

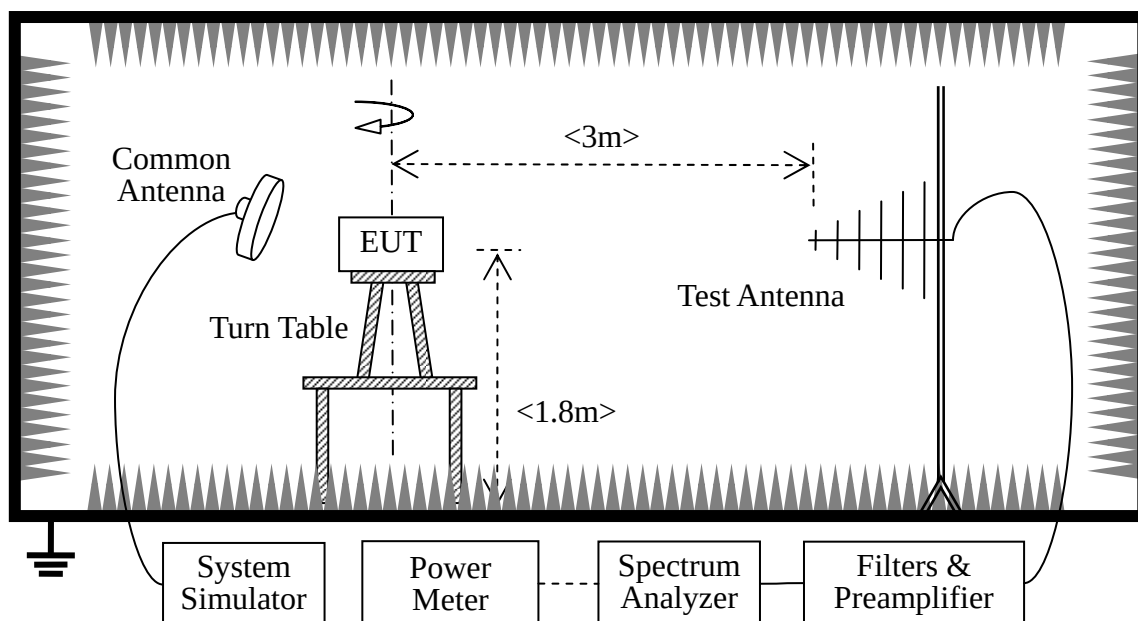
## 2.7 Transmitter Radiated Power (EIRP/ERP)

### 2.7.1 Requirement

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts, and FCC section 24.232, the broadband PCS mobile station is limited to 2 Watts e.i.r.p. peak power. FCC section 27.50, AWS 1700 test transmitters must not exceed 1Watts

### 2.7.2 Test Description

#### 1. Test Setup:



The EUT, which is powered by the Battery charged with the AC Adapter, is located in a 3m Full-Anechoic Chamber; the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power (i.e. GSM850MHz band Power Control Level (PCL) = 5/19 and Power Class = 4, GSM1900MHz band Power Control Level (PCL) = 0/15 and Power Class = 1), and only the test result of the maximum output power was recorded.

- GSM Maximum RF output power: GSM 850 33.42dBm, GSM 1900 29.39dBm, EGPRS 850 30.64dBm, EGPRS 26.60.WCDMA 850 24.88dBm, WCDMA 1900 23.52 dBm, WCDMA1700 24.23 dBm Please refer to section 2.1.3 of this report.

- Step size (dB): 3dB

- Minimum RF power: GSM 850 3.1dBm, GSM 1900 0.3dBm, EGPRS 850 3.1dBm, EGPRS 1900

0.21dBm ,WCDMA 850 0.39dBm ,WCDMA 1900 0.5dBm WCDMA 1700 0.5dBm.

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) or a Horn one (used for above 3GHz), and it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

## 2. Equipments List:

| Description           | Manufacturer | Model              | Serial No.   | Cal. Date | Cal. Due |
|-----------------------|--------------|--------------------|--------------|-----------|----------|
| System Simulator      | Agilent      | E5515C             | GB43130131   | 2013.05   | 2014.05  |
| Spectrum Analyzer     | Agilent      | E7405A             | US44210471   | 2013.05   | 2014.05  |
| Full-Anechoic Chamber | Albatross    | 9m*6m*6m           | (n.a.)       | 2013.05   | 2014.05  |
| Test Antenna - Bi-Log | Schwarzbeck  | VULB 9163          | 9163-274     | 2013.05   | 2014.05  |
| Test Antenna - Horn   | Schwarzbeck  | BBHA 9120C         | 9120C-384    | 2013.05   | 2014.05  |
| Substitution Antenna  | Schwarzbeck  | BBHA 9120C         | 9120C-384    | 2013.05   | 2014.05  |
| Pre-AMPs              | lucix        | S10M100L3802       | S020180L3203 | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C836.5-25-X   | NA           | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C1747.5-75-X2 | NA           | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C1880-60-X2   | NA           | 2013.05   | 2014.05  |

### 2.7.3 Test Result

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST\_TX}} - P_{\text{SUBST\_RX}} - L_{\text{SUBST\_CABLES}} + G_{\text{SUBST\_TX\_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where  $A_{\text{SUBST}}$  is the final substitution correction including receive antenna gain.

$P_{\text{SUBST\_TX}}$  is signal generator level,

$P_{\text{SUBST\_RX}}$  is receiver level,

$L_{\text{SUBST\_CABLES}}$  is cable losses including TX cable,

$G_{\text{SUBST\_TX\_ANT}}$  is substitution antenna gain.

$A_{\text{TOT}}$  is total correction factor including cable loss and substitution correction

During the test, the data of  $A_{\text{TOT}}$  was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of  $A_{\text{TOT}}$ .

## 1. GSM Model Test Verdict:

| Band             | Channel                                                                                                    | Frequency (MHz) | PCL | Measured ERP  |       |                          | Limit |   | Verdict |
|------------------|------------------------------------------------------------------------------------------------------------|-----------------|-----|---------------|-------|--------------------------|-------|---|---------|
|                  |                                                                                                            |                 |     | dBm           | W     | Refer to Plot            | dBm   | W |         |
| GSM<br>850MHz    | 128                                                                                                        | 824.20          | 5   | 31.40         | 1.380 | Plot A                   | 38.5  | 7 | PASS    |
|                  | 190                                                                                                        | 836.60          | 5   | 31.84         | 1.528 |                          |       |   | PASS    |
|                  | 251                                                                                                        | 848.80          | 5   | 31.86         | 1.535 |                          |       |   | PASS    |
| GPRS<br>850MHz   | 128                                                                                                        | 824.20          | 5   | 29.52         | 0.895 | Plot B <sup>Note 1</sup> | 38.5  | 7 | PASS    |
|                  | 190                                                                                                        | 836.60          | 5   | 29.75         | 0.944 |                          |       |   | PASS    |
|                  | 251                                                                                                        | 848.80          | 5   | 29.47         | 0.885 |                          |       |   | PASS    |
| EGPRS<br>850MHz  | 128                                                                                                        | 824.20          | 5   | 31.10         | 1.288 | Plot C <sup>Note 1</sup> | 38.5  | 7 | PASS    |
|                  | 190                                                                                                        | 836.60          | 5   | 31.04         | 1.271 |                          |       |   | PASS    |
|                  | 251                                                                                                        | 848.80          | 5   | 31.18         | 1.312 |                          |       |   | PASS    |
|                  |                                                                                                            |                 |     |               |       |                          |       |   |         |
| Band             | Channel                                                                                                    | Frequency (MHz) | PCL | Measured EIRP |       |                          | Limit |   | Verdict |
|                  |                                                                                                            |                 |     | dBm           | W     | Refer to Plot            | dBm   | W |         |
| GSM<br>1900MHz   | 512                                                                                                        | 1850.2          | 0   | 29.15         | 0.822 | Plot D                   | 33    | 2 | PASS    |
|                  | 661                                                                                                        | 1880.0          | 0   | 29.02         | 0.798 |                          |       |   | PASS    |
|                  | 810                                                                                                        | 1909.8          | 0   | 28.86         | 0.769 |                          |       |   | PASS    |
| GPRS<br>1900MHz  | 512                                                                                                        | 1850.2          | 0   | 27.06         | 0.508 | Plot E <sup>Note 1</sup> | 33    | 2 | PASS    |
|                  | 661                                                                                                        | 1880.0          | 0   | 27.18         | 0.522 |                          |       |   | PASS    |
|                  | 810                                                                                                        | 1909.8          | 0   | 26.86         | 0.485 |                          |       |   | PASS    |
| EGPRS<br>1900MHz | 512                                                                                                        | 1850.2          | 0   | 27.83         | 0.607 | Plot F <sup>Note 1</sup> | 33    | 2 | PASS    |
|                  | 661                                                                                                        | 1880.0          | 0   | 27.57         | 0.571 |                          |       |   | PASS    |
|                  | 810                                                                                                        | 1909.8          | 0   | 27.82         | 0.605 |                          |       |   | PASS    |
| Note 1:          | For the GPRS and EGPRS model, all the slots were tested and just the worst data was record in this report. |                 |     |               |       |                          |       |   |         |

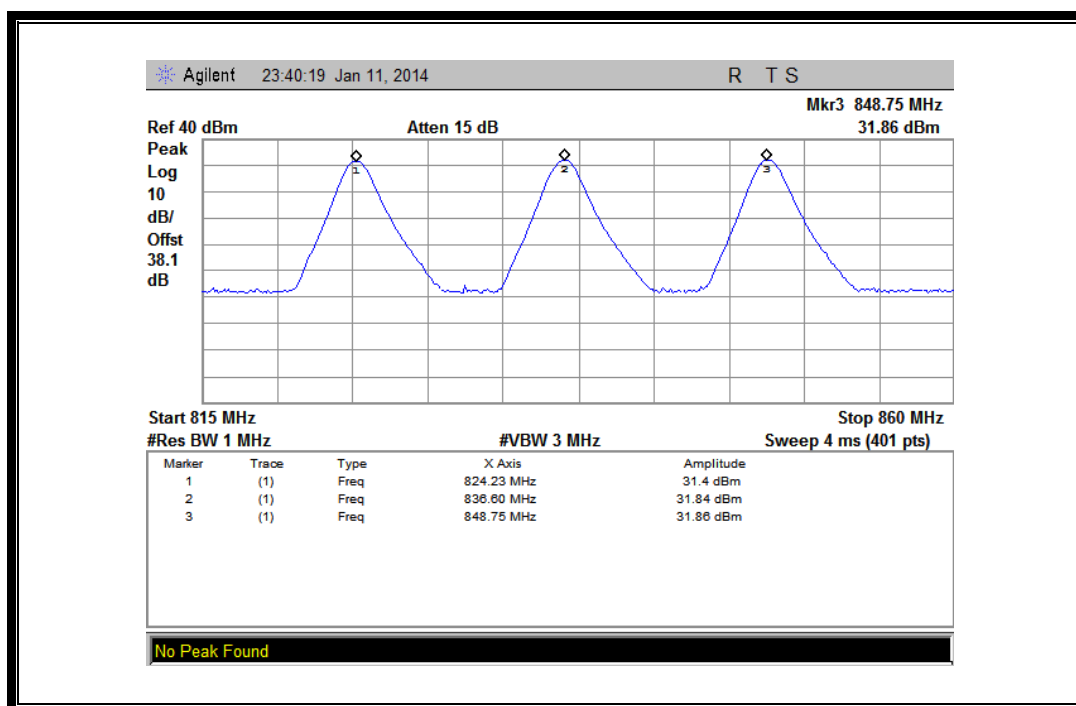
## 2. WCDMA Model Test Verdict:

| Band         | Channel | Frequency (MHz) | Measured ERP |       |               | Limit |   | Verdict |
|--------------|---------|-----------------|--------------|-------|---------------|-------|---|---------|
|              |         |                 | dBm          | W     | Refer to Plot | dBm   | W |         |
| WCDMA 850MHz | 4132    | 826.4           | 26.78        | 0.476 | Plot G        | 38.5  | 7 | PASS    |
|              | 4175    | 835             | 26.58        | 0.455 |               |       |   | PASS    |
|              | 4233    | 846.6           | 26.82        | 0.481 |               |       |   | PASS    |
| HSDPA 850MHz | 4132    | 826.4           | 26.67        | 0.465 | Plot H        | 38.5  | 7 | PASS    |
|              | 4175    | 835             | 26.50        | 0.447 |               |       |   | PASS    |
|              | 4233    | 846.6           | 26.81        | 0.480 |               |       |   | PASS    |
| HSUPA 850MHz | 4132    | 826.4           | 26.46        | 0.443 | Plot I        | 38.5  | 7 | PASS    |
|              | 4175    | 835             | 26.42        | 0.439 |               |       |   | PASS    |
|              | 4233    | 846.6           | 26.54        | 0.451 |               |       |   | PASS    |
| HSPA+ 850MHz | 4132    | 826.4           | 26.41        | 0.438 | Plot J        | 38.5  | 7 | PASS    |
|              | 4175    | 835             | 26.38        | 0.435 |               |       |   | PASS    |
|              | 4233    | 846.6           | 26.53        | 0.450 |               |       |   | PASS    |

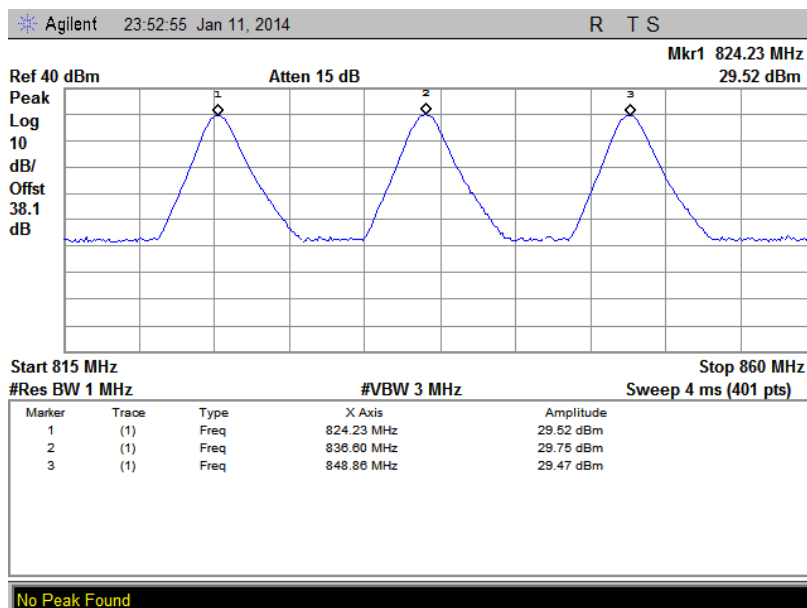
| Band          | Channel | Frequency (MHz) | Measured EIRP |       |        | Limit |   | Verdict |
|---------------|---------|-----------------|---------------|-------|--------|-------|---|---------|
|               |         |                 | dBm           | W     |        | dBm   | W |         |
| WCDMA 1900MHz | 9262    | 1852.4          | 24.14         | 0.259 | Plot K | 33    | 2 | PASS    |
|               | 9400    | 1880            | 23.65         | 0.232 |        |       |   | PASS    |
|               | 9538    | 1907.6          | 23.68         | 0.233 |        |       |   | PASS    |
| HSDPA 1900MHz | 9262    | 1852.4          | 24.09         | 0.256 | Plot L | 33    | 2 | PASS    |
|               | 9400    | 1880            | 23.61         | 0.230 |        |       |   | PASS    |
|               | 9538    | 1907.6          | 23.67         | 0.233 |        |       |   | PASS    |
| HSUPA 1900MHz | 9262    | 1852.4          | 23.93         | 0.247 | Plot M | 33    | 2 | PASS    |
|               | 9400    | 1880            | 23.59         | 0.229 |        |       |   | PASS    |
|               | 9538    | 1907.6          | 23.65         | 0.232 |        |       |   | PASS    |
| HSPA+ 1900MHz | 9262    | 1852.4          | 23.91         | 0.246 | Plot N | 33    | 2 | PASS    |
|               | 9400    | 1880            | 23.57         | 0.228 |        |       |   | PASS    |
|               | 9538    | 1907.6          | 23.52         | 0.225 |        |       |   | PASS    |

| Band             | Channel | Frequency (MHz) | Measured EIRP |       |        | Limit |   | Verdict |
|------------------|---------|-----------------|---------------|-------|--------|-------|---|---------|
|                  |         |                 | dBm           | W     |        | dBm   | W |         |
| WCDMA<br>1700MHz | 1312    | 1712.4          | 27.99         | 0.630 | Plot O | 30    | 1 | PASS    |
|                  | 1412    | 1732.4          | 27.96         | 0.625 |        |       |   | PASS    |
|                  | 1513    | 1752.6          | 27.89         | 0.615 |        |       |   | PASS    |
| HSDPA<br>1700MHz | 1312    | 1712.4          | 27.75         | 0.596 | Plot P | 30    | 1 | PASS    |
|                  | 1412    | 1732.4          | 27.95         | 0.624 |        |       |   | PASS    |
|                  | 1513    | 1752.6          | 27.84         | 0.608 |        |       |   | PASS    |
| HSUPA<br>1700MHz | 1312    | 1712.4          | 27.51         | 0.564 | Plot Q | 30    | 1 | PASS    |
|                  | 1412    | 1732.4          | 27.93         | 0.621 |        |       |   | PASS    |
|                  | 1513    | 1752.6          | 27.81         | 0.604 |        |       |   | PASS    |
| HSPA+<br>1700MHz | 1312    | 1712.4          | 27.20         | 0.525 | Plot R | 30    | 1 | PASS    |
|                  | 1412    | 1732.4          | 27.89         | 0.615 |        |       |   | PASS    |
|                  | 1513    | 1752.6          | 27.79         | 0.601 |        |       |   | PASS    |

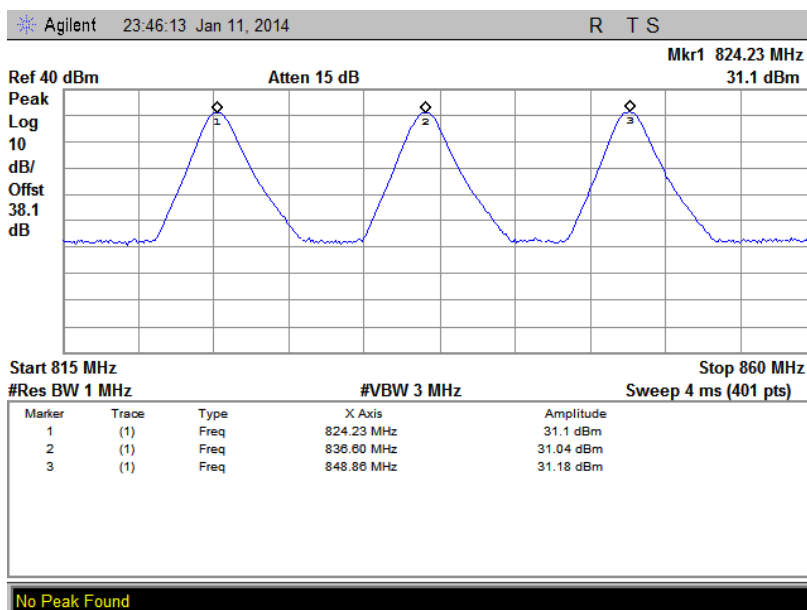
### 3. Test Plots:



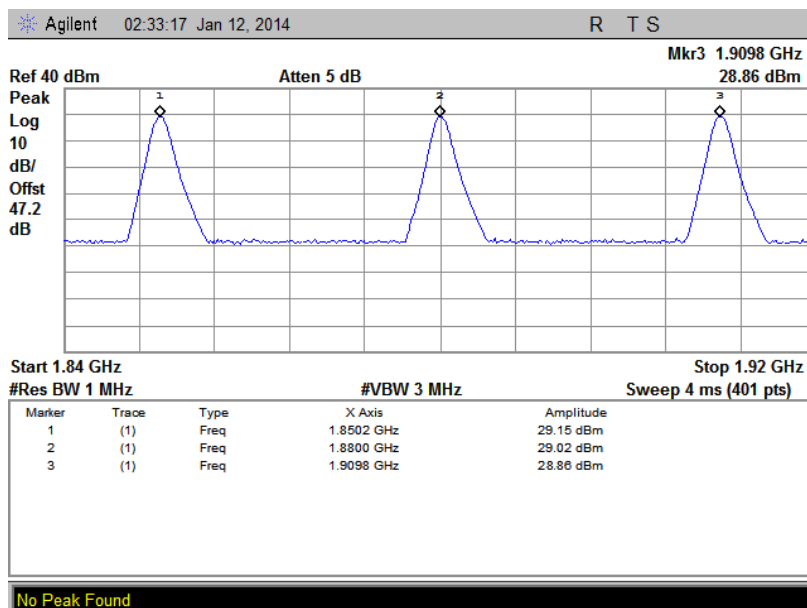
(Plot A: GSM 850MHz Channel = 128, 190, 251)



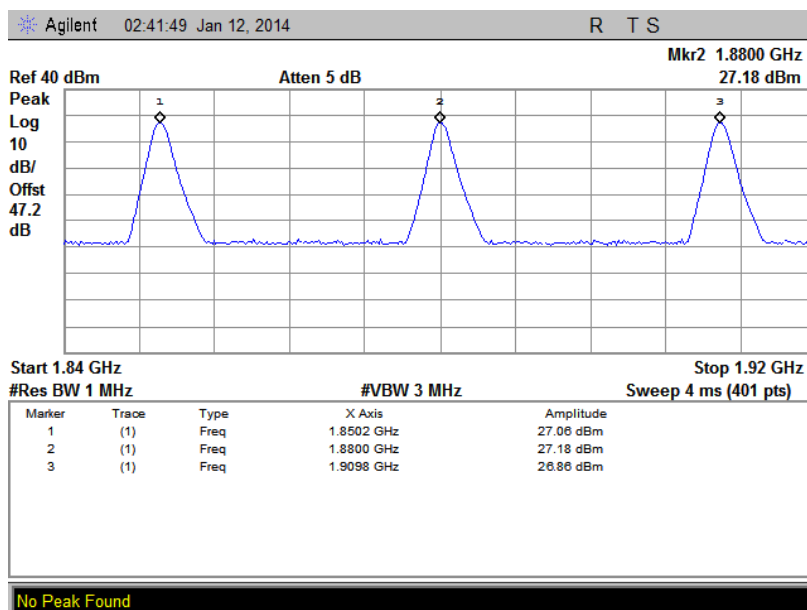
(Plot B: GPRS 850MHz Channel = 128, 190, 251)



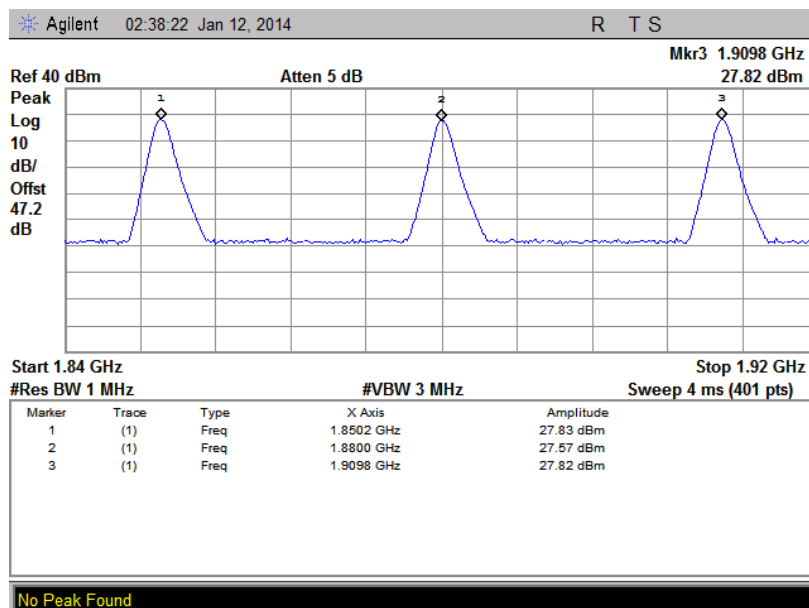
(Plot C: EGPRS 850MHz Channel = 128, 190, 251)



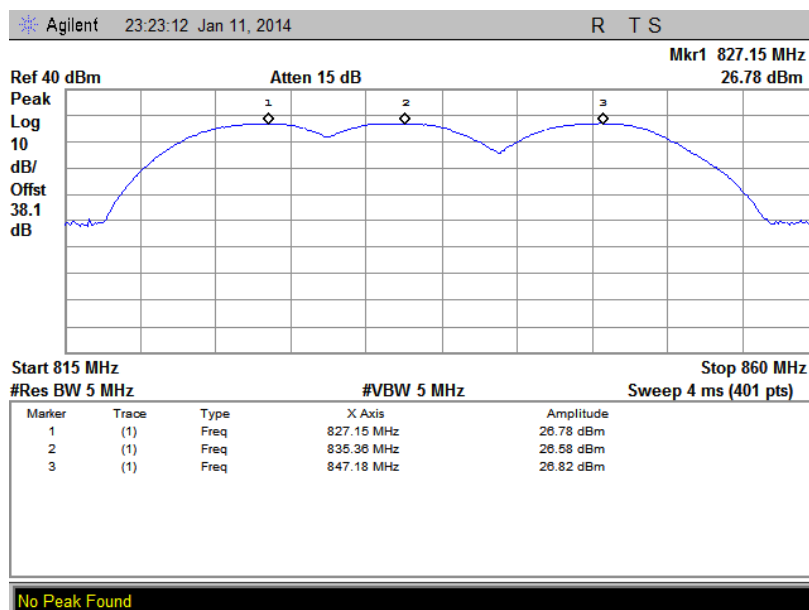
(Plot D: GSM 1900MHz Channel = 512, 661, 810)



(Plot E: GPRS 1900MHz Channel = 512, 661, 810)

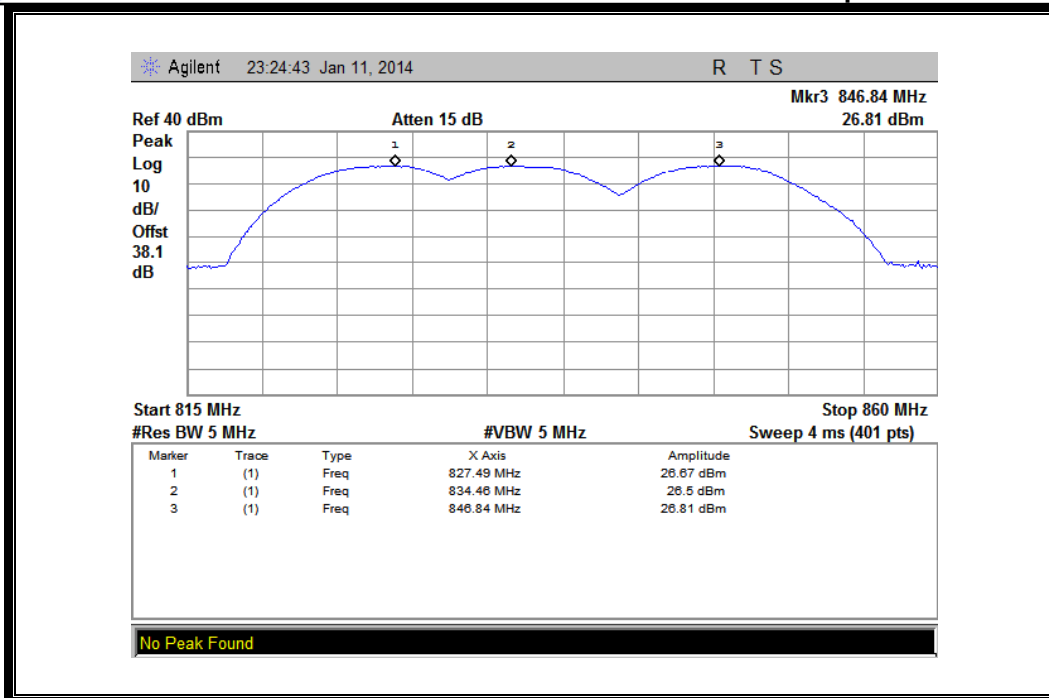


(Plot F: EGPRS 1900MHz Channel = 512, 661, 810)

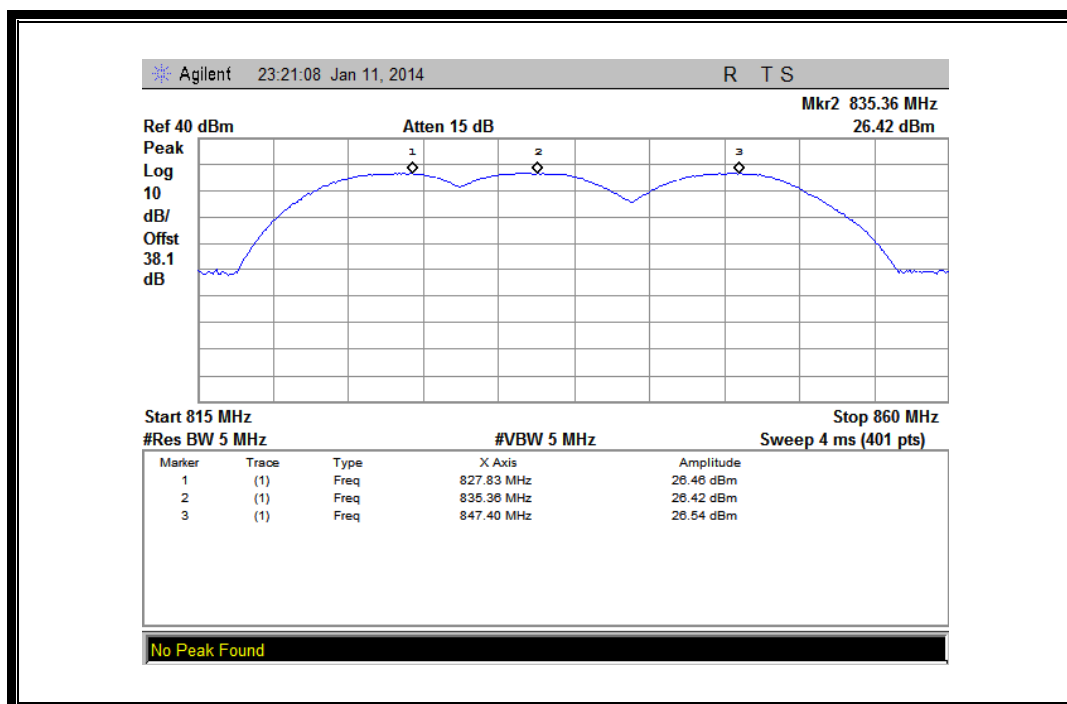


(Plot G: WCDMA 850 MHz Channel = 4132, 4175, 4233)

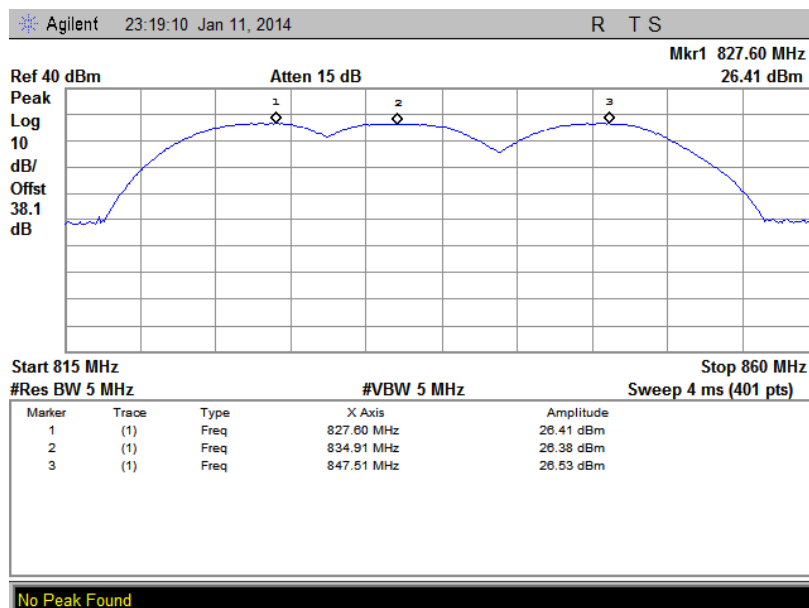




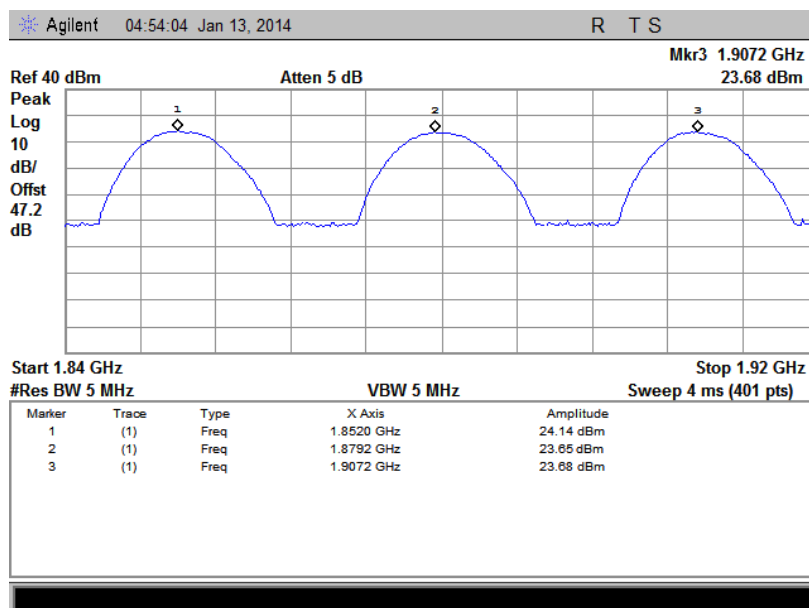
(Plot H: HSDPA 850 MHz Channel = 4132, 4175, 4233)



