIZONTAL  
 Remak : GPRS 1900\_M-CH  
 Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 78.50   | -52.36 | -41.93     | -13.00     | -39.36     | -10.43 | Peak   |
| 2    | 127.97  | -49.67 | -40.75     | -13.00     | -36.67     | -8.92  | Peak   |
| 3    | 233.70  | -55.62 | -48.96     | -13.00     | -42.62     | -6.66  | Peak   |
| 4    | 292.87  | -53.88 | -47.01     | -13.00     | -40.88     | -6.87  | Peak   |
| 5    | 360.77  | -61.23 | -55.05     | -13.00     | -48.23     | -6.18  | Peak   |
| 6    | 647.89  | -53.40 | -52.52     | -13.00     | -40.40     | -0.88  | Peak   |
| 7    | 3760.00 | -55.11 | -47.05     | -13.00     | -42.11     | -8.06  | Peak   |
| 8 pp | 5640.00 | -48.84 | -46.90     | -13.00     | -35.84     | -1.94  | Peak   |

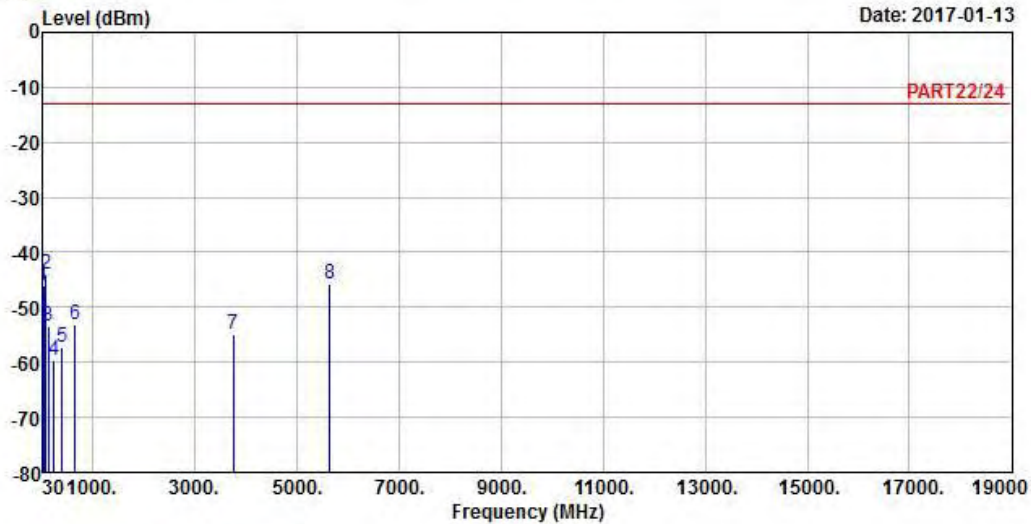




# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 8



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : GPRS 1900\_M-CH  
Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 33.88   | -46.09 | -44.51     | -13.00     | -33.09     | -1.58  | Peak   |
| 2 pp | 79.47   | -44.01 | -33.35     | -13.00     | -31.01     | -10.66 | Peak   |
| 3    | 127.97  | -53.36 | -44.44     | -13.00     | -40.36     | -8.92  | Peak   |
| 4    | 233.70  | -59.51 | -52.85     | -13.00     | -46.51     | -6.66  | Peak   |
| 5    | 408.30  | -57.30 | -51.42     | -13.00     | -44.30     | -5.88  | Peak   |
| 6    | 648.86  | -53.12 | -52.24     | -13.00     | -40.12     | -0.88  | Peak   |
| 7    | 3760.00 | -55.04 | -46.98     | -13.00     | -42.04     | -8.06  | Peak   |
| 8    | 5640.00 | -45.81 | -43.87     | -13.00     | -32.81     | -1.94  | Peak   |

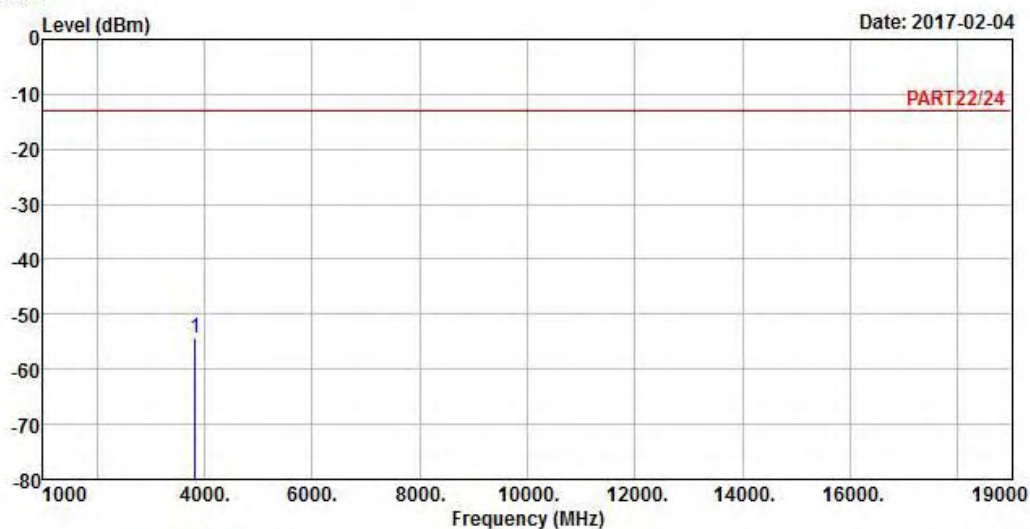
# High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : GPRS 1900\_H-CH  
Tested by: Toby Tian

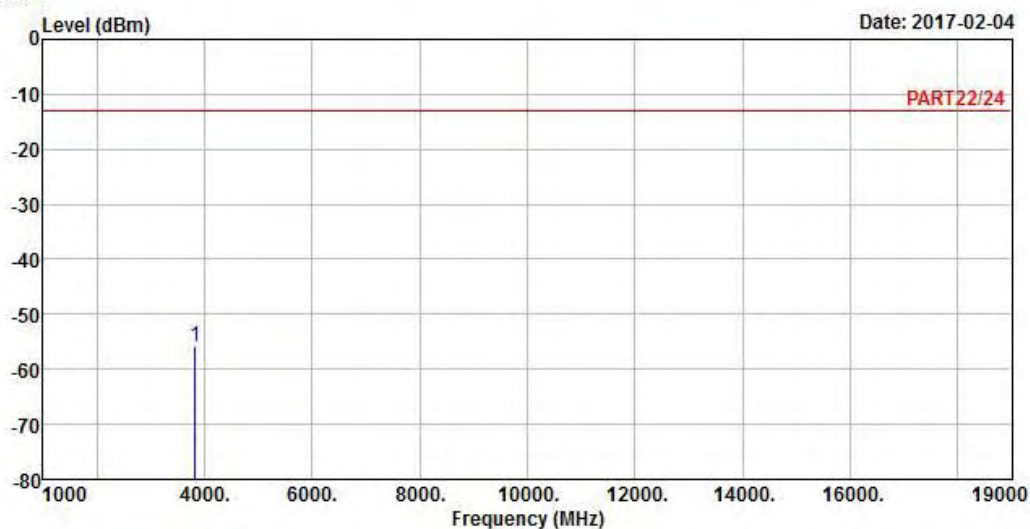
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3819.60 | -54.25 | -46.57 | -13.00 | -41.25 | -7.68  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : GPRS 1900\_H-CH  
 Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3819.60 | -55.77 | -48.09     | -13.00     | -42.77     | -7.68  | Peak   |

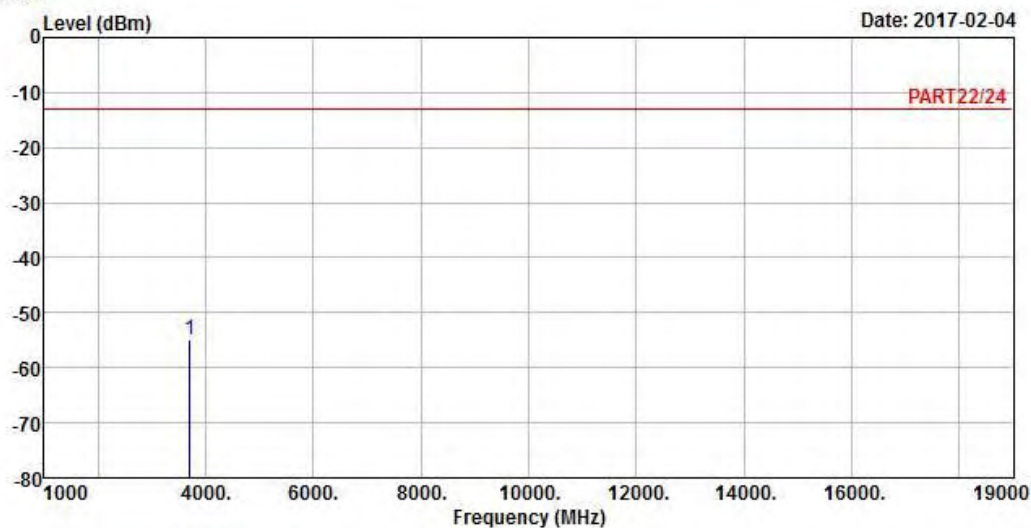
EDGE:  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : EDGE 1900\_L-CH  
Tested by: Toby Tian

