



# TEST REPORT

**APPLICANT** : Hot Pepper, Inc.

**PRODUCT NAME** : 4G Smart Phone

**MODEL NAME** : H5

**BRAND NAME** : Hot Pepper

**FCC ID** : 2APD4-P26A

**STANDARD(S)** : 47 CFR Part 22 Subpart H  
47 CFR Part 24 Subpart E  
47 CFR Part 27 Subpart L

**TEST DATE** : 2018-04-10 to 2018-05-03

**ISSUE DATE** : 2018-05-19

Tested by: Tu Ya'nan  
Tu Ya'nan (Test Engineer)

Approved by: Andy Yeh  
Andy Yeh (Technical Director)

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# DIRECTORY

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| <b>Change History</b> |             |                          |
|-----------------------|-------------|--------------------------|
| <b>Issue</b>          | <b>Date</b> | <b>Reason for change</b> |
| 1.0                   | 2018-05-19  | First edition            |
|                       |             |                          |



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

|                              |  |
|------------------------------|--|
| <b>Applicant:</b>            | Hot Pepper, Inc.                                   |
| <b>Applicant Address:</b>    | 5151 California Ave., Suite 100, Irvine 92617, USA |
| <b>Manufacturer:</b>         | Hot Pepper, Inc.                                   |
| <b>Manufacturer Address:</b> | 5151 California Ave., Suite 100, Irvine 92617, USA |

## 1.2. Equipment Under Test (EUT) Description

|                                   |  |
|-----------------------------------|--|
| <b>Product Name:</b>              | 4G Smart Phone   |
| <b>Serial No:</b>                 | (N/A, marked #1 by test site)  |
| <b>Hardware Version:</b>          | T169-LK-V1.2   |
| <b>Software Version:</b>          | HOTPEPPER_SW01_20180320  |
| <b>Modulation Type:</b>           | GSM,GPRS Mode with GMSK Modulation   |
| <b>Operating Frequency Range:</b> | GSM 850MHz:<br>Tx: 824.20 - 848.80MHz (at intervals of 200kHz);<br>Rx: 869.20 - 893.80MHz (at intervals of 200kHz)<br>GSM 1900MHz:<br>Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz);<br>Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)<br>WCDMA 850MHz<br>Tx: 826.4 - 846.6MHz (at intervals of 200kHz);<br>Rx: 871.4 - 891.6MHz (at intervals of 200kHz)<br>WCDMA 1700MHz<br>Tx: 1712.4 – 1752.6MHz (at intervals of 200kHz);<br>Rx: 2112.4 - 2152.6MHz (at intervals of 200kHz)<br>WCDMA 1900MHz<br>Tx: 1852.4 - 1907.6MHz (at intervals of 200kHz);<br>Rx: 1932.4 - 1987.6MHz (at intervals of 200kHz) |
| <b>Multi-slot Class:</b>          | GPRS: Multislot Class12; EGPRS: Multislot Class12  |
| <b>Emission Designators:</b>      | GSM 850:247KGXW,GSM 1900:249KGXW<br>EGPRS850:254KG7W, EGPRS1900:252KG7W,<br>WCDMA 850:4M17F9W , WCDMA1700:4M17F9W  |



|                           |                   |      |
|---------------------------|-------------------|------|
|                           | WCDMA1900:4M17F9W |      |
| <b>Antenna Type:</b>      | PIFA Antenna      |      |
| <b>Antenna Gain:</b>      | 1.51 dBi          |      |
| <b>Operating voltage:</b> | Normal(NV):       | 3.8V |
|                           | Lowest(LV):       | 3.5V |
|                           | Highest(HV):      | 4.4V |

*Note 1:* The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula  $F(n)=824.2+0.2*(n-128)$ ,  $128 \leq n \leq 251$ ; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 190 (836.6MHz) and 251 (848.8MHz).

*Note 2:* The transmitter (Tx) frequency arrangement of the PCS 1900MHz band used by the EUT can be represented with the formula  $F(n)=1850.2+0.2*(n-512)$ ,  $512 \leq n \leq 810$ ; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 512 (1850.2MHz), 661 (1880.0MHz) and 810 (1909.8MHz).

*Note 3:* The transmitter (Tx) frequency arrangement of the WCDMA 850MHz band used by the EUT can be represented with the formula  $F(n)=826.4+0.2*(n-4132)$ ,  $4132 \leq n \leq 4233$ ; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 4132 (826.4MHz), 4175(835MHz) and 4233 (846.6MHz).

*Note 4:* The transmitter (Tx) frequency arrangement of the WCDMA 1900MHz band used by the EUT can be represented with the formula  $F(n)=1852.4+0.2*(n-9262)$ ,  $9262 \leq n \leq 9538$ ; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 9262 (1852.4MHz), 9400 (1880MHz) and 9538 (1907.6MHz).

*Note 5:* For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



### 1.3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

| No | Identity                         | Document Title  |
|----|----------------------------------|---|
| 1  | 47 CFR Part 2 (10-1-12 Edition)  | Frequency Allocations and Radio Treaty Matters; General Rules and Regulations |
| 2  | 47 CFR Part 22 (10-1-12 Edition) | Public Mobile Services  |
| 3  | 47 CFR Part 24 (10-1-12 Edition) | Personal Communications Services  |
| 4  | 47 CFR Part 27 (10-1-12 Edition) | Miscellaneous Wireless Communications Services                                |

Test detailed items/section required by FCC rules and results are as below:

| No. | Section                                   | Description                           | Test Date                    | Test Engineer | Result |
|-----|---|---------------------------------------|------------------------------|---------------|--------|
| 1   | 2.1046                                    | Conducted RF Output Power             | Apr 12, 2018                 | Tu Ya'nan     | PASS   |
| 2   | 24.232(d)<br>27.50(d)                     | Peak - Average Radio                  | Apr 12, 2018<br>May 03, 2018 | Tu Ya'nan     | PASS   |
| 3   | 2.1049                                    | 99% Occupied Bandwidth                | Apr 12, 2018<br>May 02, 2018 | Tu Ya'nan     | PASS   |
| 4   | 2.1055,22.355,<br>24.235,27.54            | Frequency Stability                   | Apr 12, 2018<br>May 02, 2018 | Tu Ya'nan     | PASS   |
| 5   | 2.1051, 22.917(a),<br>24.238(a), 27.53(h) | Conducted Out of Band Emissions       | Apr 12, 2018<br>May 02, 2018 | Tu Ya'nan     | PASS   |
| 6   | 2.1051, 22.917(a),<br>24.238(a), 27.53(h) | Band Edge                             | Apr 12, 2018<br>May 02, 2018 | Tu Ya'nan     | PASS   |
| 7   | 22.913(a), 24.232(a)                      | Transmitter Radiated Power (EIPR/ERP) | Apr 14&15,<br>2018           | Wu Junke      | PASS   |
| 8   | 2.1051, 22.917(a),<br>24.238(a), 27.53(h) | Radiated Out of Band Emissions        | Apr 10&17,<br>2018           | Wu Junke      | PASS   |

**Note:** The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 (Oct 27, 2017) and ANSI/TIA-603-E-2016.



## 1.4. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

|                             |         |
|-----------------------------|---------|
| Temperature (°C):           | 15 - 35 |
| Relative Humidity (%):      | 30 -60  |
| Atmospheric Pressure (kPa): | 86-106  |

## 2. 47 CFR Part 2, Part 22H & 24E Requirements

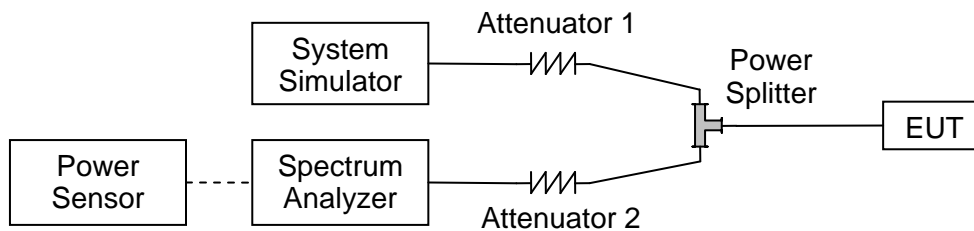
### 2.1. Conducted RF Output Power

#### 2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

#### 2.1.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.





**2.1.3. Test Results**

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT.

**GSM Test Verdict:**

| Band             | Channel | Frequency (MHz) | Measured Output Power | Limit | Verdict |
|------------------|---------|-----------------|-----------------------|-------|---------|
|                  |         |                 | dBm                   | dBm   |         |
| GSM<br>850MHz    | 128     | 824.2           | 32.11                 | 35    | PASS    |
|                  | 190     | 836.6           | 32.00                 |       | PASS    |
|                  | 251     | 848.8           | 31.98                 |       | PASS    |
| GSM<br>1900MHz   | 512     | 1850.2          | 27.20                 | 32    | PASS    |
|                  | 661     | 1880.0          | 26.93                 |       | PASS    |
|                  | 810     | 1909.8          | 26.85                 |       | PASS    |
| GPRS<br>850MHz   | 128     | 824.2           | 31.86                 | 35    | PASS    |
|                  | 190     | 836.6           | 31.86                 |       | PASS    |
|                  | 251     | 848.8           | 31.80                 |       | PASS    |
| GPRS<br>1900MHz  | 512     | 1850.2          | 27.45                 | 32    | PASS    |
|                  | 661     | 1880.0          | 27.50                 |       | PASS    |
|                  | 810     | 1909.8          | 27.31                 |       | PASS    |
| EGPRS<br>850MHz  | 128     | 824.2           | 29.64                 | 35    | PASS    |
|                  | 190     | 836.6           | 29.50                 |       | PASS    |
|                  | 251     | 848.8           | 29.32                 |       | PASS    |
| EGPRS<br>1900MHz | 512     | 1850.2          | 26.98                 | 32    | PASS    |
|                  | 661     | 1880.0          | 26.51                 |       | PASS    |
|                  | 810     | 1909.8          | 25.80                 |       | PASS    |

Note 1: For the GPRS and EGPRS model, all the slots were tested and just the worst data was recorded in this report.



**WCDMA Test Verdict:**

| Item       | band    | WCDMA 850 |       |       | WCDMA 1700 |       |       | WCDMA 1900 |       |       |
|------------|---------|-----------|-------|-------|------------|-------|-------|------------|-------|-------|
|            | ARFCN   | 4132      | 4175  | 4233  | 1312       | 1412  | 1513  | 9262       | 9400  | 9538  |
|            | subtest | dBm       |       |       | dBm        |       |       | dBm        |       |       |
| 5.2(WCDMA) | non     | 23.15     | 23.21 | 23.15 | 23.17      | 23.19 | 23.24 | 22.71      | 22.68 | 22.61 |
| HSDPA      | 1       | 22.19     | 22.19 | 22.25 | 22.39      | 22.32 | 22.42 | 21.99      | 21.92 | 21.89 |
|            | 2       | 22.21     | 22.25 | 22.23 | 22.37      | 22.35 | 22.38 | 21.95      | 21.93 | 21.9  |
|            | 3       | 21.70     | 21.71 | 21.76 | 21.93      | 21.92 | 21.94 | 21.48      | 21.45 | 21.41 |
|            | 4       | 21.69     | 21.71 | 21.74 | 21.84      | 21.82 | 21.88 | 21.43      | 21.43 | 21.39 |
| HSUPA      | 1       | 20.22     | 20.24 | 20.21 | 20.49      | 20.4  | 20.41 | 19.83      | 19.88 | 19.83 |
|            | 2       | 20.27     | 20.26 | 20.23 | 20.46      | 20.35 | 20.49 | 19.89      | 19.86 | 19.84 |
|            | 3       | 21.28     | 21.35 | 21.29 | 21.43      | 21.35 | 21.42 | 20.92      | 20.86 | 20.85 |
|            | 4       | 19.79     | 19.85 | 19.81 | 20.05      | 19.89 | 19.99 | 19.46      | 19.41 | 19.43 |
|            | 5       | 21.20     | 21.26 | 21.23 | 21.45      | 21.33 | 21.38 | 20.83      | 20.82 | 20.81 |
| HSPA+      | 1       | 21.26     | 21.28 | 21.31 | 21.32      | 21.17 | 21.22 | 20.87      | 20.85 | 20.84 |

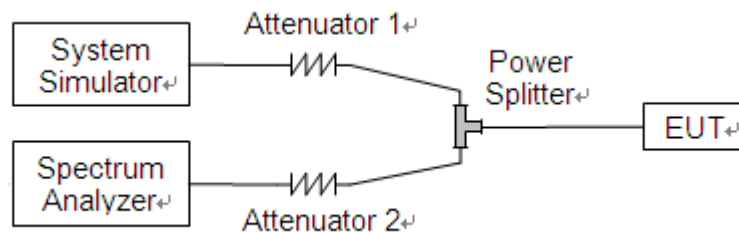
## 2.2. Peak to Average Ratio

### 2.2.1. Requirement

According to FCC 24.232(d) the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 2.2.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

1 .For GSM/EGPRS operating mode:

- a. Set RBW=1MHz, VBW=3MHz, peak detector in spectrum analyzer.
- b. Set EUT in maximum output power, and triggered the bust signal.
- c. Measured respectively the peak level and mean level, and the deviation was recorded as Peak to Average radio.

2. For UMTS operating mode:

- a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
- b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%.



