

# FCC Radio Test Report

## FCC ID: QISE5573CS-509

This report concerns (check one): ☒ Original Grant ☐ Class II Change

**Project No.** : 1702C058  
**Equipment** : Mobile WiFi  
**Model Name** : E5573Cs-509  
**Applicant** : Huawei Technologies Co., Ltd.  
**Address** : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

**Date of Receipt** : Feb. 14, 2017  
**Date of Test** : Feb. 14, 2017 ~ Mar. 06, 2017  
**Issued Date** : Mar. 06, 2017  
**Tested by** : BTL Inc.

**Technical Engineer**

: Shawn Xiao  
(Shawn Xiao)

**Authorized Signatory**

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**BTL's** laboratory quality assurance procedures are in compliance with the **ISO Guide17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

### **Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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### REPORT ISSUED HISTORY

| Issued No.          | Description     | Issued Date   |
|---------------------|-----------------|---------------|
| BTL-FCCP-3-1702C058 | Original Issue. | Mar. 06, 2017 |

## 1. CERTIFICATION

Equipment : Mobile WiFi  
Brand Name : HUAWEI  
Model Name : E5573Cs-509  
Applicant : Huawei Technologies Co., Ltd.  
Manufacturer : Huawei Technologies Co., Ltd  
Address : Administration Building, Huawei Base, Bantian, Longgang District ,  
Shenzhen 518129, P.R.China  
Factory : Huawei Technologies Co., Ltd  
Address : Administration Building, Huawei Base, Bantian, Longgang District ,  
Shenzhen 518129, P.R.China  
Date of Test : Feb. 14, 2017 ~ Mar. 06, 2017  
Test Sample : Engineering Sample  
Standard(s) : 47 CFR FCC Part 27  
47 CFR FCC Part 2 & ANSI/TIA-603-D-2010

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1702C058) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

**Test results included in this report is only for the WCDMA Band 4, LTE Band 4, 7, 12, 13, 17 parts.**

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| FCC Part 27 & Part 2  |                              |          |           |
|-----------------------|------------------------------|----------|-----------|
| Standard(s) Section   | Test Item                    | Judgment | Tested By |
| 2.1046<br>27.50(d)(4) | Radiated power               | PASS     | Paul Li   |
| 2.1046<br>27.50(d)(4) | Conducted Output Power       | PASS     | Paul Li   |
| 2.1049<br>27.53(h)    | Occupied Bandwidth           | PASS     | Paul Li   |
| 2.1051<br>27.53(h)    | Conducted Spurious Emissions | PASS     | Paul Li   |
| 2.1053<br>27.53(h)    | Radiated Spurious Emissions  | PASS     | Biao Chen |
| 27.53(h)              | Band Edge Measurements       | PASS     | Paul Li   |
| 27.50                 | Peak To Average Ratio        | PASS     | Paul Li   |
| 2.1055<br>27.54       | Frequency Stability          | PASS     | Paul Li   |

NOTE:

(1) "N/A" denotes test is not applicable to this device.

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 319330

## 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{\text{CISPR}}$  requirement.

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

### A. Radiated Measurement :

| Test Site       | Method | Measurement Frequency Range | Ant.<br>H / V | $U_1$ (dB) |
|-----------------|--------|-----------------------------|---------------|------------|
| DG-CB03<br>(3m) | CISPR  | 9KHz ~ 30MHz                | V             | 3.79       |
|                 |        | 9KHz ~ 30MHz                | H             | 3.57       |
|                 |        | 30MHz ~ 200MHz              | V             | 3.82       |
|                 |        | 30MHz ~ 200MHz              | H             | 3.78       |
|                 |        | 200MHz ~ 1,000MHz           | V             | 4.10       |
|                 |        | 200MHz ~ 1,000MHz           | H             | 4.06       |

| Test Site       | Method | Measurement Frequency Range | Ant.<br>H / V | $U_1$ (dB) |
|-----------------|--------|-----------------------------|---------------|------------|
| DG-CB03<br>(3m) | CISPR  | 1GHz ~ 18GHz                | V             | 3.12       |
|                 |        | 1GHz ~ 18GHz                | H             | 3.68       |

| Test Site       | Method | Measurement Frequency Range | Ant.<br>H / V | $U_1$ (dB) |
|-----------------|--------|-----------------------------|---------------|------------|
| DG-CB03<br>(1m) | CISPR  | 18GHz ~ 40GHz               | V             | 4.15       |
|                 |        | 18GHz ~ 40GHz               | H             | 4.14       |

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

|                     |                                   |                                |
|---------------------|-----------------------------------|--------------------------------|
| Equipment           | Mobile WiFi                       |                                |
| Brand Name          | HUAWEI                            |                                |
| Model Name          | E5573Cs-509                       |                                |
| Model Difference    | N/A                               |                                |
| Modulation Type     | WCDMA                             | Uplink: BPSK<br>Downlink: QPSK |
|                     | WCDMA(HSDPA/HSUPA/HSPA+)          | 16QAM/64QAM                    |
|                     | LTE                               | QPSK, 16QAM                    |
| Operation Frequency | WCDMA Band 4                      | 1712.4 ~ 1752.6MHz             |
|                     | LTE 4 (Channel Bandwidth: 5MHz)   | 1712.5 ~ 1752.5 MHz            |
|                     | LTE 4 (Channel Bandwidth: 10MHz)  | 1715.0 ~ 1750.0 MHz            |
|                     | LTE 4 (Channel Bandwidth: 15MHz)  | 1717.5 ~ 1747.5 MHz            |
|                     | LTE 4 (Channel Bandwidth: 20MHz)  | 1720.0 ~ 1745.0 MHz            |
|                     | LTE 7 (Channel Bandwidth: 5MHz)   | 2502.5 ~ 2567.5 MHz            |
|                     | LTE 7 (Channel Bandwidth: 10MHz)  | 2505.0 ~ 2565.0 MHz            |
|                     | LTE 7 (Channel Bandwidth: 15MHz)  | 2507.5 ~ 2562.5 MHz            |
|                     | LTE 7 (Channel Bandwidth: 20MHz)  | 2510.0 ~ 2560.0 MHz            |
|                     | LTE 12 (Channel Bandwidth: 5MHz)  | 701.5 ~ 713.5MHz               |
|                     | LTE 12 (Channel Bandwidth: 10MHz) | 704.0 ~ 711.0MHz               |
|                     | LTE 13 (Channel Bandwidth: 5MHz)  | 779.5 ~ 784.5MHz               |
|                     | LTE 13 (Channel Bandwidth: 10MHz) | 782.0MHz                       |
|                     | LTE 17 (Channel Bandwidth: 10MHz) | 706.5 ~ 713.5 MHz              |
|                     | LTE 17 (Channel Bandwidth: 15MHz) | 709.0 ~ 711.0 MHz              |

|                 |                                   |       |       |     |
|-----------------|-----------------------------------|-------|-------|-----|
| Max. EIRP Power | WCDMA Band 4(WCDMA)               | BPSK  | 25.33 | dBm |
|                 | WCDMA Band 4(HSDPA)               | 16QAM | 25.11 | dBm |
|                 | WCDMA Band 4(HSUPA)               | 16QAM | 23.59 | dBm |
|                 | LTE 4 (Channel Bandwidth: 5MHz)   | QPSK  | 25.27 | dBm |
|                 |                                   | 16QAM | 24.57 | dBm |
|                 | LTE 4 (Channel Bandwidth: 10MHz)  | QPSK  | 25.65 | dBm |
|                 |                                   | 16QAM | 24.56 | dBm |
|                 | LTE 4 (Channel Bandwidth: 15MHz)  | QPSK  | 25.63 | dBm |
|                 |                                   | 16QAM | 24.65 | dBm |
|                 | LTE 4 (Channel Bandwidth: 20MHz)  | QPSK  | 25.19 | dBm |
|                 |                                   | 16QAM | 24.60 | dBm |
|                 | LTE 7 (Channel Bandwidth: 5MHz)   | QPSK  | 24.95 | dBm |
|                 |                                   | 16QAM | 24.15 | dBm |
|                 | LTE 7 (Channel Bandwidth: 10MHz)  | QPSK  | 25.42 | dBm |
|                 |                                   | 16QAM | 25.09 | dBm |
|                 | LTE 7 (Channel Bandwidth: 15MHz)  | QPSK  | 25.38 | dBm |
|                 |                                   | 16QAM | 24.77 | dBm |
| Max. ERP Power  | LTE 12 (Channel Bandwidth: 5MHz)  | QPSK  | 25.75 | dBm |
|                 |                                   | 16QAM | 25.03 | dBm |
|                 | LTE 12 (Channel Bandwidth: 10MHz) | QPSK  | 17.62 | dBm |
|                 |                                   | 16QAM | 17.09 | dBm |
|                 | LTE 12 (Channel Bandwidth: 10MHz) | QPSK  | 17.84 | dBm |
|                 |                                   | 16QAM | 17.15 | dBm |
|                 | LTE 13 (Channel Bandwidth: 5MHz)  | QPSK  | 19.29 | dBm |
|                 |                                   | 16QAM | 19.62 | dBm |
|                 | LTE 13 (Channel Bandwidth: 10MHz) | QPSK  | 19.29 | dBm |
|                 |                                   | 16QAM | 18.64 | dBm |
|                 | LTE 17 (Channel Bandwidth: 5MHz)  | QPSK  | 16.98 | dBm |
|                 |                                   | 16QAM | 16.36 | dBm |
|                 | LTE 17 (Channel Bandwidth: 10MHz) | QPSK  | 16.81 | dBm |
|                 |                                   | 16QAM | 16.39 | dBm |

|                  |                                                                  |                                              |
|------------------|------------------------------------------------------------------|----------------------------------------------|
| Antenna Type     | Fixed Internal Antenna                                           |                                              |
| Antenna Gain     | WCDMA Band 4                                                     | 0.41 dBi(Diversity Ant),2.66 dBi(Main Ant)   |
|                  | LTE Band 4                                                       |                                              |
|                  | LTE Band 7                                                       | 2.77 dBi(Diversity Ant),2.77 dBi(Main Ant)   |
|                  | LTE Band 12                                                      | -3.17 dBi(Main Ant)                          |
|                  | LTE Band 13                                                      | -2.33 dBi(Diversity Ant),-1.62 dBi(Main Ant) |
|                  | LTE Band 17                                                      | -3.6 dBi(Main Ant)                           |
| Hardware Version | CL2E5573CSM01                                                    |                                              |
| Software Version | 21.323.00.00.00                                                  |                                              |
| IMEI No.1        | Radiated                                                         | 004401728362586                              |
|                  | Conducted                                                        | 004401728362530                              |
| Power Source     | #1 Supplied from PC USB port or adapter.<br>#2 Battery Supplied. |                                              |
| Power Rating     | #1 100-240V~ 50/60Hz<br>#2 --- 4.0V ( 3.8V-4.2V )                |                                              |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

### 3.2 DESCRIPTION OF TEST MODES AND TEST CONDITION

Following channel(s) was (were) selected for the final test as listed below:

| WCDMA BAND 4          |                   |                  |                    |
|-----------------------|-------------------|------------------|--------------------|
| Test Item             | Available Channel | Tested Channel   | Mode               |
| EIRP                  | 1312 to 1513      | 1312, 1413, 1513 | WCDMA,HSDPA, HSUPA |
| Frequency Stability   | 1312 to 1513      | 1413             | WCDMA              |
| Occupied Bandwidth    | 1312 to 1513      | 1312, 1413, 1513 | WCDMA,HSDPA, HSUPA |
| Band Edge             | 1312 to 1513      | 1312, 1513       | WCDMA,HSDPA, HSUPA |
| Peak to Average Ratio | 1312 to 1513      | 1312, 1413, 1513 | WCDMA,HSDPA, HSUPA |
| Conducuted Emission   | 1312 to 1513      | 1413             | WCDMA,HSDPA, HSUPA |
| Radiated Emission     | 1312 to 1513      | 1312             | WCDMA,HSDPA, HSUPA |

| LTE BAND 4         |                   |                     |                   |             |                      |
|--------------------|-------------------|---------------------|-------------------|-------------|----------------------|
| Test Item          | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                 |
| EIRP               | 19975 to 20375    | 19975, 20175, 20375 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                    | 20000 to 20350    | 20000, 20175, 20350 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                    | 20025 to 20325    | 20025, 20175, 20325 | 15MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                    | 20050 to 20300    | 20050, 20175, 20300 | 20MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
| Occupied Bandwidth | 19975 to 20375    | 19975, 20175, 20375 | 5MHz              | QPSK, 16QAM | 25 RB / 0 RB Offset  |
|                    | 20000 to 20350    | 20000, 20175, 20350 | 10MHz             | QPSK, 16QAM | 50 RB / 0 RB Offset  |
|                    | 20025 to 20325    | 20025, 20175, 20325 | 15MHz             | QPSK, 16QAM | 75 RB / 0 RB Offset  |
|                    | 20050 to 20300    | 20050, 20175, 20300 | 20MHz             | QPSK, 16QAM | 100 RB / 0 RB Offset |
| Conducted Emission | 19975 to 20375    | 20175               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                    | 20000 to 20350    | 20175               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                    | 20025 to 20325    | 20175               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                    | 20050 to 20300    | 20175               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |
| Radiated Emission  | 19975 to 20375    | 20375               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                    | 20050 to 20300    | 20300               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |

| LTE BAND 4            |                   |                     |                   |             |                      |
|-----------------------|-------------------|---------------------|-------------------|-------------|----------------------|
| Test Item             | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                 |
| Band Edge             | 19975 to 20375    | 19975               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset  |
|                       |                   | 20375               | 5MHz              | QPSK        | 1 RB / 24 RB Offset  |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset  |
|                       | 20000 to 20350    | 20000               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset  |
|                       |                   | 20350               | 10MHz             | QPSK        | 1 RB / 49 RB Offset  |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset  |
|                       | 20025 to 20325    | 20025               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 75 RB / 0 RB Offset  |
|                       |                   | 20325               | 15MHz             | QPSK        | 1 RB / 74 RB Offset  |
|                       |                   |                     |                   |             | 75 RB / 0 RB Offset  |
|                       | 20050 to 20300    | 20050               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 100 RB / 0 RB Offset |
|                       |                   | 20300               | 20MHz             | QPSK        | 1 RB / 99 RB Offset  |
|                       |                   |                     |                   |             | 100 RB / 0 RB Offset |
| Peak To Average Ratio | 19975 to 20375    | 19975, 20175, 20375 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20000 to 20350    | 20000, 20175, 20350 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20025 to 20325    | 20025, 20175, 20325 | 15MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20050 to 20300    | 20050, 20175, 20300 | 20MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
| Frequency Stability   | 19975 to 20375    | 20175               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20000 to 20350    | 20175               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20025 to 20325    | 20175               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20050 to 20300    | 20175               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |

| LTE BAND 7            |                   |                     |                   |             |                      |
|-----------------------|-------------------|---------------------|-------------------|-------------|----------------------|
| Test Item             | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                 |
| EIRP                  | 20775 to 21425    | 20775, 21100, 21425 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20800 to 21400    | 20800, 21100, 21400 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20825 to 21375    | 20825, 21100, 21375 | 15MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20850 to 21350    | 20850, 21100, 21350 | 20MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
| Occupied Bandwidth    | 20775 to 21425    | 20775, 21100, 21425 | 5MHz              | QPSK, 16QAM | 25 RB / 0 RB Offset  |
|                       | 20800 to 21400    | 20800, 21100, 21400 | 10MHz             | QPSK, 16QAM | 50 RB / 0 RB Offset  |
|                       | 20825 to 21375    | 20825, 21100, 21375 | 15MHz             | QPSK, 16QAM | 75 RB / 0 RB Offset  |
|                       | 20850 to 21350    | 20850, 21100, 21350 | 20MHz             | QPSK, 16QAM | 100 RB / 0 RB Offset |
| Conducted Emission    | 20775 to 21425    | 21100               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20800 to 21400    | 21100               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20825 to 21375    | 21100               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20850 to 21350    | 21100               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |
| Radiated Emission     | 20775 to 21425    | 21425               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20850 to 21350    | 21350               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |
| Band Edge             | 20775 to 21425    | 20775               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset  |
|                       | 20775 to 21425    | 21425               | 5MHz              | QPSK        | 1 RB / 24 RB Offset  |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset  |
|                       | 20800 to 21400    | 20800               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset  |
|                       | 20800 to 21400    | 21400               | 10MHz             | QPSK        | 1 RB / 49 RB Offset  |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset  |
|                       | 20825 to 21375    | 20825               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       |                   |                     |                   |             | 75 RB / 0 RB Offset  |
|                       | 20825 to 21375    | 21375               | 15MHz             | QPSK        | 1 RB / 74 RB Offset  |
|                       |                   |                     |                   |             | 75 RB / 0 RB Offset  |
| Peak To Average Ratio | 20775 to 21425    | 20775, 21100, 21425 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20800 to 21400    | 20800, 21100, 21400 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20825 to 21375    | 20825, 21100, 21375 | 15MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
|                       | 20850 to 21350    | 20850, 21100, 21350 | 20MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset   |
| Frequency Stability   | 20775 to 21425    | 21100               | 5MHz              | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20800 to 21400    | 21100               | 10MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20825 to 21375    | 21100               | 15MHz             | QPSK        | 1 RB / 0 RB Offset   |
|                       | 20850 to 21350    | 21100               | 20MHz             | QPSK        | 1 RB / 0 RB Offset   |

| LTE BAND 12           |                   |                     |         |             |                     |
|-----------------------|-------------------|---------------------|---------|-------------|---------------------|
| Test Item             | Available Channel | Tested Channel      | Channel | Modulation  | Mode                |
| ERP                   | 23035 to 23155    | 23035, 23095, 23155 | 5MHz    | QPSK, 16QAM | 1 RB / 12 RB Offset |
|                       | 23060 to 23130    | 23060, 23095, 23130 | 10MHz   | QPSK, 16QAM | 1 RB / 24 RB Offset |
| Occupied Bandwidth    | 23035 to 23155    | 23035, 23095, 23155 | 5MHz    | QPSK, 16QAM | 25 RB / 0 RB Offset |
|                       | 23060 to 23130    | 23060, 23095, 23130 | 10MHz   | QPSK, 16QAM | 50 RB / 0 RB Offset |
| Conducted Emission    | 23035 to 23155    | 23095               | 5MHz    | QPSK        | 1 RB / 0 RB Offset  |
|                       | 23060 to 23130    | 23095               | 10MHz   | QPSK        | 1 RB / 0 RB Offset  |
| Radiated Emission     | 23035 to 23155    | 23095               | 5MHz    | QPSK        | 1 RB / 0 RB Offset  |
|                       | 23060 to 23130    | 23060               | 10MHz   | QPSK        | 1 RB / 0 RB Offset  |
| Band Edge             | 23035 to 23155    | 23035               | 5MHz    | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |         |             | 25 RB / 0 RB Offset |
|                       |                   | 23155               | 5MHz    | QPSK        | 1 RB / 24 RB Offset |
|                       |                   |                     |         |             | 25 RB / 0 RB Offset |
|                       | 23060 to 23130    | 23060               | 10MHz   | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |         |             | 50 RB / 0 RB Offset |
|                       |                   | 23130               | 10MHz   | QPSK        | 1 RB / 49 RB Offset |
|                       |                   |                     |         |             | 50 RB / 0 RB Offset |
| Peak to Average Ratio | 23035 to 23155    | 23035, 23095, 23155 | 5MHz    | QPSK, 16QAM | 1 RB / 0 RB Offset  |
|                       | 23060 to 23130    | 23060, 23095, 23130 | 10MHz   | QPSK, 16QAM | 1 RB / 0 RB Offset  |
| Frequency Stability   | 23035 to 23155    | 23095               | 5MHz    | QPSK        | 1 RB / 12 RB Offset |
|                       | 23060 to 23130    | 23095               | 10MHz   | QPSK        | 1 RB / 24 RB Offset |

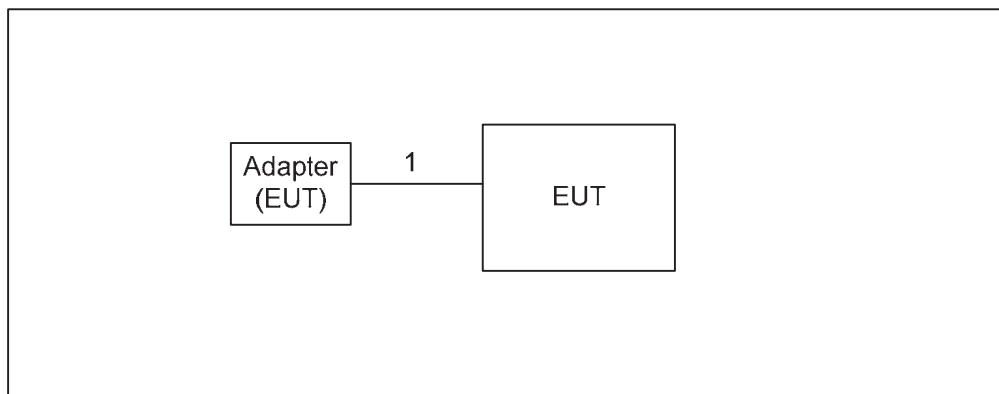
| LTE BAND 13           |                   |                     |                   |             |                     |
|-----------------------|-------------------|---------------------|-------------------|-------------|---------------------|
| Test Item             | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                |
| ERP                   | 23205 to 23255    | 23205, 23230, 23255 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset  |
|                       | 23230             | 23230               | 10MHz             | QPSK, 16QAM | 1 RB / 24 RB Offset |
| Occupied Bandwidth    | 23205 to 23255    | 23205, 23230, 23255 | 5MHz              | QPSK, 16QAM | 25 RB / 0 RB Offset |
|                       | 23230             | 23230               | 10MHz             | QPSK, 16QAM | 50 RB / 0 RB Offset |
| Conducted Emission    | 23205 to 23255    | 23230               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 23230             | 23230               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |
| Radiated Emission     | 23205 to 23255    | 23255               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 23230             | 23230               | 10MHz             | QPSK        | 1 RB / 24 RB Offset |
| Band Edge             | 23205 to 23255    | 23205               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset |
|                       |                   | 23255               | 5MHz              | QPSK        | 1 RB / 24 RB Offset |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset |
|                       | 23230             | 23230               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset |
| Peak to Average Ratio | 23205 to 23255    | 23205, 23230, 23255 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset  |
|                       | 23230             | 23230               | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset  |
| Frequency Stability   | 23205 to 23255    | 23230               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 23230             | 23230               | 10MHz             | QPSK        | 1 RB / 24 RB Offset |

| LTE BAND 17           |                   |                     |                   |             |                     |
|-----------------------|-------------------|---------------------|-------------------|-------------|---------------------|
| Test Item             | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                |
| ERP                   | 706.5 to 713.5    | 23755, 23790, 23825 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset  |
|                       | 709.0 to 711.0    | 23780, 23790, 23775 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset  |
| Occupied Bandwidth    | 706.5 to 713.5    | 23755, 23790, 23825 | 5MHz              | QPSK, 16QAM | 25 RB / 0 RB Offset |
|                       | 709.0 to 711.0    | 23780, 23790, 23775 | 10MHz             | QPSK, 16QAM | 50 RB / 0 RB Offset |
| Conducted Emission    | 706.5 to 713.5    | 23790               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 709.0 to 711.0    | 23790               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |
| Radiated Emission     | 706.5 to 713.5    | 23755               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 709.0 to 711.0    | 23780               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |
| Band Edge             | 706.5 to 713.5    | 23755               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset |
|                       |                   | 23825               | 5MHz              | QPSK        | 1 RB / 24 RB Offset |
|                       |                   |                     |                   |             | 25 RB / 0 RB Offset |
|                       | 709.0 to 711.0    | 23780               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |
|                       |                   |                     |                   |             | 50 RB / 0 RB Offset |
| Peak To Average Ratio | 706.5 to 713.5    | 23755, 23790, 23825 | 5MHz              | QPSK, 16QAM | 1 RB / 0 RB Offset  |
|                       | 709.0 to 711.0    | 23780, 23790, 23775 | 10MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset  |
| Frequency Stability   | 706.5 to 713.5    | 23790               | 5MHz              | QPSK        | 1 RB / 0 RB Offset  |
|                       | 709.0 to 711.0    | 23790               | 10MHz             | QPSK        | 1 RB / 0 RB Offset  |

### EUT TEST CONDITIONS:

| Test Item              | Environmental Conditions | Test Voltage |
|------------------------|--------------------------|--------------|
| EIRP                   | 24°C, 63%RH              | DC 4.0V      |
| Conducted Output Power | 25°C, 65%RH              | DC 4.0V      |
| Occupied Bandwidth     | 25°C, 65%RH              | DC 4.0V      |
| Conducted Emission     | 25°C, 65%RH              | DC 4.0V      |
| Radiated Emission      | 25°C, 60%RH              | AC 120V/60Hz |
| Band Edge              | 25°C, 65%RH              | DC 4.0V      |
| Peak to Average Ratio  | 25°C, 65%RH              | DC 4.0V      |
| Frequency Stability    | 25°C, 65%RH              | DC 4.0V      |

### 3.3 BLOCK DIGRAM SHOWING THECONFIGURATIONOFSYSTEMTESTED FOR RADIATED



### 3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | FCC ID | Series No. |
|------|-----------|-----------|----------------|--------|------------|
| -    | -         | -         | -              | -      | -          |

| Item | Shielded Type | Ferrite Core | Length | Note      |
|------|---------------|--------------|--------|-----------|
| 1    | YES           | NO           | 1m     | USB cable |

## 4. TEST RESULT

### 4.1 OUTPUT POWER MEASUREMENT

#### 4.1.1 LIMIT

Mobile / Portable station are limited to 1 watts e.i.r.p. (WCDMA Band 4 & LTE 4)

Mobile / Portable station are limited to 2 watts e.i.r.p. (LTE 7)

Mobile / Portable station are limited to 3 watts e.i.r.p. (LTE 12, LTE 13 and LTE 17)

#### 4.1.2 TEST PROCEDURE

##### EIRP/ERP:

EIRP= Conducted Power +Antenan gain

ERP power=EIPR power-2.15dBi.

##### Conducted Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA, CDMA, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

#### 4.1.3 TESTSETUP LAYOUT

##### Conducted Power Measurement



#### 4.1.4 TEST DEVIATION

No deviation

#### 4.1.5 TEST RESULTS

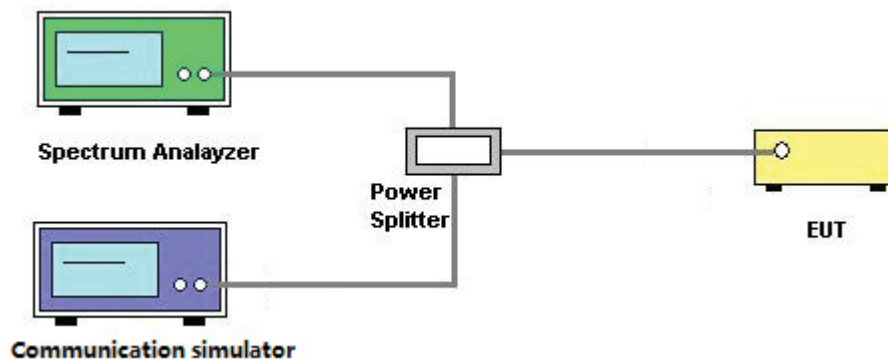
Please refer to the Attachment A.

## 4.2 OCCUPIED BANDWIDTH MEASUREMENT

### 4.2.1 TEST PROCEDURE

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.

### 4.2.2 TEST SETUP LAYOUT



### 4.2.3 TEST DEVIATION

No deviation

### 4.2.4 TEST RESULTS

Please refer to the Attachment B.

### 4.3 CONDUCTED EMISSIONS MEASUREMENT

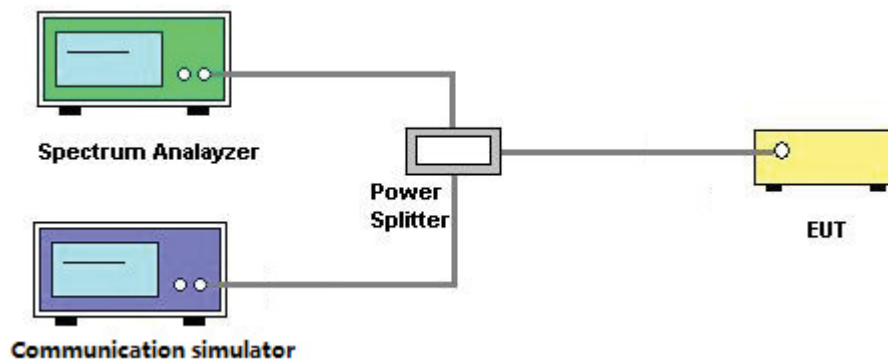
#### 4.3.1 LIMIT

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

#### 4.3.2 TEST PROCEDURES

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set  $RBW \geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from  $43 + 10 \log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10 \log(P)](dB)$   
 $= [30 + 10 \log(P)](dBm) - [43 + 10 \log(P)](dB)$   
 $= -13dBm$

#### 4.3.3 TESTSETUP LAYOUT



#### 4.3.4 TESTDEVIATION

No deviation

#### 4.3.5 TEST RESULTS

Please refer to the Attachment C.

## **4.4 RADIATED EMISSIONS MEASUREMENT**

### **4.4.1 LIMIT**

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

### **4.4.2 TEST PROCEDURES**

1. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
2. 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
3. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
4. 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 - 2.15dBi.
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

### **4.4.3 TESTSETUP LAYOUT**

This test setup layout is the same as that shown in **section 4.1.3**.

### **4.4.4 TESTDEVIATION**

No deviation

### **4.4.5 TEST RESULTS**

Please refer to the Attachment D.

## 4.5 BAND EDGE MEASUREMENT

### 4.5.1 LIMIT

For operations in the 699-716 , 704-716 and 777-787MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

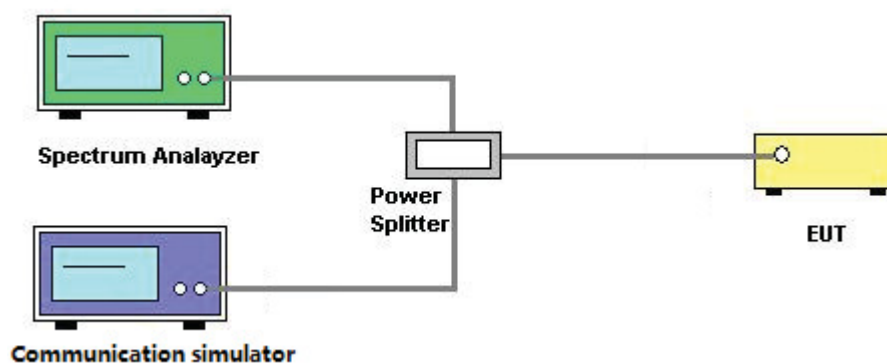
However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

For operations in the 1710–1755 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10}(P)$  dB.

### 4.5.2 TEST PROCEDURES

1. All measurements were done at low and high operational frequency range.
2. The center frequency of spectrum is the band edge frequency and span is 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
3. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 13kHz and VB of the spectrum is 51kHz (LTE Bandwidth 1.4MHz).
4. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Bandwidth 3MHz).
5. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Bandwidth 5MHz/10MHz).
6. Record the max trace plot into the test report.

### 4.5.3 TESTSETUP LAYOUT



### 4.5.4 TESTDEVIATION

No deviation

### 4.5.5 TEST RESULTS

Please refer to the Attachment E.

## 4.6 PEAK TO AVERAGE RATIO MEASUREMENT

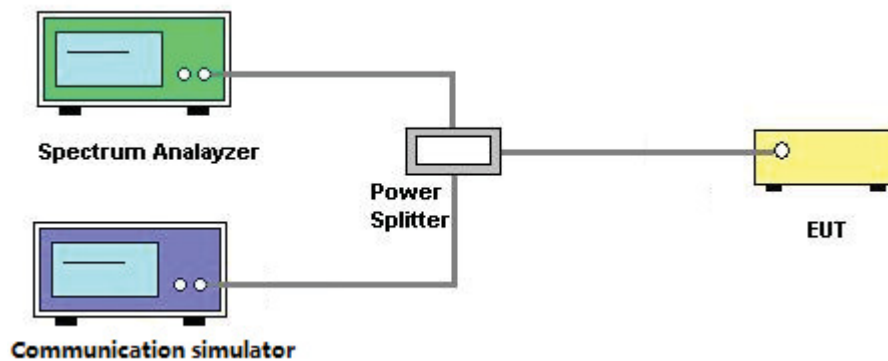
### 4.6.1 LIMIT

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 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%.

### 4.6.3 TESTSETUP LAYOUT



### 4.6.4 TESTDEVIATION

No deviation

### 4.6.5 TEST RESULTS

Please refer to the Attachment F.

## 4.7 FREQUENCY STABILITY MEASUREMENT

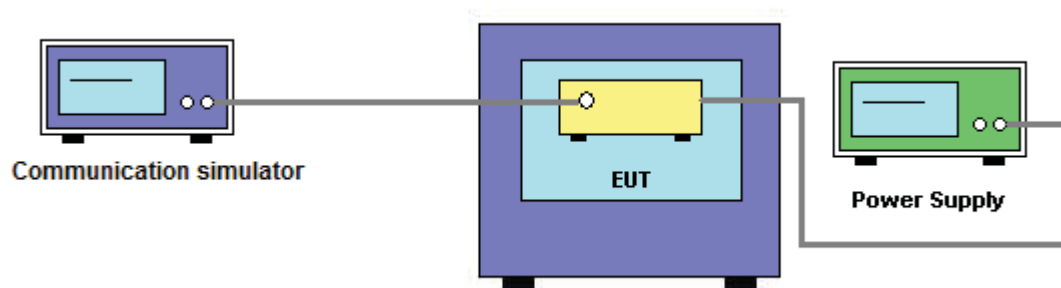
### 4.7.1 LIMIT

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

### 4.7.2 TEST PROCEDURES

1. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
2. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
3. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the  $\pm 0.5^{\circ}\text{C}$  during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
4. The frequency error was recorded frequency error from the communication simulator.

### 4.7.3 TESTSETUP LAYOUT



### 4.7.4 TESTDEVIATION

No deviation

### 4.7.5 TEST RESULTS

Please refer to the Attachment G.

## 5. LIST OF MEASUREMENT EQUIPMENTS

| Radiated Emission Measurement |                                                 |              |           |            |                  |
|-------------------------------|-------------------------------------------------|--------------|-----------|------------|------------------|
| Item                          | Kind of Equipment                               | Manufacturer | Type No.  | Serial No. | Calibrated until |
| 1                             | Test receiver                                   | R&S          | ESU26     | 100387     | Jul. 21, 2017    |
| 2                             | LOOP Antennas(9kHz-30M Hz)                      | R&S          | HFH2-Z2   | 100263     | Apr. 29, 2017    |
| 3                             | Spectrum analyzer                               | R&S          | FSU3      | 200474     | May 24, 2017     |
| 4                             | Spectrum analyzer                               | R&S          | FSU43     | 100144     | Jun. 02, 2017    |
| 5                             | Trilog Broadband Antenna (30M~3GHz)             | SCHWARZBECK  | VULB 9163 | 9163-521   | Apr. 08, 2017    |
| 6                             | Double-Ridged Waveguide Horn Antenna (1G~18GHz) | R&S          | HF907     | 100304     | Apr. 29, 2017    |
| 7                             | Pyramidal Horn Antenna(18GHz-26.5 GHz)          | ETS-Lindgren | Sep-60    | 5140299    | Jul. 14, 2017    |
| 8                             | Radio Communication Tester                      | R&S          | CMU200    | 3608082535 | Mar. 30, 2017    |
| 9                             | Radio Communication Tester                      | Anritsu      | MT8820C   | A110518805 | May 23, 2017     |

| Conducted Measurement |                                     |               |               |             |                  |
|-----------------------|-------------------------------------|---------------|---------------|-------------|------------------|
| Item                  | Kind of Equipment                   | Manufacturer  | Type No.      | Serial No.  | Calibrated until |
| 1                     | EXA Spectrum Analyzer               | Agilent       | N9010A        | MY50520044  | Mar. 27, 2017    |
| 2                     | POWER SPLITTER                      | Mini-Circuits | ZFRSC-123-S + | 331000910-1 | Feb. 26, 2017    |
| 3                     | wideband radio communication tester | R&S           | CMW500        | 152372      | Mar. 27, 2017    |
| 4                     | Cable                               | N/A           | RG316(0.3m)   | N/A         | Jul. 06, 2017    |
| 5                     | Cable                               | N/A           | RG316(0.3m)   | N/A         | Jul. 06, 2017    |

| Frequency Stability Measurement |                                     |               |                  |             |                  |
|---------------------------------|-------------------------------------|---------------|------------------|-------------|------------------|
| Item                            | Kind of Equipment                   | Manufacturer  | Type No.         | Serial No.  | Calibrated until |
| 1                               | DC power supply                     | GW Instek     | GPC-3030DN       | EK880675    | Oct. 13, 2017    |
| 2                               | POWER SPLITTER                      | Mini-Circuits | ZFRSC-123-S<br>+ | 331000910-1 | Feb. 26, 2017    |
| 3                               | wideband radio communication tester | R&S           | CMW500           | 152372      | Mar. 27, 2017    |
| 4                               | Const Temp,& Humidity Chamber       | Giant Force   | ITH-225-20-S     | IAB0309-001 | Sep. 04, 2017    |
| 5                               | Cable                               | N/A           | RG316(0.3m)      | N/A         | Jul. 06, 2017    |

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of equipment list is one year.