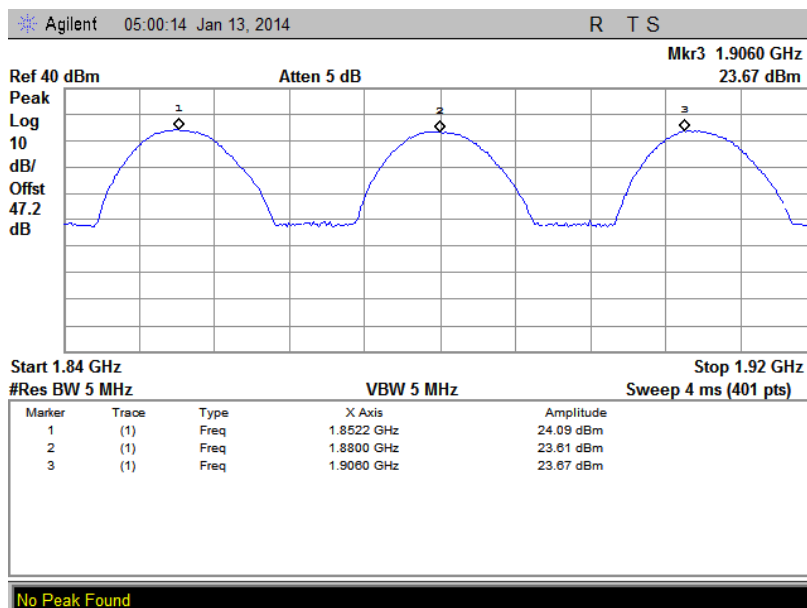
(Plot I: HSUPA 850 MHz Channel = 4132, 4175, 4233)



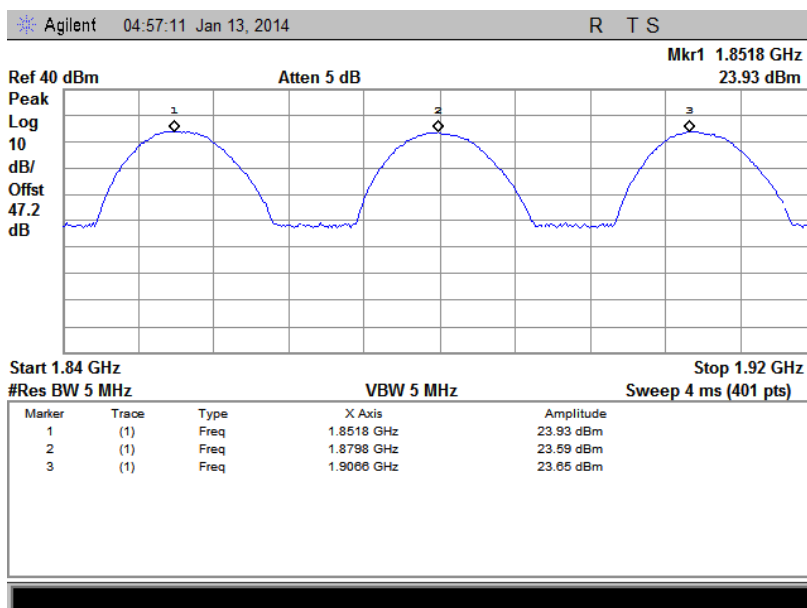
(Plot J: HSPA+ 850 MHz Channel = 4132, 4175, 4233)



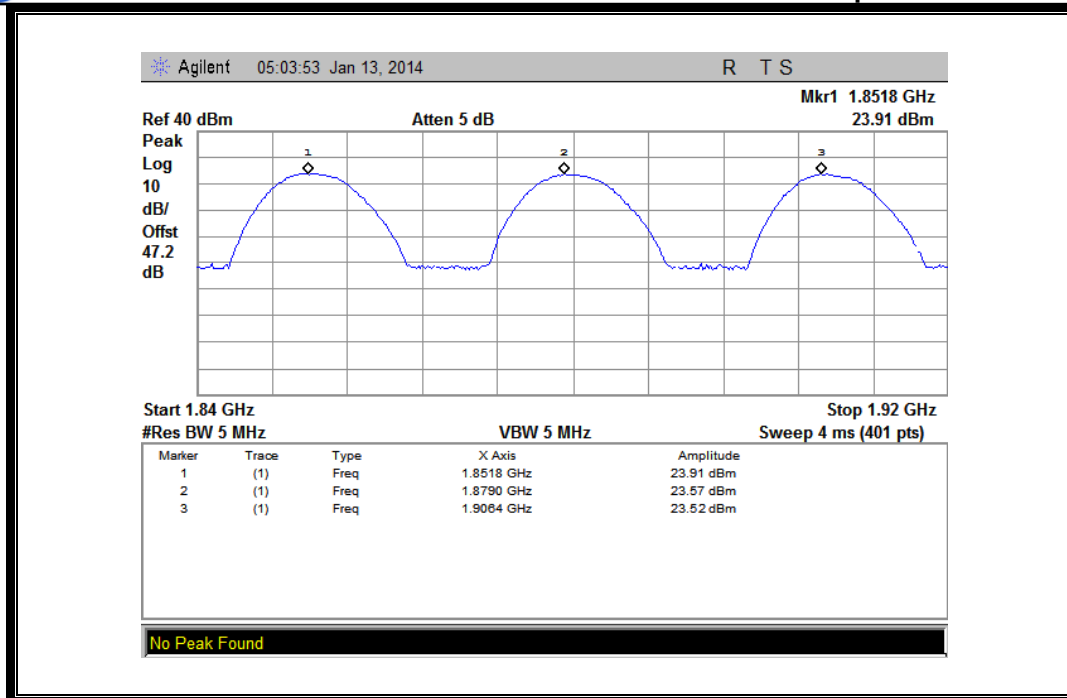
(Plot K: WCDMA 1900 MHz Channel = 9262, 9400, 9538)



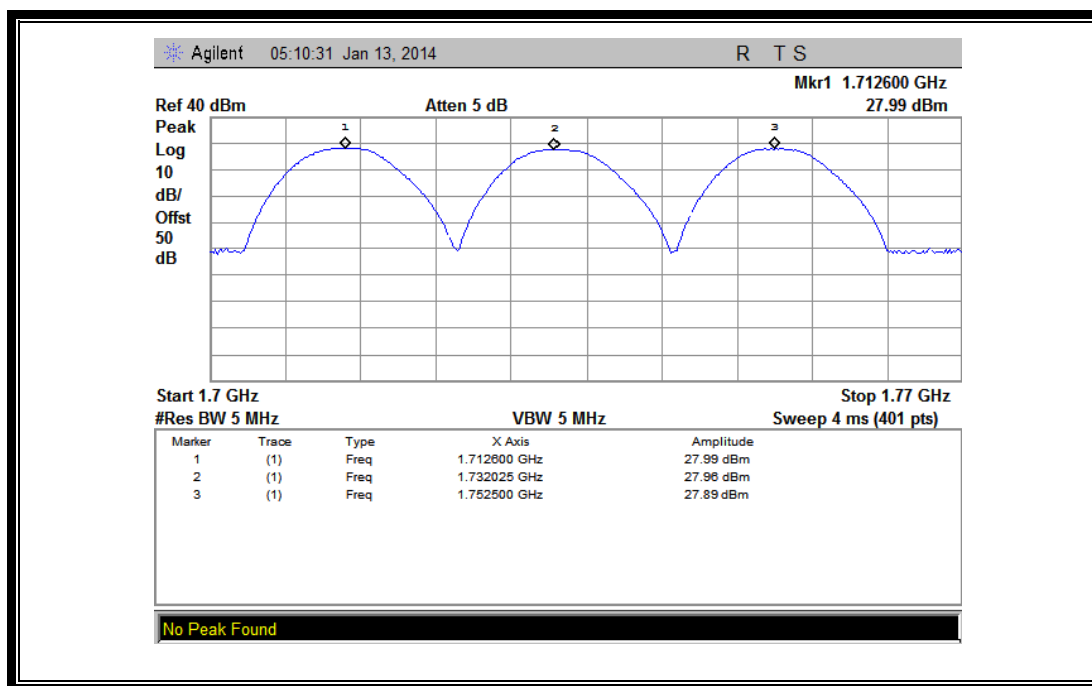
(Plot L: HSDPA1900 MHz Channel = 9262, 9400, 9538)



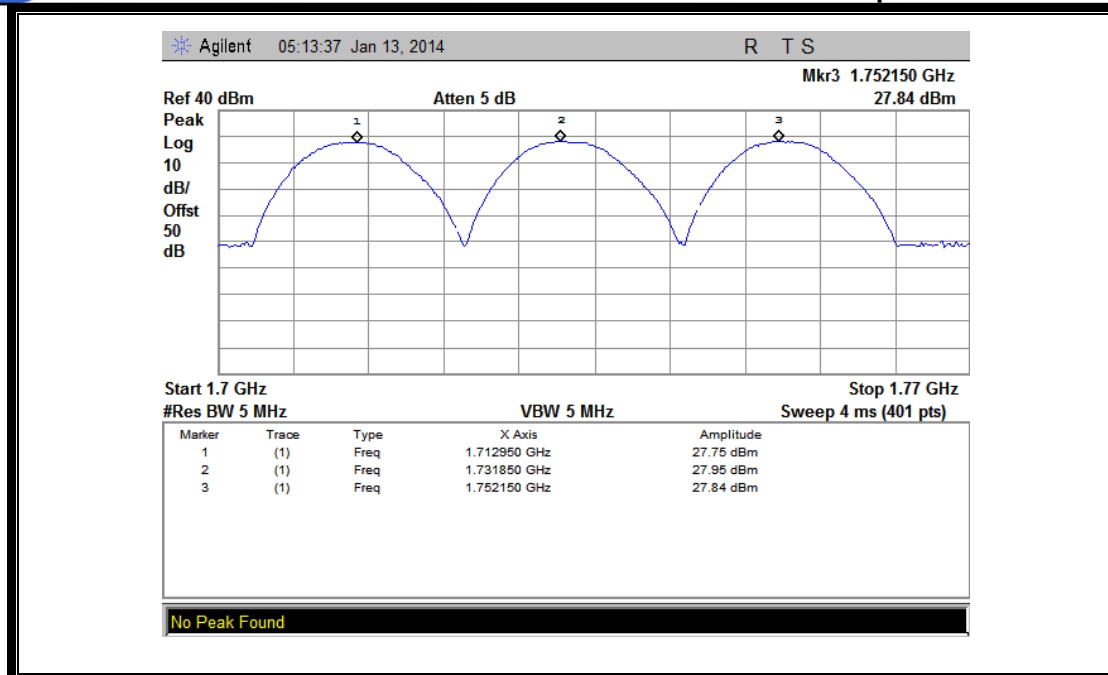
(Plot M: HSUPA1900 MHz Channel = 9262, 9400, 9538)



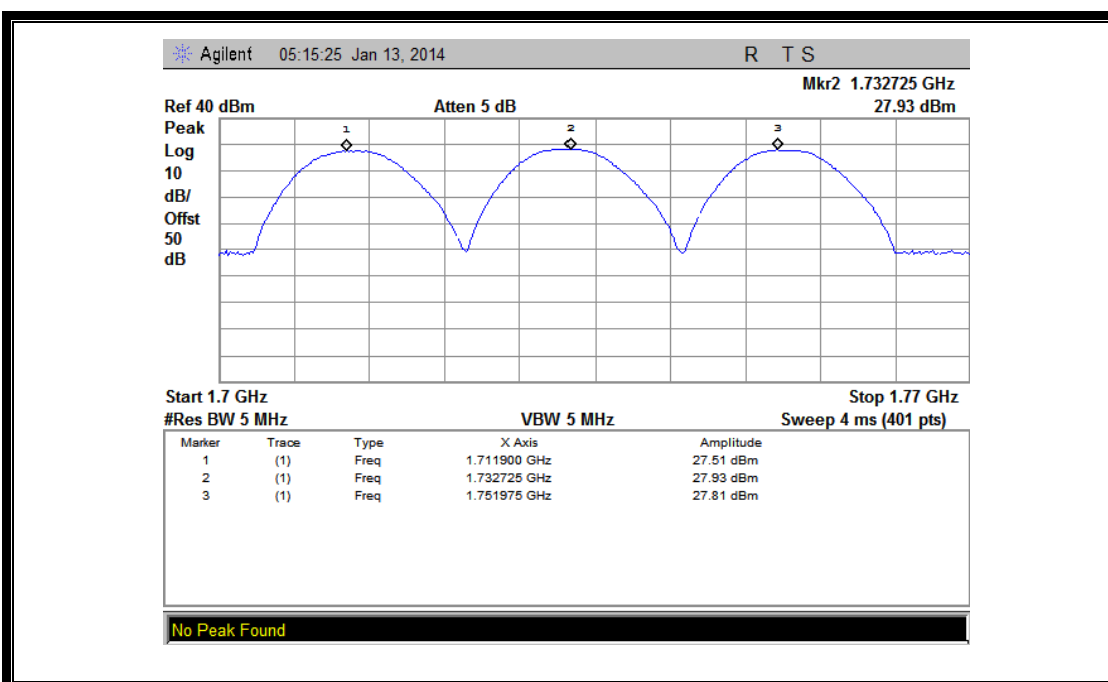
(Plot N: HSPA+1900 MHz Channel = 9262, 9400, 9538)



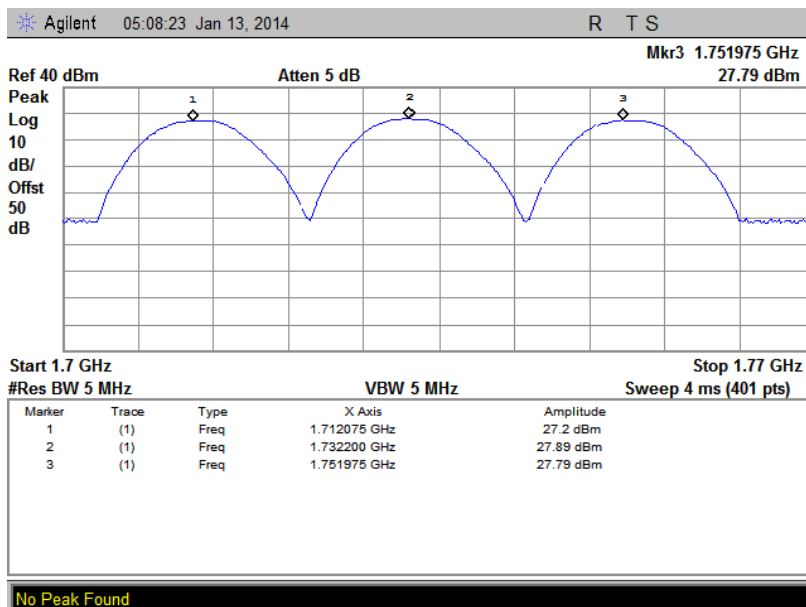
(Plot O: WCDMA 1700MHz Channel = 1312, 1412, 1513)



(Plot P: HSDPA 1700MHz Channel = 1312, 1412, 1513)



(Plot Q: HSUPA 1700MHz Channel = 1312, 1412, 1513)



(Plot R: HSPA+ 1700MHz Channel = 1312, 1412, 1513)

## 2.8 Radiated Out of Band Emissions

### 2.8.1 Requirement

According to FCC section 22.917(a) and section 24.238(a), 27.53(g) 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. This calculated to be -13dBm.

The spurious emission with frequency band 1900 according to FCC section 2.1057.

### 2.8.2 Test Description

See section 2.7.2 of this report.

Equipment List:

| Description           | Manufacturer | Model              | Serial No.   | Cal. Date | Cal. Due |
|-----------------------|--------------|--------------------|--------------|-----------|----------|
| System Simulator      | Agilent      | E5515C             | GB43130131   | 2013.05   | 2014.05  |
| Spectrum Analyzer     | Agilent      | E7405A             | US44210471   | 2013.05   | 2014.05  |
| Full-Anechoic Chamber | Albatross    | 9m*6m*6m           | (n.a.)       | 2013.05   | 2014.05  |
| Test Antenna - Bi-Log | Schwarzbeck  | VULB 9163          | 9163-274     | 2013.05   | 2014.05  |
| Test Antenna - Horn   | Schwarzbeck  | BBHA 9120C         | 9120C-384    | 2013.05   | 2014.05  |
| Substitution Antenna  | Schwarzbeck  | BBHA 9120C         | 9120C-384    | 2013.05   | 2014.05  |
| Pre-AMPs              | lucix        | S10M100L3802       | S020180L3203 | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C836.5-25-X   | NA           | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C1747.5-75-X2 | NA           | 2013.05   | 2014.05  |
| Notch Filter          | COM-MW       | ZBSF-C1880-60-X2   | NA           | 2013.05   | 2014.05  |

**Note:** when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

### 2.8.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

## 1. Test Verdict:

| Band          | Channel | Frequency (MHz) | Measured Max. Spurious Emission (dBm) |                       | Refer to Plot | Limit (dBm) | Verdict     |
|---------------|---------|-----------------|---------------------------------------|-----------------------|---------------|-------------|-------------|
|               |         |                 | Test Antenna Horizontal               | Test Antenna Vertical |               |             |             |
| GSM 850MHz    | 128     | 824.2           | < -25                                 | < -25                 | Plot A.1/A.2  | -13         | <u>PASS</u> |
|               | 190     | 836.6           | < -25                                 | < -25                 | Plot A.3/A.4  |             | <u>PASS</u> |
|               | 251     | 848.8           | < -25                                 | < -25                 | Plot A.5/A.6  |             | <u>PASS</u> |
| GSM 1900MHz   | 512     | 1850.2          | < -25                                 | < -25                 | Plot B.1/B.2  | -13         | <u>PASS</u> |
|               | 661     | 1880.0          | < -25                                 | < -25                 | Plot B.3/B.4  |             | <u>PASS</u> |
|               | 810     | 1909.8          | < -25                                 | < -25                 | Plot B.5/B.6  |             | <u>PASS</u> |
| EDGE 850MHz   | 128     | 824.2           | < -25                                 | < -25                 | Plot C.1/C.2  | -13         | <u>PASS</u> |
|               | 190     | 836.6           | < -25                                 | < -25                 | Plot C.3/C.4  |             | <u>PASS</u> |
|               | 251     | 848.8           | < -25                                 | < -25                 | Plot C.5/C.6  |             | <u>PASS</u> |
| EDGE 1900MHz  | 512     | 1850.2          | < -25                                 | < -25                 | Plot D.1/D.2  | -13         | <u>PASS</u> |
|               | 661     | 1880.0          | < -25                                 | < -25                 | Plot D.3/D.4  |             | <u>PASS</u> |
|               | 810     | 1909.8          | < -25                                 | < -25                 | Plot D.5/D.6  |             | <u>PASS</u> |
| WCDMA 850MHz  | 4132    | 826.4           | < -25                                 | < -25                 | Plot E.1/E.2  | -13         | <u>PASS</u> |
|               | 4175    | 835             | < -25                                 | < -25                 | Plot E.3/E.4  |             | <u>PASS</u> |
|               | 4233    | 846.6           | < -25                                 | < -25                 | Plot E.5/E.6  |             | <u>PASS</u> |
| WCDMA 1900MHz | 9262    | 1852.4          | < -25                                 | < -25                 | Plot F.1/F.2  | -13         | <u>PASS</u> |
|               | 9400    | 1880            | < -25                                 | < -25                 | Plot F.3/F.4  |             | <u>PASS</u> |
|               | 9538    | 1907.6          | < -25                                 | < -25                 | Plot F.5/F.6  |             | <u>PASS</u> |
| HSDPA 850MHz  | 4132    | 826.4           | < -25                                 | < -25                 | Plot G.1/G.2  | -13         | <u>PASS</u> |
|               | 4175    | 835             | < -25                                 | < -25                 | Plot G.3/G.4  |             | <u>PASS</u> |
|               | 4233    | 846.6           | < -25                                 | < -25                 | Plot G.5/G.6  |             | <u>PASS</u> |
| HSDPA 1900MHz | 9262    | 1852.4          | < -25                                 | < -25                 | Plot H.1/H.2  | -13         | <u>PASS</u> |
|               | 9400    | 1880            | < -25                                 | < -25                 | Plot H.3/H.4  |             | <u>PASS</u> |
|               | 9538    | 1907.6          | < -25                                 | < -25                 | Plot H.5/H.6  |             | <u>PASS</u> |
| HSUPA 850MHz  | 4132    | 826.4           | < -25                                 | < -25                 | Plot I.1/I.2  | -13         | <u>PASS</u> |
|               | 4175    | 835             | < -25                                 | < -25                 | Plot I.3/I.4  |             | <u>PASS</u> |
|               | 4233    | 846.6           | < -25                                 | < -25                 | Plot I.5/I.6  |             | <u>PASS</u> |
| HSUPA 1900MHz | 9262    | 1852.4          | < -25                                 | < -25                 | Plot J.1/J.2  | -13         | <u>PASS</u> |
|               | 9400    | 1880            | < -25                                 | < -25                 | Plot J.3/J.4  |             | <u>PASS</u> |
|               | 9538    | 1907.6          | < -25                                 | < -25                 | Plot J.5/J.6  |             | <u>PASS</u> |
| HSPA+ 850MHz  | 4132    | 826.4           | < -25                                 | < -25                 | Plot K.1/K.2  | -13         | <u>PASS</u> |
|               | 4175    | 835             | < -25                                 | < -25                 | Plot K.3/K.4  |             | <u>PASS</u> |
|               | 4233    | 846.6           | < -25                                 | < -25                 | Plot K.5/K.6  |             | <u>PASS</u> |
| HSPA+ 1900MHz | 9662    | 1852.4          | < -25                                 | < -25                 | Plot L.1/L.2  | -13         | <u>PASS</u> |
|               | 9800    | 1880            | < -25                                 | < -25                 | Plot L.3/L.4  |             | <u>PASS</u> |
|               | 9938    | 1907.6          | < -25                                 | < -25                 | Plot L.5/L.6  |             | <u>PASS</u> |

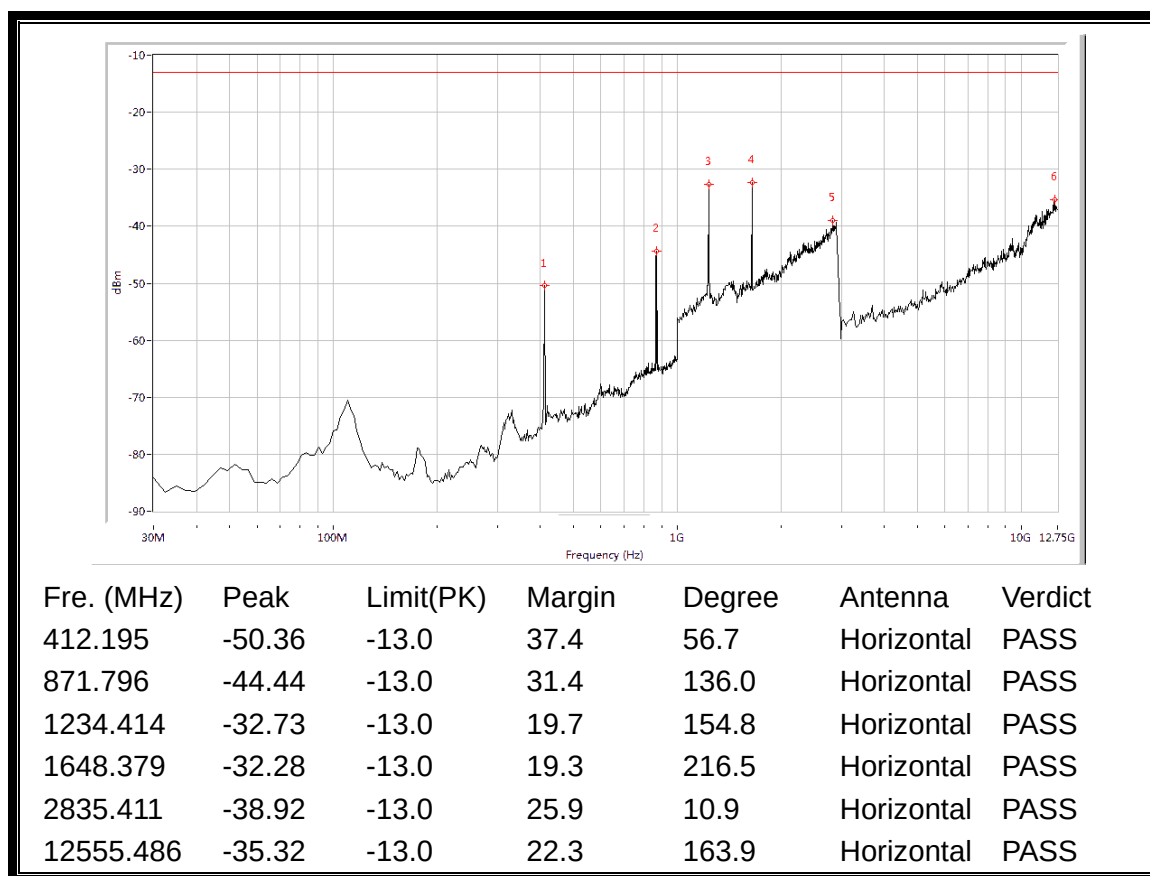


| Band          | Channel | Frequency (MHz) | Measured Max. Spurious Emission (dBm) |                       | Refer to Plot | Limit (dBm) | Verdict     |
|---------------|---------|-----------------|---------------------------------------|-----------------------|---------------|-------------|-------------|
|               |         |                 | Test Antenna Horizontal               | Test Antenna Vertical |               |             |             |
| WCDMA 1700MHz | 1312    | 1712.4          | < -25                                 | < -25                 | Plot M.1/M.2  | -13         | <u>PASS</u> |
|               | 1412    | 1732.4          | < -25                                 | < -25                 | Plot M.3/M.4  |             | <u>PASS</u> |
|               | 1513    | 1752.6          | < -25                                 | < -25                 | Plot M.5/M.6  |             | <u>PASS</u> |
| HSDPA 1700MHz | 1312    | 1712.4          | < -25                                 | < -25                 | Plot N.1/N.2  | -13         | <u>PASS</u> |
|               | 1412    | 1732.4          | < -25                                 | < -25                 | Plot N.3/N.4  |             | <u>PASS</u> |
|               | 1513    | 1752.6          | < -25                                 | < -25                 | Plot N.5/N.6  |             | <u>PASS</u> |
| HSUPA 1700MHz | 1312    | 1712.4          | < -25                                 | < -25                 | Plot O.1/O.2  | -13         | <u>PASS</u> |
|               | 1412    | 1732.4          | < -25                                 | < -25                 | Plot O.3/O.4  |             | <u>PASS</u> |
|               | 1513    | 1752.6          | < -25                                 | < -25                 | Plot O.5/O.6  |             | <u>PASS</u> |
| HSPA+ 1700MHz | 1312    | 1712.4          | < -25                                 | < -25                 | Plot P.1/P.2  | -13         | <u>PASS</u> |
|               | 1412    | 1732.4          | < -25                                 | < -25                 | Plot P.3/P.4  |             | <u>PASS</u> |
|               | 1513    | 1752.6          | < -25                                 | < -25                 | Plot P.5/P.6  |             | <u>PASS</u> |

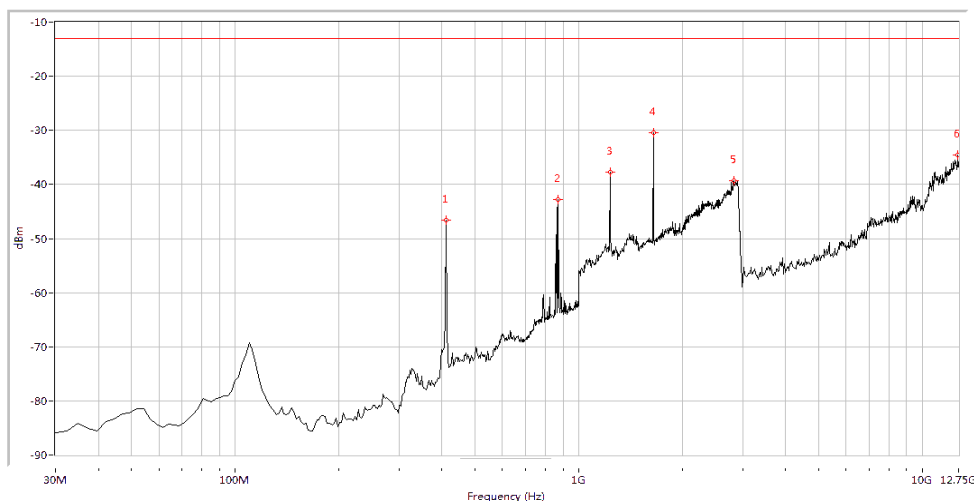
## 2. Test Plots for the Whole Measurement Frequency Range:

Note1: the power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

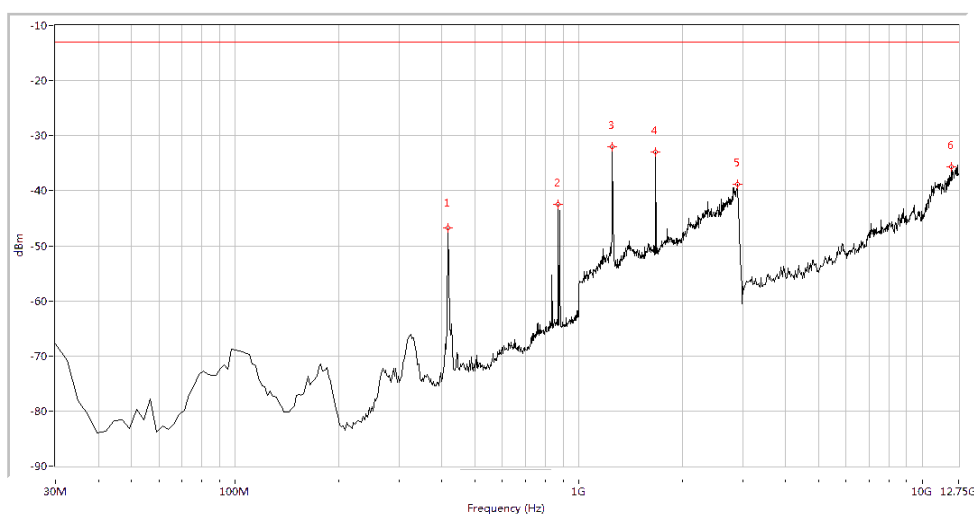


(Plot A.1: GSM 850MHz Channel = 128, Test Antenna Horizontal)



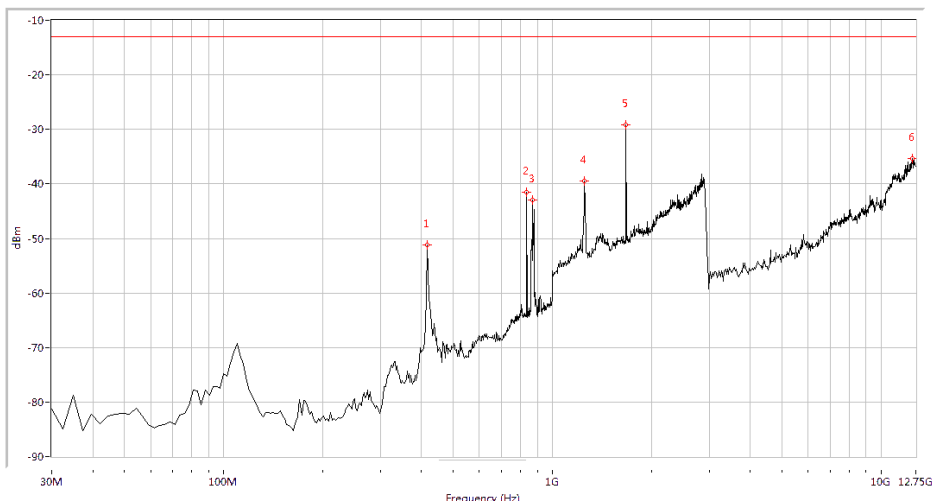
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 412.195    | -46.56 | -13.0     | 33.6   | 148.2  | Vertical | PASS    |
| 871.796    | -42.86 | -13.0     | 29.9   | 239.0  | Vertical | PASS    |
| 1234.414   | -37.78 | -13.0     | 24.8   | 323.0  | Vertical | PASS    |
| 1648.379   | -30.51 | -13.0     | 17.5   | 360.0  | Vertical | PASS    |
| 2825.436   | -39.28 | -13.0     | 26.3   | 19.8   | Vertical | PASS    |
| 12701.372  | -34.48 | -13.0     | 21.5   | 360.0  | Vertical | PASS    |

(Plot A.2: GSM 850MHz Channel = 128, Test Antenna Vertical)



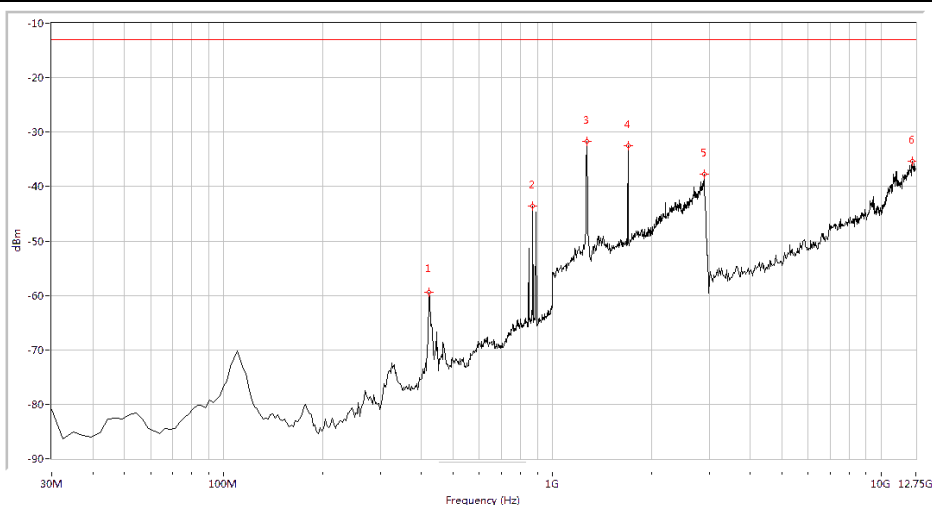
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 417.032    | -46.71 | -13.0     | 33.7   | 66.5   | Horizontal | PASS    |
| 871.796    | -42.48 | -13.0     | 29.5   | 134.5  | Horizontal | PASS    |
| 1254.364   | -31.98 | -13.0     | 19.0   | 137.4  | Horizontal | PASS    |
| 1673.317   | -33.00 | -13.0     | 20.0   | 156.7  | Horizontal | PASS    |
| 2900.249   | -38.84 | -13.0     | 25.8   | 166.4  | Horizontal | PASS    |
| 12142.145  | -35.59 | -13.0     | 22.6   | 202.2  | Horizontal | PASS    |