**2.2.4. Test Result**

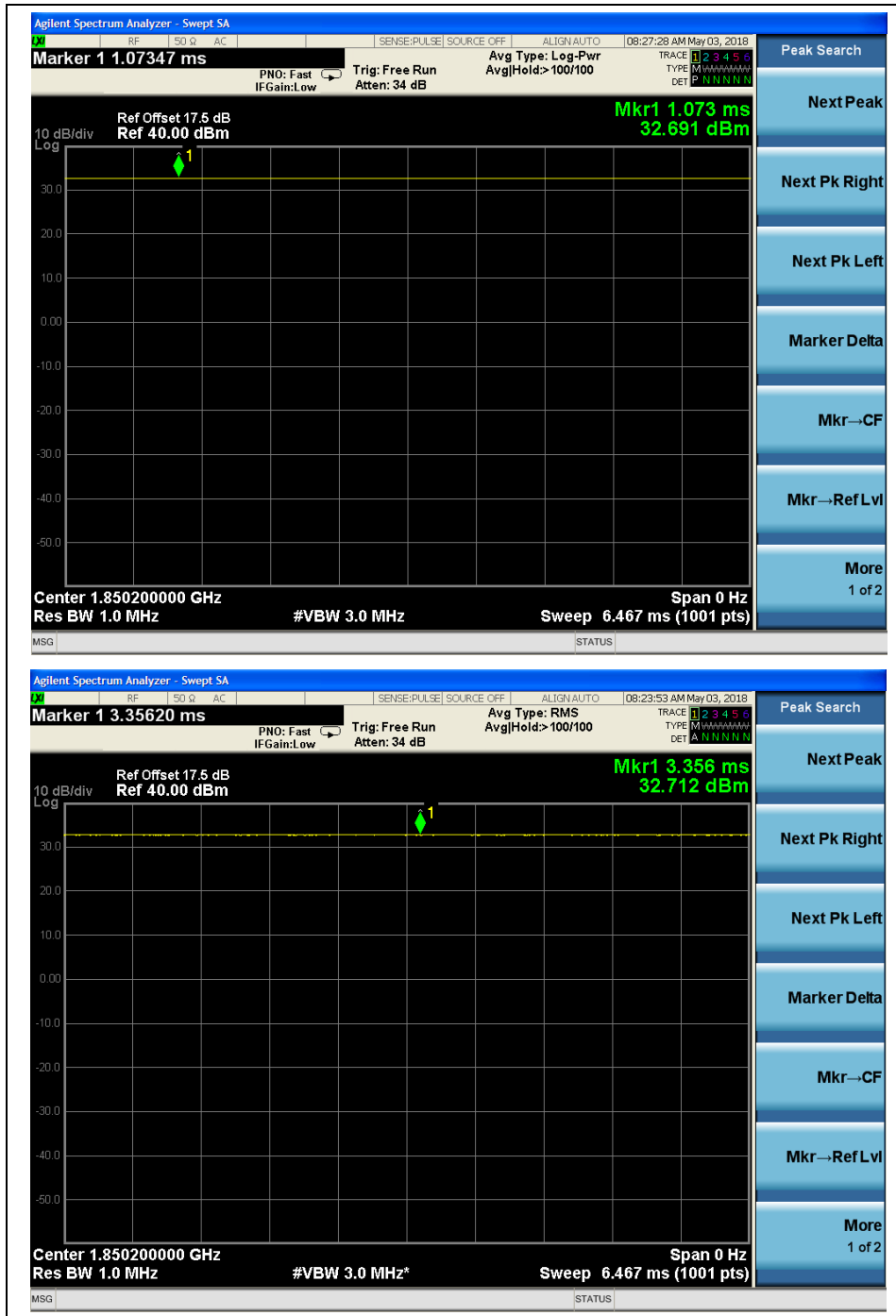
The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

**A. Test Verdict:**

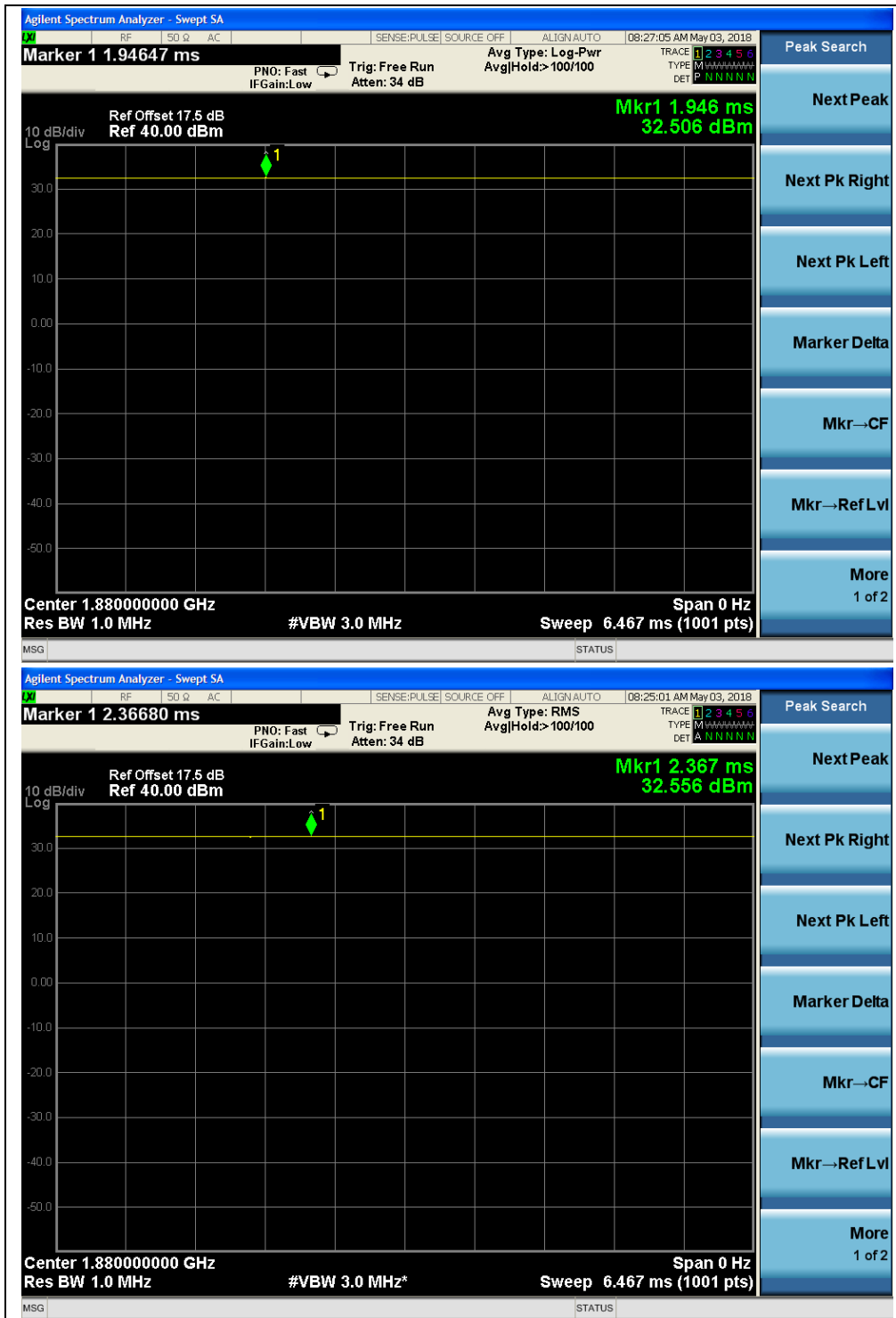
| Band             | Channel | Frequency (MHz) | Peak to Average ratio |               | Limit dB | Verdict |
|------------------|---------|-----------------|-----------------------|---------------|----------|---------|
|                  |         |                 | dB                    | Refer to Plot |          |         |
| GSM<br>1900MHz   | 512     | 1850.2          | 0.02                  | Plot A1 to A3 | 13       | PASS    |
|                  | 661     | 1880.0          | 0.05                  |               |          | PASS    |
|                  | 810     | 1909.8          | 0.01                  |               |          | PASS    |
| EGPRS<br>1900MHz | 512     | 1850.2          | 0.04                  | Plot B1 to B3 | 13       | PASS    |
|                  | 661     | 1880.0          | 0.04                  |               |          | PASS    |
|                  | 810     | 1909.8          | 0.01                  |               |          | PASS    |
| WCDMA<br>1900MHz | 9262    | 1852.4          | 3.45                  | Plot C1 to C3 | 13       | PASS    |
|                  | 9400    | 1880.0          | 2.90                  |               |          | PASS    |
|                  | 9538    | 1907.6          | 3.00                  |               |          | PASS    |
| WCDMA<br>1700MHz | 1312    | 1712.4          | 2.82                  | Plot D1 to D3 | 13       | PASS    |
|                  | 1412    | 1732.4          | 2.73                  |               |          | PASS    |
|                  | 1513    | 1752.6          | 2.56                  |               |          | PASS    |



B. Test Plots:



(Plot A1, GSM 1900 MHz, Channel = 512)



(Plot A2, GSM 1900 MHz, Channel = 661)



(Plot A3, GSM 1900MHz, Channel = 810)



(Plot B1, EGPRS 1900 MHz, Channel = 512)

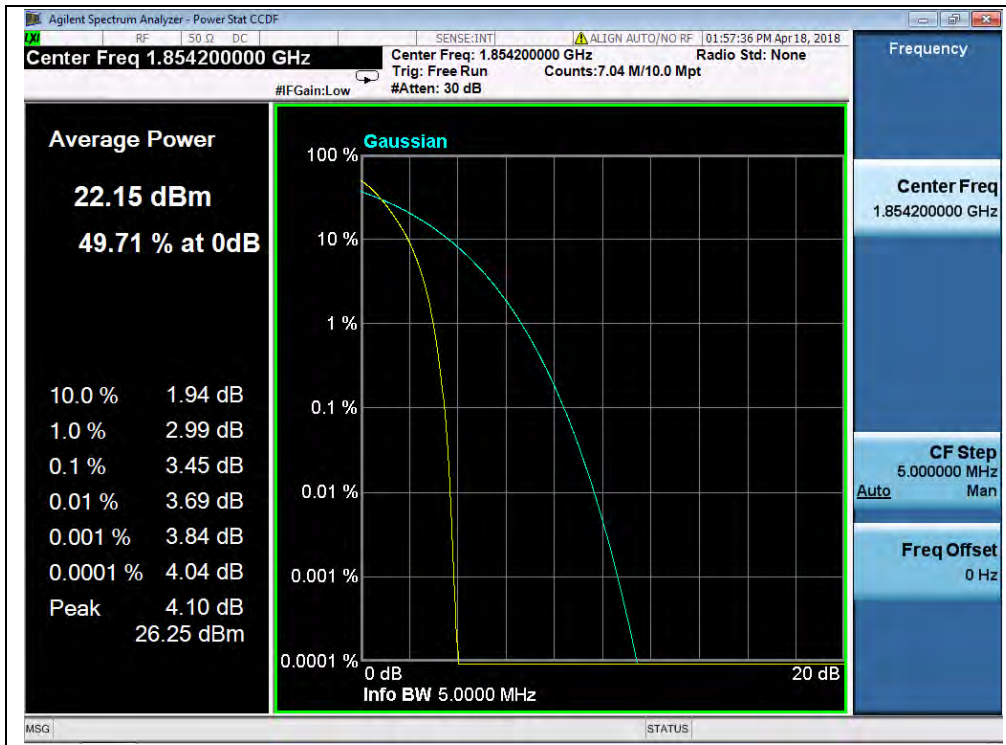




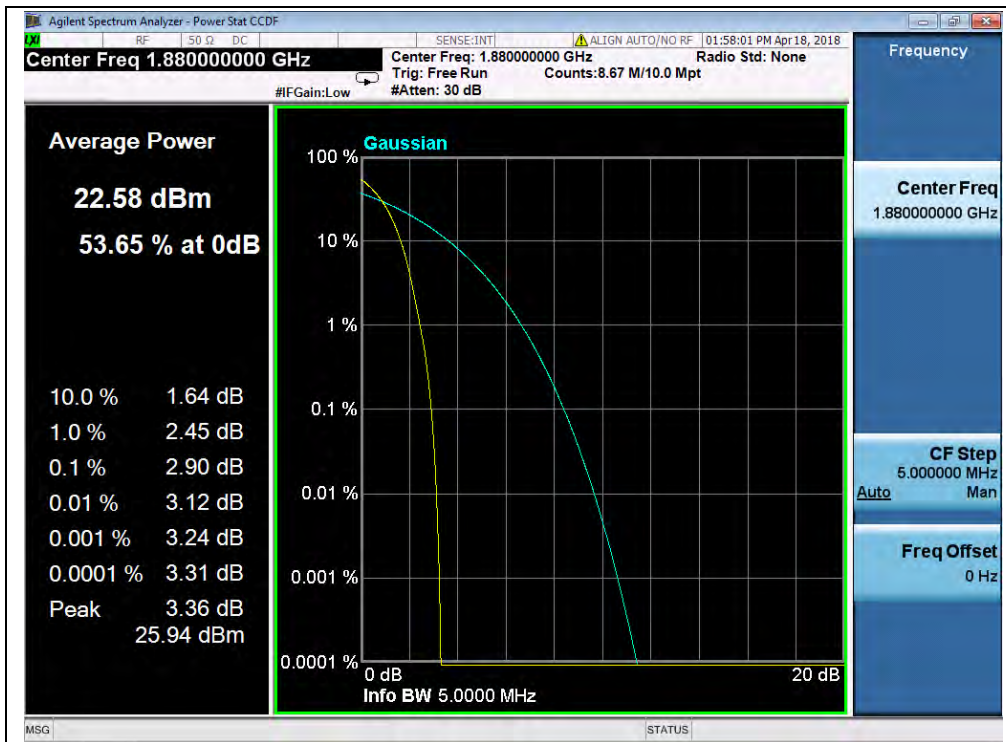
(Plot B2, EGPRS 1900 MHz, Channel = 661)



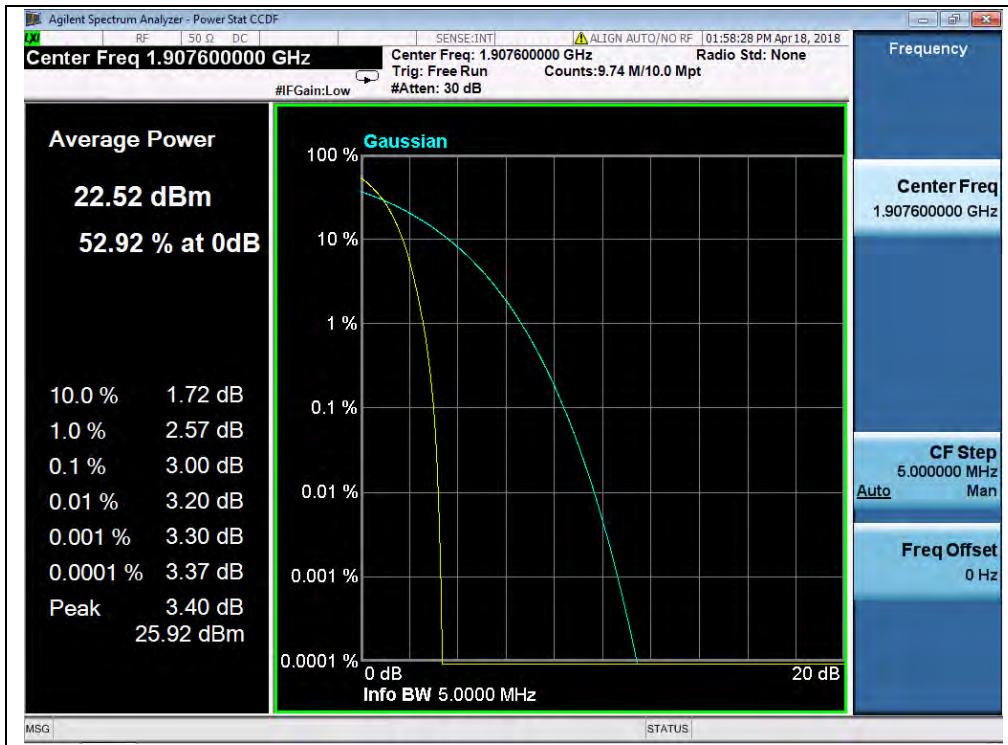
(Plot B3, EGPRS 1900MHz, Channel = 810)