## ATTACHMENT A - OUTPUT POWER

### Conducted Power:

| Modulation | Band            | WCDMA IV |         |         |
|------------|-----------------|----------|---------|---------|
|            | Tx Channel      | 1312 CH  | 1413 CH | 1513 CH |
|            | Rx Channel      | 1537 CH  | 1638 CH | 1738 CH |
|            | Frequency       | 1712.4   | 1732.6  | 1752.6  |
| BPSK       | RMC 12.2K       | 22.63    | 22.58   | 22.42   |
|            | RMC 64K         | 22.66    | 22.59   | 22.41   |
|            | RMC 144K        | 22.67    | 22.58   | 22.44   |
|            | RMC 384K        | 22.65    | 22.57   | 22.40   |
| 16QAM      | HSDPA Subtest-1 | 22.44    | 22.45   | 22.21   |
|            | HSDPA Subtest-2 | 22.43    | 22.43   | 22.23   |
|            | HSDPA Subtest-3 | 21.85    | 21.93   | 21.74   |
|            | HSDPA Subtest-4 | 21.89    | 21.91   | 21.76   |
| 16QAM      | HSUPA Subtest-1 | 20.28    | 19.98   | 20.21   |
|            | HSUPA Subtest-2 | 19.54    | 19.47   | 19.71   |
|            | HSUPA Subtest-3 | 20.57    | 20.77   | 20.75   |
|            | HSUPA Subtest-4 | 19.78    | 19.63   | 19.51   |
|            | HSUPA Subtest-5 | 20.93    | 20.93   | 20.47   |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH     | Mid CH     | High CH    |
|---------------|------------|----------|-----------|------------|------------|------------|
|               |            |          |           | 19975 CH   | 20175 CH   | 20375 CH   |
|               |            |          |           | 1712.5 MHz | 1732.5 MHz | 1752.5 MHz |
| 4 / 5M        | QPSK       | 1        | 0         | 21.74      | 21.87      | 21.98      |
|               |            | 1        | 12        | 22.48      | 22.59      | 22.61      |
|               |            | 1        | 24        | 21.97      | 21.98      | 21.92      |
|               |            | 12       | 0         | 21.11      | 21.29      | 21.38      |
|               |            | 12       | 6         | 21.38      | 21.55      | 21.60      |
|               |            | 12       | 13        | 21.36      | 21.42      | 21.40      |
|               |            | 25       | 0         | 21.41      | 21.33      | 21.26      |
|               | 16QAM      | 1        | 0         | 21.08      | 21.29      | 21.30      |
|               |            | 1        | 12        | 21.83      | 21.91      | 21.91      |
|               |            | 1        | 24        | 21.34      | 21.42      | 21.26      |
|               |            | 12       | 0         | 21.42      | 21.28      | 21.41      |
|               |            | 12       | 6         | 21.70      | 21.54      | 21.62      |
|               |            | 12       | 13        | 21.67      | 21.40      | 21.42      |
|               |            | 25       | 0         | 21.41      | 21.25      | 21.26      |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH   | Mid CH     | High CH  |
|---------------|------------|----------|-----------|----------|------------|----------|
|               |            |          |           | 20000 CH | 20175 CH   | 20350 CH |
|               |            |          |           | 1715 MHz | 1732.5 MHz | 1750 MHz |
| 4 / 10M       | QPSK       | 1        | 0         | 22.09    | 22.11      | 22.55    |
|               |            | 1        | 24        | 22.89    | 22.67      | 22.99    |
|               |            | 1        | 49        | 21.91    | 21.73      | 21.99    |
|               |            | 25       | 0         | 21.32    | 21.27      | 21.53    |
|               |            | 25       | 12        | 21.52    | 21.39      | 21.77    |
|               |            | 25       | 25        | 21.51    | 21.32      | 21.51    |
|               |            | 50       | 0         | 21.35    | 21.56      | 21.50    |
|               | 16QAM      | 1        | 0         | 21.45    | 21.68      | 21.69    |
|               |            | 1        | 24        | 21.84    | 21.90      | 21.84    |
|               |            | 1        | 49        | 21.16    | 21.32      | 21.11    |
|               |            | 25       | 0         | 21.30    | 21.43      | 21.37    |
|               |            | 25       | 12        | 21.59    | 21.56      | 21.60    |
|               |            | 25       | 25        | 21.75    | 21.38      | 21.34    |
|               |            | 50       | 0         | 21.59    | 21.34      | 21.31    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH     | High CH    |
|---------------|------------|----------|-----------|------------|------------|------------|
|               |            |          |           | 20025 CH   | 20175 CH   | 20325 CH   |
|               |            |          |           | 1717.5 MHz | 1732.5 MHz | 1747.5 MHz |
| 4 / 15M       | QPSK       | 1        | 0         | 22.64      | 22.66      | 22.49      |
|               |            | 1        | 37        | 22.97      | 22.68      | 22.57      |
|               |            | 1        | 74        | 22.25      | 22.31      | 22.19      |
|               |            | 36       | 0         | 21.64      | 21.91      | 21.46      |
|               |            | 36       | 19        | 21.89      | 21.59      | 21.55      |
|               |            | 36       | 39        | 21.62      | 21.60      | 21.46      |
|               |            | 75       | 0         | 21.80      | 21.49      | 21.42      |
|               | 16QAM      | 1        | 0         | 21.90      | 21.92      | 21.89      |
|               |            | 1        | 37        | 21.96      | 21.91      | 21.97      |
|               |            | 1        | 74        | 21.47      | 21.99      | 21.60      |
|               |            | 36       | 0         | 21.54      | 21.99      | 21.64      |
|               |            | 36       | 19        | 21.76      | 21.75      | 21.71      |
|               |            | 36       | 39        | 21.46      | 21.77      | 21.57      |
|               |            | 75       | 0         | 21.62      | 21.63      | 21.54      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH     | High CH  |
|---------------|------------|----------|-----------|----------|------------|----------|
|               |            |          |           | 20050 CH | 20175 CH   | 20300 CH |
|               |            |          |           | 1720 MHz | 1732.5 MHz | 1745 MHz |
| 4 / 20M       | QPSK       | 1        | 0         | 22.39    | 22.47      | 22.53    |
|               |            | 1        | 50        | 22.35    | 21.34      | 22.51    |
|               |            | 1        | 99        | 21.93    | 22.14      | 22.31    |
|               |            | 50       | 0         | 21.33    | 21.36      | 21.40    |
|               |            | 50       | 25        | 21.19    | 20.99      | 21.27    |
|               |            | 50       | 50        | 21.34    | 21.23      | 21.42    |
|               |            | 100      | 0         | 21.34    | 21.25      | 21.47    |
|               | 16QAM      | 1        | 0         | 21.90    | 21.94      | 21.86    |
|               |            | 1        | 50        | 21.70    | 21.55      | 21.82    |
|               |            | 1        | 99        | 21.33    | 21.62      | 21.65    |
|               |            | 50       | 0         | 21.34    | 21.39      | 21.22    |
|               |            | 50       | 25        | 21.34    | 21.09      | 21.10    |
|               |            | 50       | 50        | 21.45    | 21.28      | 21.23    |
|               |            | 100      | 0         | 21.46    | 21.32      | 21.26    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH   | High CH    |
|---------------|------------|----------|-----------|------------|----------|------------|
|               |            |          |           | 20775 CH   | 21100 CH | 21425 CH   |
|               |            |          |           | 2502.5 MHz | 2535 MHz | 2567.5 MHz |
| 7 / 5M        | QPSK       | 1        | 0         | 21.81      | 21.32    | 21.50      |
|               |            | 1        | 12        | 21.93      | 22.13    | 22.18      |
|               |            | 1        | 24        | 21.24      | 21.75    | 21.52      |
|               |            | 12       | 0         | 20.61      | 21.15    | 21.16      |
|               |            | 12       | 6         | 20.86      | 21.43    | 21.34      |
|               |            | 12       | 13        | 20.78      | 21.37    | 21.20      |
|               |            | 25       | 0         | 20.62      | 21.21    | 21.11      |
|               | 16QAM      | 1        | 0         | 20.43      | 20.53    | 20.66      |
|               |            | 1        | 12        | 21.15      | 21.33    | 21.38      |
|               |            | 1        | 24        | 20.49      | 20.70    | 20.69      |
|               |            | 12       | 0         | 20.53      | 20.61    | 20.65      |
|               |            | 12       | 6         | 20.73      | 20.88    | 20.82      |
|               |            | 12       | 13        | 20.64      | 20.81    | 20.68      |
|               |            | 25       | 0         | 20.53      | 20.63    | 20.53      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH   | High CH  |
|---------------|------------|----------|-----------|----------|----------|----------|
|               |            |          |           | 20800 CH | 21100 CH | 21400 CH |
|               |            |          |           | 2505 MHz | 2535 MHz | 2565 MHz |
| 7 / 10M       | QPSK       | 1        | 0         | 22.07    | 22.49    | 22.59    |
|               |            | 1        | 24        | 22.18    | 22.55    | 22.65    |
|               |            | 1        | 49        | 22.06    | 22.18    | 21.90    |
|               |            | 25       | 0         | 21.77    | 21.68    | 21.77    |
|               |            | 25       | 12        | 21.98    | 21.95    | 21.92    |
|               |            | 25       | 25        | 21.85    | 21.85    | 21.67    |
|               |            | 50       | 0         | 21.80    | 21.76    | 21.84    |
|               | 16QAM      | 1        | 0         | 21.26    | 21.54    | 21.63    |
|               |            | 1        | 24        | 22.11    | 22.32    | 22.16    |
|               |            | 1        | 49        | 20.96    | 21.20    | 20.93    |
|               |            | 25       | 0         | 20.86    | 21.22    | 21.20    |
|               |            | 25       | 12        | 21.13    | 21.49    | 21.36    |
|               |            | 25       | 25        | 21.28    | 21.36    | 21.11    |
|               |            | 50       | 0         | 21.20    | 21.24    | 21.22    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH   | High CH    |
|---------------|------------|----------|-----------|------------|----------|------------|
|               |            |          |           | 20825 CH   | 21100 CH | 21375 CH   |
|               |            |          |           | 2507.5 MHz | 2535 MHz | 2562.5 MHz |
| 7 / 15M       | QPSK       | 1        | 0         | 22.13      | 22.41    | 22.61      |
|               |            | 1        | 37        | 22.49      | 22.59    | 22.58      |
|               |            | 1        | 74        | 21.80      | 22.17    | 21.86      |
|               |            | 36       | 0         | 21.17      | 21.44    | 21.91      |
|               |            | 36       | 19        | 21.29      | 21.56    | 21.74      |
|               |            | 36       | 39        | 21.16      | 21.47    | 21.65      |
|               |            | 75       | 0         | 21.18      | 21.50    | 21.84      |
|               | 16QAM      | 1        | 0         | 21.50      | 21.59    | 21.97      |
|               |            | 1        | 37        | 21.81      | 21.81    | 22.00      |
|               |            | 1        | 74        | 21.15      | 21.36    | 21.18      |
|               |            | 36       | 0         | 21.22      | 21.13    | 21.52      |
|               |            | 36       | 19        | 21.33      | 21.23    | 21.56      |
|               |            | 36       | 39        | 21.18      | 21.16    | 21.28      |
|               |            | 75       | 0         | 21.14      | 21.37    | 21.58      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH   | High CH  |
|---------------|------------|----------|-----------|----------|----------|----------|
|               |            |          |           | 20850 CH | 21100 CH | 21350 CH |
|               |            |          |           | 2510 MHz | 2535 MHz | 2560 MHz |
| 7 / 20M       | QPSK       | 1        | 0         | 22.35    | 22.36    | 22.98    |
|               |            | 1        | 50        | 22.73    | 22.40    | 22.67    |
|               |            | 1        | 99        | 22.09    | 22.55    | 22.09    |
|               |            | 50       | 0         | 21.39    | 21.65    | 21.92    |
|               |            | 50       | 25        | 21.35    | 21.65    | 21.83    |
|               |            | 50       | 50        | 21.48    | 21.79    | 21.62    |
|               |            | 100      | 0         | 21.33    | 21.76    | 21.88    |
|               | 16QAM      | 1        | 0         | 21.84    | 21.83    | 22.26    |
|               |            | 1        | 50        | 22.00    | 21.80    | 22.05    |
|               |            | 1        | 99        | 21.63    | 21.70    | 21.37    |
|               |            | 50       | 0         | 21.36    | 21.27    | 21.87    |
|               |            | 50       | 25        | 21.32    | 21.24    | 21.78    |
|               |            | 50       | 50        | 21.46    | 21.61    | 21.55    |
|               |            | 100      | 0         | 21.28    | 21.70    | 21.81    |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23035 CH  | 23095 CH  | 23155 CH  |
|               |            |          |           | 701.5 MHz | 707.5 MHz | 713.5 MHz |
| 12 / 5M       | QPSK       | 1        | 0         | 22.07     | 22.45     | 22.31     |
|               |            | 1        | 12        | 22.87     | 22.94     | 22.84     |
|               |            | 1        | 24        | 22.67     | 22.38     | 22.23     |
|               |            | 12       | 0         | 21.61     | 21.90     | 21.77     |
|               |            | 12       | 6         | 21.99     | 21.97     | 21.85     |
|               |            | 12       | 13        | 21.87     | 21.87     | 21.86     |
|               |            | 25       | 0         | 21.69     | 21.74     | 21.73     |
|               | 16QAM      | 1        | 0         | 21.45     | 21.80     | 21.88     |
|               |            | 1        | 12        | 22.22     | 22.30     | 22.41     |
|               |            | 1        | 24        | 21.79     | 21.72     | 21.86     |
|               |            | 12       | 0         | 21.49     | 21.79     | 21.91     |
|               |            | 12       | 6         | 21.85     | 21.93     | 21.99     |
|               |            | 12       | 13        | 21.74     | 22.00     | 21.99     |
|               |            | 25       | 0         | 21.55     | 21.82     | 21.80     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH   | Mid CH    | High CH  |
|---------------|------------|----------|-----------|----------|-----------|----------|
|               |            |          |           | 23060 CH | 23095 CH  | 23130 CH |
|               |            |          |           | 704 MHz  | 707.5 MHz | 711 MHz  |
| 12 / 10M      | QPSK       | 1        | 0         | 22.27    | 22.55     | 22.77    |
|               |            | 1        | 24        | 23.16    | 22.94     | 23.10    |
|               |            | 1        | 49        | 22.10    | 22.04     | 22.14    |
|               |            | 25       | 0         | 21.53    | 21.64     | 21.77    |
|               |            | 25       | 12        | 21.79    | 21.63     | 21.75    |
|               |            | 25       | 25        | 21.71    | 21.58     | 21.61    |
|               |            | 50       | 0         | 21.53    | 21.77     | 21.61    |
|               | 16QAM      | 1        | 0         | 21.74    | 21.91     | 21.87    |
|               |            | 1        | 24        | 22.43    | 22.47     | 22.16    |
|               |            | 1        | 49        | 21.44    | 21.67     | 21.27    |
|               |            | 25       | 0         | 21.47    | 21.82     | 21.74    |
|               |            | 25       | 12        | 21.74    | 21.81     | 21.73    |
|               |            | 25       | 25        | 21.65    | 21.80     | 21.59    |
|               |            | 50       | 0         | 21.46    | 21.68     | 21.57    |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23205 CH  | 23230 CH  | 23255 CH  |
|               |            |          |           | 779.5 MHz | 782.0 MHz | 784.5 MHz |
| 13 / 5M       | QPSK       | 1        | 0         | 21.78     | 22.16     | 22.19     |
|               |            | 1        | 12        | 22.77     | 22.95     | 23.06     |
|               |            | 1        | 24        | 22.11     | 22.23     | 22.25     |
|               |            | 12       | 0         | 21.37     | 21.55     | 21.75     |
|               |            | 12       | 6         | 21.79     | 21.83     | 22.00     |
|               |            | 12       | 13        | 21.72     | 21.83     | 21.83     |
|               |            | 25       | 0         | 21.65     | 21.63     | 21.74     |
|               | 16QAM      | 1        | 0         | 21.16     | 21.60     | 21.44     |
|               |            | 1        | 12        | 22.22     | 22.39     | 22.15     |
|               |            | 1        | 24        | 21.61     | 21.71     | 21.53     |
|               |            | 12       | 0         | 21.54     | 21.57     | 21.72     |
|               |            | 12       | 6         | 21.79     | 21.84     | 21.97     |
|               |            | 12       | 13        | 21.68     | 21.85     | 21.79     |
|               |            | 25       | 0         | 21.56     | 21.64     | 21.61     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Mid CH    |
|---------------|------------|----------|-----------|-----------|
|               |            |          |           | 23230 CH  |
|               |            |          |           | 782.0 MHz |
| 13 / 10M      | QPSK       | 1        | 0         | 22.23     |
|               |            | 1        | 24        | 23.06     |
|               |            | 1        | 49        | 22.36     |
|               |            | 25       | 0         | 21.61     |
|               |            | 25       | 12        | 21.83     |
|               |            | 25       | 25        | 21.87     |
|               |            | 50       | 0         | 21.73     |
|               | 16QAM      | 1        | 0         | 21.75     |
|               |            | 1        | 24        | 22.41     |
|               |            | 1        | 49        | 21.88     |
|               |            | 25       | 0         | 21.60     |
|               |            | 25       | 12        | 21.85     |
|               |            | 25       | 25        | 21.87     |
|               |            | 50       | 0         | 21.64     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23755 CH  | 23790 CH  | 23825 CH  |
|               |            |          |           | 706.5 MHz | 710.0 MHz | 713.5 MHz |
| 17 / 5M       | QPSK       | 1        | 0         | 21.57     | 21.85     | 21.89     |
|               |            | 1        | 12        | 22.73     | 22.62     | 22.54     |
|               |            | 1        | 24        | 22.06     | 22.00     | 21.69     |
|               |            | 12       | 0         | 21.43     | 21.33     | 21.33     |
|               |            | 12       | 6         | 21.71     | 21.43     | 21.54     |
|               |            | 12       | 13        | 21.64     | 21.35     | 21.43     |
|               |            | 25       | 0         | 21.45     | 21.20     | 21.29     |
|               | 16QAM      | 1        | 0         | 20.99     | 21.31     | 21.22     |
|               |            | 1        | 12        | 22.11     | 22.09     | 21.90     |
|               |            | 1        | 24        | 21.48     | 21.52     | 21.08     |
|               |            | 12       | 0         | 21.60     | 21.47     | 21.47     |
|               |            | 12       | 6         | 21.86     | 21.58     | 21.67     |
|               |            | 12       | 13        | 21.78     | 21.49     | 21.56     |
|               |            | 25       | 0         | 21.59     | 21.30     | 21.35     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23780 CH  | 23790 CH  | 23800 CH  |
|               |            |          |           | 709.0 MHz | 710.0 MHz | 711.0 MHz |
| 17 / 10M      | QPSK       | 1        | 0         | 21.82     | 22.06     | 22.12     |
|               |            | 1        | 24        | 22.56     | 22.51     | 22.43     |
|               |            | 1        | 49        | 21.71     | 21.56     | 21.54     |
|               |            | 25       | 0         | 21.10     | 21.08     | 21.08     |
|               |            | 25       | 12        | 21.21     | 21.04     | 21.05     |
|               |            | 25       | 25        | 20.96     | 21.05     | 21.05     |
|               |            | 50       | 0         | 21.10     | 20.94     | 20.92     |
|               | 16QAM      | 1        | 0         | 21.36     | 21.50     | 21.56     |
|               |            | 1        | 24        | 22.14     | 21.97     | 21.88     |
|               |            | 1        | 49        | 21.34     | 21.07     | 21.03     |
|               |            | 25       | 0         | 21.41     | 21.31     | 21.30     |
|               |            | 25       | 12        | 21.53     | 21.28     | 21.29     |
|               |            | 25       | 25        | 21.29     | 21.30     | 21.28     |
|               |            | 50       | 0         | 21.37     | 21.15     | 21.10     |

# EIRP Power:

| Modulation | Band            | WCDMA IV |         |         |
|------------|-----------------|----------|---------|---------|
|            | Tx Channel      | 1312 CH  | 1413 CH | 1513 CH |
|            | Rx Channel      | 1537 CH  | 1638 CH | 1738 CH |
|            | Frequency       | 1712.4   | 1732.6  | 1752.6  |
| BPSK       | RMC 12.2K       | 25.29    | 25.24   | 25.08   |
|            | RMC 64K         | 25.32    | 25.25   | 25.07   |
|            | RMC 144K        | 25.33    | 25.24   | 25.10   |
|            | RMC 384K        | 25.31    | 25.23   | 25.06   |
| 16QAM      | HSDPA Subtest-1 | 25.10    | 25.11   | 24.87   |
|            | HSDPA Subtest-2 | 25.09    | 25.09   | 24.89   |
|            | HSDPA Subtest-3 | 24.51    | 24.59   | 24.40   |
|            | HSDPA Subtest-4 | 24.55    | 24.57   | 24.42   |
| 16QAM      | HSUPA Subtest-1 | 22.94    | 22.64   | 22.87   |
|            | HSUPA Subtest-2 | 22.20    | 22.13   | 22.37   |
|            | HSUPA Subtest-3 | 23.23    | 23.43   | 23.41   |
|            | HSUPA Subtest-4 | 22.44    | 22.29   | 22.17   |
|            | HSUPA Subtest-5 | 23.59    | 23.59   | 23.13   |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH     | Mid CH     | High CH    |
|---------------|------------|----------|-----------|------------|------------|------------|
|               |            |          |           | 19975 CH   | 20175 CH   | 20375 CH   |
|               |            |          |           | 1712.5 MHz | 1732.5 MHz | 1752.5 MHz |
| 4 / 5M        | QPSK       | 1        | 0         | 24.40      | 24.53      | 24.64      |
|               |            | 1        | 12        | 25.14      | 25.25      | 25.27      |
|               |            | 1        | 24        | 24.63      | 24.64      | 24.58      |
|               |            | 12       | 0         | 23.77      | 23.95      | 24.04      |
|               |            | 12       | 6         | 24.04      | 24.21      | 24.26      |
|               |            | 12       | 13        | 24.02      | 24.08      | 24.06      |
|               |            | 25       | 0         | 24.07      | 23.99      | 23.92      |
|               | 16QAM      | 1        | 0         | 23.74      | 23.95      | 23.96      |
|               |            | 1        | 12        | 24.49      | 24.57      | 24.57      |
|               |            | 1        | 24        | 24.00      | 24.08      | 23.92      |
|               |            | 12       | 0         | 24.08      | 23.94      | 24.07      |
|               |            | 12       | 6         | 24.36      | 24.20      | 24.28      |
|               |            | 12       | 13        | 24.33      | 24.06      | 24.08      |
|               |            | 25       | 0         | 24.07      | 23.91      | 23.92      |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH   | Mid CH     | High CH  |
|---------------|------------|----------|-----------|----------|------------|----------|
|               |            |          |           | 20000 CH | 20175 CH   | 20350 CH |
|               |            |          |           | 1715 MHz | 1732.5 MHz | 1750 MHz |
| 4 / 10M       | QPSK       | 1        | 0         | 24.75    | 24.77      | 25.21    |
|               |            | 1        | 24        | 25.55    | 25.33      | 25.65    |
|               |            | 1        | 49        | 24.57    | 24.39      | 24.65    |
|               |            | 25       | 0         | 23.98    | 23.93      | 24.19    |
|               |            | 25       | 12        | 24.18    | 24.05      | 24.43    |
|               |            | 25       | 25        | 24.17    | 23.98      | 24.17    |
|               |            | 50       | 0         | 24.01    | 24.22      | 24.16    |
|               | 16QAM      | 1        | 0         | 24.11    | 24.34      | 24.35    |
|               |            | 1        | 24        | 24.50    | 24.56      | 24.50    |
|               |            | 1        | 49        | 23.82    | 23.98      | 23.77    |
|               |            | 25       | 0         | 23.96    | 24.09      | 24.03    |
|               |            | 25       | 12        | 24.25    | 24.22      | 24.26    |
|               |            | 25       | 25        | 24.41    | 24.04      | 24.00    |
|               |            | 50       | 0         | 24.25    | 24.00      | 23.97    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH     | High CH    |
|---------------|------------|----------|-----------|------------|------------|------------|
|               |            |          |           | 20025 CH   | 20175 CH   | 20325 CH   |
|               |            |          |           | 1717.5 MHz | 1732.5 MHz | 1747.5 MHz |
| 4 / 15M       | QPSK       | 1        | 0         | 25.30      | 25.32      | 25.15      |
|               |            | 1        | 37        | 25.63      | 25.34      | 25.23      |
|               |            | 1        | 74        | 24.91      | 24.97      | 24.85      |
|               |            | 36       | 0         | 24.30      | 24.57      | 24.12      |
|               |            | 36       | 19        | 24.55      | 24.25      | 24.21      |
|               |            | 36       | 39        | 24.28      | 24.26      | 24.12      |
|               |            | 75       | 0         | 24.46      | 24.15      | 24.08      |
|               | 16QAM      | 1        | 0         | 24.56      | 24.58      | 24.55      |
|               |            | 1        | 37        | 24.62      | 24.57      | 24.63      |
|               |            | 1        | 74        | 24.13      | 24.65      | 24.26      |
|               |            | 36       | 0         | 24.20      | 24.65      | 24.30      |
|               |            | 36       | 19        | 24.42      | 24.41      | 24.37      |
|               |            | 36       | 39        | 24.12      | 24.43      | 24.23      |
|               |            | 75       | 0         | 24.28      | 24.29      | 24.20      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH     | High CH  |
|---------------|------------|----------|-----------|----------|------------|----------|
|               |            |          |           | 20050 CH | 20175 CH   | 20300 CH |
|               |            |          |           | 1720 MHz | 1732.5 MHz | 1745 MHz |
| 4 / 20M       | QPSK       | 1        | 0         | 25.05    | 25.13      | 25.19    |
|               |            | 1        | 50        | 25.01    | 24.00      | 25.17    |
|               |            | 1        | 99        | 24.59    | 24.80      | 24.97    |
|               |            | 50       | 0         | 23.99    | 24.02      | 24.06    |
|               |            | 50       | 25        | 23.85    | 23.65      | 23.93    |
|               |            | 50       | 50        | 24.00    | 23.89      | 24.08    |
|               |            | 100      | 0         | 24.00    | 23.91      | 24.13    |
|               | 16QAM      | 1        | 0         | 24.56    | 24.60      | 24.52    |
|               |            | 1        | 50        | 24.36    | 24.21      | 24.48    |
|               |            | 1        | 99        | 23.99    | 24.28      | 24.31    |
|               |            | 50       | 0         | 24.00    | 24.05      | 23.88    |
|               |            | 50       | 25        | 24.00    | 23.75      | 23.76    |
|               |            | 50       | 50        | 24.11    | 23.94      | 23.89    |
|               |            | 100      | 0         | 24.12    | 23.98      | 23.92    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH   | High CH    |
|---------------|------------|----------|-----------|------------|----------|------------|
|               |            |          |           | 20775 CH   | 21100 CH | 21425 CH   |
|               |            |          |           | 2502.5 MHz | 2535 MHz | 2567.5 MHz |
| 7 / 5M        | QPSK       | 1        | 0         | 24.58      | 24.09    | 24.27      |
|               |            | 1        | 12        | 24.70      | 24.90    | 24.95      |
|               |            | 1        | 24        | 24.01      | 24.52    | 24.29      |
|               |            | 12       | 0         | 23.38      | 23.92    | 23.93      |
|               |            | 12       | 6         | 23.63      | 24.20    | 24.11      |
|               |            | 12       | 13        | 23.55      | 24.14    | 23.97      |
|               |            | 25       | 0         | 23.39      | 23.98    | 23.88      |
|               | 16QAM      | 1        | 0         | 23.20      | 23.30    | 23.43      |
|               |            | 1        | 12        | 23.92      | 24.10    | 24.15      |
|               |            | 1        | 24        | 23.26      | 23.47    | 23.46      |
|               |            | 12       | 0         | 23.30      | 23.38    | 23.42      |
|               |            | 12       | 6         | 23.50      | 23.65    | 23.59      |
|               |            | 12       | 13        | 23.41      | 23.58    | 23.45      |
|               |            | 25       | 0         | 23.30      | 23.40    | 23.30      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH   | High CH  |
|---------------|------------|----------|-----------|----------|----------|----------|
|               |            |          |           | 20800 CH | 21100 CH | 21400 CH |
|               |            |          |           | 2505 MHz | 2535 MHz | 2565 MHz |
| 7 / 10M       | QPSK       | 1        | 0         | 24.84    | 25.26    | 25.36    |
|               |            | 1        | 24        | 24.95    | 25.32    | 25.42    |
|               |            | 1        | 49        | 24.83    | 24.95    | 24.67    |
|               |            | 25       | 0         | 24.54    | 24.45    | 24.54    |
|               |            | 25       | 12        | 24.75    | 24.72    | 24.69    |
|               |            | 25       | 25        | 24.62    | 24.62    | 24.44    |
|               |            | 50       | 0         | 24.57    | 24.53    | 24.61    |
|               | 16QAM      | 1        | 0         | 24.03    | 24.31    | 24.40    |
|               |            | 1        | 24        | 24.88    | 25.09    | 24.93    |
|               |            | 1        | 49        | 23.73    | 23.97    | 23.70    |
|               |            | 25       | 0         | 23.63    | 23.99    | 23.97    |
|               |            | 25       | 12        | 23.90    | 24.26    | 24.13    |
|               |            | 25       | 25        | 24.05    | 24.13    | 23.88    |
|               |            | 50       | 0         | 23.97    | 24.01    | 23.99    |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH     | Mid CH   | High CH    |
|---------------|------------|----------|-----------|------------|----------|------------|
|               |            |          |           | 20825 CH   | 21100 CH | 21375 CH   |
|               |            |          |           | 2507.5 MHz | 2535 MHz | 2562.5 MHz |
| 7 / 15M       | QPSK       | 1        | 0         | 24.90      | 25.18    | 25.38      |
|               |            | 1        | 37        | 25.26      | 25.36    | 25.35      |
|               |            | 1        | 74        | 24.57      | 24.94    | 24.63      |
|               |            | 36       | 0         | 23.94      | 24.21    | 24.68      |
|               |            | 36       | 19        | 24.06      | 24.33    | 24.51      |
|               |            | 36       | 39        | 23.93      | 24.24    | 24.42      |
|               |            | 75       | 0         | 23.95      | 24.27    | 24.61      |
|               | 16QAM      | 1        | 0         | 24.27      | 24.36    | 24.74      |
|               |            | 1        | 37        | 24.58      | 24.58    | 24.77      |
|               |            | 1        | 74        | 23.92      | 24.13    | 23.95      |
|               |            | 36       | 0         | 23.99      | 23.90    | 24.29      |
|               |            | 36       | 19        | 24.10      | 24.00    | 24.33      |
|               |            | 36       | 39        | 23.95      | 23.93    | 24.05      |
|               |            | 75       | 0         | 23.91      | 24.14    | 24.35      |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH   | High CH  |
|---------------|------------|----------|-----------|----------|----------|----------|
|               |            |          |           | 20850 CH | 21100 CH | 21350 CH |
|               |            |          |           | 2510 MHz | 2535 MHz | 2560 MHz |
| 7 / 20M       | QPSK       | 1        | 0         | 25.12    | 25.13    | 25.75    |
|               |            | 1        | 50        | 25.50    | 25.17    | 25.44    |
|               |            | 1        | 99        | 24.86    | 25.32    | 24.86    |
|               |            | 50       | 0         | 24.16    | 24.42    | 24.69    |
|               |            | 50       | 25        | 24.12    | 24.42    | 24.60    |
|               |            | 50       | 50        | 24.25    | 24.56    | 24.39    |
|               |            | 100      | 0         | 24.10    | 24.53    | 24.65    |
|               | 16QAM      | 1        | 0         | 24.61    | 24.60    | 25.03    |
|               |            | 1        | 50        | 24.77    | 24.57    | 24.82    |
|               |            | 1        | 99        | 24.40    | 24.47    | 24.14    |
|               |            | 50       | 0         | 24.13    | 24.04    | 24.64    |
|               |            | 50       | 25        | 24.09    | 24.01    | 24.55    |
|               |            | 50       | 50        | 24.23    | 24.38    | 24.32    |
|               |            | 100      | 0         | 24.05    | 24.47    | 24.58    |

# ERP Power:

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23035 CH  | 23095 CH  | 23155 CH  |
|               |            |          |           | 701.5 MHz | 707.5 MHz | 713.5 MHz |
| 12 / 5M       | QPSK       | 1        | 0         | 16.75     | 17.13     | 16.99     |
|               |            | 1        | 12        | 17.55     | 17.62     | 17.52     |
|               |            | 1        | 24        | 17.35     | 17.06     | 16.91     |
|               |            | 12       | 0         | 16.29     | 16.58     | 16.45     |
|               |            | 12       | 6         | 16.67     | 16.65     | 16.53     |
|               |            | 12       | 13        | 16.55     | 16.55     | 16.54     |
|               |            | 25       | 0         | 16.37     | 16.42     | 16.41     |
|               | 16QAM      | 1        | 0         | 16.13     | 16.48     | 16.56     |
|               |            | 1        | 12        | 16.90     | 16.98     | 17.09     |
|               |            | 1        | 24        | 16.47     | 16.40     | 16.54     |
|               |            | 12       | 0         | 16.17     | 16.47     | 16.59     |
|               |            | 12       | 6         | 16.53     | 16.61     | 16.67     |
|               |            | 12       | 13        | 16.42     | 16.68     | 16.67     |
|               |            | 25       | 0         | 16.23     | 16.50     | 16.48     |

| LTE Band / BW | Modulation | RB Siset | RB Offset | Low CH   | Mid CH    | High CH  |
|---------------|------------|----------|-----------|----------|-----------|----------|
|               |            |          |           | 23060 CH | 23095 CH  | 23130 CH |
|               |            |          |           | 704 MHz  | 707.5 MHz | 711 MHz  |
| 12 / 10M      | QPSK       | 1        | 0         | 16.95    | 17.23     | 17.45    |
|               |            | 1        | 24        | 17.84    | 17.62     | 17.78    |
|               |            | 1        | 49        | 16.78    | 16.72     | 16.82    |
|               |            | 25       | 0         | 16.21    | 16.32     | 16.45    |
|               |            | 25       | 12        | 16.47    | 16.31     | 16.43    |
|               |            | 25       | 25        | 16.39    | 16.26     | 16.29    |
|               |            | 50       | 0         | 16.21    | 16.45     | 16.29    |
|               | 16QAM      | 1        | 0         | 16.42    | 16.59     | 16.55    |
|               |            | 1        | 24        | 17.11    | 17.15     | 16.84    |
|               |            | 1        | 49        | 16.12    | 16.35     | 15.95    |
|               |            | 25       | 0         | 16.15    | 16.50     | 16.42    |
|               |            | 25       | 12        | 16.42    | 16.49     | 16.41    |
|               |            | 25       | 25        | 16.33    | 16.48     | 16.27    |
|               |            | 50       | 0         | 16.14    | 16.36     | 16.25    |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23205 CH  | 23230 CH  | 23255 CH  |
|               |            |          |           | 779.5 MHz | 782.0 MHz | 784.5 MHz |
| 13 / 5M       | QPSK       | 1        | 0         | 18.01     | 18.39     | 18.42     |
|               |            | 1        | 12        | 19.00     | 19.18     | 19.29     |
|               |            | 1        | 24        | 18.34     | 18.46     | 18.48     |
|               |            | 12       | 0         | 17.60     | 17.78     | 17.98     |
|               |            | 12       | 6         | 18.02     | 18.06     | 18.23     |
|               |            | 12       | 13        | 17.95     | 18.06     | 18.06     |
|               |            | 25       | 0         | 17.88     | 17.86     | 17.97     |
|               | 16QAM      | 1        | 0         | 17.39     | 17.83     | 17.67     |
|               |            | 1        | 12        | 18.45     | 18.62     | 18.38     |
|               |            | 1        | 24        | 17.84     | 17.94     | 17.76     |
|               |            | 12       | 0         | 17.77     | 17.80     | 17.95     |
|               |            | 12       | 6         | 18.02     | 18.07     | 18.20     |
|               |            | 12       | 13        | 17.91     | 18.08     | 18.02     |
|               |            | 25       | 0         | 17.79     | 17.87     | 17.84     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Mid CH    |
|---------------|------------|----------|-----------|-----------|
|               |            |          |           | 23230 CH  |
|               |            |          |           | 782.0 MHz |
| 13 / 10M      | QPSK       | 1        | 0         | 18.46     |
|               |            | 1        | 24        | 19.29     |
|               |            | 1        | 49        | 18.59     |
|               |            | 25       | 0         | 17.84     |
|               |            | 25       | 12        | 18.06     |
|               |            | 25       | 25        | 18.10     |
|               |            | 50       | 0         | 17.96     |
|               | 16QAM      | 1        | 0         | 17.98     |
|               |            | 1        | 24        | 18.64     |
|               |            | 1        | 49        | 18.11     |
|               |            | 25       | 0         | 17.83     |
|               |            | 25       | 12        | 18.08     |
|               |            | 25       | 25        | 18.10     |
|               |            | 50       | 0         | 17.87     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23755 CH  | 23790 CH  | 23825 CH  |
|               |            |          |           | 706.5 MHz | 710.0 MHz | 713.5 MHz |
| 17 / 5M       | QPSK       | 1        | 0         | 15.82     | 16.10     | 16.14     |
|               |            | 1        | 12        | 16.98     | 16.87     | 16.79     |
|               |            | 1        | 24        | 16.31     | 16.25     | 15.94     |
|               |            | 12       | 0         | 15.68     | 15.58     | 15.58     |
|               |            | 12       | 6         | 15.96     | 15.68     | 15.79     |
|               |            | 12       | 13        | 15.89     | 15.60     | 15.68     |
|               |            | 25       | 0         | 15.70     | 15.45     | 15.54     |
|               | 16QAM      | 1        | 0         | 15.24     | 15.56     | 15.47     |
|               |            | 1        | 12        | 16.36     | 16.34     | 16.15     |
|               |            | 1        | 24        | 15.73     | 15.77     | 15.33     |
|               |            | 12       | 0         | 15.85     | 15.72     | 15.72     |
|               |            | 12       | 6         | 16.11     | 15.83     | 15.92     |
|               |            | 12       | 13        | 16.03     | 15.74     | 15.81     |
|               |            | 25       | 0         | 15.84     | 15.55     | 15.60     |

| LTE Band / BW | Modulation | RB Sizer | RB Offset | Low CH    | Mid CH    | High CH   |
|---------------|------------|----------|-----------|-----------|-----------|-----------|
|               |            |          |           | 23780 CH  | 23790 CH  | 23800 CH  |
|               |            |          |           | 709.0 MHz | 710.0 MHz | 711.0 MHz |
| 17 / 10M      | QPSK       | 1        | 0         | 16.07     | 16.31     | 16.37     |
|               |            | 1        | 24        | 16.81     | 16.76     | 16.68     |
|               |            | 1        | 49        | 15.96     | 15.81     | 15.79     |
|               |            | 25       | 0         | 15.35     | 15.33     | 15.33     |
|               |            | 25       | 12        | 15.46     | 15.29     | 15.30     |
|               |            | 25       | 25        | 15.21     | 15.30     | 15.30     |
|               |            | 50       | 0         | 15.35     | 15.19     | 15.17     |
|               | 16QAM      | 1        | 0         | 15.61     | 15.75     | 15.81     |
|               |            | 1        | 24        | 16.39     | 16.22     | 16.13     |
|               |            | 1        | 49        | 15.59     | 15.32     | 15.28     |
|               |            | 25       | 0         | 15.66     | 15.56     | 15.55     |
|               |            | 25       | 12        | 15.78     | 15.53     | 15.54     |
|               |            | 25       | 25        | 15.54     | 15.55     | 15.53     |
|               |            | 50       | 0         | 15.62     | 15.40     | 15.35     |

## ATTACHMENT B - OCCUPIED BANDWIDTH

| WCDMA Band 4 WCDMA |                 |                              |         |                 |                      |
|--------------------|-----------------|------------------------------|---------|-----------------|----------------------|
| Channel            | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 1312               | 1712.4          | 4.1634                       | 19957   | 1710.7          | 4.733                |
| 1413               | 1732.6          | 4.1613                       | 20175   | 1732.5          | 4.731                |
| 1513               | 1752.6          | 4.1850                       | 20393   | 1754.3          | 4.716                |



| WCDMA Band 4 HSDPA |                 |                              |         |                 |                      |
|--------------------|-----------------|------------------------------|---------|-----------------|----------------------|
| Channel            | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 1312               | 1712.4          | 4.1632                       | 19957   | 1710.7          | 4.731                |
| 1413               | 1732.6          | 4.1639                       | 20175   | 1732.5          | 4.732                |
| 1513               | 1752.6          | 4.1646                       | 20393   | 1754.3          | 4.729                |



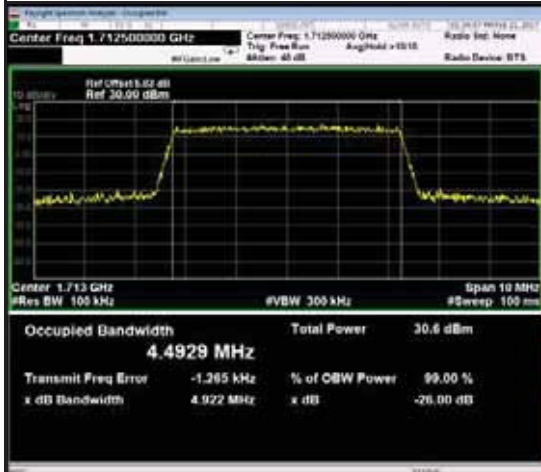
| WCDMA Band 4 HSUPA |                 |                              |         |                 |                      |
|--------------------|-----------------|------------------------------|---------|-----------------|----------------------|
| Channel            | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 1312               | 1712.4          | 4.1640                       | 19957   | 1710.7          | 4.734                |
| 1413               | 1732.6          | 4.1659                       | 20175   | 1732.5          | 4.746                |
| 1513               | 1752.6          | 4.1661                       | 20393   | 1754.3          | 4.733                |



| LTE Band 4_5M |                 |                              |         |                 |                              |
|---------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK          |                 |                              | 16QAM   |                 |                              |
| Channel       | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 19975         | 1712.5          | 4.4929                       | 19975   | 1712.5          | 4.4974                       |
| 20175         | 1732.5          | 4.5027                       | 20175   | 1732.5          | 4.5010                       |
| 20375         | 1752.5          | 4.4939                       | 20375   | 1752.5          | 4.5065                       |
| Channel       | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 19975         | 1712.5          | 4.922                        | 19975   | 1712.5          | 4.907                        |
| 20175         | 1732.5          | 4.958                        | 20175   | 1732.5          | 4.948                        |
| 20375         | 1752.5          | 4.936                        | 20375   | 1752.5          | 4.935                        |

Spectrum Plot

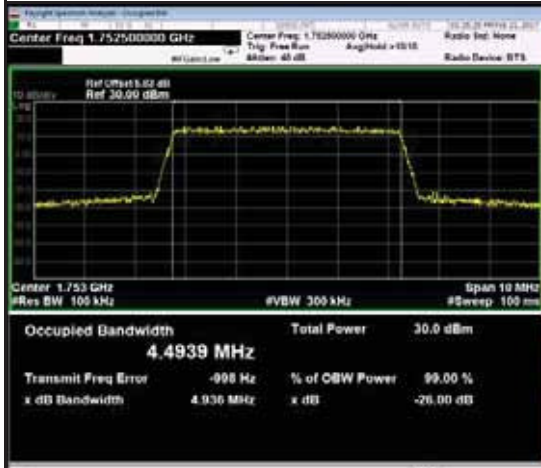
QPSK-19975



QPSK-20175



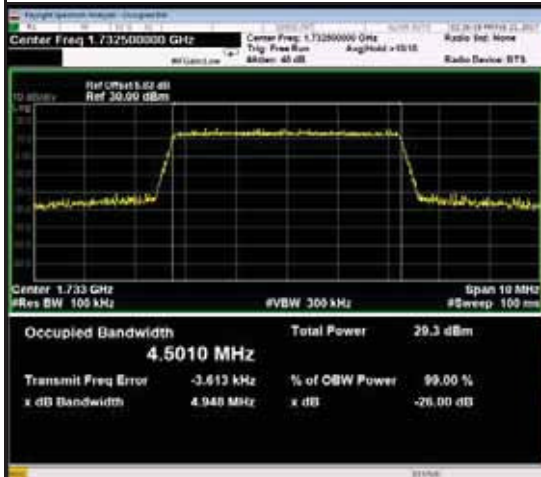
QPSK-20375



16QAM-19975



16QAM-20175



16QAM-20375



| LTE Band 4_10M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20000          | 1715            | 8.9780                       | 20000   | 1715            | 9.0049                       |
| 20175          | 1732.5          | 9.0069                       | 20175   | 1732.5          | 8.9902                       |
| 20350          | 1750            | 8.9847                       | 20350   | 1750            | 8.9861                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20000          | 1715            | 9.876                        | 20000   | 1715            | 9.886                        |
| 20175          | 1732.5          | 9.901                        | 20175   | 1732.5          | 9.893                        |
| 20350          | 1750            | 9.925                        | 20350   | 1750            | 9.839                        |

Spectrum Plot

QPSK-20000



QPSK-20175



QPSK-20350



16QAM-20000



16QAM-20175



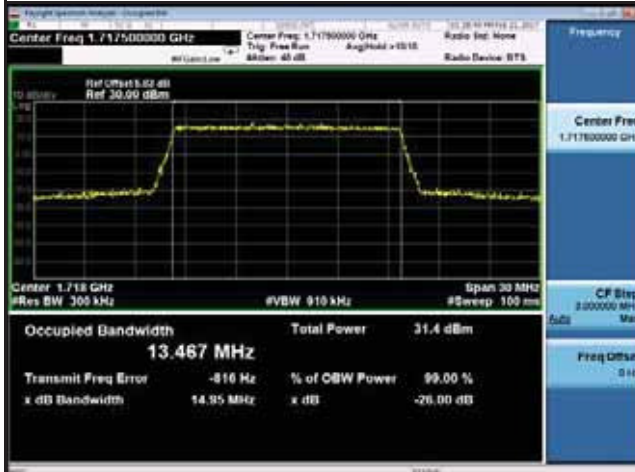
16QAM-20350



| LTE Band 4_15M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20025          | 1717.5          | 13.467                       | 20025   | 1717.5          | 13.474                       |
| 20175          | 1732.5          | 13.510                       | 20175   | 1732.5          | 13.517                       |
| 20325          | 1747.5          | 13.490                       | 20325   | 1747.5          | 13.480                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20025          | 1717.5          | 14.95                        | 20025   | 1717.5          | 14.78                        |
| 20175          | 1732.5          | 14.98                        | 20175   | 1732.5          | 14.90                        |
| 20325          | 1747.5          | 14.94                        | 20325   | 1747.5          | 15.00                        |

Spectrum Plot

QPSK-20025



QPSK-20175



QPSK-20325



16QAM-20025



16QAM-20175



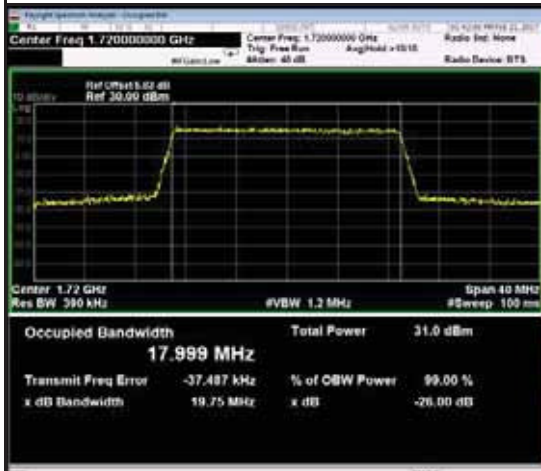
16QAM-20325



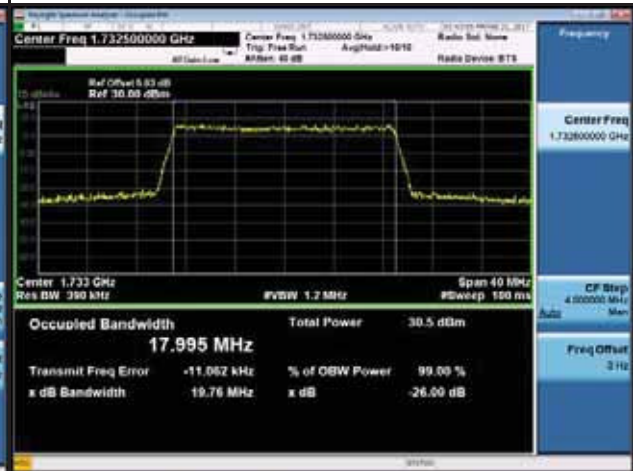
| LTE Band 4_20M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20050          | 1720            | 17.999                       | 20050   | 1720            | 17.942                       |
| 20175          | 1732.5          | 17.995                       | 20175   | 1732.5          | 18.019                       |
| 20300          | 1745            | 17.974                       | 20300   | 1745            | 17.985                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20050          | 1720            | 19.75                        | 20050   | 1720            | 19.80                        |
| 20175          | 1732.5          | 19.76                        | 20175   | 1732.5          | 19.67                        |
| 20300          | 1745            | 19.66                        | 20300   | 1745            | 19.63                        |

Spectrum Plot

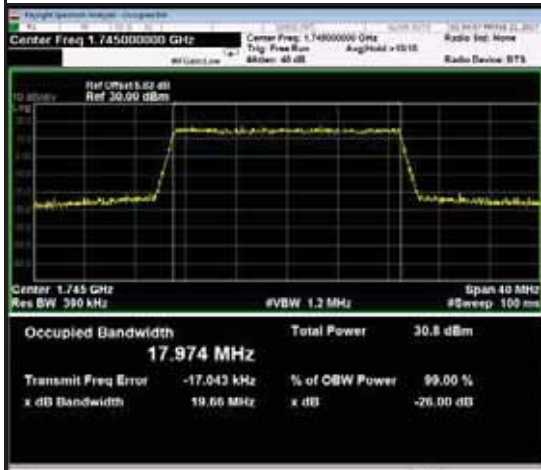
QPSK-20050



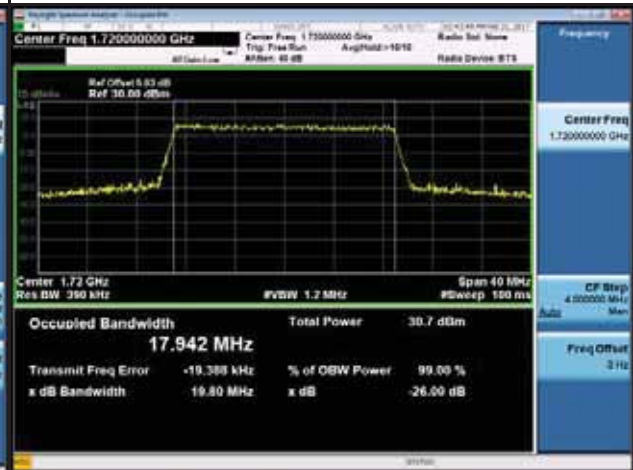
QPSK-20175



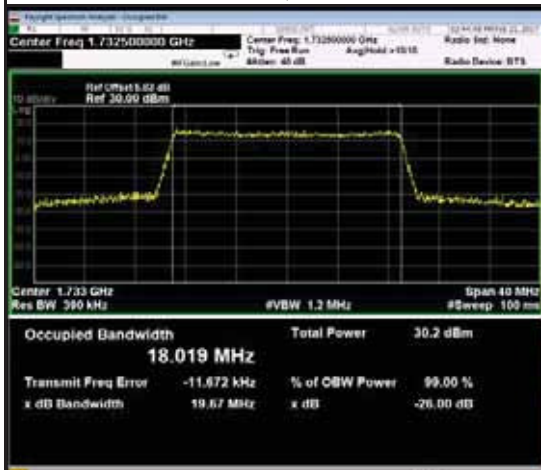
QPSK-20300



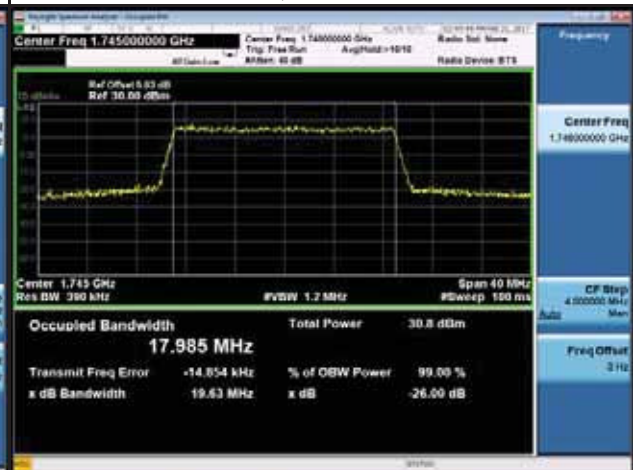
16QAM-20050



16QAM-20175



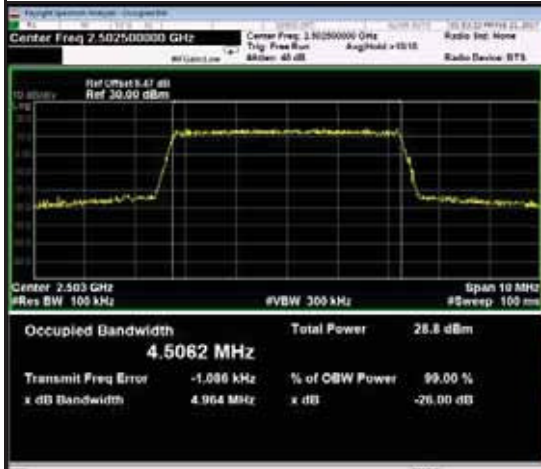
16QAM-20300



| LTE Band 7_5M |                 |                              |         |                 |                              |
|---------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK          |                 |                              | 16QAM   |                 |                              |
| Channel       | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20775         | 2502.5          | 4.5062                       | 20775   | 2502.5          | 4.5119                       |
| 21100         | 2535            | 4.5080                       | 21100   | 2535            | 4.5097                       |
| 21425         | 2567.5          | 4.5021                       | 21425   | 2567.5          | 4.5041                       |
| Channel       | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20775         | 2502.5          | 4.964                        | 20775   | 2502.5          | 4.964                        |
| 21100         | 2535            | 4.959                        | 21100   | 2535            | 4.946                        |
| 21425         | 2567.5          | 4.953                        | 21425   | 2567.5          | 4.921                        |