(Plot A.3: GSM 850MHz Channel = 190, Test Antenna Horizontal)



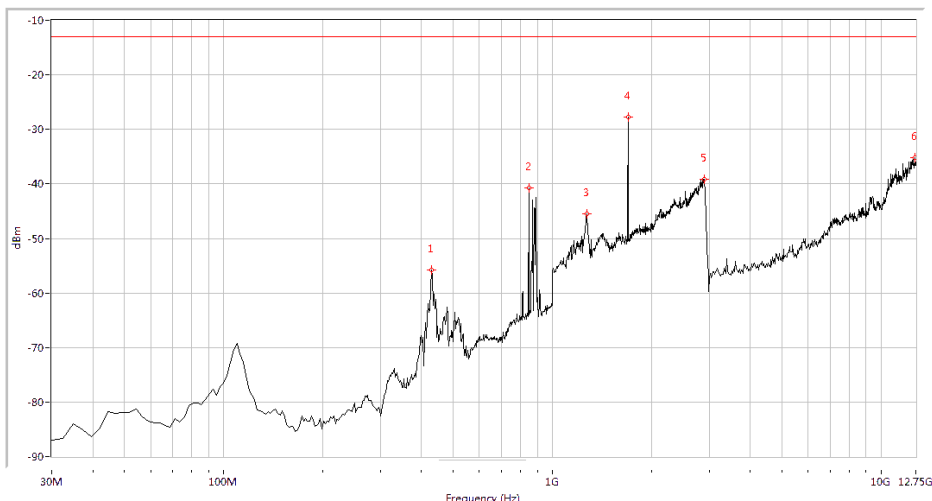
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 417.032    | -51.13 | -13.0     | 38.1   | 58.4   | Vertical | PASS    |
| 835.511    | -41.46 | -13.0     | 28.5   | 170.7  | Vertical | PASS    |
| 871.796    | -42.93 | -13.0     | 29.9   | 58.4   | Vertical | PASS    |
| 1254.364   | -39.54 | -13.0     | 26.5   | 336.5  | Vertical | PASS    |
| 1673.317   | -29.17 | -13.0     | 16.2   | 73.9   | Vertical | PASS    |
| 12433.915  | -35.35 | -13.0     | 22.3   | 2.4    | Vertical | PASS    |

(Plot A.4: GSM 850MHz Channel = 190, Test Antenna Vertical)



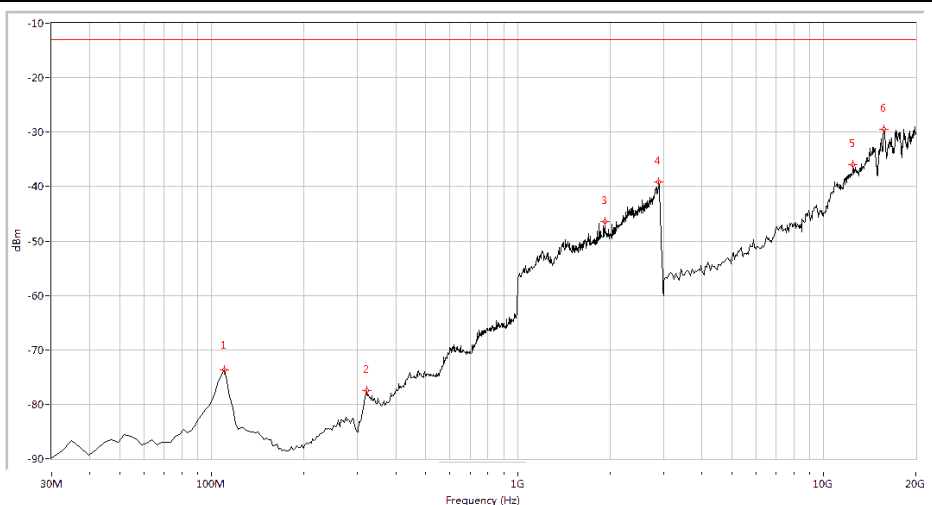
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 421.870    | -59.35 | -13.0     | 46.3   | 333.5  | Horizontal | PASS    |
| 871.796    | -43.61 | -13.0     | 30.6   | 135.6  | Horizontal | PASS    |
| 1274.314   | -31.78 | -13.0     | 18.8   | 134.7  | Horizontal | PASS    |
| 1698.254   | -32.45 | -13.0     | 19.5   | 200.2  | Horizontal | PASS    |
| 2895.262   | -37.73 | -13.0     | 24.7   | 90.8   | Horizontal | PASS    |
| 12482.544  | -35.40 | -13.0     | 22.4   | 159.5  | Horizontal | PASS    |

(Plot A.5: GSM 850MHz Channel = 251, Test Antenna Horizontal)



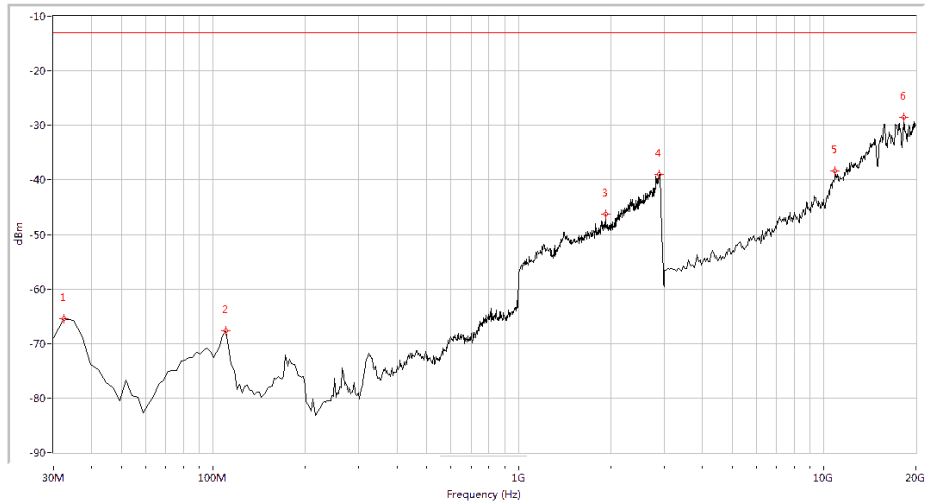
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 429.127    | -55.84 | -13.0     | 42.8   | 140.2  | Vertical | PASS    |
| 847.606    | -40.80 | -13.0     | 27.8   | 359.6  | Vertical | PASS    |
| 1274.314   | -45.44 | -13.0     | 32.4   | 360.0  | Vertical | PASS    |
| 1698.254   | -27.67 | -13.0     | 14.7   | 297.8  | Vertical | PASS    |
| 2890.274   | -39.16 | -13.0     | 26.2   | 181.0  | Vertical | PASS    |
| 12701.372  | -35.12 | -13.0     | 22.1   | 262.6  | Vertical | PASS    |

(Plot A.6: GSM 850MHz Channel = 251, Test Antenna Vertical)



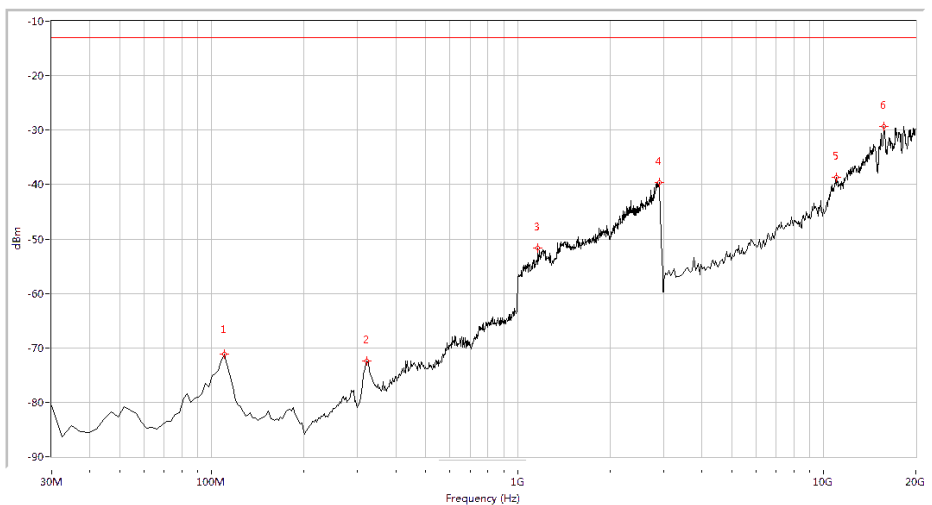
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -73.74 | -13.0     | 60.7   | 0.1    | Horizontal | PASS    |
| 320.274    | -77.49 | -13.0     | 64.5   | 182.1  | Horizontal | PASS    |
| 1927.681   | -46.46 | -13.0     | 33.5   | 263.7  | Horizontal | PASS    |
| 2890.274   | -39.17 | -13.0     | 26.2   | 346.9  | Horizontal | PASS    |
| 12453.865  | -35.97 | -13.0     | 23.0   | 75.7   | Horizontal | PASS    |
| 15718.204  | -29.49 | -13.0     | 16.5   | 8.8    | Horizontal | PASS    |

(Plot B.1: GSM 1900MHz Channel = 512, Test Antenna Horizontal)



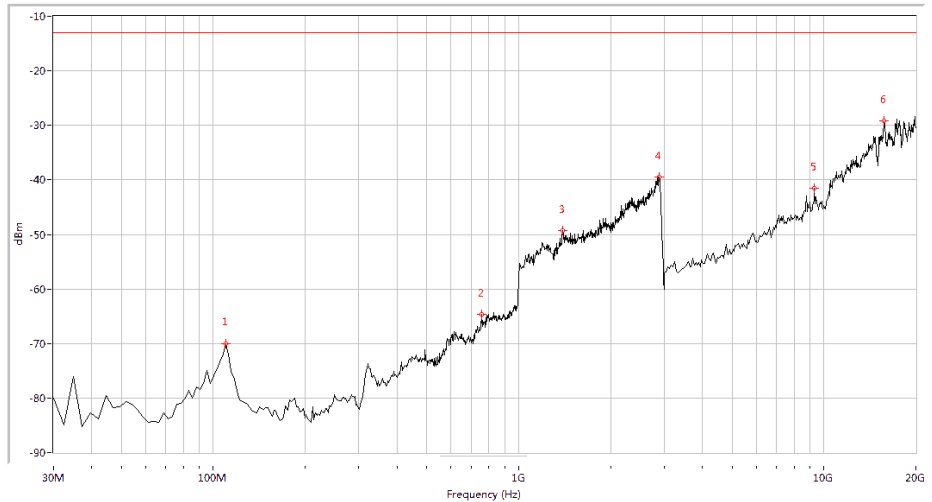
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 32.419     | -65.40 | -13.0     | 52.4   | 206.2  | Vertical | PASS    |
| 109.825    | -67.74 | -13.0     | 54.7   | 174.2  | Vertical | PASS    |
| 1927.681   | -46.20 | -13.0     | 33.2   | 226.7  | Vertical | PASS    |
| 2895.262   | -38.95 | -13.0     | 25.9   | 281.8  | Vertical | PASS    |
| 10885.287  | -38.37 | -13.0     | 25.4   | 226.5  | Vertical | PASS    |
| 18304.239  | -28.55 | -13.0     | 15.6   | 276.4  | Vertical | PASS    |

(Plot B.2: GSM 1900MHz Channel = 512, Test Antenna Vertical)



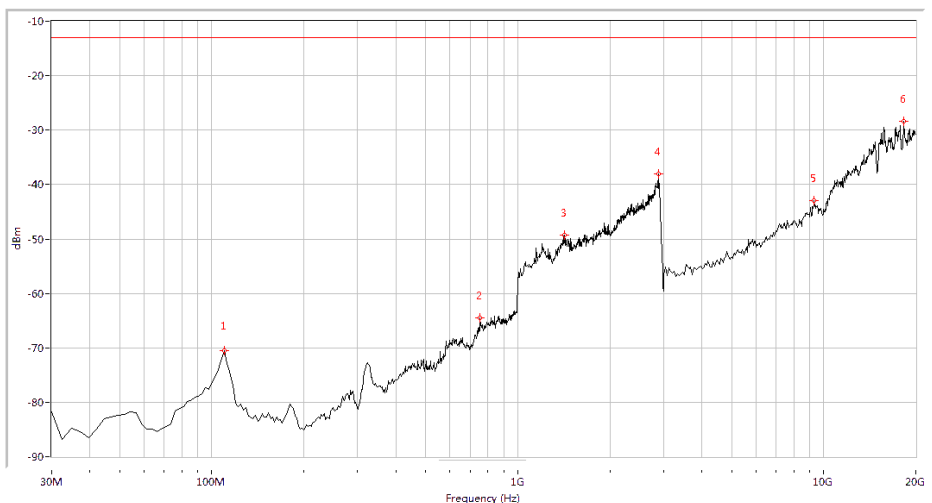
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.16 | -13.0     | 58.2   | 180.3  | Horizontal | PASS    |
| 320.274    | -72.40 | -13.0     | 59.4   | 235.0  | Horizontal | PASS    |
| 1164.589   | -51.67 | -13.0     | 38.7   | 220.6  | Horizontal | PASS    |
| 2900.249   | -39.64 | -13.0     | 26.6   | 299.4  | Horizontal | PASS    |
| 10970.075  | -38.63 | -13.0     | 25.6   | 108.1  | Horizontal | PASS    |
| 15760.599  | -29.27 | -13.0     | 16.3   | 99.9   | Horizontal | PASS    |

(Plot B.3: GSM 1900MHz Channel = 661, Test Antenna Horizontal)



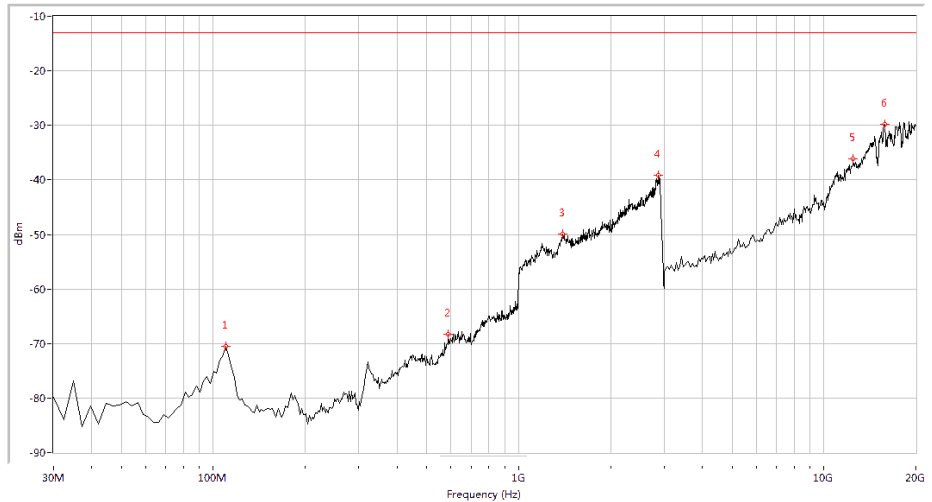
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.11 | -13.0     | 57.1   | 30.9   | Vertical | PASS    |
| 755.686    | -64.69 | -13.0     | 51.7   | 230.6  | Vertical | PASS    |
| 1394.015   | -49.28 | -13.0     | 36.3   | 128.9  | Vertical | PASS    |
| 2890.274   | -39.51 | -13.0     | 26.5   | 72.4   | Vertical | PASS    |
| 9316.708   | -41.47 | -13.0     | 28.5   | 229.5  | Vertical | PASS    |
| 15760.599  | -29.19 | -13.0     | 16.2   | 99.4   | Vertical | PASS    |

(Plot B.4: GSM 1900MHz Channel = 661, Test Antenna Vertical)



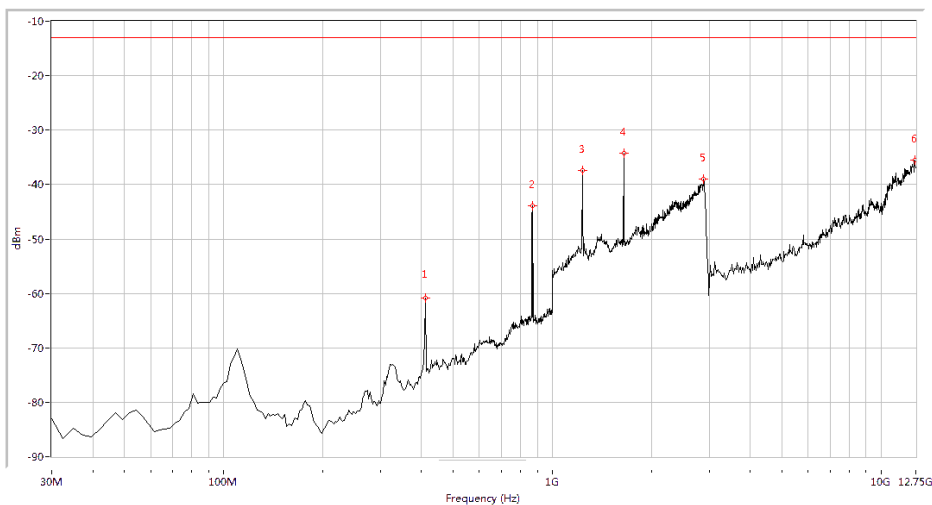
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.50 | -13.0     | 57.5   | 349.9  | Horizontal | PASS    |
| 753.267    | -64.56 | -13.0     | 51.6   | 227.9  | Horizontal | PASS    |
| 1423.940   | -49.29 | -13.0     | 36.3   | 356.1  | Horizontal | PASS    |
| 2880.299   | -38.00 | -13.0     | 25.0   | 272.6  | Horizontal | PASS    |
| 9316.708   | -42.98 | -13.0     | 30.0   | 93.2   | Horizontal | PASS    |
| 18304.239  | -28.39 | -13.0     | 15.4   | -0.0   | Horizontal | PASS    |

(Plot B.5: GSM 1900MHz Channel = 810, Test Antenna Horizontal)



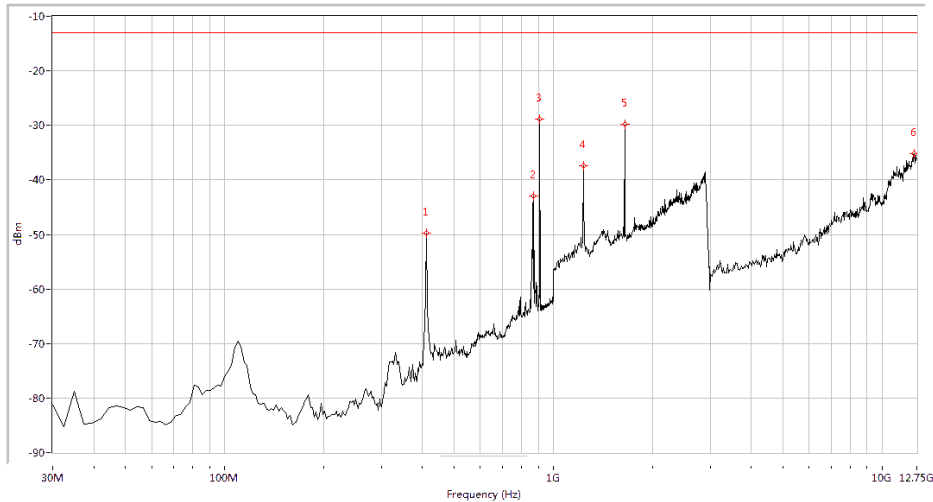
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.48 | -13.0     | 57.5   | 196.5  | Vertical | PASS    |
| 588.778    | -68.25 | -13.0     | 55.3   | 356.5  | Vertical | PASS    |
| 1394.015   | -49.89 | -13.0     | 36.9   | 115.5  | Vertical | PASS    |
| 2865.337   | -39.22 | -13.0     | 26.2   | 109.2  | Vertical | PASS    |
| 12453.865  | -36.22 | -13.0     | 23.2   | 164.8  | Vertical | PASS    |
| 15802.993  | -29.84 | -13.0     | 16.8   | 108.3  | Vertical | PASS    |

(PlotB.6: GSM 1900MHz Channel = 810, Test Antenna Vertical)



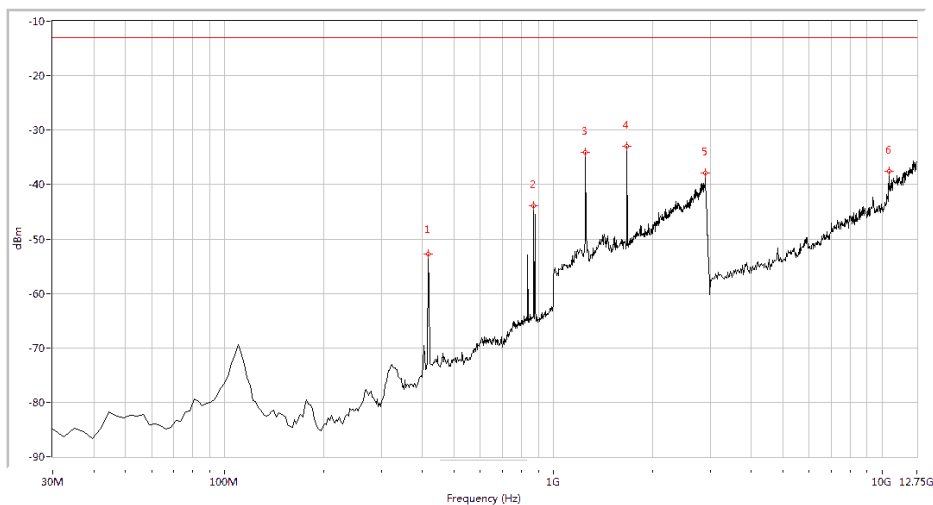
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 412.195    | -60.91 | -13.0     | 47.9   | 341.8  | Horizontal | PASS    |
| 871.796    | -43.88 | -13.0     | 30.9   | 128.4  | Horizontal | PASS    |
| 1234.414   | -37.48 | -13.0     | 24.5   | 19.1   | Horizontal | PASS    |
| 1648.379   | -34.31 | -13.0     | 21.3   | 211.1  | Horizontal | PASS    |
| 2880.299   | -38.96 | -13.0     | 26.0   | 280.7  | Horizontal | PASS    |
| 12652.743  | -35.54 | -13.0     | 22.5   | 73.3   | Horizontal | PASS    |

(Plot C.1: EGPRS 850MHz Channel = 128, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 412.195    | -49.71 | -13.0     | 36.7   | 247.1  | Vertical | PASS    |
| 871.796    | -42.89 | -13.0     | 29.9   | 236.6  | Vertical | PASS    |
| 910.499    | -28.90 | -13.0     | 15.9   | 129.5  | Vertical | PASS    |
| 1234.414   | -37.41 | -13.0     | 24.4   | 1.2    | Vertical | PASS    |
| 1648.379   | -29.80 | -13.0     | 16.8   | 350.6  | Vertical | PASS    |
| 12555.486  | -35.14 | -13.0     | 22.1   | 286.9  | Vertical | PASS    |

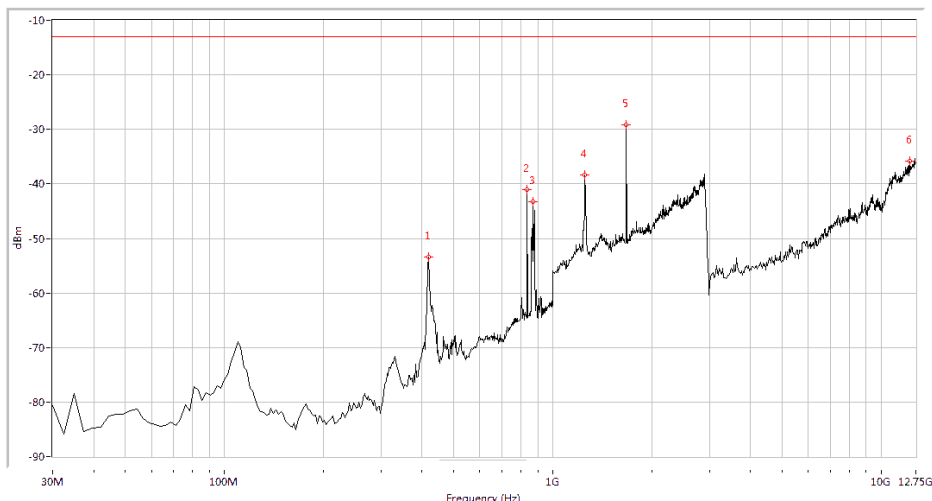
(Plot C.2: EGPRS 850MHz Channel = 128, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 417.032    | -52.81 | -13.0     | 39.8   | 84.5   | Horizontal | PASS    |
| 871.796    | -43.83 | -13.0     | 30.8   | 130.2  | Horizontal | PASS    |
| 1254.364   | -34.03 | -13.0     | 21.0   | -0.0   | Horizontal | PASS    |
| 1673.317   | -32.95 | -13.0     | 20.0   | 166.9  | Horizontal | PASS    |
| 2900.249   | -37.87 | -13.0     | 24.9   | 7.0    | Horizontal | PASS    |
| 10488.778  | -37.57 | -13.0     | 24.6   | 254.3  | Horizontal | PASS    |

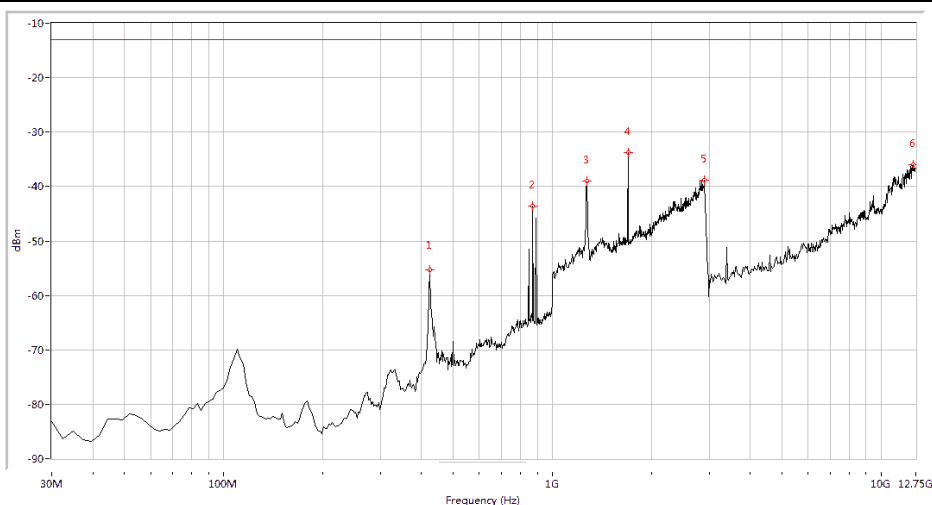
(Plot C.3: EGPRS 850MHz Channel = 190, Test Antenna Horizontal)





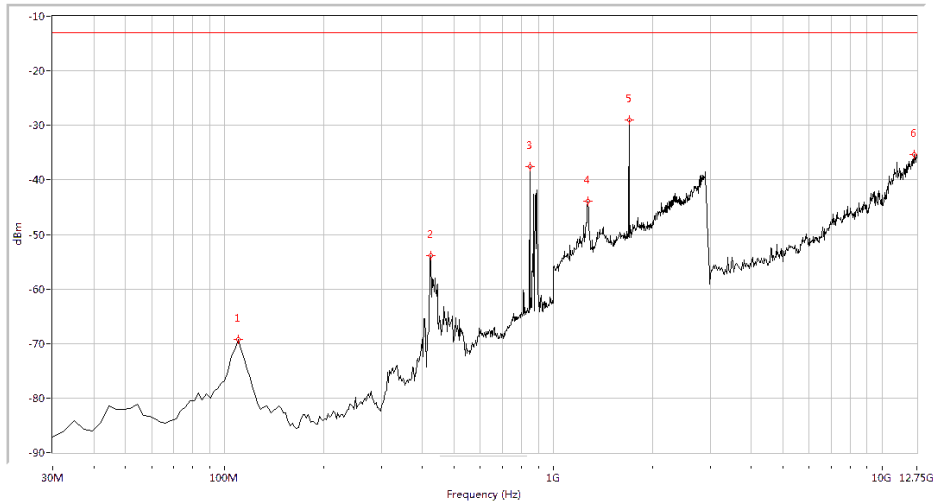
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 419.451    | -53.44 | -13.0     | 40.4   | 120.3  | Vertical | PASS    |
| 835.511    | -40.98 | -13.0     | 28.0   | 153.4  | Vertical | PASS    |
| 871.796    | -43.22 | -13.0     | 30.2   | 241.2  | Vertical | PASS    |
| 1254.364   | -38.28 | -13.0     | 25.3   | 360.0  | Vertical | PASS    |
| 1673.317   | -29.13 | -13.0     | 16.1   | 313.2  | Vertical | PASS    |
| 12215.087  | -35.85 | -13.0     | 22.9   | 177.3  | Vertical | PASS    |

(Plot C.4: EGPRS 850MHz Channel = 190, Test Antenna Vertical)



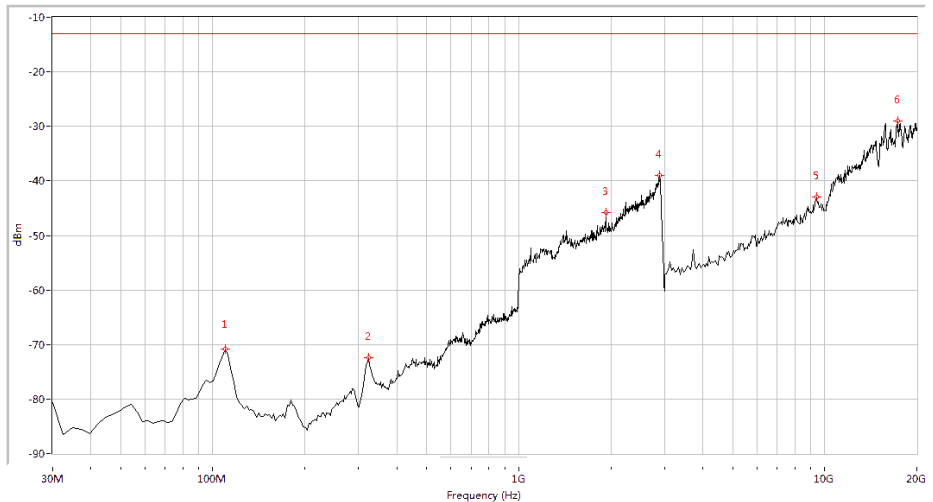
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 424.289    | -55.34 | -13.0     | 42.3   | 355.9  | Horizontal | PASS    |
| 871.796    | -43.51 | -13.0     | 30.5   | 139.5  | Horizontal | PASS    |
| 1274.314   | -38.92 | -13.0     | 25.9   | 212.9  | Horizontal | PASS    |
| 1698.254   | -33.81 | -13.0     | 20.8   | 231.9  | Horizontal | PASS    |
| 2895.262   | -38.88 | -13.0     | 25.9   | 359.5  | Horizontal | PASS    |
| 12555.486  | -35.97 | -13.0     | 23.0   | 0.9    | Horizontal | PASS    |

(Plot C.5: EGPRS 850MHz Channel = 251, Test Antenna Horizontal)



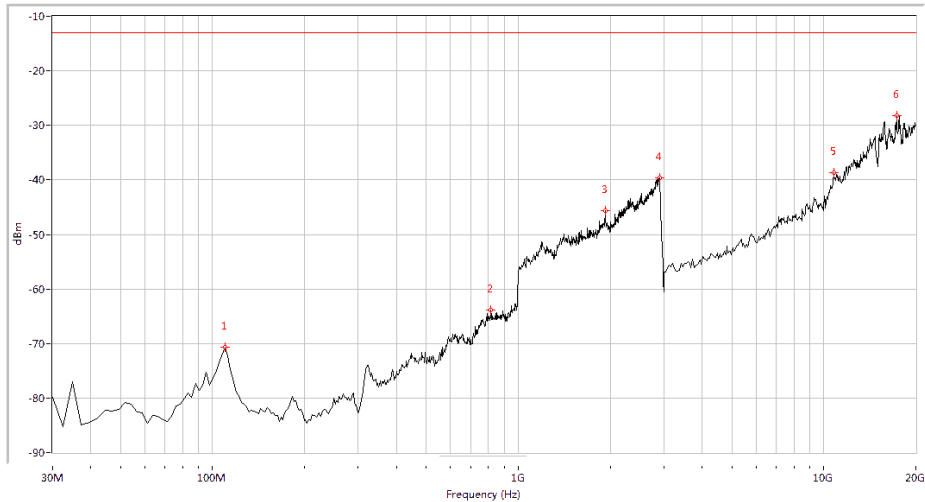
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.20 | -13.0     | 56.2   | 1.5    | Vertical | PASS    |
| 424.289    | -53.91 | -13.0     | 40.9   | 137.5  | Vertical | PASS    |
| 847.606    | -37.61 | -13.0     | 24.6   | 170.2  | Vertical | PASS    |
| 1274.314   | -43.85 | -13.0     | 30.9   | 360.0  | Vertical | PASS    |
| 1698.254   | -28.99 | -13.0     | 16.0   | 306.1  | Vertical | PASS    |
| 12555.486  | -35.30 | -13.0     | 22.3   | 161.4  | Vertical | PASS    |

(Plot C.6: EGPRS 850MHz Channel = 251, Test Antenna Vertical)