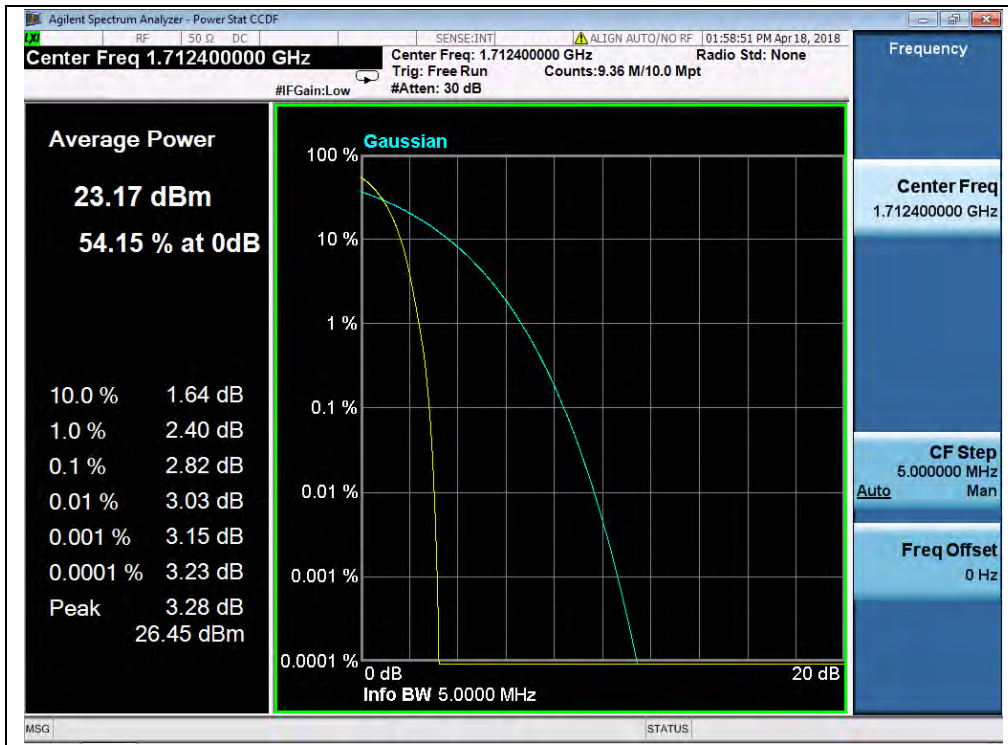
(Plot C1, WCDMA 1900MHz, Channel = 9262)



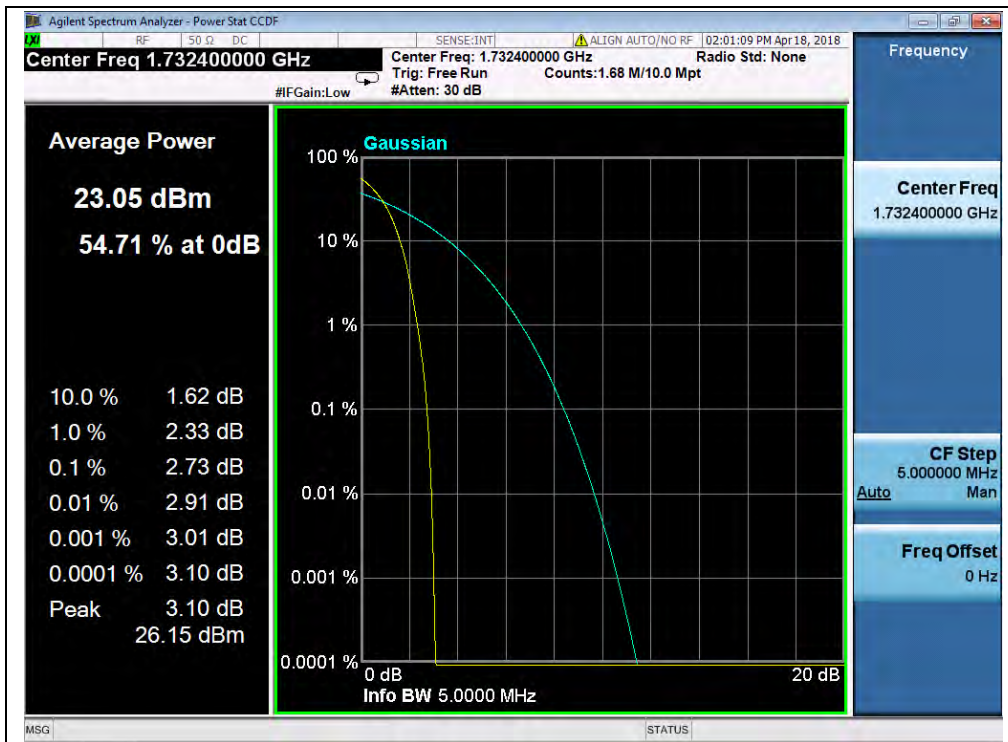
(Plot C2, WCDMA 1900MHz, Channel = 9400)



(Plot C3, WCDMA 1900MHz, Channel = 9538)



(Plot D1, WCDMA 1700MHz, Channel = 1312)



(Plot D2, WCDMA 1700MHz, Channel = 1412)



(Plot D3, WCDMA 1700MHz, Channel = 1513)

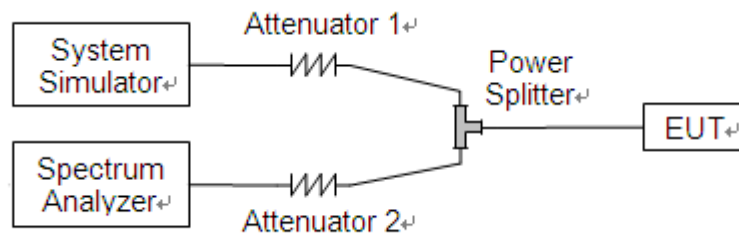
## 2.3. 99% Occupied Bandwidth

### 2.3.1. Requirement

According to FCC section 2.1049 and FCC § 22.917 & 24.238, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.3.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.



### 2.3.3. Test Result

The lowest, middle and highest channels are selected to perform testing to record the 99% occupied bandwidth.

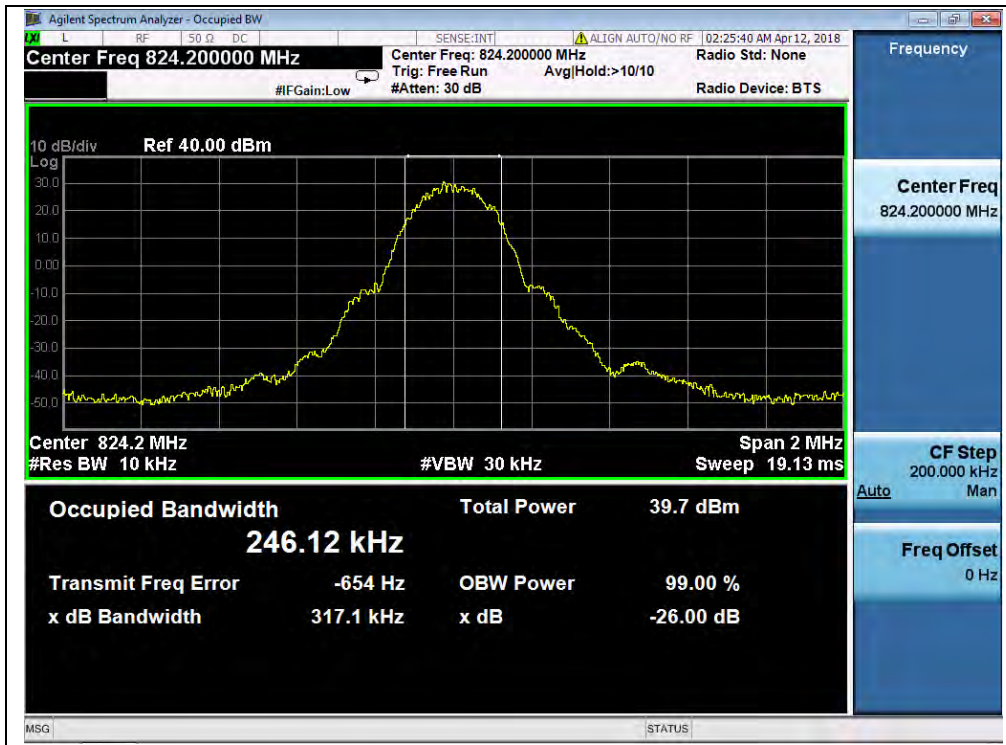
#### GSM Test Verdict:

| Band             | Channel | Frequency (MHz) | 26dB bandwidth (kHz) | 99% Occupied Bandwidth (kHz) | Refer to Plot    |
|------------------|---------|-----------------|----------------------|------------------------------|------------------|
| GSM<br>850MHz    | 128     | 824.2           | 317.1                | 246.12                       | Plot<br>A1 to A3 |
|                  | 190     | 836.6           | 316.6                | 244.50                       |                  |
|                  | 251     | 848.8           | 314.8                | 245.88                       |                  |
| GSM<br>1900MHz   | 512     | 1850.2          | 321.6                | 246.00                       | Plot<br>B1 to B3 |
|                  | 661     | 1880.0          | 322.8                | 248.66                       |                  |
|                  | 810     | 1909.8          | 312.4                | 247.38                       |                  |
| GPRS<br>850MHz   | 128     | 824.2           | 320.3                | 246.74                       | Plot<br>C1 to C3 |
|                  | 190     | 836.6           | 312.8                | 243.44                       |                  |
|                  | 251     | 848.8           | 316.3                | 243.54                       |                  |
| GPRS<br>1900MHz  | 512     | 1850.2          | 322.7                | 246.83                       | Plot<br>D1 to D3 |
|                  | 661     | 1880.0          | 321.4                | 248.72                       |                  |
|                  | 810     | 1909.8          | 319.6                | 249.48                       |                  |
| EGPRS<br>850MHz  | 128     | 824.2           | 327.0                | 250.29                       | Plot<br>E1 to E3 |
|                  | 190     | 836.6           | 326.4                | 246.55                       |                  |
|                  | 251     | 848.8           | 329.8                | 253.95                       |                  |
| EGPRS<br>1900MHz | 512     | 1850.2          | 323.6                | 252.42                       | Plot<br>F1 to F3 |
|                  | 661     | 1880.0          | 313.5                | 243.55                       |                  |
|                  | 810     | 1909.8          | 320.8                | 247.80                       |                  |

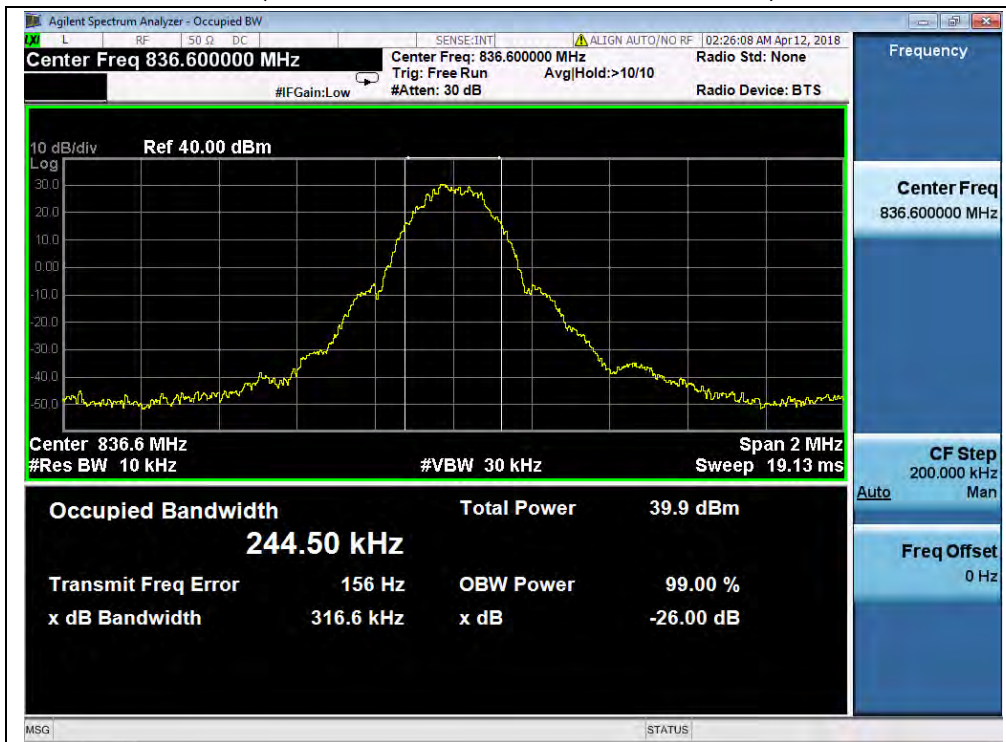




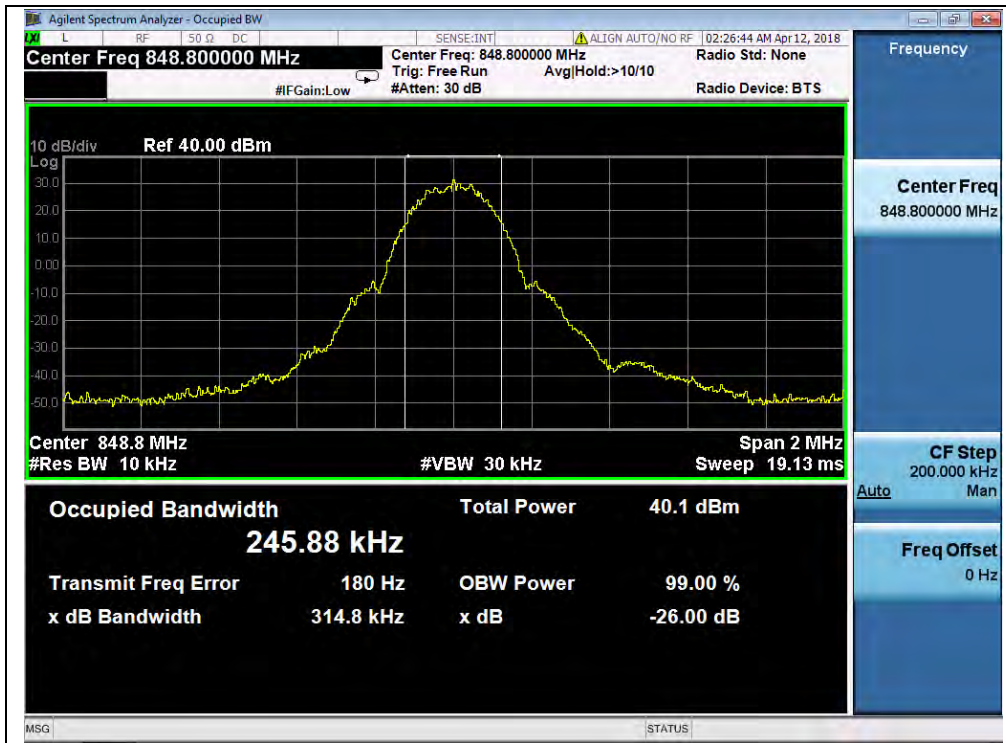
Test Plots:



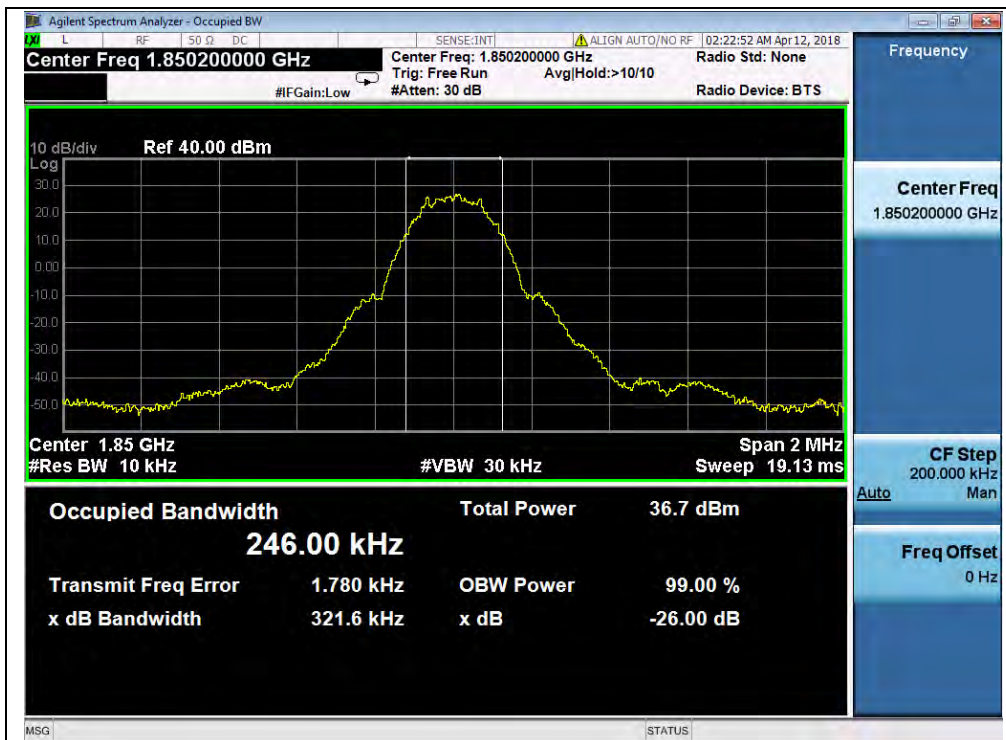
(Plot A1, GSM 850MHz, Channel = 128)



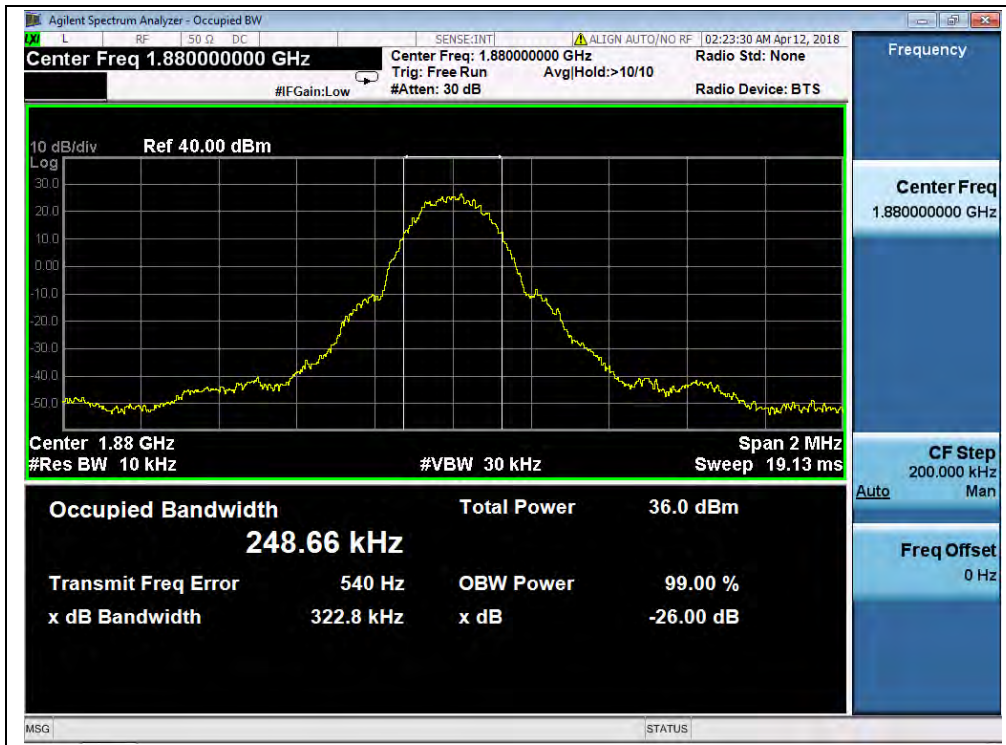
(Plot A2, GSM 850MHz, Channel = 190)



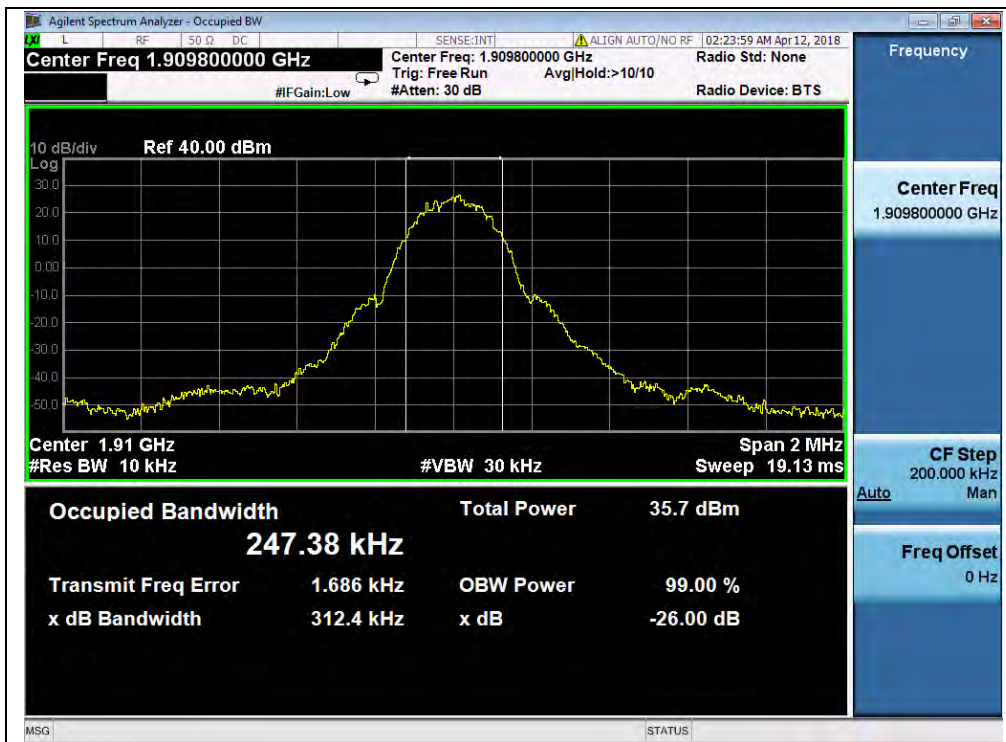
(Plot A3, GSM 850MHz, Channel = 251)



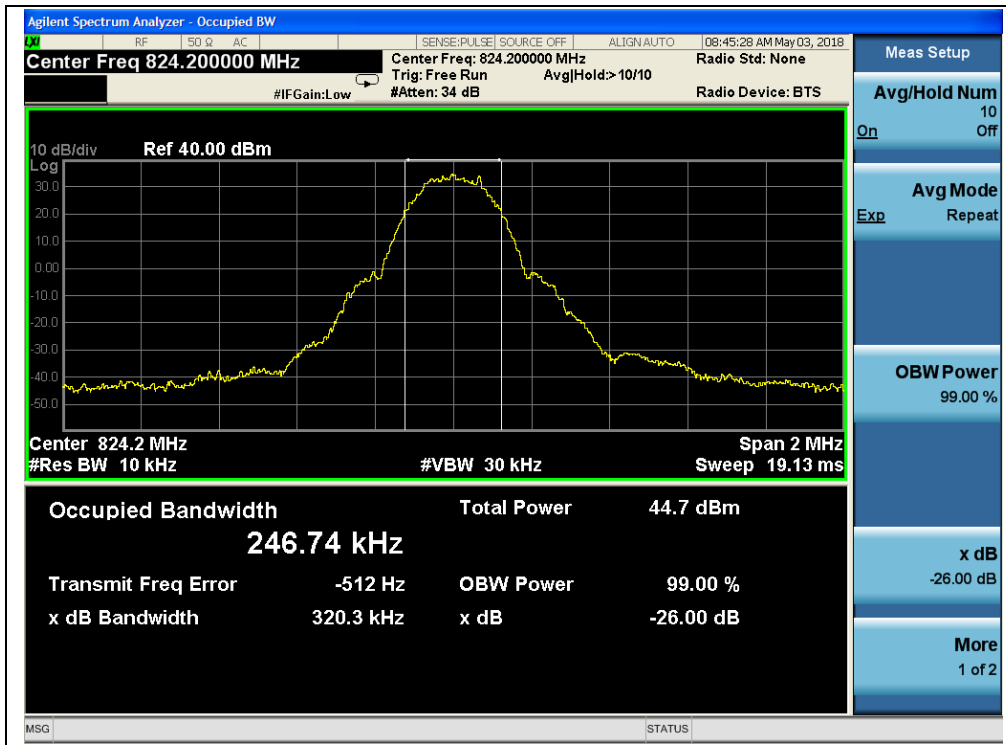
(Plot B1, GSM1900MHz, Channel = 512)



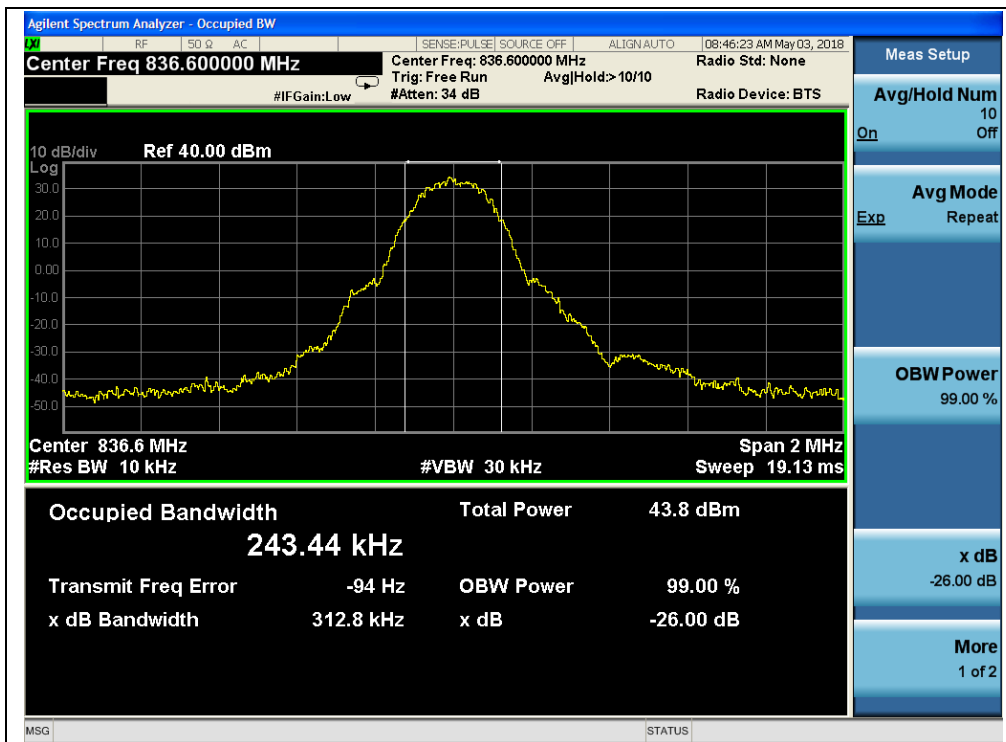
(Plot B2, GSM1900MHz, Channel = 661)



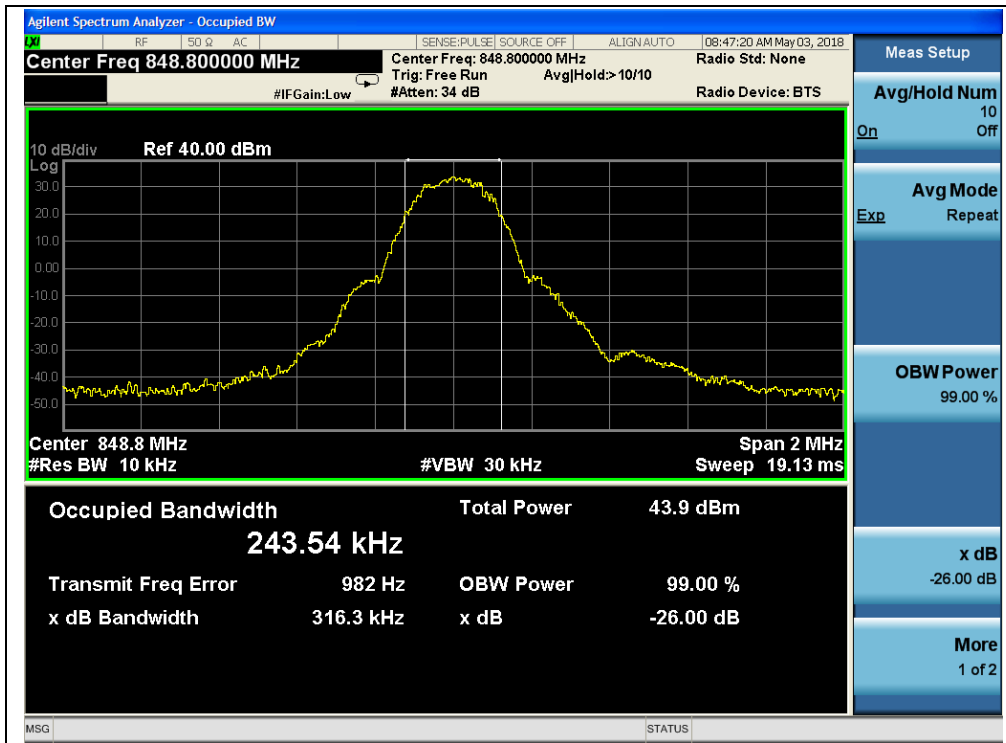
(Plot B3, GSM 1900MHz, Channel = 810)