Spectrum Plot

QPSK-20775



QPSK-21100



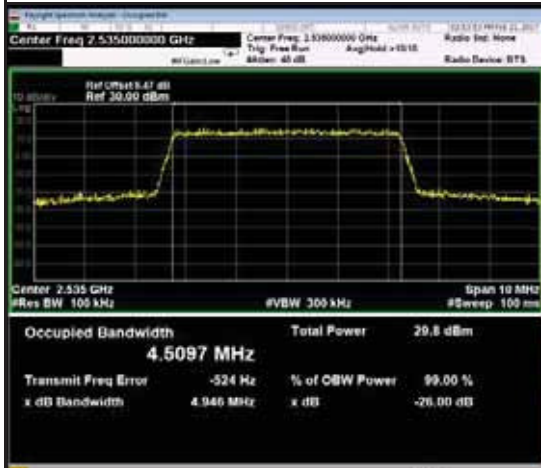
QPSK-21425



16QAM-20775



16QAM-21100



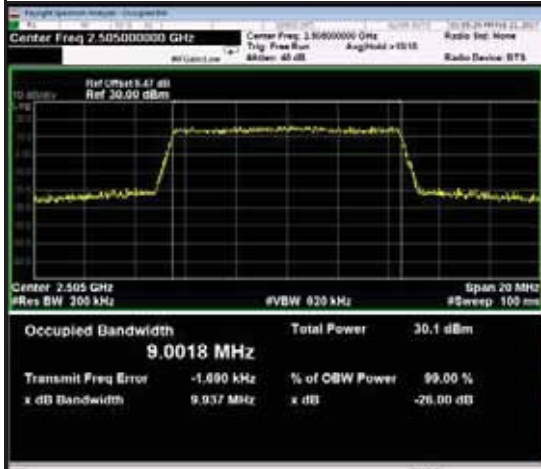
16QAM-21425



| LTE Band 7_10M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20800          | 2505            | 9.0018                       | 20800   | 2505            | 9.0053                       |
| 21100          | 2535            | 9.0196                       | 21100   | 2535            | 8.9806                       |
| 21400          | 2565            | 9.0324                       | 21400   | 2565            | 9.0005                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20800          | 2505            | 9.937                        | 20800   | 2505            | 9.924                        |
| 21100          | 2535            | 9.910                        | 21100   | 2535            | 9.844                        |
| 21400          | 2565            | 9.843                        | 21400   | 2565            | 9.889                        |

Spectrum Plot

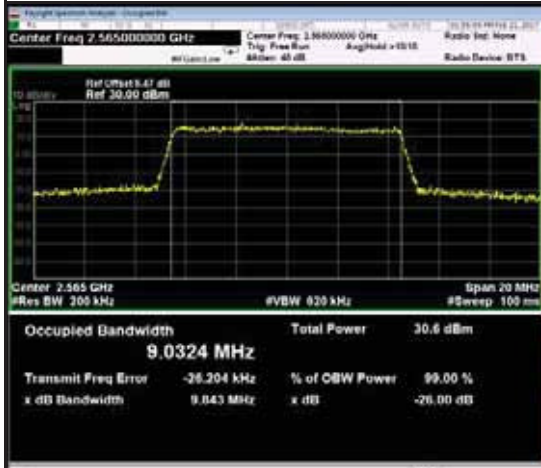
QPSK-20800



QPSK-21100



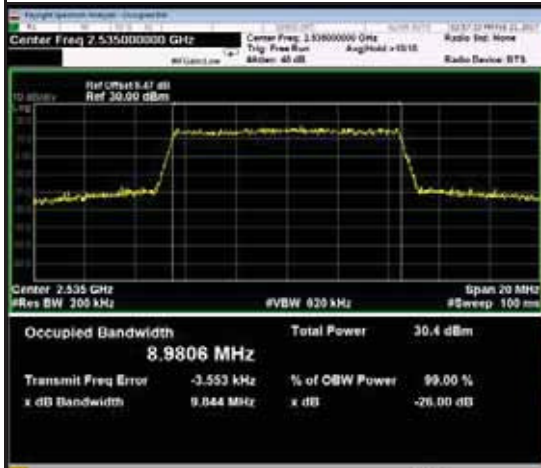
QPSK-21400



16QAM-20800



16QAM-21100



16QAM-21400



| LTE Band 7_15M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20825          | 2507.5          | 13.478                       | 20825   | 2507.5          | 13.533                       |
| 21100          | 2535            | 13.507                       | 21100   | 2535            | 13.503                       |
| 21375          | 2562.5          | 13.466                       | 21375   | 2562.5          | 13.504                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20825          | 2507.5          | 14.87                        | 20825   | 2507.5          | 14.83                        |
| 21100          | 2535            | 15.02                        | 21100   | 2535            | 14.94                        |
| 21375          | 2562.5          | 14.96                        | 21375   | 2562.5          | 14.95                        |

Spectrum Plot

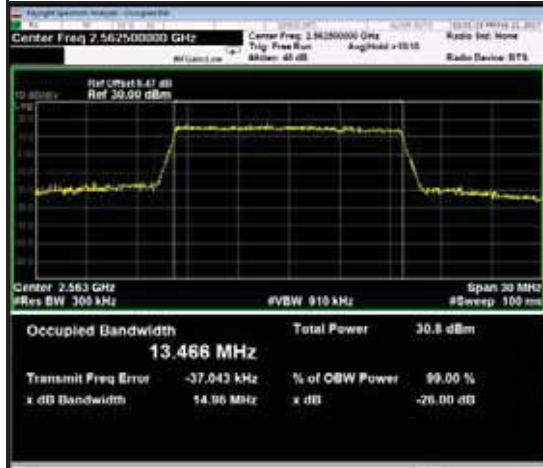
QPSK-20825



QPSK-21100



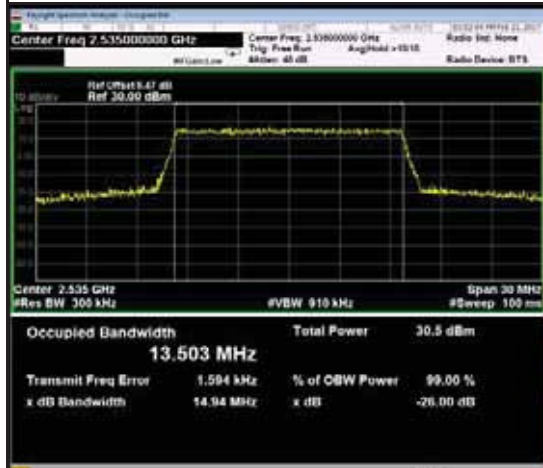
QPSK-21375



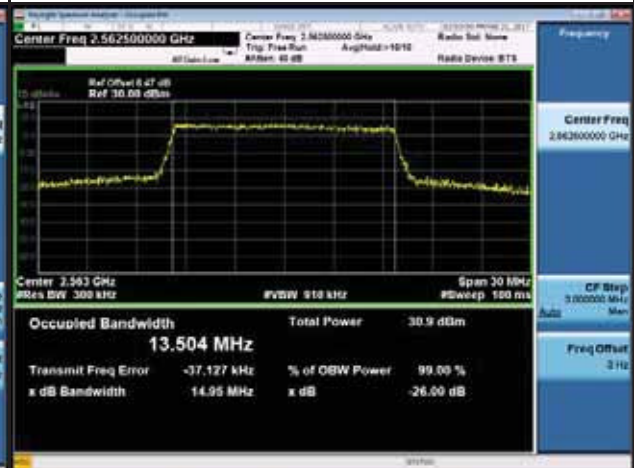
16QAM-20825



16QAM-21100



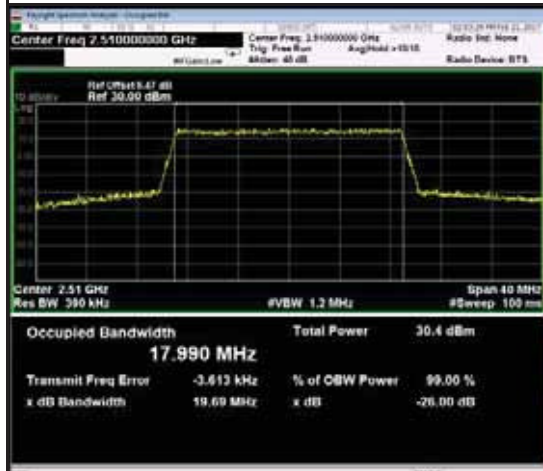
16QAM-21375



| LTE Band 7_20M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 20850          | 2510            | 17.990                       | 20850   | 2510            | 17.994                       |
| 21100          | 2535            | 18.021                       | 21100   | 2535            | 18.038                       |
| 21350          | 2560            | 17.946                       | 21350   | 2560            | 17.965                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 20850          | 2510            | 19.69                        | 20850   | 2510            | 19.71                        |
| 21100          | 2535            | 19.89                        | 21100   | 2535            | 19.70                        |
| 21350          | 2560            | 19.63                        | 21350   | 2560            | 19.75                        |

Spectrum Plot

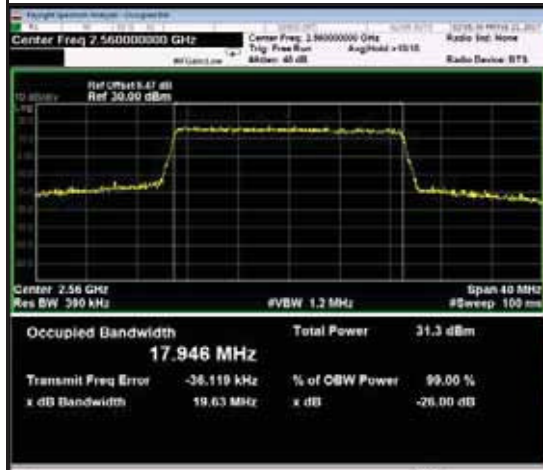
QPSK-20850



QPSK-21100



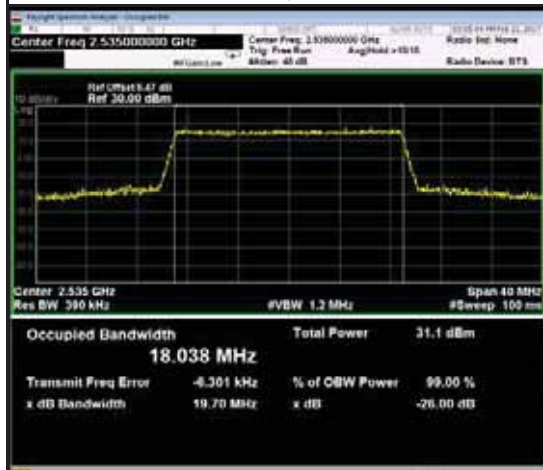
QPSK-21350



16QAM-20850



16QAM-21100



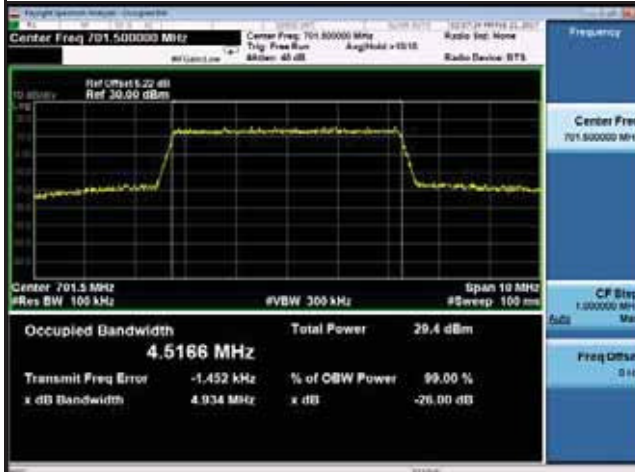
16QAM-21350



| LTE Band 12_5M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23035          | 701.5           | 4.5166                       | 23035   | 701.5           | 4.5234                       |
| 23095          | 707.5           | 4.5043                       | 23095   | 707.5           | 4.5019                       |
| 23155          | 713.5           | 4.5056                       | 23155   | 713.5           | 4.5186                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23035          | 701.5           | 4.934                        | 23035   | 701.5           | 4.981                        |
| 23095          | 707.5           | 4.917                        | 23095   | 707.5           | 4.943                        |
| 23155          | 713.5           | 4.962                        | 23155   | 713.5           | 4.992                        |

Spectrum Plot

QPSK-23035



QPSK-23095



QPSK-23155



16QAM-23035



16QAM-23095



16QAM-23155



| LTE Band 12_10M |                 |                              |         |                 |                              |
|-----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK            |                 |                              | 16QAM   |                 |                              |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23060           | 704.0           | 9.0117                       | 23060   | 704.0           | 9.0196                       |
| 23095           | 707.5           | 8.9964                       | 23095   | 707.5           | 8.9925                       |
| 23130           | 711.0           | 9.0021                       | 23130   | 711.0           | 9.0270                       |
| Channel         | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23060           | 704.0           | 9.882                        | 23060   | 704.0           | 10.01                        |
| 23095           | 707.5           | 9.861                        | 23095   | 707.5           | 9.928                        |
| 23130           | 711.0           | 9.889                        | 23130   | 711.0           | 9.943                        |

Spectrum Plot

QPSK-23060



QPSK-23095



QPSK-23130



16QAM-23060



16QAM-23095



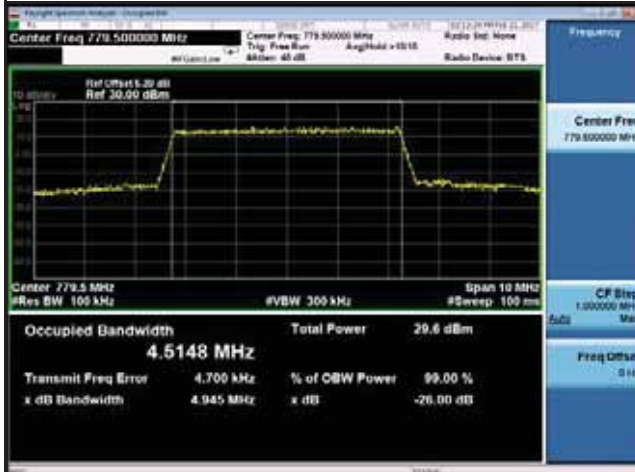
16QAM-23130



| LTE Band 13_5M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23205          | 779.5           | 4.5148                       | 23205   | 779.5           | 4.5100                       |
| 23230          | 782.0           | 4.5120                       | 23230   | 782.0           | 4.5052                       |
| 23255          | 784.5           | 4.5087                       | 23255   | 784.5           | 4.4972                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23205          | 779.5           | 4.945                        | 23205   | 779.5           | 4.928                        |
| 23230          | 782.0           | 4.934                        | 23230   | 782.0           | 4.922                        |
| 23255          | 784.5           | 4.967                        | 23255   | 784.5           | 4.927                        |

Spectrum Plot

QPSK-23205



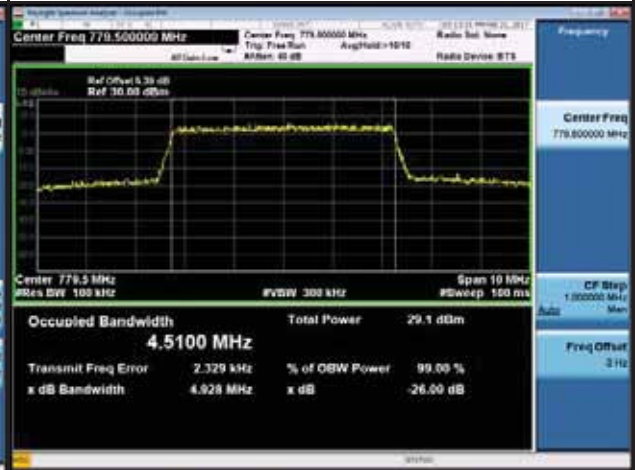
QPSK-23230



QPSK-23255



16QAM-23205



16QAM-23230



16QAM-23255



| LTE Band 13_10M |                 |                              |         |                 |                              |
|-----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK            |                 |                              | 16QAM   |                 |                              |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23230           | 782.0           | 9.0159                       | 23230   | 782.0           | 9.0094                       |
| Channel         | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23230           | 782.0           | 9.904                        | 23230   | 782.0           | 9.814                        |



| LTE Band 17_5M |                 |                              |         |                 |                              |
|----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK           |                 |                              | 16QAM   |                 |                              |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23755          | 706.5           | 4.5048                       | 23755   | 706.5           | 4.5043                       |
| 23790          | 710.0           | 4.5172                       | 23790   | 710.0           | 4.5094                       |
| 23825          | 713.5           | 4.5041                       | 23825   | 713.5           | 4.5075                       |
| Channel        | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23755          | 706.5           | 4.973                        | 23755   | 706.5           | 4.968                        |
| 23790          | 710.0           | 4.968                        | 23790   | 710.0           | 4.935                        |
| 23825          | 713.5           | 4.954                        | 23825   | 713.5           | 4.953                        |

Spectrum Plot

QPSK-23755



QPSK-23790



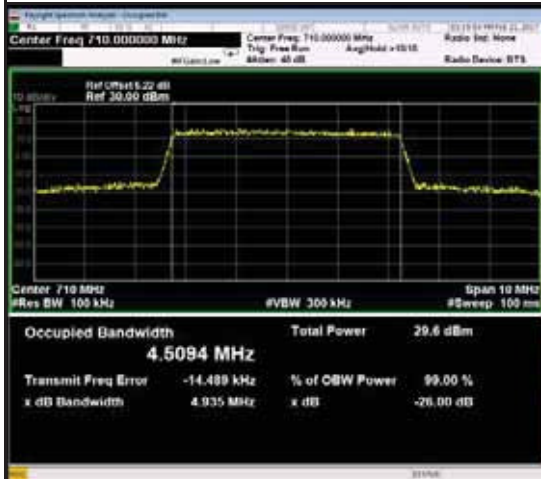
QPSK-23825



16QAM-23755



16QAM-23790



16QAM-23825



| LTE Band 17_10M |                 |                              |         |                 |                              |
|-----------------|-----------------|------------------------------|---------|-----------------|------------------------------|
| QPSK            |                 |                              | 16QAM   |                 |                              |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) |
| 23780           | 709.0           | 8.9883                       | 23780   | 709.0           | 8.9965                       |
| 23790           | 710.0           | 9.0144                       | 23790   | 710.0           | 9.0112                       |
| 23800           | 711.0           | 9.0206                       | 23800   | 711.0           | 9.0129                       |
| Channel         | Frequency (MHz) | 26dB Bandwidth (MHz)         | Channel | Frequency (MHz) | 26dB Bandwidth (MHz)         |
| 23780           | 709.0           | 8.901                        | 23780   | 709.0           | 9.951                        |
| 23790           | 710.0           | 9.909                        | 23790   | 710.0           | 9.923                        |
| 23800           | 711.0           | 9.926                        | 23800   | 711.0           | 9.923                        |

Spectrum Plot

QPSK-23780



QPSK-23790



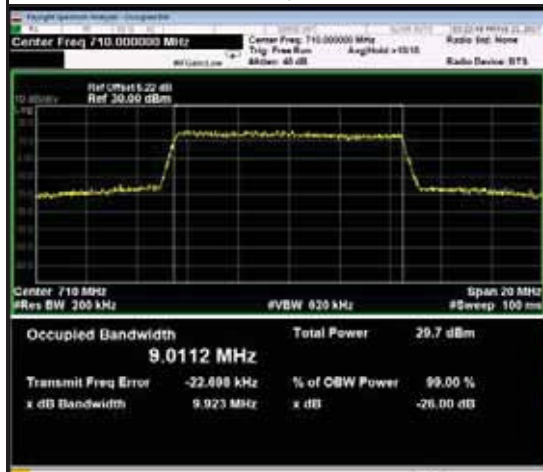
QPSK-23800



16QAM-13780



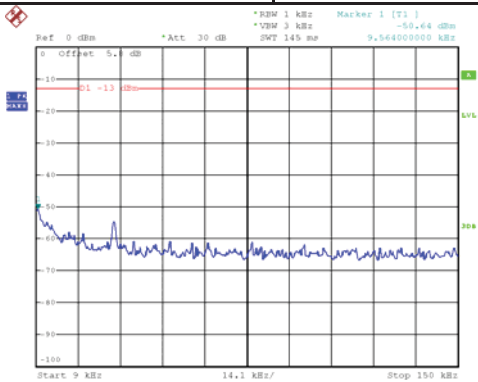
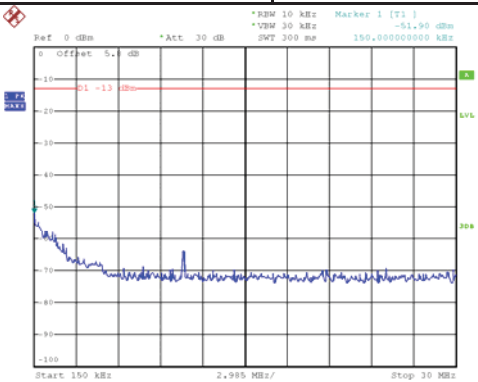
16QAM-23790

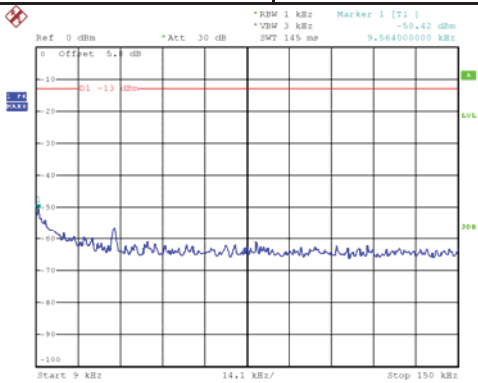
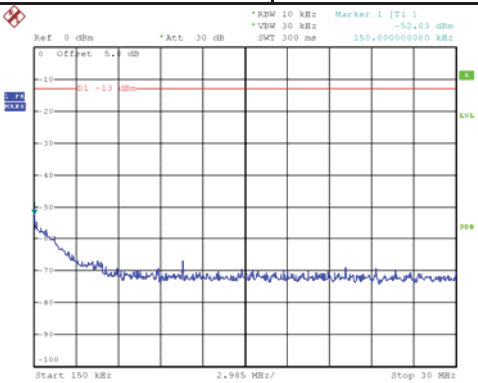
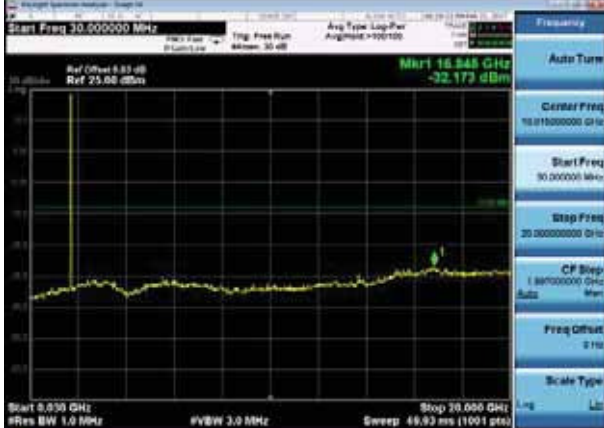


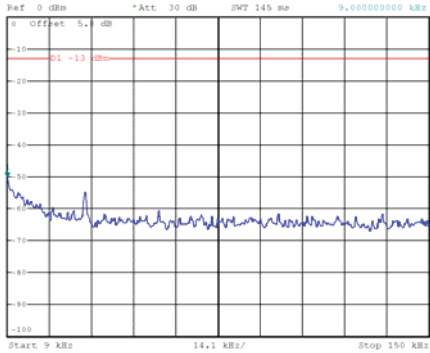
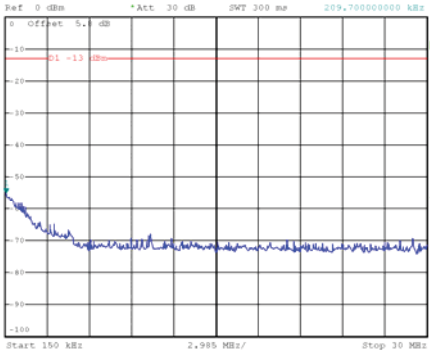
16QAM-23800

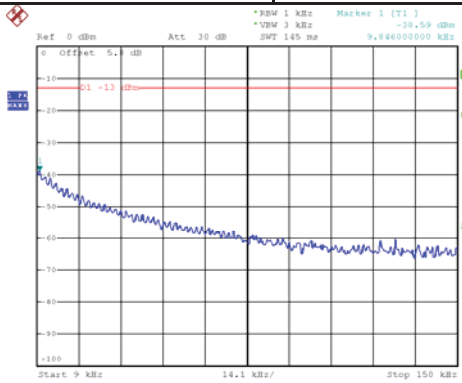
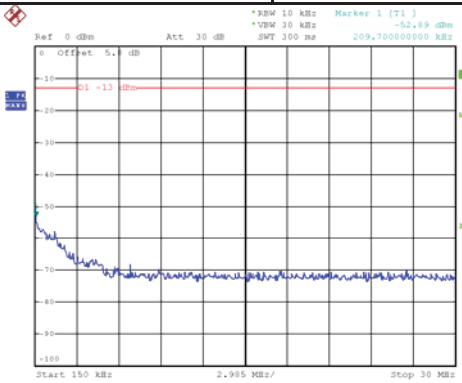


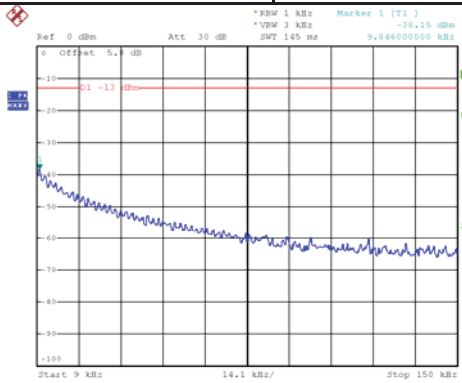
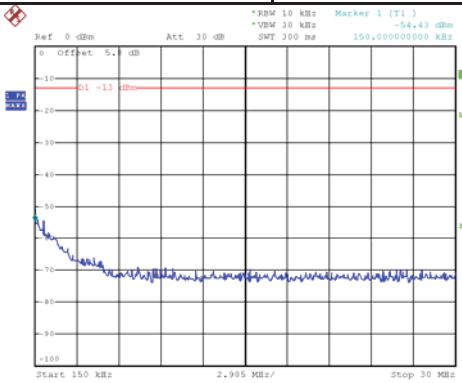
## ATTACHMENT C - CONDUCTED EMISSIONS

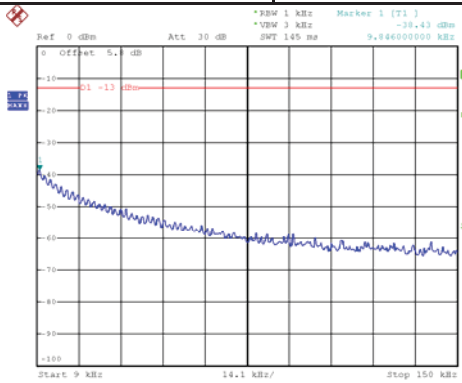
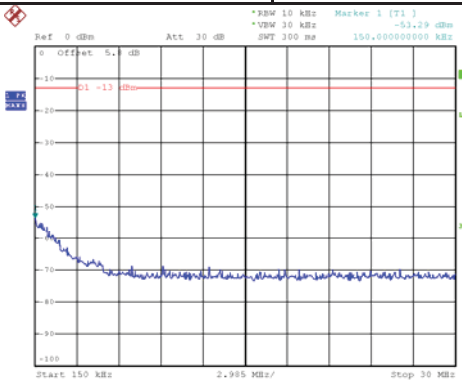
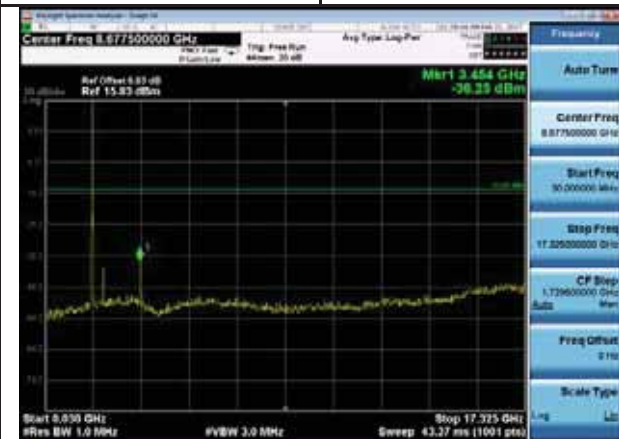
| WCDMA Band 4_WCDMA                                                                 |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 1413                                                                               | 1732.6         | 1413                                                                               | 1732.6         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 1413                                                                               | 1732.6         | -                                                                                  | -              |
|  |                |                                                                                    |                |

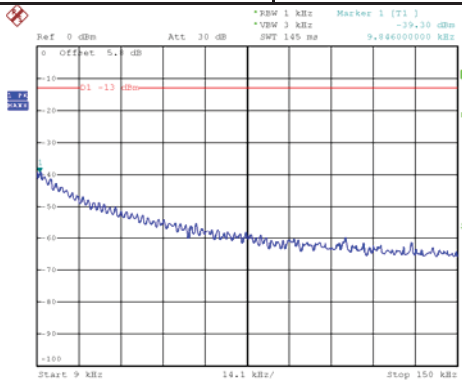
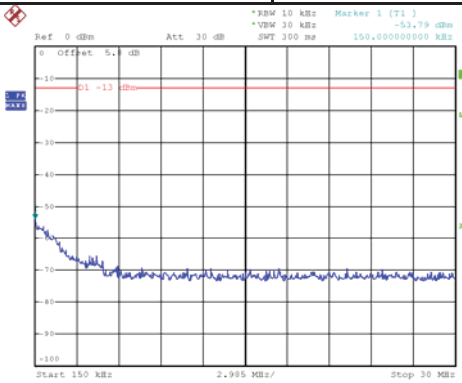
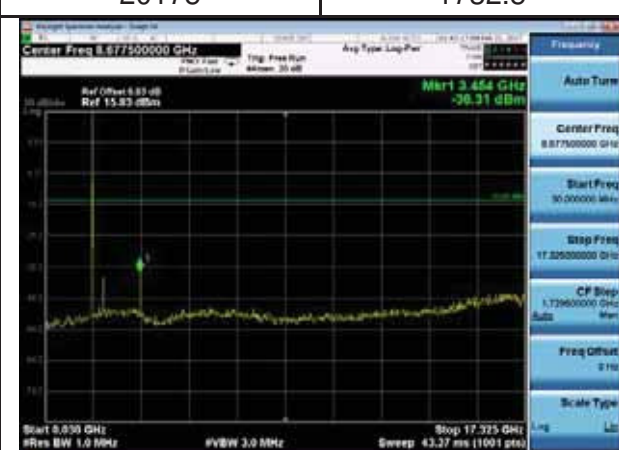
| WCDMA Band 4_HSDPA                                                                 |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 1413                                                                               | 1732.6         | 1413                                                                               | 1732.6         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 1413                                                                               | 1732.6         | -                                                                                  | -              |
|  |                |                                                                                    |                |

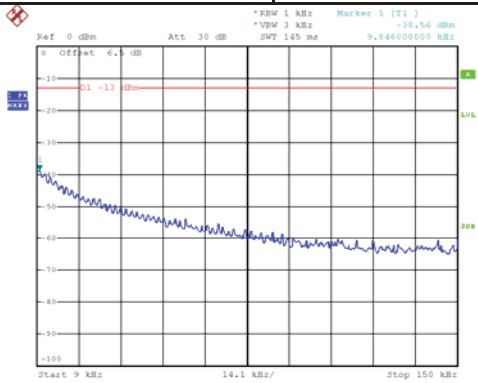
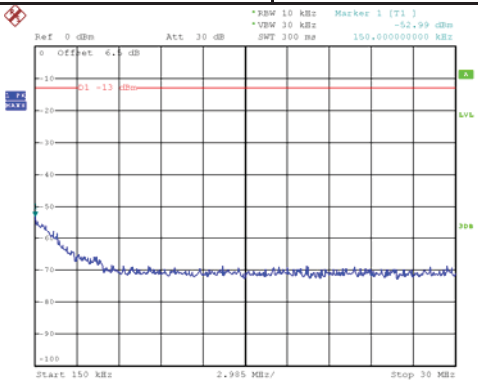
| WCDMA Band 4_HSUPA                                                                 |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 1413                                                                               | 1732.6         | 1413                                                                               | 1732.6         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 1413                                                                               | 1732.6         | -                                                                                  | -              |
|  |                | -                                                                                  |                |

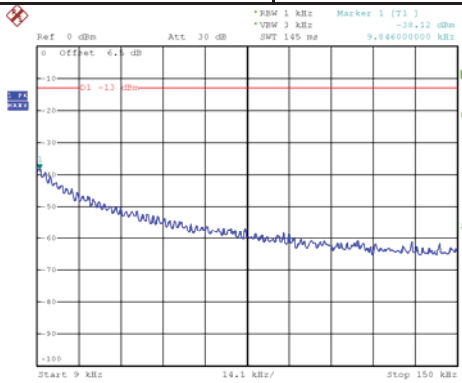
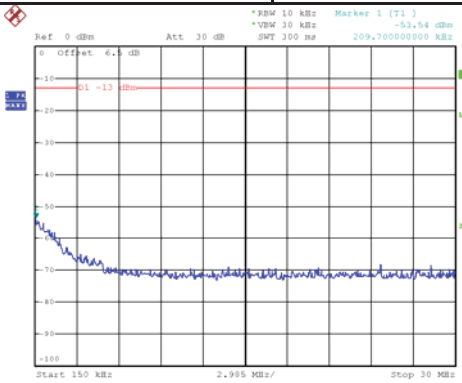
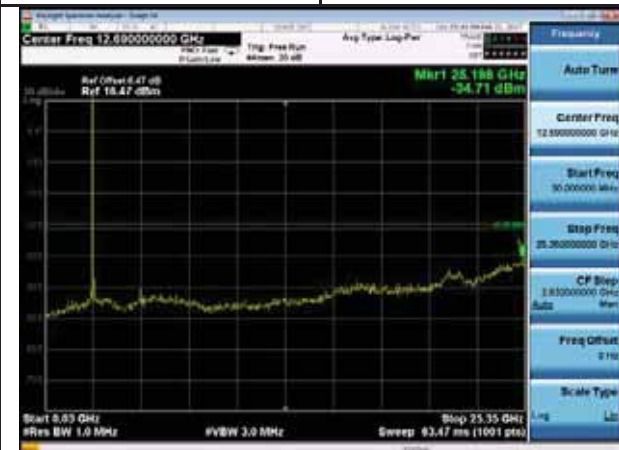
| LTE Band 4_5M                                                                      |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 20175                                                                              | 1732.5         | 20175                                                                              | 1732.5         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 20175                                                                              | 1732.5         | -                                                                                  | -              |
|  |                | -                                                                                  |                |

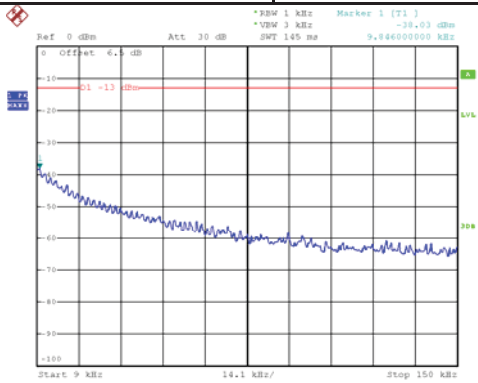
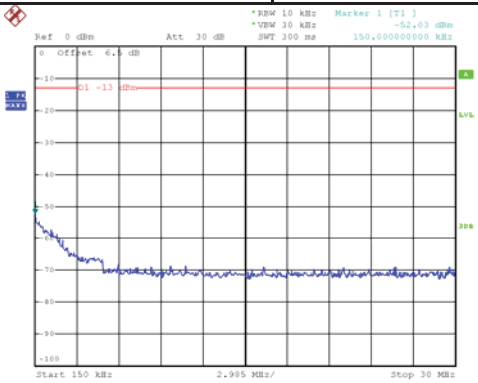
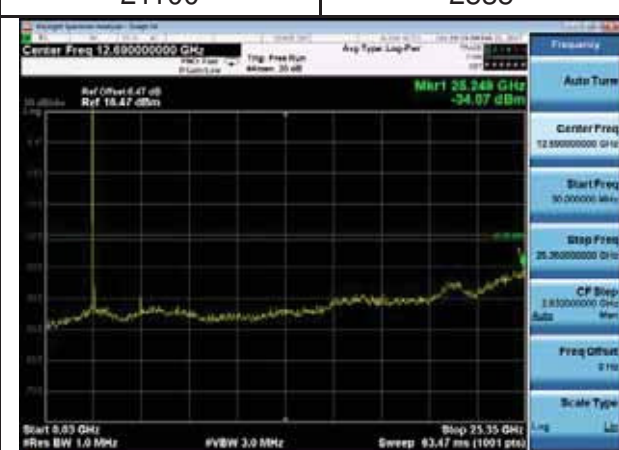
| LTE Band 4_10M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 20175                                                                              | 1732.5         | 20175                                                                              | 1732.5         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 20175                                                                              | 1732.5         | -                                                                                  | -              |
|  |                |                                                                                    |                |

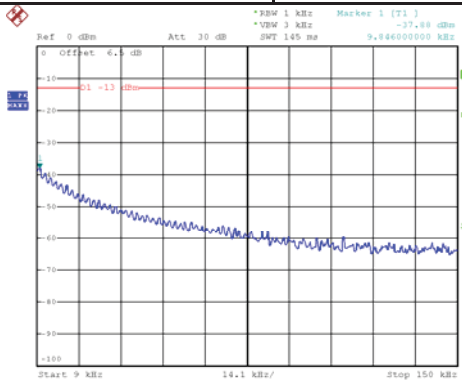
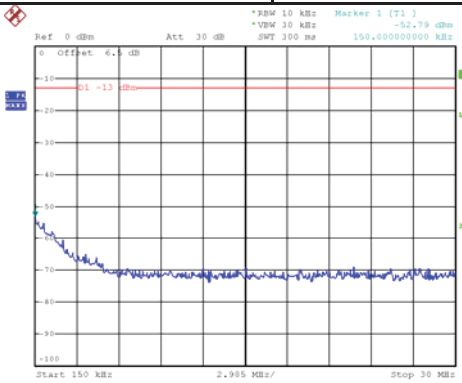
| LTE Band 4_15M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 20175                                                                              | 1732.5         | 20175                                                                              | 1732.5         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 20175                                                                              | 1732.5         | -                                                                                  | -              |
|  |                |                                                                                    |                |

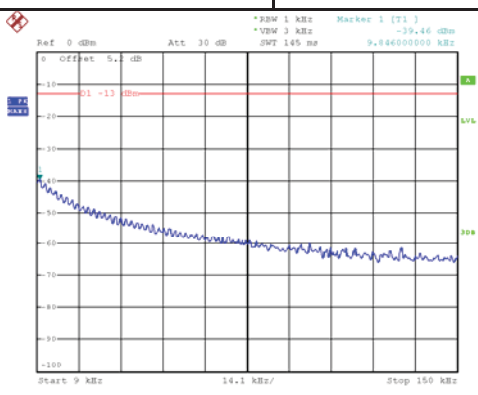
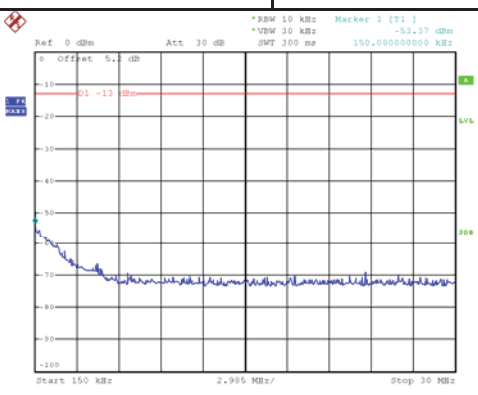
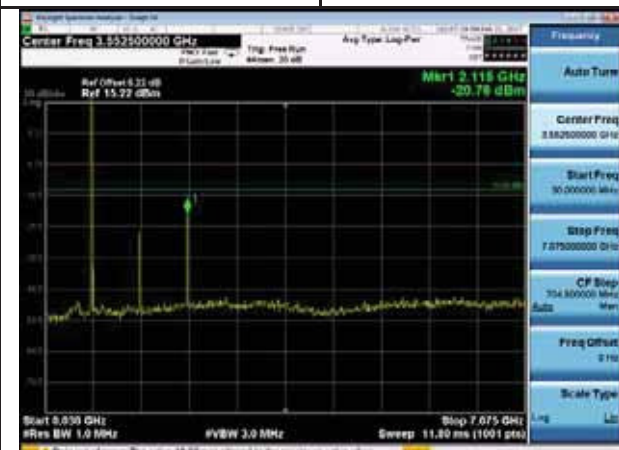
| LTE Band 4_20M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 20175                                                                              | 1732.5         | 20175                                                                              | 1732.5         |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 20175                                                                              | 1732.5         | -                                                                                  | -              |
|  |                | -                                                                                  |                |

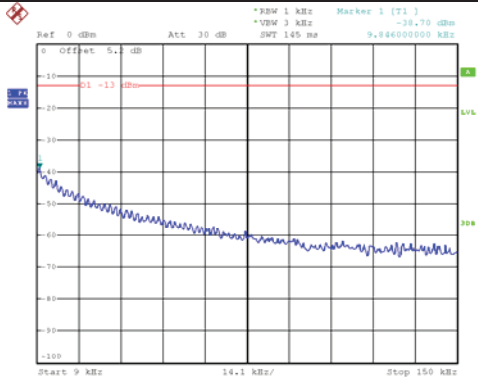
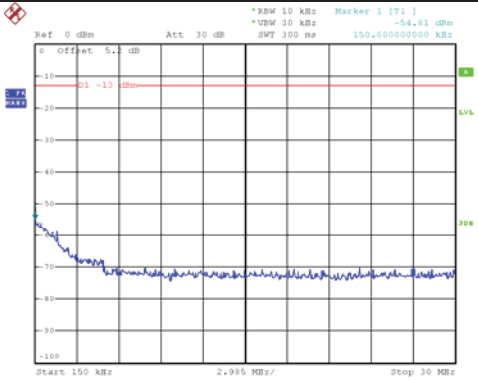
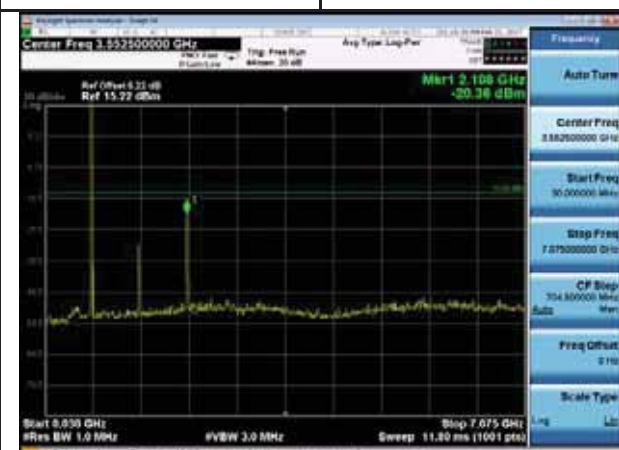
| LTE Band 7_5M                                                                      |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 21100                                                                              | 2535           | 21100                                                                              | 2535           |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 21100                                                                              | 2535           | -                                                                                  | -              |
|  |                |                                                                                    |                |

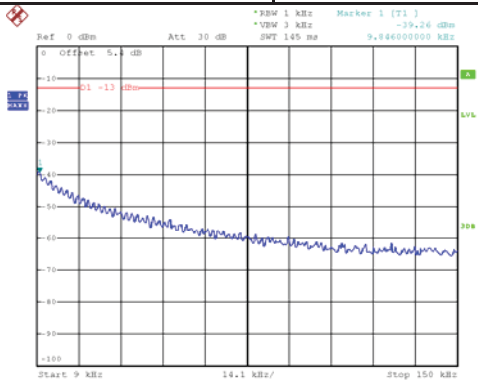
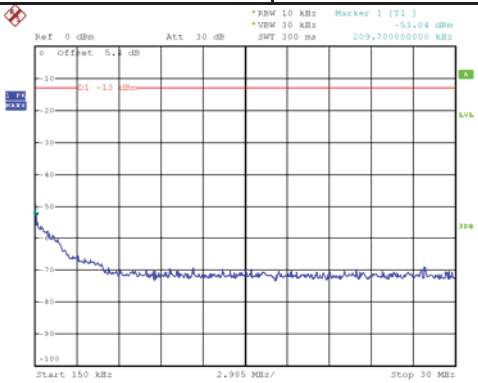
| LTE Band 7_10M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 21100                                                                              | 2535           | 21100                                                                              | 2535           |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 21100                                                                              | 2535           | -                                                                                  | -              |
|  |                |                                                                                    |                |