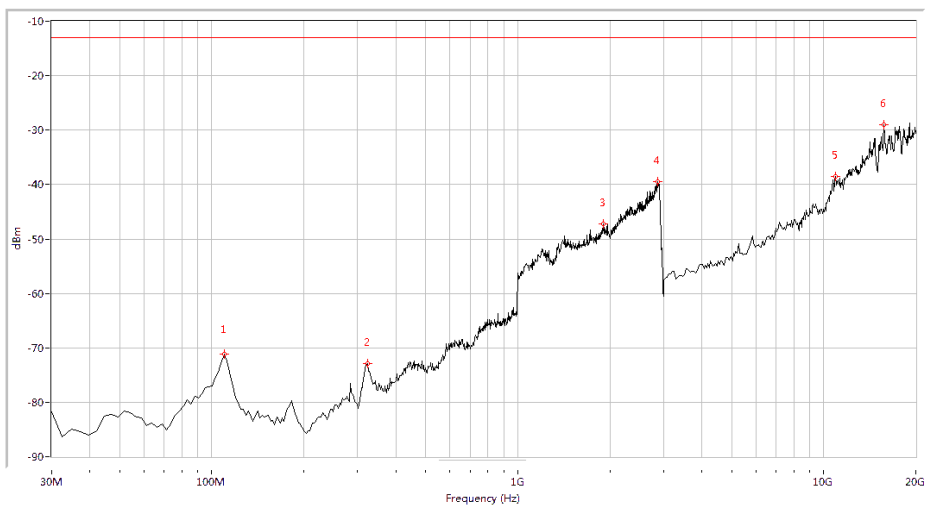
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.89 | -13.0     | 57.9   | 357.9  | Horizontal | PASS    |
| 322.693    | -72.48 | -13.0     | 59.5   | 144.0  | Horizontal | PASS    |
| 1927.681   | -45.77 | -13.0     | 32.8   | 339.4  | Horizontal | PASS    |
| 2880.299   | -39.00 | -13.0     | 26.0   | 281.8  | Horizontal | PASS    |
| 9401.496   | -43.03 | -13.0     | 30.0   | 50.7   | Horizontal | PASS    |
| 17286.783  | -28.98 | -13.0     | 16.0   | 360.0  | Horizontal | PASS    |

(Plot D.1: EGPRS 1900MHz Channel = 512, Test Antenna Horizontal)



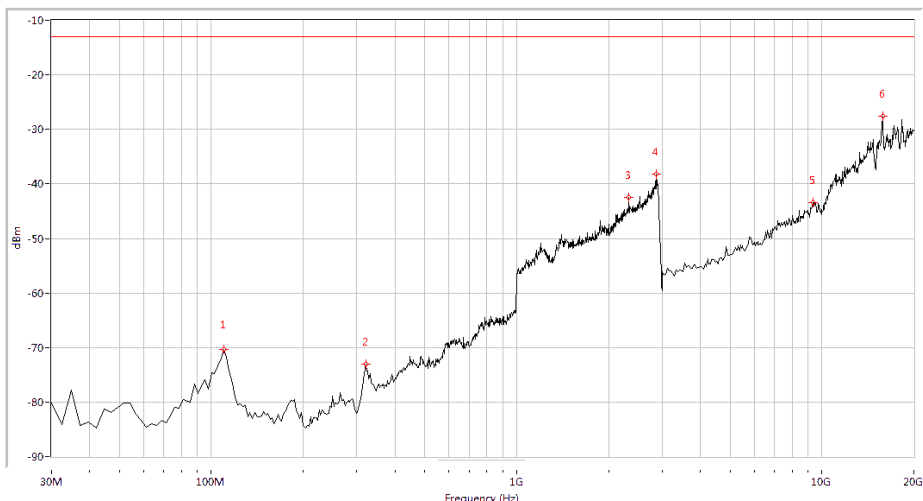
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.66 | -13.0     | 57.7   | 303.0  | Vertical | PASS    |
| 813.741    | -63.91 | -13.0     | 50.9   | 345.8  | Vertical | PASS    |
| 1927.681   | -45.68 | -13.0     | 32.7   | 69.6   | Vertical | PASS    |
| 2905.237   | -39.69 | -13.0     | 26.7   | 84.5   | Vertical | PASS    |
| 10758.105  | -38.73 | -13.0     | 25.7   | -0.0   | Vertical | PASS    |
| 17286.783  | -28.24 | -13.0     | 15.2   | -0.0   | Vertical | PASS    |

(Plot D.2: EGPRS 1900MHz Channel = 512, Test Antenna Vertical)



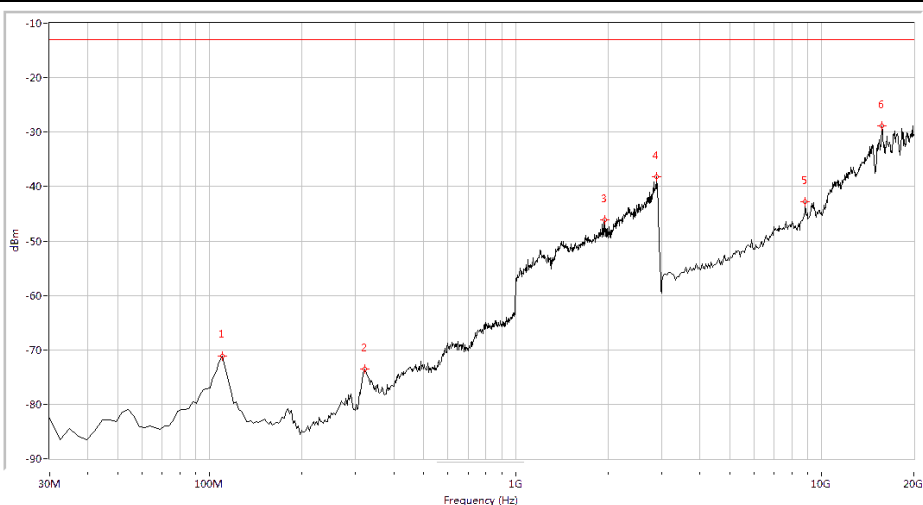
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.10 | -13.0     | 58.1   | 0.1    | Horizontal | PASS    |
| 322.693    | -72.93 | -13.0     | 59.9   | 236.0  | Horizontal | PASS    |
| 1907.731   | -47.17 | -13.0     | 34.2   | 211.3  | Horizontal | PASS    |
| 2875.312   | -39.44 | -13.0     | 26.4   | 291.9  | Horizontal | PASS    |
| 10927.681  | -38.56 | -13.0     | 25.6   | 0.8    | Horizontal | PASS    |
| 15760.599  | -29.06 | -13.0     | 16.1   | 51.5   | Horizontal | PASS    |

(Plot D.3: EGPRS 1900MHz Channel = 661, Test Antenna Horizontal)



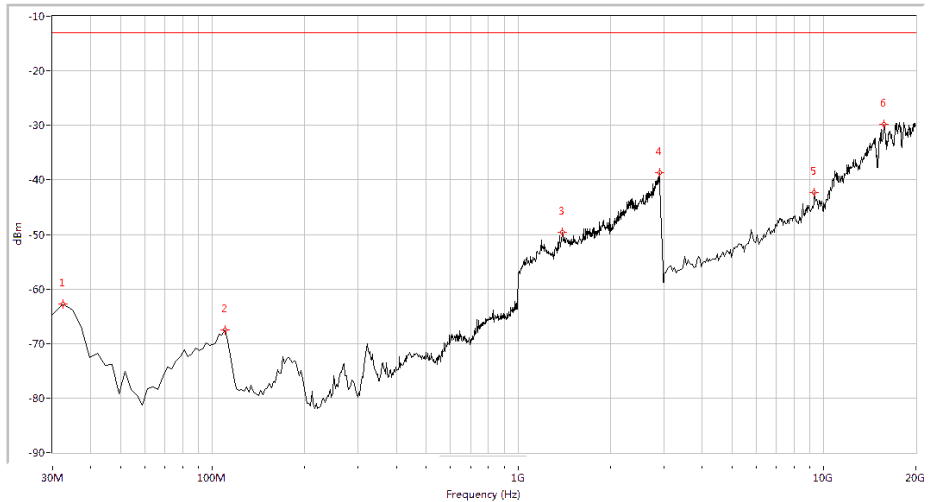
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.35 | -13.0     | 57.4   | 75.7   | Vertical | PASS    |
| 320.274    | -73.09 | -13.0     | 60.1   | 70.9   | Vertical | PASS    |
| 2331.671   | -42.41 | -13.0     | 29.4   | 142.2  | Vertical | PASS    |
| 2865.337   | -38.27 | -13.0     | 25.3   | 272.7  | Vertical | PASS    |
| 9359.102   | -43.47 | -13.0     | 30.5   | 63.9   | Vertical | PASS    |
| 15802.993  | -27.61 | -13.0     | 14.6   | 80.6   | Vertical | PASS    |

(Plot D.4: EGPRS 1900MHz Channel = 661, Test Antenna Vertical)



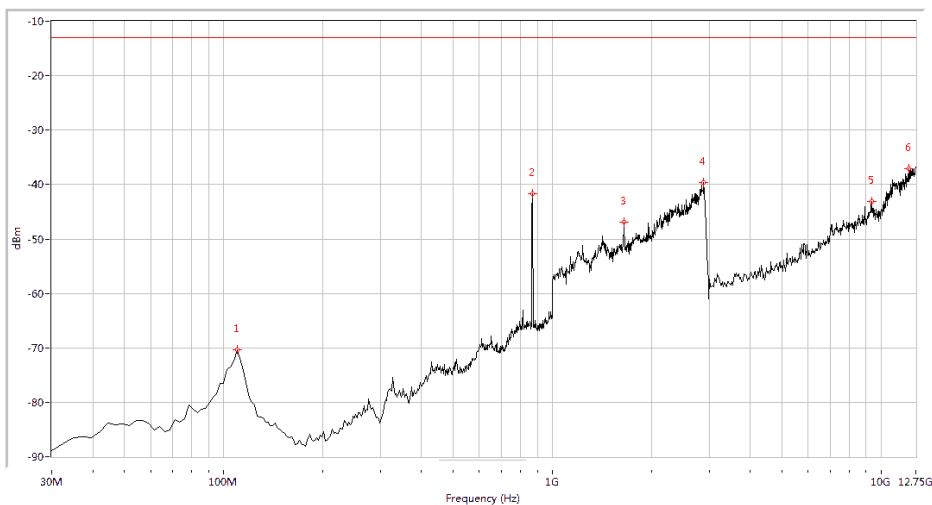
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.07 | -13.0     | 58.1   | 243.4  | Horizontal | PASS    |
| 320.274    | -73.47 | -13.0     | 60.5   | 127.7  | Horizontal | PASS    |
| 1957.606   | -46.09 | -13.0     | 33.1   | 101.1  | Horizontal | PASS    |
| 2890.274   | -38.17 | -13.0     | 25.2   | 26.7   | Horizontal | PASS    |
| 8850.374   | -42.83 | -13.0     | 29.8   | 272.6  | Horizontal | PASS    |
| 15760.599  | -28.88 | -13.0     | 15.9   | 167.8  | Horizontal | PASS    |

(Plot D.5: EGPRS 1900MHz Channel = 810, Test Antenna Horizontal)



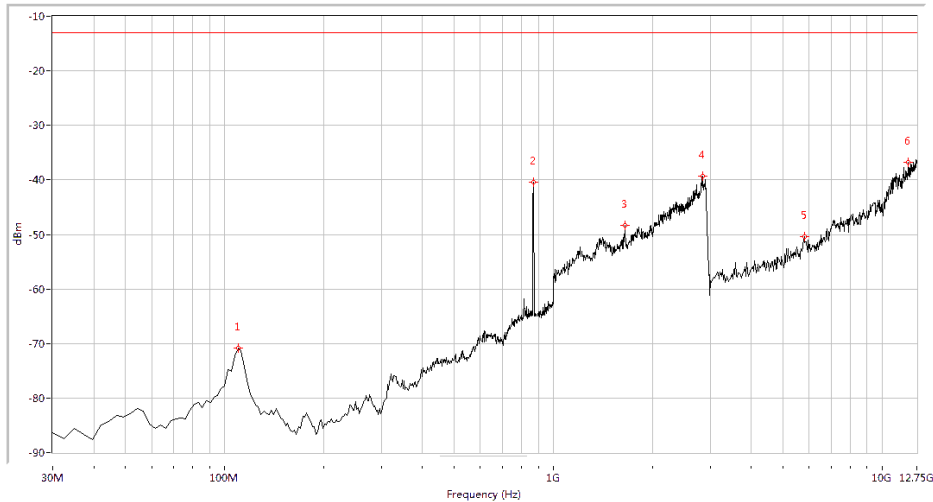
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 32.419     | -62.73 | -13.0     | 49.7   | 0.3    | Vertical | PASS    |
| 109.825    | -67.44 | -13.0     | 54.4   | 340.6  | Vertical | PASS    |
| 1394.015   | -49.67 | -13.0     | 36.7   | 153.3  | Vertical | PASS    |
| 2900.249   | -38.74 | -13.0     | 25.7   | 119.4  | Vertical | PASS    |
| 9316.708   | -42.39 | -13.0     | 29.4   | 62.0   | Vertical | PASS    |
| 15760.599  | -29.72 | -13.0     | 16.7   | 317.9  | Vertical | PASS    |

(Plot D.6: EGPRS 1900MHz Channel = 810, Test Antenna Vertical)



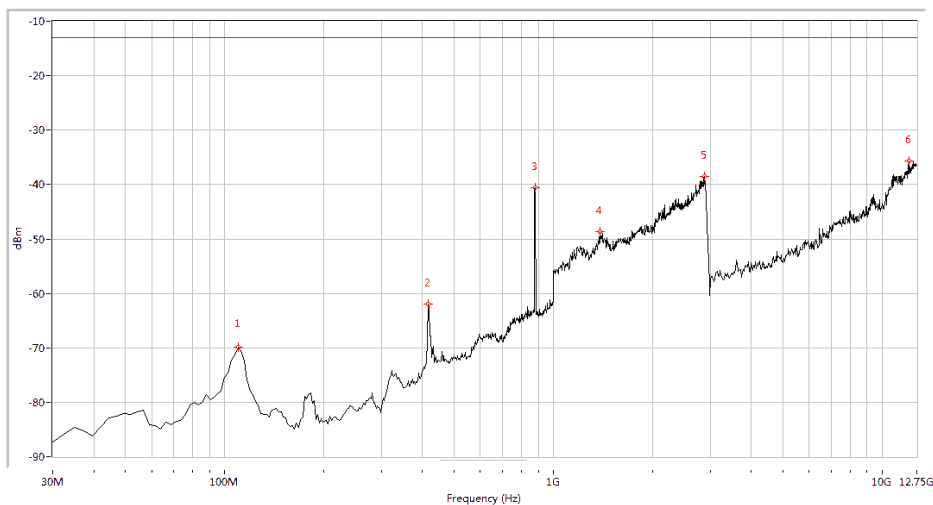
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.39 | -13.0     | 57.4   | 56.4   | Horizontal | PASS    |
| 869.377    | -41.71 | -13.0     | 28.7   | 165.7  | Horizontal | PASS    |
| 1653.367   | -46.94 | -13.0     | 33.9   | 325.4  | Horizontal | PASS    |
| 2885.287   | -39.70 | -13.0     | 26.7   | 196.4  | Horizontal | PASS    |
| 9346.010   | -43.10 | -13.0     | 30.1   | 0.0    | Horizontal | PASS    |
| 12142.145  | -37.01 | -13.0     | 24.0   | 10.2   | Horizontal | PASS    |

(Plot E.1: WCDMA 850MHz Channel = 4132, Test Antenna Horizontal)



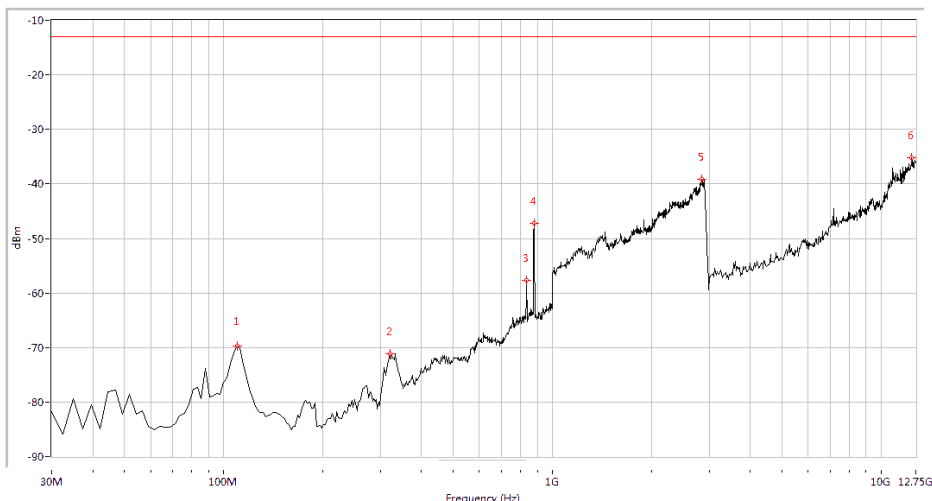
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.88 | -13.0     | 57.9   | 352.8  | Vertical | PASS    |
| 869.377    | -40.37 | -13.0     | 27.4   | 201.0  | Vertical | PASS    |
| 1648.379   | -48.29 | -13.0     | 35.3   | 194.5  | Vertical | PASS    |
| 2845.387   | -39.24 | -13.0     | 26.2   | 16.5   | Vertical | PASS    |
| 5796.135   | -50.42 | -13.0     | 37.4   | 24.3   | Vertical | PASS    |
| 12020.574  | -36.85 | -13.0     | 23.8   | 3.5    | Vertical | PASS    |

(Plot E.2: WCDMA 850MHz Channel = 4132, Test Antenna Vertical)



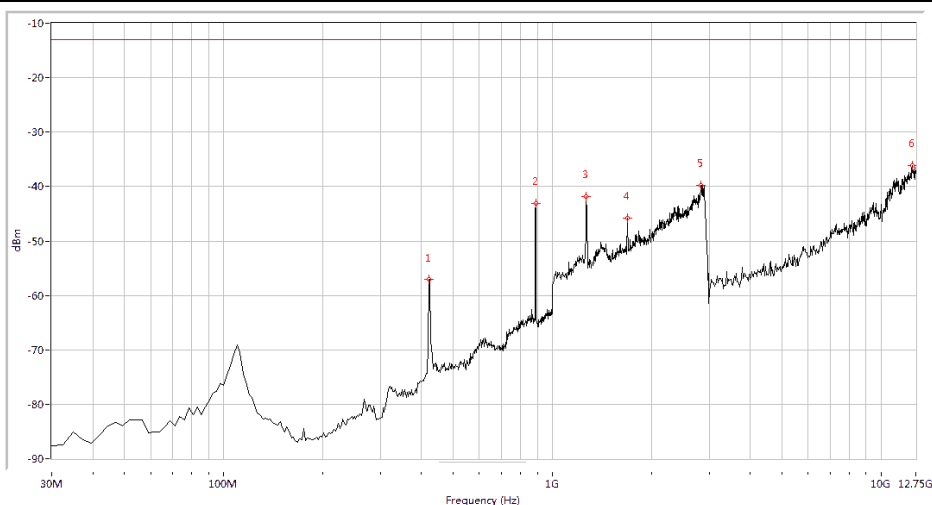
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.82 | -13.0     | 56.8   | 216.7  | Horizontal | PASS    |
| 417.032    | -61.99 | -13.0     | 49.0   | 163.1  | Horizontal | PASS    |
| 879.052    | -40.64 | -13.0     | 27.6   | 95.0   | Horizontal | PASS    |
| 1384.040   | -48.61 | -13.0     | 35.6   | -0.0   | Horizontal | PASS    |
| 2880.299   | -38.56 | -13.0     | 25.6   | 60.0   | Horizontal | PASS    |
| 12044.888  | -35.68 | -13.0     | 22.7   | 117.0  | Horizontal | PASS    |

(Plot E.3: WCDMA 850MHz Channel = 4175, Test Antenna Horizontal)



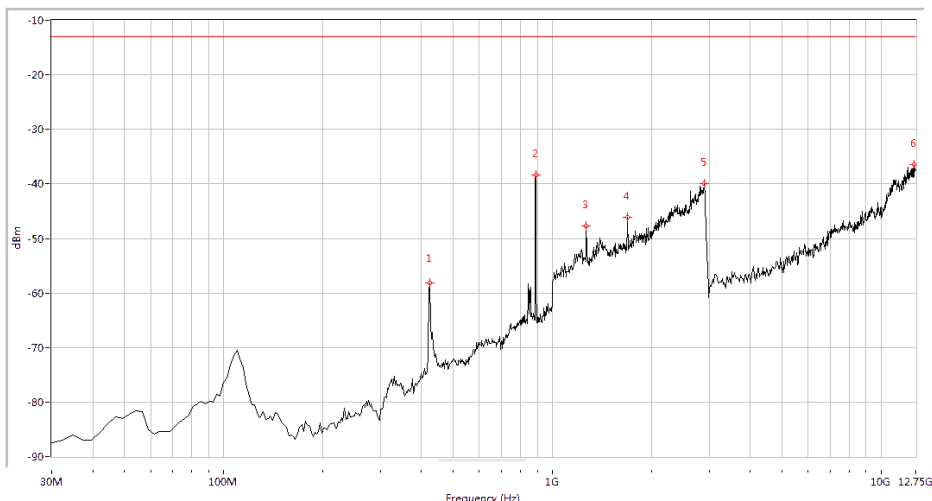
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.68 | -13.0     | 56.7   | 207.8  | Vertical | PASS    |
| 320.274    | -71.15 | -13.0     | 58.2   | 360.0  | Vertical | PASS    |
| 835.511    | -57.64 | -13.0     | 44.6   | 160.9  | Vertical | PASS    |
| 879.052    | -47.27 | -13.0     | 34.3   | 151.2  | Vertical | PASS    |
| 2845.387   | -39.13 | -13.0     | 26.1   | 167.5  | Vertical | PASS    |
| 12360.973  | -35.12 | -13.0     | 22.1   | 270.6  | Vertical | PASS    |

(Plot E.4: WCDMA 850MHz Channel = 4175, Test Antenna Vertical)



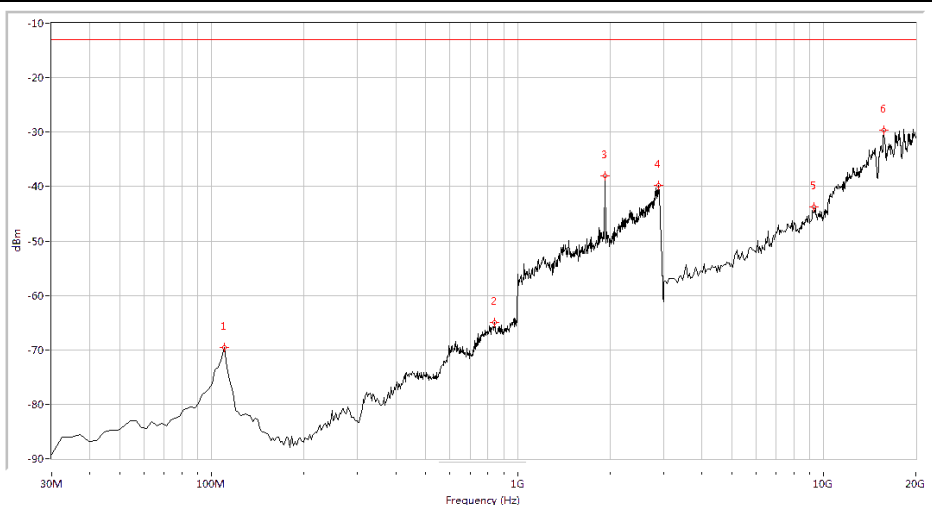
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 421.870    | -57.10 | -13.0     | 44.1   | 360.0  | Horizontal | PASS    |
| 891.147    | -43.09 | -13.0     | 30.1   | 258.4  | Horizontal | PASS    |
| 1269.327   | -41.88 | -13.0     | 28.9   | 16.4   | Horizontal | PASS    |
| 1688.279   | -45.77 | -13.0     | 32.8   | 249.4  | Horizontal | PASS    |
| 2830.424   | -39.85 | -13.0     | 26.9   | 251.0  | Horizontal | PASS    |
| 12458.229  | -36.07 | -13.0     | 23.1   | 0.2    | Horizontal | PASS    |

(Plot E.5: WCDMA 850MHz Channel = 4233, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 424.289    | -58.16 | -13.0     | 45.2   | 169.4  | Vertical | PASS    |
| 891.147    | -38.42 | -13.0     | 25.4   | 263.8  | Vertical | PASS    |
| 1269.327   | -47.71 | -13.0     | 34.7   | 152.0  | Vertical | PASS    |
| 1693.267   | -46.20 | -13.0     | 33.2   | 0.8    | Vertical | PASS    |
| 2905.237   | -39.94 | -13.0     | 26.9   | 21.4   | Vertical | PASS    |
| 12628.429  | -36.52 | -13.0     | 23.5   | 86.4   | Vertical | PASS    |

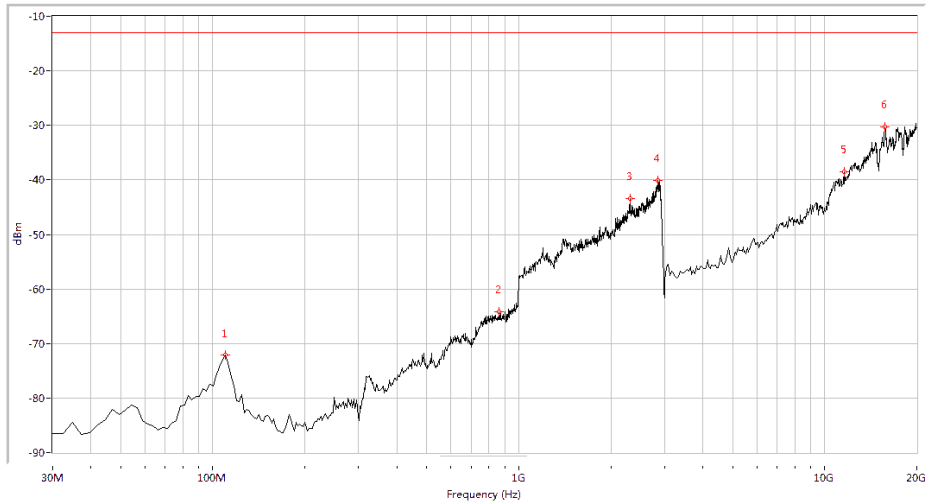
(Plot E.6: WCDMA 850MHz Channel = 4233, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.52 | -13.0     | 56.5   | 167.5  | Horizontal | PASS    |
| 842.768    | -64.99 | -13.0     | 52.0   | 65.8   | Horizontal | PASS    |
| 1927.681   | -37.96 | -13.0     | 25.0   | 256.8  | Horizontal | PASS    |
| 2895.262   | -39.80 | -13.0     | 26.8   | 139.4  | Horizontal | PASS    |
| 9316.708   | -43.73 | -13.0     | 30.7   | 54.6   | Horizontal | PASS    |
| 15718.204  | -29.67 | -13.0     | 16.7   | 28.2   | Horizontal | PASS    |

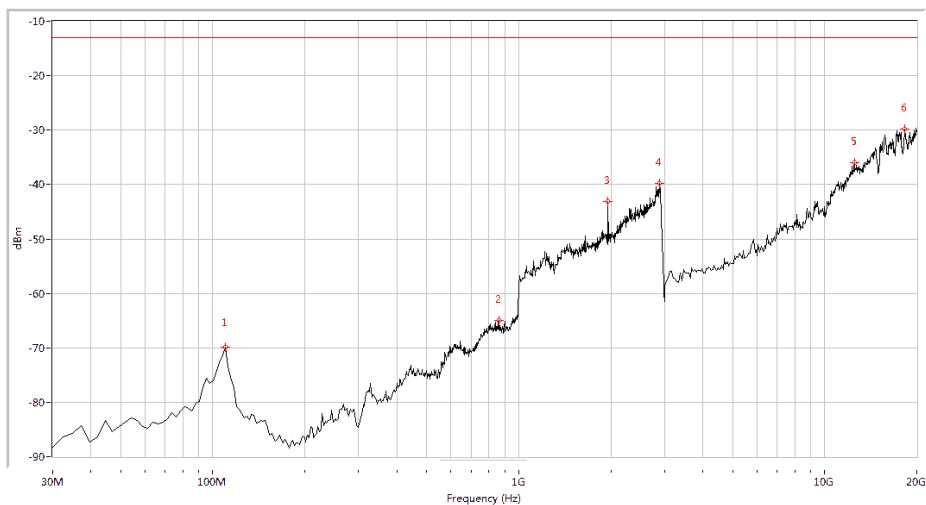
(Plot F.1: WCDMA 1900MHz Channel = 9262, Test Antenna Horizontal)





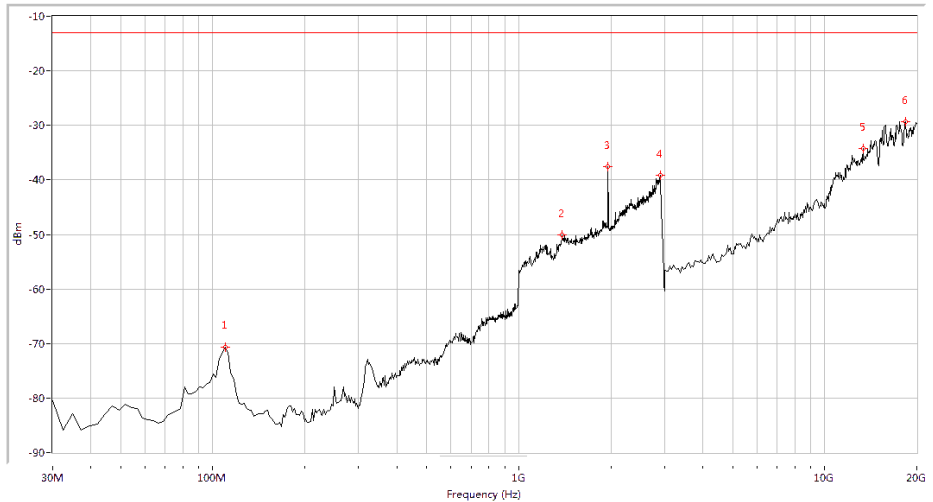
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -72.13 | -13.0     | 59.1   | 63.8   | Vertical | PASS    |
| 864.539    | -64.11 | -13.0     | 51.1   | 48.5   | Vertical | PASS    |
| 2311.721   | -43.42 | -13.0     | 30.4   | 195.4  | Vertical | PASS    |
| 2855.362   | -40.13 | -13.0     | 27.1   | 246.7  | Vertical | PASS    |
| 11605.985  | -38.49 | -13.0     | 25.5   | 0.0    | Vertical | PASS    |
| 15718.204  | -30.24 | -13.0     | 17.2   | 10.9   | Vertical | PASS    |

(Plot F.2: WCDMA 1900MHz Channel = 9262, Test Antenna Vertical)



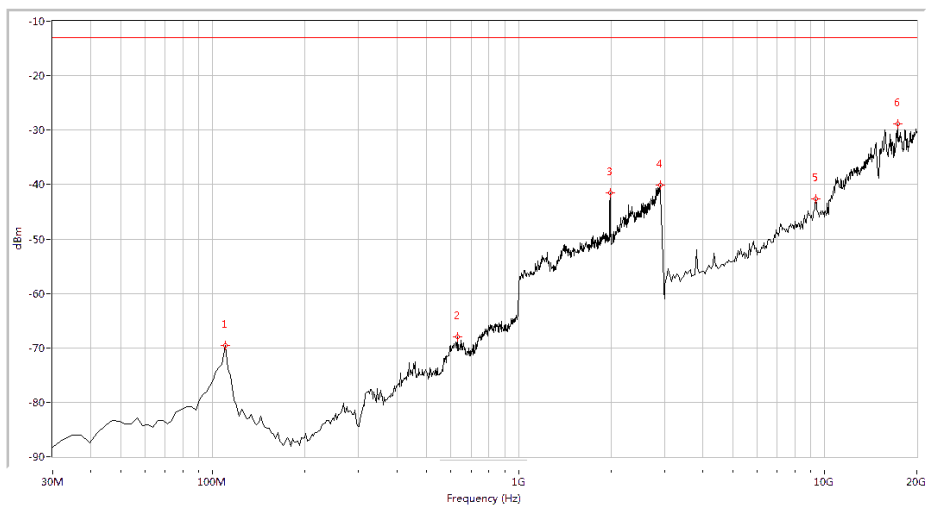
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.85 | -13.0     | 56.8   | 348.5  | Horizontal | PASS    |
| 864.539    | -64.98 | -13.0     | 52.0   | 96.7   | Horizontal | PASS    |
| 1957.606   | -43.12 | -13.0     | 30.1   | 267.3  | Horizontal | PASS    |
| 2895.262   | -39.71 | -13.0     | 26.7   | 10.0   | Horizontal | PASS    |
| 12496.259  | -35.91 | -13.0     | 22.9   | 0.4    | Horizontal | PASS    |
| 18304.239  | -29.85 | -13.0     | 16.8   | 251.4  | Horizontal | PASS    |

(Plot F.3: WCDMA 1900MHz Channel = 9400, Test Antenna Horizontal)