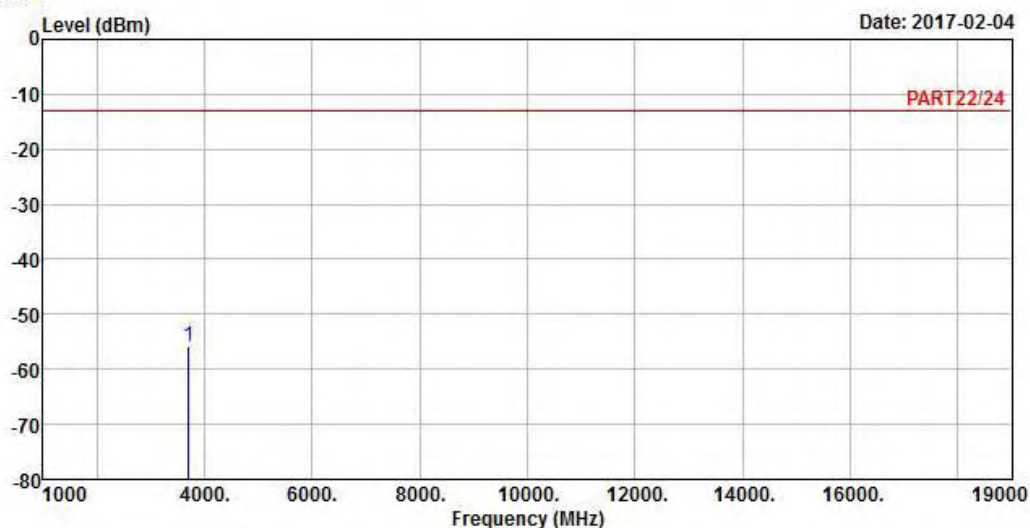
| Freq         | Level  | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| MHz          | dBm    | Level  | Line   | Limit  | Factor | Remark |
|              |        | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3700.40 | -54.81 | -46.64 | -13.00 | -41.81 | -8.17  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : EDGE 1900\_L-CH  
 Tested by: Toby Tian

|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3700.40 | -55.86 | -47.69 | -13.00 | -42.86 | -8.17  | Peak   |



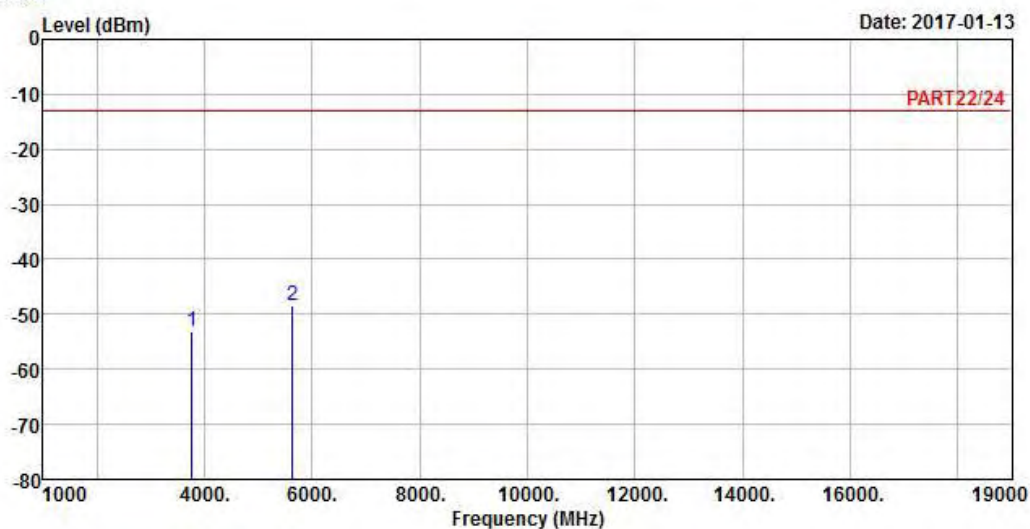
## Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : EDGE 1900\_M-CH

Tested by: Toby Tian

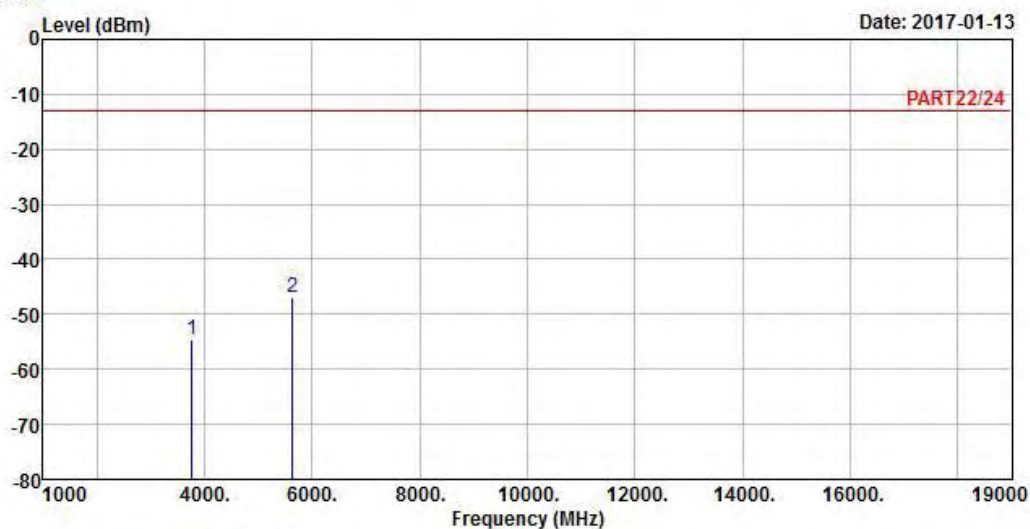
|      |         |        | Read   | Limit  | Over   |        |        |
|------|---------|--------|--------|--------|--------|--------|--------|
|      | Freq    | Level  | Level  | Line   | Limit  | Factor | Remark |
|      | MHz     | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1    | 3760.00 | -53.22 | -45.16 | -13.00 | -40.22 | -8.06  | Peak   |
| 2 pp | 5640.00 | -48.30 | -46.36 | -13.00 | -35.30 | -1.94  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : EDGE 1900\_M-CH  
 Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 3760.00 | -54.64 | -46.58     | -13.00     | -41.64     | -8.06  | Peak   |
| 2 pp | 5640.00 | -46.89 | -44.95     | -13.00     | -33.89     | -1.94  | Peak   |

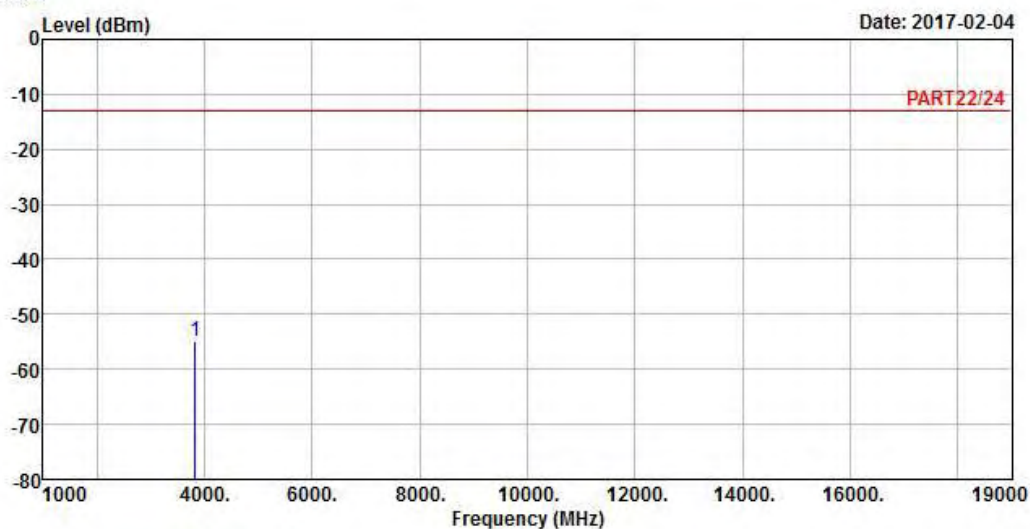
## High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
 Condition: PART22/24 HORIZONTAL  
 Remak : EDGE 1900\_H-CH  
 Tested by: Toby Tian