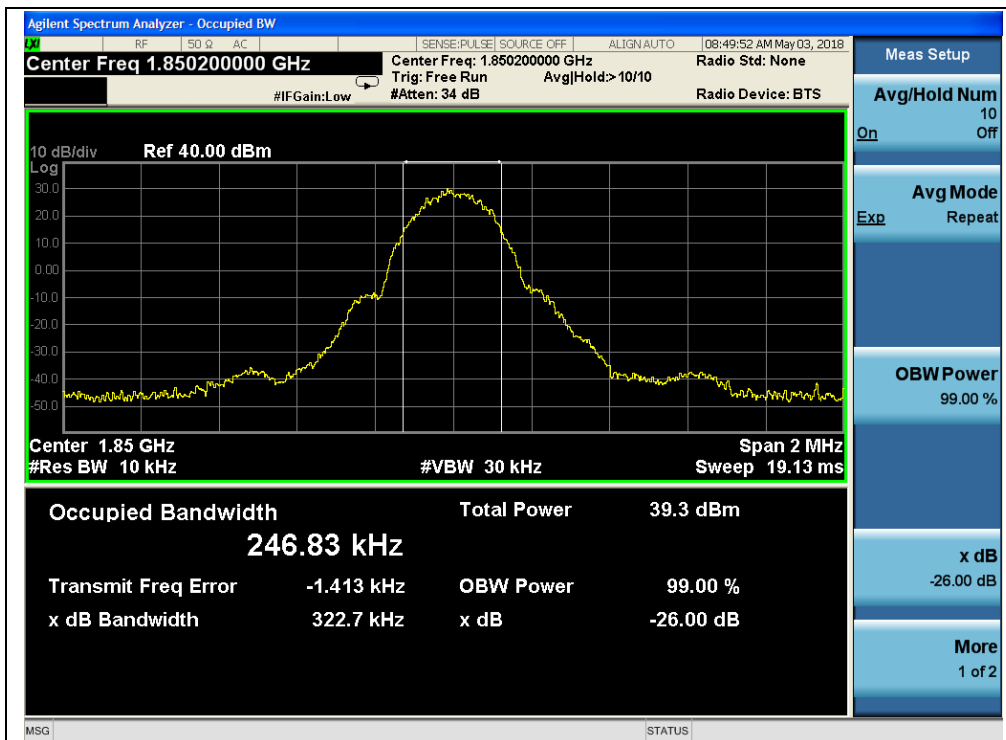
(Plot C1, GPRS 850MHz, Channel = 128)



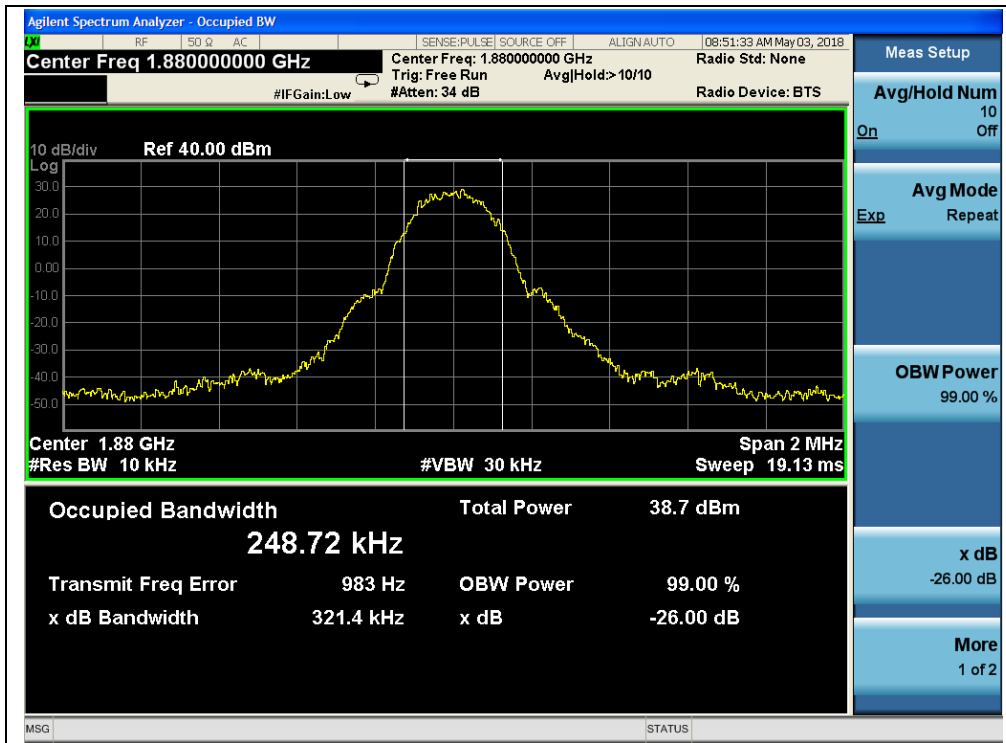
(Plot C2, GPRS 850MHz, Channel = 190)



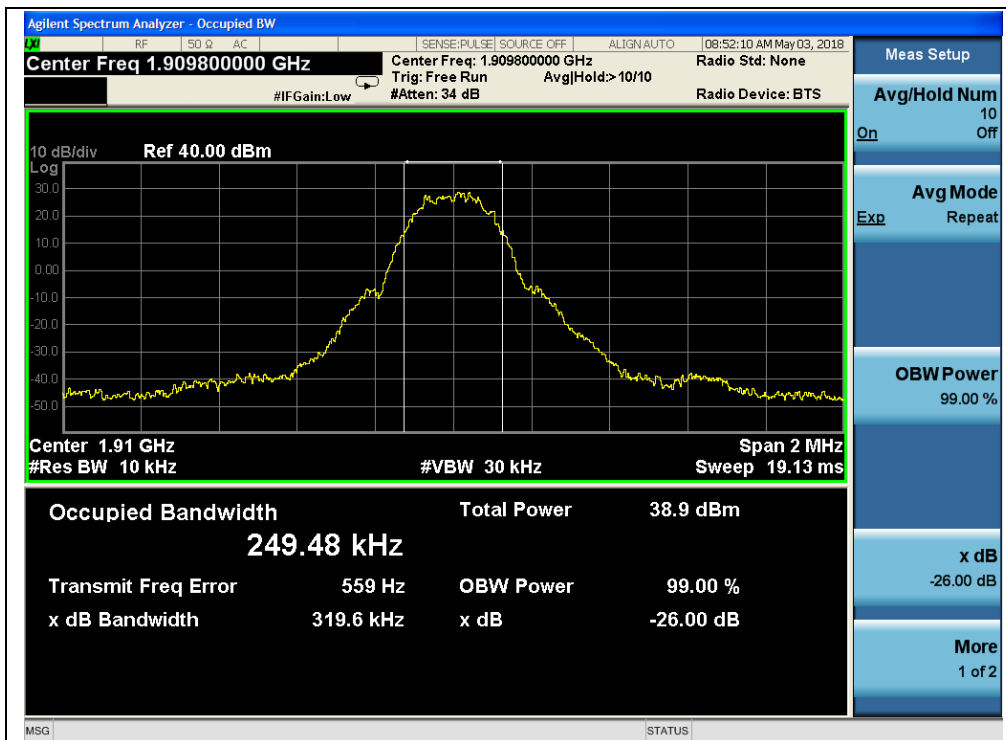
(Plot C3, GPRS 850MHz, Channel = 251)



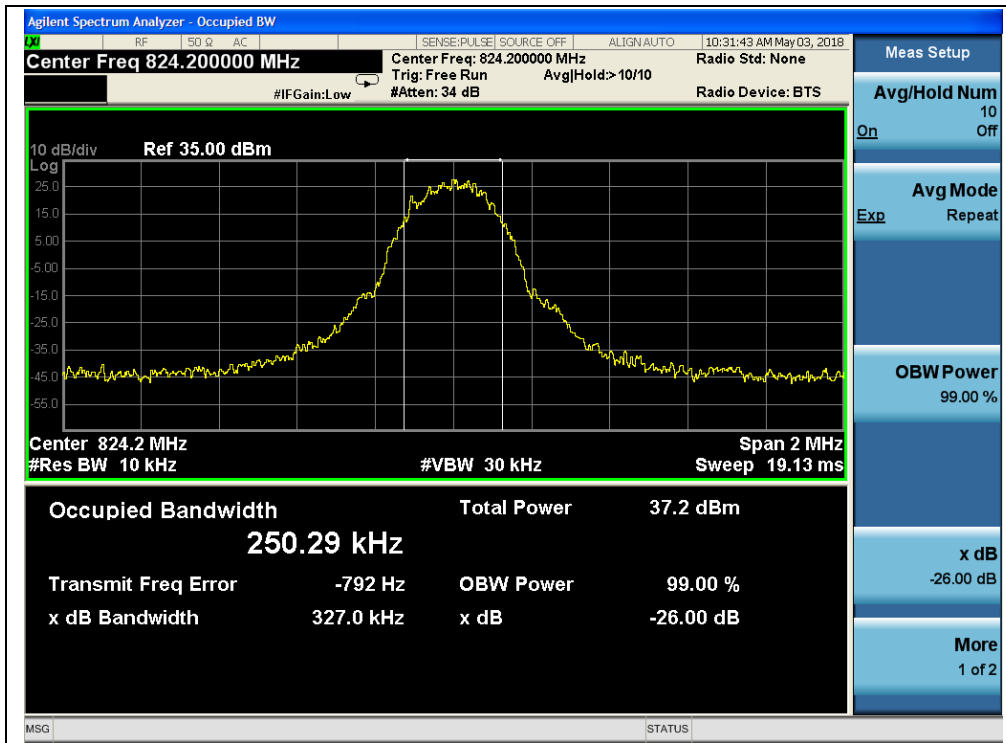
(Plot D1, GPRS1900MHz, Channel = 512)



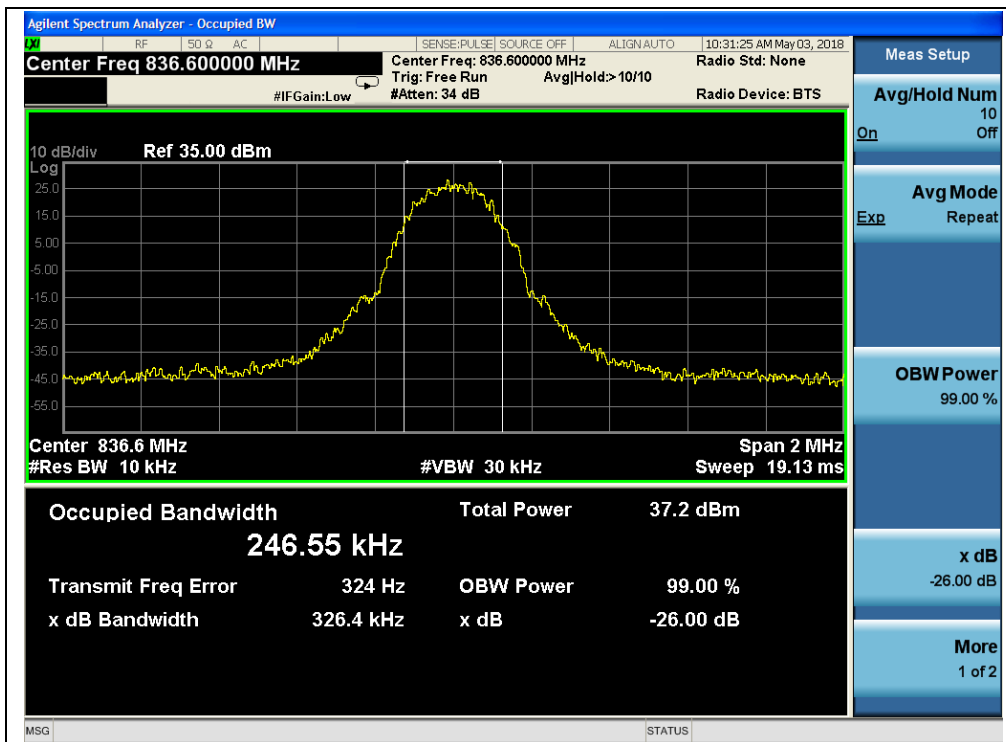
(Plot D2, GPRS1900MHz, Channel = 661)



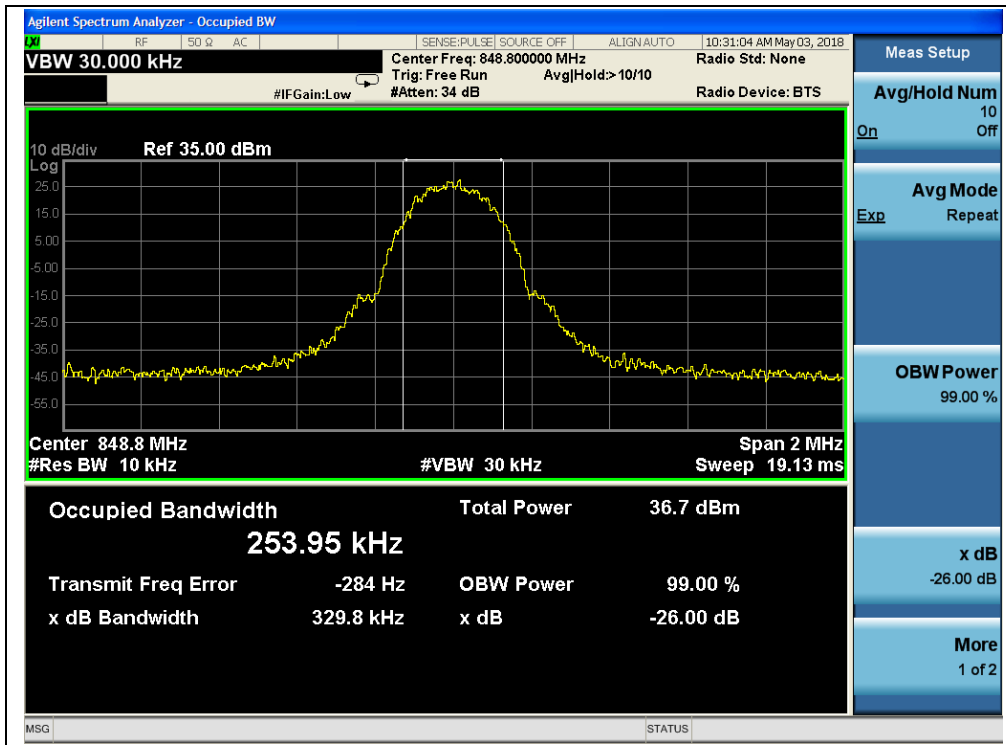
(Plot D3, GPRS 1900MHz, Channel = 810)