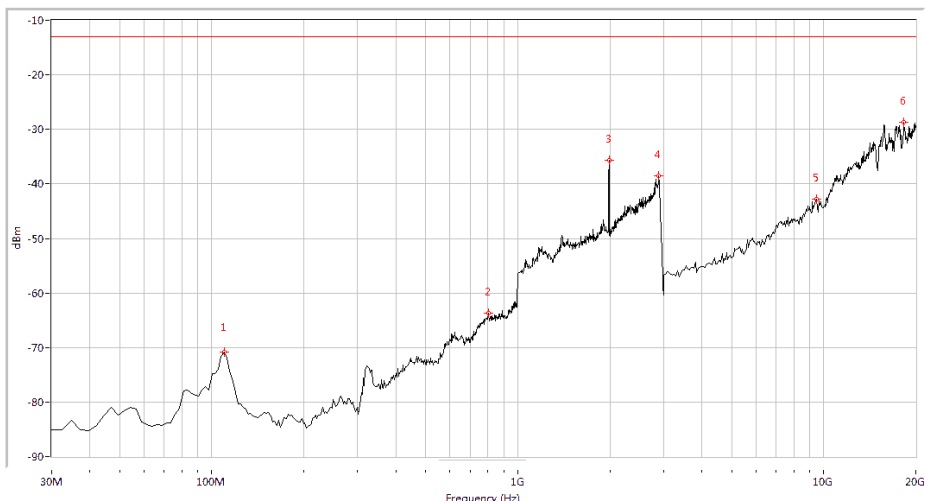
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.63 | -13.0     | 57.6   | 199.4  | Vertical | PASS    |
| 1389.027   | -50.04 | -13.0     | 37.0   | 341.7  | Vertical | PASS    |
| 1957.606   | -37.52 | -13.0     | 24.5   | 166.1  | Vertical | PASS    |
| 2900.249   | -39.11 | -13.0     | 26.1   | 75.7   | Vertical | PASS    |
| 13344.140  | -34.17 | -13.0     | 21.2   | 71.9   | Vertical | PASS    |
| 18389.027  | -29.40 | -13.0     | 16.4   | 355.6  | Vertical | PASS    |

(Plot F.4: WCDMA 1900MHz Channel = 9400, Test Antenna Vertical)



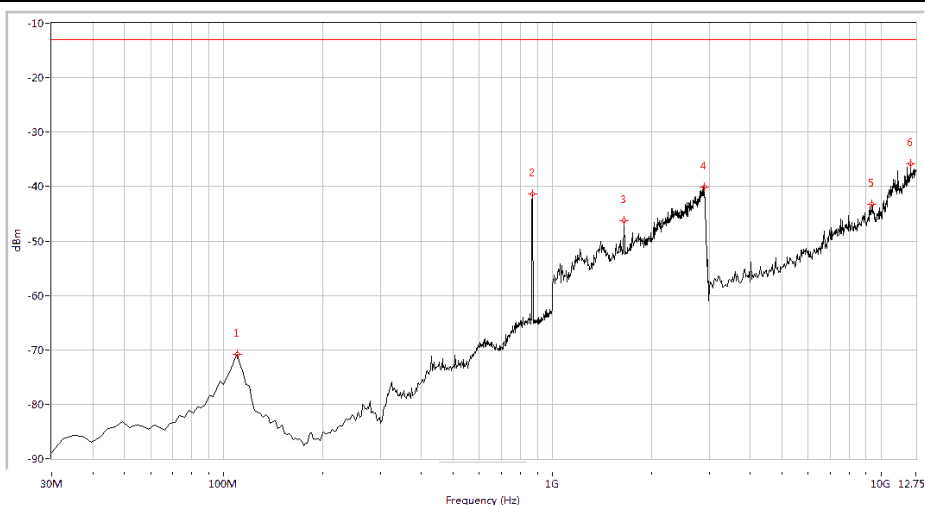
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.53 | -13.0     | 56.5   | 69.4   | Horizontal | PASS    |
| 629.900    | -68.00 | -13.0     | 55.0   | 153.4  | Horizontal | PASS    |
| 1987.531   | -41.51 | -13.0     | 28.5   | 52.8   | Horizontal | PASS    |
| 2900.249   | -40.07 | -13.0     | 27.1   | 305.7  | Horizontal | PASS    |
| 9359.102   | -42.61 | -13.0     | 29.6   | 268.9  | Horizontal | PASS    |
| 17286.783  | -28.85 | -13.0     | 15.8   | 196.4  | Horizontal | PASS    |

(Plot F.5: WCDMA 1900MHz Channel = 9538, Test Antenna Horizontal)



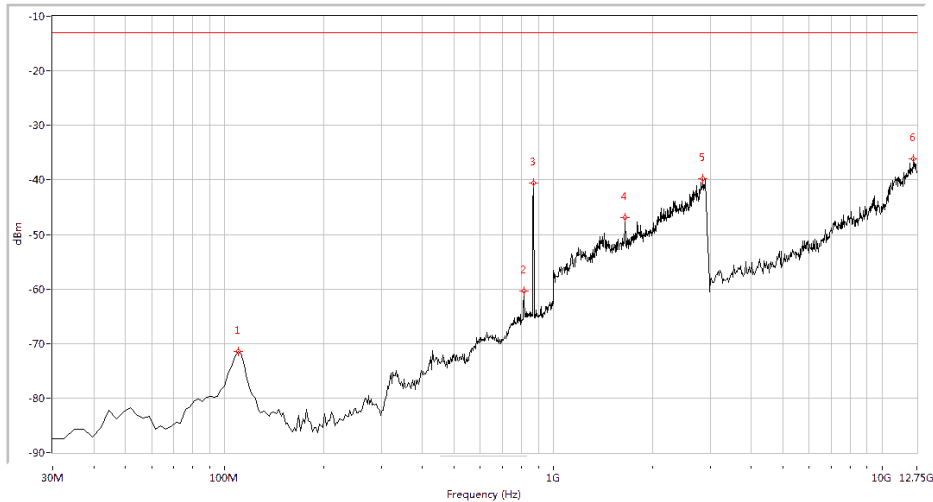
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.78 | -13.0     | 57.8   | 132.4  | Vertical | PASS    |
| 801.646    | -63.65 | -13.0     | 50.7   | 70.0   | Vertical | PASS    |
| 1987.531   | -35.69 | -13.0     | 22.7   | 123.7  | Vertical | PASS    |
| 2890.274   | -38.45 | -13.0     | 25.5   | 0.5    | Vertical | PASS    |
| 9486.284   | -42.78 | -13.0     | 29.8   | 146.5  | Vertical | PASS    |
| 18304.239  | -28.63 | -13.0     | 15.6   | 16.1   | Vertical | PASS    |

(Plot F.6: WCDMA 1900MHz Channel = 9538, Test Antenna Vertical)



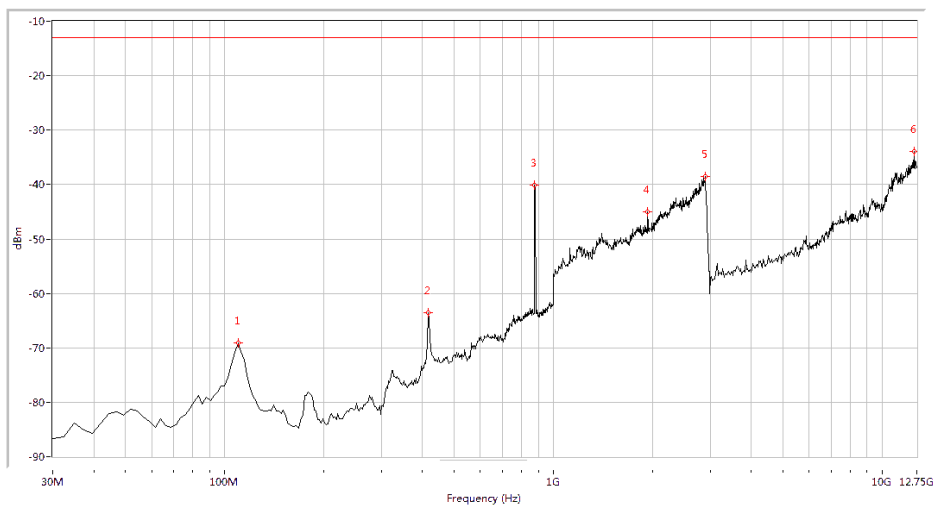
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.86 | -13.0     | 57.9   | 126.4  | Horizontal | PASS    |
| 869.377    | -41.37 | -13.0     | 28.4   | 346.5  | Horizontal | PASS    |
| 1653.367   | -46.35 | -13.0     | 33.4   | 98.1   | Horizontal | PASS    |
| 2890.274   | -40.14 | -13.0     | 27.1   | 165.8  | Horizontal | PASS    |
| 9394.638   | -43.27 | -13.0     | 30.3   | 20.1   | Horizontal | PASS    |
| 12288.030  | -35.78 | -13.0     | 22.8   | 0.8    | Horizontal | PASS    |

(Plot G.1: HSDPA 850MHz Channel = 4132, Test Antenna Horizontal)



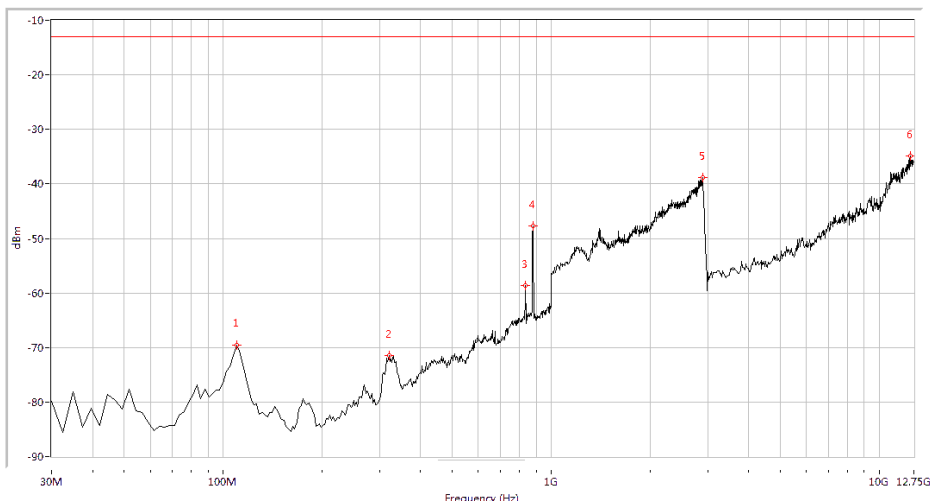
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.51 | -13.0     | 58.5   | 36.4   | Vertical | PASS    |
| 813.741    | -60.33 | -13.0     | 47.3   | 52.8   | Vertical | PASS    |
| 869.377    | -40.51 | -13.0     | 27.5   | 164.2  | Vertical | PASS    |
| 1653.367   | -46.95 | -13.0     | 34.0   | 269.9  | Vertical | PASS    |
| 2845.387   | -39.75 | -13.0     | 26.8   | 0.2    | Vertical | PASS    |
| 12458.229  | -36.09 | -13.0     | 23.1   | 248.6  | Vertical | PASS    |

(Plot G.2: HSDPA 850MHz Channel = 4132, Test Antenna Vertical)



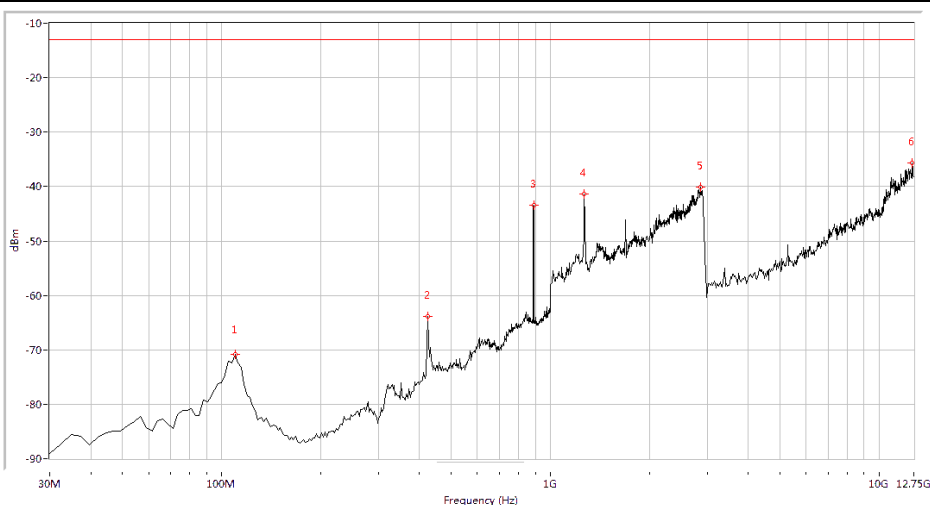
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.11 | -13.0     | 56.1   | -0.0   | Horizontal | PASS    |
| 417.032    | -63.54 | -13.0     | 50.5   | 186.2  | Horizontal | PASS    |
| 876.633    | -40.05 | -13.0     | 27.1   | 84.3   | Horizontal | PASS    |
| 1937.656   | -44.94 | -13.0     | 31.9   | 85.2   | Horizontal | PASS    |
| 2895.262   | -38.48 | -13.0     | 25.5   | -0.0   | Horizontal | PASS    |
| 12555.486  | -33.99 | -13.0     | 21.0   | 120.7  | Horizontal | PASS    |

(Plot G.3: HSDPA 850MHz Channel = 4175, Test Antenna Horizontal)



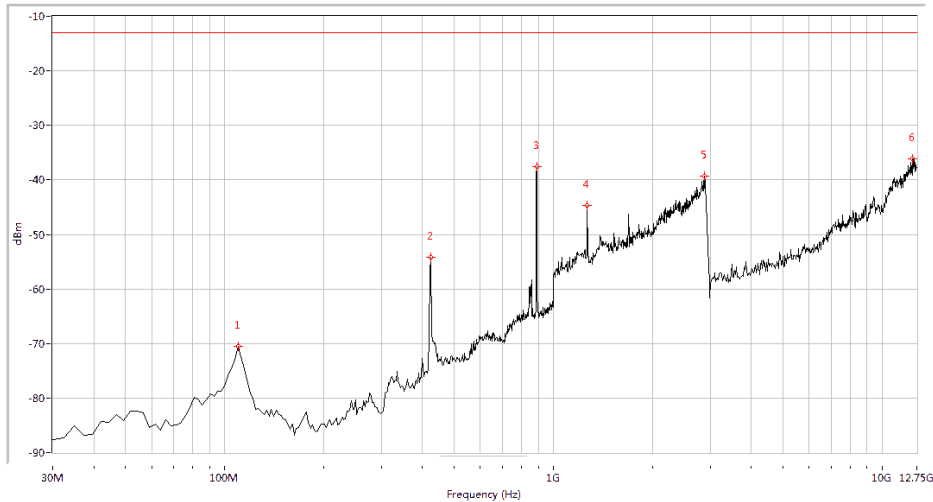
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.49 | -13.0     | 56.5   | 107.2  | Vertical | PASS    |
| 320.274    | -71.39 | -13.0     | 58.4   | 46.9   | Vertical | PASS    |
| 835.511    | -58.65 | -13.0     | 45.7   | 194.9  | Vertical | PASS    |
| 879.052    | -47.65 | -13.0     | 34.6   | 102.0  | Vertical | PASS    |
| 2890.274   | -38.83 | -13.0     | 25.8   | 138.6  | Vertical | PASS    |
| 12482.544  | -34.90 | -13.0     | 21.9   | 334.8  | Vertical | PASS    |

(Plot G.4: HSDPA 850MHz Channel = 4175, Test Antenna Vertical)



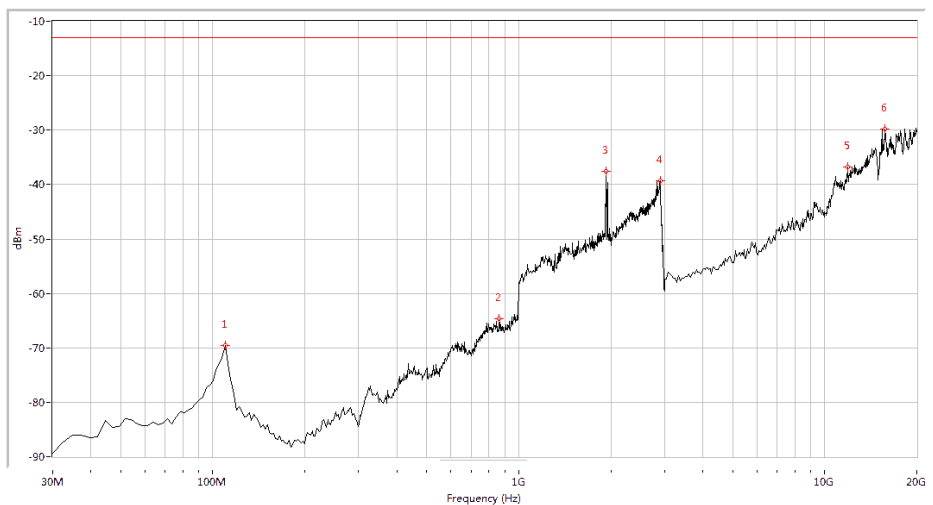
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.88 | -13.0     | 57.9   | 35.9   | Horizontal | PASS    |
| 424.289    | -63.79 | -13.0     | 50.8   | 165.4  | Horizontal | PASS    |
| 891.147    | -43.39 | -13.0     | 30.4   | 251.9  | Horizontal | PASS    |
| 1269.327   | -41.31 | -13.0     | 28.3   | 0.2    | Horizontal | PASS    |
| 2855.362   | -40.14 | -13.0     | 27.1   | 21.5   | Horizontal | PASS    |
| 12628.429  | -35.67 | -13.0     | 22.7   | 63.7   | Horizontal | PASS    |

(Plot G.5: HSDPA 850MHz Channel = 4233, Test Antenna Horizontal)



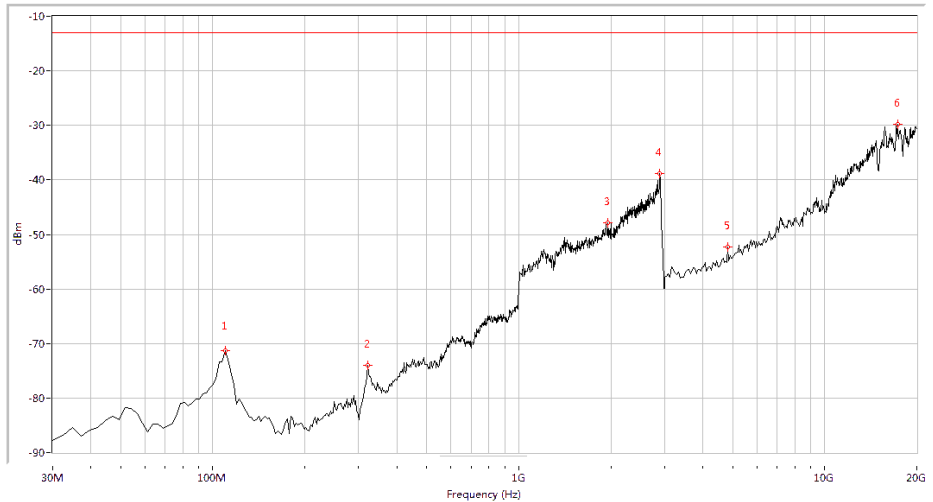
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.52 | -13.0     | 57.5   | 169.4  | Vertical | PASS    |
| 424.289    | -54.23 | -13.0     | 41.2   | 65.4   | Vertical | PASS    |
| 891.147    | -37.60 | -13.0     | 24.6   | 89.2   | Vertical | PASS    |
| 1269.327   | -44.74 | -13.0     | 31.7   | 136.8  | Vertical | PASS    |
| 2885.287   | -39.35 | -13.0     | 26.3   | 91.1   | Vertical | PASS    |
| 12385.287  | -36.19 | -13.0     | 23.2   | 0.0    | Vertical | PASS    |

(Plot G.6: HSDPA 850MHz Channel = 4233, Test Antenna Vertical)



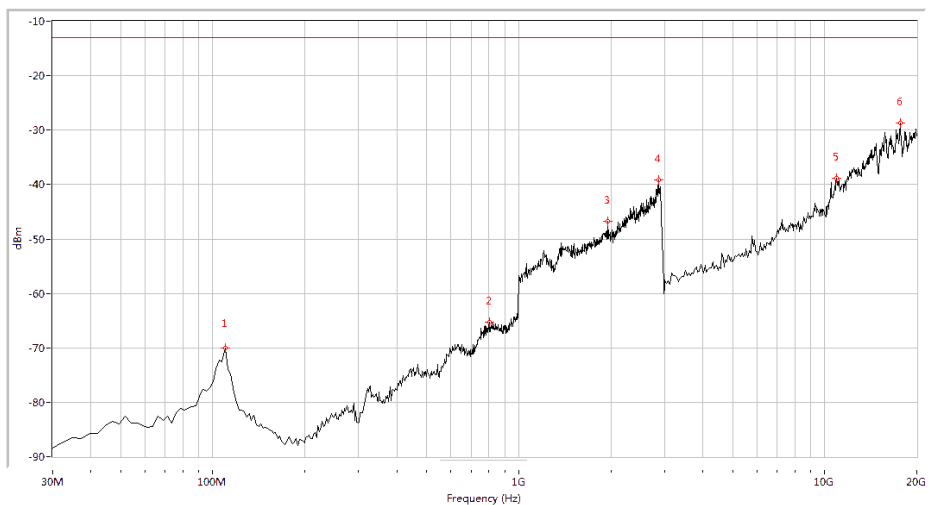
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.64 | -13.0     | 56.6   | 63.4   | Horizontal | PASS    |
| 864.539    | -64.63 | -13.0     | 51.6   | 195.8  | Horizontal | PASS    |
| 1927.681   | -37.52 | -13.0     | 24.5   | 264.7  | Horizontal | PASS    |
| 2900.249   | -39.38 | -13.0     | 26.4   | 23.5   | Horizontal | PASS    |
| 11860.349  | -36.77 | -13.0     | 23.8   | 269.5  | Horizontal | PASS    |
| 15760.599  | -29.86 | -13.0     | 16.9   | 86.4   | Horizontal | PASS    |

(Plot H.1: HSDPA 1900 MHz Channel = 9262, Test Antenna Horizontal)



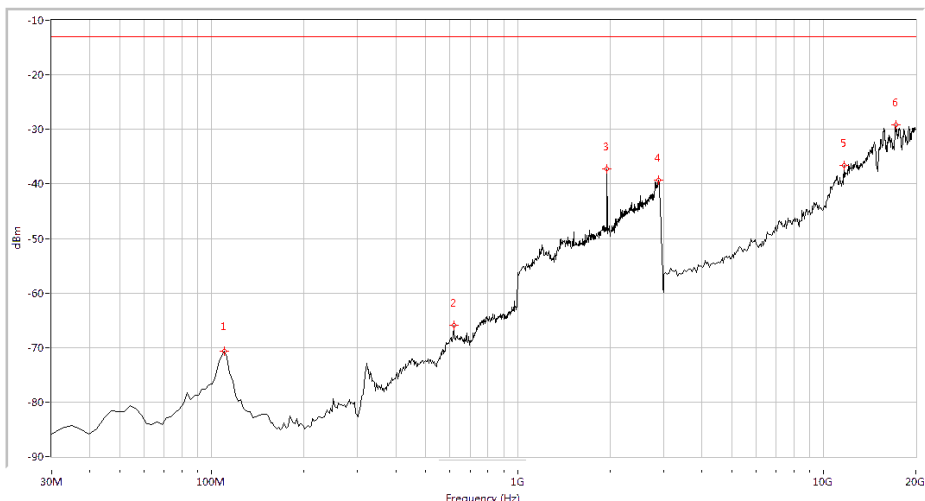
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.30 | -13.0     | 58.3   | 94.8   | Vertical | PASS    |
| 320.274    | -74.07 | -13.0     | 61.1   | 197.9  | Vertical | PASS    |
| 1957.606   | -47.87 | -13.0     | 34.9   | 326.7  | Vertical | PASS    |
| 2890.274   | -38.87 | -13.0     | 25.9   | 152.8  | Vertical | PASS    |
| 4822.943   | -52.32 | -13.0     | 39.3   | 247.1  | Vertical | PASS    |
| 17286.783  | -29.74 | -13.0     | 16.7   | 0.5    | Vertical | PASS    |

(Plot H.2: HSDPA 1900 MHz Channel = 9262, Test Antenna Vertical)



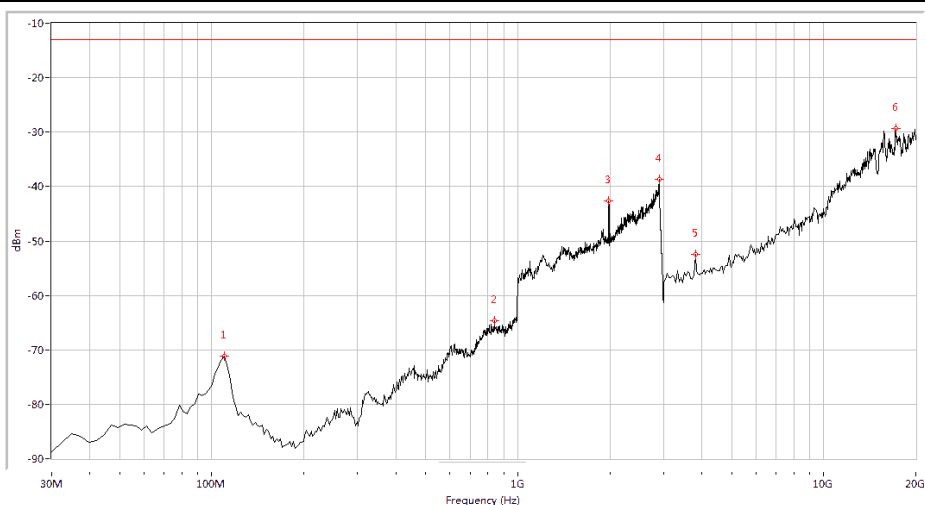
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.06 | -13.0     | 57.1   | 345.8  | Horizontal | PASS    |
| 801.646    | -65.27 | -13.0     | 52.3   | 95.6   | Horizontal | PASS    |
| 1957.606   | -46.72 | -13.0     | 33.7   | 264.5  | Horizontal | PASS    |
| 2860.349   | -39.15 | -13.0     | 26.2   | 158.3  | Horizontal | PASS    |
| 10927.681  | -38.77 | -13.0     | 25.8   | 67.4   | Horizontal | PASS    |
| 17625.935  | -28.70 | -13.0     | 15.7   | 57.6   | Horizontal | PASS    |

(Plot H.3: HSDPA 1900 MHz Channel = 9400, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.74 | -13.0     | 57.7   | 91.4   | Vertical | PASS    |
| 617.805    | -65.88 | -13.0     | 52.9   | -0.0   | Vertical | PASS    |
| 1957.606   | -37.20 | -13.0     | 24.2   | 191.5  | Vertical | PASS    |
| 2890.274   | -39.37 | -13.0     | 26.4   | 360.0  | Vertical | PASS    |
| 11648.379  | -36.61 | -13.0     | 23.6   | 202.2  | Vertical | PASS    |
| 17201.995  | -29.15 | -13.0     | 16.1   | 306.0  | Vertical | PASS    |

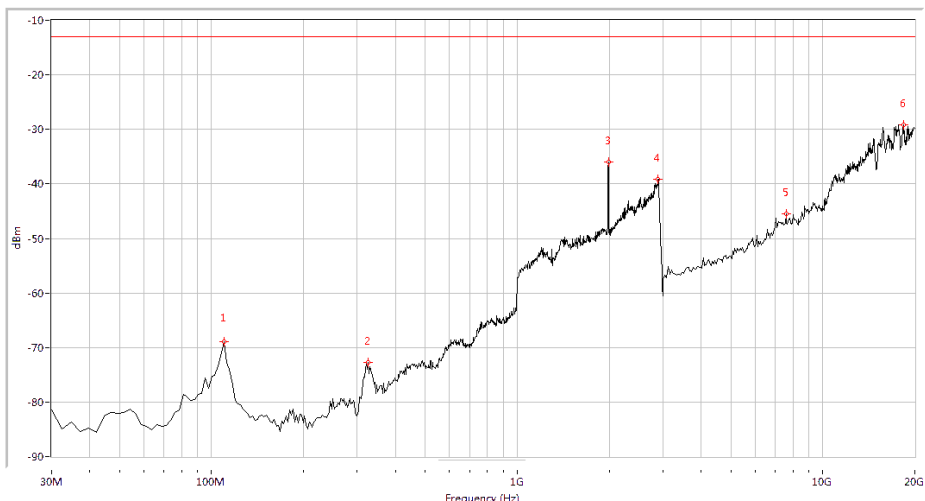
(Plot H.4: HSDPA 1900 MHz Channel = 9400, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.11 | -13.0     | 58.1   | 342.1  | Horizontal | PASS    |
| 837.930    | -64.64 | -13.0     | 51.6   | 268.4  | Horizontal | PASS    |
| 1982.544   | -42.57 | -13.0     | 29.6   | 173.4  | Horizontal | PASS    |
| 2900.249   | -38.64 | -13.0     | 25.6   | 52.8   | Horizontal | PASS    |
| 3805.486   | -52.38 | -13.0     | 39.4   | 95.6   | Horizontal | PASS    |
| 17201.995  | -29.39 | -13.0     | 16.4   | 111.0  | Horizontal | PASS    |

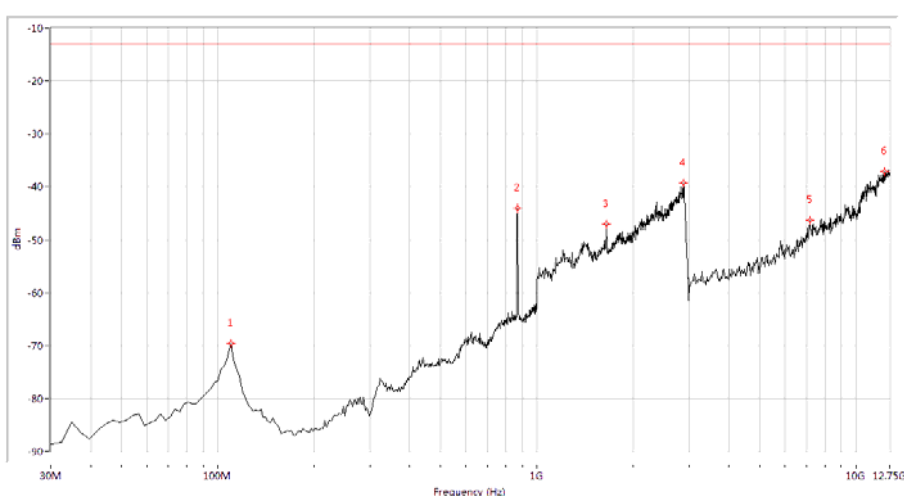
(Plot H.5: HSDPA 1900 MHz Channel = 9538, Test Antenna Horizontal)





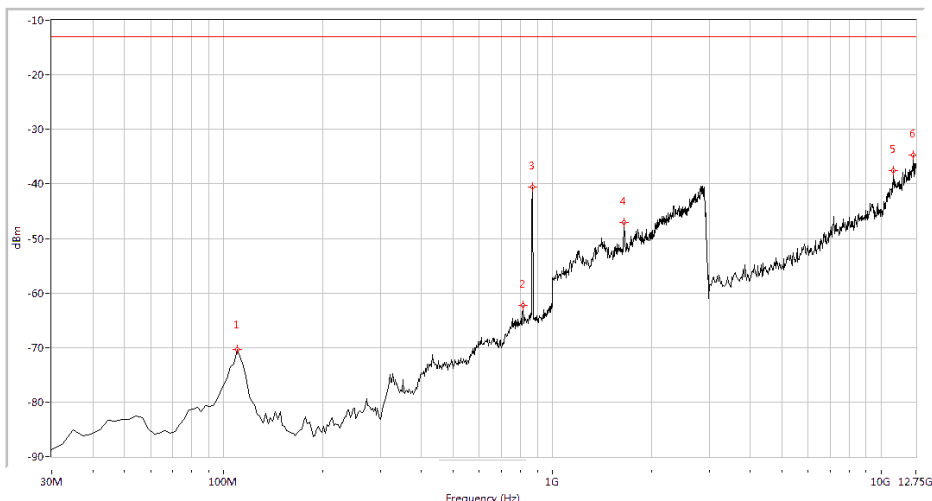
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -68.87 | -13.0     | 55.9   | 4.2    | Vertical | PASS    |
| 325.112    | -72.74 | -13.0     | 59.7   | 38.6   | Vertical | PASS    |
| 1987.531   | -36.02 | -13.0     | 23.0   | 258.5  | Vertical | PASS    |
| 2890.274   | -39.22 | -13.0     | 26.2   | 359.8  | Vertical | PASS    |
| 7578.554   | -45.41 | -13.0     | 32.4   | 235.3  | Vertical | PASS    |
| 18389.027  | -29.17 | -13.0     | 16.2   | 250.5  | Vertical | PASS    |

(Plot H.6: HSDPA 1900 MHz Channel = 9538, Test Antenna Vertical)



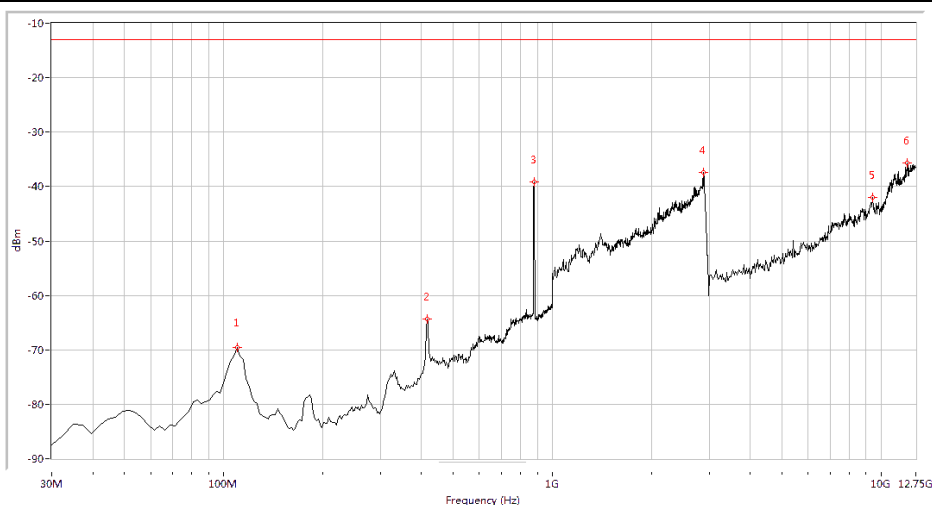
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.53 | -13.0     | 56.5   | 12.5   | Horizontal | PASS    |
| 869.377    | -44.12 | -13.0     | 31.1   | 254.8  | Horizontal | PASS    |
| 1653.367   | -47.09 | -13.0     | 34.1   | 0.0    | Horizontal | PASS    |
| 2885.287   | -39.27 | -13.0     | 26.3   | 25.3   | Horizontal | PASS    |
| 7157.731   | -46.27 | -13.0     | 33.3   | 269.7  | Horizontal | PASS    |
| 12288.030  | -37.12 | -13.0     | 24.1   | 194.2  | Horizontal | PASS    |