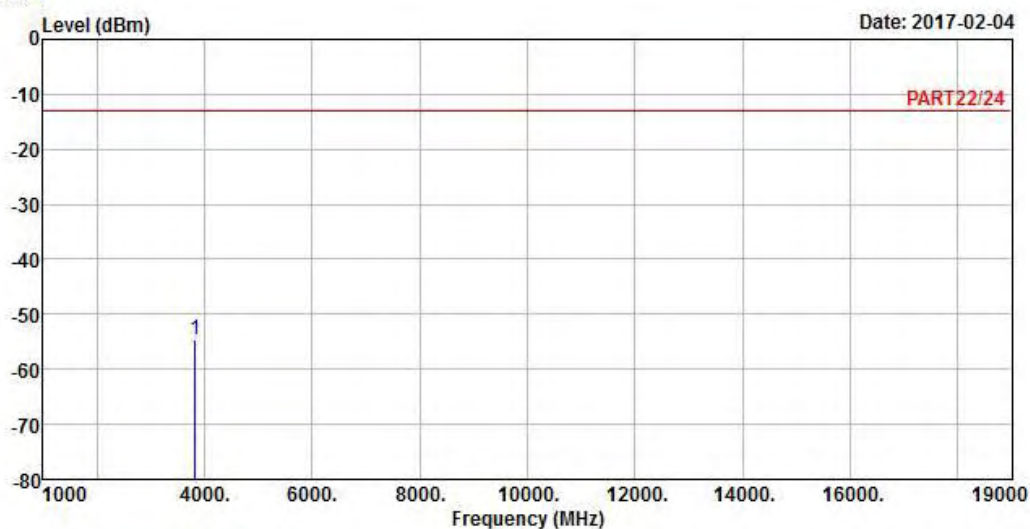
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3819.60 | -54.93 | -47.25 | -13.00 | -41.93 | -7.68  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : EDGE 1900\_H-CH  
 Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3819.60 | -54.75 | -47.07     | -13.00     | -41.75     | -7.68  | Peak   |

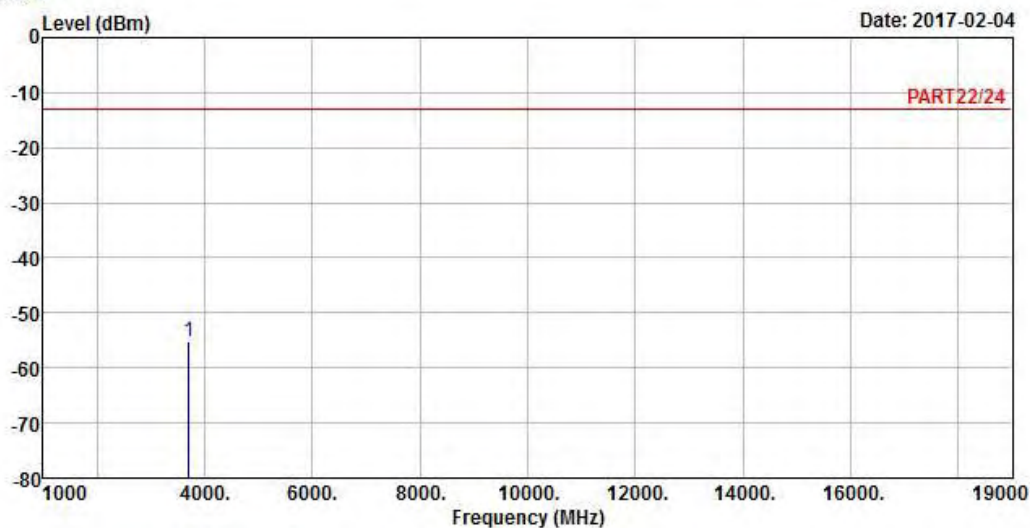
WCDMA:  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : WCDMA Bamd II\_L-CH  
Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3704.80 | -55.15 | -46.98     | -13.00     | -42.15     | -8.17  | Peak   |

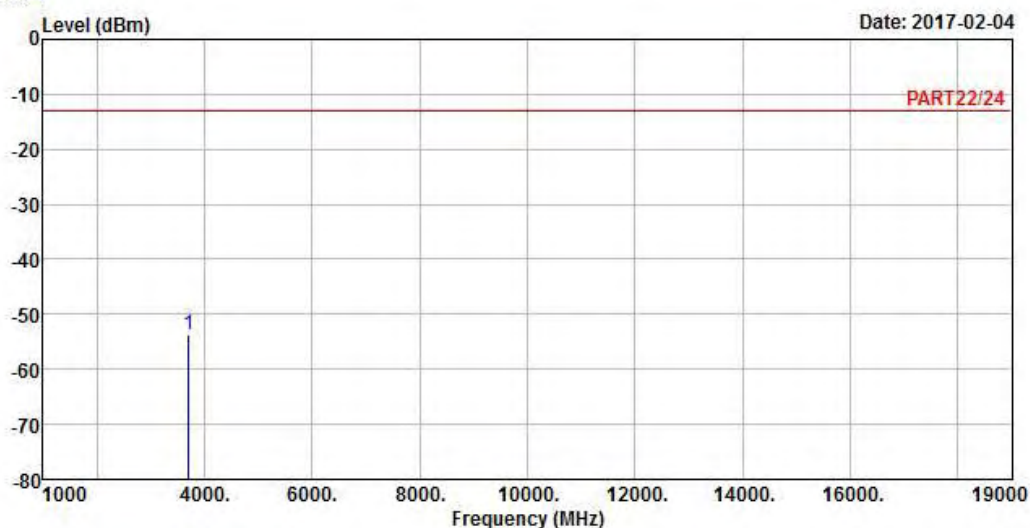




# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : WCDMA Band II\_L-CH  
Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3704.80 | -53.59 | -45.42     | -13.00     | -40.59     | -8.17  | Peak   |

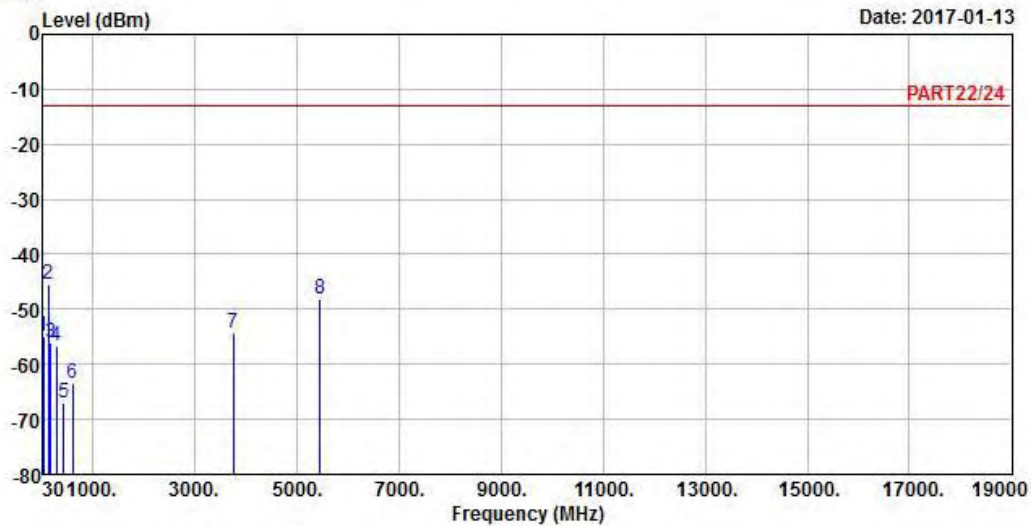
# Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 7



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : WCDMA Band II\_M-CH  
Tested by: Toby Tian

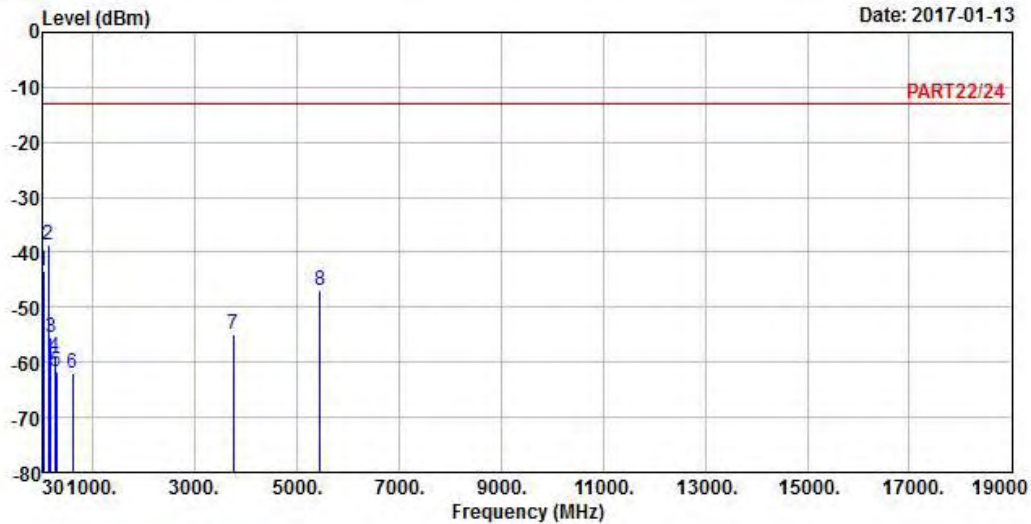
|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 36.79   | -54.97 | -53.98     | -13.00     | -41.97     | -0.99  | Peak   |
| 2 pp | 127.00  | -45.36 | -36.32     | -13.00     | -32.36     | -9.04  | Peak   |
| 3    | 182.29  | -56.12 | -48.78     | -13.00     | -43.12     | -7.34  | Peak   |
| 4    | 292.87  | -56.75 | -49.88     | -13.00     | -43.75     | -6.87  | Peak   |
| 5    | 436.43  | -66.97 | -61.31     | -13.00     | -53.97     | -5.66  | Peak   |
| 6    | 600.36  | -63.55 | -62.80     | -13.00     | -50.55     | -0.75  | Peak   |
| 7    | 3760.00 | -54.45 | -46.39     | -13.00     | -41.45     | -8.06  | Peak   |
| 8    | 5460.00 | -47.98 | -46.55     | -13.00     | -34.98     | -1.43  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 8