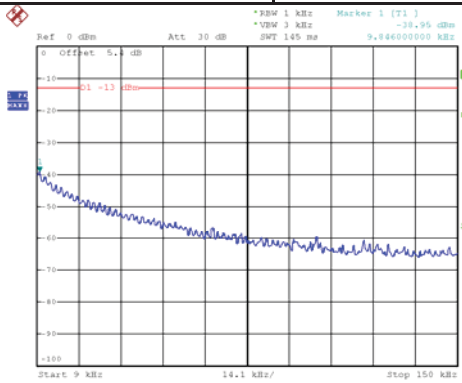
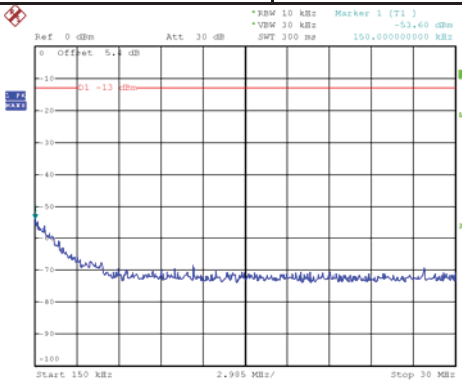
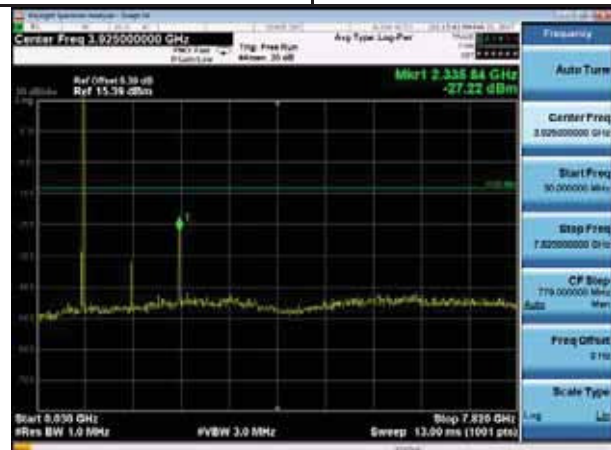
| LTE Band 7_15M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 21100                                                                              | 2535           | 21100                                                                              | 2535           |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 21100                                                                              | 2535           | -                                                                                  | -              |
|  |                |                                                                                    |                |

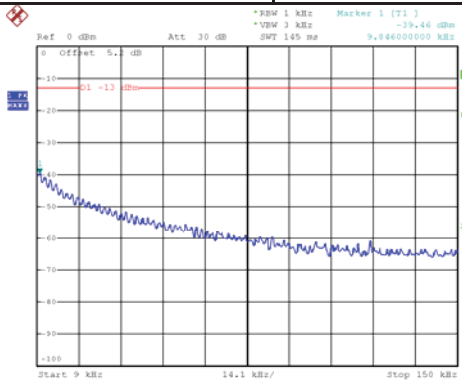
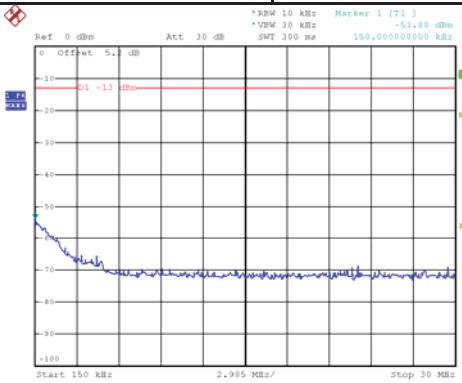
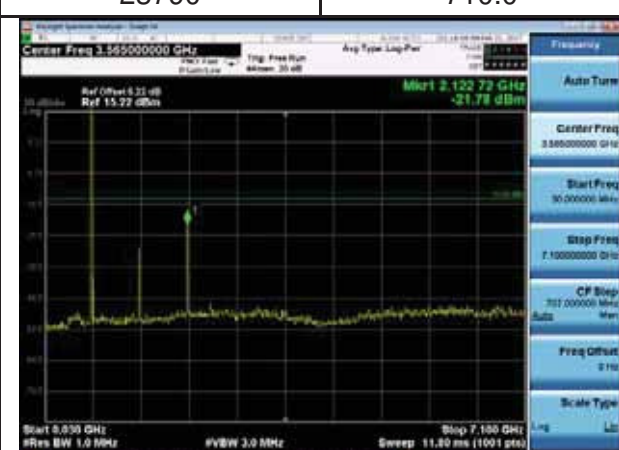
| LTE Band 7_20M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 21100                                                                              | 2535           | 21100                                                                              | 2535           |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 21100                                                                              | 2535           | -                                                                                  | -              |
|  |                |                                                                                    |                |

| LTE Band 12_5M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 23095                                                                              | 707.5          | 23095                                                                              | 707.5          |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 23095                                                                              | 707.5          | -                                                                                  | -              |
|  |                |                                                                                    |                |

| LTE Band 12_10M                                                                    |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 23095                                                                              | 707.5          | 23095                                                                              | 707.5          |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 23095                                                                              | 707.5          | -                                                                                  | -              |
|  |                |                                                                                    |                |

| LTE Band 13_5M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 23230                                                                              | 782.0          | 23230                                                                              | 782.0          |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 23230                                                                              | 782.0          | -                                                                                  | -              |
|  |                |                                                                                    |                |

| LTE Band 13_10M                                                                    |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 23230                                                                              | 782.0          | 23230                                                                              | 782.0          |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 23230                                                                              | 782.0          | -                                                                                  | -              |
|  |                |                                                                                    |                |

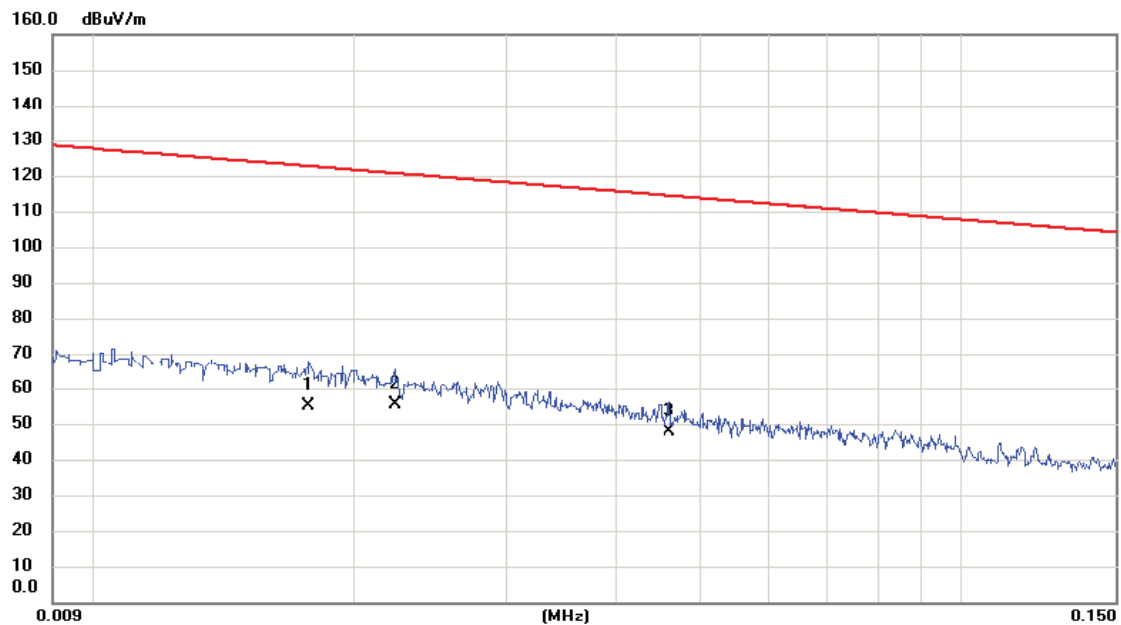
| LTE Band 17_5M                                                                     |                |                                                                                    |                |
|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------|
| Channel                                                                            | Frequency(MHz) | Channel                                                                            | Frequency(MHz) |
| 23790                                                                              | 710.0          | 23790                                                                              | 710.0          |
|   |                |  |                |
| Channel                                                                            | Frequency(MHz) | -                                                                                  | -              |
| 23790                                                                              | 710.0          | -                                                                                  | -              |
|  |                |                                                                                    |                |

| LTE Band 17_10M |                |         |                |
|-----------------|----------------|---------|----------------|
| Channel         | Frequency(MHz) | Channel | Frequency(MHz) |
| 23790           | 710.0          | 23790   | 710.0          |
|                 |                |         |                |
| Channel         | Frequency(MHz) | -       | -              |
| 23790           | 710.0          | -       | -              |
|                 |                |         |                |

## ATTACHMENT D - RADIATED EMISSION

|            |                           |
|------------|---------------------------|
| Test Mode: | TX Mode (Adapter: PHITEK) |
|------------|---------------------------|

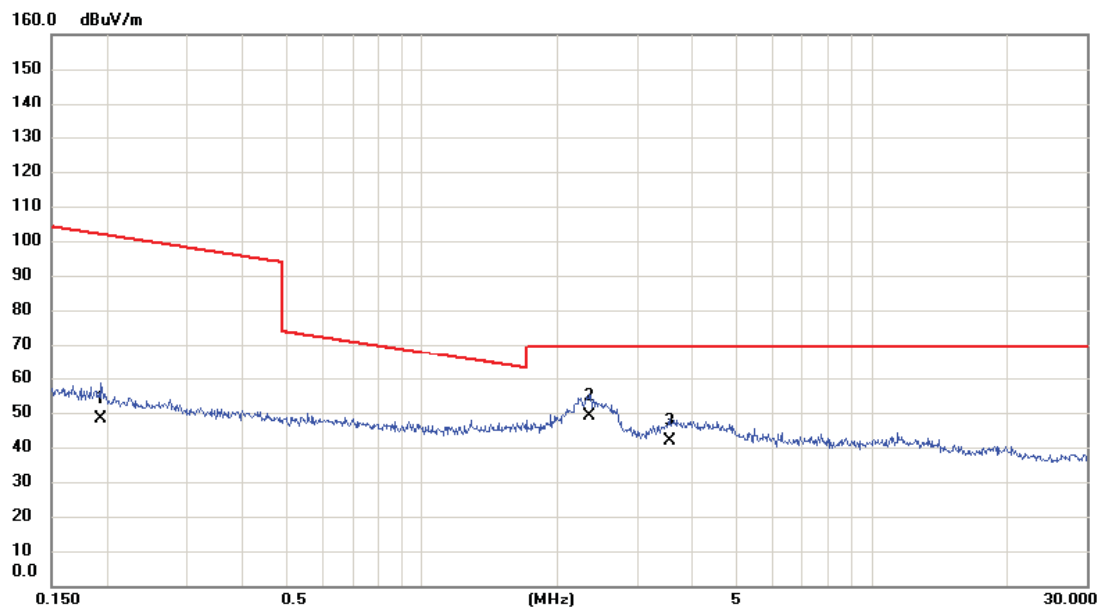
Ant 0°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.0177       | 31.44                    | 23.66                   | 55.10                      | 122.65          | -67.55       | AVG      |         |
| 2   | *   | 0.0223       | 32.16                    | 23.24                   | 55.40                      | 120.64          | -65.24       | AVG      |         |
| 3   |     | 0.0461       | 27.64                    | 20.30                   | 47.94                      | 114.33          | -66.39       | AVG      |         |

Test Mode: TX Mode (Adapter: PHITEK)

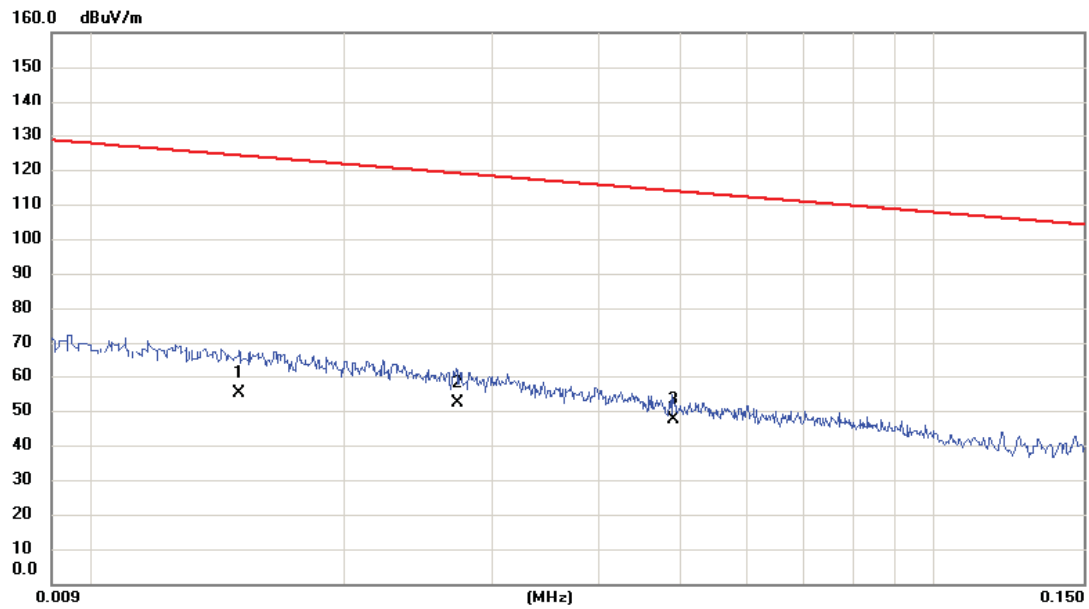
Ant 0°



| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   |     | 0.1934 | 29.44         | 18.70          | 48.14       | 101.88 | -53.74 | AVG      |         |
| 2   | *   | 2.3584 | 31.42         | 17.44          | 48.86       | 69.54  | -20.68 | QP       |         |
| 3   |     | 3.5653 | 24.12         | 17.83          | 41.95       | 69.54  | -27.59 | QP       |         |

Test Mode: TX Mode (Adapter: PHITEK)

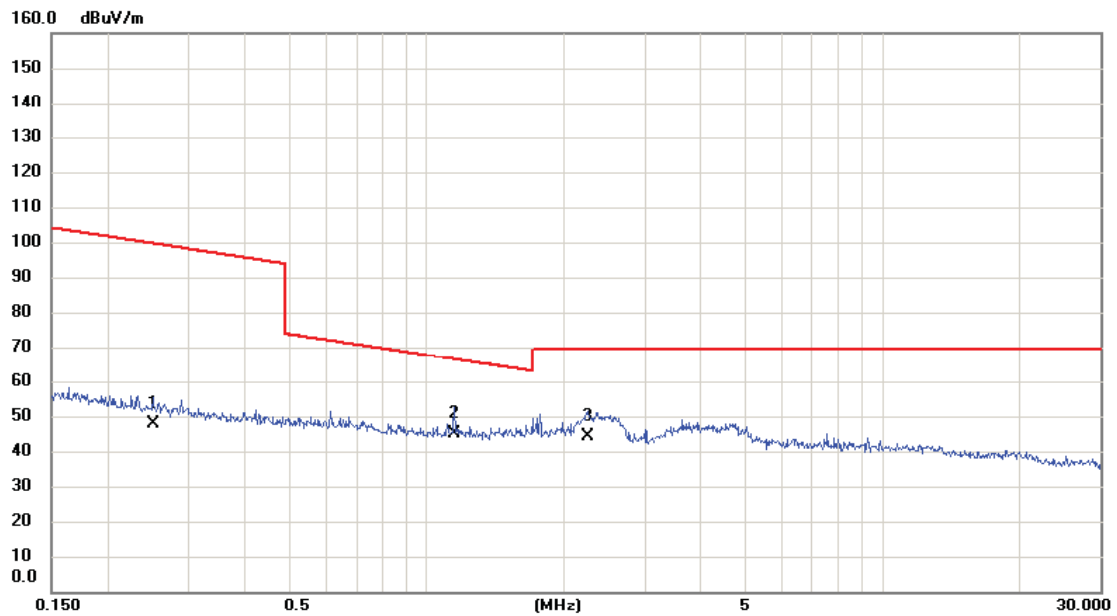
Ant 90°



| No. | Mk. | Freq.  | Reading | Correct | Measure- | Limit  | Margin |          |         |
|-----|-----|--------|---------|---------|----------|--------|--------|----------|---------|
|     |     | MHz    | Level   | Factor  | ment     |        |        | Detector | Comment |
|     |     |        | dBuV    | dB      | dBuV/m   | dBuV/m | dB     |          |         |
| 1   |     | 0.0150 | 31.14   | 23.82   | 54.96    | 124.08 | -69.12 | AVG      |         |
| 2   |     | 0.0273 | 29.55   | 22.62   | 52.17    | 118.88 | -66.71 | AVG      |         |
| 3   | *   | 0.0491 | 27.58   | 19.93   | 47.51    | 113.78 | -66.27 | AVG      |         |

Test Mode: TX Mode (Adapter: PHITEK)

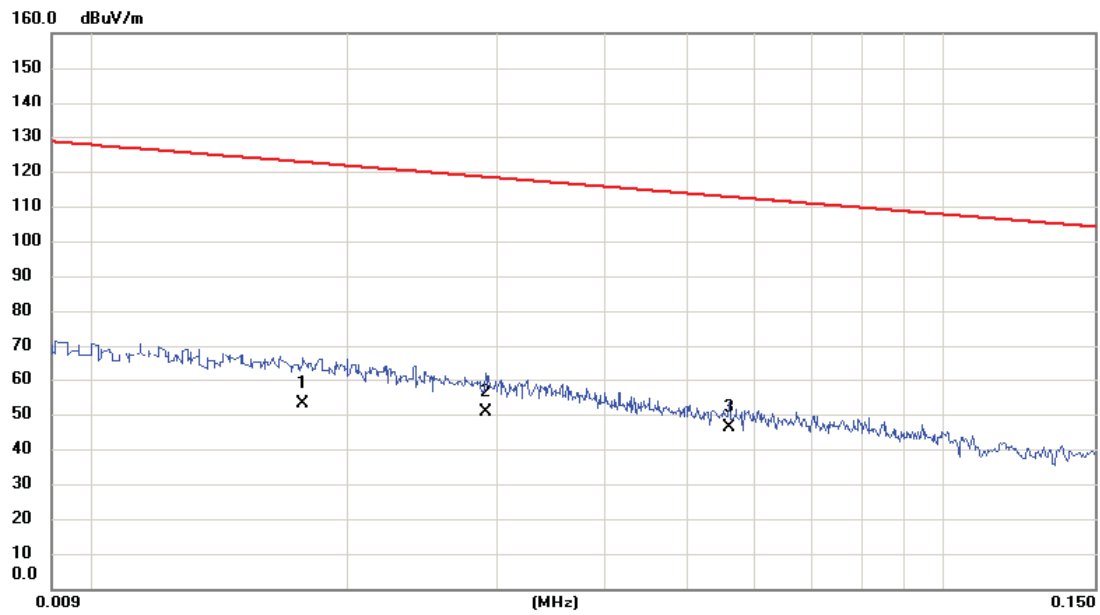
Ant 90°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.2508       | 29.22                    | 18.65                   | 47.87                      | 99.62           | -51.75       | AVG      |         |
| 2   | *   | 1.1534       | 27.33                    | 17.71                   | 45.04                      | 66.36           | -21.32       | QP       |         |
| 3   |     | 2.2486       | 26.74                    | 17.59                   | 44.33                      | 69.54           | -25.21       | QP       |         |

Test Mode: TX Mode (Adapter: HUNTKEY)

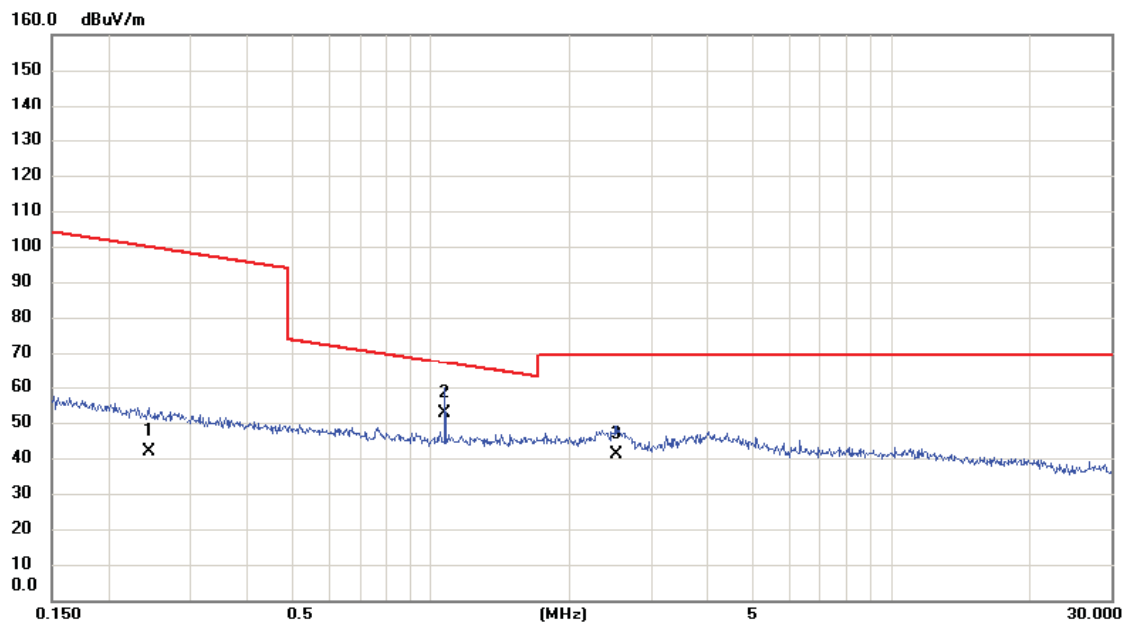
Ant 0°



| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measure-ment | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|--------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector | Comment |
| 1   |     | 0.0177 | 29.32         | 23.66          | 52.98        | 122.65 | -69.67 | AVG      |         |
| 2   |     | 0.0291 | 28.15         | 22.40          | 50.55        | 118.33 | -67.78 | AVG      |         |
| 3   | *   | 0.0561 | 26.41         | 19.76          | 46.17        | 112.63 | -66.46 | AVG      |         |

Test Mode: TX Mode (Adapter: HUNTKEY)

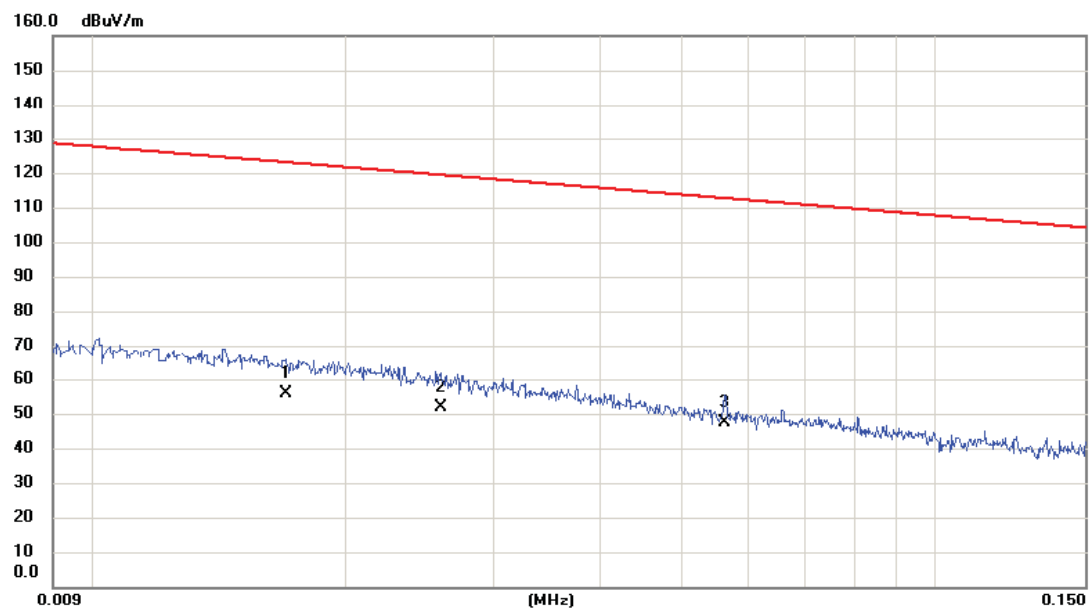
Ant 0°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.2430       | 23.12                    | 18.66                   | 41.78                      | 99.89           | -58.11       | AVG      |         |
| 2   | *   | 1.0766       | 34.96                    | 17.70                   | 52.66                      | 66.96           | -14.30       | QP       |         |
| 3   |     | 2.5133       | 23.70                    | 17.25                   | 40.95                      | 69.54           | -28.59       | QP       |         |

Test Mode: TX Mode (Adapter: HUNTKEY)

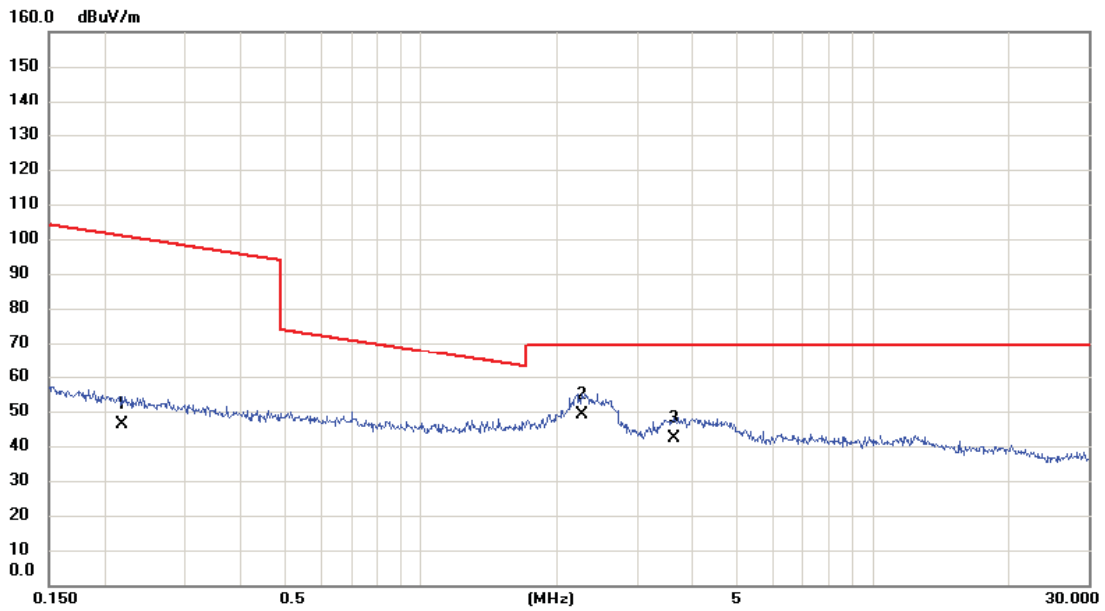
Ant 90°



| No. | Mk. | Freq.  | Reading | Correct | Measure- | Limit  | Margin |          |         |
|-----|-----|--------|---------|---------|----------|--------|--------|----------|---------|
|     |     | MHz    | Level   | Factor  | ment     |        |        | Detector | Comment |
|     |     |        | dBuV    | dB      | dBuV/m   | dBuV/m | dB     |          |         |
| 1   |     | 0.0170 | 32.15   | 23.70   | 55.85    | 123.00 | -67.15 | AVG      |         |
| 2   |     | 0.0260 | 29.04   | 22.78   | 51.82    | 119.31 | -67.49 | AVG      |         |
| 3   | *   | 0.0563 | 27.52   | 19.75   | 47.27    | 112.59 | -65.32 | AVG      |         |

Test Mode: TX Mode (Adapter: HUNTKEY)

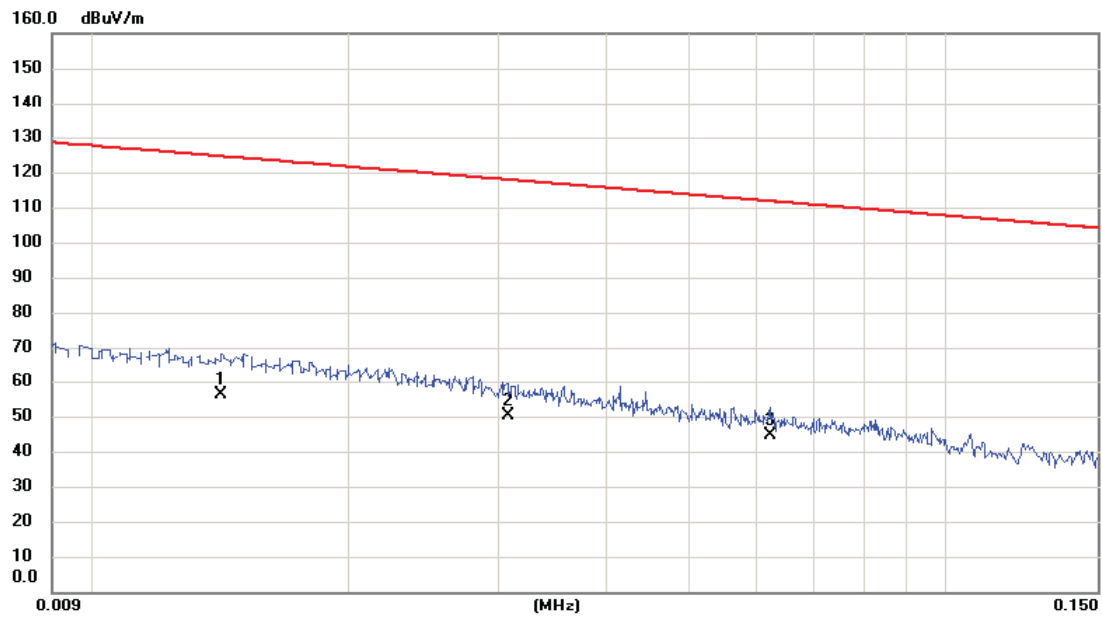
Ant 90°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.2174       | 27.67                    | 18.68                   | 46.35                      | 100.86          | -54.51       | AVG      |         |
| 2   | *   | 2.2725       | 31.55                    | 17.56                   | 49.11                      | 69.54           | -20.43       | QP       |         |
| 3   |     | 3.6417       | 24.11                    | 18.00                   | 42.11                      | 69.54           | -27.43       | QP       |         |

Test Mode: TX Mode (Adapter: BYD)

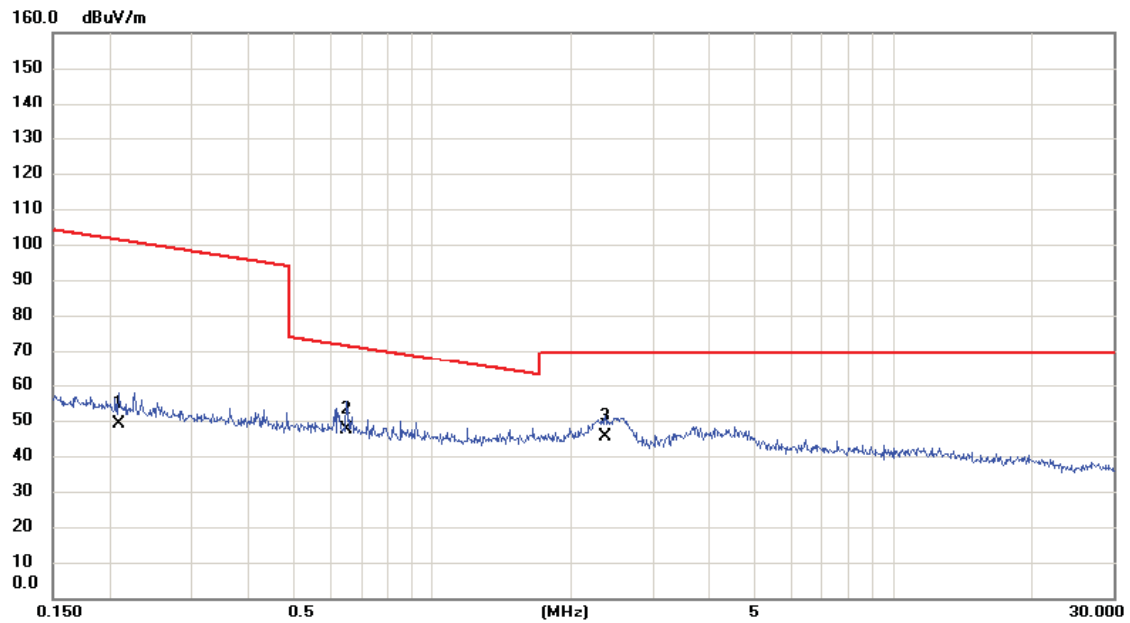
Ant 0°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.0142       | 32.29                    | 23.87                   | 56.16                      | 124.56          | -68.40       | peak     |         |
| 2   |     | 0.0307       | 28.09                    | 22.20                   | 50.29                      | 117.86          | -67.57       | peak     |         |
| 3   | *   | 0.0623       | 24.86                    | 19.68                   | 44.54                      | 111.72          | -67.18       | peak     |         |

Test Mode: TX Mode (Adapter: BYD)

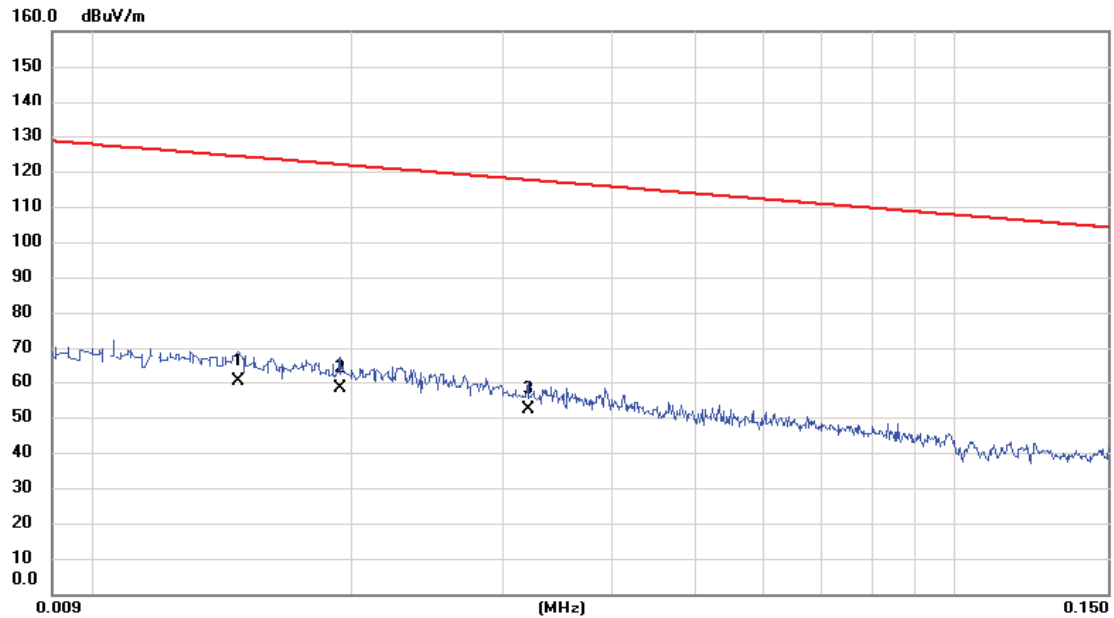
Ant 0°



| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   |     | 0.2083 | 30.19         | 18.68          | 48.87       | 101.23 | -52.36 | AVG      |         |
| 2   | *   | 0.6508 | 28.96         | 18.43          | 47.39       | 71.34  | -23.95 | QP       |         |
| 3   |     | 2.3710 | 27.84         | 17.43          | 45.27       | 69.54  | -24.27 | QP       |         |

Test Mode: TX Mode (Adapter: BYD)

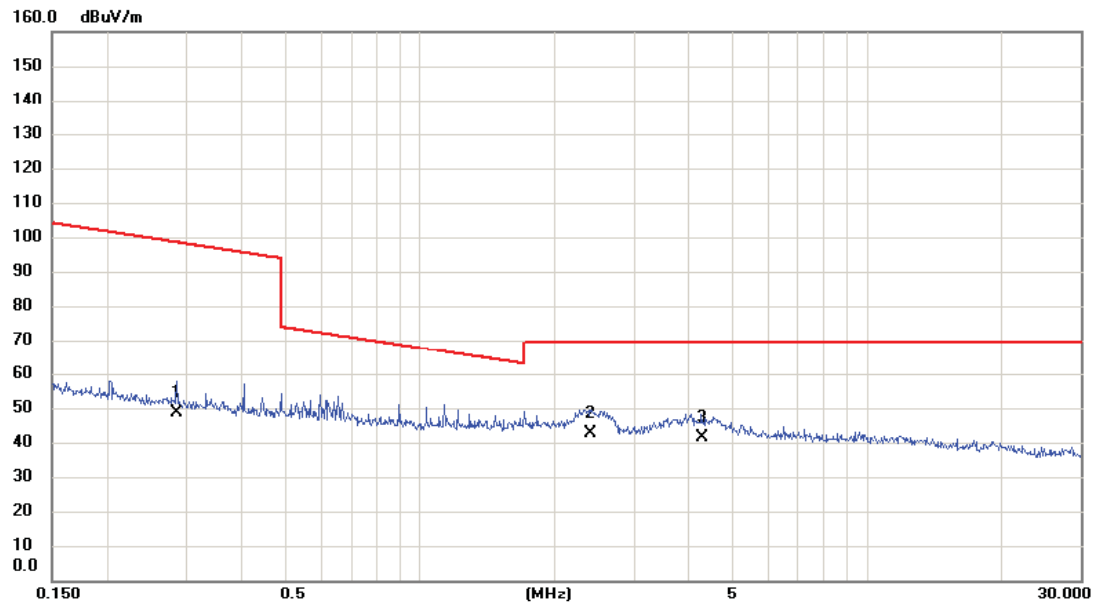
Ant 90°



| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measure-ment | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|--------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector | Comment |
| 1   |     | 0.0148 | 36.26         | 23.83          | 60.09        | 124.20 | -64.11 | AVG      |         |
| 2   | *   | 0.0194 | 34.69         | 23.56          | 58.25        | 121.85 | -63.60 | AVG      |         |
| 3   |     | 0.0320 | 30.01         | 22.04          | 52.05        | 117.50 | -65.45 | AVG      |         |

Test Mode: TX Mode (Adapter: BYD)

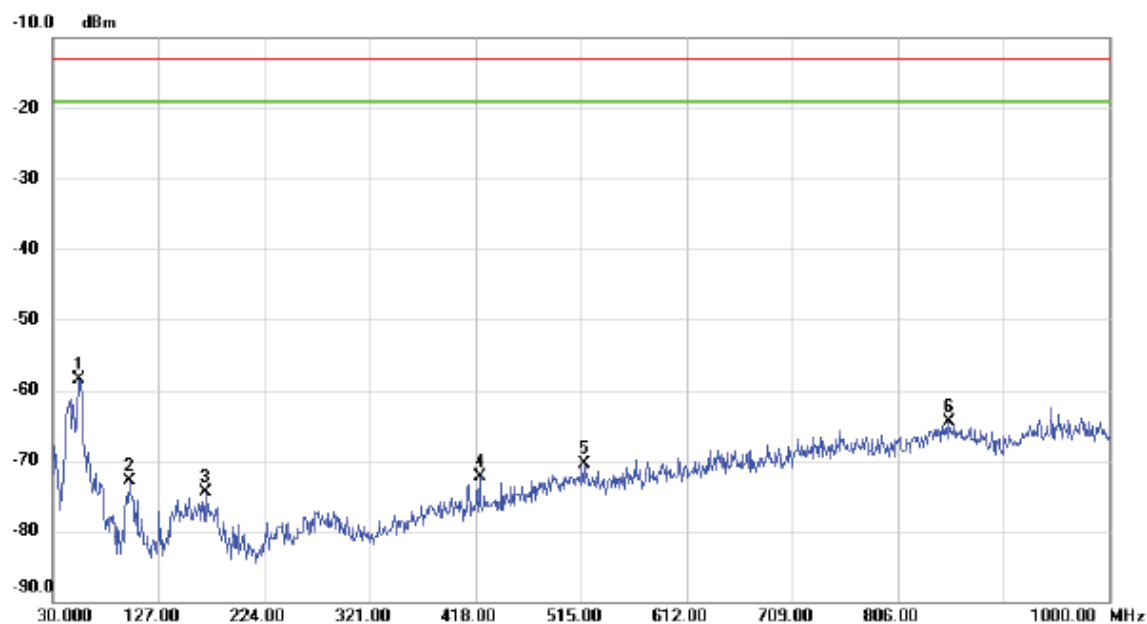
Ant 90°



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.2847       | 30.02                    | 18.61                   | 48.63                      | 98.52           | -49.89       | AVG      |         |
| 2   | *   | 2.3962       | 25.18                    | 17.39                   | 42.57                      | 69.54           | -26.97       | QP       |         |
| 3   |     | 4.2692       | 23.02                    | 18.19                   | 41.21                      | 69.54           | -28.33       | QP       |         |

Test Mode: WCDMA Band 4\_TX CH1312

**Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 54.250       | -60.87                  | 2.40                    | -58.47                  | -13.00       | -45.47       | peak     |         |
| 2   |     | 99.840       | -71.46                  | -1.45                   | -72.91                  | -13.00       | -59.91       | peak     |         |
| 3   |     | 169.680      | -74.50                  | -0.01                   | -74.51                  | -13.00       | -61.51       | peak     |         |
| 4   |     | 421.880      | -76.97                  | 4.62                    | -72.35                  | -13.00       | -59.35       | peak     |         |
| 5   |     | 517.910      | -78.01                  | 7.51                    | -70.50                  | -13.00       | -57.50       | peak     |         |
| 6   |     | 853.530      | -78.87                  | 14.35                   | -64.52                  | -13.00       | -51.52       | peak     |         |

Test Mode: WCDMA Band 4\_TX CH1312

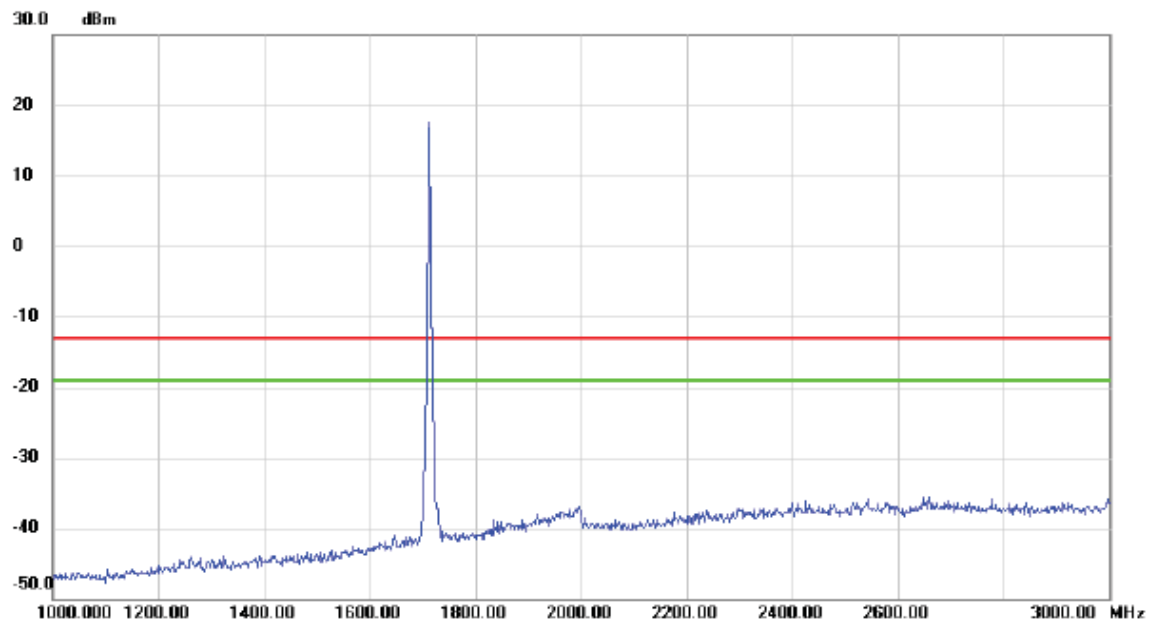
# Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 30.000       | -72.46                  | 1.88                    | -70.58                  | -13.00       | -57.58       | peak     |         |
| 2   |     | 116.330      | -70.96                  | -3.07                   | -74.03                  | -13.00       | -61.03       | peak     |         |
| 3   |     | 134.760      | -73.14                  | 1.14                    | -72.00                  | -13.00       | -59.00       | peak     |         |
| 4   |     | 259.890      | -75.00                  | 1.93                    | -73.07                  | -13.00       | -60.07       | peak     |         |
| 5   |     | 614.910      | -75.86                  | 9.56                    | -66.30                  | -13.00       | -53.30       | peak     |         |
| 6   | *   | 696.390      | -76.51                  | 13.73                   | -62.78                  | -13.00       | -49.78       | peak     |         |

|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|

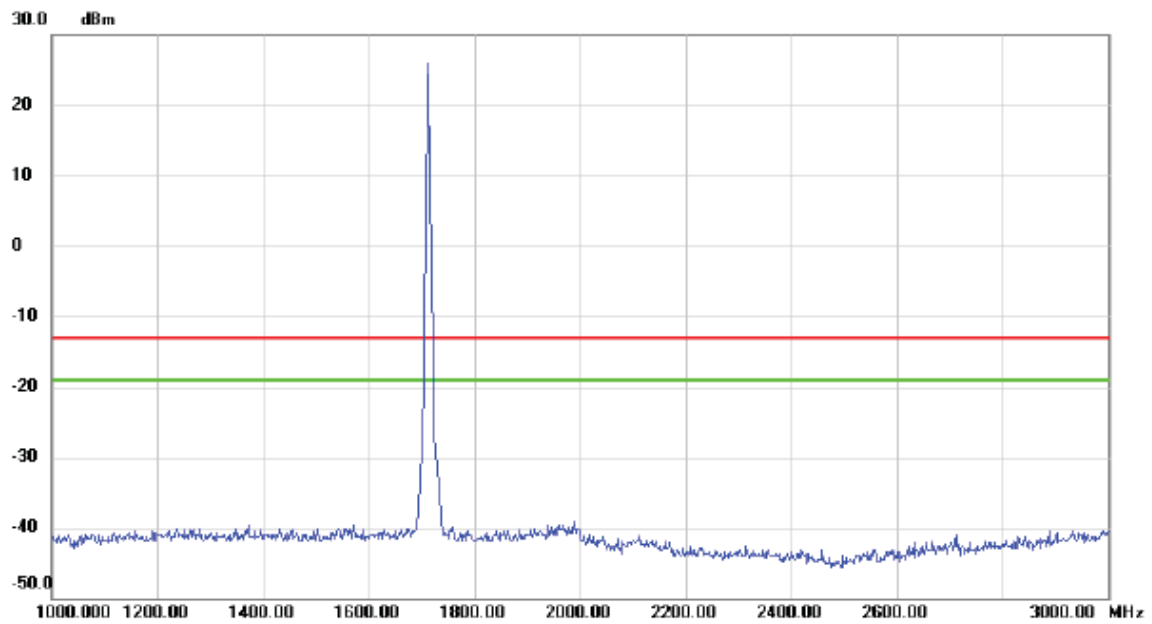
**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|