(Plot I.1: HSUPA 850MHz Channel = 4132, Test Antenna Horizontal)



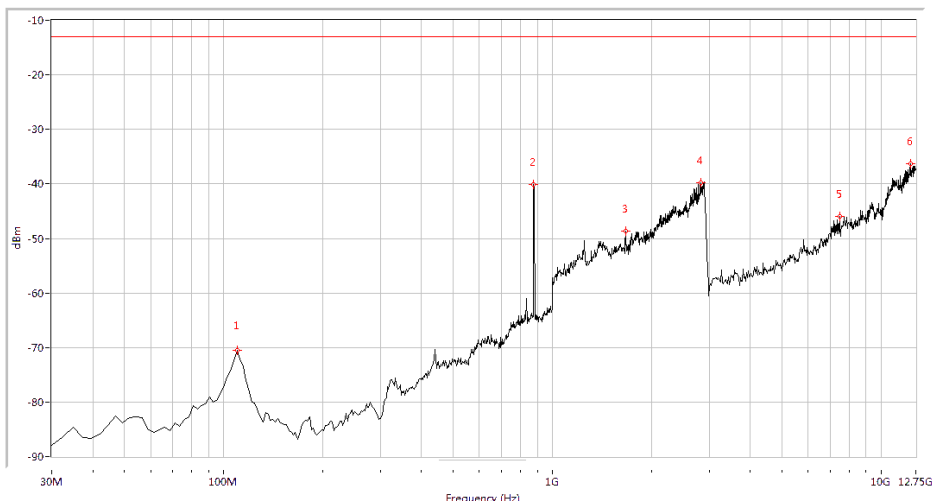
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.32 | -13.0     | 57.3   | 321.5  | Vertical | PASS    |
| 813.741    | -62.32 | -13.0     | 49.3   | 164.7  | Vertical | PASS    |
| 871.796    | -40.56 | -13.0     | 27.6   | 30.4   | Vertical | PASS    |
| 1653.367   | -47.07 | -13.0     | 34.1   | 125.4  | Vertical | PASS    |
| 10926.434  | -37.63 | -13.0     | 24.6   | 97.6   | Vertical | PASS    |
| 12555.486  | -34.68 | -13.0     | 21.7   | 20.0   | Vertical | PASS    |

(Plot I.2: HSUPA 850 MHz Channel = 4132, Test Antenna Vertical)



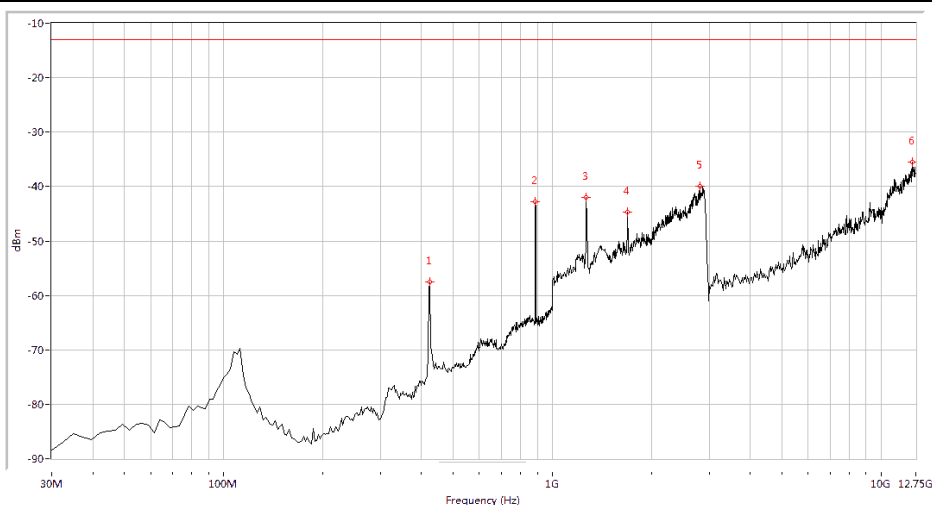
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.50 | -13.0     | 56.5   | 260.5  | Horizontal | PASS    |
| 417.032    | -64.38 | -13.0     | 51.4   | 185.7  | Horizontal | PASS    |
| 879.052    | -39.23 | -13.0     | 26.2   | 93.1   | Horizontal | PASS    |
| 2875.312   | -37.48 | -13.0     | 24.5   | 3.8    | Horizontal | PASS    |
| 9418.953   | -41.99 | -13.0     | 29.0   | 157.3  | Horizontal | PASS    |
| 12020.574  | -35.70 | -13.0     | 22.7   | 78.5   | Horizontal | PASS    |

(Plot I.3: HSUPA 850MHz Channel = 4175, Test Antenna Horizontal)



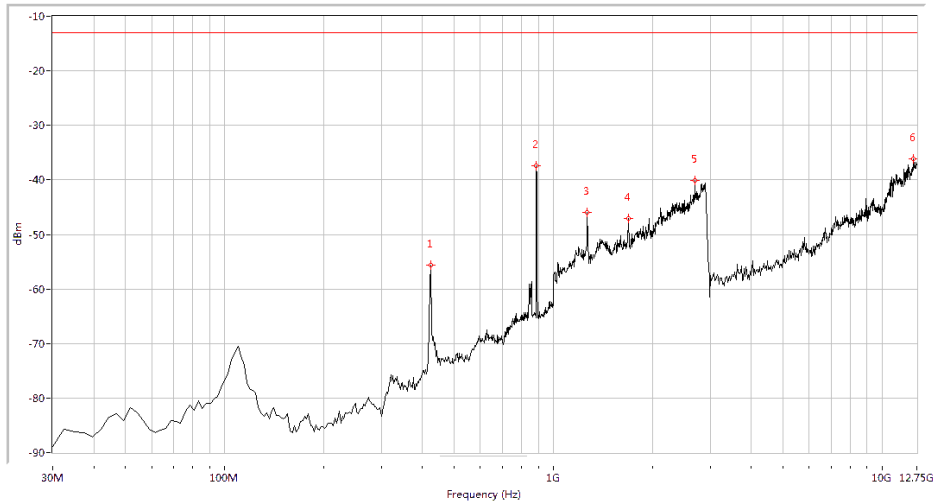
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.44 | -13.0     | 57.4   | 318.4  | Vertical | PASS    |
| 876.633    | -40.13 | -13.0     | 27.1   | 96.7   | Vertical | PASS    |
| 1668.329   | -48.72 | -13.0     | 35.7   | 182.0  | Vertical | PASS    |
| 2825.436   | -39.85 | -13.0     | 26.8   | 24.7   | Vertical | PASS    |
| 7473.815   | -45.98 | -13.0     | 33.0   | 95.6   | Vertical | PASS    |
| 12312.344  | -36.35 | -13.0     | 23.3   | 121.0  | Vertical | PASS    |

(Plot I.4: HSUPA 850MHz Channel = 4175, Test Antenna Vertical)



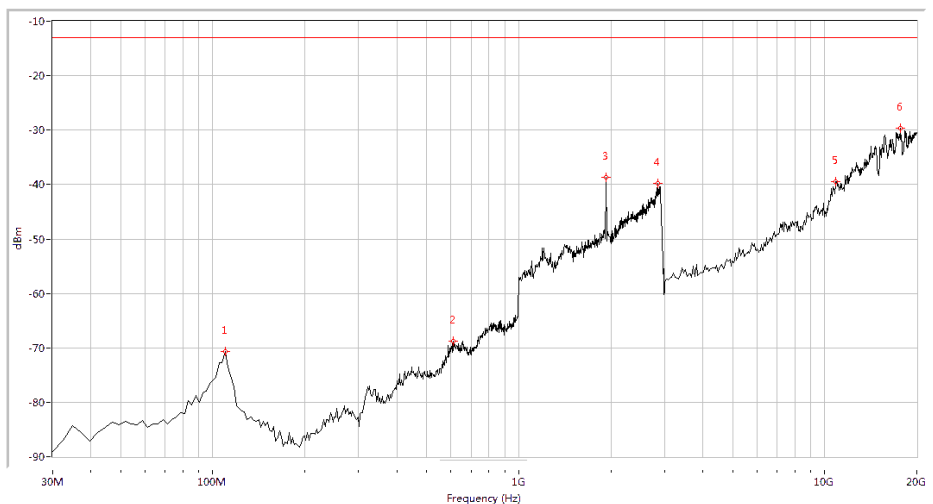
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 424.289    | -57.55 | -13.0     | 44.6   | 319.7  | Horizontal | PASS    |
| 888.728    | -42.72 | -13.0     | 29.7   | 26.4   | Horizontal | PASS    |
| 1269.327   | -41.96 | -13.0     | 29.0   | 168.4  | Horizontal | PASS    |
| 1693.267   | -44.63 | -13.0     | 31.6   | 254.9  | Horizontal | PASS    |
| 2805.486   | -39.88 | -13.0     | 26.9   | 31.5   | Horizontal | PASS    |
| 12409.601  | -35.43 | -13.0     | 22.4   | 267.8  | Horizontal | PASS    |

(Plot I.5: HSUPA 850MHz Channel = 4233, Test Antenna Horizontal)



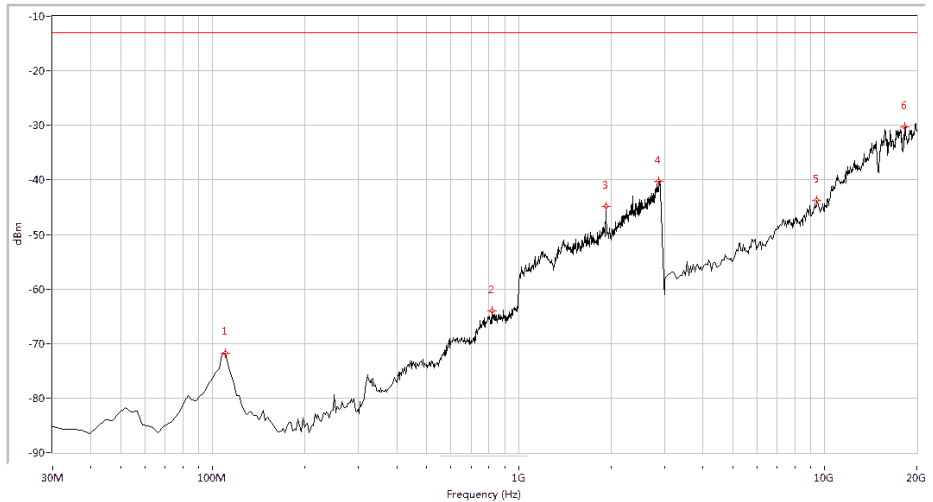
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 424.289    | -55.69 | -13.0     | 42.7   | 69.5   | Vertical | PASS    |
| 888.728    | -37.38 | -13.0     | 24.4   | 168.5  | Vertical | PASS    |
| 1269.327   | -45.99 | -13.0     | 33.0   | 52.3   | Vertical | PASS    |
| 1688.279   | -47.08 | -13.0     | 34.1   | 169.9  | Vertical | PASS    |
| 2695.761   | -40.17 | -13.0     | 27.2   | 0.0    | Vertical | PASS    |
| 12433.915  | -36.14 | -13.0     | 23.1   | 360.0  | Vertical | PASS    |

(Plot I.6: HSUPA 850MHz Channel = 4233, Test Antenna Vertical)



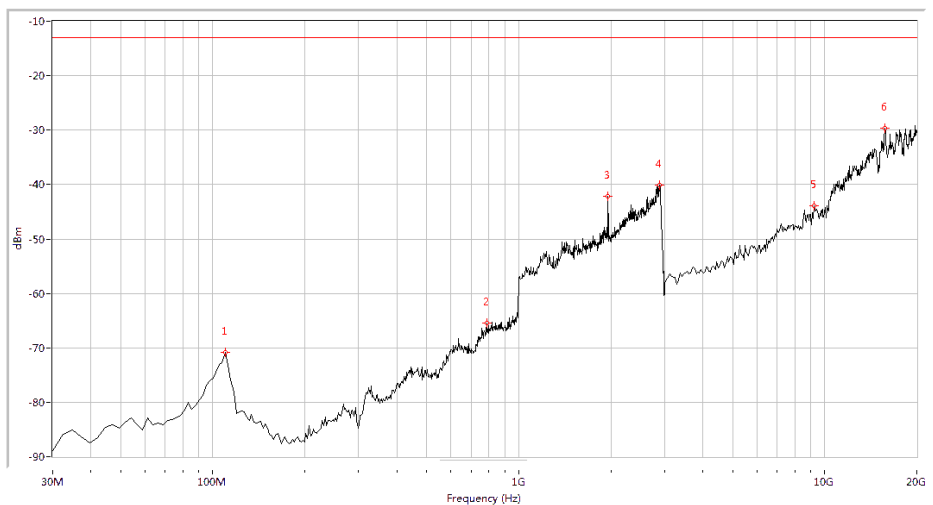
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.61 | -13.0     | 57.6   | 95.7   | Horizontal | PASS    |
| 612.968    | -68.78 | -13.0     | 55.8   | 48.3   | Horizontal | PASS    |
| 1932.668   | -38.68 | -13.0     | 25.7   | 164.8  | Horizontal | PASS    |
| 2855.362   | -39.76 | -13.0     | 26.8   | 105.6  | Horizontal | PASS    |
| 10885.287  | -39.49 | -13.0     | 26.5   | 42.9   | Horizontal | PASS    |
| 17710.723  | -29.67 | -13.0     | 16.7   | 254.3  | Horizontal | PASS    |

(Plot J.1: HSUPA 1900 MHz Channel = 9262, Test Antenna Horizontal)



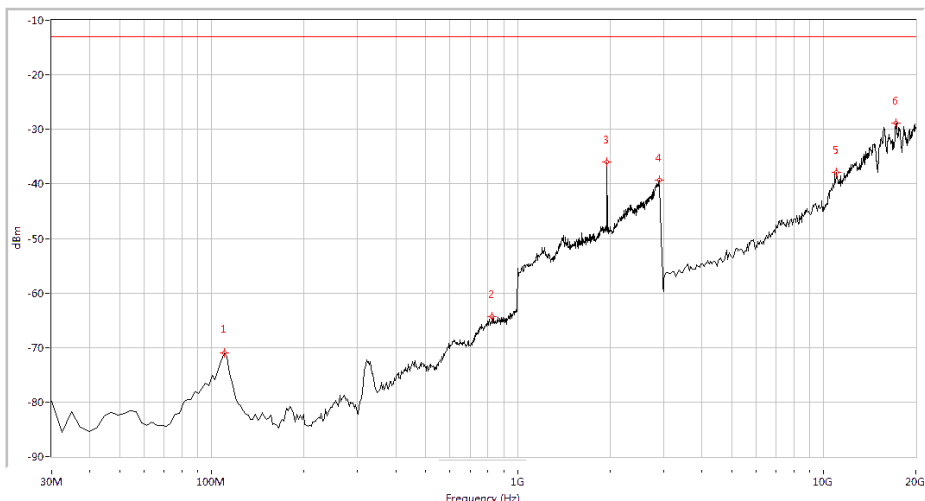
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.80 | -13.0     | 58.8   | 349.7  | Vertical | PASS    |
| 816.160    | -64.10 | -13.0     | 51.1   | 152.8  | Vertical | PASS    |
| 1927.681   | -44.92 | -13.0     | 31.9   | 84.2   | Vertical | PASS    |
| 2875.312   | -40.31 | -13.0     | 27.3   | 63.9   | Vertical | PASS    |
| 9443.890   | -43.76 | -13.0     | 30.8   | 94.2   | Vertical | PASS    |
| 18304.239  | -30.31 | -13.0     | 17.3   | 147.5  | Vertical | PASS    |

(Plot J.2: HSUPA 1900 MHz Channel = 9262, Test Antenna Vertical)



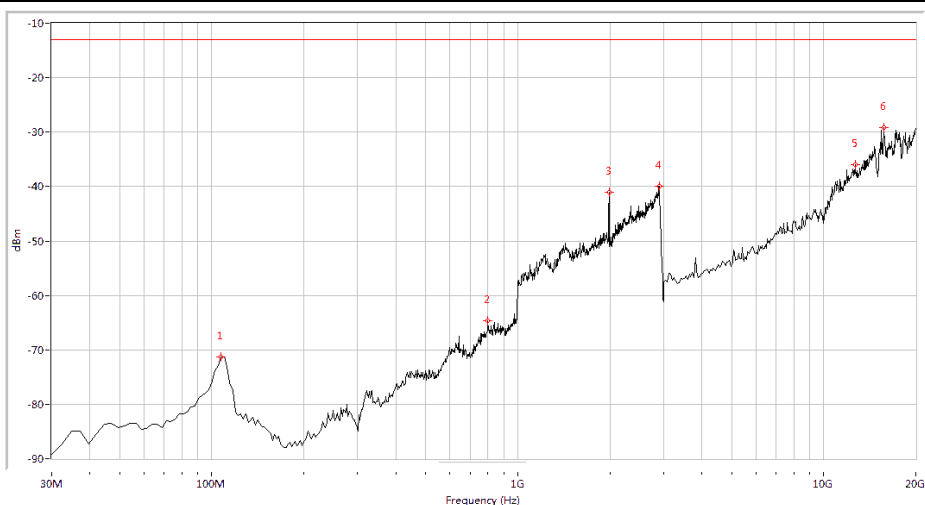
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.85 | -13.0     | 57.8   | 346.5  | Horizontal | PASS    |
| 787.132    | -65.46 | -13.0     | 52.5   | 258.7  | Horizontal | PASS    |
| 1957.606   | -42.13 | -13.0     | 29.1   | 95.8   | Horizontal | PASS    |
| 2885.287   | -40.13 | -13.0     | 27.1   | 156.4  | Horizontal | PASS    |
| 9231.920   | -43.93 | -13.0     | 30.9   | 263.5  | Horizontal | PASS    |
| 15718.204  | -29.69 | -13.0     | 16.7   | 185.3  | Horizontal | PASS    |

(Plot J.3: HSUPA 1900 MHz Channel = 9400, Test Antenna Horizontal)



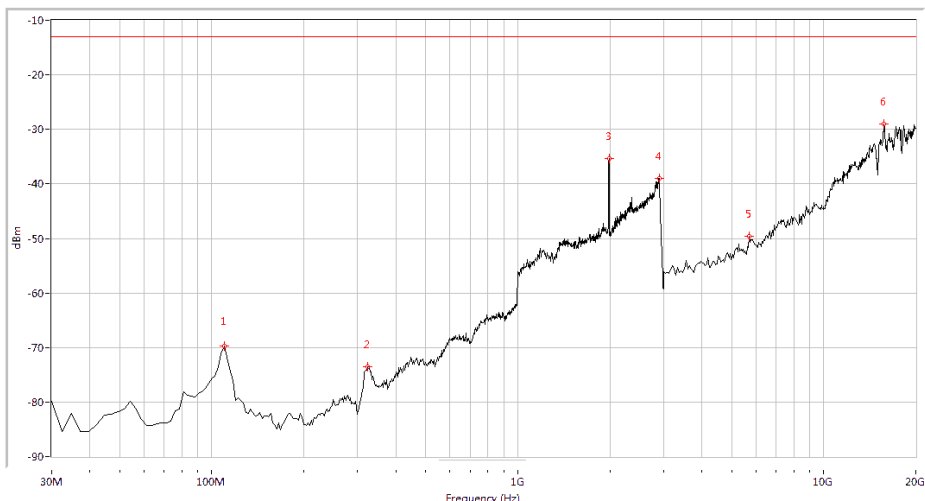
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.03 | -13.0     | 58.0   | 269.5  | Vertical | PASS    |
| 825.835    | -64.41 | -13.0     | 51.4   | 33.8   | Vertical | PASS    |
| 1957.606   | -35.92 | -13.0     | 22.9   | 215.7  | Vertical | PASS    |
| 2900.249   | -39.36 | -13.0     | 26.4   | 3.9    | Vertical | PASS    |
| 11012.469  | -37.84 | -13.0     | 24.8   | -0.0   | Vertical | PASS    |
| 17201.995  | -28.81 | -13.0     | 15.8   | 326.8  | Vertical | PASS    |

(Plot J.4: HSUPA 1900 MHz Channel = 9400, Test Antenna Vertical)



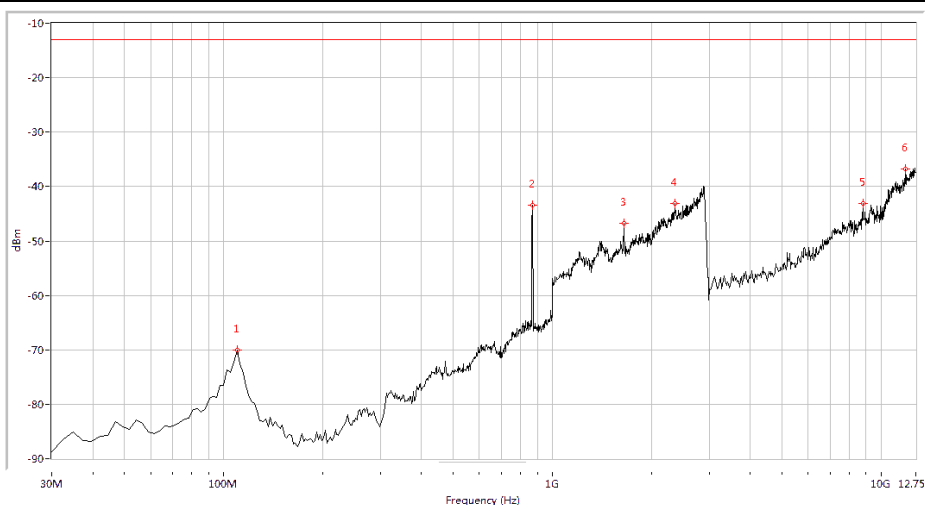
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 107.406    | -71.38 | -13.0     | 58.4   | 325.9  | Horizontal | PASS    |
| 799.227    | -64.66 | -13.0     | 51.7   | 45.5   | Horizontal | PASS    |
| 1987.531   | -41.01 | -13.0     | 28.0   | 264.7  | Horizontal | PASS    |
| 2905.237   | -39.93 | -13.0     | 26.9   | 152.5  | Horizontal | PASS    |
| 12665.835  | -36.05 | -13.0     | 23.1   | 35.9   | Horizontal | PASS    |
| 15760.599  | -29.14 | -13.0     | 16.1   | 68.7   | Horizontal | PASS    |

(Plot J.5: HSUPA 1900 MHz Channel = 9538, Test Antenna Horizontal)



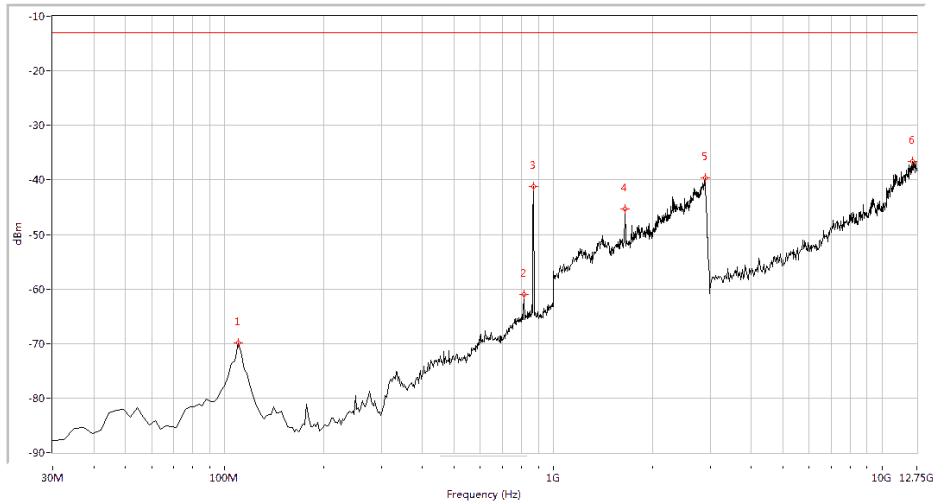
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.79 | -13.0     | 56.8   | 233.4  | Vertical | PASS    |
| 322.693    | -73.58 | -13.0     | 60.6   | 32.9   | Vertical | PASS    |
| 1987.531   | -35.32 | -13.0     | 22.3   | 212.8  | Vertical | PASS    |
| 2900.249   | -39.05 | -13.0     | 26.0   | 82.6   | Vertical | PASS    |
| 5713.217   | -49.61 | -13.0     | 36.6   | 220.8  | Vertical | PASS    |
| 15760.599  | -29.07 | -13.0     | 16.1   | 350.9  | Vertical | PASS    |

(Plot J.6: HSUPA 1900 MHz Channel = 9538, Test Antenna Vertical)



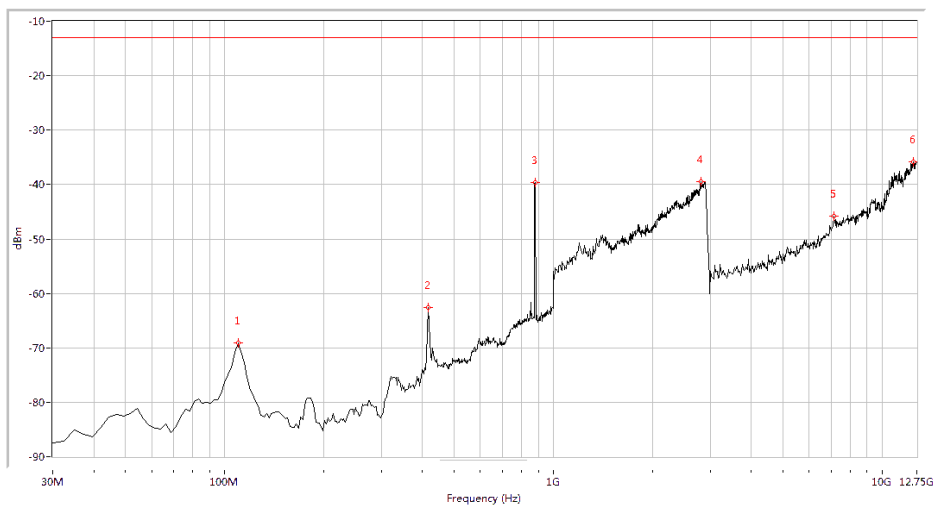
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.08 | -13.0     | 57.1   | 265.3  | Horizontal | PASS    |
| 869.377    | -43.50 | -13.0     | 30.5   | 205.4  | Horizontal | PASS    |
| 1648.379   | -46.77 | -13.0     | 33.8   | 0.9    | Horizontal | PASS    |
| 2361.596   | -43.07 | -13.0     | 30.1   | 165.4  | Horizontal | PASS    |
| 8811.097   | -43.18 | -13.0     | 30.2   | 269.9  | Horizontal | PASS    |
| 11874.688  | -36.80 | -13.0     | 23.8   | 215.7  | Horizontal | PASS    |

(Plot K.1: HSPA+ 850MHz Channel = 4132, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.93 | -13.0     | 56.9   | 321.5  | Vertical | PASS    |
| 813.741    | -61.08 | -13.0     | 48.1   | 15.2   | Vertical | PASS    |
| 869.377    | -41.28 | -13.0     | 28.3   | 69.7   | Vertical | PASS    |
| 1653.367   | -45.31 | -13.0     | 32.3   | 184.3  | Vertical | PASS    |
| 2895.262   | -39.57 | -13.0     | 26.6   | 33.2   | Vertical | PASS    |
| 12385.287  | -36.62 | -13.0     | 23.6   | 121.4  | Vertical | PASS    |

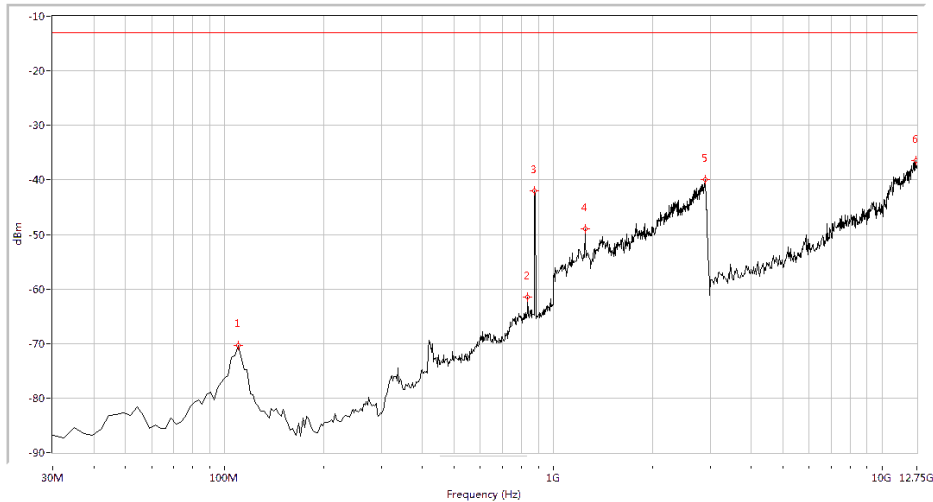
(Plot K.2: HSPA+ 850 MHz Channel = 4132, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.13 | -13.0     | 56.1   | 1.7    | Horizontal | PASS    |
| 417.032    | -62.64 | -13.0     | 49.6   | 179.0  | Horizontal | PASS    |
| 879.052    | -39.59 | -13.0     | 26.6   | 78.5   | Horizontal | PASS    |
| 2810.474   | -39.49 | -13.0     | 26.5   | 253.5  | Horizontal | PASS    |
| 7133.416   | -45.80 | -13.0     | 32.8   | 360.0  | Horizontal | PASS    |
| 12409.601  | -35.75 | -13.0     | 22.8   | 306.2  | Horizontal | PASS    |

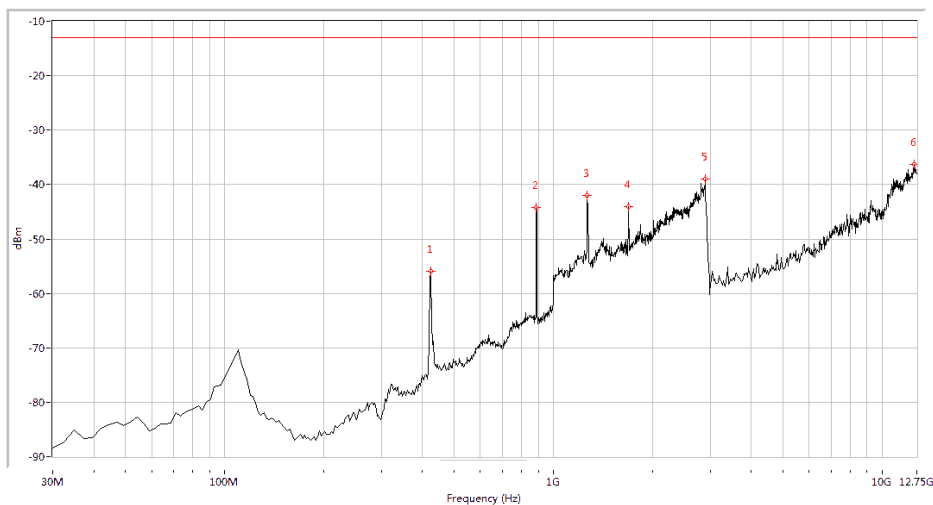
(Plot K.3: HSPA+ 850MHz Channel = 4175, Test Antenna Horizontal)





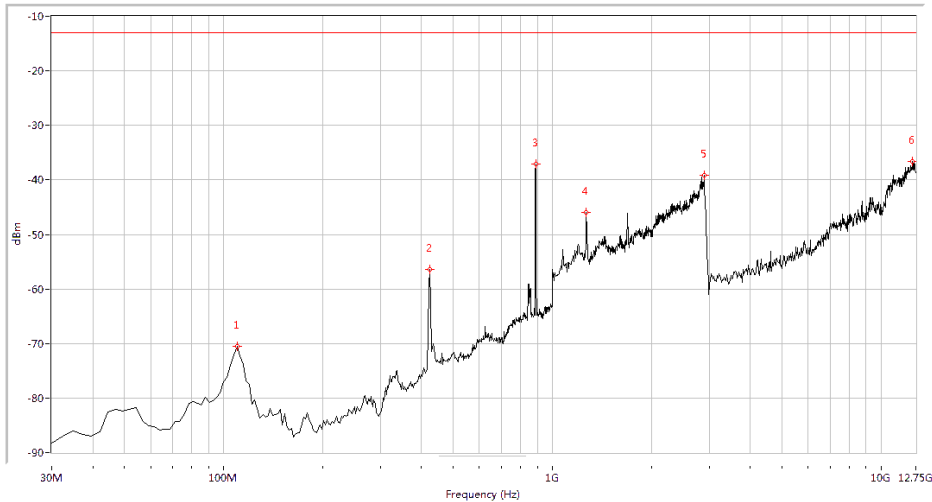
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.29 | -13.0     | 57.3   | 32.6   | Vertical | PASS    |
| 835.511    | -61.53 | -13.0     | 48.5   | 164.8  | Vertical | PASS    |
| 876.633    | -42.03 | -13.0     | 29.0   | 251.8  | Vertical | PASS    |
| 1249.377   | -48.99 | -13.0     | 36.0   | 360.0  | Vertical | PASS    |
| 2890.274   | -39.98 | -13.0     | 27.0   | 318.7  | Vertical | PASS    |
| 12652.743  | -36.43 | -13.0     | 23.4   | 261.8  | Vertical | PASS    |

(Plot K.4: HSPA+ 850MHz Channel = 4175, Test Antenna Vertical)