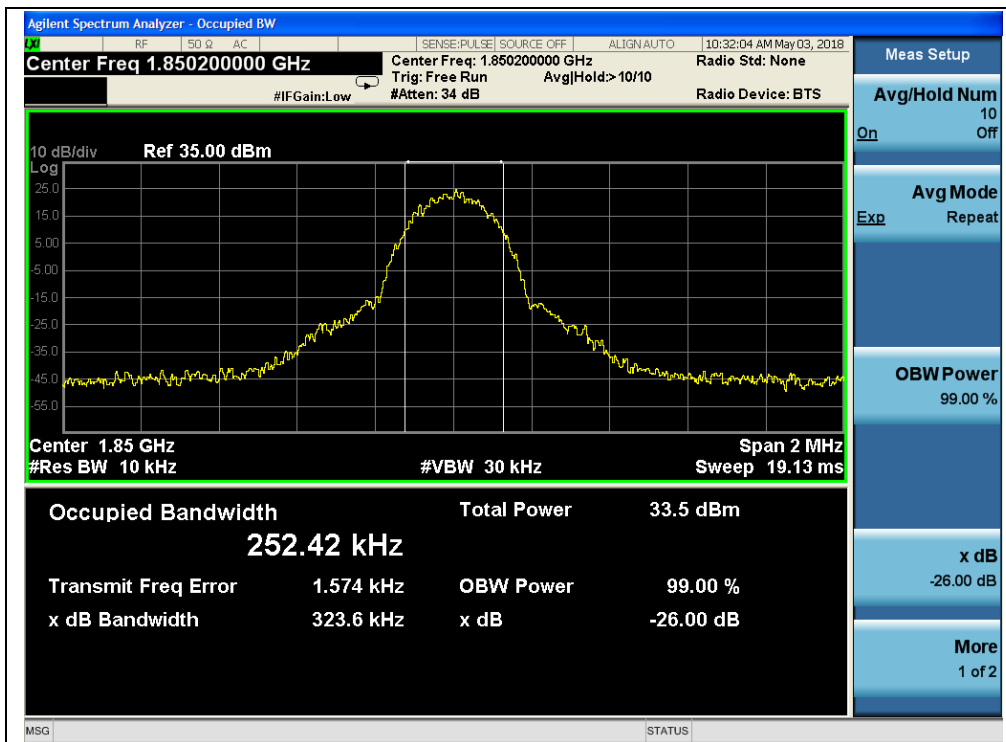
(Plot E1, EGPRS 850MHz, Channel = 128)



(Plot E2, EGPRS 850MHz, Channel = 190)

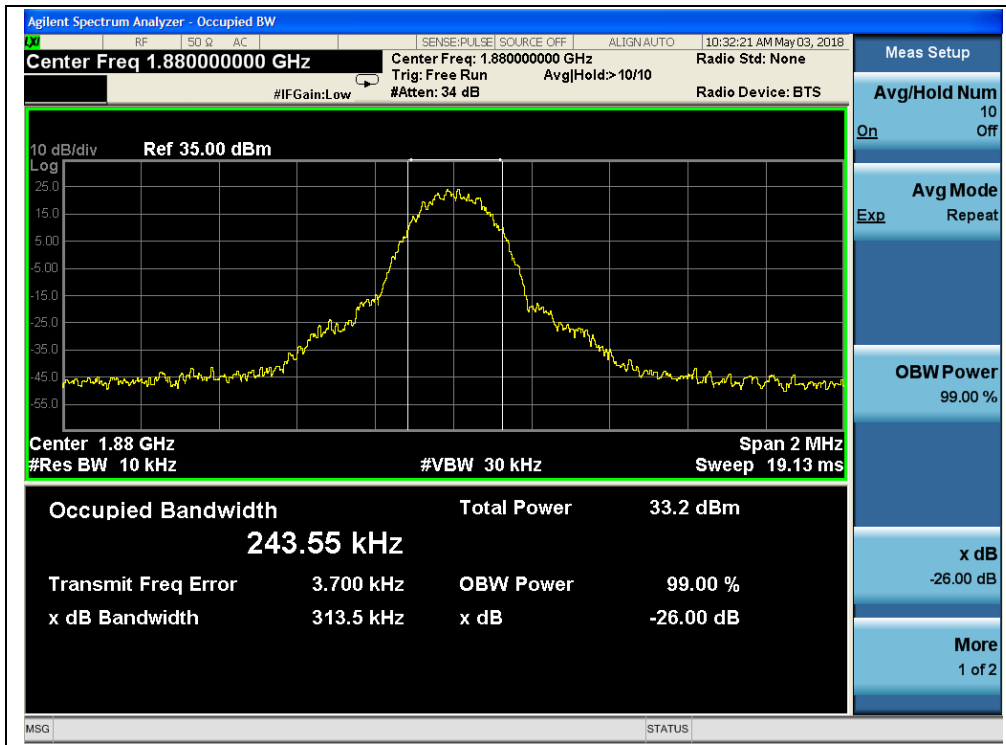


(Plot E3, EGPRS 850MHz, Channel = 251)

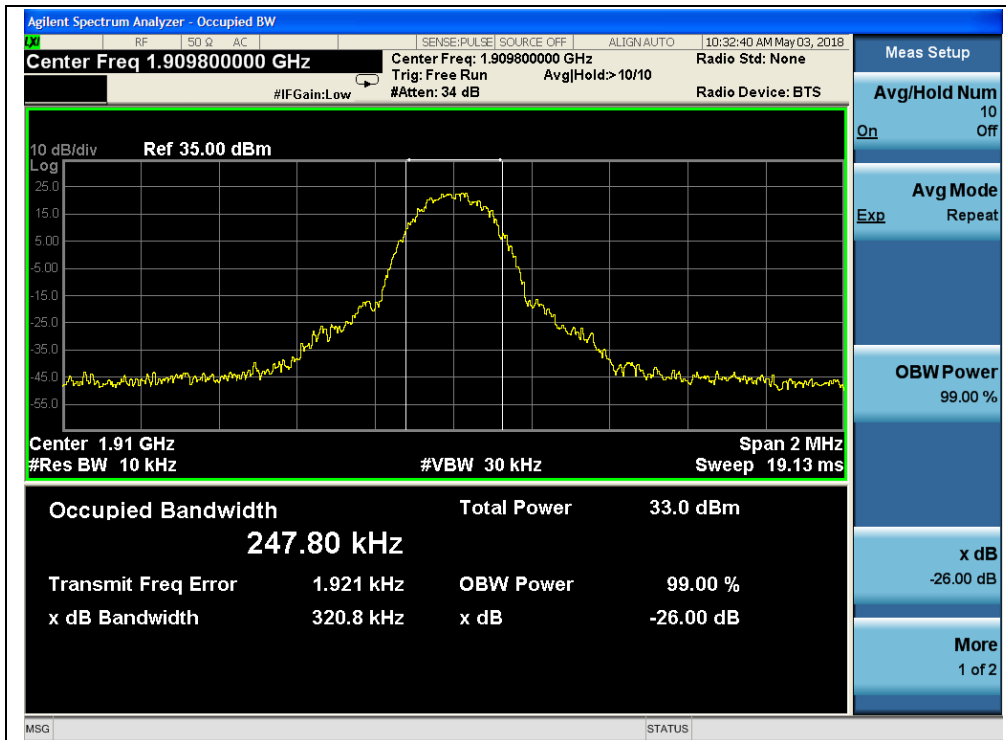


(Plot F1, EGPRS1900MHz, Channel = 512)





(Plot F2, EGPRS1900MHz, Channel = 661)



(Plot F3, EGPRS 1900MHz, Channel = 810)



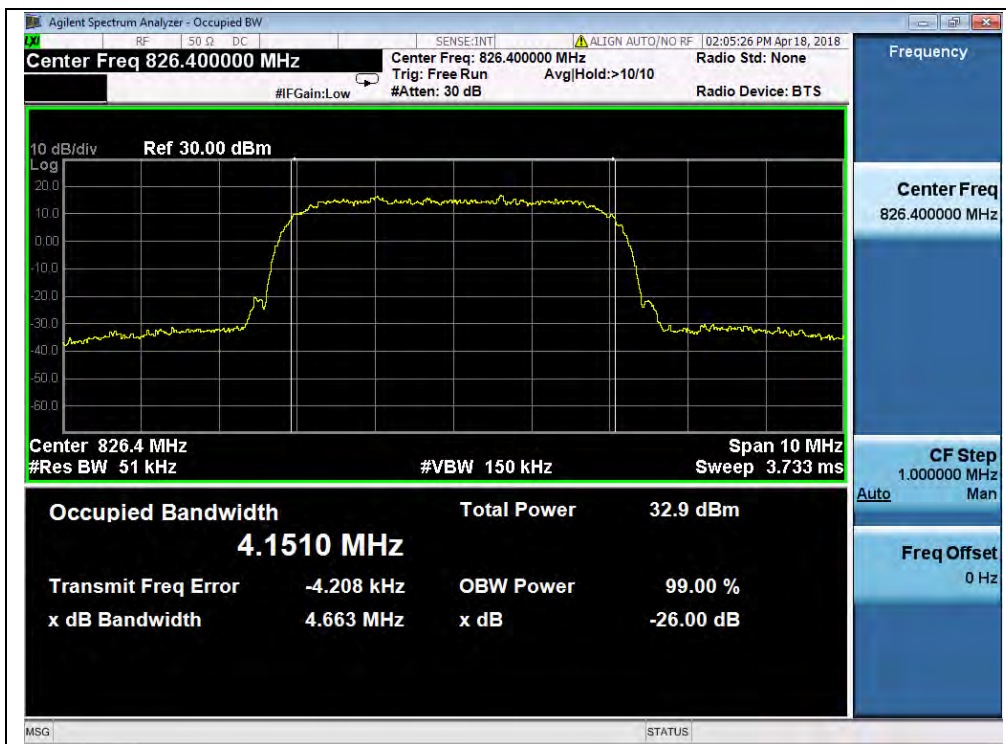
**WCDMA Test Verdict:**

| Band             | Channel | Frequency (MHz) | 26dB bandwidth (MHz) | 99% Occupied Bandwidth (MHz) | Refer to Plot    |
|------------------|---------|-----------------|----------------------|------------------------------|------------------|
| WCDMA<br>850MHz  | 4132    | 826.4           | 4.663                | 4.1510                       | Plot<br>G1 to G3 |
|                  | 4175    | 835.0           | 4.667                | 4.1657                       |                  |
|                  | 4233    | 846.6           | 4.674                | 4.1686                       |                  |
| WCDMA<br>1700MHz | 1312    | 1712.4          | 4.666                | 4.1549                       | Plot<br>H1 to H3 |
|                  | 1412    | 1732.4          | 4.675                | 4.1567                       |                  |
|                  | 1513    | 1752.6          | 4.673                | 4.1457                       |                  |
| WCDMA<br>1900MHz | 9262    | 1852.4          | 4.690                | 4.1659                       | Plot<br>I1 to I3 |
|                  | 9400    | 1880.0          | 4.658                | 4.1709                       |                  |
|                  | 9538    | 1907.6          | 4.660                | 4.1545                       |                  |
| HSDPA<br>850MHz  | 4132    | 826.4           | 4.650                | 4.1524                       | Plot<br>J1 to J3 |
|                  | 4175    | 835.0           | 4.646                | 4.1633                       |                  |
|                  | 4233    | 846.6           | 4.665                | 4.1605                       |                  |
| HSDPA<br>1700MHz | 1312    | 1712.4          | 4.660                | 4.1668                       | Plot<br>K1 to K3 |
|                  | 1412    | 1732.4          | 4.675                | 4.1480                       |                  |
|                  | 1513    | 1752.6          | 4.662                | 4.1569                       |                  |
| HSDPA<br>1900MHz | 9262    | 1852.4          | 4.661                | 4.1497                       | Plot<br>L1 to L3 |
|                  | 9400    | 1880.0          | 4.685                | 4.1568                       |                  |
|                  | 9538    | 1907.6          | 4.654                | 4.1581                       |                  |
| HSUPA<br>850MHz  | 4132    | 826.4           | 4.640                | 4.1465                       | Plot<br>M1 to M3 |
|                  | 4175    | 835.0           | 4.645                | 4.1471                       |                  |
|                  | 4233    | 846.6           | 4.664                | 4.1586                       |                  |
| HSUPA<br>1700MHz | 1312    | 1712.4          | 4.654                | 4.1532                       | Plot<br>N1 to N3 |
|                  | 1412    | 1732.4          | 4.660                | 4.1563                       |                  |
|                  | 1513    | 1752.6          | 4.663                | 4.1599                       |                  |
| HSUPA<br>1900MHz | 9262    | 1852.4          | 4.672                | 4.1635                       | Plot<br>O1 to O3 |
|                  | 9400    | 1880.0          | 4.650                | 4.1606                       |                  |
|                  | 9538    | 1907.6          | 4.656                | 4.1516                       |                  |

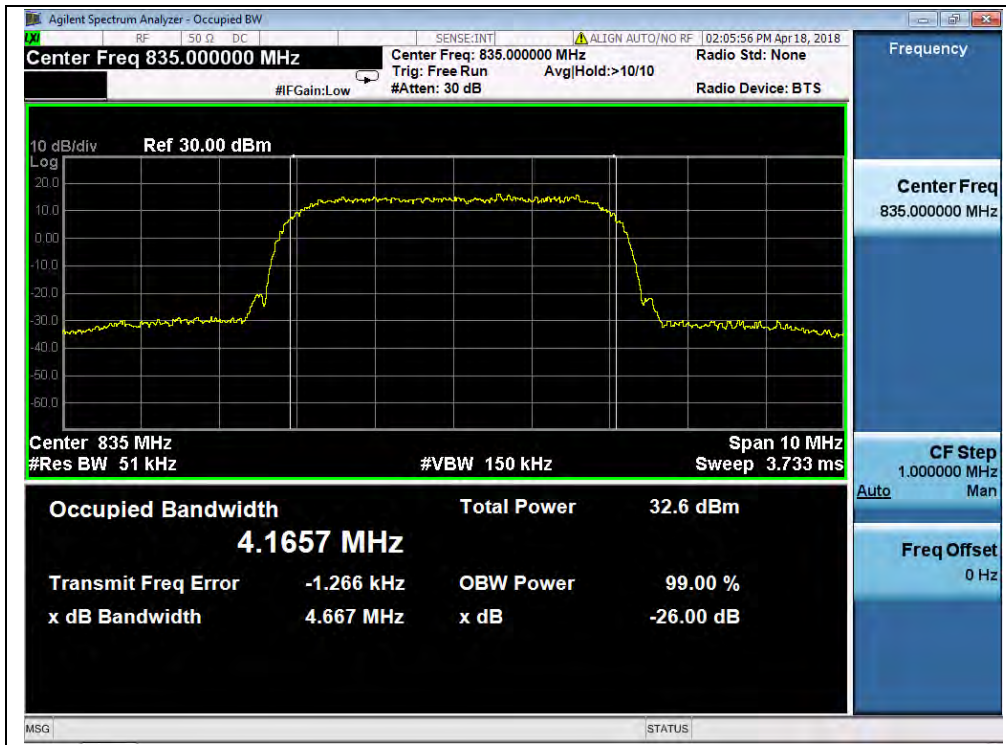


| Band          | Channel | Frequency (MHz) | 26dB bandwidth (MHz) | 99% Occupied Bandwidth (MHz) | Refer to Plot |
|---------------|---------|-----------------|----------------------|------------------------------|---------------|
| HSPA+ 850MHz  | 4132    | 826.4           | 4.651                | 4.1672                       | Plot P1 to P3 |
|               | 4175    | 835.0           | 4.652                | 4.1486                       |               |
|               | 4233    | 846.6           | 4.651                | 4.1554                       |               |
| HSPA+ 1700MHz | 1312    | 1712.4          | 4.651                | 4.1562                       | Plot Q1 to Q3 |
|               | 1412    | 1732.4          | 4.661                | 4.1633                       |               |
|               | 1513    | 1752.6          | 4.664                | 4.1535                       |               |
| HSPA+ 1900MHz | 9262    | 1852.4          | 4.669                | 4.1686                       | Plot R1 to R3 |
|               | 9400    | 1880.0          | 4.661                | 4.1623                       |               |
|               | 9538    | 1907.6          | 4.656                | 4.1567                       |               |