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : WCDMA Band II\_M-CH  
Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 35.82   | -43.51 | -41.98     | -13.00     | -30.51     | -1.53  | Peak   |
| 2 pp | 127.97  | -38.77 | -29.85     | -13.00     | -25.77     | -8.92  | Peak   |
| 3    | 182.29  | -55.55 | -48.21     | -13.00     | -42.55     | -7.34  | Peak   |
| 4    | 256.98  | -59.08 | -52.95     | -13.00     | -46.08     | -6.13  | Peak   |
| 5    | 294.81  | -61.70 | -54.79     | -13.00     | -48.70     | -6.91  | Peak   |
| 6    | 600.36  | -61.92 | -61.17     | -13.00     | -48.92     | -0.75  | Peak   |
| 7    | 3760.00 | -54.90 | -46.84     | -13.00     | -41.90     | -8.06  | Peak   |
| 8    | 5460.00 | -46.95 | -45.52     | -13.00     | -33.95     | -1.43  | Peak   |

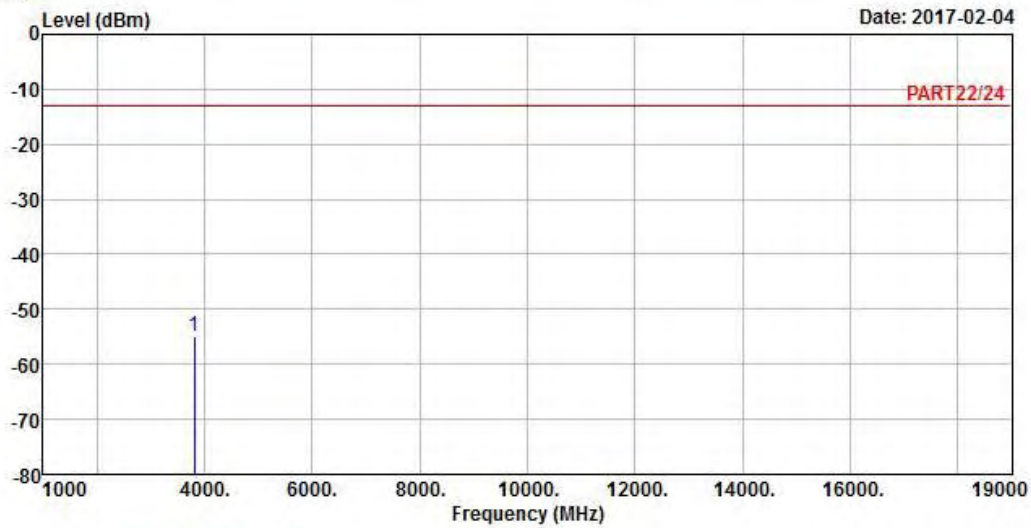
# High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : WCDMA Bamd II\_H-CH  
Tested by: Toby Tian

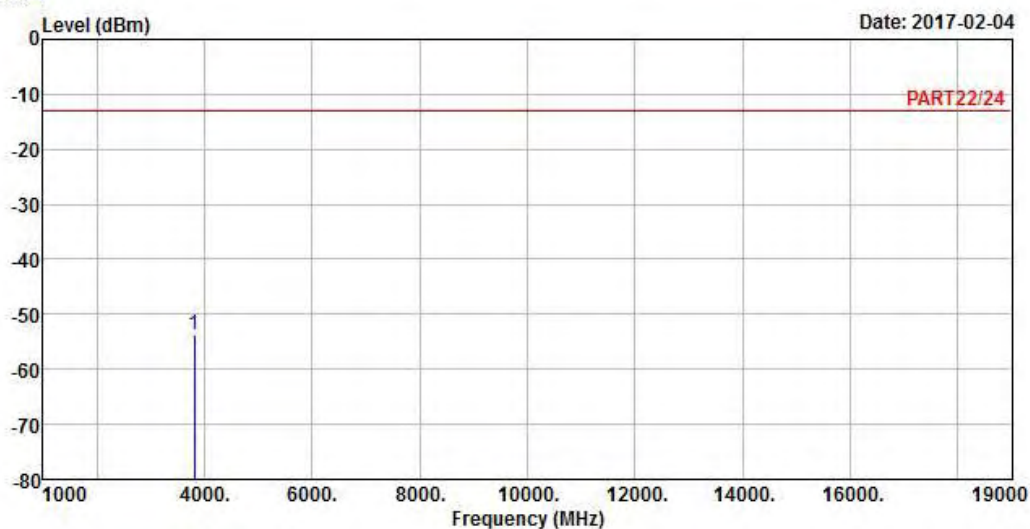
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3815.20 | -54.91 | -47.13 | -13.00 | -41.91 | -7.78  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : WCDMA Band II\_H-CH  
Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3815.20 | -53.86 | -46.08     | -13.00     | -40.86     | -7.78  | Peak   |



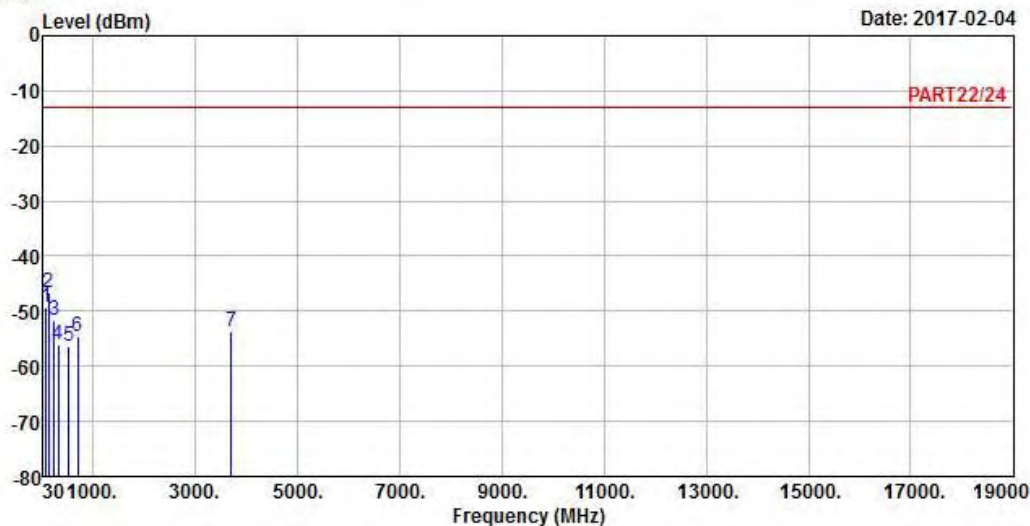
CDMA:  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : CDMA BC1\_L-CH  
Tested by: Toby Tian

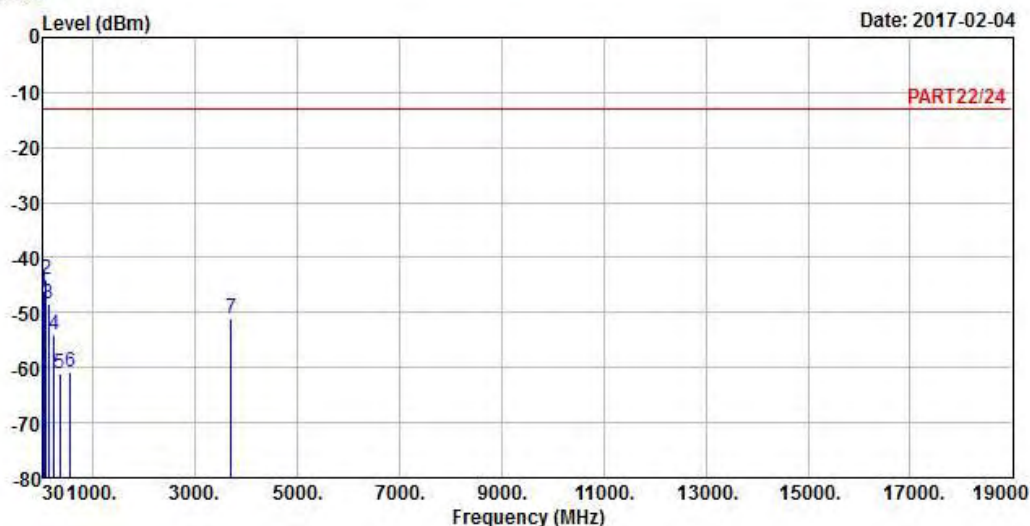
|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 78.50   | -49.36 | -38.93     | -13.00     | -36.36     | -10.43 | Peak   |
| 2 pp | 127.00  | -46.53 | -37.49     | -13.00     | -33.53     | -9.04  | Peak   |
| 3    | 233.70  | -51.62 | -44.96     | -13.00     | -38.62     | -6.66  | Peak   |
| 4    | 314.21  | -55.99 | -49.20     | -13.00     | -42.99     | -6.79  | Peak   |
| 5    | 533.43  | -56.37 | -52.93     | -13.00     | -43.37     | -3.44  | Peak   |
| 6    | 705.12  | -54.50 | -54.50     | -13.00     | -41.50     | 0.00   | Peak   |
| 7    | 3702.50 | -53.85 | -45.68     | -13.00     | -40.85     | -8.17  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : CDMA BC1\_L-CH  
Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 33.88   | -46.09 | -44.51     | -13.00     | -33.09     | -1.58  | Peak   |
| 2 pp | 79.47   | -44.01 | -33.35     | -13.00     | -31.01     | -10.66 | Peak   |
| 3    | 127.97  | -48.36 | -39.44     | -13.00     | -35.36     | -8.92  | Peak   |
| 4    | 237.58  | -53.97 | -47.47     | -13.00     | -40.97     | -6.50  | Peak   |
| 5    | 359.80  | -61.05 | -54.87     | -13.00     | -48.05     | -6.18  | Peak   |
| 6    | 552.83  | -60.79 | -58.06     | -13.00     | -47.79     | -2.73  | Peak   |
| 7    | 3702.50 | -50.98 | -42.81     | -13.00     | -37.98     | -8.17  | Peak   |