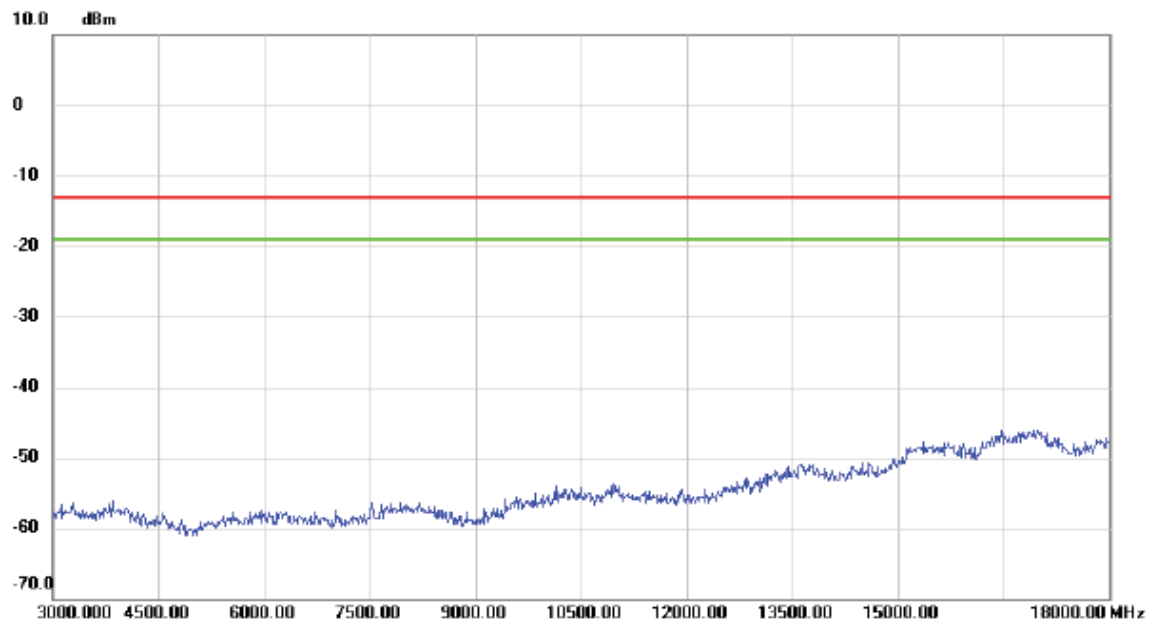
### Horizontal



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

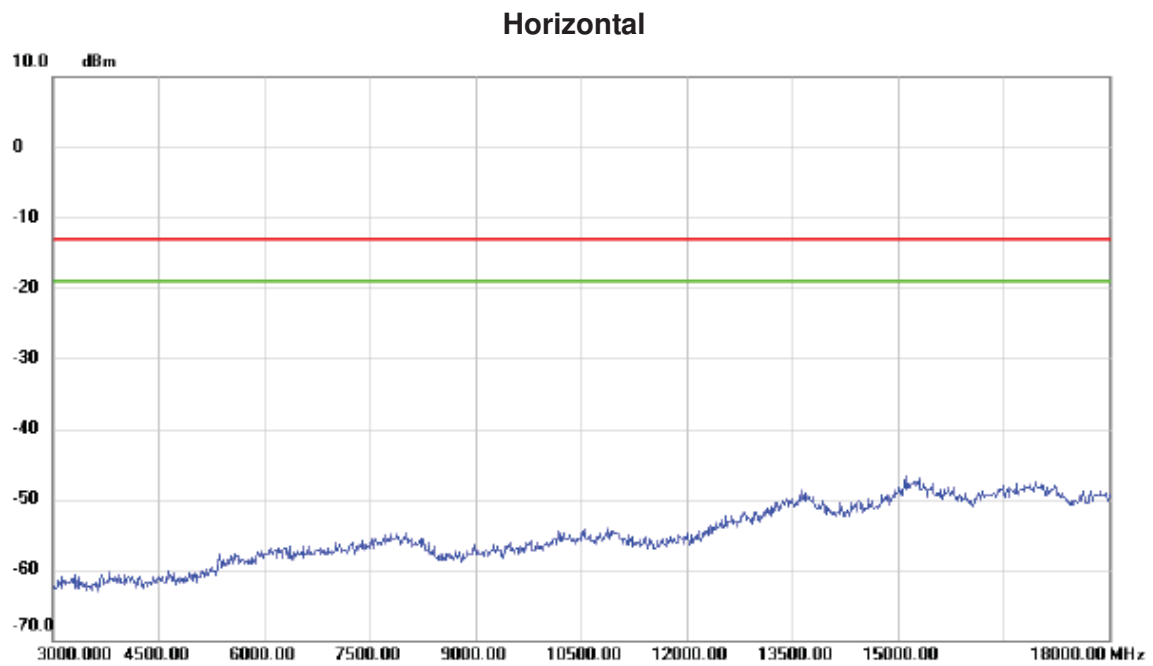
|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|

### Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

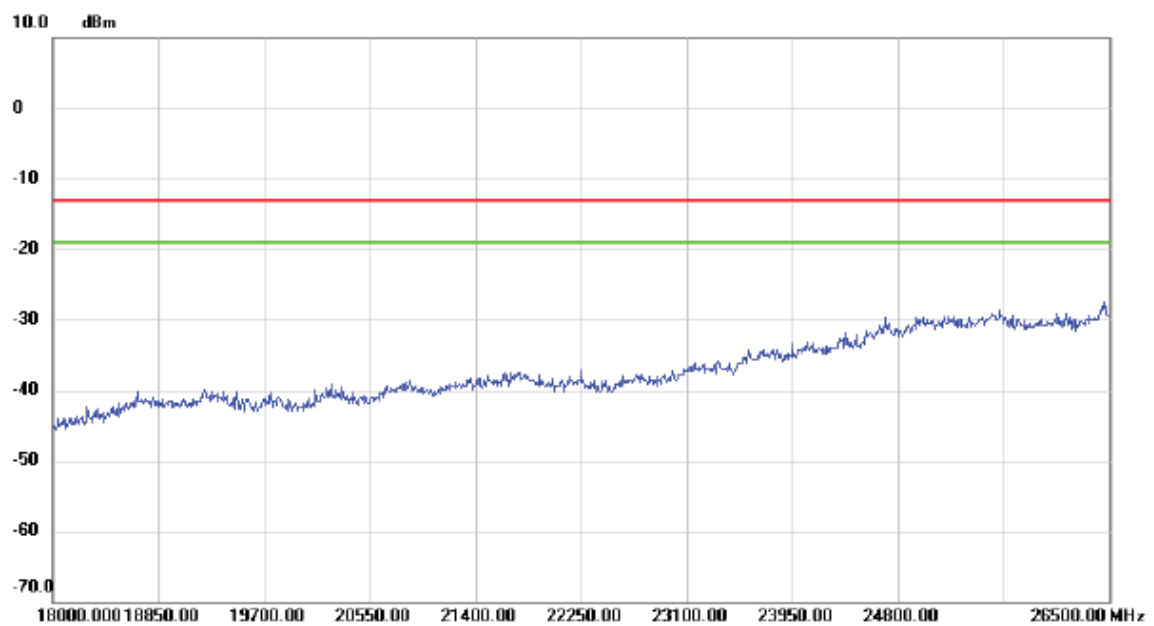
|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|



| No. | Mk. | Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|-----|-----|-------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz   | dBm              | dB                | dBm              | dBm   | dB     | Detector | Comment |

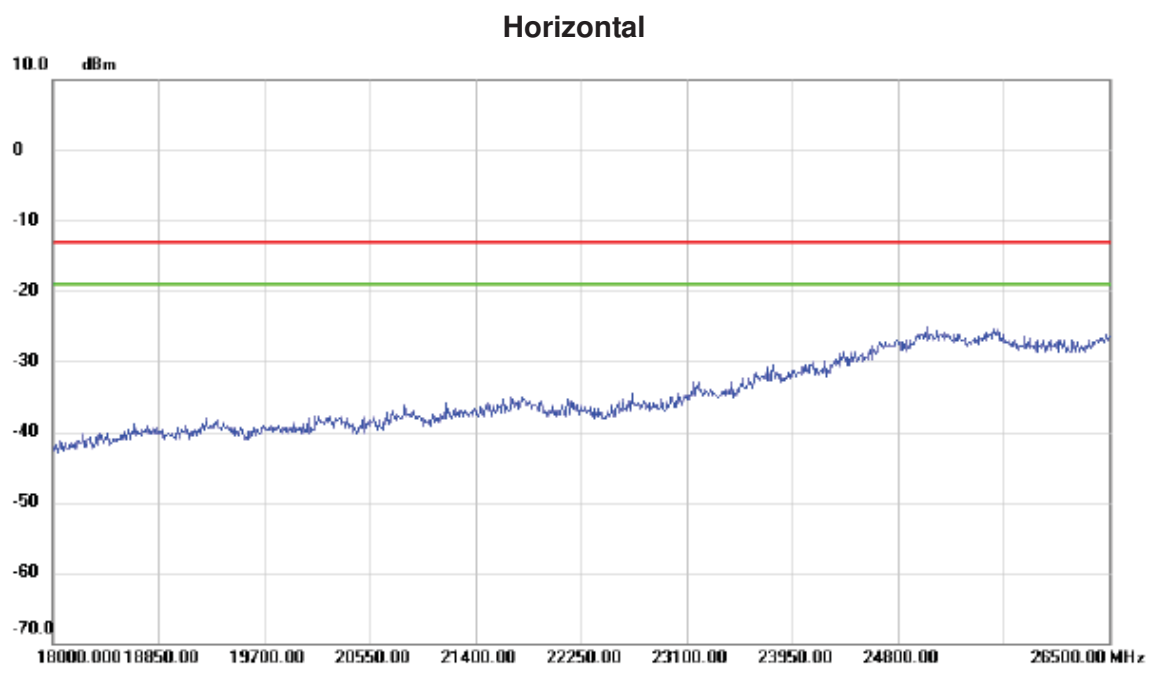
|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

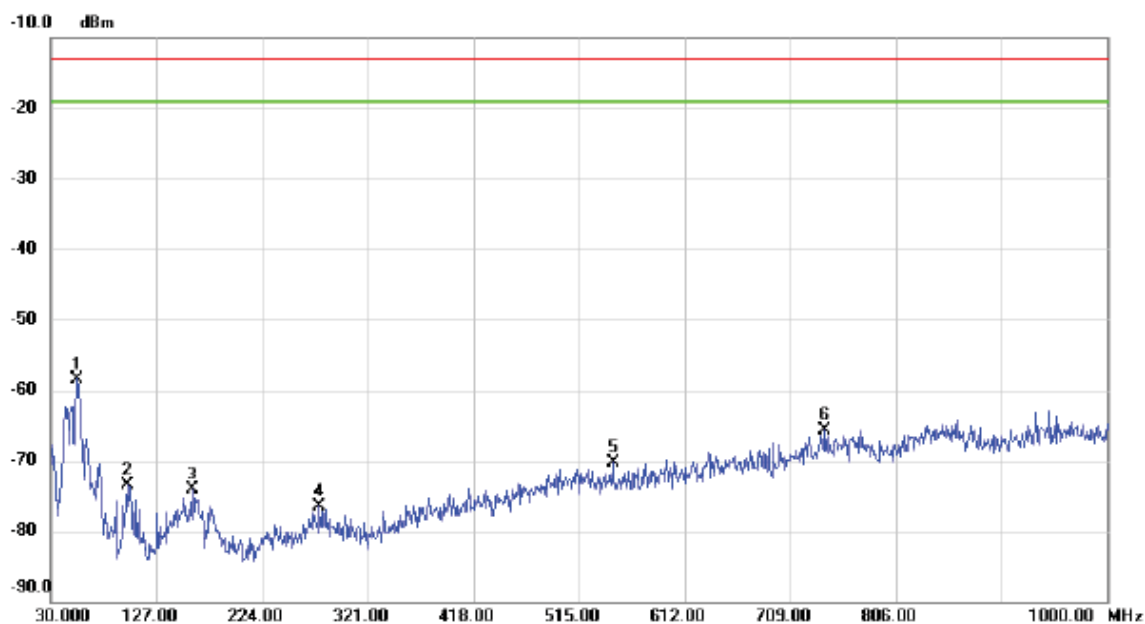
|            |                        |
|------------|------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312 |
|------------|------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSDPA

**Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 54.250       | -60.80                  | 2.40                    | -58.40                  | -13.00       | -45.40       | peak     |         |
| 2   |     | 99.840       | -71.97                  | -1.45                   | -73.42                  | -13.00       | -60.42       | peak     |         |
| 3   |     | 159.980      | -77.25                  | 3.18                    | -74.07                  | -13.00       | -61.07       | peak     |         |
| 4   |     | 276.380      | -79.06                  | 2.48                    | -76.58                  | -13.00       | -63.58       | peak     |         |
| 5   |     | 546.040      | -77.83                  | 7.46                    | -70.37                  | -13.00       | -57.37       | peak     |         |
| 6   |     | 741.010      | -77.91                  | 12.12                   | -65.79                  | -13.00       | -52.79       | peak     |         |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSDPA

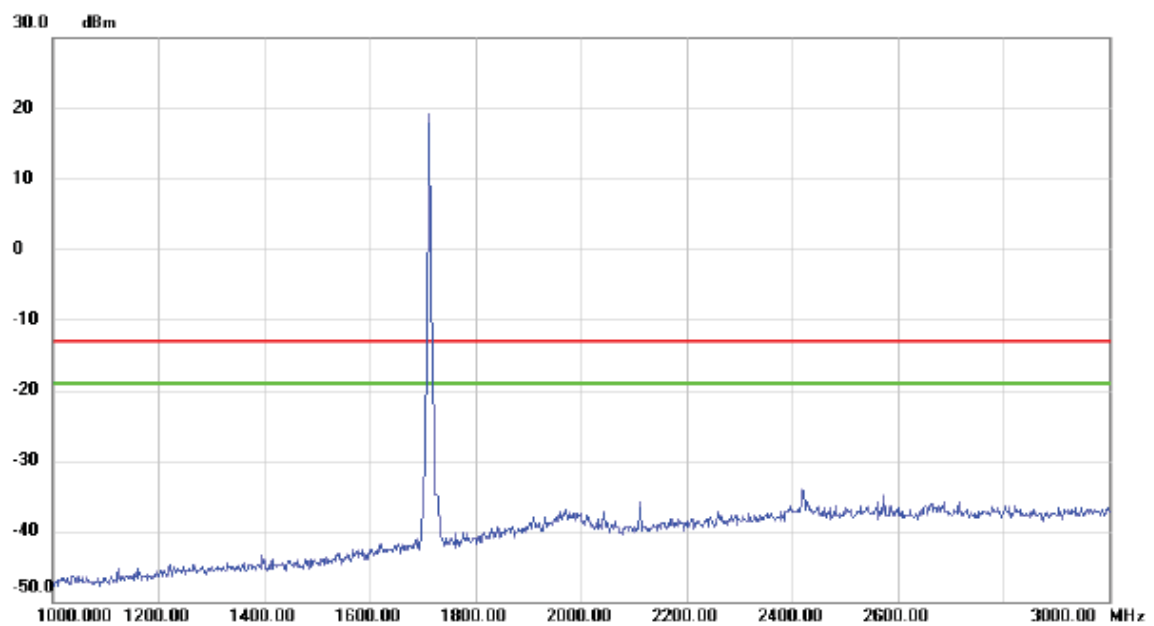
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 55.220       | -67.12                  | 2.53                    | -64.59                  | -13.00       | -51.59       | peak     |         |
| 2   |     | 166.770      | -66.51                  | -0.07                   | -66.58                  | -13.00       | -53.58       | peak     |         |
| 3   |     | 205.570      | -70.68                  | -1.93                   | -72.61                  | -13.00       | -59.61       | peak     |         |
| 4   |     | 401.510      | -73.95                  | 5.96                    | -67.99                  | -13.00       | -54.99       | peak     |         |
| 5   |     | 721.610      | -74.21                  | 13.46                   | -60.75                  | -13.00       | -47.75       | peak     |         |
| 6   | *   | 947.620      | -74.00                  | 14.85                   | -59.15                  | -13.00       | -46.15       | peak     |         |

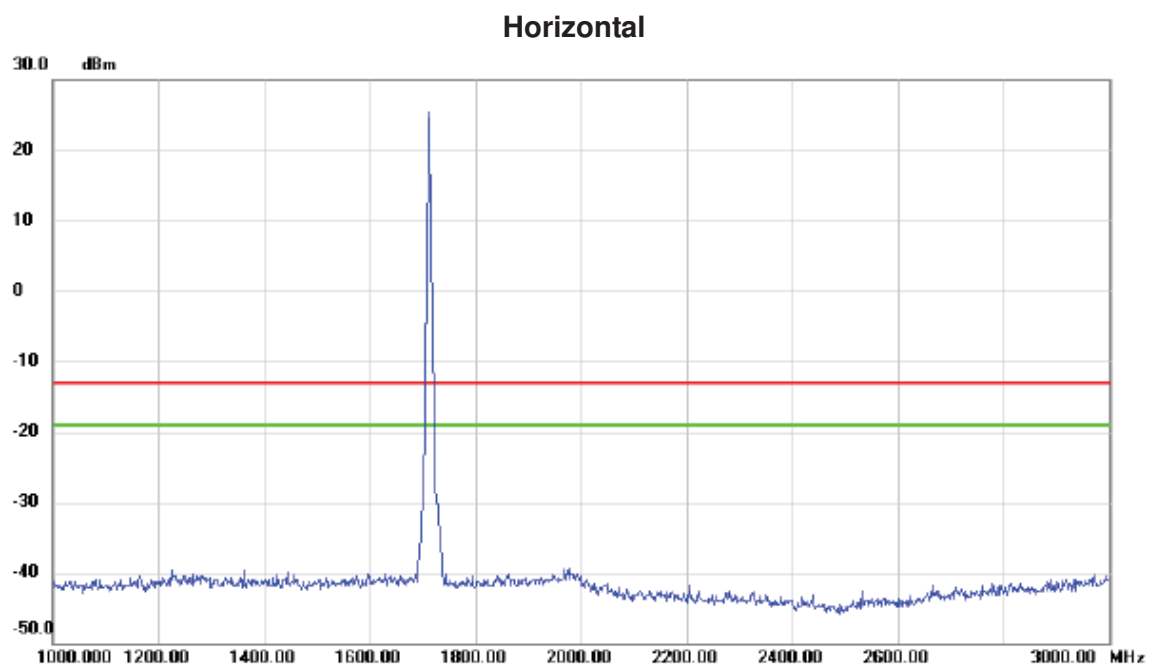
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSDPA |
|------------|-------------------------------|

### Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        |          |         |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     | Detector | Comment |

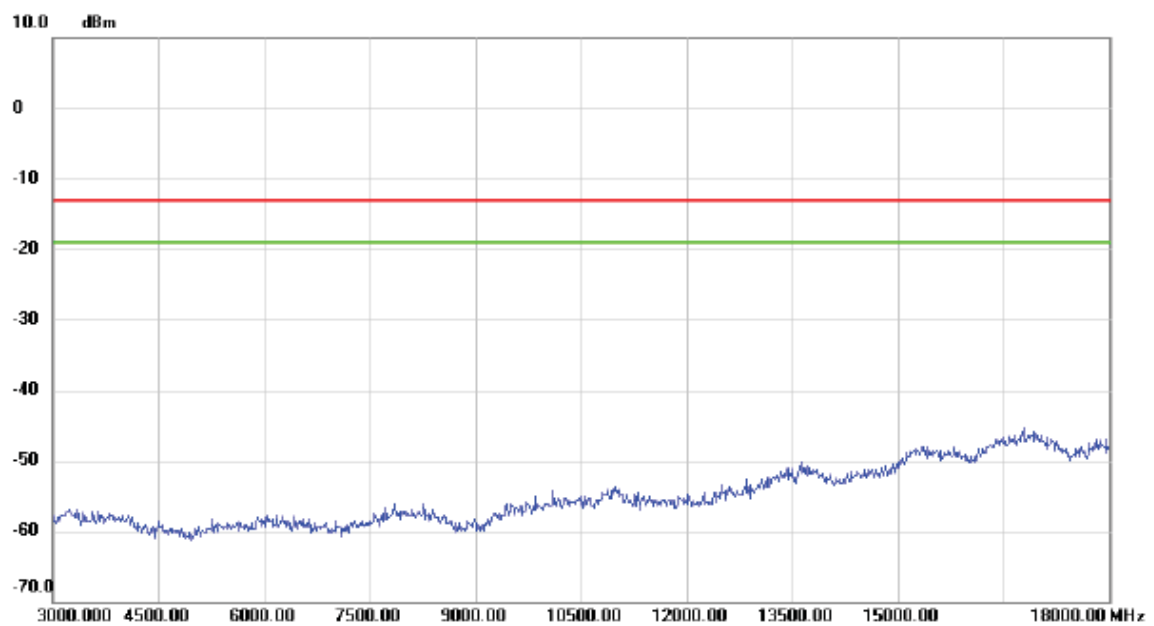
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSDPA |
|------------|-------------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

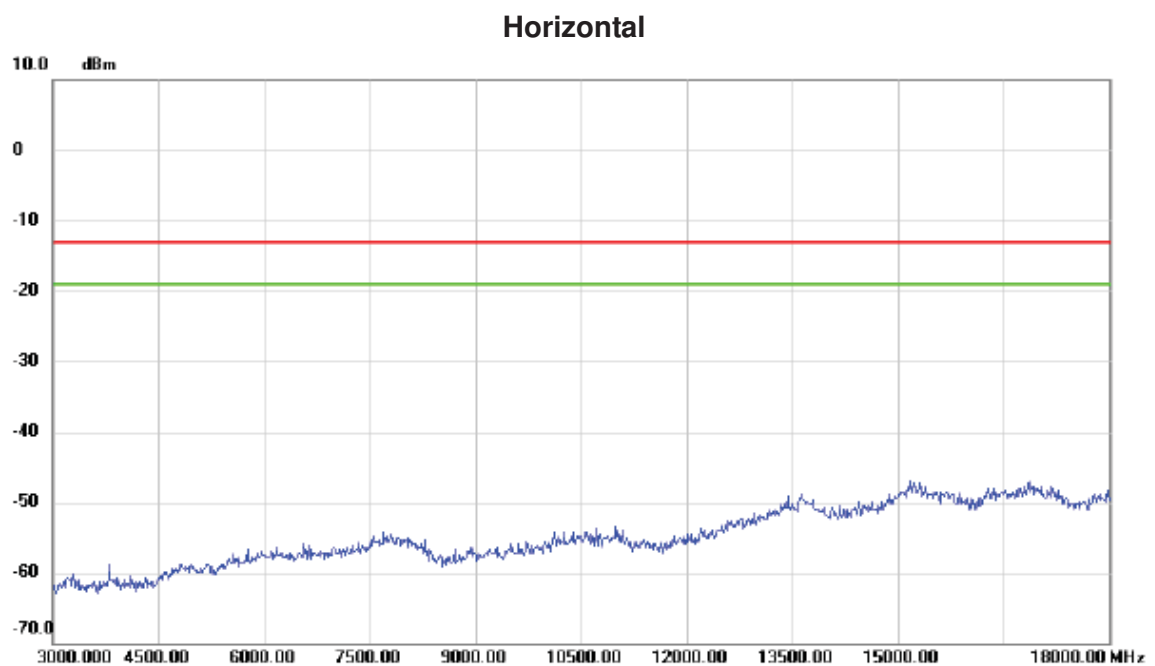
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSDPA |
|------------|-------------------------------|

### Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

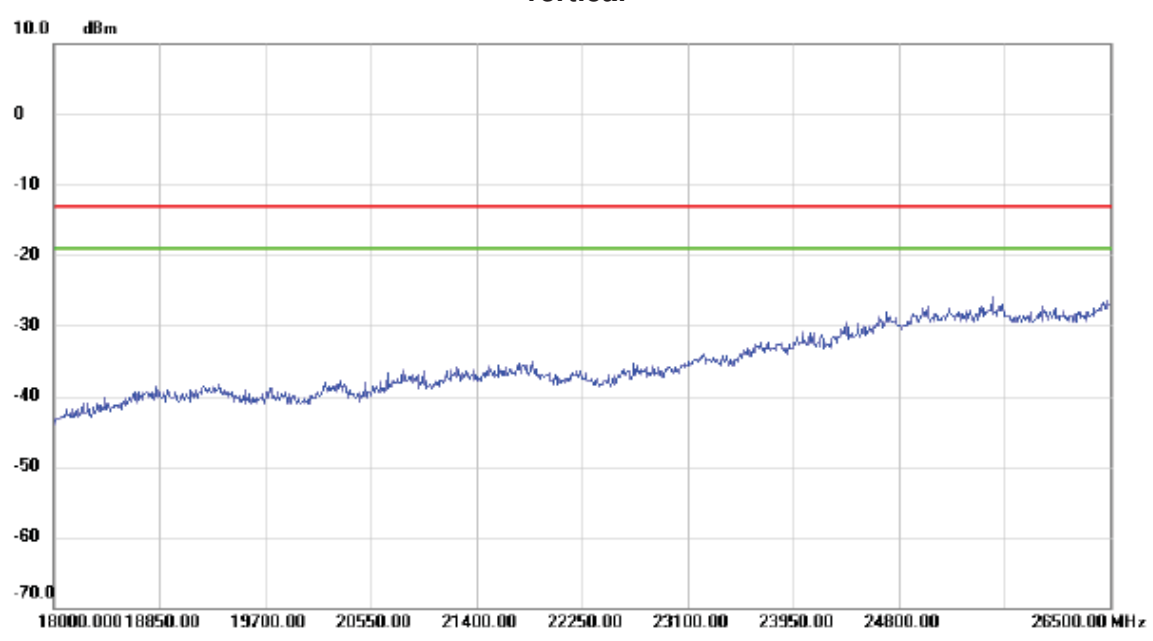
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSDPA |
|------------|-------------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSDPA |
|------------|-------------------------------|

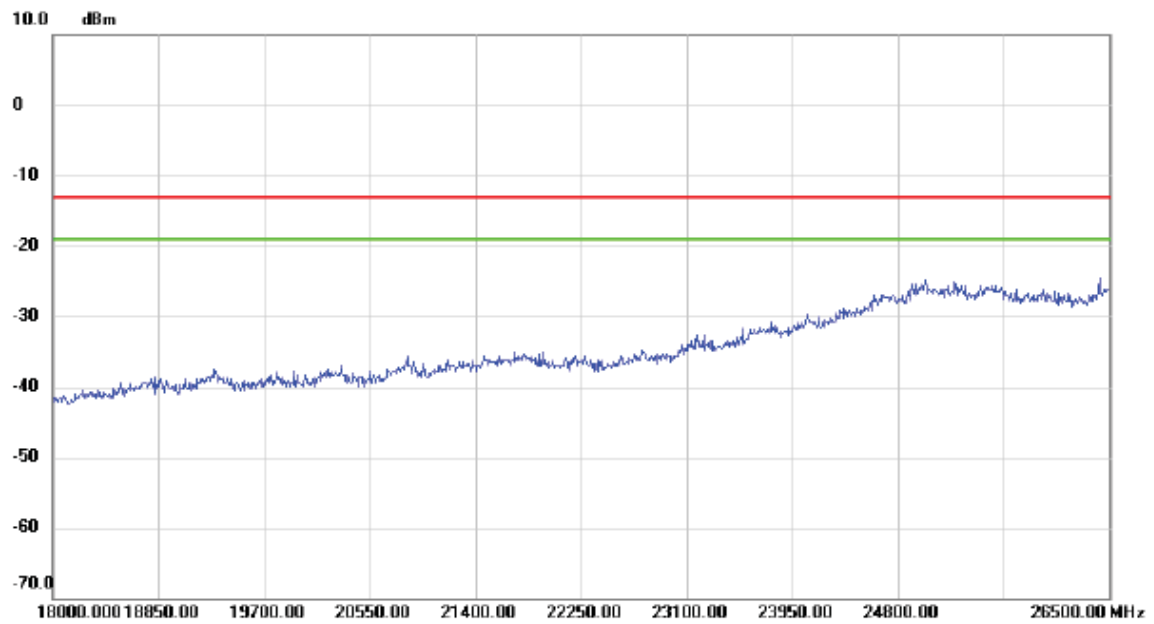
**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSDPA

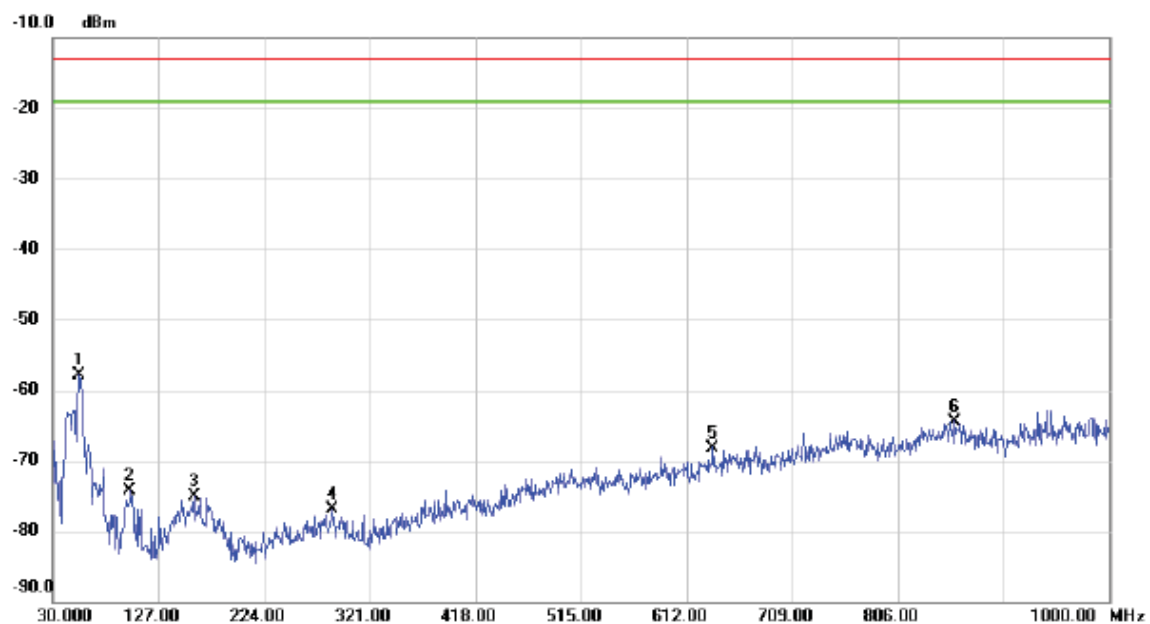
### Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSUPA

**Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 54.250       | -60.24                  | 2.40                    | -57.84                  | -13.00       | -44.84       | peak     |         |
| 2   |     | 100.810      | -73.03                  | -1.35                   | -74.38                  | -13.00       | -61.38       | peak     |         |
| 3   |     | 159.980      | -78.29                  | 3.18                    | -75.11                  | -13.00       | -62.11       | peak     |         |
| 4   |     | 287.050      | -79.20                  | 2.35                    | -76.85                  | -13.00       | -63.85       | peak     |         |
| 5   |     | 636.250      | -77.93                  | 9.73                    | -68.20                  | -13.00       | -55.20       | peak     |         |
| 6   |     | 858.380      | -78.58                  | 14.18                   | -64.40                  | -13.00       | -51.40       | peak     |         |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSUPA

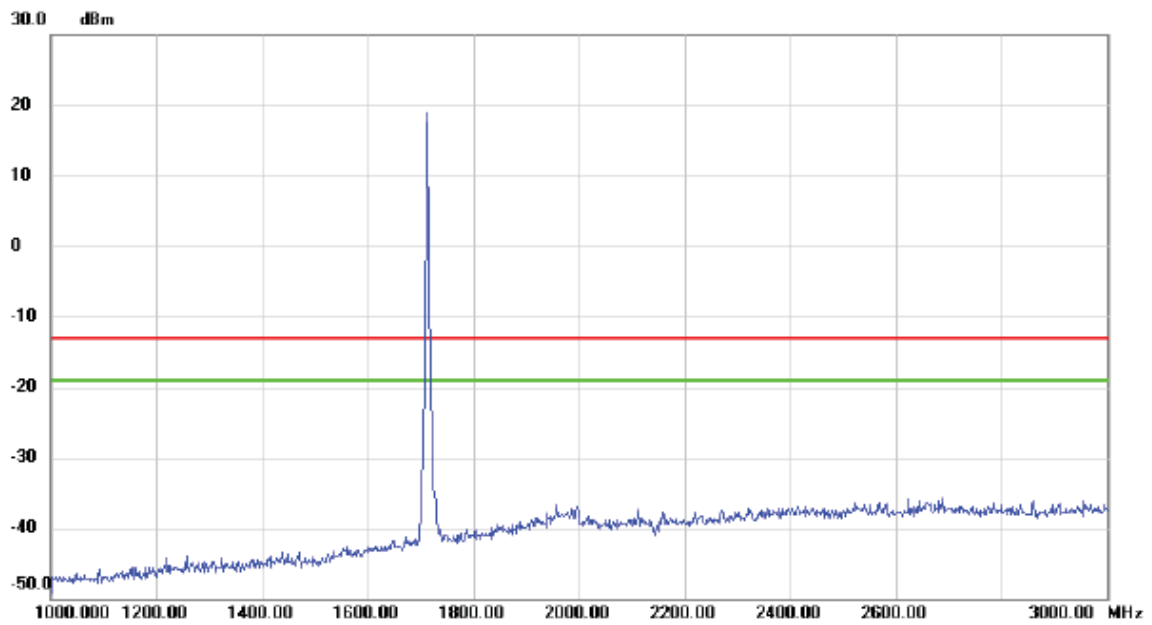
# Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 48.430       | -56.94                  | 1.83                    | -55.11                  | -13.00       | -42.11       | peak     |         |
| 2   |     | 101.780      | -66.99                  | -3.56                   | -70.55                  | -13.00       | -57.55       | peak     |         |
| 3   |     | 166.770      | -64.81                  | -0.07                   | -64.88                  | -13.00       | -51.88       | peak     |         |
| 4   |     | 255.040      | -72.86                  | 1.90                    | -70.96                  | -13.00       | -57.96       | peak     |         |
| 5   |     | 418.970      | -78.03                  | 6.83                    | -71.20                  | -13.00       | -58.20       | peak     |         |
| 6   |     | 677.960      | -75.82                  | 12.48                   | -63.34                  | -13.00       | -50.34       | peak     |         |

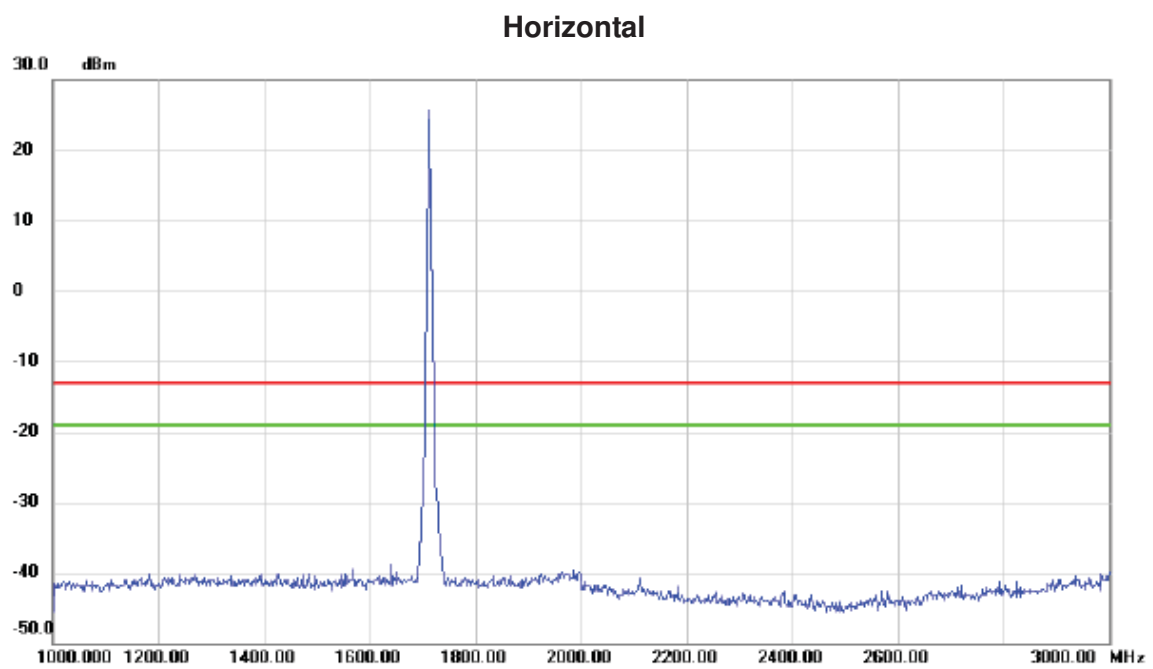
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSUPA |
|------------|-------------------------------|

**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

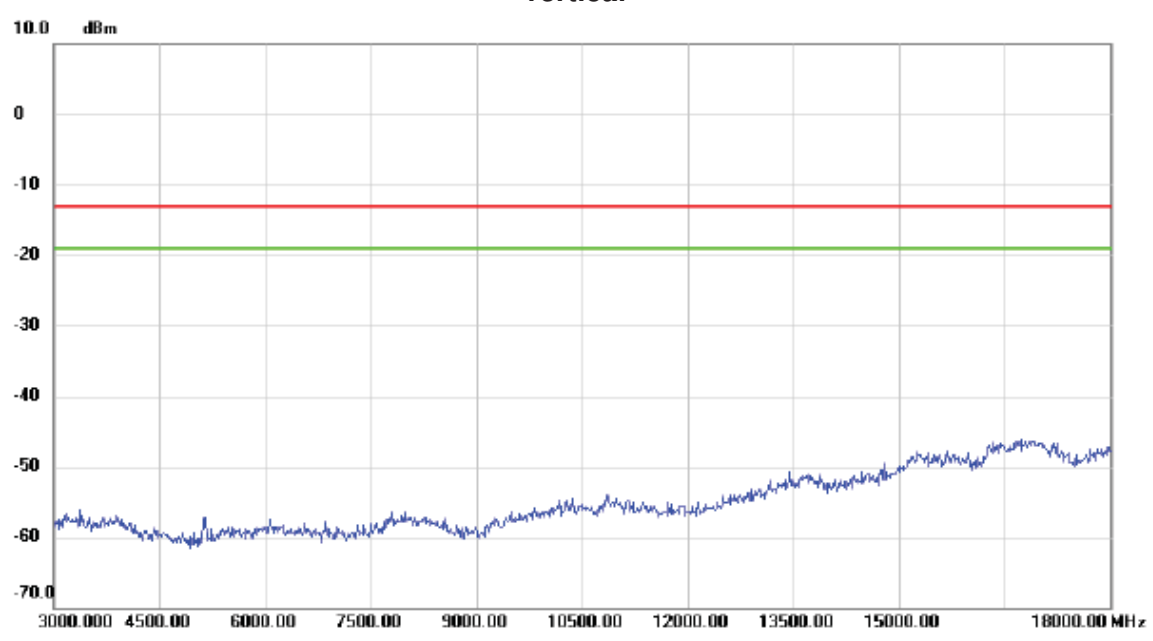
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSUPA |
|------------|-------------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSUPA |
|------------|-------------------------------|

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: WCDMA Band 4\_TX CH1312\_ HSUPA

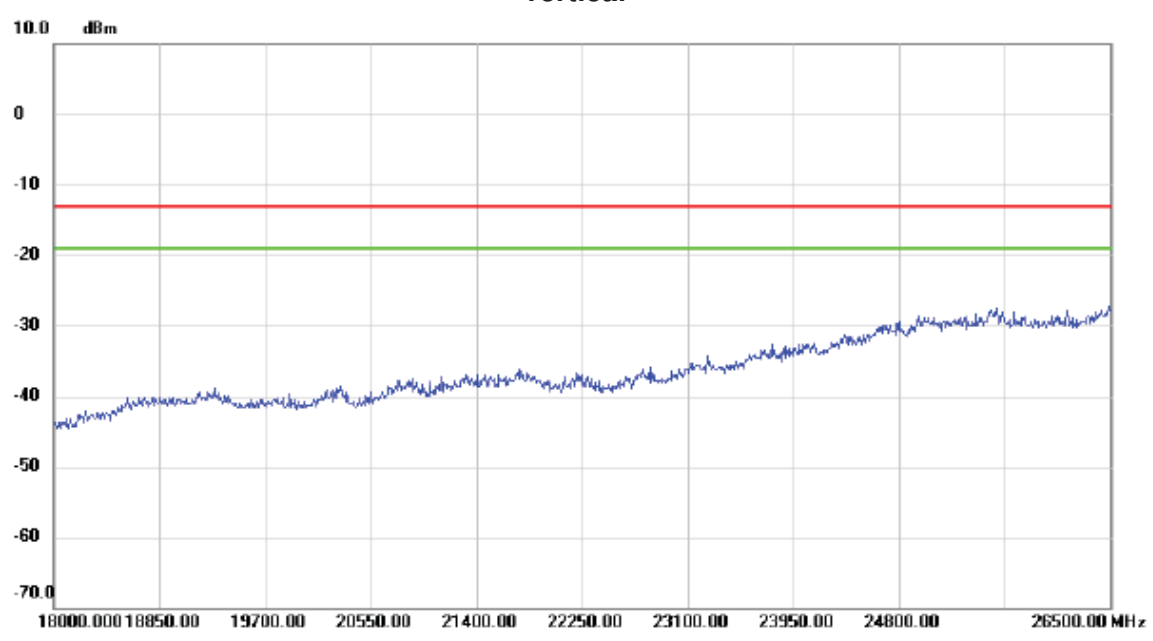
### Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Detector | Comment |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     |          |         |

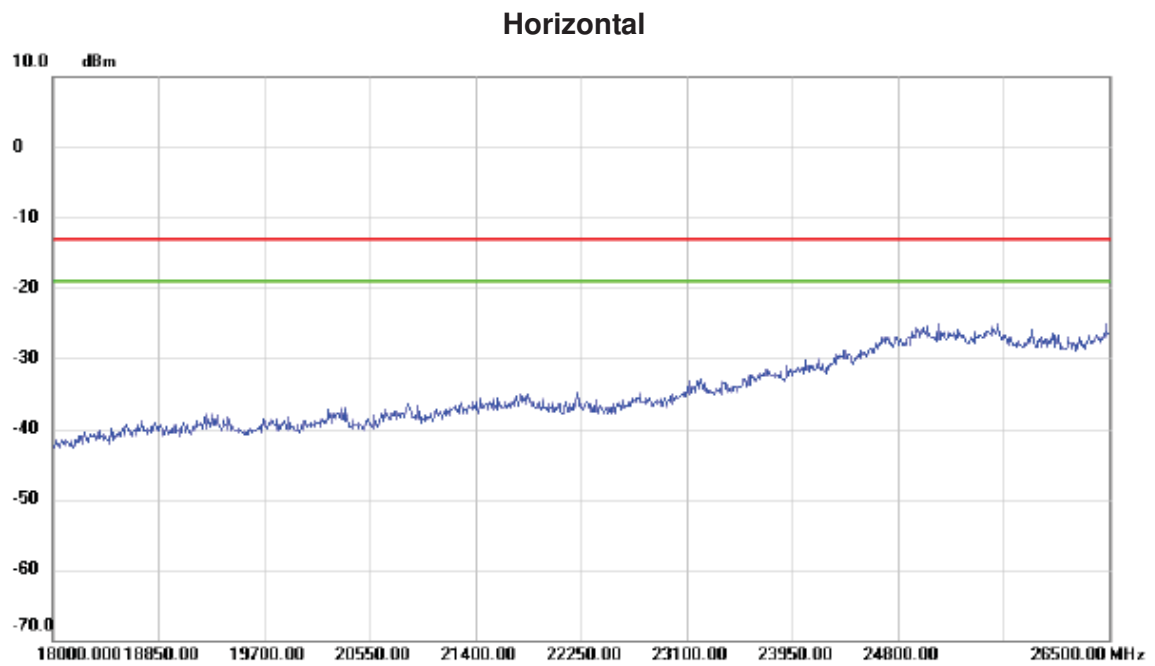
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSUPA |
|------------|-------------------------------|