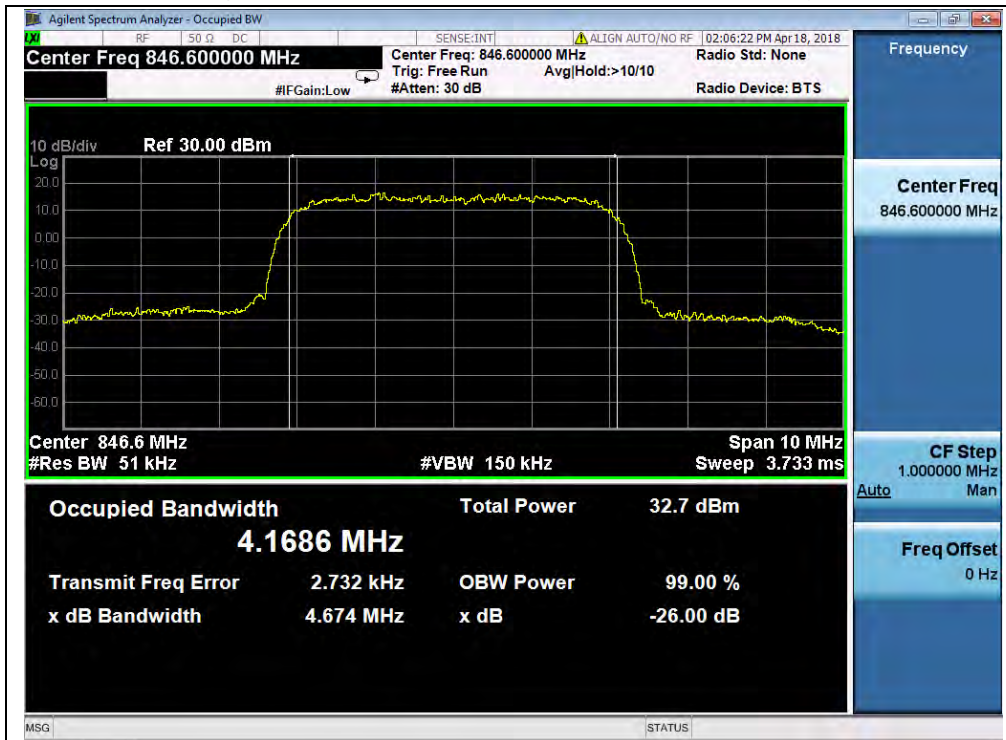
**Test Plots:**



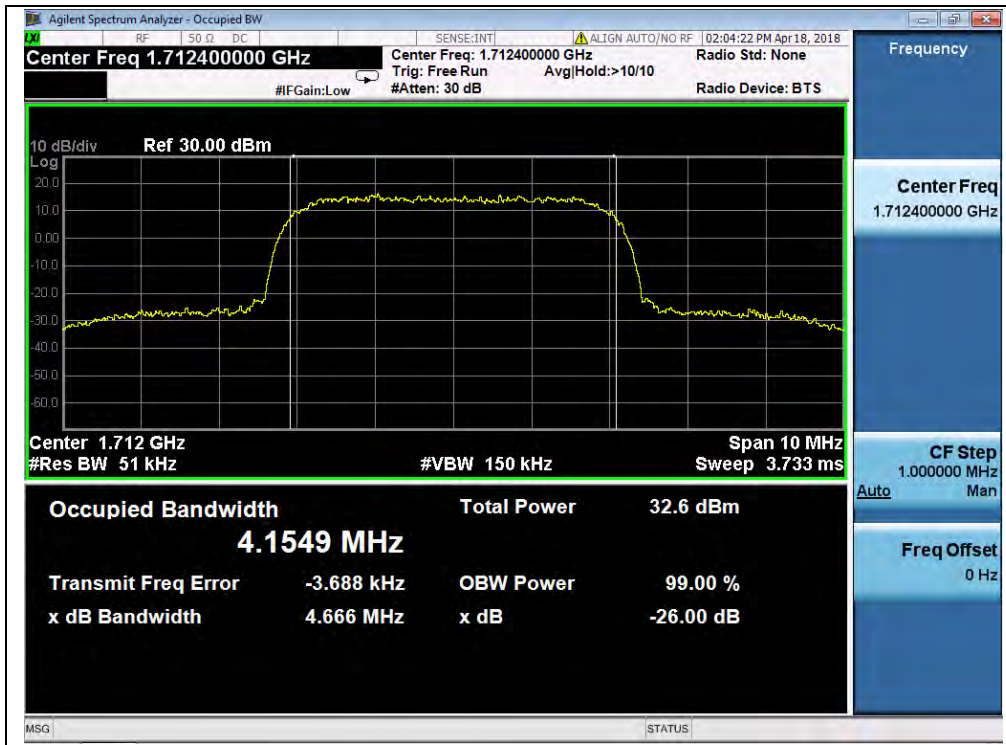
(Plot G1, WCDMA 850MHz, Channel = 4132)



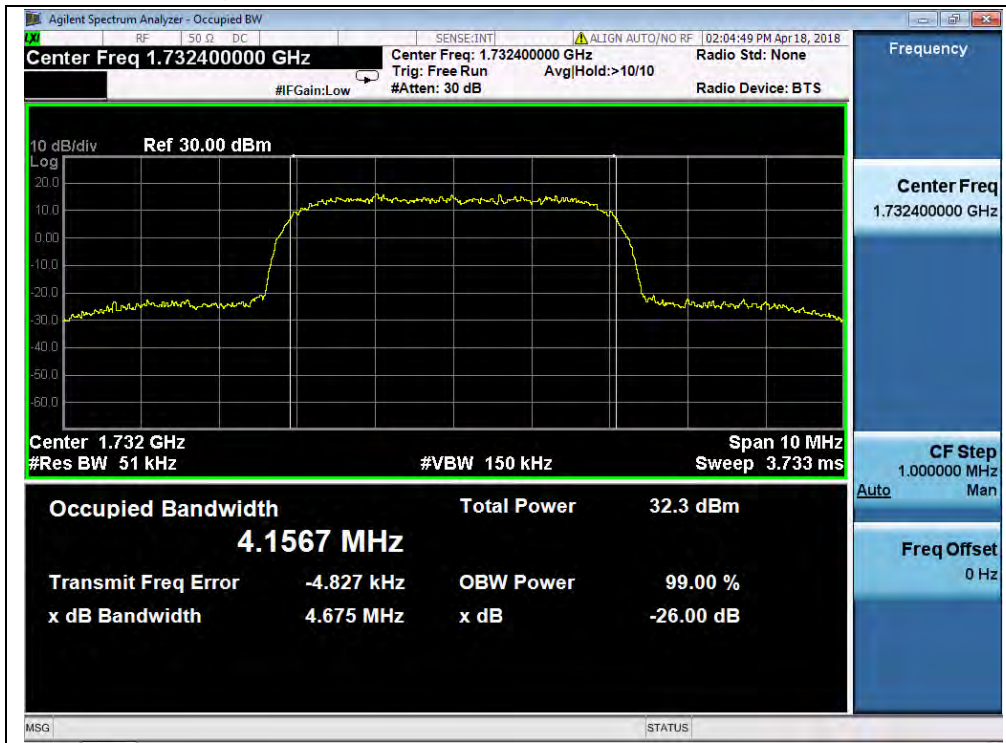
(Plot G2, WCDMA 850 MHz, Channel = 4175)



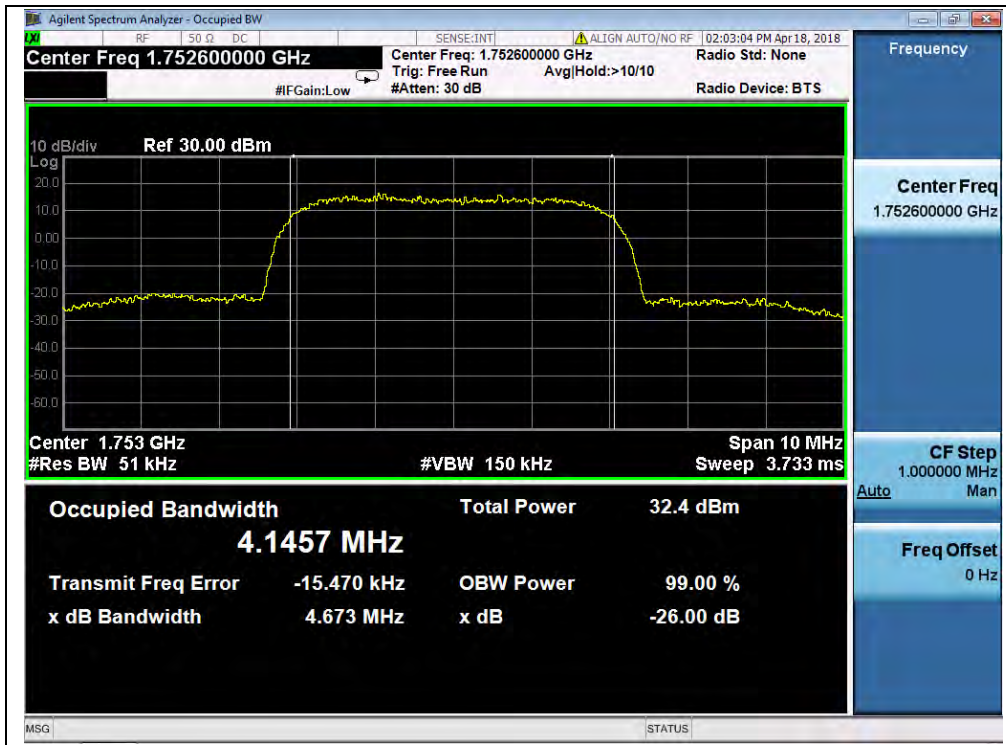
(Plot G3, WCDMA 850MHz, Channel = 4233)



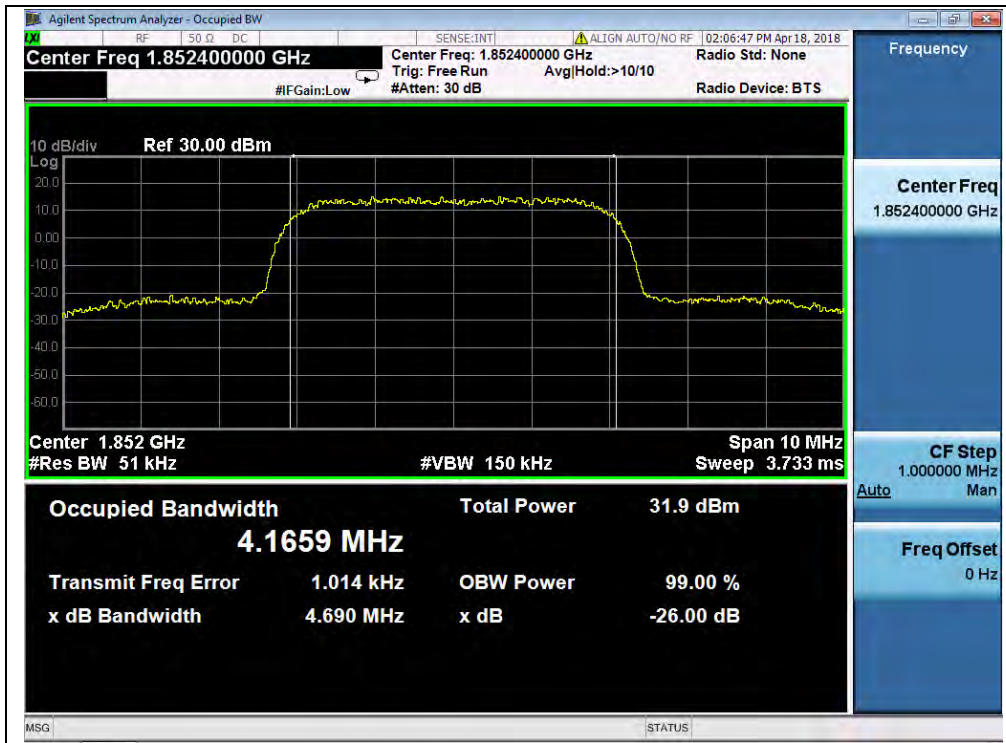
(Plot H1, WCDMA 1700MHz, Channel = 1312)



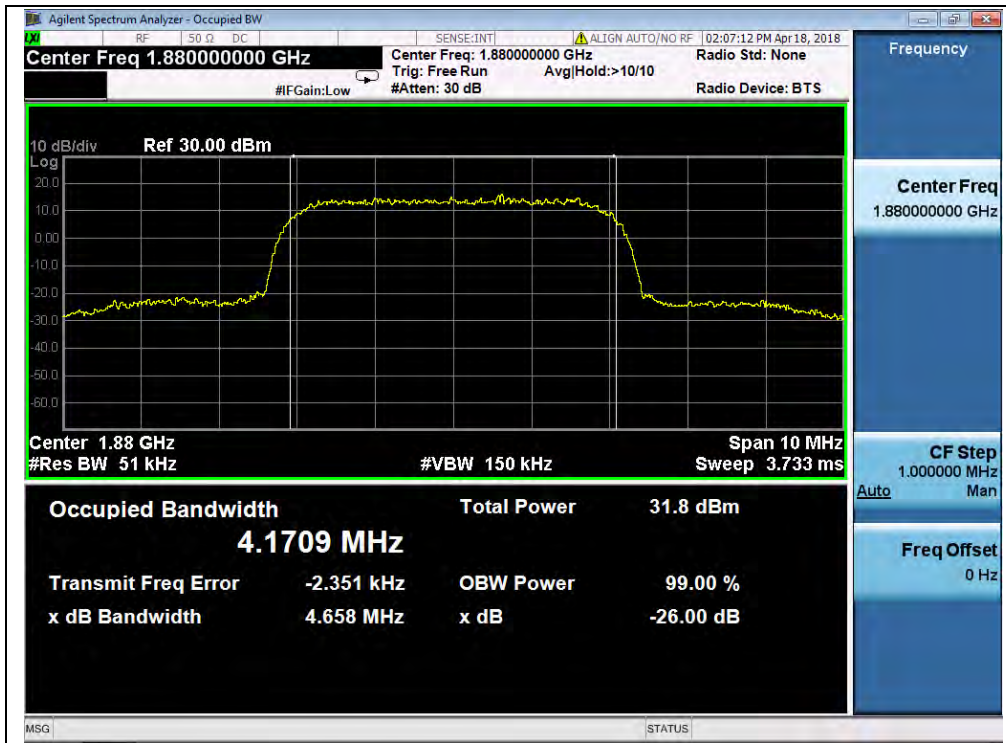
(Plot H2, WCDMA 1700 MHz, Channel = 1412)