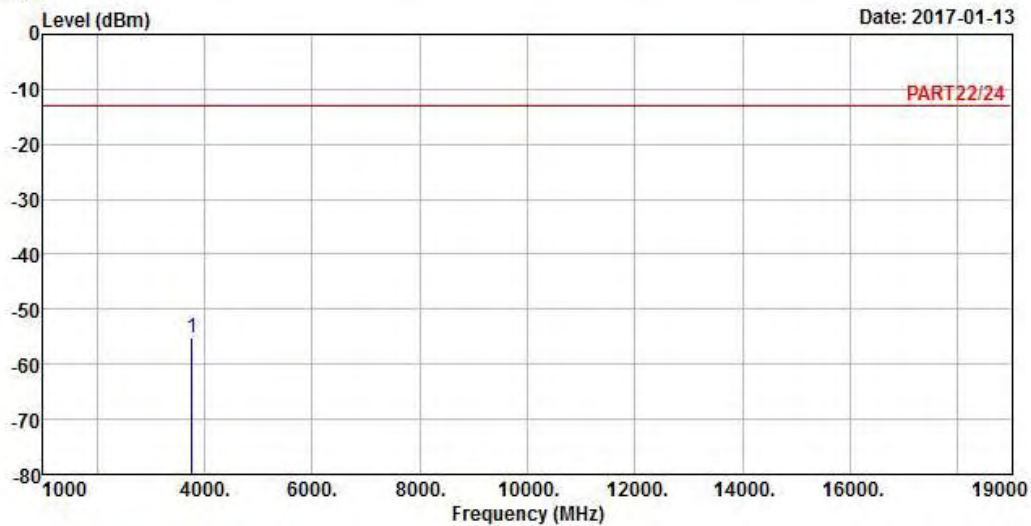
# Middle Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : CDMA BC1\_M-CH  
Tested by: Toby Tian

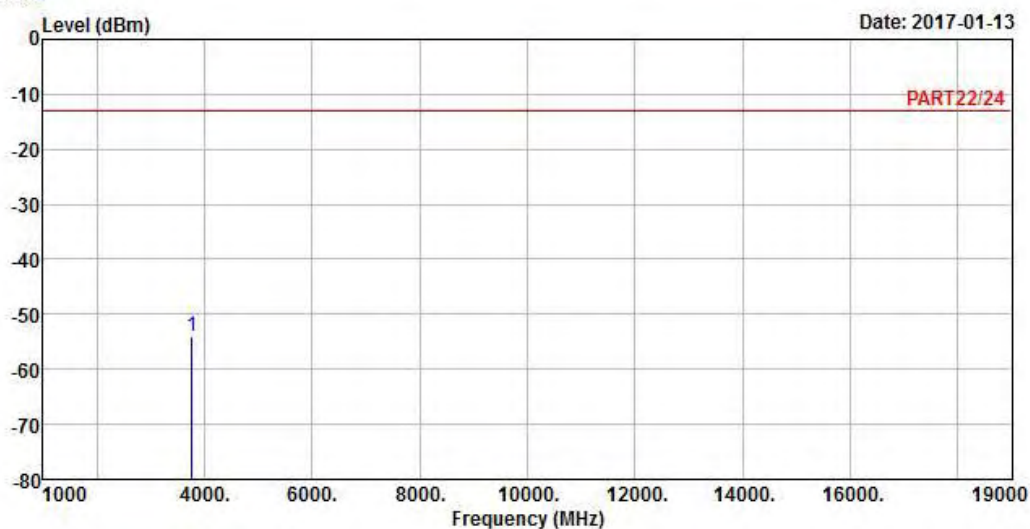
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3760.00 | -55.24 | -47.18 | -13.00 | -42.24 | -8.06  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : CDMA BC1\_M-CH  
 Tested by: Toby Tian

|              |        |        | Read   | Limit  | Over  |        |        |
|--------------|--------|--------|--------|--------|-------|--------|--------|
| Freq         | Level  | Level  | Level  | Line   | Limit | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dBm    | dB    | dB     |        |
| 1 pp 3760.00 | -53.92 | -45.86 | -13.00 | -40.92 | -8.06 | Peak   |        |

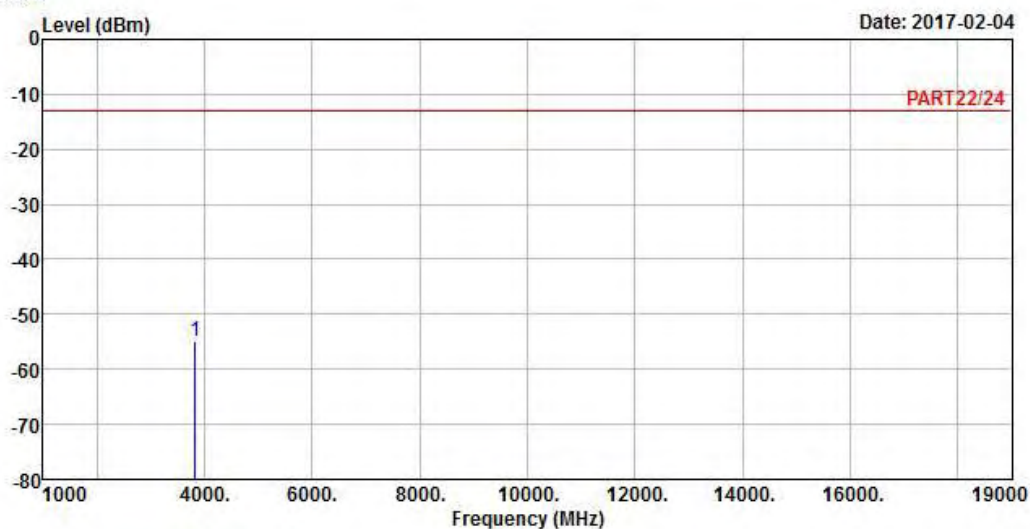
# High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : CDMA BC1\_H-CH  
Tested by: Toby Tian

|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3817.50 | -55.03 | -47.35 | -13.00 | -42.03 | -7.68  | Peak   |

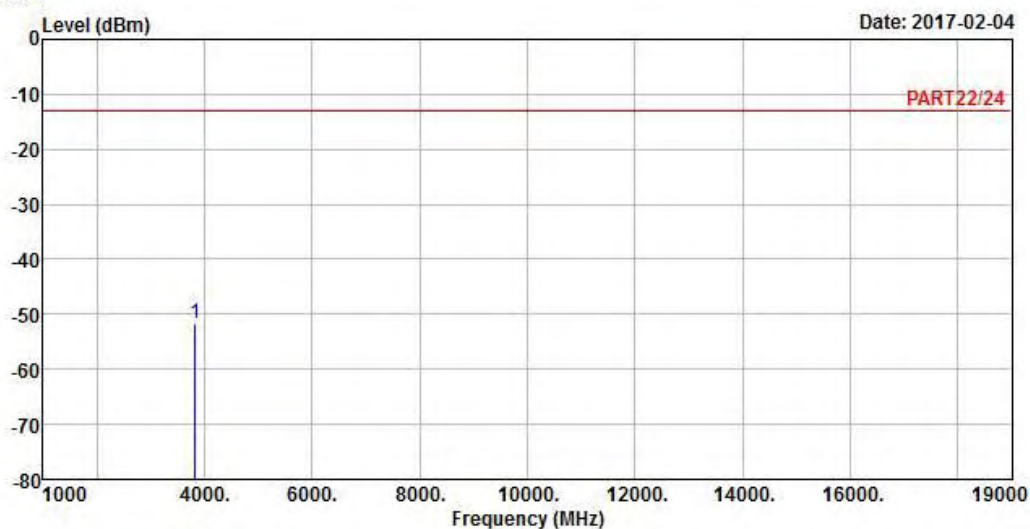




Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : CDMA BC1\_H-CH  
Tested by: Toby Tian

|              |        |        | Read   | Limit  | Over   |        |  |
|--------------|--------|--------|--------|--------|--------|--------|--|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |  |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |  |
| 1 pp 3817.50 | -51.67 | -43.99 | -13.00 | -38.67 | -7.68  | Peak   |  |