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

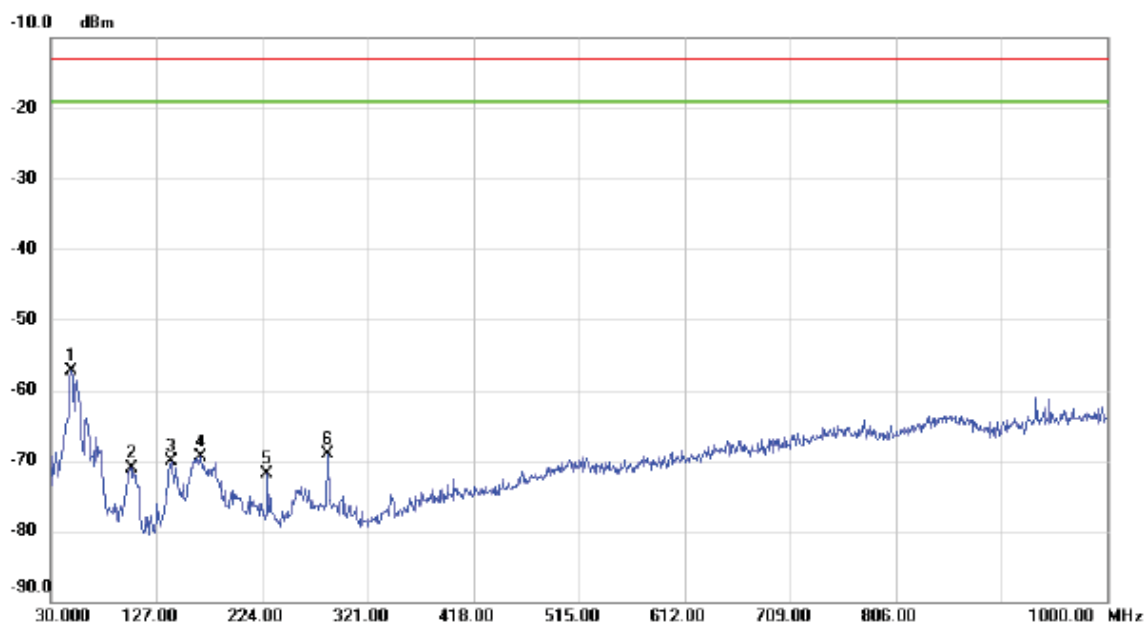
|            |                               |
|------------|-------------------------------|
| Test Mode: | WCDMA Band 4_TX CH1312_ HSUPA |
|------------|-------------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Detector | Comment |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     |          |         |

Test Mode: LTE Band 4\_TX CH20375\_5M

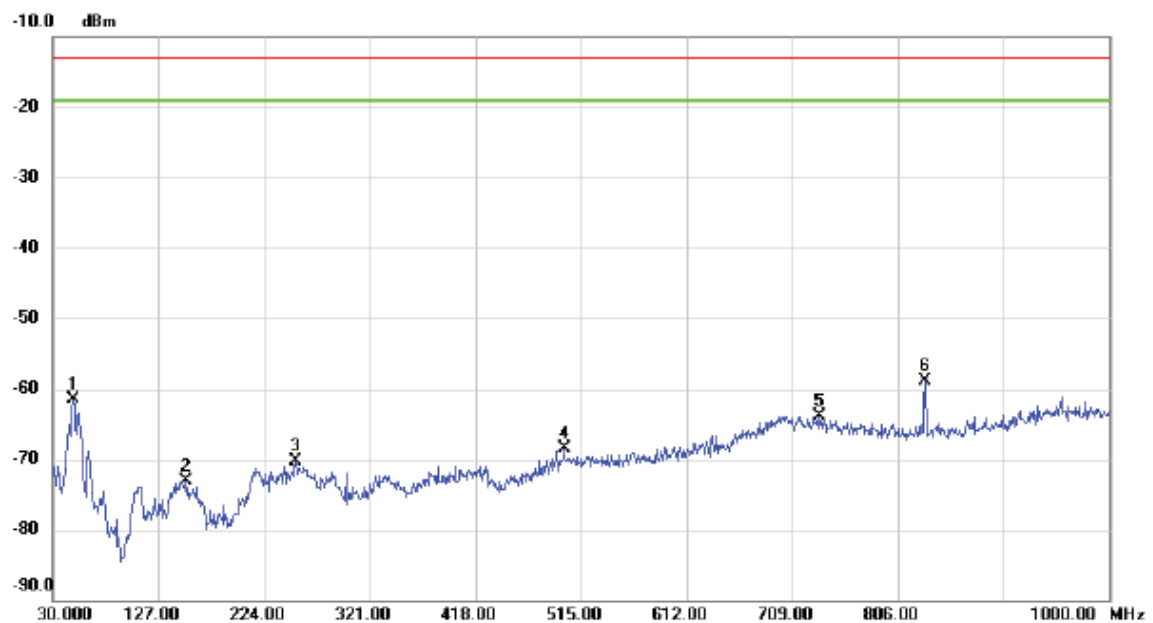
Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 48.430       | -58.38                  | 1.03                    | -57.35                  | -13.00       | -44.35       | peak     |         |
| 2   |     | 103.720      | -69.78                  | -1.24                   | -71.02                  | -13.00       | -58.02       | peak     |         |
| 3   |     | 140.580      | -72.38                  | 2.21                    | -70.17                  | -13.00       | -57.17       | peak     |         |
| 4   |     | 167.740      | -70.18                  | 0.63                    | -69.55                  | -13.00       | -56.55       | peak     |         |
| 5   |     | 228.850      | -72.14                  | 0.27                    | -71.87                  | -13.00       | -58.87       | peak     |         |
| 6   |     | 284.140      | -71.64                  | 2.47                    | -69.17                  | -13.00       | -56.17       | peak     |         |

Test Mode: LTE Band 4\_TX CH20375\_5M

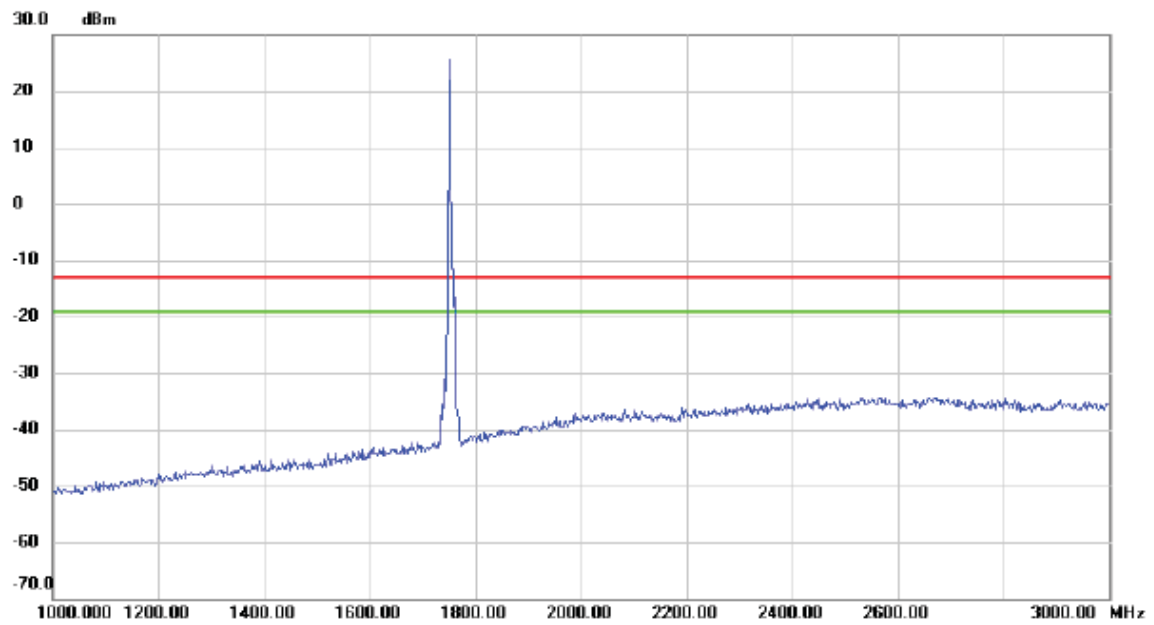
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 48.430       | -63.37                  | 1.83                    | -61.54                  | -13.00       | -48.54       | peak     |         |
| 2   |     | 152.220      | -77.04                  | 3.91                    | -73.13                  | -13.00       | -60.13       | peak     |         |
| 3   |     | 253.100      | -72.16                  | 1.89                    | -70.27                  | -13.00       | -57.27       | peak     |         |
| 4   |     | 499.480      | -76.53                  | 8.02                    | -68.51                  | -13.00       | -55.51       | peak     |         |
| 5   |     | 734.220      | -76.97                  | 13.15                   | -63.82                  | -13.00       | -50.82       | peak     |         |
| 6   | *   | 831.220      | -70.76                  | 11.92                   | -58.84                  | -13.00       | -45.84       | peak     |         |

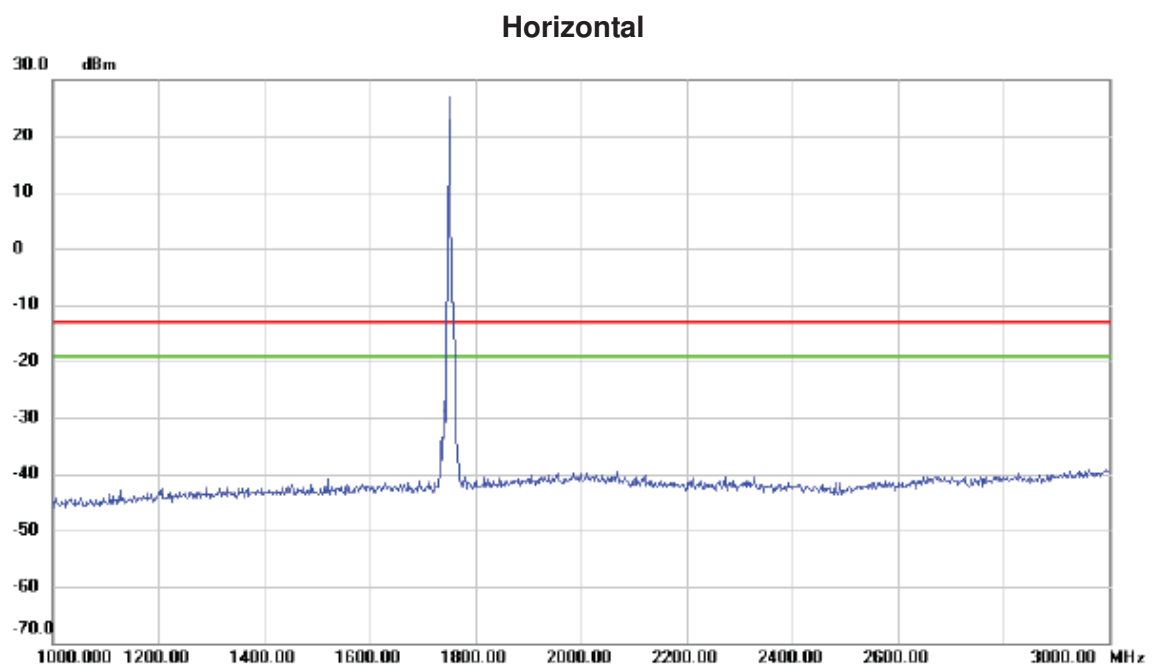
Test Mode: LTE Band 4\_TX CH20375\_5M

**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

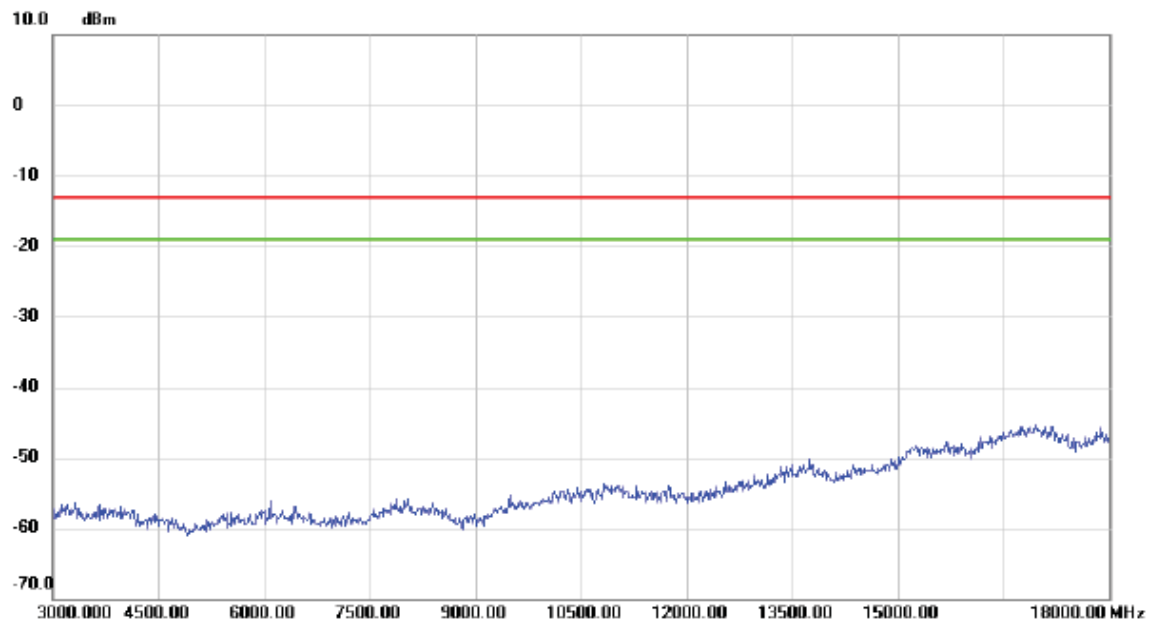
|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 4_TX CH20375_5M |
|------------|--------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: LTE Band 4\_TX CH20375\_5M

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 4_TX CH20375_5M |
|------------|--------------------------|

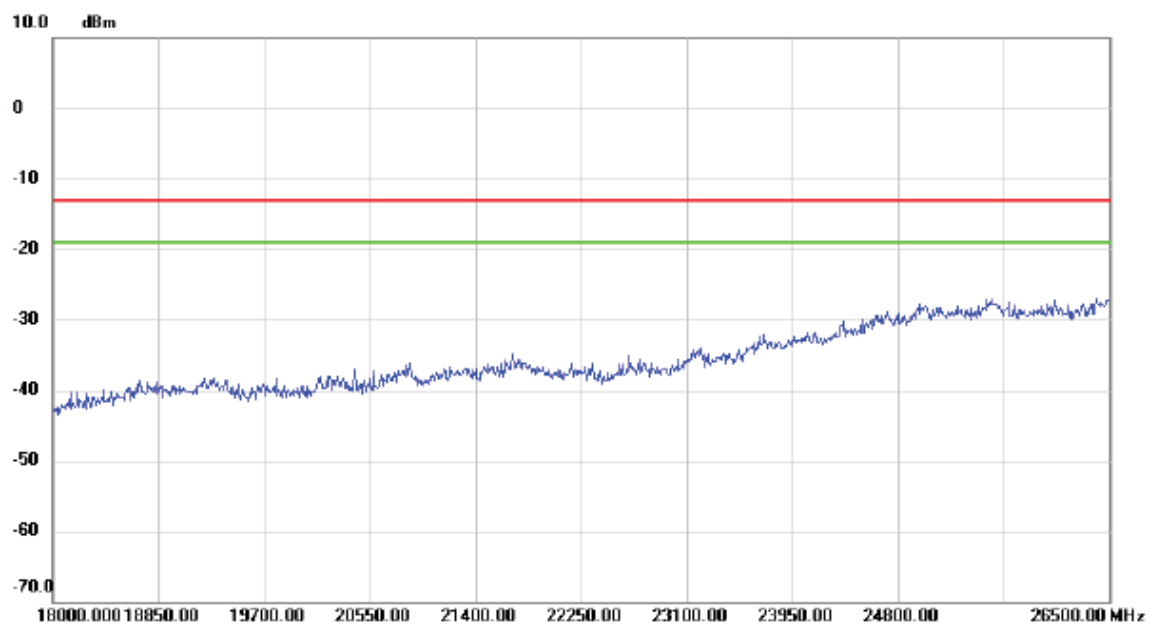
### Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 4_TX CH20375_5M |
|------------|--------------------------|

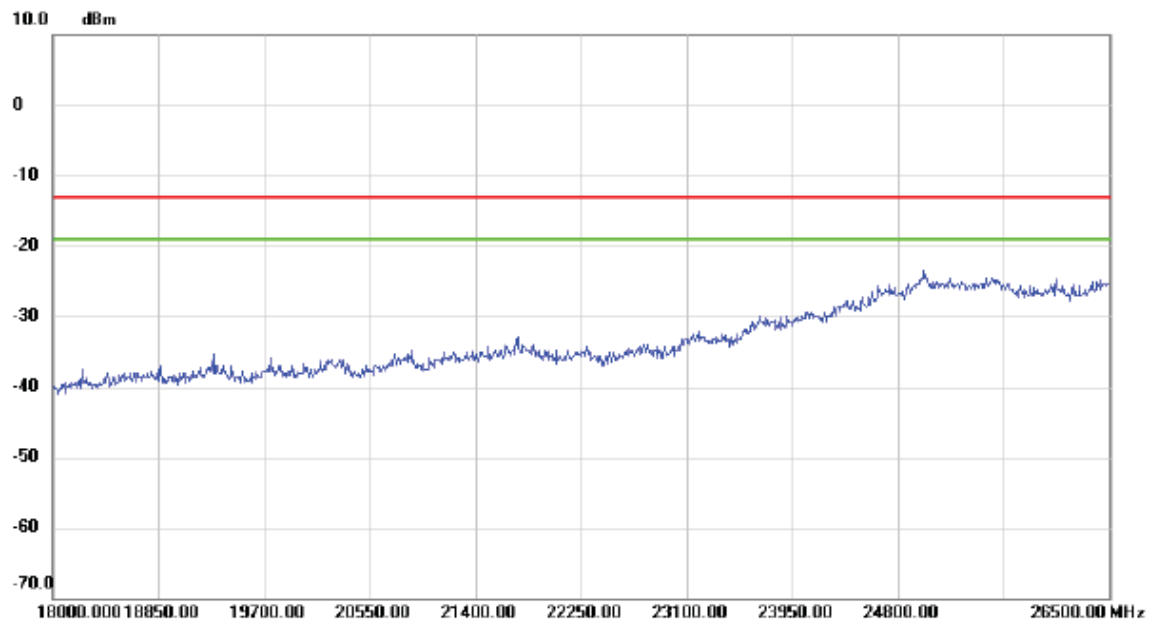
### Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: LTE Band 4\_TX CH20375\_5M

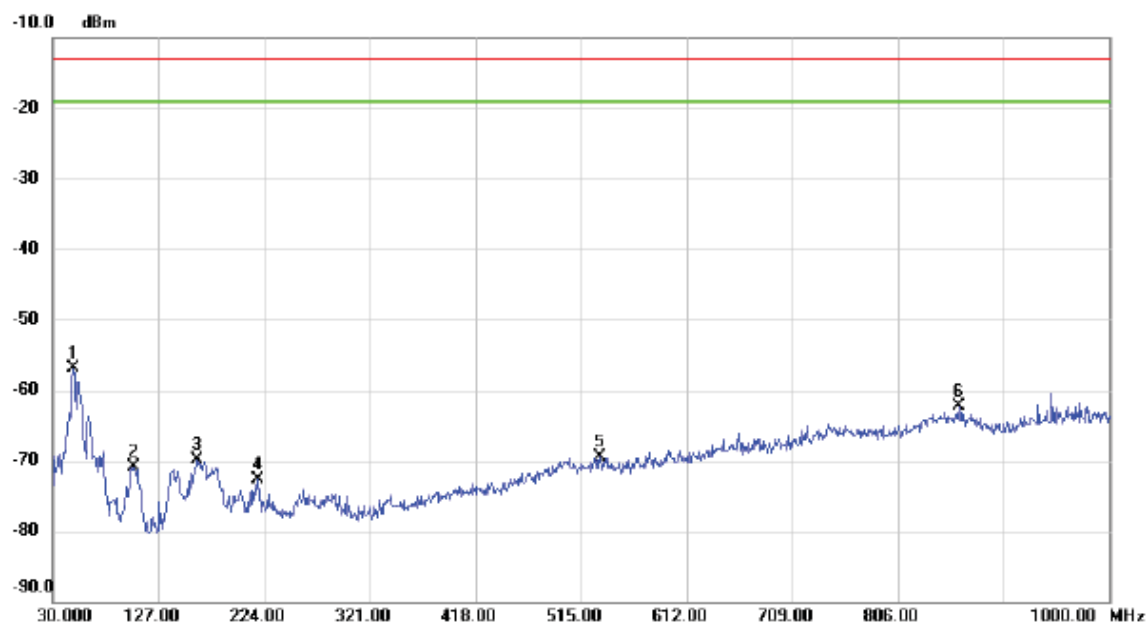
### Horizontal



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: LTE Band 4\_TX CH20300\_20M

Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 48.430       | -58.01                  | 1.03                    | -56.98                  | -13.00       | -43.98       | peak     |         |
| 2   |     | 103.720      | -69.67                  | -1.24                   | -70.91                  | -13.00       | -57.91       | peak     |         |
| 3   |     | 162.890      | -72.15                  | 2.23                    | -69.92                  | -13.00       | -56.92       | peak     |         |
| 4   |     | 218.180      | -71.11                  | -1.59                   | -72.70                  | -13.00       | -59.70       | peak     |         |
| 5   |     | 532.460      | -77.07                  | 7.49                    | -69.58                  | -13.00       | -56.58       | peak     |         |
| 6   |     | 862.260      | -76.43                  | 14.04                   | -62.39                  | -13.00       | -49.39       | peak     |         |

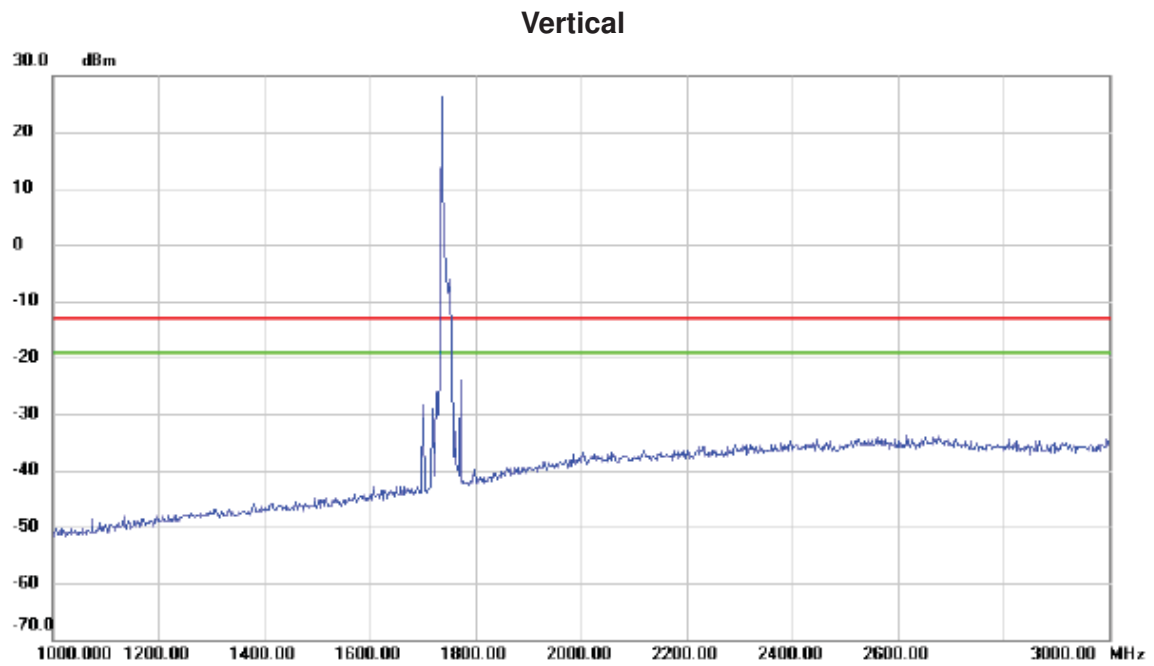
Test Mode: LTE Band 4\_TX CH20300\_20M

### Horizontal



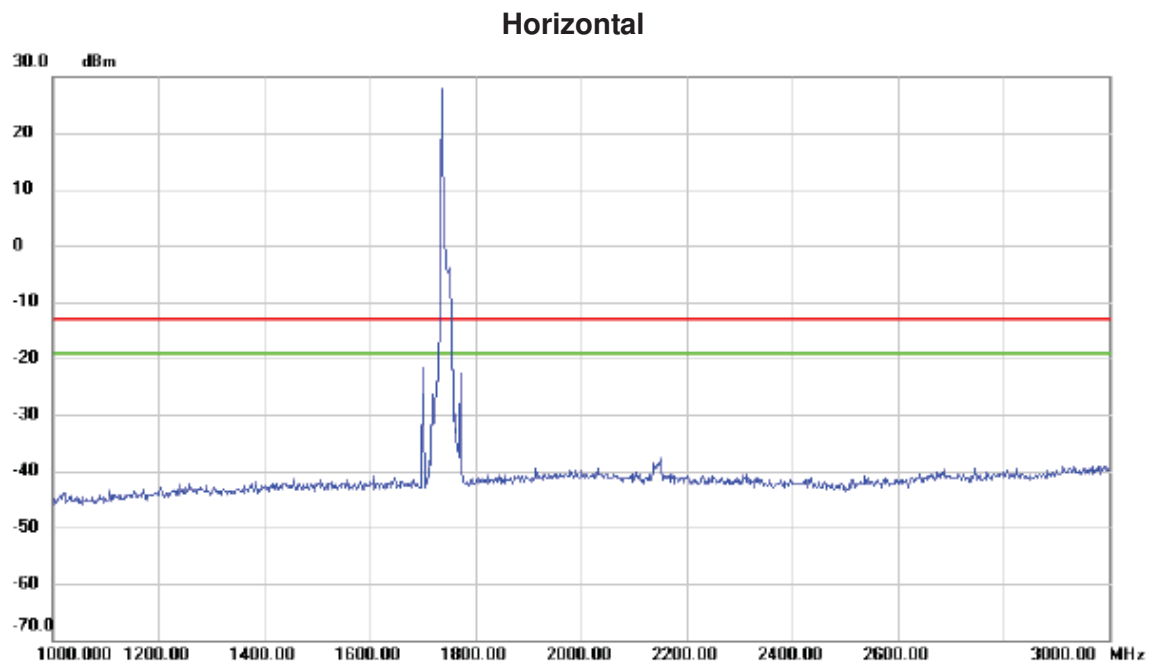
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 30.000       | -72.74                  | 1.88                    | -70.86                  | -13.00       | -57.86       | peak     |         |
| 2   |     | 146.400      | -76.58                  | 3.84                    | -72.74                  | -13.00       | -59.74       | peak     |         |
| 3   |     | 262.800      | -72.58                  | 2.24                    | -70.34                  | -13.00       | -57.34       | peak     |         |
| 4   |     | 422.850      | -76.95                  | 6.56                    | -70.39                  | -13.00       | -57.39       | peak     |         |
| 5   |     | 502.390      | -76.36                  | 8.06                    | -68.30                  | -13.00       | -55.30       | peak     |         |
| 6   | *   | 709.970      | -77.25                  | 13.74                   | -63.51                  | -13.00       | -50.51       | peak     |         |

|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 4_TX CH20300_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

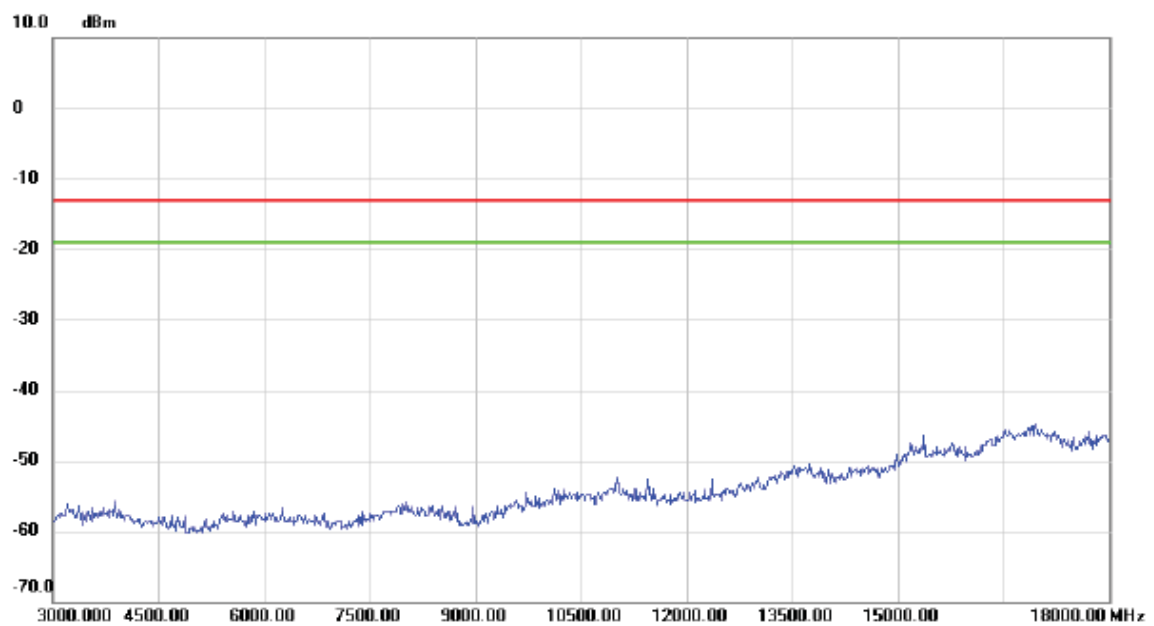
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 4_TX CH20300_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

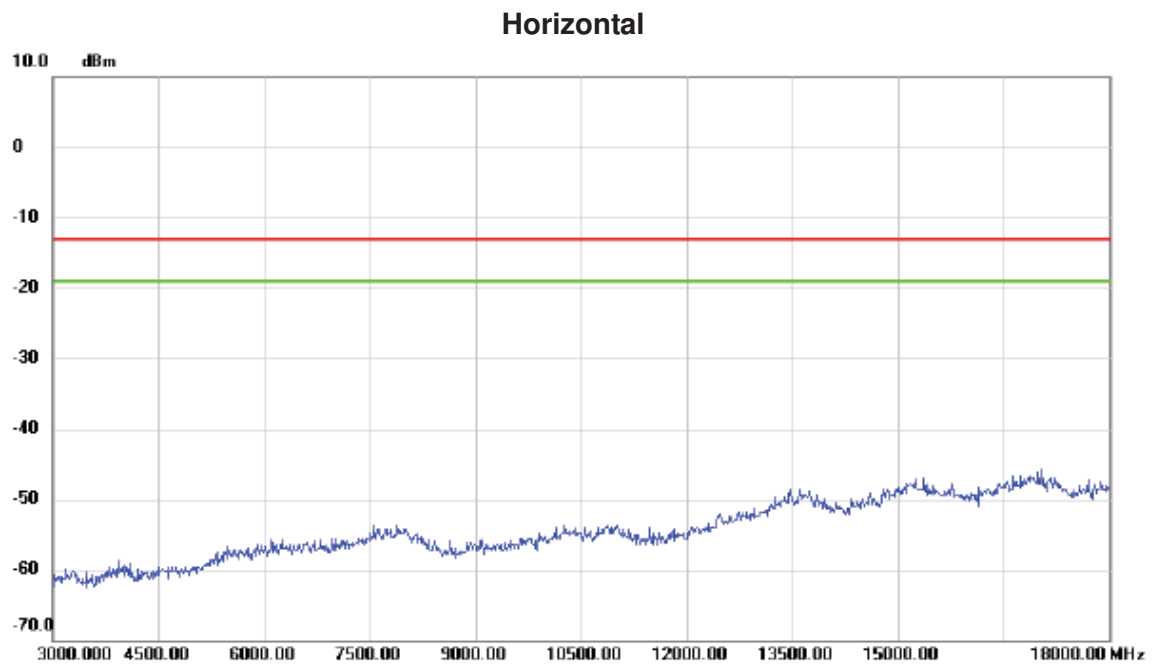
Test Mode: LTE Band 4\_TX CH20300\_20M

**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

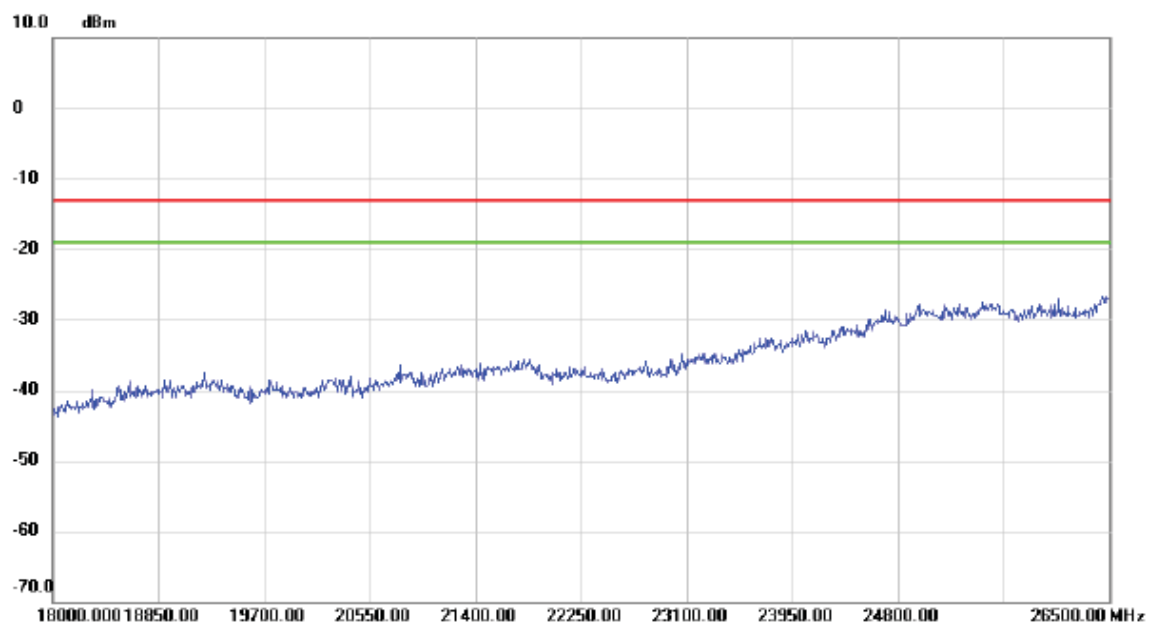
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 4_TX CH20300_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

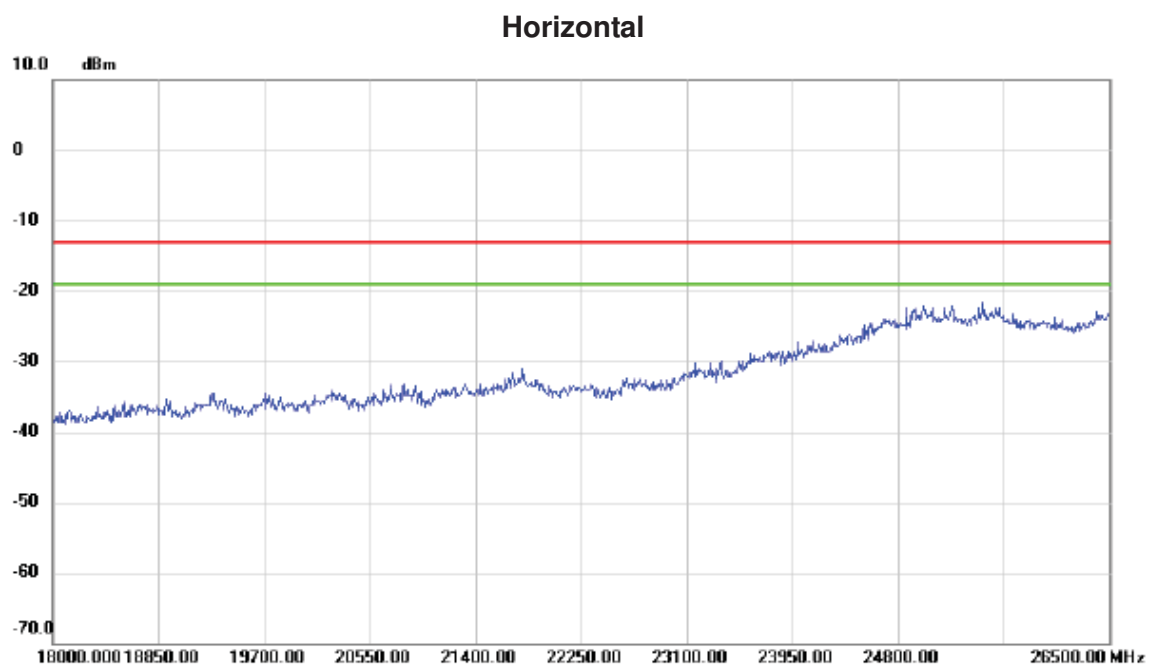
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 4_TX CH20300_20M |
|------------|---------------------------|

### Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

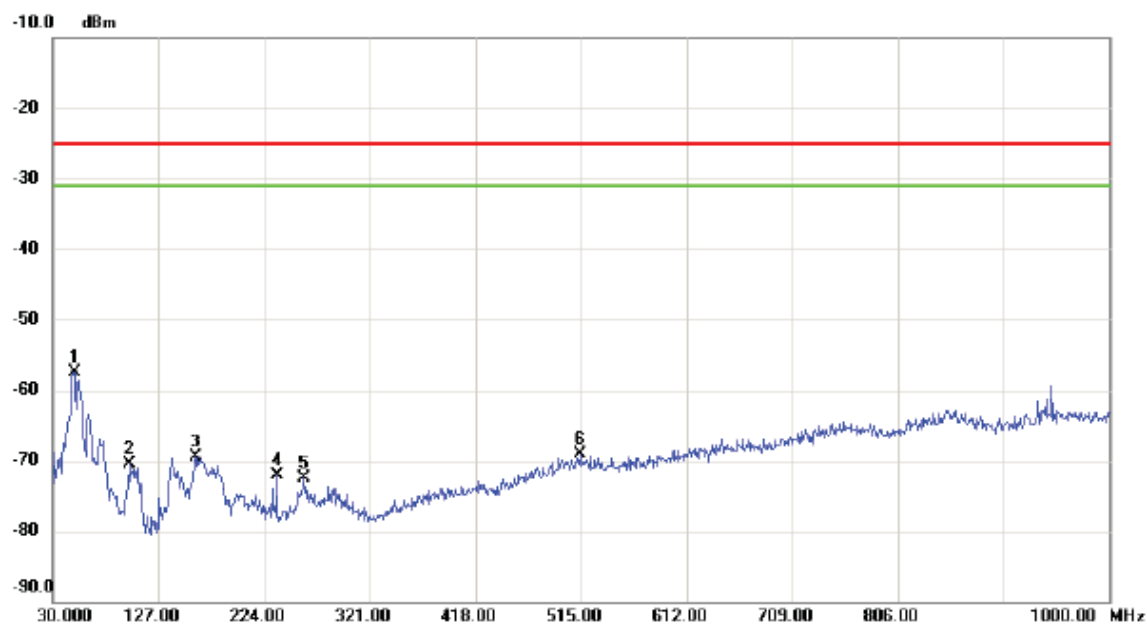
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 4_TX CH20300_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

Test Mode: LTE Band 4\_TX CH20375\_5M

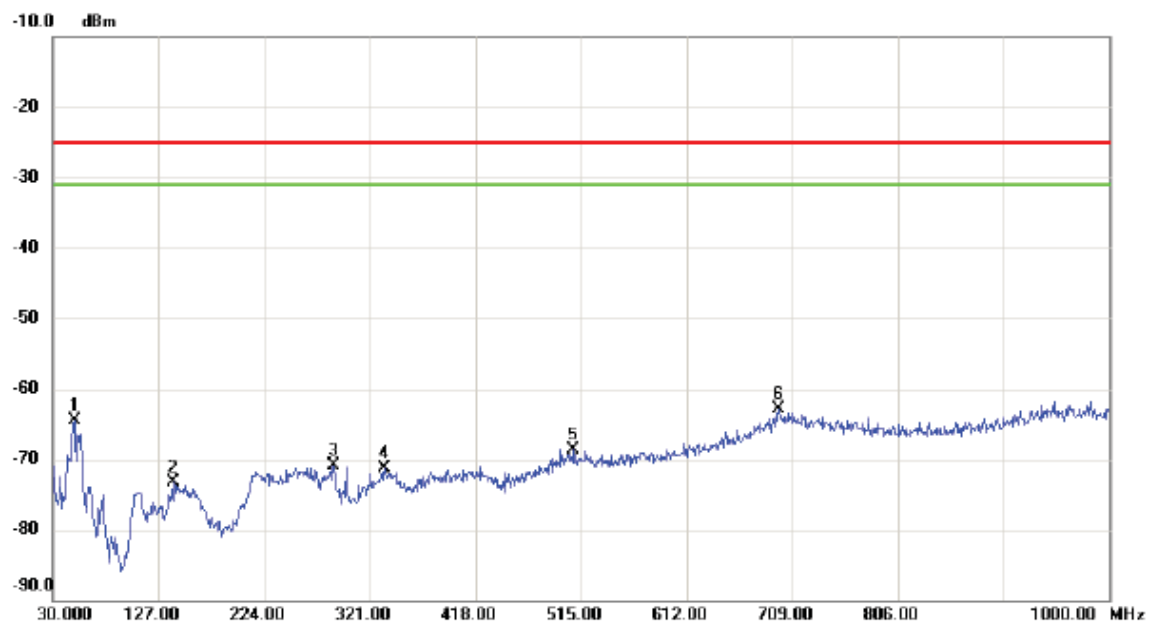
Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 49.400       | -58.28                  | 0.77                    | -57.51                  | -25.00       | -32.51       | peak     |         |
| 2   |     | 99.840       | -69.03                  | -1.45                   | -70.48                  | -25.00       | -45.48       | peak     |         |
| 3   |     | 160.950      | -72.27                  | 2.87                    | -69.40                  | -25.00       | -44.40       | peak     |         |
| 4   |     | 235.640      | -72.39                  | 0.34                    | -72.05                  | -25.00       | -47.05       | peak     |         |
| 5   |     | 260.860      | -73.41                  | 0.86                    | -72.55                  | -25.00       | -47.55       | peak     |         |
| 6   |     | 514.030      | -76.70                  | 7.52                    | -69.18                  | -25.00       | -44.18       | peak     |         |

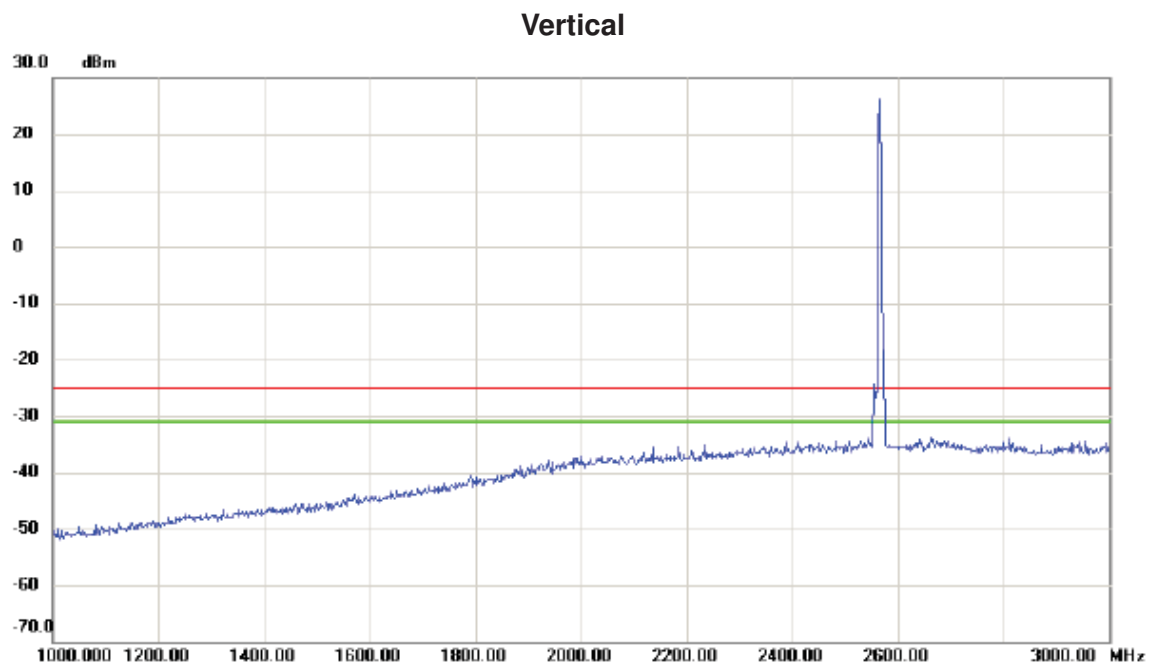
Test Mode: LTE Band 4\_TX CH20375\_5M

### Horizontal



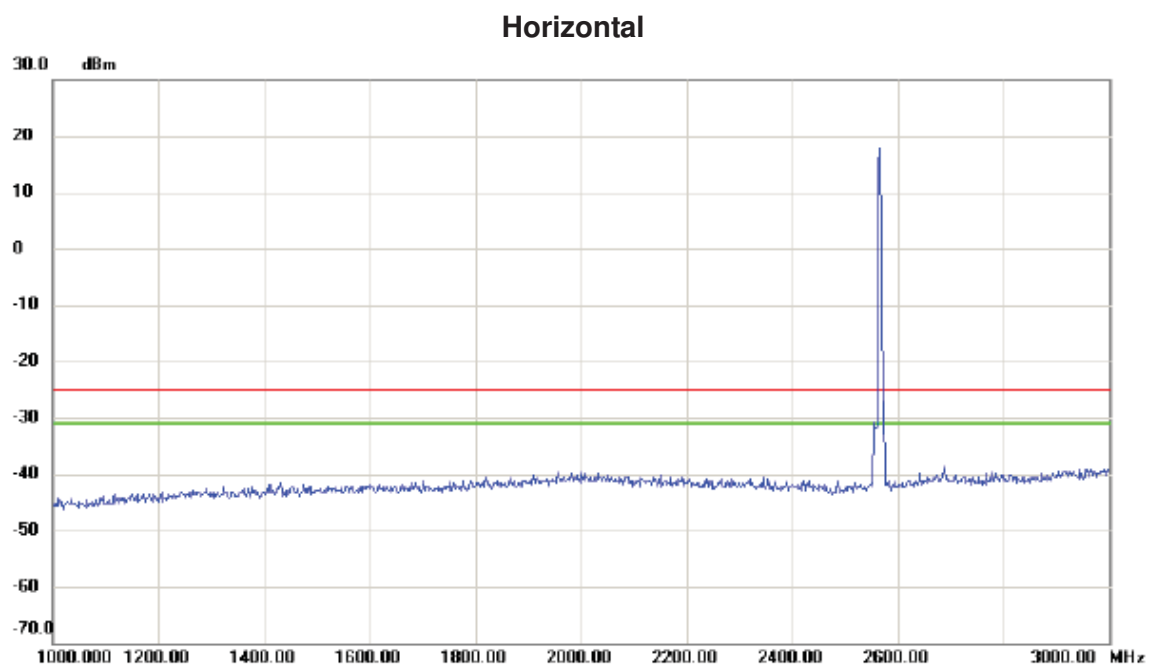
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 49.400       | -65.98                  | 1.48                    | -64.50                  | -25.00       | -39.50       | peak     |         |
| 2   |     | 140.580      | -76.50                  | 3.19                    | -73.31                  | -25.00       | -48.31       | peak     |         |
| 3   |     | 288.020      | -72.72                  | 1.76                    | -70.96                  | -25.00       | -45.96       | peak     |         |
| 4   |     | 334.580      | -73.74                  | 2.46                    | -71.28                  | -25.00       | -46.28       | peak     |         |
| 5   |     | 508.210      | -76.76                  | 8.07                    | -68.69                  | -25.00       | -43.69       | peak     |         |
| 6   | *   | 696.390      | -76.65                  | 13.73                   | -62.92                  | -25.00       | -37.92       | peak     |         |

|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 7_TX CH21425_5M |
|------------|--------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | dBm     | Factor  | ment     |       |        | Detector | Comment |
|     |     |       |         | dB      | dBm      | dBm   | dB     |          |         |