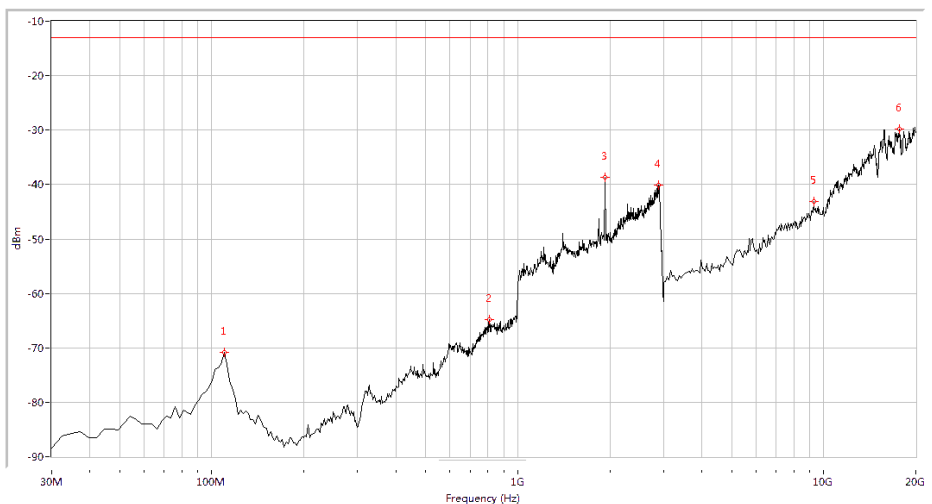
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 424.289    | -55.94 | -13.0     | 42.9   | 305.4  | Horizontal | PASS    |
| 888.728    | -44.18 | -13.0     | 31.2   | 135.4  | Horizontal | PASS    |
| 1269.327   | -41.95 | -13.0     | 29.0   | 0.5    | Horizontal | PASS    |
| 1693.267   | -44.11 | -13.0     | 31.1   | 22.3   | Horizontal | PASS    |
| 2900.249   | -39.01 | -13.0     | 26.0   | 121.6  | Horizontal | PASS    |
| 12531.172  | -36.29 | -13.0     | 23.3   | 108.6  | Horizontal | PASS    |

(Plot K.5: HSPA+ 850MHz Channel = 4233, Test Antenna Horizontal)



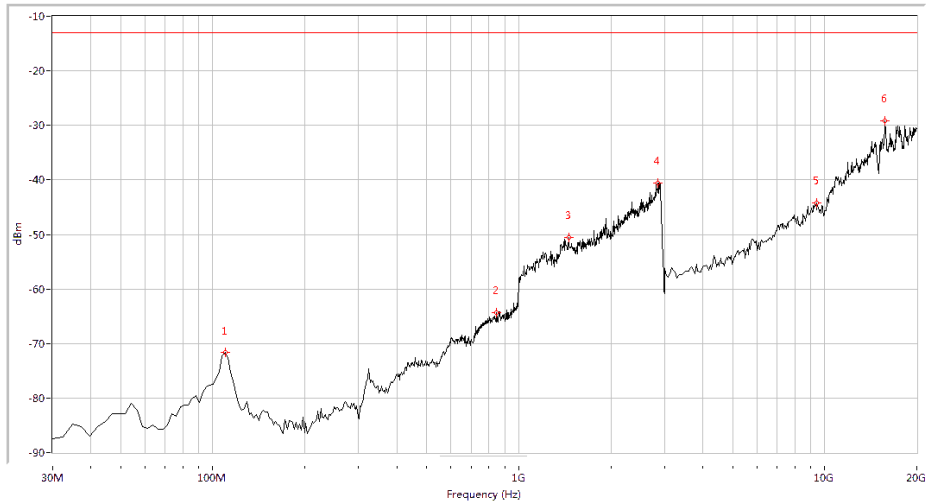
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.50 | -13.0     | 57.5   | 69.4   | Vertical | PASS    |
| 424.289    | -56.45 | -13.0     | 43.4   | 165.7  | Vertical | PASS    |
| 891.147    | -37.08 | -13.0     | 24.1   | 84.5   | Vertical | PASS    |
| 1269.327   | -45.99 | -13.0     | 33.0   | 264.3  | Vertical | PASS    |
| 2900.249   | -39.18 | -13.0     | 26.2   | 63.9   | Vertical | PASS    |
| 12458.229  | -36.65 | -13.0     | 23.7   | 19.0   | Vertical | PASS    |

(Plot K.6: HSPA+ 850MHz Channel = 4233, Test Antenna Vertical)



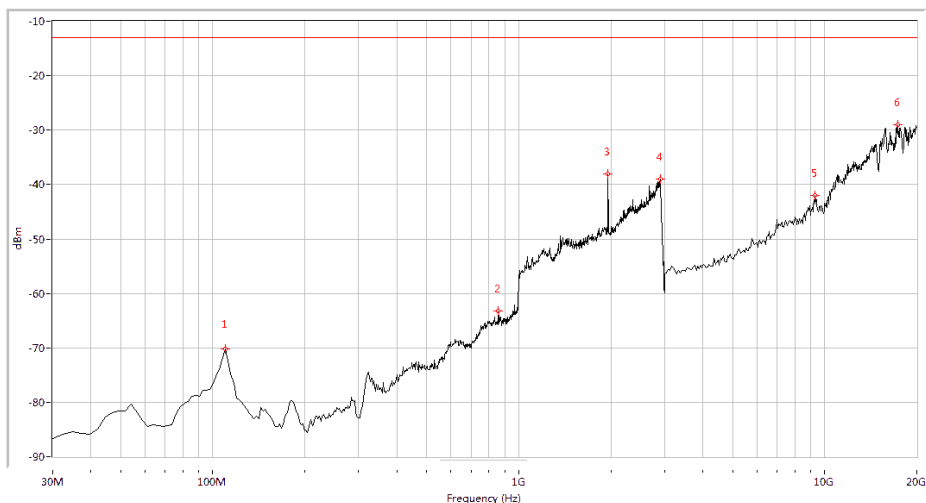
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.87 | -13.0     | 57.9   | 64.5   | Horizontal | PASS    |
| 808.903    | -64.85 | -13.0     | 51.9   | 256.8  | Horizontal | PASS    |
| 1932.668   | -38.71 | -13.0     | 25.7   | 175.3  | Horizontal | PASS    |
| 2895.262   | -40.15 | -13.0     | 27.2   | 94.1   | Horizontal | PASS    |
| 9274.314   | -43.07 | -13.0     | 30.1   | 0.0    | Horizontal | PASS    |
| 17625.935  | -29.72 | -13.0     | 16.7   | 71.2   | Horizontal | PASS    |

(Plot L.1: HSPA+ 1900 MHz Channel = 9262, Test Antenna Horizontal)



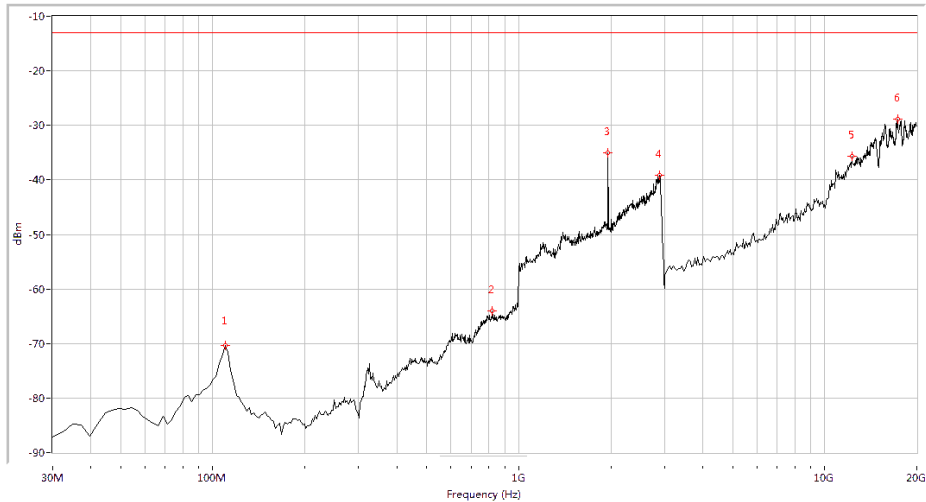
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.63 | -13.0     | 58.6   | 345.2  | Vertical | PASS    |
| 847.606    | -64.40 | -13.0     | 51.4   | 0.8    | Vertical | PASS    |
| 1458.853   | -50.62 | -13.0     | 37.6   | 123.4  | Vertical | PASS    |
| 2845.387   | -40.55 | -13.0     | 27.5   | 24.5   | Vertical | PASS    |
| 9401.496   | -44.18 | -13.0     | 31.2   | 47.6   | Vertical | PASS    |
| 15760.599  | -29.11 | -13.0     | 16.1   | 247.3  | Vertical | PASS    |

(Plot L.2: HSPA+ 1900 MHz Channel = 9262, Test Antenna Vertical)



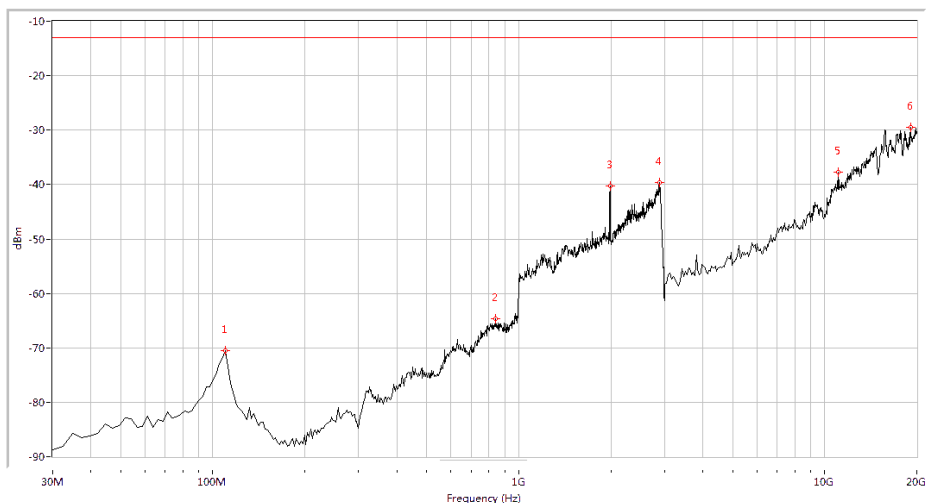
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.27 | -13.0     | 57.3   | 234.9  | Horizontal | PASS    |
| 857.282    | -63.22 | -13.0     | 50.2   | -0.0   | Horizontal | PASS    |
| 1957.606   | -38.08 | -13.0     | 25.1   | 293.0  | Horizontal | PASS    |
| 2900.249   | -39.02 | -13.0     | 26.0   | 306.8  | Horizontal | PASS    |
| 9316.708   | -42.05 | -13.0     | 29.0   | 4.9    | Horizontal | PASS    |
| 17286.783  | -29.05 | -13.0     | 16.1   | 164.6  | Horizontal | PASS    |

(Plot L.3: HSPA+ 1900 MHz Channel = 9400, Test Antenna Horizontal)



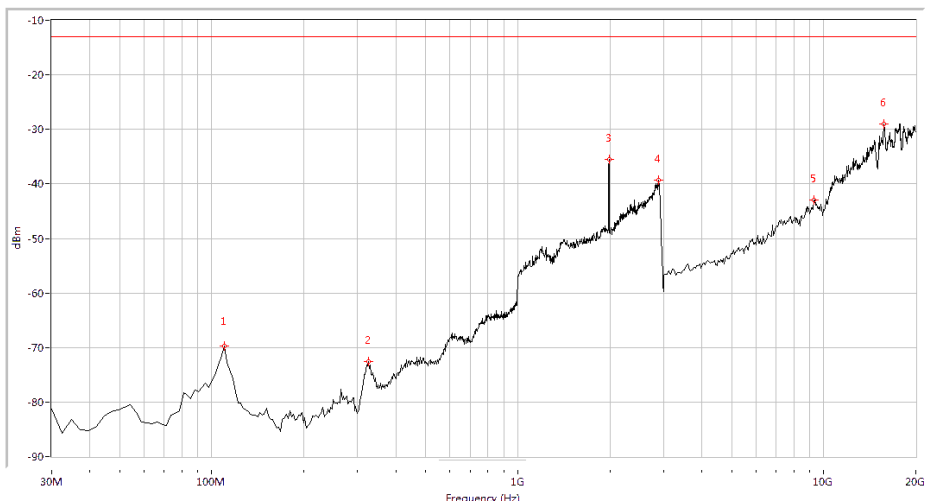
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.36 | -13.0     | 57.4   | 271.8  | Vertical | PASS    |
| 818.579    | -64.08 | -13.0     | 51.1   | 41.0   | Vertical | PASS    |
| 1957.606   | -34.98 | -13.0     | 22.0   | 213.0  | Vertical | PASS    |
| 2895.262   | -39.17 | -13.0     | 26.2   | 116.6  | Vertical | PASS    |
| 12284.289  | -35.65 | -13.0     | 22.7   | 255.6  | Vertical | PASS    |
| 17286.783  | -28.81 | -13.0     | 15.8   | 271.6  | Vertical | PASS    |

(Plot L.4: HSPA+ 1900 MHz Channel = 9400, Test Antenna Vertical)



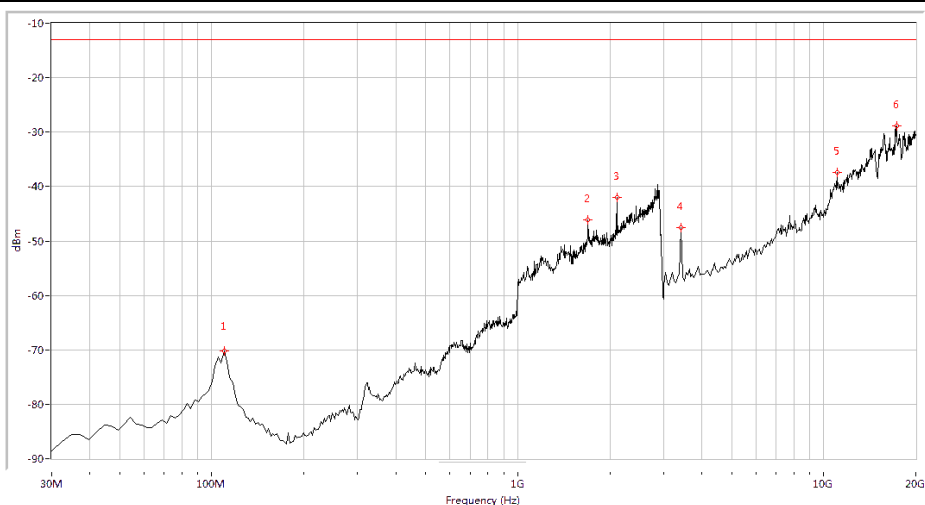
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.58 | -13.0     | 57.6   | 64.7   | Horizontal | PASS    |
| 842.768    | -64.67 | -13.0     | 51.7   | 51.6   | Horizontal | PASS    |
| 1987.531   | -40.26 | -13.0     | 27.3   | 169.5  | Horizontal | PASS    |
| 2890.274   | -39.55 | -13.0     | 26.5   | 354.8  | Horizontal | PASS    |
| 11054.863  | -37.69 | -13.0     | 24.7   | 208.7  | Horizontal | PASS    |
| 19067.332  | -29.42 | -13.0     | 16.4   | 69.4   | Horizontal | PASS    |

(Plot L.5: HSPA+ 1900 MHz Channel = 9538, Test Antenna Horizontal)



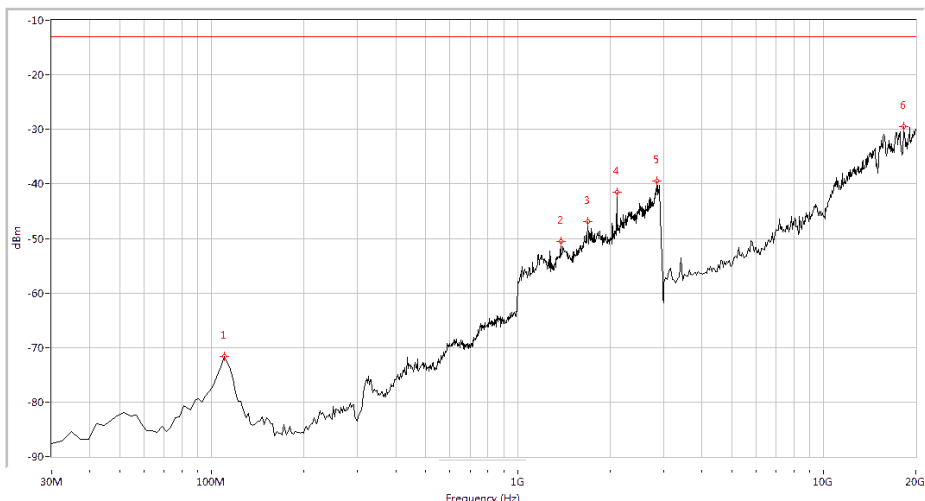
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -69.70 | -13.0     | 56.7   | 269.8  | Vertical | PASS    |
| 325.112    | -72.50 | -13.0     | 59.5   | 35.4   | Vertical | PASS    |
| 1987.531   | -35.46 | -13.0     | 22.5   | 326.1  | Vertical | PASS    |
| 2885.287   | -39.32 | -13.0     | 26.3   | 266.9  | Vertical | PASS    |
| 9316.708   | -42.94 | -13.0     | 29.9   | 359.5  | Vertical | PASS    |
| 15760.599  | -28.96 | -13.0     | 16.0   | 153.3  | Vertical | PASS    |

(Plot L.6: HSPA+ 1900 MHz Channel = 9538, Test Antenna Vertical)



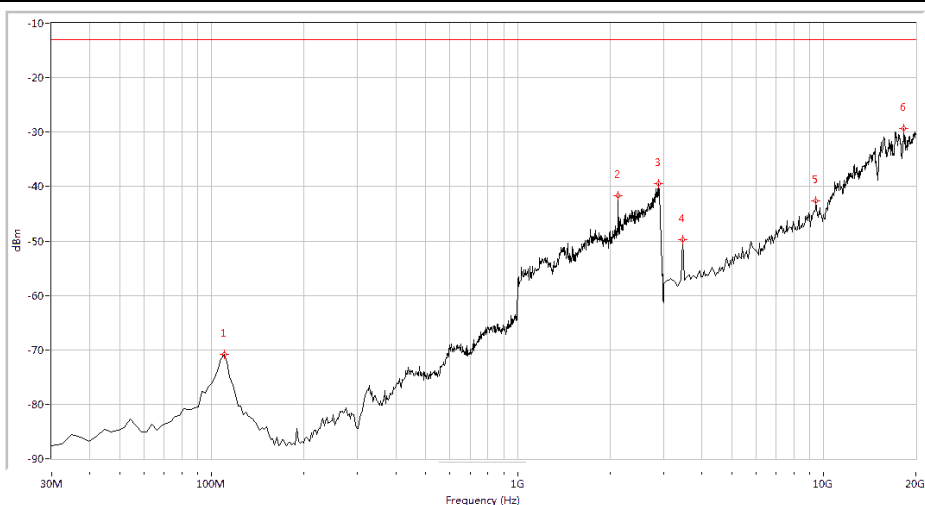
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.27 | -13.0     | 57.3   | 325.9  | Horizontal | PASS    |
| 1698.254   | -46.05 | -13.0     | 33.1   | 157.4  | Horizontal | PASS    |
| 2107.232   | -41.94 | -13.0     | 28.9   | 111.0  | Horizontal | PASS    |
| 3423.940   | -47.54 | -13.0     | 34.5   | 86.5   | Horizontal | PASS    |
| 11054.863  | -37.38 | -13.0     | 24.4   | 175.4  | Horizontal | PASS    |
| 17286.783  | -28.90 | -13.0     | 15.9   | 239.1  | Horizontal | PASS    |

(Plot M.1: WCDMA 1700MHz Channel = 1312, Test Antenna Horizontal)



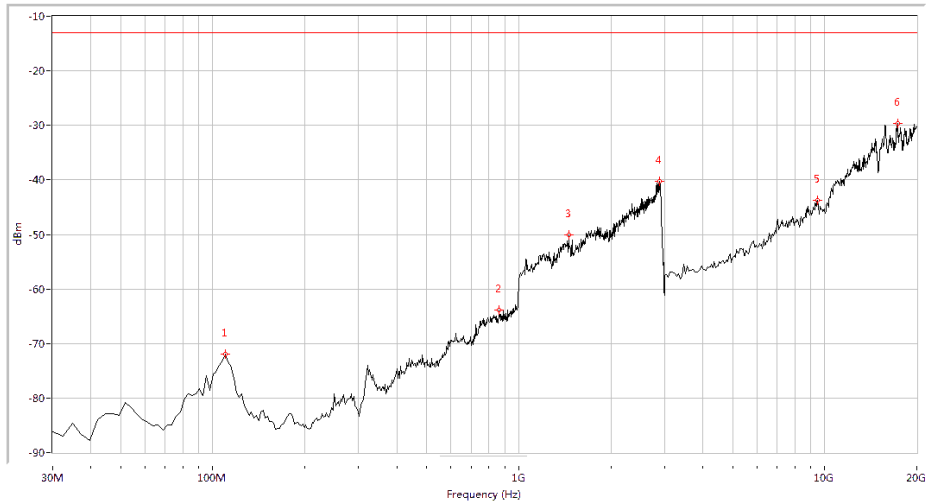
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.65 | -13.0     | 58.7   | 328.4  | Vertical | PASS    |
| 1384.040   | -50.60 | -13.0     | 37.6   | 11.0   | Vertical | PASS    |
| 1698.254   | -46.87 | -13.0     | 33.9   | 28.4   | Vertical | PASS    |
| 2107.232   | -41.46 | -13.0     | 28.5   | 305.6  | Vertical | PASS    |
| 2850.374   | -39.54 | -13.0     | 26.5   | 97.5   | Vertical | PASS    |
| 18261.845  | -29.54 | -13.0     | 16.5   | 145.7  | Vertical | PASS    |

(Plot M.2: WCDMA 1700MHz Channel = 1312, Test Antenna Vertical)



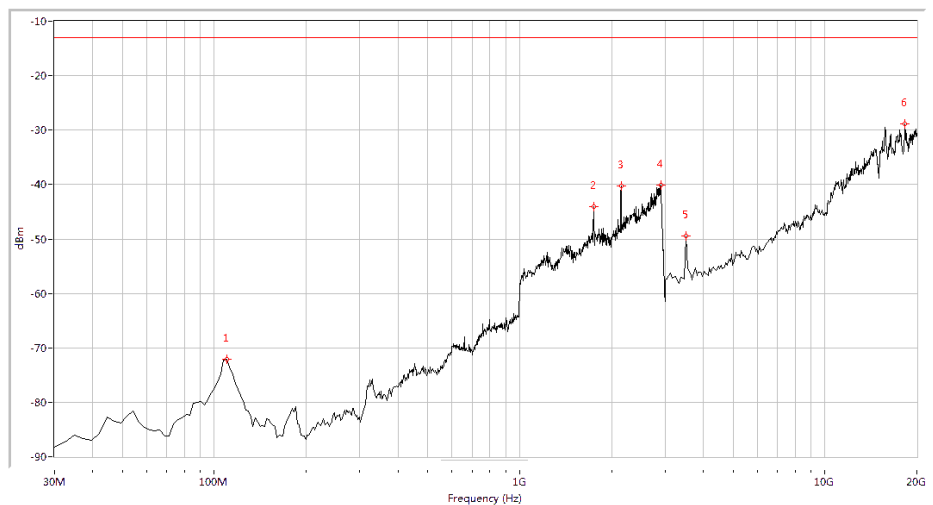
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.90 | -13.0     | 57.9   | 64.8   | Horizontal | PASS    |
| 2127.182   | -41.69 | -13.0     | 28.7   | 196.4  | Horizontal | PASS    |
| 2880.299   | -39.51 | -13.0     | 26.5   | 265.4  | Horizontal | PASS    |
| 3466.334   | -49.84 | -13.0     | 36.8   | 10.7   | Horizontal | PASS    |
| 9443.890   | -42.62 | -13.0     | 29.6   | 251.2  | Horizontal | PASS    |
| 18304.239  | -29.33 | -13.0     | 16.3   | 13.2   | Horizontal | PASS    |

(Plot M.3: WCDMA 1700MHz Channel = 1412, Test Antenna Horizontal)



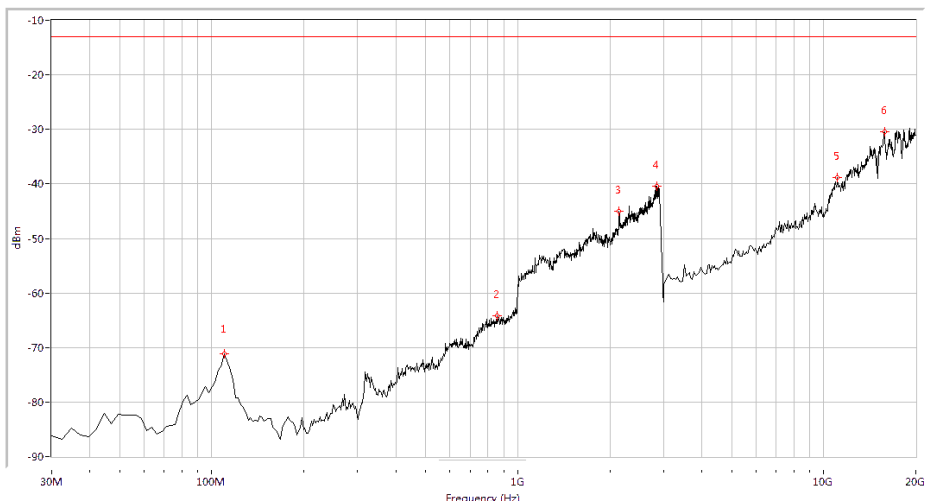
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.87 | -13.0     | 58.9   | 349.5  | Vertical | PASS    |
| 864.539    | -63.79 | -13.0     | 50.8   | 156.4  | Vertical | PASS    |
| 1458.853   | -50.02 | -13.0     | 37.0   | 0.2    | Vertical | PASS    |
| 2880.299   | -40.24 | -13.0     | 27.2   | 85.1   | Vertical | PASS    |
| 9486.284   | -43.77 | -13.0     | 30.8   | 169.9  | Vertical | PASS    |
| 17286.783  | -29.70 | -13.0     | 16.7   | 84.7   | Vertical | PASS    |

(Plot M.4: WCDMA 1700MHz Channel = 1412, Test Antenna Vertical)



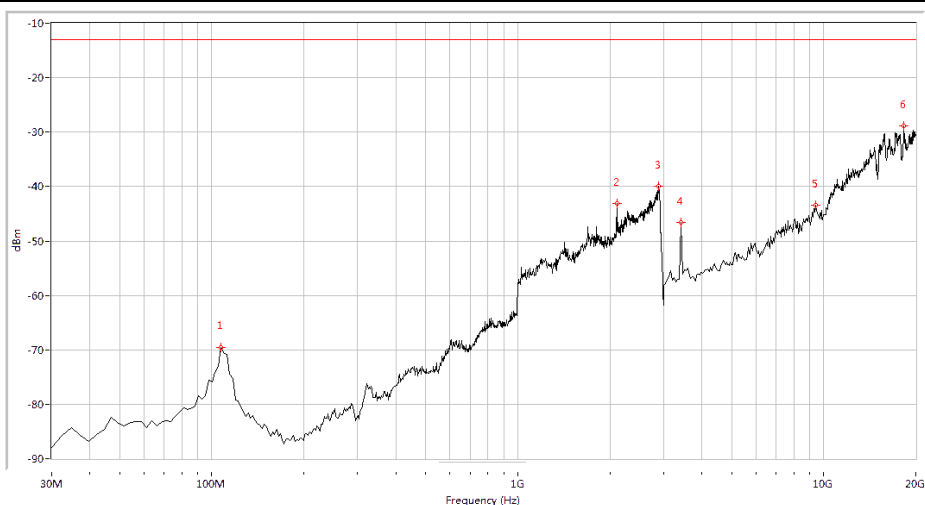
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -72.02 | -13.0     | 59.0   | 64.5   | Horizontal | PASS    |
| 1748.130   | -44.10 | -13.0     | 31.1   | 159.7  | Horizontal | PASS    |
| 2152.120   | -40.28 | -13.0     | 27.3   | 84.3   | Horizontal | PASS    |
| 2900.249   | -40.17 | -13.0     | 27.2   | 318.6  | Horizontal | PASS    |
| 3508.728   | -49.47 | -13.0     | 36.5   | 17.4   | Horizontal | PASS    |
| 18304.239  | -28.85 | -13.0     | 15.8   | 0.5    | Horizontal | PASS    |

(Plot M.5: WCDMA 1700MHz Channel = 1513, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.16 | -13.0     | 58.2   | 46.5   | Vertical | PASS    |
| 857.282    | -64.21 | -13.0     | 51.2   | 163.9  | Vertical | PASS    |
| 2147.132   | -44.98 | -13.0     | 32.0   | 84.6   | Vertical | PASS    |
| 2845.387   | -40.40 | -13.0     | 27.4   | 68.1   | Vertical | PASS    |
| 11097.257  | -38.87 | -13.0     | 25.9   | 159.7  | Vertical | PASS    |
| 15802.993  | -30.49 | -13.0     | 17.5   | 52.6   | Vertical | PASS    |

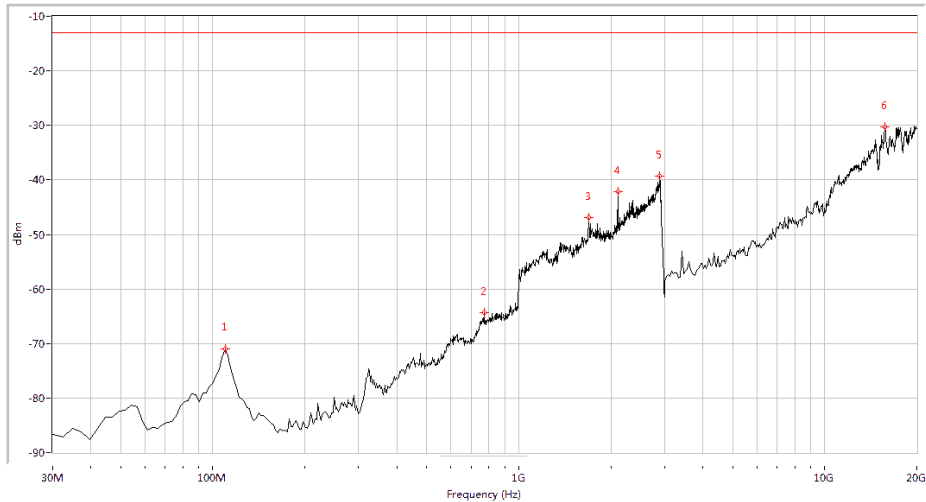
(Plot M.6: WCDMA 1700MHz Channel = 1513, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 107.406    | -69.61 | -13.0     | 56.6   | 69.4   | Horizontal | PASS    |
| 2107.232   | -43.08 | -13.0     | 30.1   | 212.7  | Horizontal | PASS    |
| 2880.299   | -39.93 | -13.0     | 26.9   | 20.8   | Horizontal | PASS    |
| 3423.940   | -46.59 | -13.0     | 33.6   | 197.6  | Horizontal | PASS    |
| 9401.496   | -43.48 | -13.0     | 30.5   | 63.5   | Horizontal | PASS    |
| 18304.239  | -28.84 | -13.0     | 15.8   | 71.6   | Horizontal | PASS    |

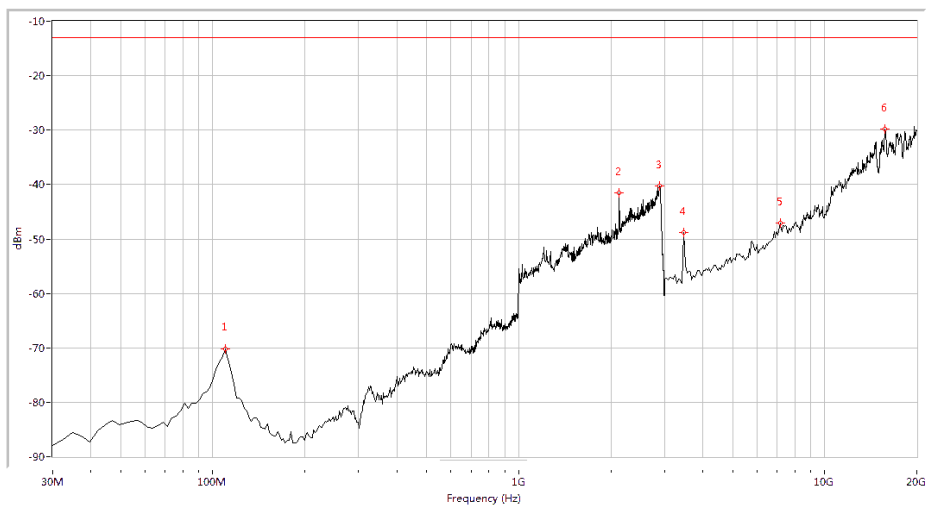
(Plot N.1: HSDPA 1700MHz Channel = 1312, Test Antenna Horizontal)