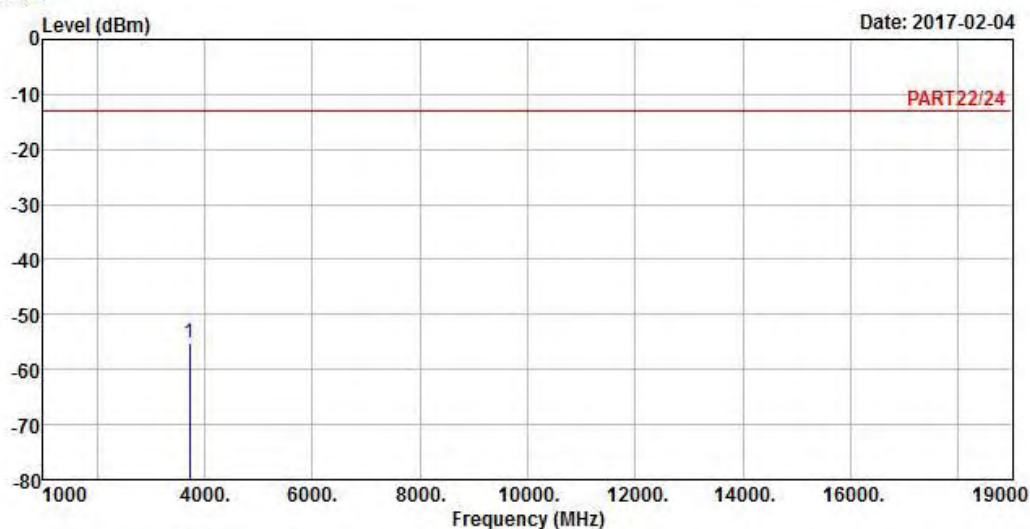
LTE Band 2  
Channel Bandwidth: 20 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : LTE Band II\_QPSK\_20M\_L-CH  
Tested by: Toby Tian

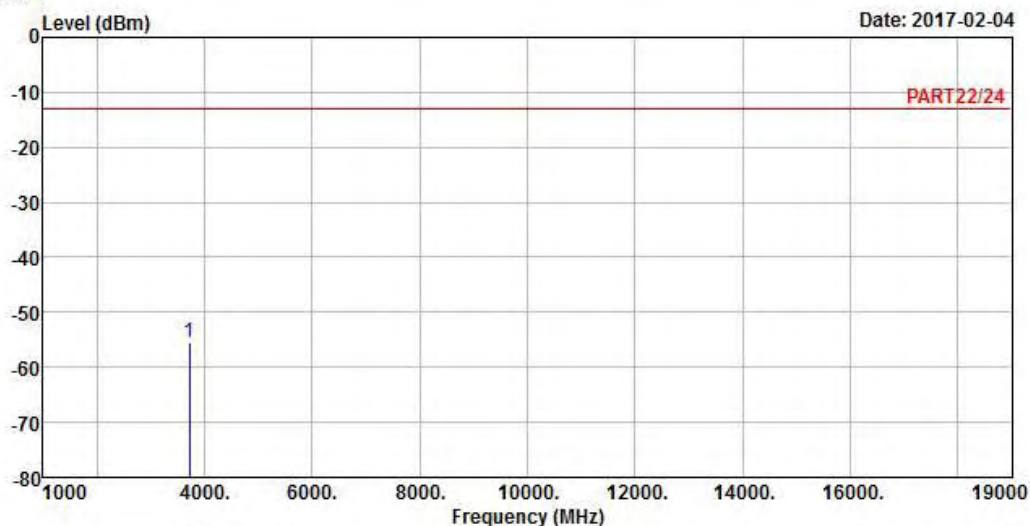
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3720.00 | -55.21 | -47.08 | -13.00 | -42.21 | -8.13  | Peak   |



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5

Condition: PART22/24 VERTICAL

Remak : LTE Band II\_QPSK\_20M\_L-CH

Tested by: Toby Tian

|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3720.00 | -55.60 | -47.47 | -13.00 | -42.60 | -8.13  | Peak   |

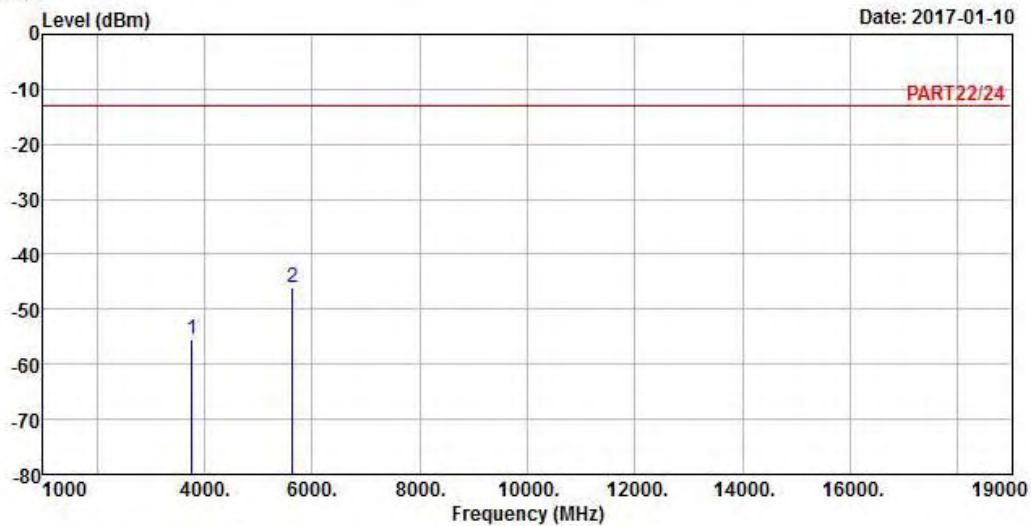
## Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 7



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : LTE Band II\_QPSK\_20M\_M-CH

Tested by: Toby Tian

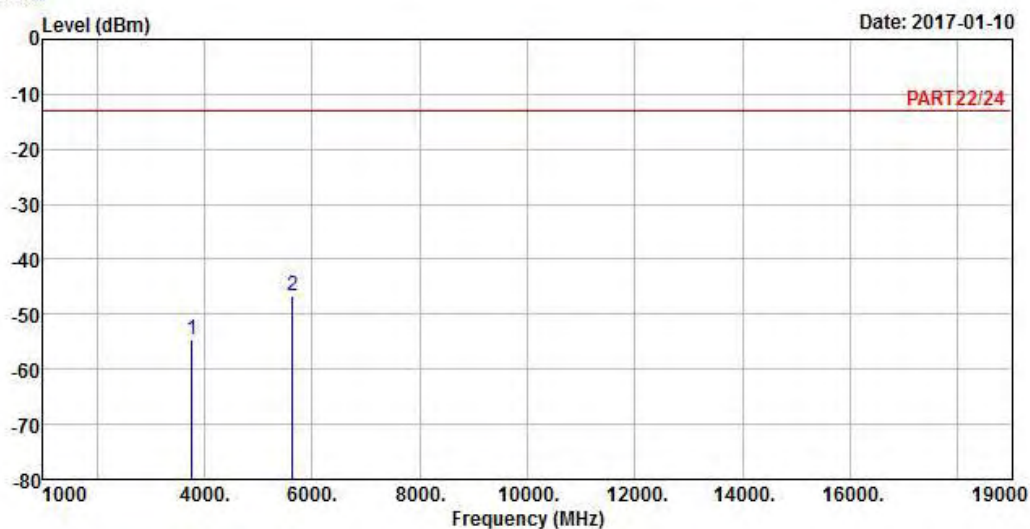
|      |         |        | Read   | Limit  | Over   |        |        |
|------|---------|--------|--------|--------|--------|--------|--------|
|      | Freq    | Level  | Level  | Line   | Limit  | Factor | Remark |
|      | MHz     | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1    | 3760.00 | -55.38 | -47.32 | -13.00 | -42.38 | -8.06  | Peak   |
| 2 pp | 5640.00 | -46.06 | -44.12 | -13.00 | -33.06 | -1.94  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 8



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : LTE Band II\_QPSK\_20M\_M-CH  
Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 3760.00 | -54.74 | -46.68     | -13.00     | -41.74     | -8.06  | Peak   |
| 2 pp | 5640.00 | -46.58 | -44.64     | -13.00     | -33.58     | -1.94  | Peak   |



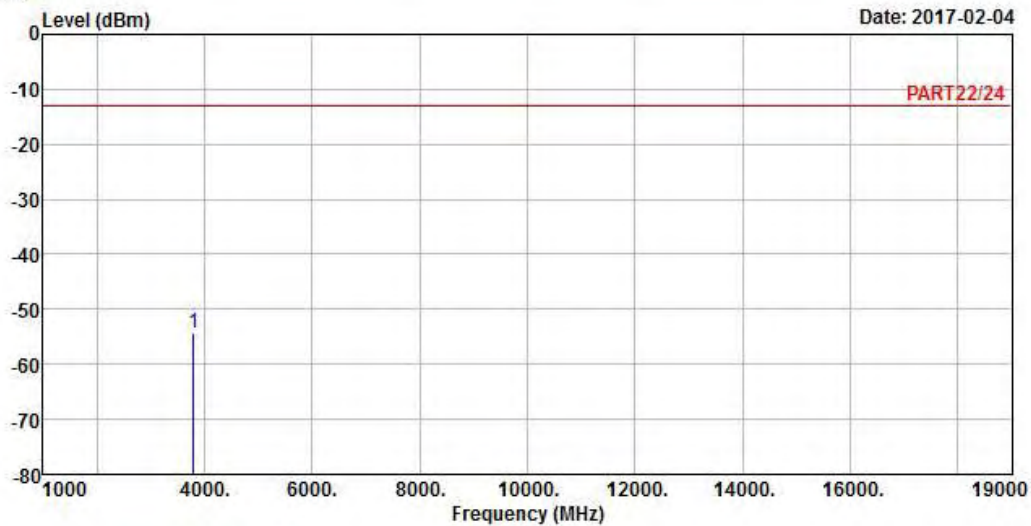
# High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : LTE Band II\_QPSK\_20M\_H-CH  
Tested by: Toby Tian