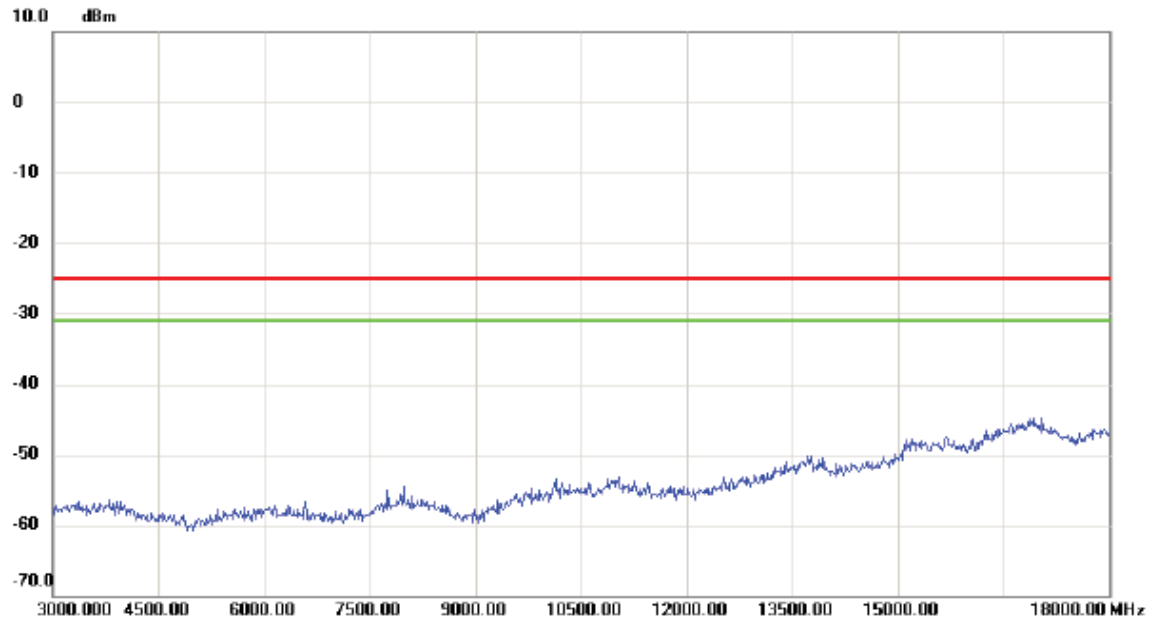
|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 7_TX CH21425_5M |
|------------|--------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

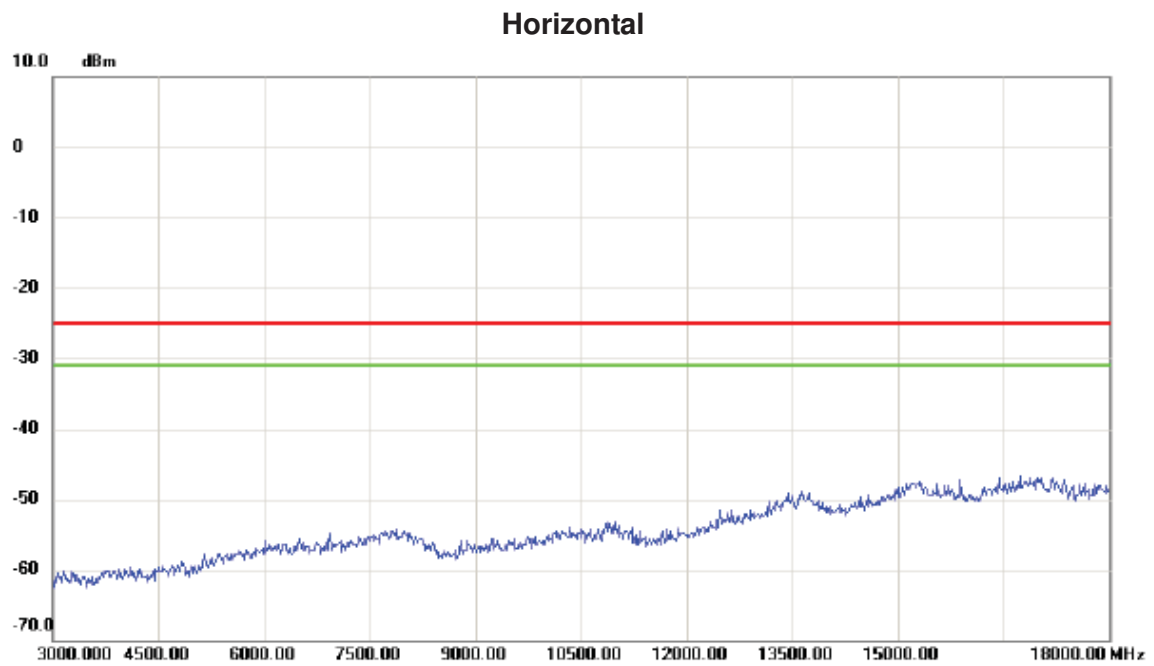
|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 7_TX CH21425_5M |
|------------|--------------------------|

### Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

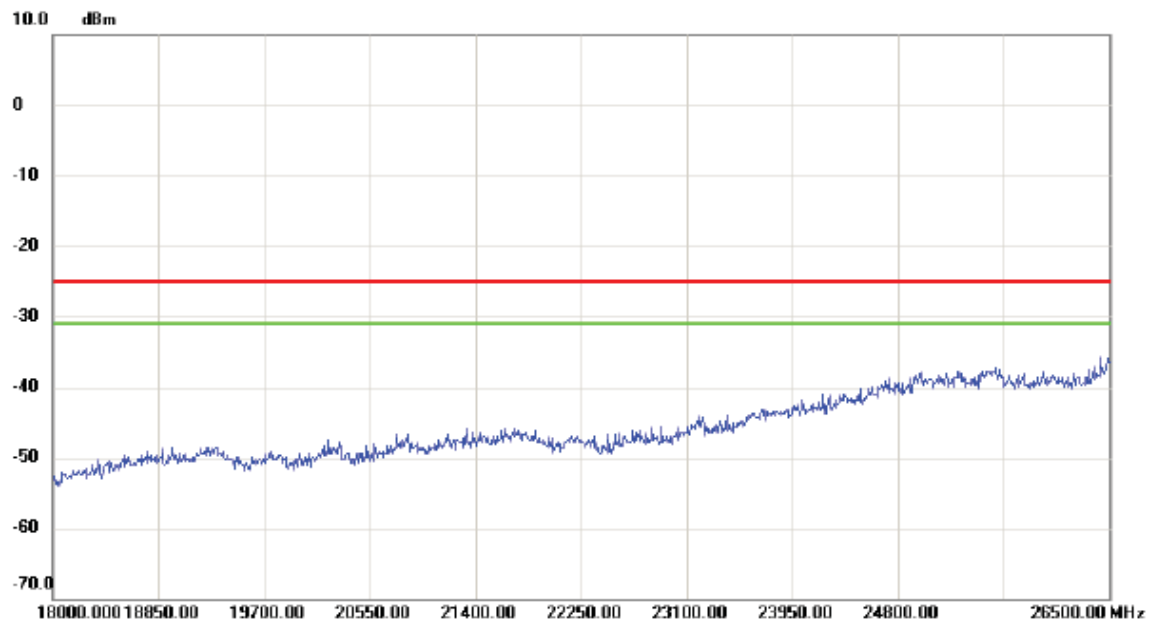
|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 7_TX CH21425_5M |
|------------|--------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

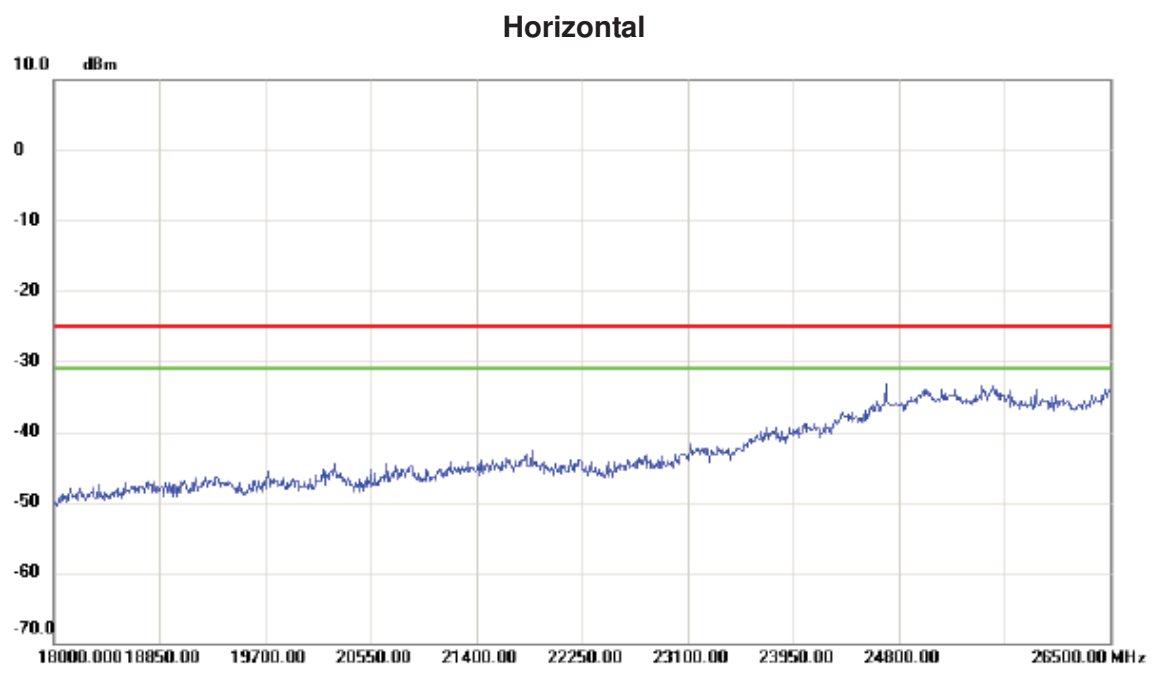
|            |                          |
|------------|--------------------------|
| Test Mode: | LTE Band 7_TX CH21425_5M |
|------------|--------------------------|

### Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

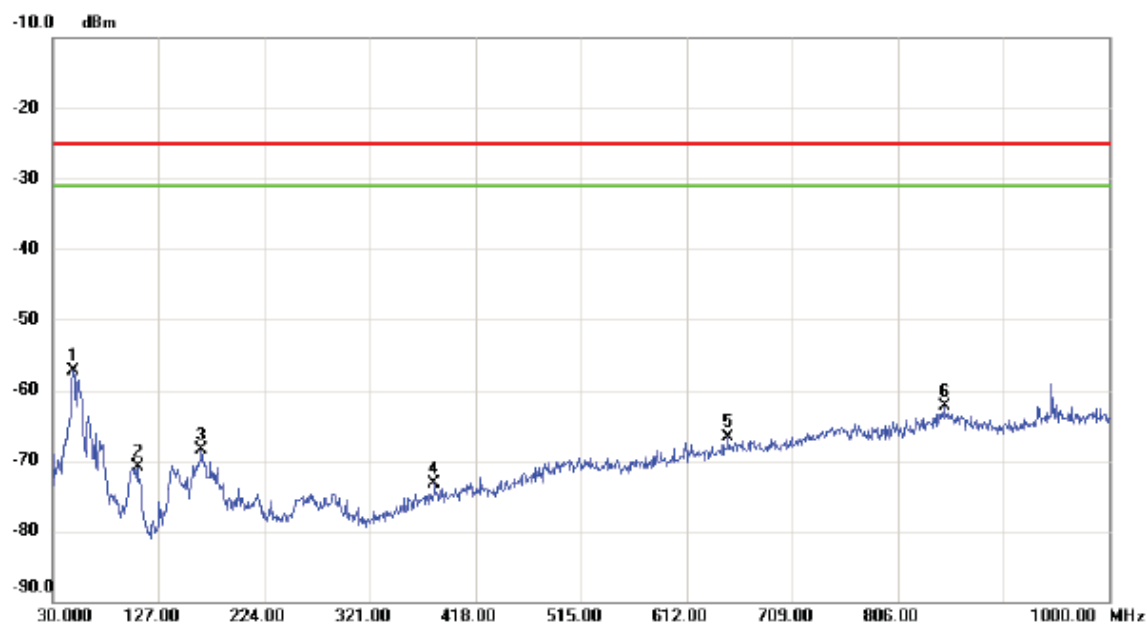
Test Mode: LTE Band 7\_TX CH21425\_5M



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 7\_TX CH21350\_20M

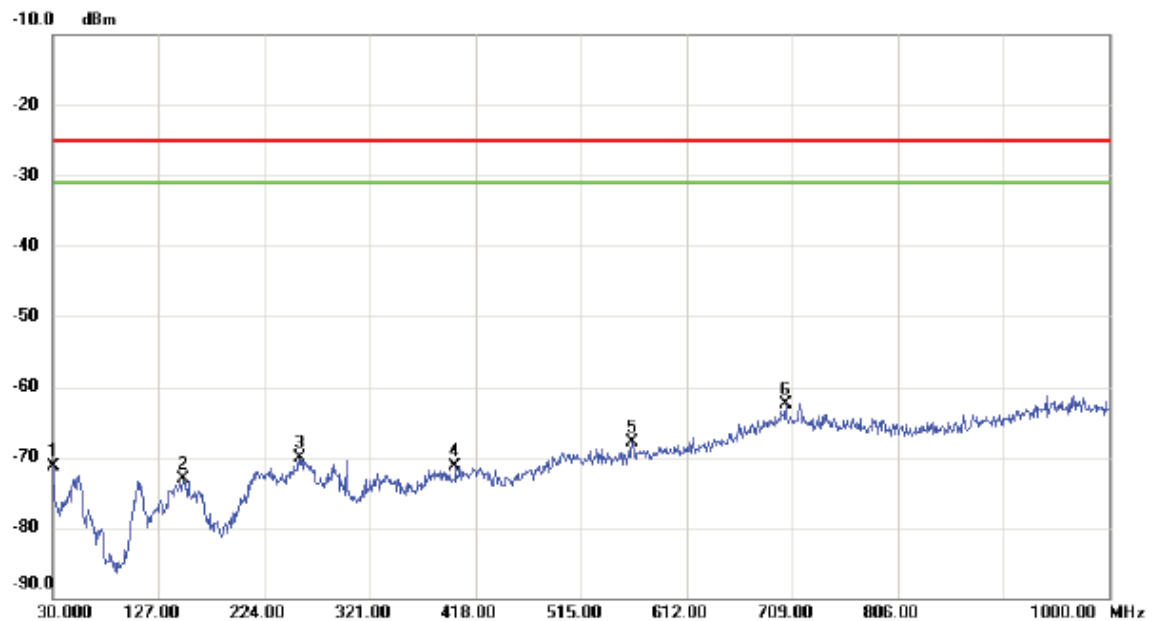
Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   | *   | 48.430       | -58.37                  | 1.03                    | -57.34                  | -25.00       | -32.34       | peak     |         |
| 2   |     | 107.600      | -69.80                  | -1.09                   | -70.89                  | -25.00       | -45.89       | peak     |         |
| 3   |     | 166.770      | -69.36                  | 0.95                    | -68.41                  | -25.00       | -43.41       | peak     |         |
| 4   |     | 380.170      | -77.17                  | 3.83                    | -73.34                  | -25.00       | -48.34       | peak     |         |
| 5   |     | 650.800      | -76.74                  | 10.13                   | -66.61                  | -25.00       | -41.61       | peak     |         |
| 6   |     | 848.680      | -76.72                  | 14.41                   | -62.31                  | -25.00       | -37.31       | peak     |         |

Test Mode: LTE Band 7\_TX CH21350\_20M

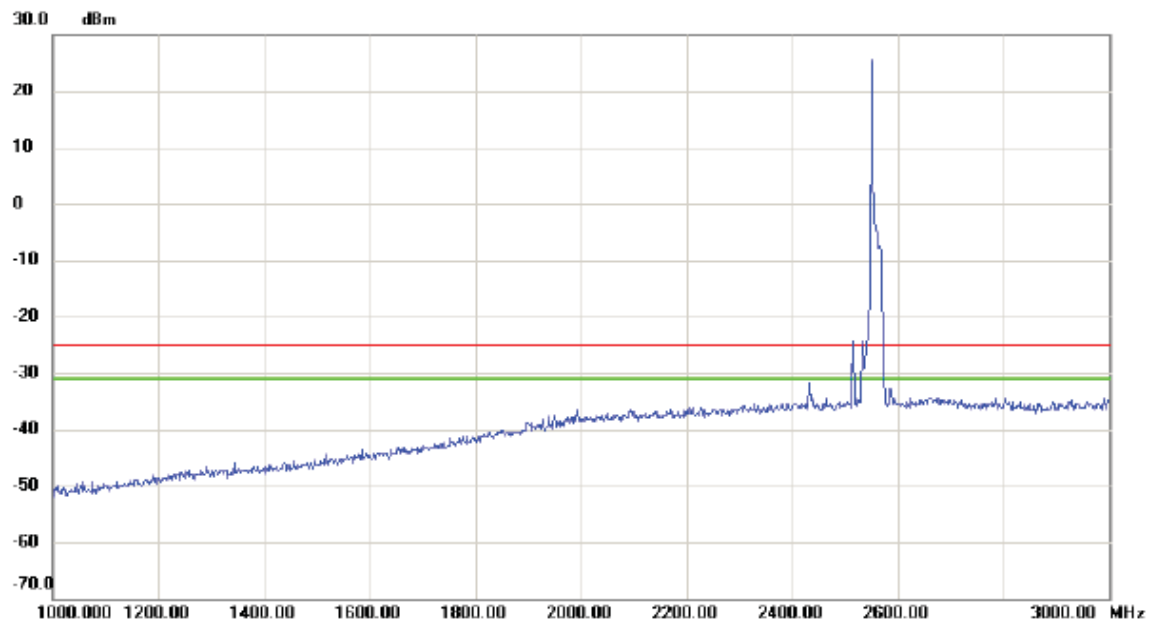
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 30.000       | -73.24                  | 1.88                    | -71.36                  | -25.00       | -46.36       | peak     |         |
| 2   |     | 149.310      | -77.29                  | 4.16                    | -73.13                  | -25.00       | -48.13       | peak     |         |
| 3   |     | 256.980      | -72.03                  | 1.91                    | -70.12                  | -25.00       | -45.12       | peak     |         |
| 4   |     | 399.570      | -77.25                  | 5.88                    | -71.37                  | -25.00       | -46.37       | peak     |         |
| 5   |     | 562.530      | -76.35                  | 8.36                    | -67.99                  | -25.00       | -42.99       | peak     |         |
| 6   | *   | 703.180      | -76.42                  | 13.90                   | -62.52                  | -25.00       | -37.52       | peak     |         |

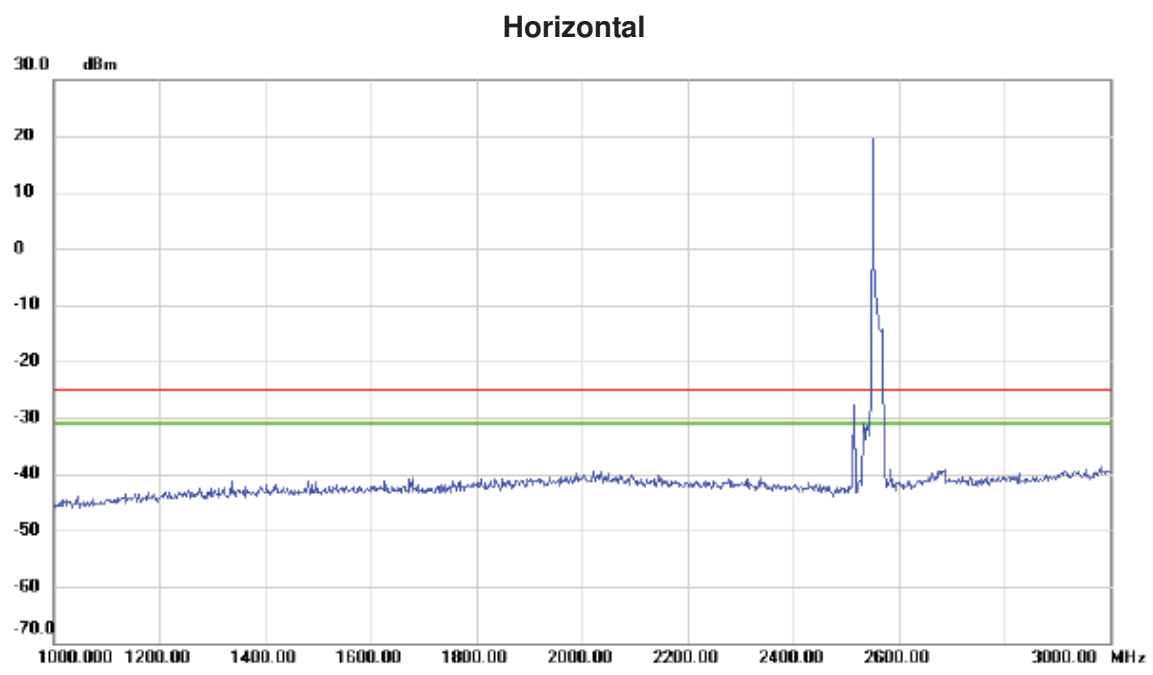
Test Mode: LTE Band 7\_TX CH21350\_20M

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

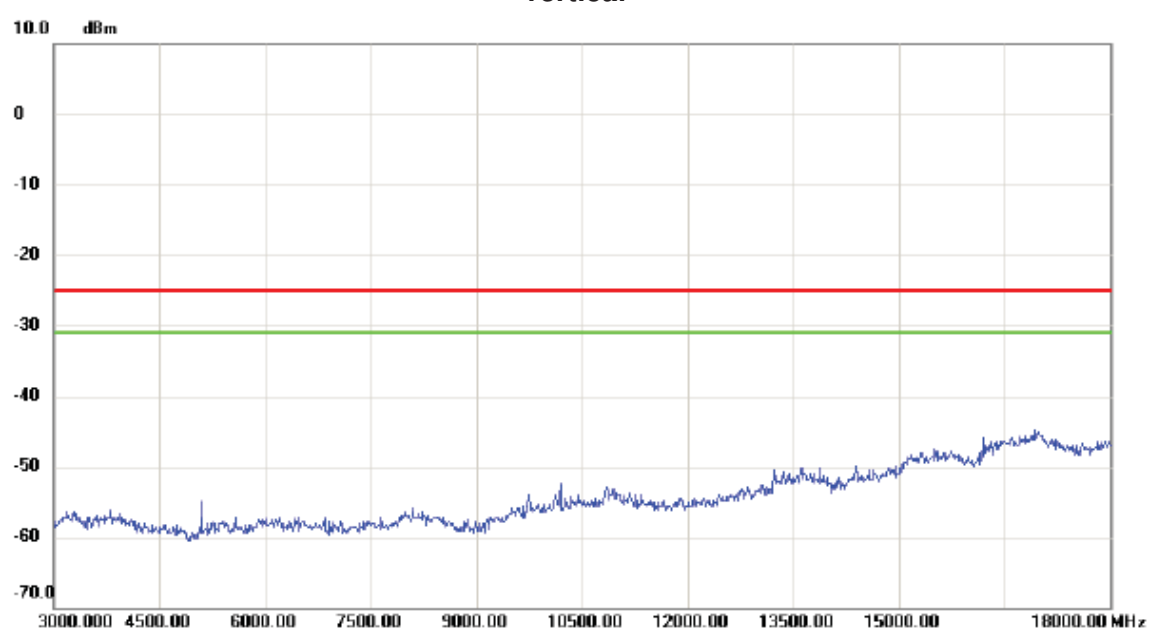
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 7_TX CH21350_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

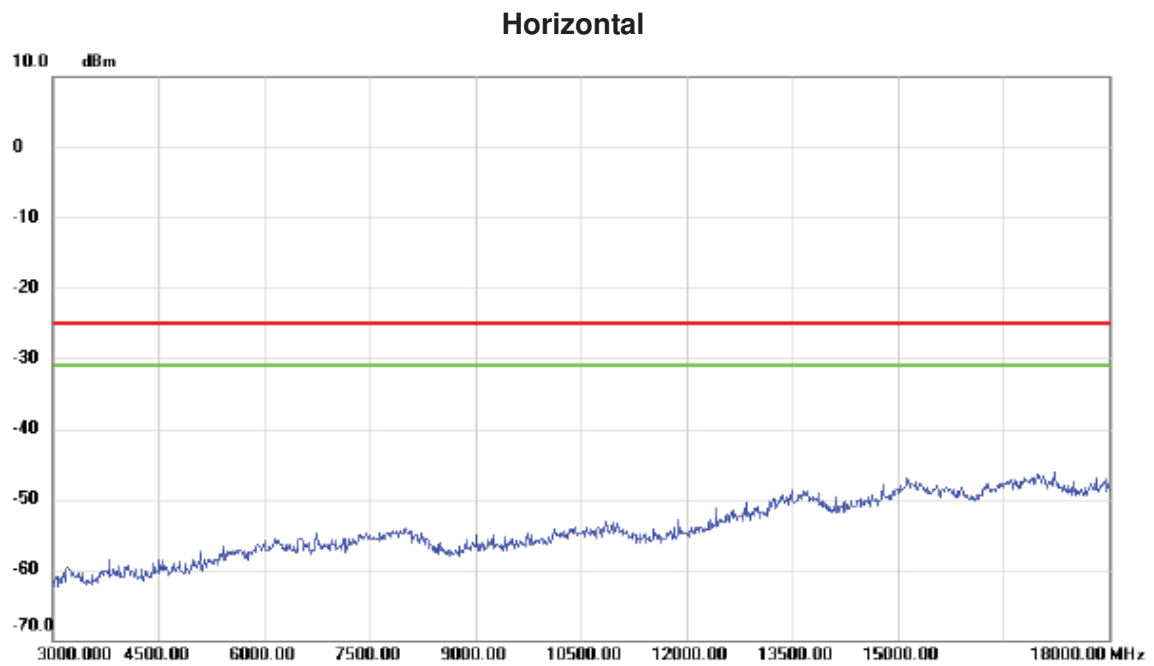
Test Mode: LTE Band 7\_TX CH21350\_20M

**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

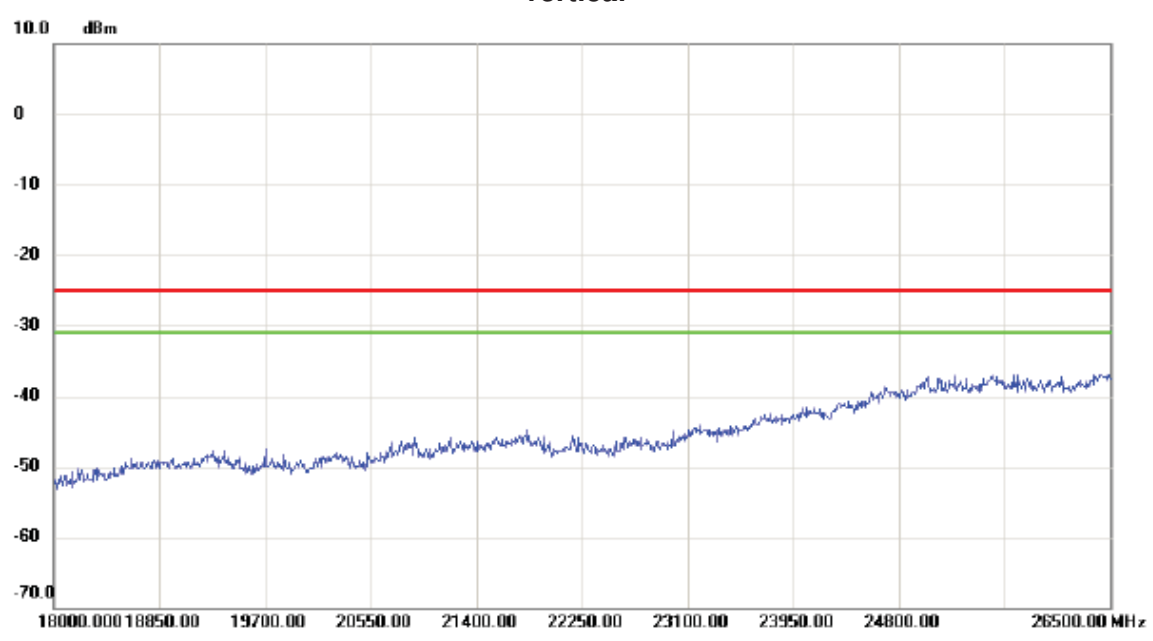
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 7_TX CH21350_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

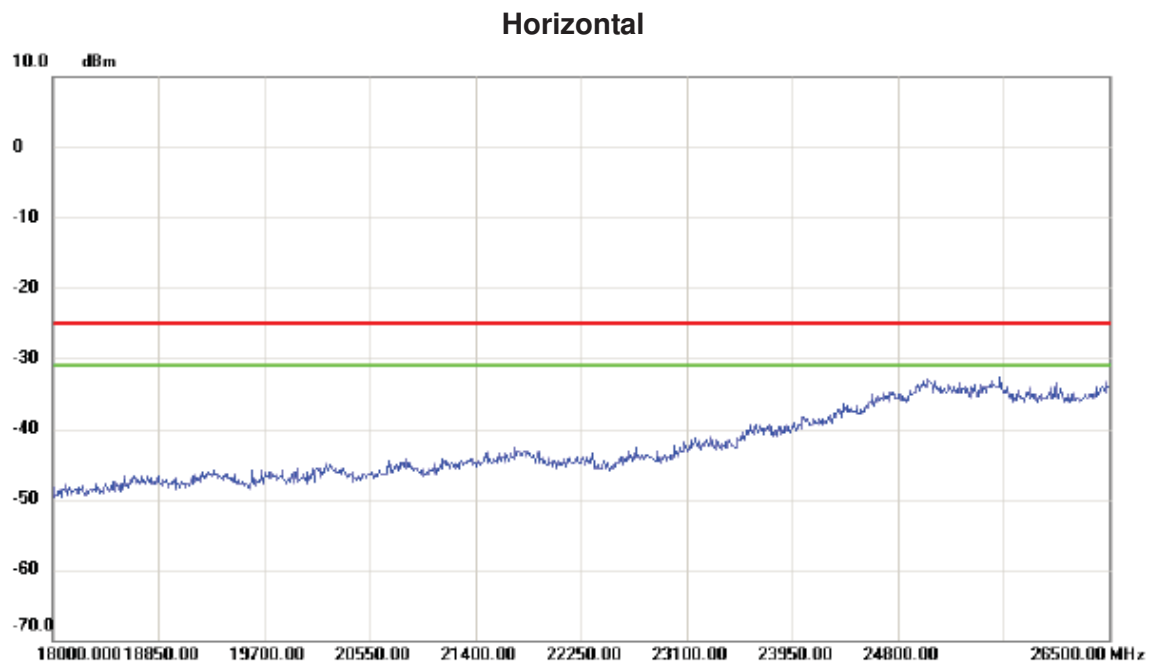
Test Mode: LTE Band 7\_TX CH21350\_20M

Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

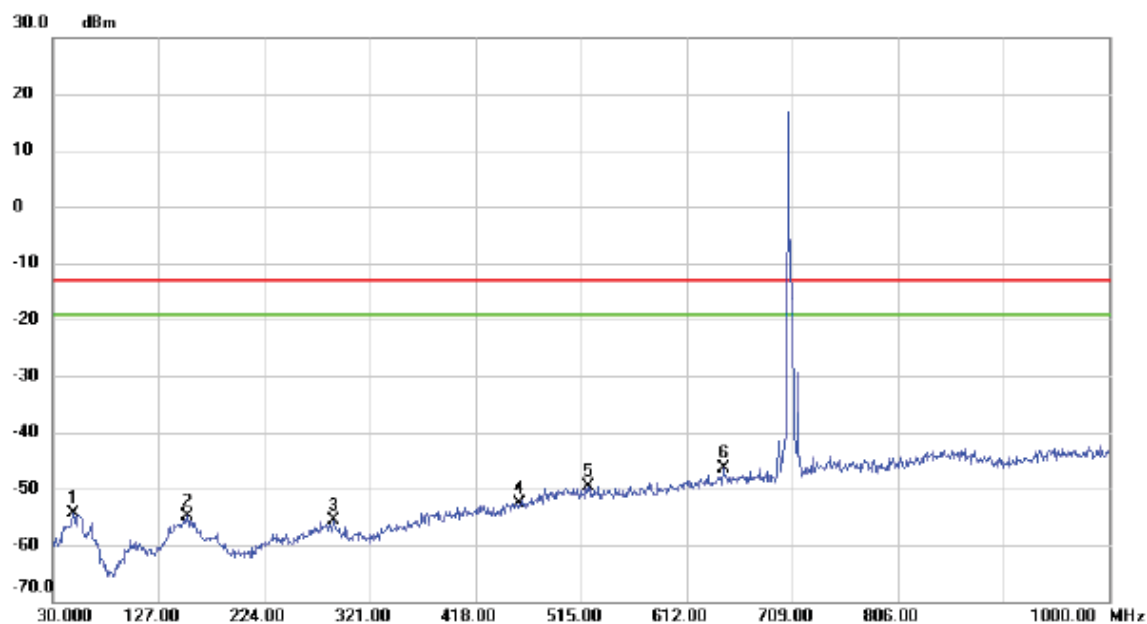
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 7_TX CH21350_20M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 12\_TX CH23095\_5M

**Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 48.430       | -75.39                  | 21.03                   | -54.36                  | -13.00       | -41.36       | peak     |         |
| 2   |     | 153.190      | -78.14                  | 23.16                   | -54.98                  | -13.00       | -41.98       | peak     |         |
| 3   |     | 288.020      | -77.99                  | 22.31                   | -55.68                  | -13.00       | -42.68       | peak     |         |
| 4   |     | 458.740      | -78.29                  | 25.77                   | -52.52                  | -13.00       | -39.52       | peak     |         |
| 5   |     | 521.790      | -77.17                  | 27.51                   | -49.66                  | -13.00       | -36.66       | peak     |         |
| 6   | *   | 645.950      | -76.48                  | 30.00                   | -46.48                  | -13.00       | -33.48       | peak     |         |

Test Mode: LTE Band 12\_TX CH23095\_5M

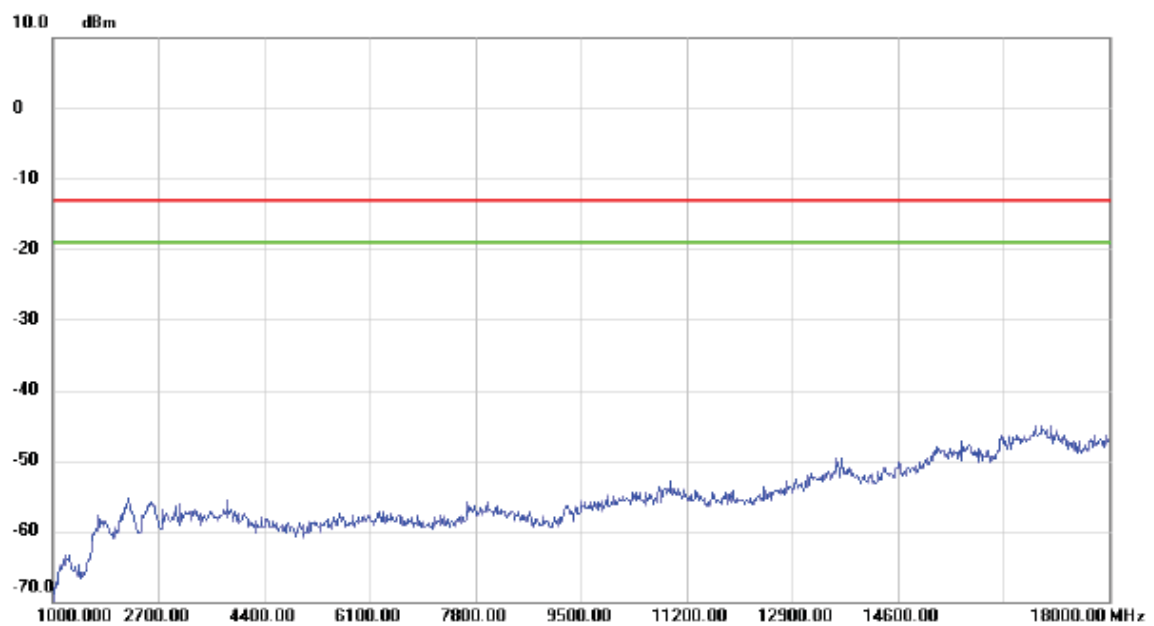
# Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 42.610       | -77.69                  | 22.59                   | -55.10                  | -13.00       | -42.10       | peak     |         |
| 2   |     | 149.310      | -78.57                  | 24.16                   | -54.41                  | -13.00       | -41.41       | peak     |         |
| 3   |     | 263.770      | -78.16                  | 22.34                   | -55.82                  | -13.00       | -42.82       | peak     |         |
| 4   |     | 411.210      | -77.61                  | 26.44                   | -51.17                  | -13.00       | -38.17       | peak     |         |
| 5   |     | 524.700      | -76.36                  | 28.08                   | -48.28                  | -13.00       | -35.28       | peak     |         |
| 6   | *   | 632.370      | -77.57                  | 30.06                   | -47.51                  | -13.00       | -34.51       | peak     |         |

|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 12_TX CH23095_5M |
|------------|---------------------------|

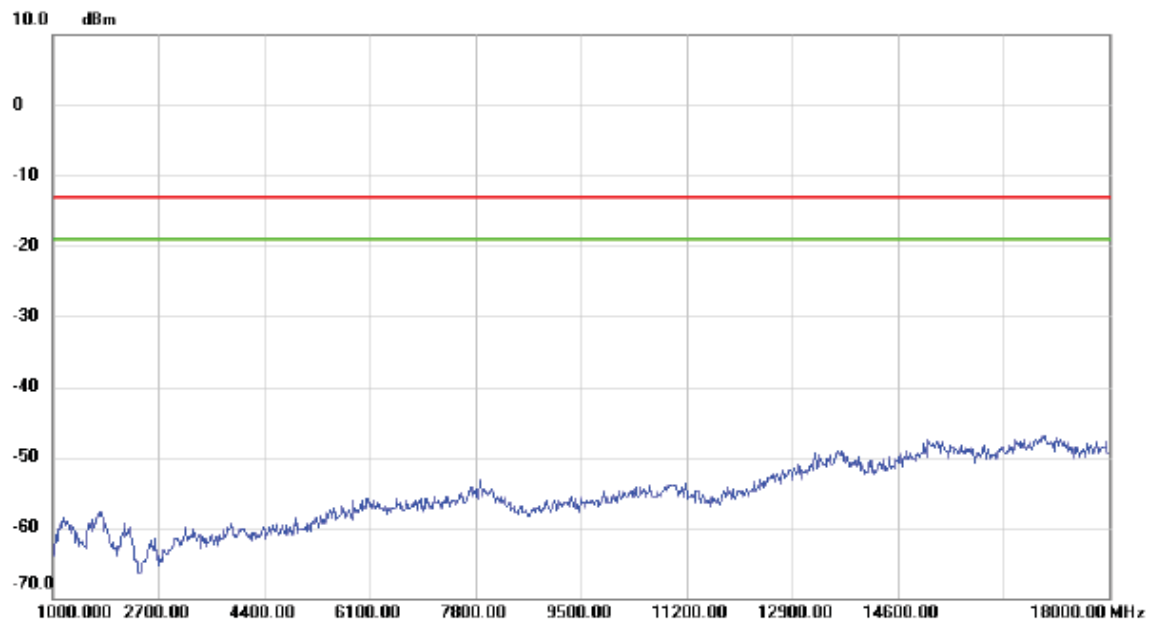
**Vertical**



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 12_TX CH23095_5M |
|------------|---------------------------|

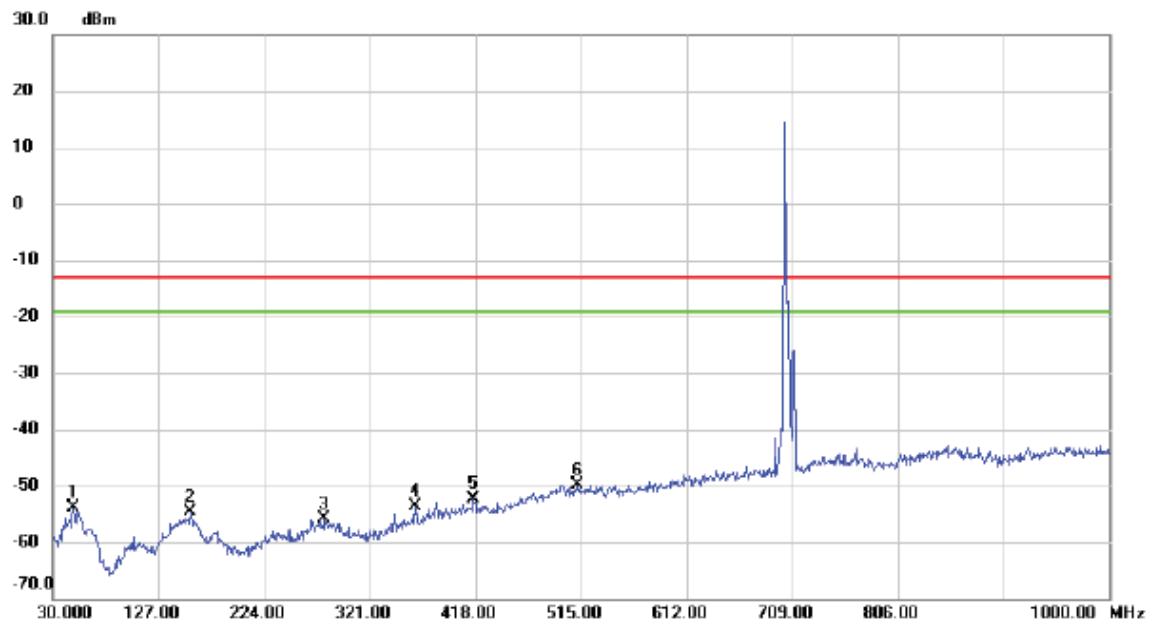
### Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 12\_TX CH23060\_10M

Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 48.430       | -75.01                  | 21.03                   | -53.98                  | -13.00       | -40.98       | peak     |         |
| 2   |     | 156.100      | -77.90                  | 23.17                   | -54.73                  | -13.00       | -41.73       | peak     |         |
| 3   |     | 279.290      | -78.41                  | 22.62                   | -55.79                  | -13.00       | -42.79       | peak     |         |
| 4   |     | 362.710      | -76.53                  | 22.96                   | -53.57                  | -13.00       | -40.57       | peak     |         |
| 5   |     | 416.060      | -76.82                  | 24.54                   | -52.28                  | -13.00       | -39.28       | peak     |         |
| 6   | *   | 512.090      | -77.29                  | 27.53                   | -49.76                  | -13.00       | -36.76       | peak     |         |