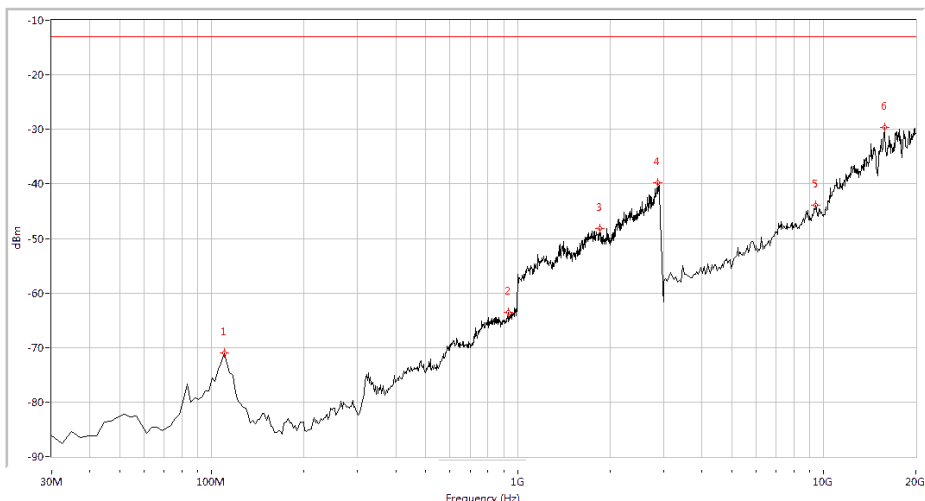
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.02 | -13.0     | 58.0   | 349.5  | Vertical | PASS    |
| 770.200    | -64.37 | -13.0     | 51.4   | 0.8    | Vertical | PASS    |
| 1698.254   | -46.91 | -13.0     | 33.9   | 263.8  | Vertical | PASS    |
| 2107.232   | -42.22 | -13.0     | 29.2   | 22.4   | Vertical | PASS    |
| 2895.262   | -39.32 | -13.0     | 26.3   | 0.0    | Vertical | PASS    |
| 15718.204  | -30.32 | -13.0     | 17.3   | 84.1   | Vertical | PASS    |

(Plot N.2: HSDPA 1700MHz Channel = 1312, Test Antenna Vertical)



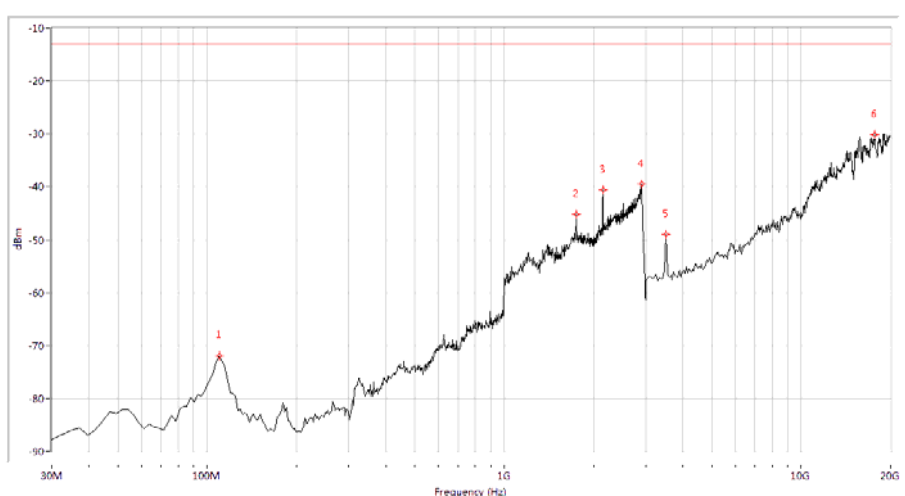
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.26 | -13.0     | 57.3   | 64.9   | Horizontal | PASS    |
| 2132.170   | -41.48 | -13.0     | 28.5   | 156.3  | Horizontal | PASS    |
| 2895.262   | -40.23 | -13.0     | 27.2   | 35.7   | Horizontal | PASS    |
| 3466.334   | -48.82 | -13.0     | 35.8   | 222.5  | Horizontal | PASS    |
| 7154.613   | -47.06 | -13.0     | 34.1   | 95.1   | Horizontal | PASS    |
| 15760.599  | -29.75 | -13.0     | 16.8   | 102.2  | Horizontal | PASS    |

(Plot N.3: HSDPA 1700MHz Channel = 1412, Test Antenna Horizontal)



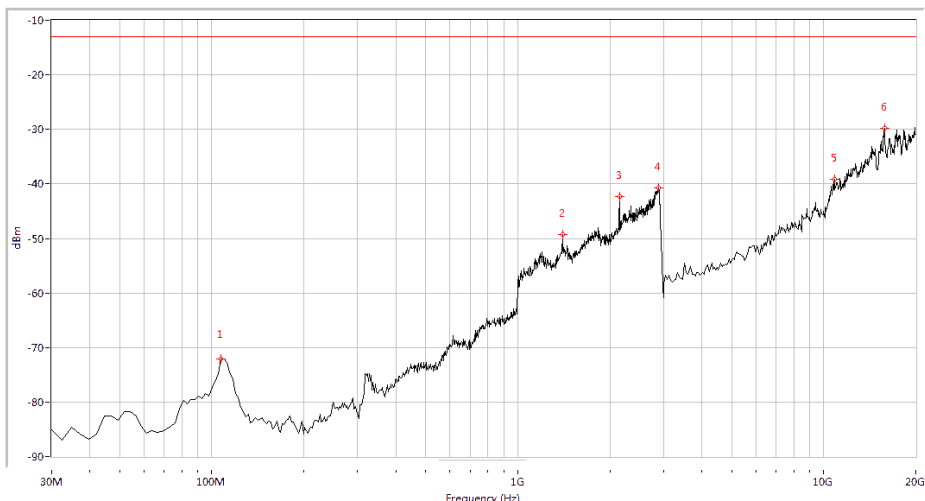
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.95 | -13.0     | 57.9   | 94.7   | Vertical | PASS    |
| 934.688    | -63.54 | -13.0     | 50.5   | 65.1   | Vertical | PASS    |
| 1857.855   | -48.20 | -13.0     | 35.2   | 254.9  | Vertical | PASS    |
| 2875.312   | -39.80 | -13.0     | 26.8   | 131.3  | Vertical | PASS    |
| 9443.890   | -43.96 | -13.0     | 31.0   | 47.5   | Vertical | PASS    |
| 15802.993  | -29.68 | -13.0     | 16.7   | 68.5   | Vertical | PASS    |

(Plot N.4: HSDAP 1700MHz Channel = 1412, Test Antenna Vertical)



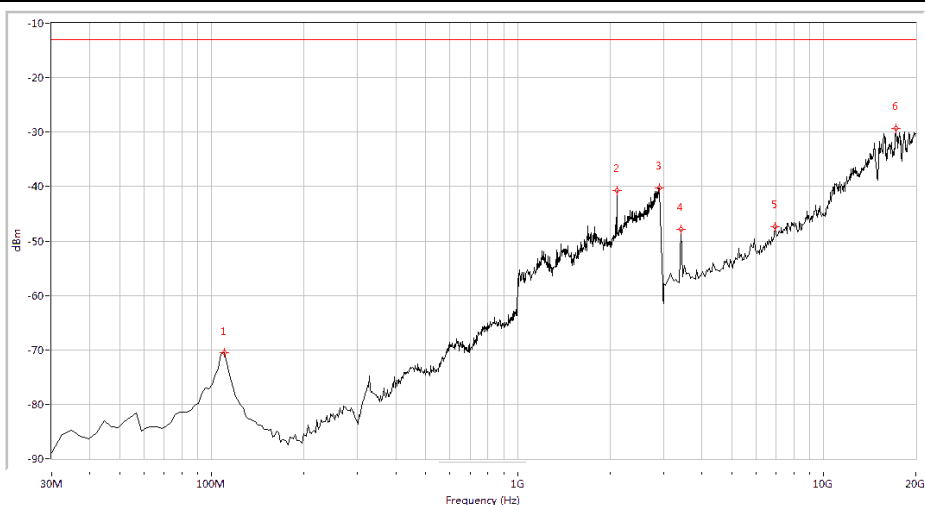
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.93 | -13.0     | 58.9   | 321.5  | Horizontal | PASS    |
| 1748.130   | -45.20 | -13.0     | 32.2   | 167.4  | Horizontal | PASS    |
| 2152.120   | -40.63 | -13.0     | 27.6   | 52.8   | Horizontal | PASS    |
| 2900.249   | -39.52 | -13.0     | 26.5   | 64.7   | Horizontal | PASS    |
| 3508.728   | -48.93 | -13.0     | 35.9   | 95.6   | Horizontal | PASS    |
| 17625.935  | -30.15 | -13.0     | 17.1   | 258.4  | Horizontal | PASS    |

(Plot N.5: HSDPA 1700MHz Channel = 1513, Test Antenna Horizontal)



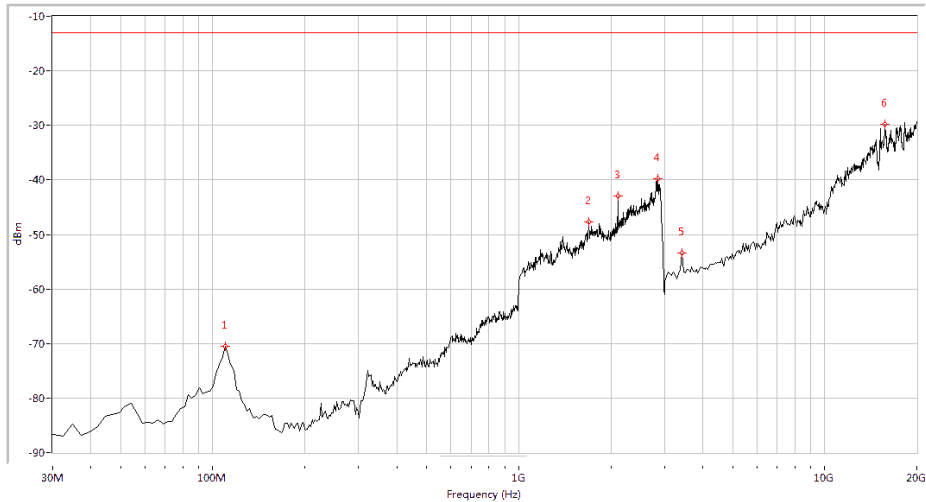
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 107.406    | -72.06 | -13.0     | 59.1   | 349.7  | Vertical | PASS    |
| 1399.002   | -49.27 | -13.0     | 36.3   | 65.6   | Vertical | PASS    |
| 2152.120   | -42.30 | -13.0     | 29.3   | 284.7  | Vertical | PASS    |
| 2880.299   | -40.65 | -13.0     | 27.7   | 305.4  | Vertical | PASS    |
| 10842.893  | -39.16 | -13.0     | 26.2   | 0.1    | Vertical | PASS    |
| 15802.993  | -29.85 | -13.0     | 16.8   | 18.2   | Vertical | PASS    |

(Plot N.6: HSDPA 1700MHz Channel = 1513, Test Antenna Vertical)



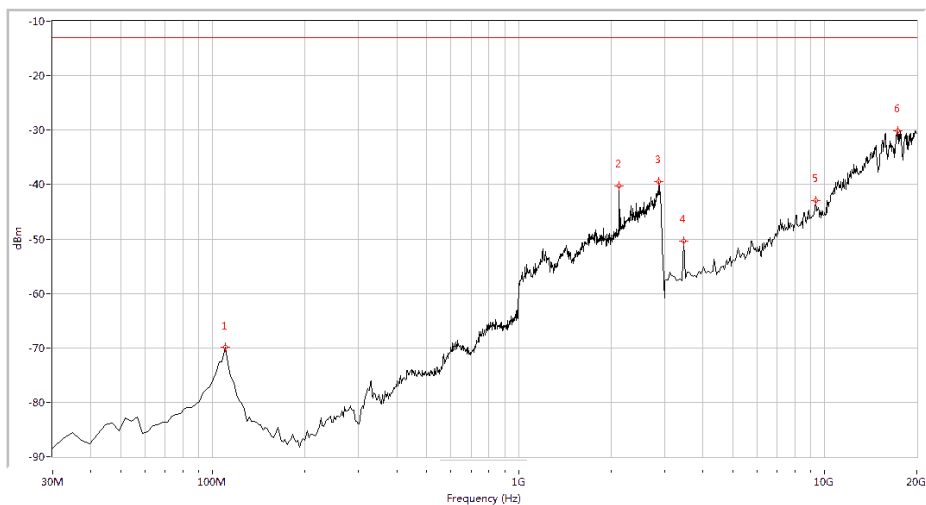
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.57 | -13.0     | 57.6   | 269.4  | Horizontal | PASS    |
| 2112.219   | -40.68 | -13.0     | 27.7   | 0.2    | Horizontal | PASS    |
| 2900.249   | -40.30 | -13.0     | 27.3   | 360.0  | Horizontal | PASS    |
| 3423.940   | -47.83 | -13.0     | 34.8   | 251.7  | Horizontal | PASS    |
| 6942.643   | -47.35 | -13.0     | 34.4   | 46.8   | Horizontal | PASS    |
| 17201.995  | -29.29 | -13.0     | 16.3   | 39.4   | Horizontal | PASS    |

(Plot O.1: HSUPA 1700MHz Channel = 1312, Test Antenna Horizontal)



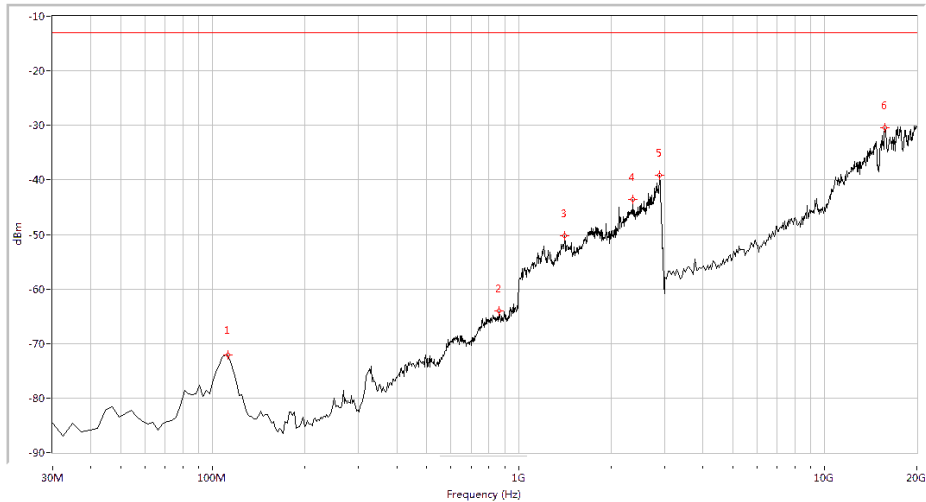
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.58 | -13.0     | 57.6   | 69.4   | Vertical | PASS    |
| 1698.254   | -47.75 | -13.0     | 34.8   | 96.1   | Vertical | PASS    |
| 2112.219   | -42.93 | -13.0     | 29.9   | 123.5  | Vertical | PASS    |
| 2855.362   | -39.83 | -13.0     | 26.8   | 0.7    | Vertical | PASS    |
| 3423.940   | -53.44 | -13.0     | 40.4   | 94.8   | Vertical | PASS    |
| 15760.599  | -29.87 | -13.0     | 16.9   | 56.7   | Vertical | PASS    |

(Plot O.2: HSUPA 1700MHz Channel = 1312, Test Antenna Vertical)



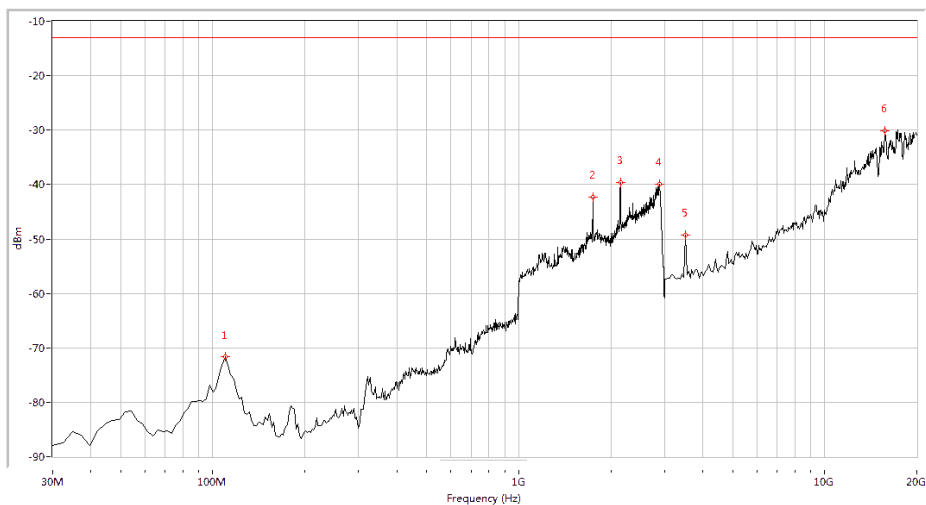
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -69.86 | -13.0     | 56.9   | 168.4  | Horizontal | PASS    |
| 2127.182   | -40.24 | -13.0     | 27.2   | 95.4   | Horizontal | PASS    |
| 2865.337   | -39.51 | -13.0     | 26.5   | 65.8   | Horizontal | PASS    |
| 3466.334   | -50.33 | -13.0     | 37.3   | 132.5  | Horizontal | PASS    |
| 9359.102   | -43.02 | -13.0     | 30.0   | 0.0    | Horizontal | PASS    |
| 17286.783  | -30.15 | -13.0     | 17.2   | 347.0  | Horizontal | PASS    |

(Plot O.3: HSUPA 1700MHz Channel = 1412, Test Antenna Horizontal)



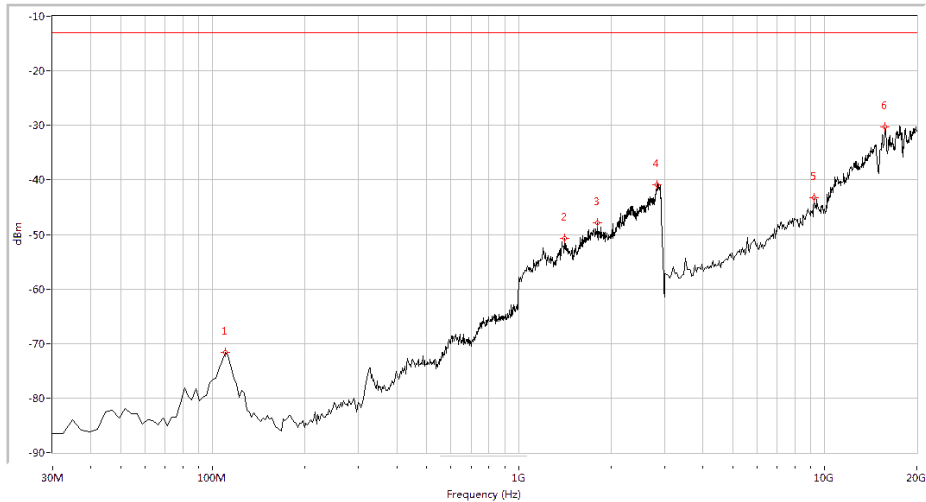
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 112.244    | -72.14 | -13.0     | 59.1   | 360.0  | Vertical | PASS    |
| 864.539    | -64.08 | -13.0     | 51.1   | 0.7    | Vertical | PASS    |
| 1413.965   | -50.21 | -13.0     | 37.2   | 58.6   | Vertical | PASS    |
| 2361.596   | -43.63 | -13.0     | 30.6   | 97.4   | Vertical | PASS    |
| 2890.274   | -39.11 | -13.0     | 26.1   | 65.2   | Vertical | PASS    |
| 15760.599  | -30.39 | -13.0     | 17.4   | 125.7  | Vertical | PASS    |

(Plot O.4: HSUPA 1700MHz Channel =1412, Test Antenna Vertical)



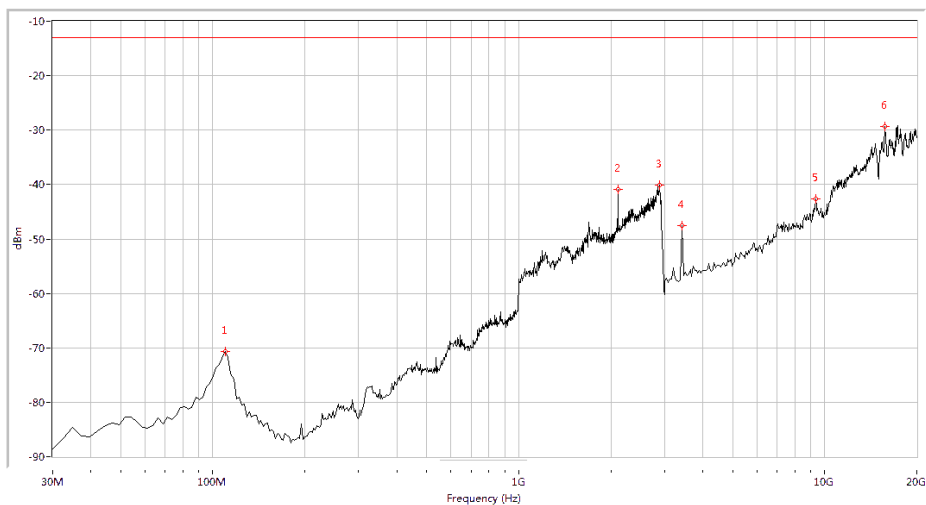
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.69 | -13.0     | 58.7   | 349.7  | Horizontal | PASS    |
| 1748.130   | -42.33 | -13.0     | 29.3   | 106.8  | Horizontal | PASS    |
| 2152.120   | -39.55 | -13.0     | 26.5   | 219.7  | Horizontal | PASS    |
| 2880.299   | -39.92 | -13.0     | 26.9   | 0.0    | Horizontal | PASS    |
| 3508.728   | -49.26 | -13.0     | 36.3   | 247.9  | Horizontal | PASS    |
| 15760.599  | -30.08 | -13.0     | 17.1   | 95.3   | Horizontal | PASS    |

(Plot O.5: HSUPA 1700MHz Channel = 1513, Test Antenna Horizontal)



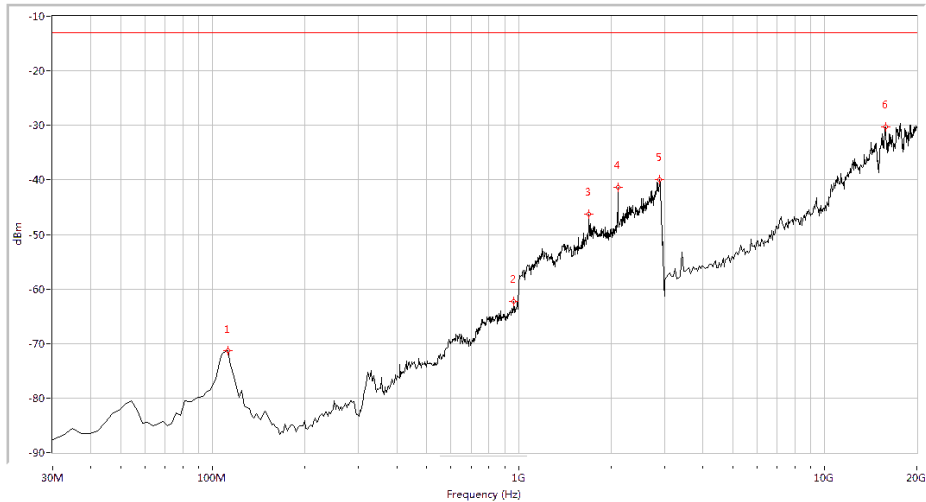
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.66 | -13.0     | 58.7   | 94.3   | Vertical | PASS    |
| 1413.965   | -50.68 | -13.0     | 37.7   | 162.8  | Vertical | PASS    |
| 1807.980   | -47.83 | -13.0     | 34.8   | 252.4  | Vertical | PASS    |
| 2830.424   | -40.94 | -13.0     | 27.9   | 87.6   | Vertical | PASS    |
| 9231.920   | -43.31 | -13.0     | 30.3   | 51.9   | Vertical | PASS    |
| 15760.599  | -30.21 | -13.0     | 17.2   | 156.2  | Vertical | PASS    |

(Plot O.6: HSUPA 1700MHz Channel = 1513, Test Antenna Vertical)



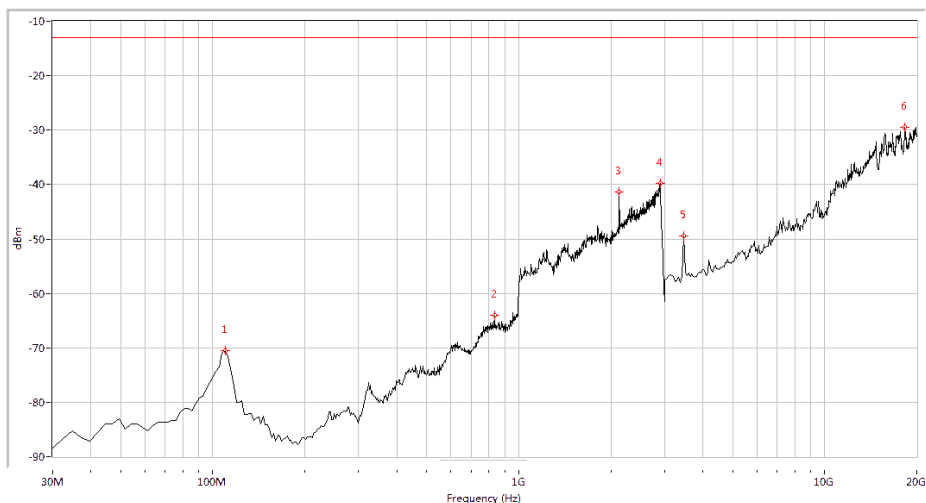
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.72 | -13.0     | 57.7   | 349.5  | Horizontal | PASS    |
| 2112.219   | -40.92 | -13.0     | 27.9   | 25.1   | Horizontal | PASS    |
| 2890.274   | -40.17 | -13.0     | 27.2   | 97.6   | Horizontal | PASS    |
| 3423.940   | -47.51 | -13.0     | 34.5   | 22.2   | Horizontal | PASS    |
| 9359.102   | -42.61 | -13.0     | 29.6   | 201.4  | Horizontal | PASS    |
| 15760.599  | -29.39 | -13.0     | 16.4   | 73.3   | Horizontal | PASS    |

(Plot P.1: HSPA+ 1700 MHz Channel = 1312, Test Antenna Horizontal)



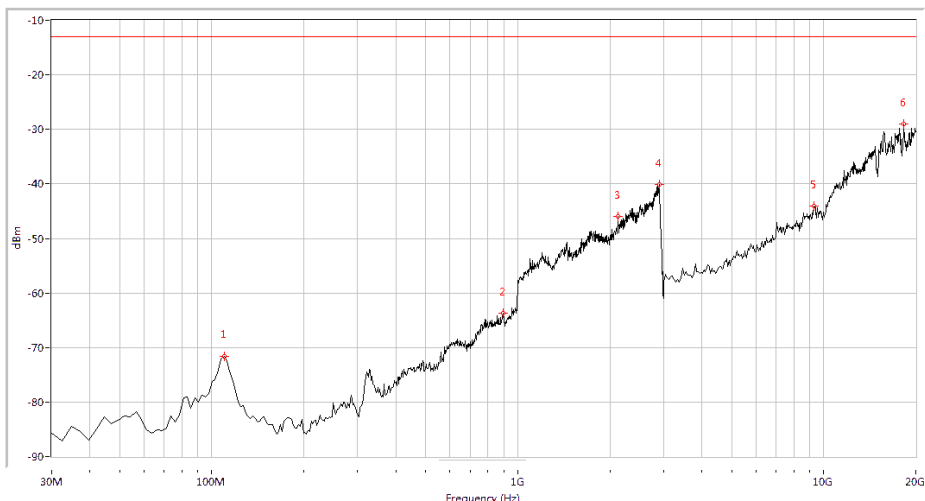
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 112.244    | -71.38 | -13.0     | 58.4   | 319.5  | Vertical | PASS    |
| 963.716    | -62.21 | -13.0     | 49.2   | 75.4   | Vertical | PASS    |
| 1698.254   | -46.32 | -13.0     | 33.3   | 269.8  | Vertical | PASS    |
| 2112.219   | -41.40 | -13.0     | 28.4   | 333.5  | Vertical | PASS    |
| 2895.262   | -39.94 | -13.0     | 26.9   | 20.1   | Vertical | PASS    |
| 15802.993  | -30.26 | -13.0     | 17.3   | 18.7   | Vertical | PASS    |

(Plot P.2: HSPA+ 1700 MHz Channel = 1312, Test Antenna Vertical)



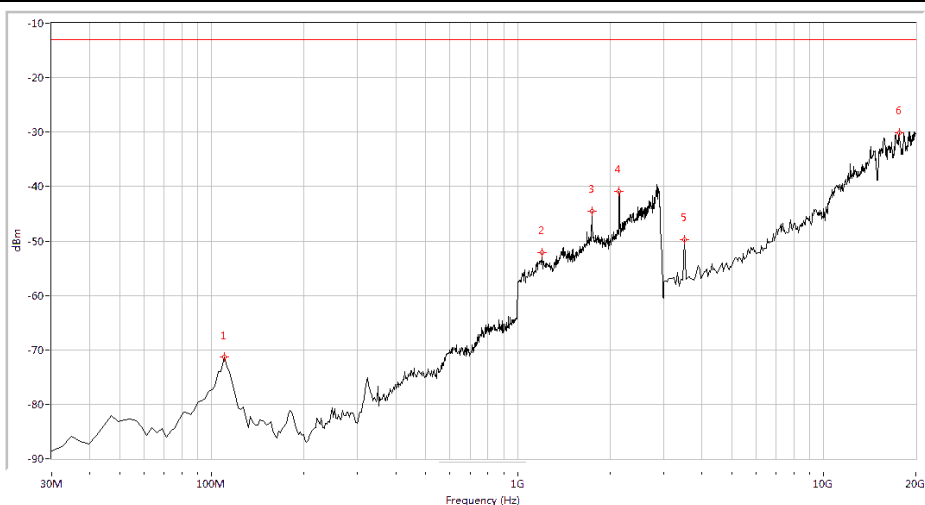
| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -70.54 | -13.0     | 57.5   | 63.5   | Horizontal | PASS    |
| 833.092    | -64.08 | -13.0     | 51.1   | 95.4   | Horizontal | PASS    |
| 2132.170   | -41.33 | -13.0     | 28.3   | 159.9  | Horizontal | PASS    |
| 2900.249   | -39.79 | -13.0     | 26.8   | 65.7   | Horizontal | PASS    |
| 3466.334   | -49.49 | -13.0     | 36.5   | 158.1  | Horizontal | PASS    |
| 18304.239  | -29.53 | -13.0     | 16.5   | 356.9  | Horizontal | PASS    |

(Plot P.3: HSPA+ 1700 MHz Channel = 1412, Test Antenna Horizontal)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -71.59 | -13.0     | 58.6   | 345.5  | Vertical | PASS    |
| 895.985    | -63.69 | -13.0     | 50.7   | 55.7   | Vertical | PASS    |
| 2132.170   | -46.03 | -13.0     | 33.0   | 163.9  | Vertical | PASS    |
| 2900.249   | -40.16 | -13.0     | 27.2   | 65.1   | Vertical | PASS    |
| 9274.314   | -44.11 | -13.0     | 31.1   | 275.8  | Vertical | PASS    |
| 18304.239  | -28.94 | -13.0     | 15.9   | 0.0    | Vertical | PASS    |

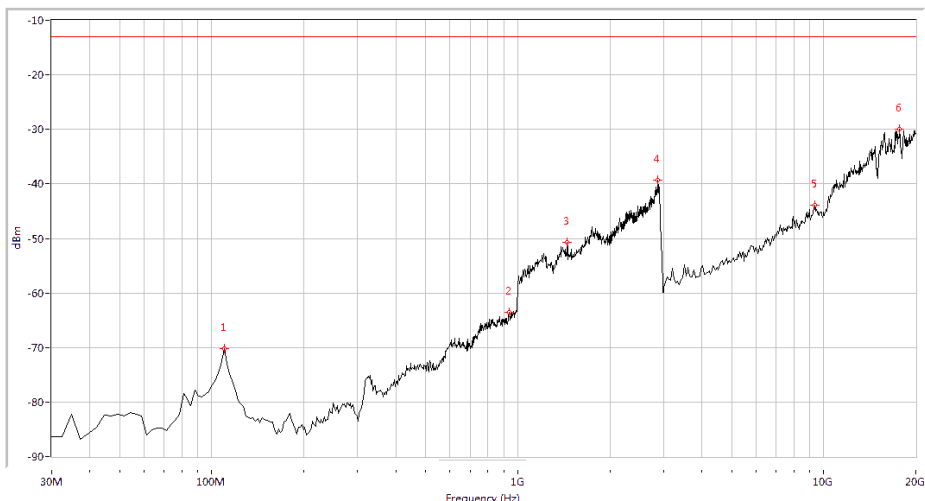
(Plot P.4: HSPA+ 1700 MHz Channel = 1412, Test Antenna Vertical)



| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna    | Verdict |
|------------|--------|-----------|--------|--------|------------|---------|
| 109.825    | -71.35 | -13.0     | 58.3   | 64.7   | Horizontal | PASS    |
| 1204.489   | -52.17 | -13.0     | 39.2   | 198.4  | Horizontal | PASS    |
| 1748.130   | -44.53 | -13.0     | 31.5   | 137.2  | Horizontal | PASS    |
| 2147.132   | -40.88 | -13.0     | 27.9   | 299.8  | Horizontal | PASS    |
| 3508.728   | -49.81 | -13.0     | 36.8   | 301.7  | Horizontal | PASS    |
| 17625.935  | -30.17 | -13.0     | 17.2   | 0.2    | Horizontal | PASS    |

(Plot P.5: HSPA+ 1700 MHz Channel = 1513, Test Antenna Horizontal)





| Fre. (MHz) | Peak   | Limit(PK) | Margin | Degree | Antenna  | Verdict |
|------------|--------|-----------|--------|--------|----------|---------|
| 109.825    | -70.27 | -13.0     | 57.3   | 249.6  | Vertical | PASS    |
| 937.107    | -63.60 | -13.0     | 50.6   | 354.8  | Vertical | PASS    |
| 1453.865   | -50.79 | -13.0     | 37.8   | 10.1   | Vertical | PASS    |
| 2875.312   | -39.31 | -13.0     | 26.3   | 208.5  | Vertical | PASS    |
| 9359.102   | -43.90 | -13.0     | 30.9   | 169.7  | Vertical | PASS    |
| 17710.723  | -29.99 | -13.0     | 17.0   | 52.3   | Vertical | PASS    |

(Plot P.6: HSPA+ 1700 MHz Channel = 1513, Test Antenna Vertical)

\*\* END OF REPORT \*\*