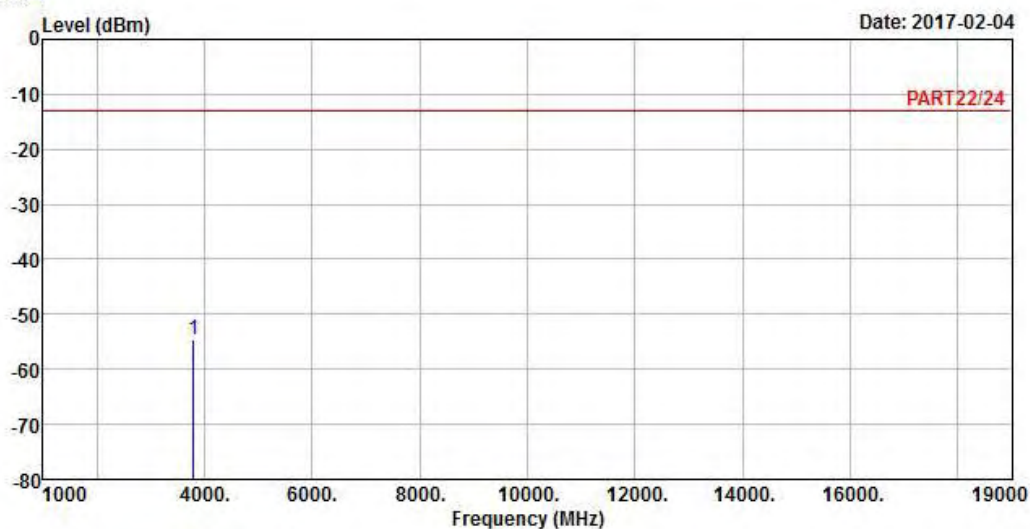
|              |        | Read   | Limit  | Over   |        |        |
|--------------|--------|--------|--------|--------|--------|--------|
| Freq         | Level  | Level  | Line   | Limit  | Factor | Remark |
| MHz          | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1 pp 3800.00 | -54.23 | -46.45 | -13.00 | -41.23 | -7.78  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : LTE Band II\_QPSK\_20M\_H-CH  
 Tested by: Toby Tian

| Freq         | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|--------------|--------|------------|------------|------------|--------|--------|
| MHz          | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1 pp 3800.00 | -54.72 | -46.94     | -13.00     | -41.72     | -7.78  | Peak   |

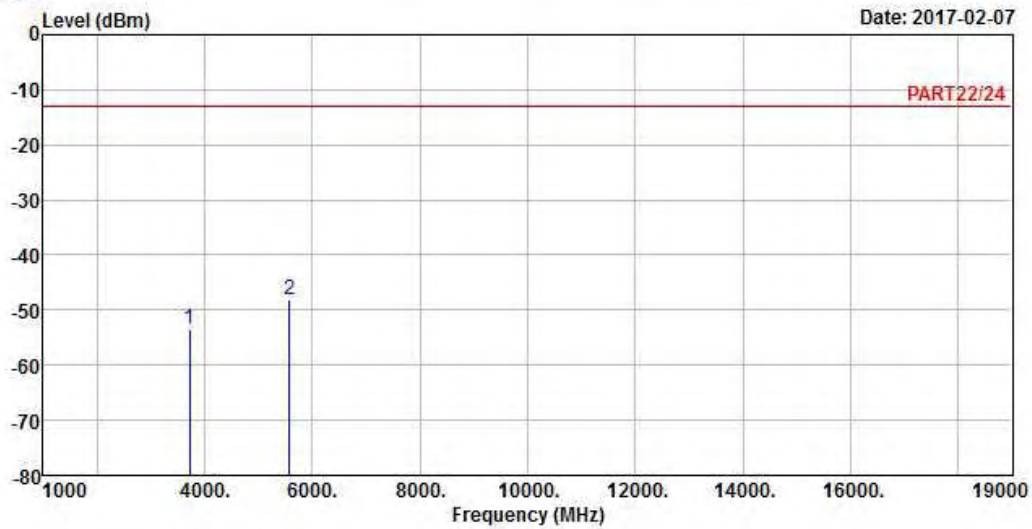
LTE Band 25  
Channel Bandwidth: 20 MHz / QPSK  
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5  
Condition: PART22/24 HORIZONTAL  
Remak : LTE Band 25\_QPSK\_20M\_L\_CH Link  
Tested by: Toby Tian

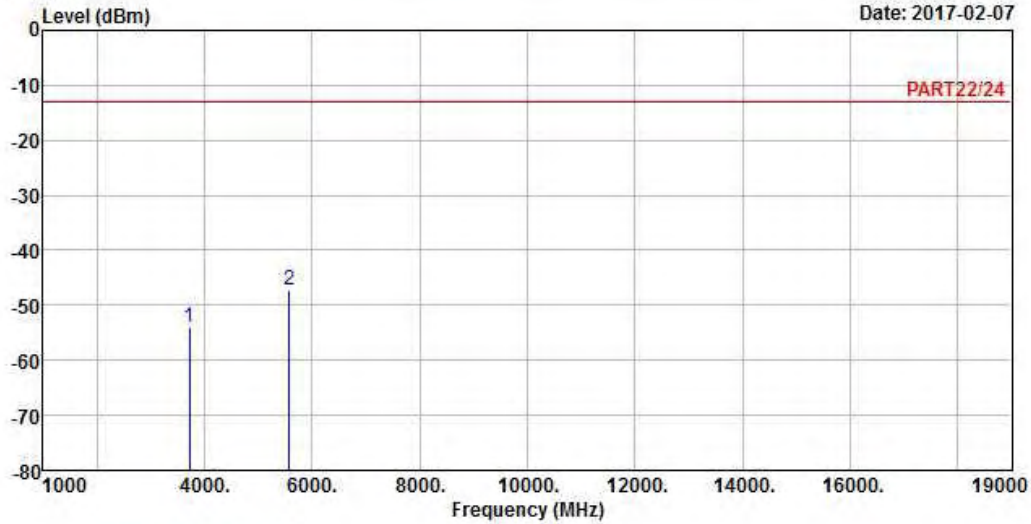
|      |         |        | Read   | Limit  | Over   |        |        |
|------|---------|--------|--------|--------|--------|--------|--------|
|      | Freq    | Level  | Level  | Line   | Limit  | Factor | Remark |
|      | MHz     | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1    | 3720.00 | -53.33 | -45.20 | -13.00 | -40.33 | -8.13  | Peak   |
| 2 pp | 5580.00 | -48.12 | -46.57 | -13.00 | -35.12 | -1.55  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : LTE Band 25\_QPSK\_20M\_L\_CH Link  
 Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 3720.00 | -53.98 | -45.85     | -13.00     | -40.98     | -8.13  | Peak   |
| 2 pp | 5580.00 | -47.09 | -45.54     | -13.00     | -34.09     | -1.55  | Peak   |

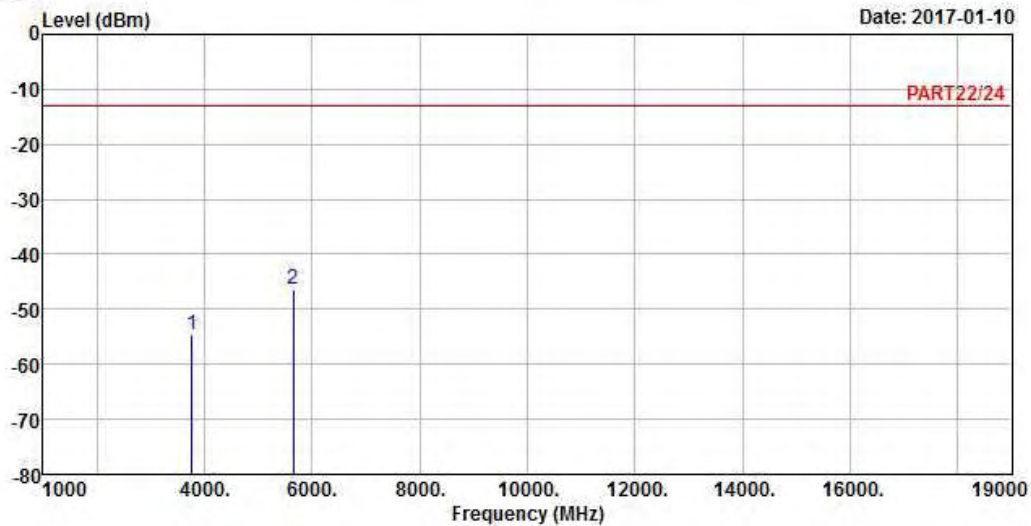
## Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : LTE Band 25\_QPSK\_20M\_M\_CH