Test Mode: LTE Band 12\_TX CH23060\_10M

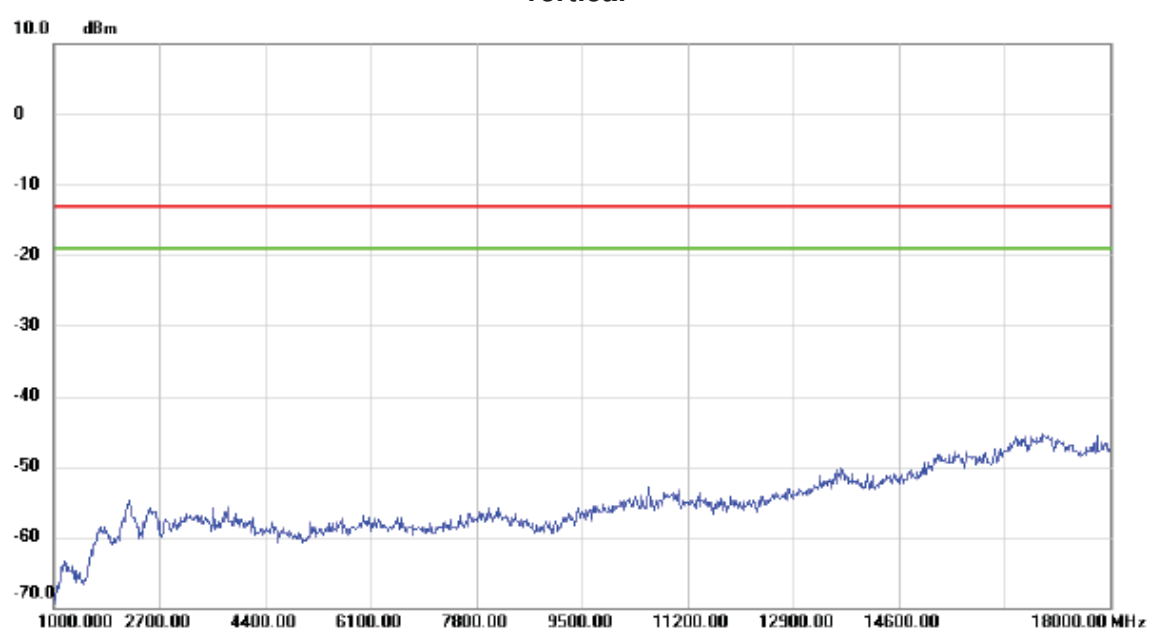
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 51.340       | -77.08                  | 21.64                   | -55.44                  | -13.00       | -42.44       | peak     |         |
| 2   |     | 149.310      | -77.93                  | 24.16                   | -53.77                  | -13.00       | -40.77       | peak     |         |
| 3   |     | 224.000      | -76.39                  | 21.62                   | -54.77                  | -13.00       | -41.77       | peak     |         |
| 4   |     | 413.150      | -76.27                  | 26.54                   | -49.73                  | -13.00       | -36.73       | peak     |         |
| 5   |     | 527.610      | -76.98                  | 28.08                   | -48.90                  | -13.00       | -35.90       | peak     |         |
| 6   | *   | 633.340      | -76.90                  | 30.09                   | -46.81                  | -13.00       | -33.81       | peak     |         |

Test Mode: LTE Band 12\_TX CH23060\_10M

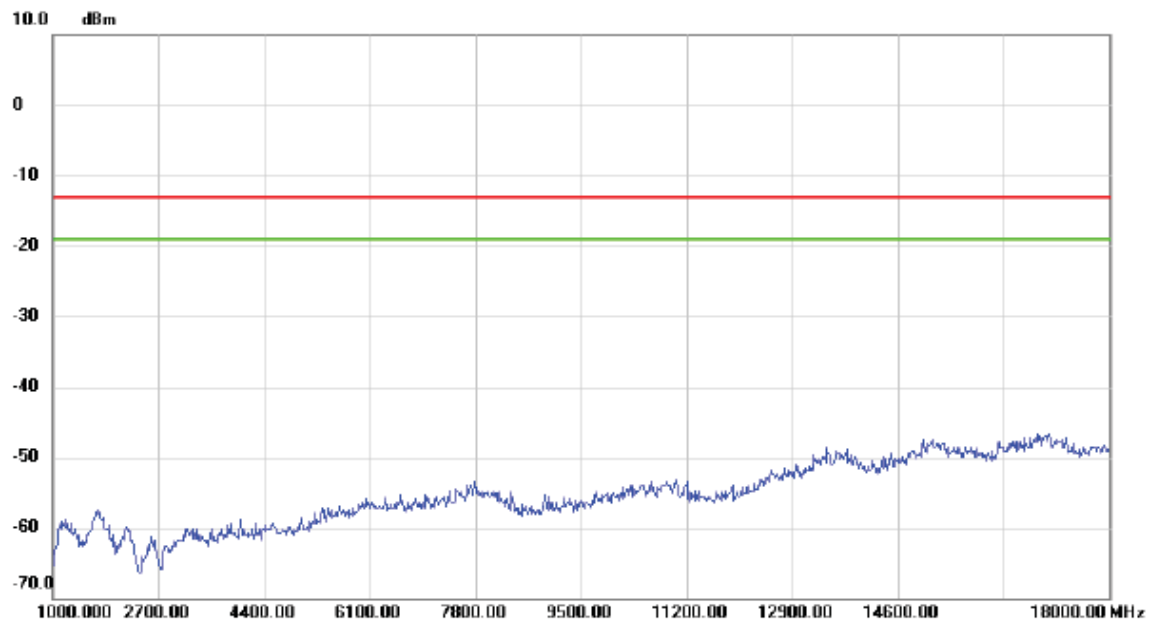
Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

|            |                            |
|------------|----------------------------|
| Test Mode: | LTE Band 12_TX CH23060_10M |
|------------|----------------------------|

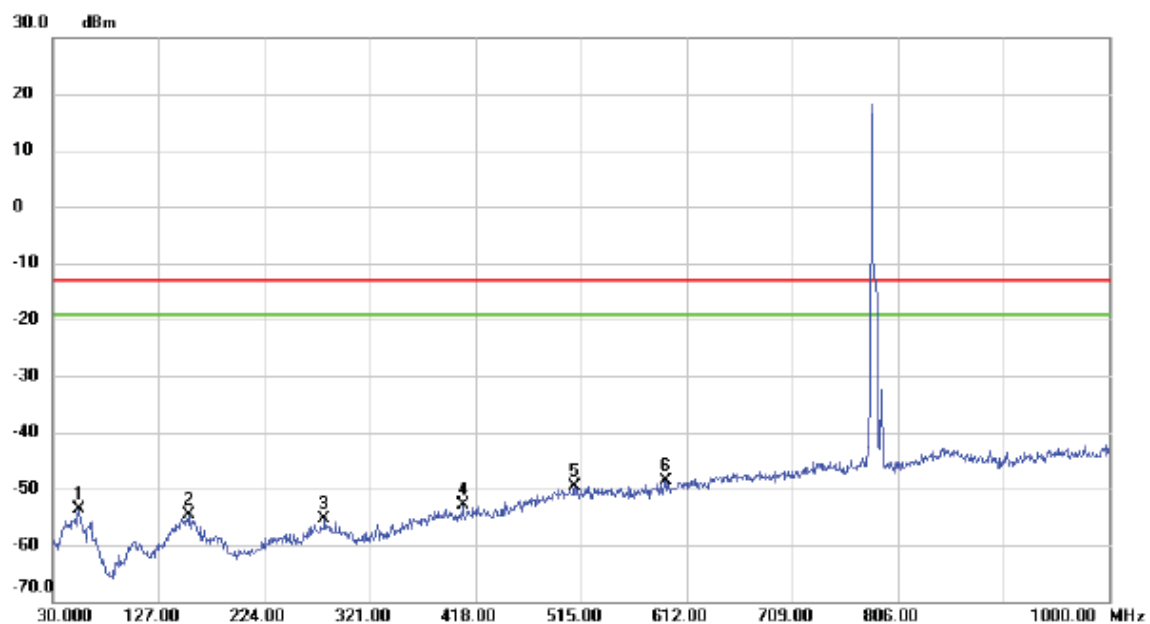
### Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 13\_TX CH23255\_5M

Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 53.280       | -75.63                  | 21.99                   | -53.64                  | -13.00       | -40.64       | peak     |         |
| 2   |     | 154.160      | -77.69                  | 23.16                   | -54.53                  | -13.00       | -41.53       | peak     |         |
| 3   |     | 279.290      | -78.02                  | 22.62                   | -55.40                  | -13.00       | -42.40       | peak     |         |
| 4   |     | 406.360      | -77.19                  | 24.28                   | -52.91                  | -13.00       | -39.91       | peak     |         |
| 5   |     | 509.180      | -77.05                  | 27.53                   | -49.52                  | -13.00       | -36.52       | peak     |         |
| 6   | *   | 592.600      | -77.16                  | 28.52                   | -48.64                  | -13.00       | -35.64       | peak     |         |

Test Mode: LTE Band 13\_TX CH23255\_5M

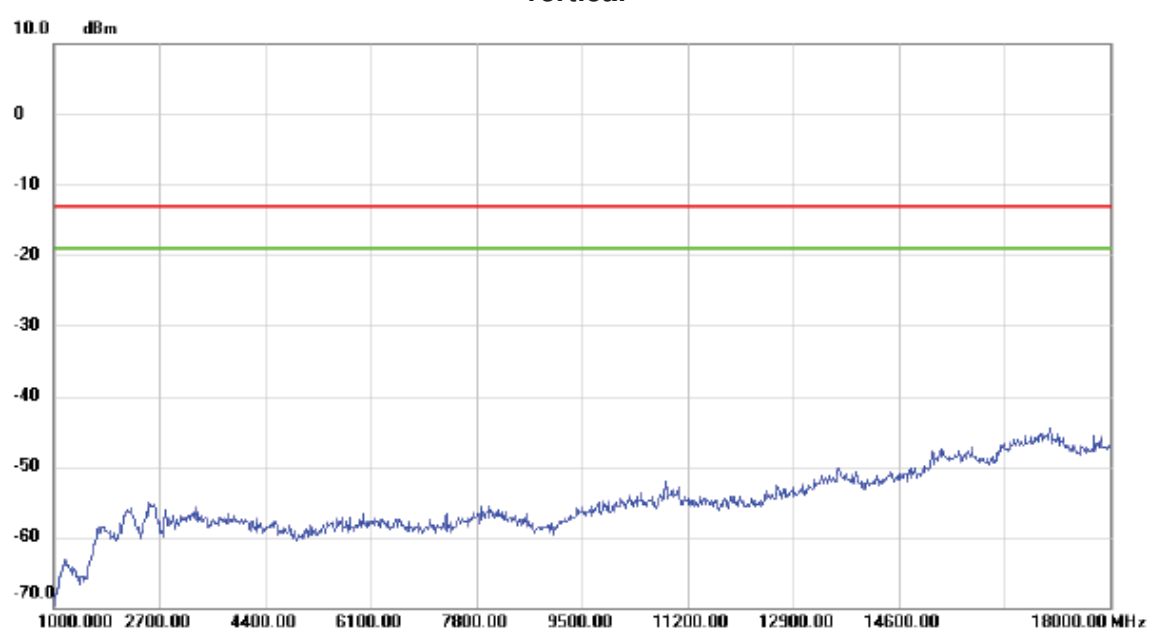
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 55.220       | -78.51                  | 22.53                   | -55.98                  | -13.00       | -42.98       | peak     |         |
| 2   |     | 148.340      | -78.62                  | 24.06                   | -54.56                  | -13.00       | -41.56       | peak     |         |
| 3   |     | 236.610      | -78.36                  | 22.69                   | -55.67                  | -13.00       | -42.67       | peak     |         |
| 4   |     | 381.140      | -76.76                  | 26.09                   | -50.67                  | -13.00       | -37.67       | peak     |         |
| 5   |     | 513.060      | -76.47                  | 28.07                   | -48.40                  | -13.00       | -35.40       | peak     |         |
| 6   | *   | 702.210      | -77.49                  | 33.93                   | -43.56                  | -13.00       | -30.56       | peak     |         |

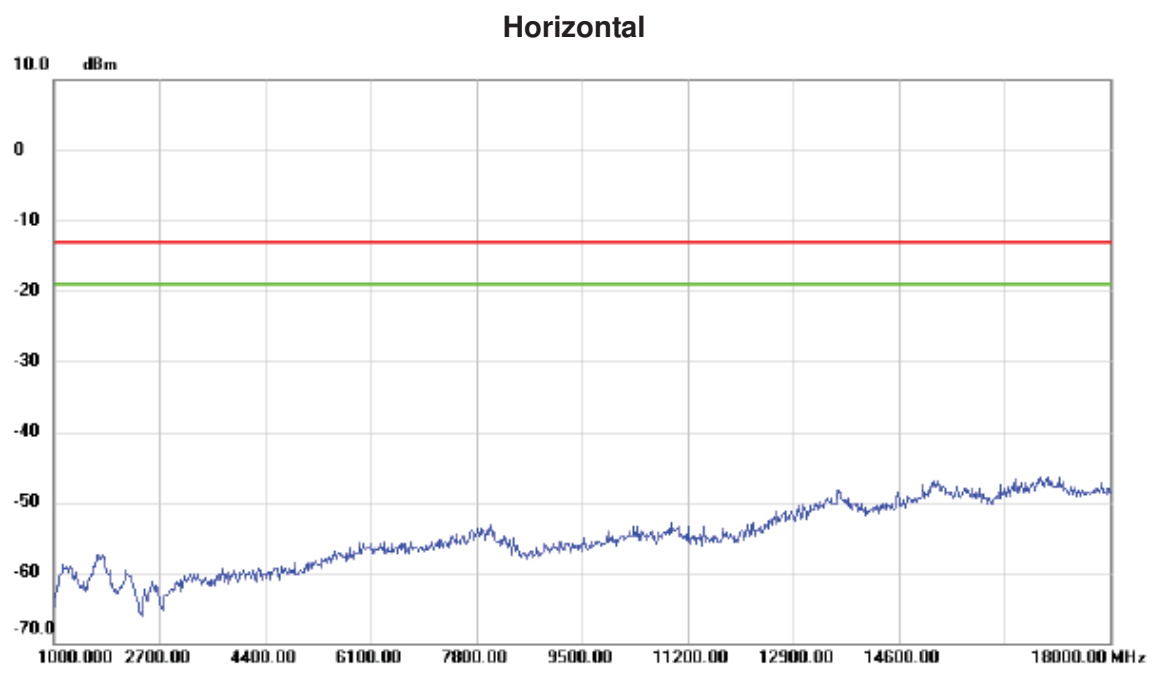
Test Mode: LTE Band 13\_TX CH23255\_5M

Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

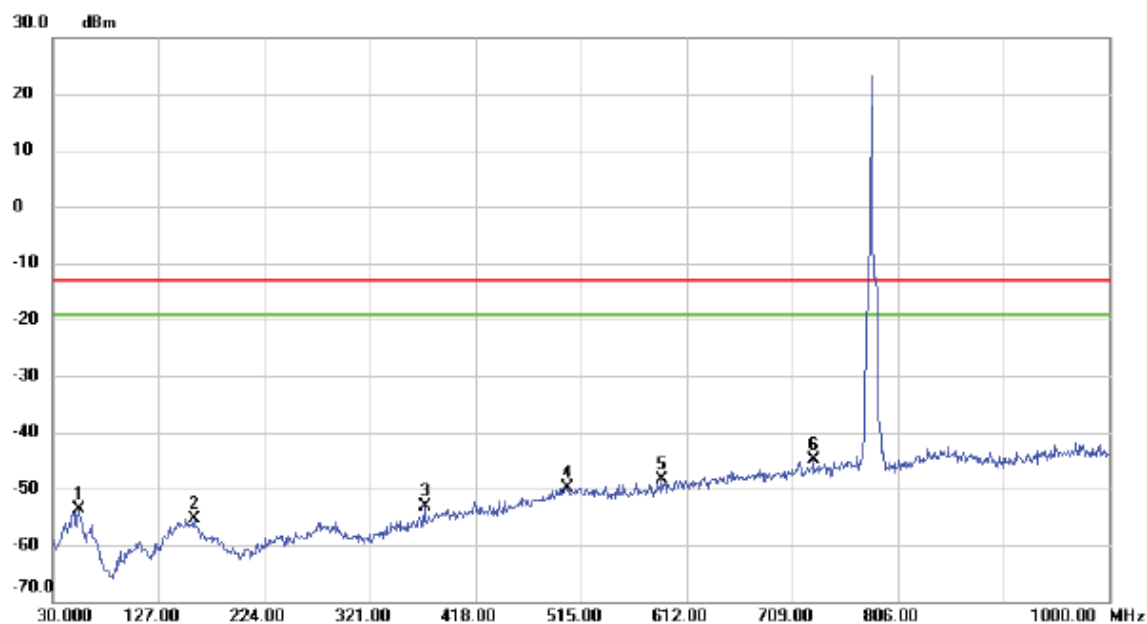
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 13_TX CH23255_5M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 13\_TX CH23230\_10M

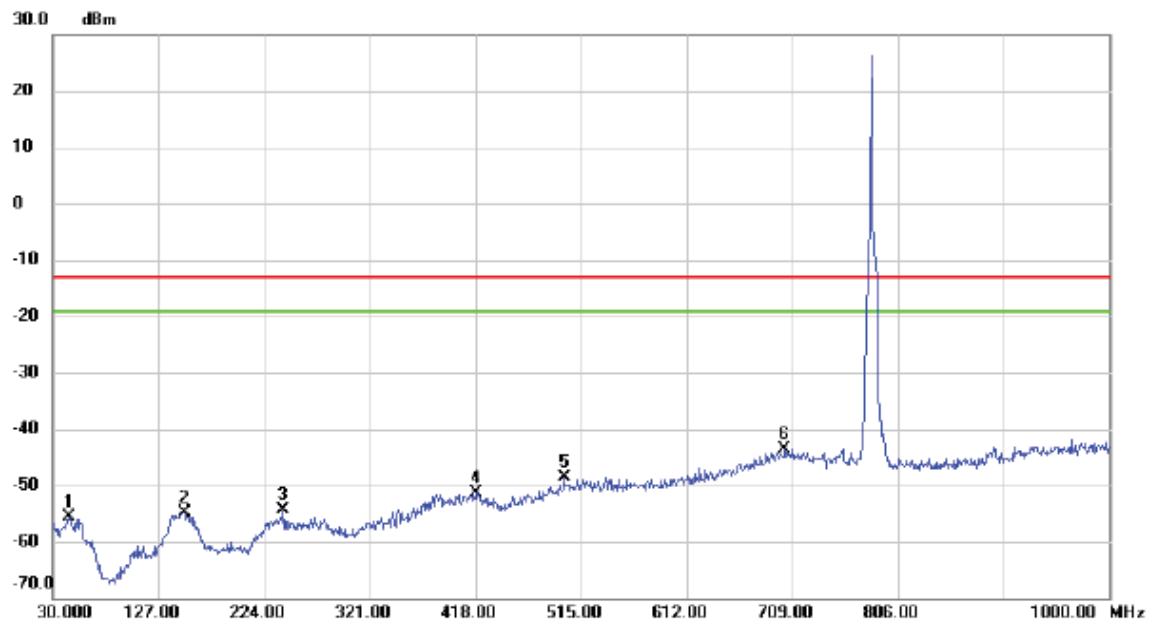
Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 53.280       | -75.65                  | 21.99                   | -53.66                  | -13.00       | -40.66       | peak     |         |
| 2   |     | 159.980      | -78.52                  | 23.18                   | -55.34                  | -13.00       | -42.34       | peak     |         |
| 3   |     | 371.440      | -76.62                  | 23.40                   | -53.22                  | -13.00       | -40.22       | peak     |         |
| 4   |     | 502.390      | -77.33                  | 27.55                   | -49.78                  | -13.00       | -36.78       | peak     |         |
| 5   |     | 589.690      | -76.73                  | 28.44                   | -48.29                  | -13.00       | -35.29       | peak     |         |
| 6   | *   | 728.400      | -76.55                  | 31.62                   | -44.93                  | -13.00       | -31.93       | peak     |         |

Test Mode: LTE Band 13\_TX CH23230\_10M

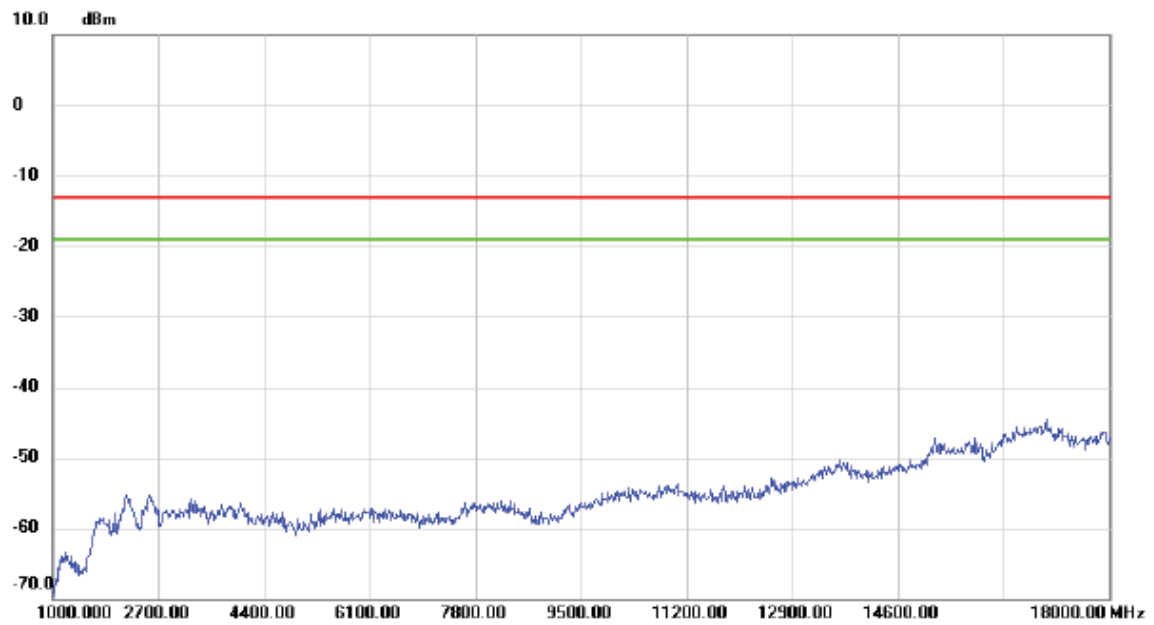
### Horizontal



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measure-ment | Limit  | Margin |          |         |
|-----|-----|---------|---------------|----------------|--------------|--------|--------|----------|---------|
|     |     | MHz     | dBm           | dB             | dBm          | dBm    | dB     | Detector | Comment |
| 1   |     | 44.550  | -78.51        | 22.97          | -55.54       | -13.00 | -42.54 | peak     |         |
| 2   |     | 151.250 | -78.98        | 24.05          | -54.93       | -13.00 | -41.93 | peak     |         |
| 3   |     | 241.460 | -76.79        | 22.32          | -54.47       | -13.00 | -41.47 | peak     |         |
| 4   |     | 418.970 | -78.24        | 26.83          | -51.41       | -13.00 | -38.41 | peak     |         |
| 5   |     | 499.480 | -76.67        | 28.02          | -48.65       | -13.00 | -35.65 | peak     |         |
| 6   | *   | 702.210 | -77.45        | 33.93          | -43.52       | -13.00 | -30.52 | peak     |         |

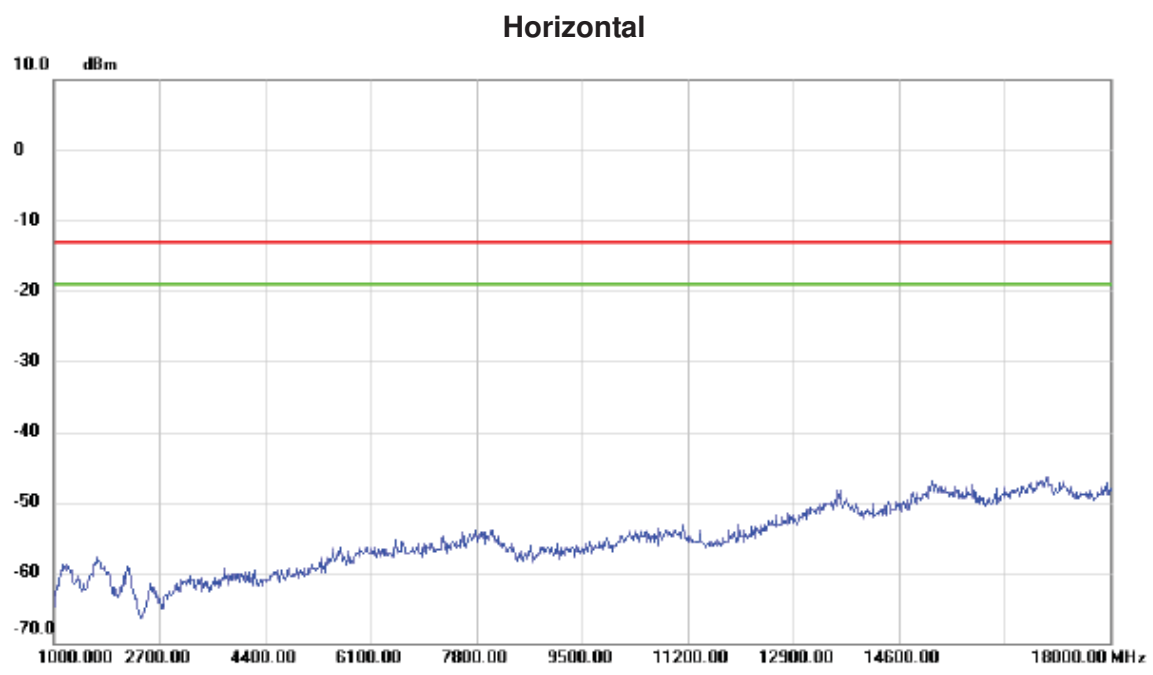
Test Mode: LTE Band 13\_TX CH23230\_10M

**Vertical**



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

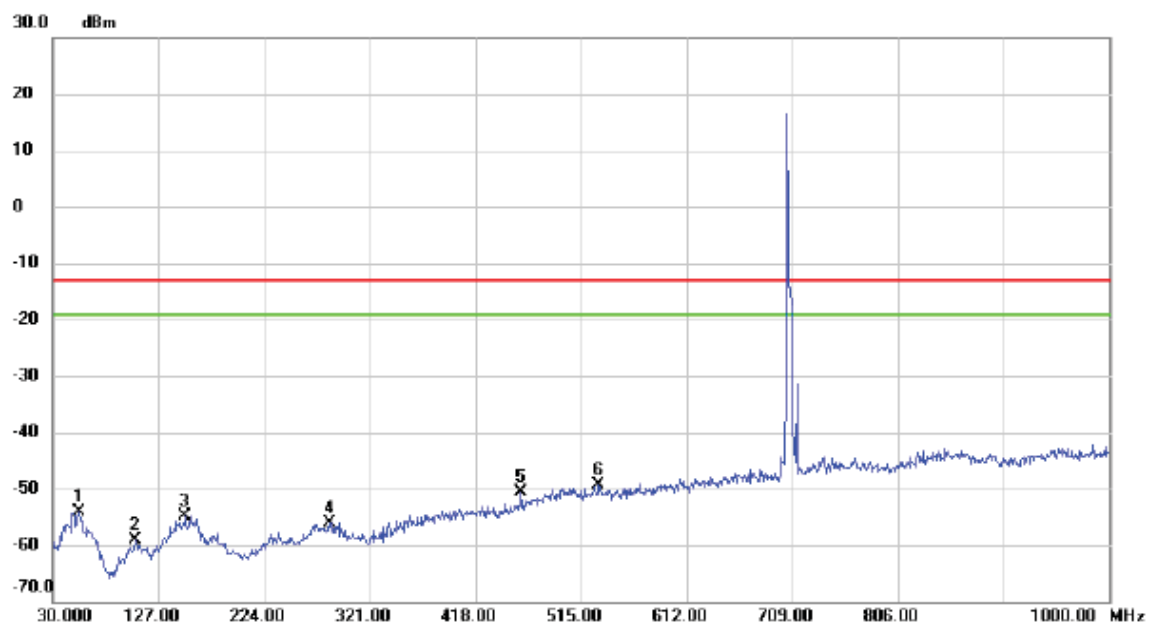
|            |                            |
|------------|----------------------------|
| Test Mode: | LTE Band 13_TX CH23230_10M |
|------------|----------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 17\_TX CH23755\_5M

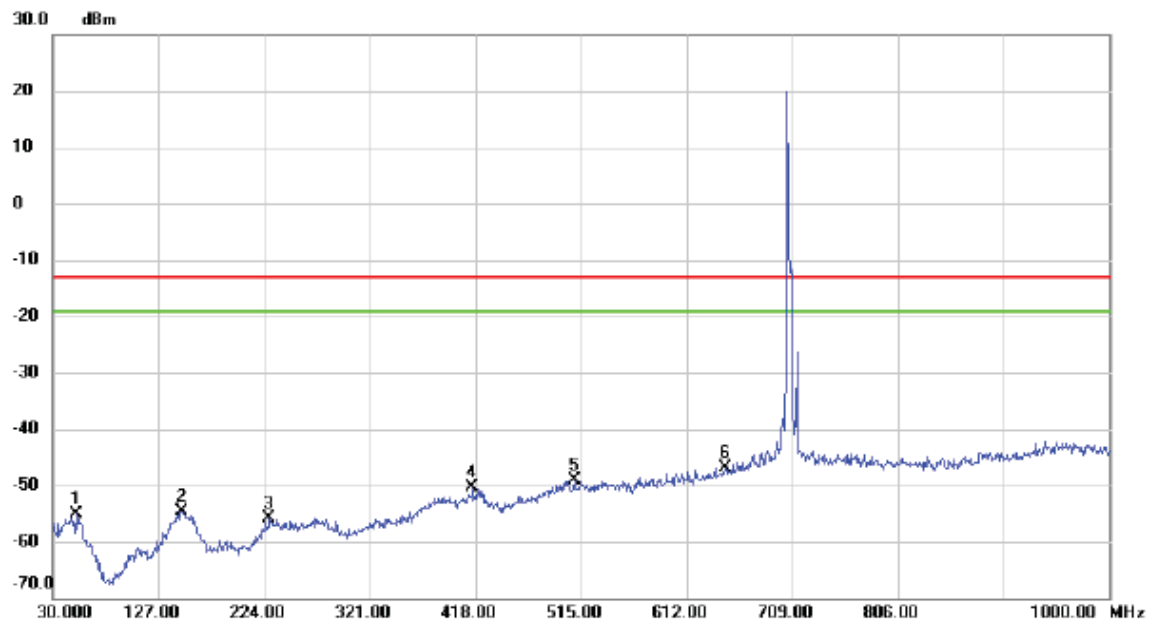
Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 54.250       | -76.42                  | 22.40                   | -54.02                  | -13.00       | -41.02       | peak     |         |
| 2   |     | 105.660      | -78.01                  | 18.84                   | -59.17                  | -13.00       | -46.17       | peak     |         |
| 3   |     | 151.250      | -78.03                  | 23.15                   | -54.88                  | -13.00       | -41.88       | peak     |         |
| 4   |     | 284.140      | -78.64                  | 22.47                   | -56.17                  | -13.00       | -43.17       | peak     |         |
| 5   |     | 459.710      | -76.47                  | 25.84                   | -50.63                  | -13.00       | -37.63       | peak     |         |
| 6   | *   | 531.490      | -76.86                  | 27.49                   | -49.37                  | -13.00       | -36.37       | peak     |         |

Test Mode: LTE Band 17\_TX CH23755\_5M

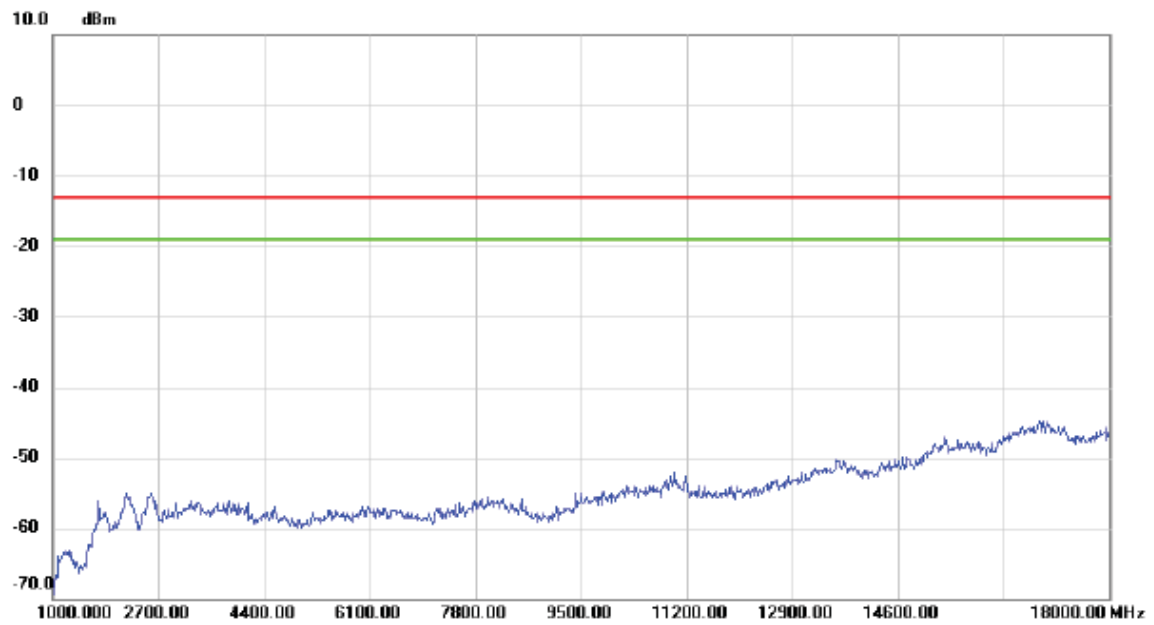
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 51.340       | -76.70                  | 21.64                   | -55.06                  | -13.00       | -42.06       | peak     |         |
| 2   |     | 148.340      | -78.59                  | 24.06                   | -54.53                  | -13.00       | -41.53       | peak     |         |
| 3   |     | 228.850      | -78.70                  | 22.94                   | -55.76                  | -13.00       | -42.76       | peak     |         |
| 4   |     | 415.090      | -76.90                  | 26.63                   | -50.27                  | -13.00       | -37.27       | peak     |         |
| 5   |     | 509.180      | -77.13                  | 28.07                   | -49.06                  | -13.00       | -36.06       | peak     |         |
| 6   | *   | 647.890      | -77.30                  | 30.51                   | -46.79                  | -13.00       | -33.79       | peak     |         |

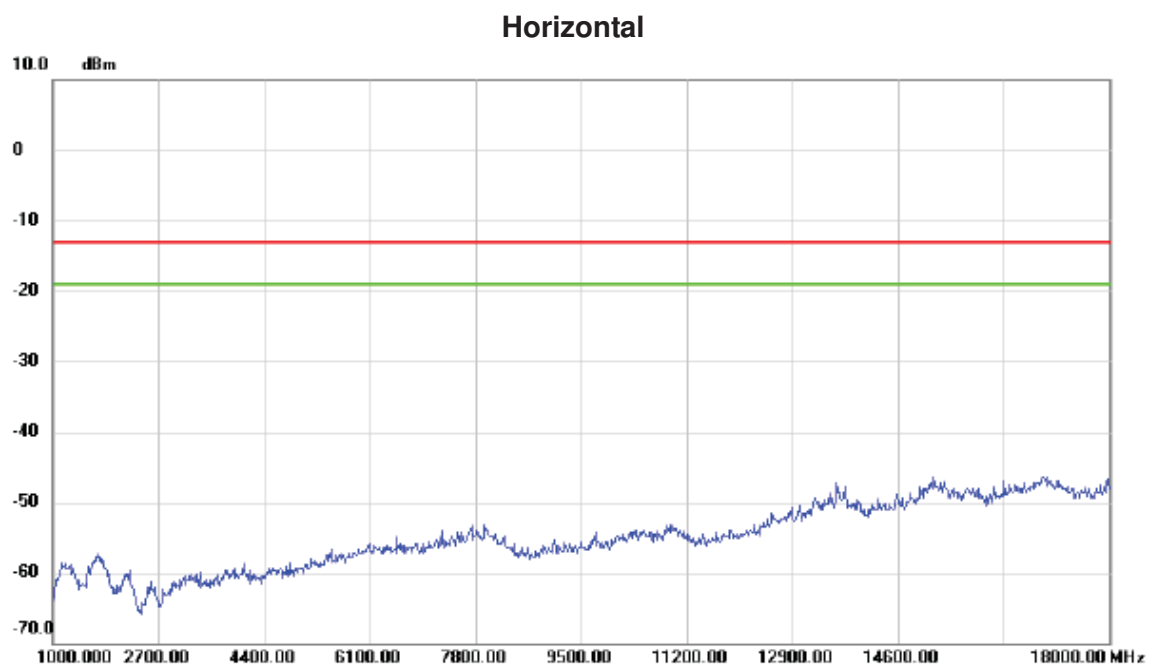
Test Mode: LTE Band 17\_TX CH23755\_5M

Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin |          |         |
|-----|-----|-------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz   | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |       | dBm     | dB      | dBm      | dBm   | dB     |          |         |

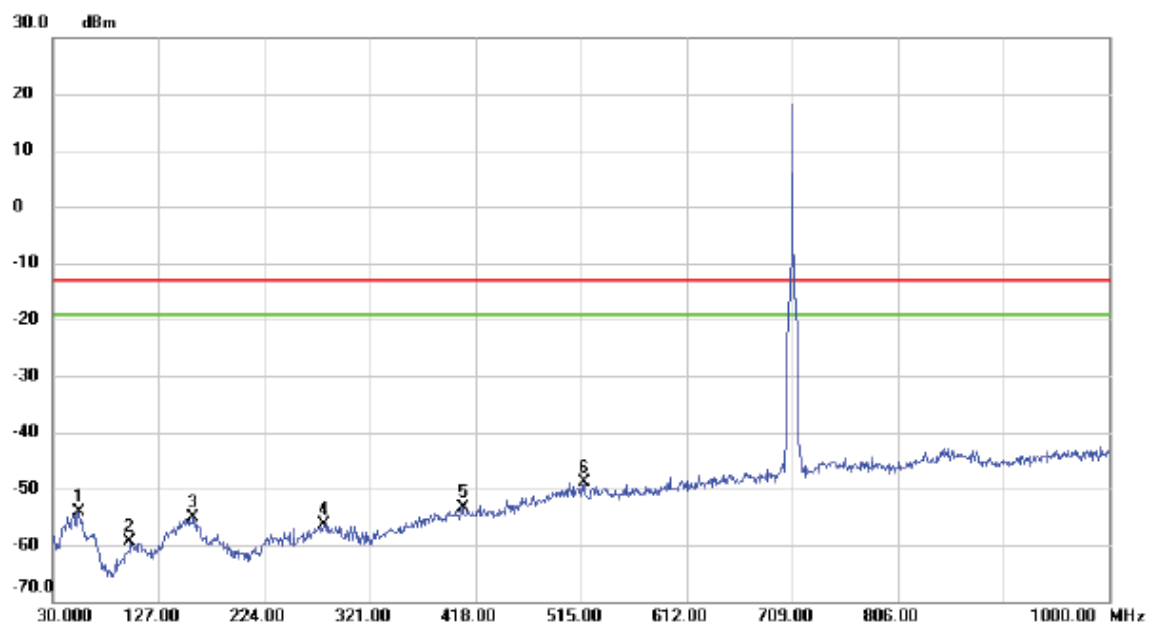
|            |                           |
|------------|---------------------------|
| Test Mode: | LTE Band 17_TX CH23755_5M |
|------------|---------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

Test Mode: LTE Band 17\_TX CH23780\_10M

**Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 53.280       | -76.01                  | 21.99                   | -54.02                  | -13.00       | -41.02       | peak     |         |
| 2   |     | 100.810      | -78.01                  | 18.65                   | -59.36                  | -13.00       | -46.36       | peak     |         |
| 3   |     | 159.010      | -78.36                  | 23.18                   | -55.18                  | -13.00       | -42.18       | peak     |         |
| 4   |     | 279.290      | -78.94                  | 22.62                   | -56.32                  | -13.00       | -43.32       | peak     |         |
| 5   |     | 406.360      | -77.65                  | 24.28                   | -53.37                  | -13.00       | -40.37       | peak     |         |
| 6   | *   | 517.910      | -76.28                  | 27.51                   | -48.77                  | -13.00       | -35.77       | peak     |         |

Test Mode: LTE Band 17\_TX CH23780\_10M

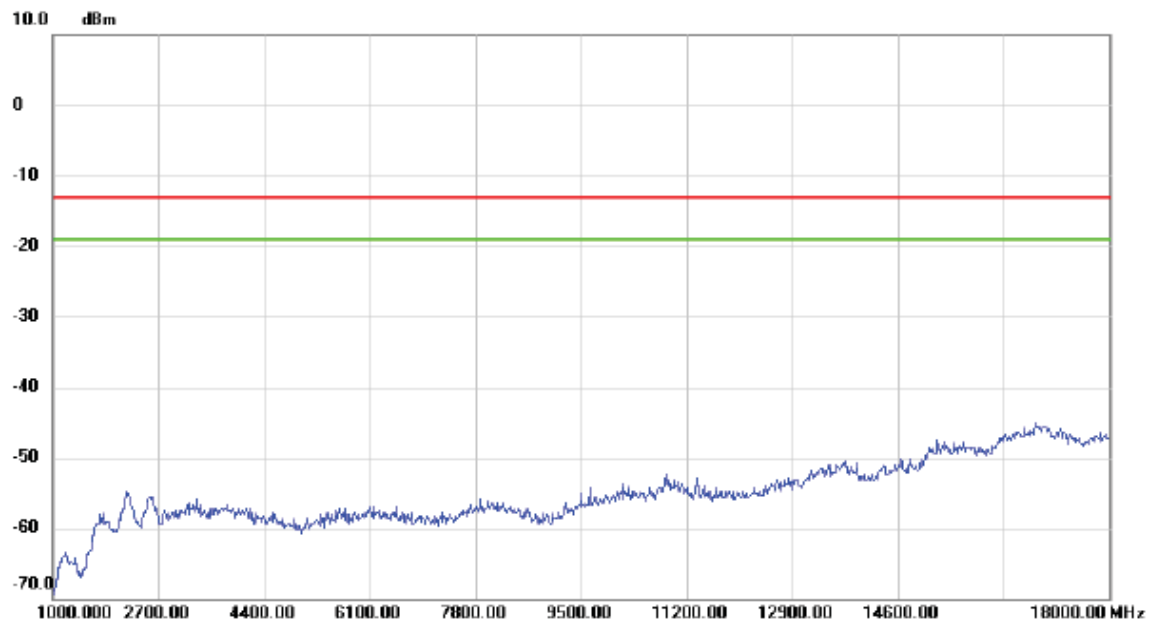
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1   |     | 42.610       | -78.02                  | 22.59                   | -55.43                  | -13.00       | -42.43       | peak     |         |
| 2   |     | 147.370      | -78.30                  | 23.95                   | -54.35                  | -13.00       | -41.35       | peak     |         |
| 3   |     | 227.880      | -77.60                  | 22.68                   | -54.92                  | -13.00       | -41.92       | peak     |         |
| 4   |     | 420.910      | -77.18                  | 26.78                   | -50.40                  | -13.00       | -37.40       | peak     |         |
| 5   |     | 518.880      | -77.17                  | 28.08                   | -49.09                  | -13.00       | -36.09       | peak     |         |
| 6   | *   | 623.640      | -77.58                  | 29.81                   | -47.77                  | -13.00       | -34.77       | peak     |         |

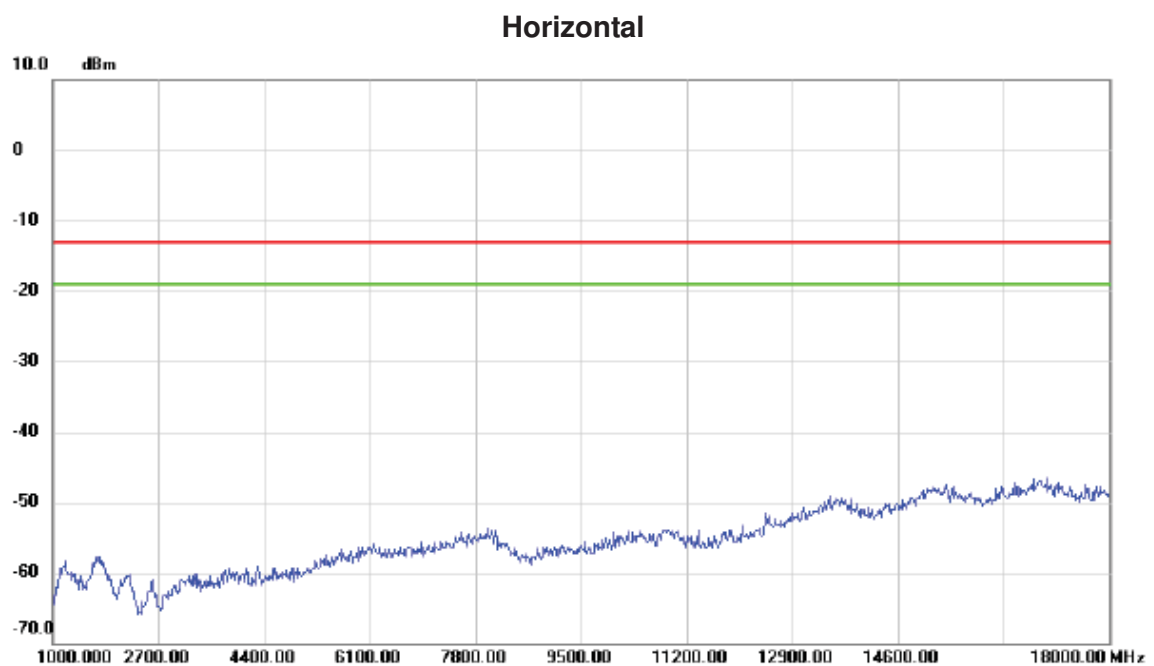
|            |                            |
|------------|----------------------------|
| Test Mode: | LTE Band 17_TX CH23780_10M |
|------------|----------------------------|

### Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |

|            |                            |
|------------|----------------------------|
| Test Mode: | LTE Band 17_TX CH23780_10M |
|------------|----------------------------|



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin |          |         |
|-----|-----|-------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz   | dBm           | dB             | dBm         | dBm   | dB     | Detector | Comment |