Tested by: Toby Tian

|      |         |        | Read   | Limit  | Over   |        |        |
|------|---------|--------|--------|--------|--------|--------|--------|
|      | Freq    | Level  | Level  | Line   | Limit  | Factor | Remark |
|      | MHz     | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1    | 3765.00 | -54.64 | -46.67 | -13.00 | -41.64 | -7.97  | Peak   |
| 2 pp | 5647.50 | -46.20 | -44.26 | -13.00 | -33.20 | -1.94  | Peak   |

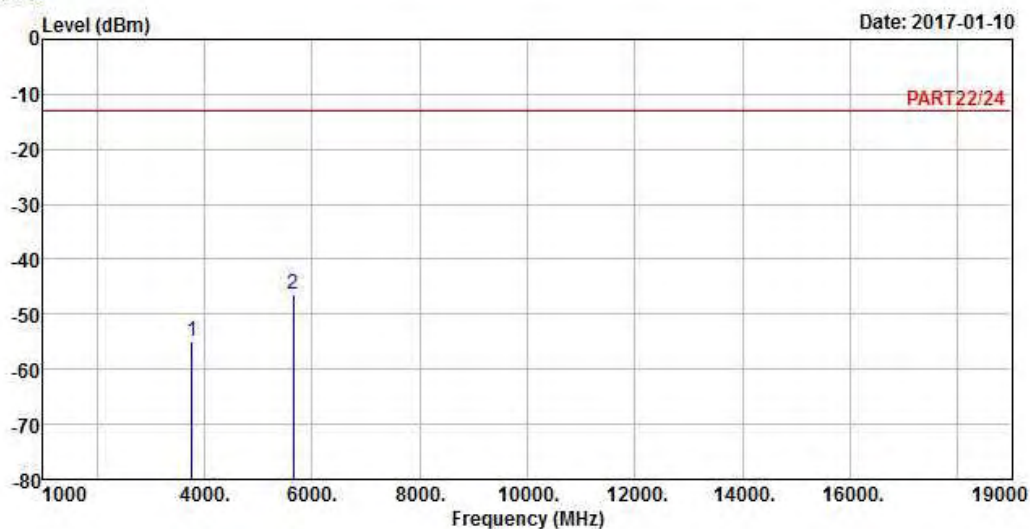




Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5  
 Condition: PART22/24 VERTICAL  
 Remak : LTE Band 25\_QPSK\_20M\_M\_CH  
 Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 3765.00 | -54.83 | -46.86     | -13.00     | -41.83     | -7.97  | Peak   |
| 2 pp | 5647.50 | -46.48 | -44.54     | -13.00     | -33.48     | -1.94  | Peak   |

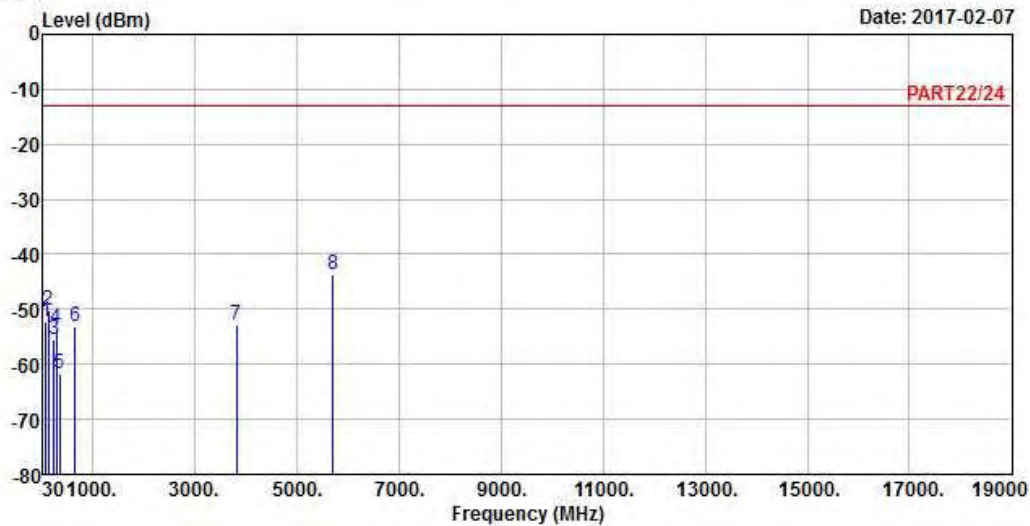
## High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 7



Site : 966 Chamber 5  
 Condition: PART22/24 HORIZONTAL  
 Remak : LTE Band 25\_QPSK\_20M\_H\_CH Link  
 Tested by: Toby Tian

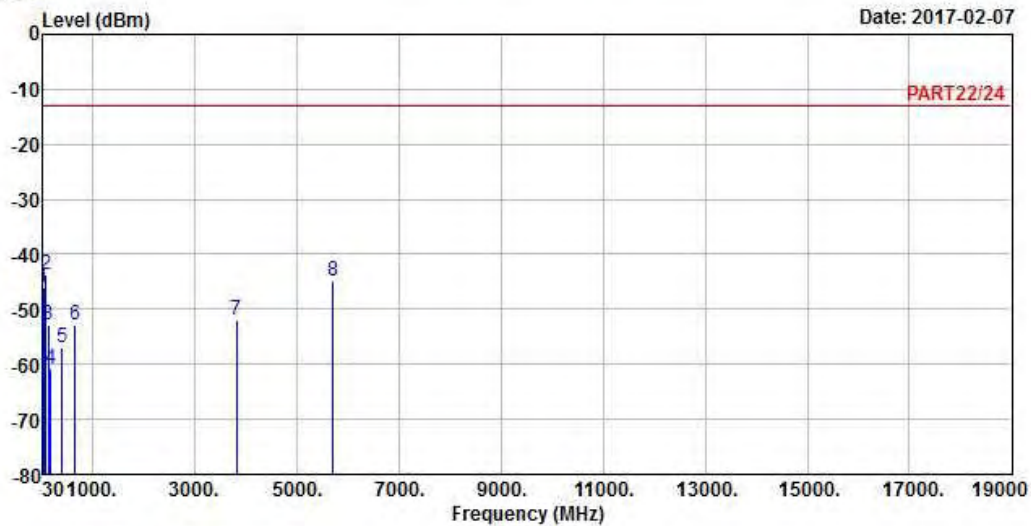
|      |         |        | Read   | Limit  | Over   |        |        |
|------|---------|--------|--------|--------|--------|--------|--------|
|      | Freq    | Level  | Level  | Line   | Limit  | Factor | Remark |
|      | MHz     | dBm    | dBm    | dBm    | dB     | dB     |        |
| 1    | 79.47   | -52.37 | -41.71 | -13.00 | -39.37 | -10.66 | Peak   |
| 2    | 128.94  | -50.19 | -41.38 | -13.00 | -37.19 | -8.81  | Peak   |
| 3    | 235.64  | -55.60 | -49.02 | -13.00 | -42.60 | -6.58  | Peak   |
| 4    | 291.90  | -53.48 | -46.63 | -13.00 | -40.48 | -6.85  | Peak   |
| 5    | 359.80  | -61.66 | -55.48 | -13.00 | -48.66 | -6.18  | Peak   |
| 6    | 648.86  | -53.26 | -52.38 | -13.00 | -40.26 | -0.88  | Peak   |
| 7    | 3810.00 | -52.90 | -45.12 | -13.00 | -39.90 | -7.78  | Peak   |
| 8 pp | 5715.00 | -43.79 | -42.03 | -13.00 | -30.79 | -1.76  | Peak   |



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 8



Site : 966 Chamber 5  
Condition: PART22/24 VERTICAL  
Remak : LTE Band 25\_QPSK\_20M\_H\_CH Link  
Tested by: Toby Tian

|      | Freq    | Level  | Read Level | Limit Line | Over Limit | Factor | Remark |
|------|---------|--------|------------|------------|------------|--------|--------|
|      | MHz     | dBm    | dBm        | dBm        | dB         | dB     |        |
| 1    | 34.85   | -46.01 | -43.94     | -13.00     | -33.01     | -2.07  | Peak   |
| 2 pp | 80.44   | -43.83 | -32.95     | -13.00     | -30.83     | -10.88 | Peak   |
| 3    | 127.97  | -52.74 | -43.82     | -13.00     | -39.74     | -8.92  | Peak   |
| 4    | 179.38  | -60.94 | -53.71     | -13.00     | -47.94     | -7.23  | Peak   |
| 5    | 408.30  | -56.97 | -51.09     | -13.00     | -43.97     | -5.88  | Peak   |
| 6    | 647.89  | -52.91 | -52.03     | -13.00     | -39.91     | -0.88  | Peak   |
| 7    | 3810.00 | -51.89 | -44.11     | -13.00     | -38.89     | -7.78  | Peak   |
| 8    | 5715.00 | -44.80 | -43.04     | -13.00     | -31.80     | -1.76  | Peak   |

## 5 Pictures of Test Arrangements

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

## Appendix – Information on 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 accredited and approved according to ISO/IEC 17025.

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

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Fax: 886-2-26051924

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

Tel: 886-3-6668565

Fax: 886-3-6668323

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Tel: 886-3-3183232

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

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

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

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