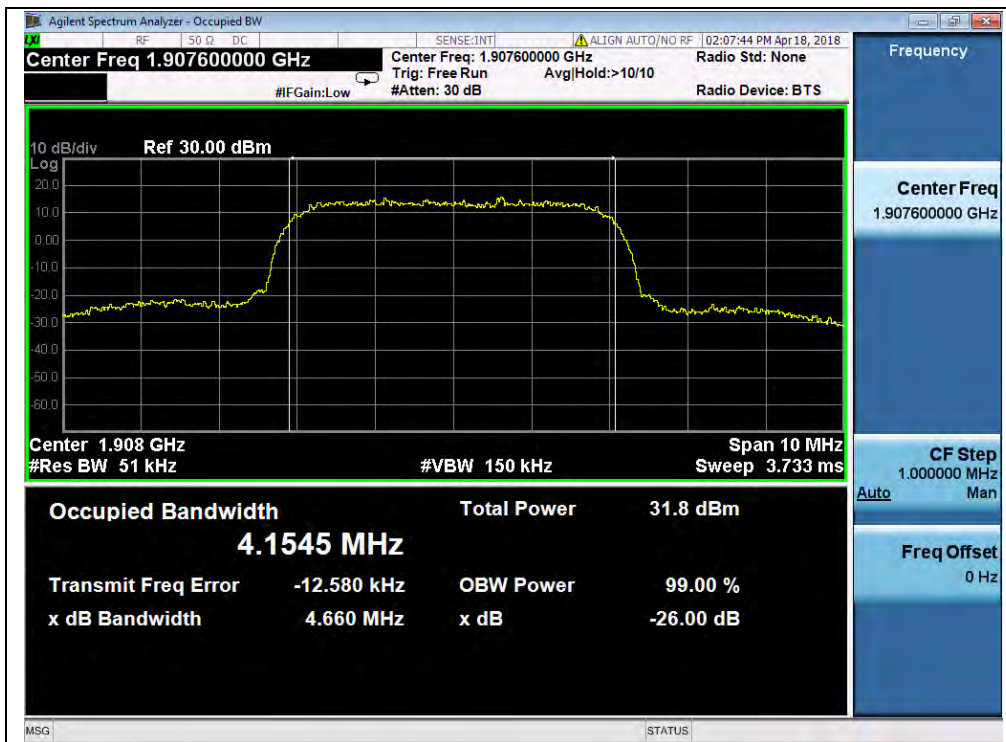
(Plot H3, WCDMA1700MHz, Channel = 1513)



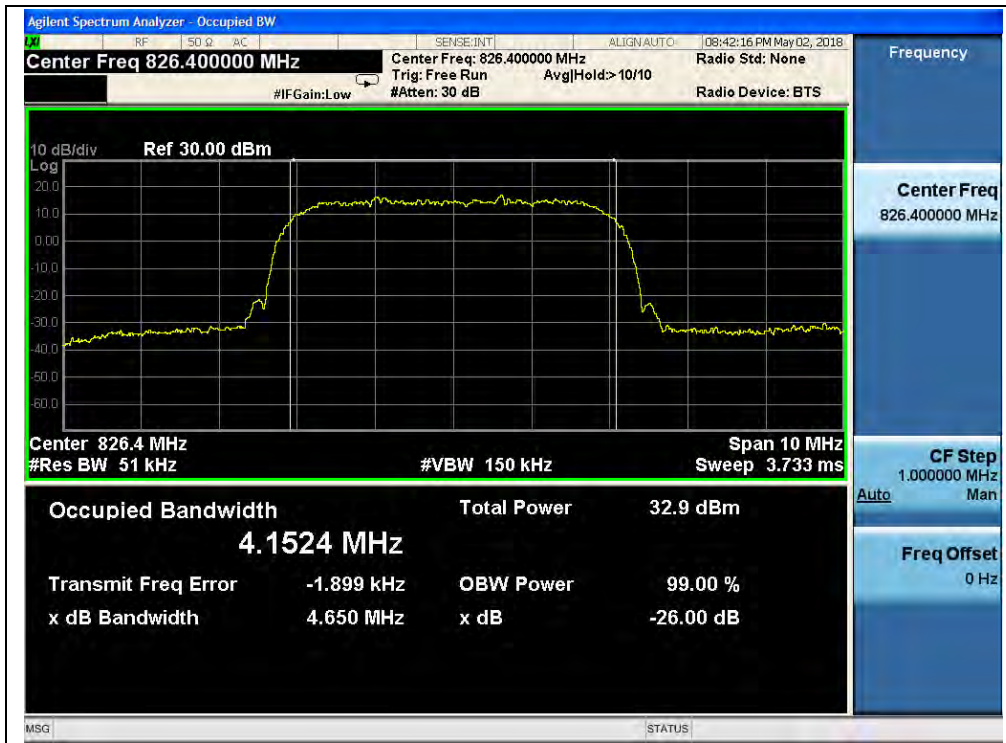
(Plot I1, WCDMA 1900MHz, Channel = 9262)



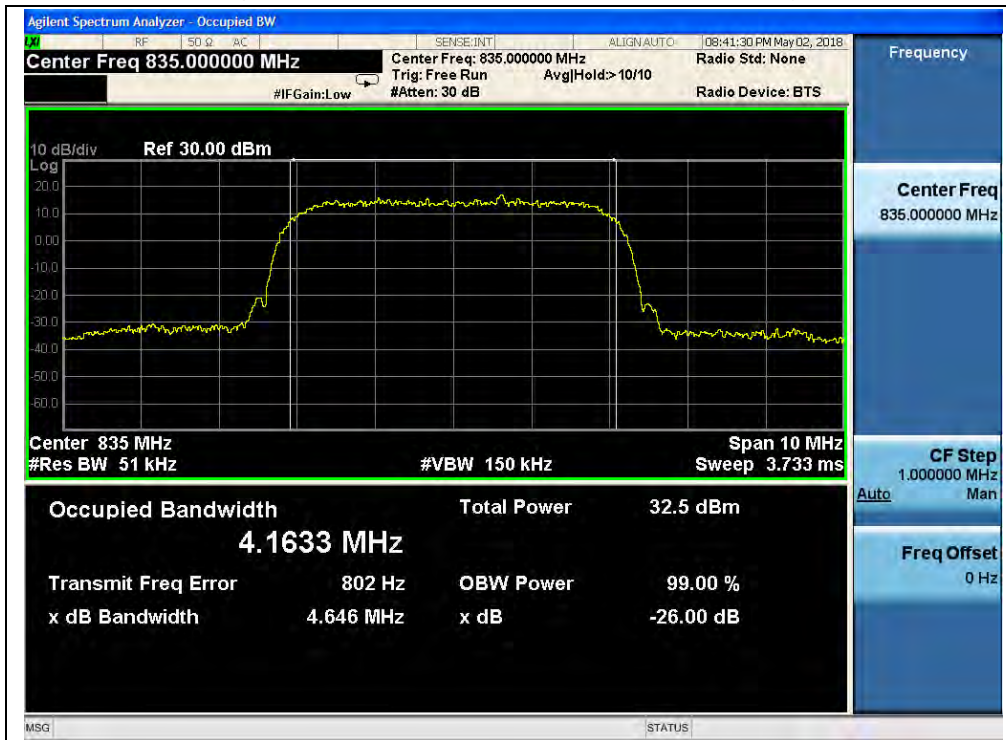
(Plot I2, WCDMA 1900 MHz, Channel = 9400)



(Plot I3, WCDMA1900MHz, Channel = 9538)

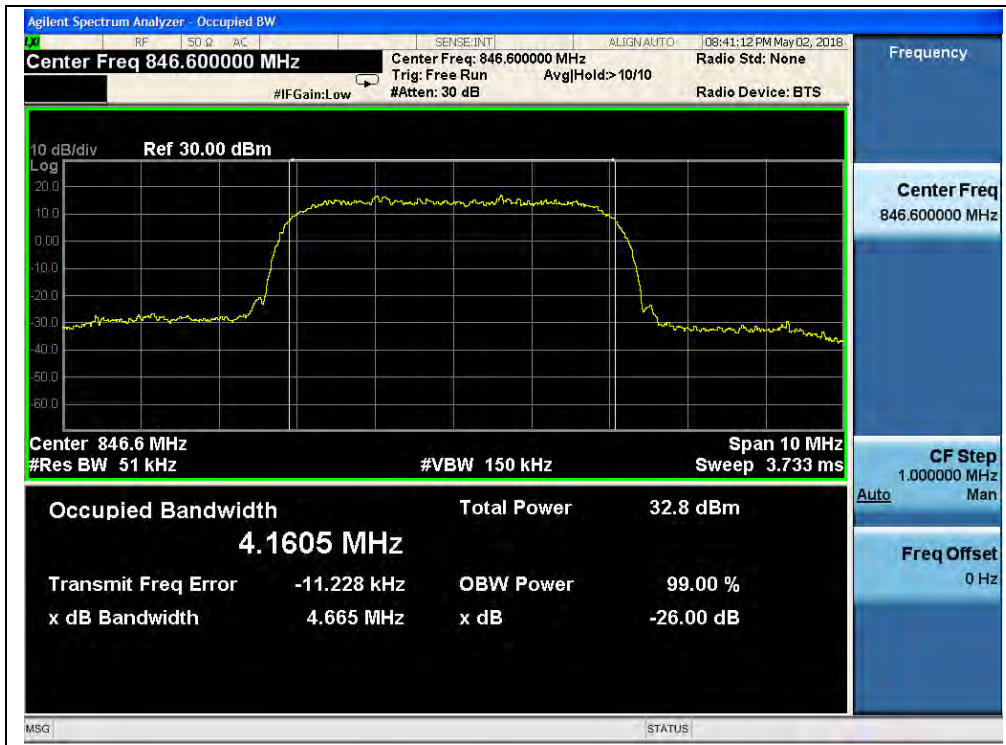


(Plot J1, HSDPA 850MHz, Channel = 4132)



(Plot J2, HSDPA 850 MHz, Channel = 4175)

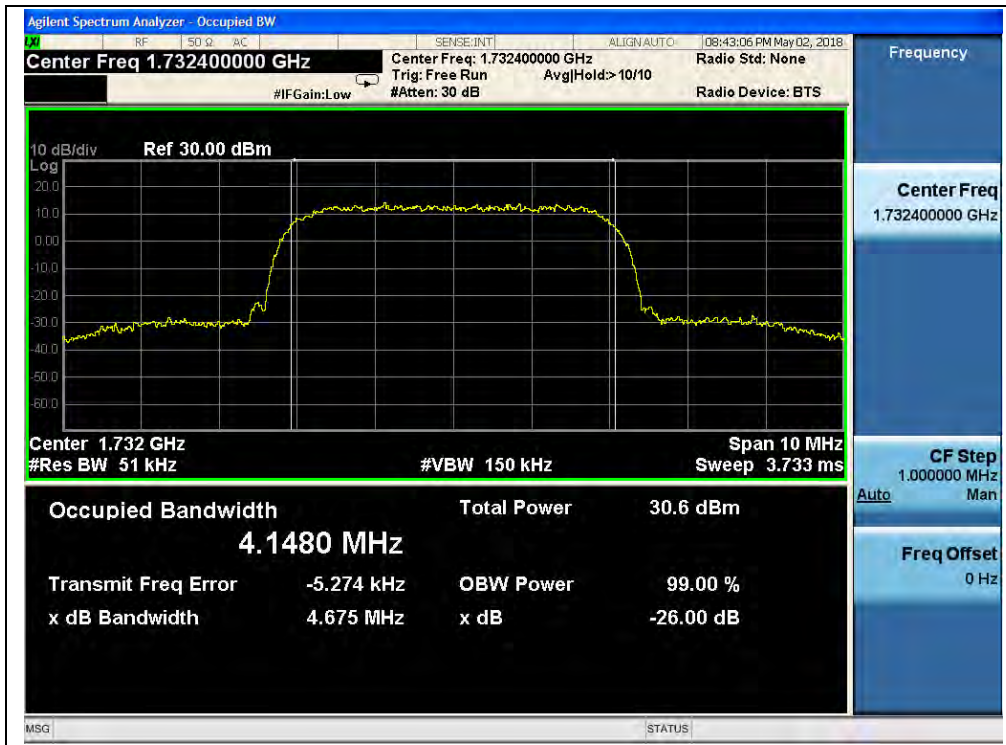




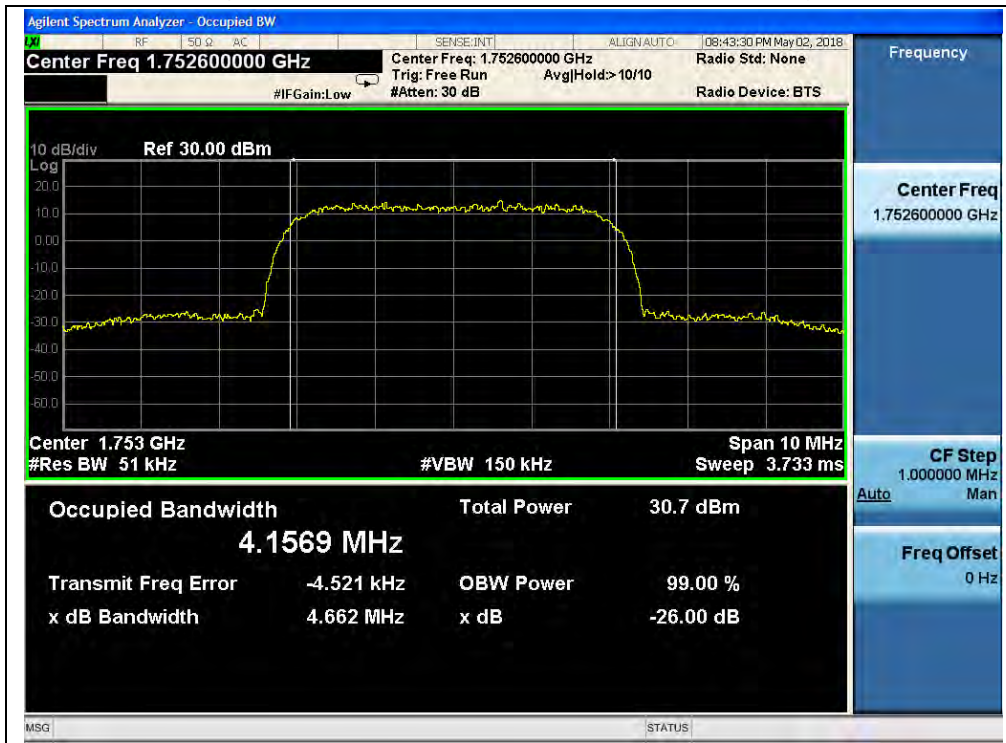
(Plot J3, HSDPA 850MHz, Channel = 4233)



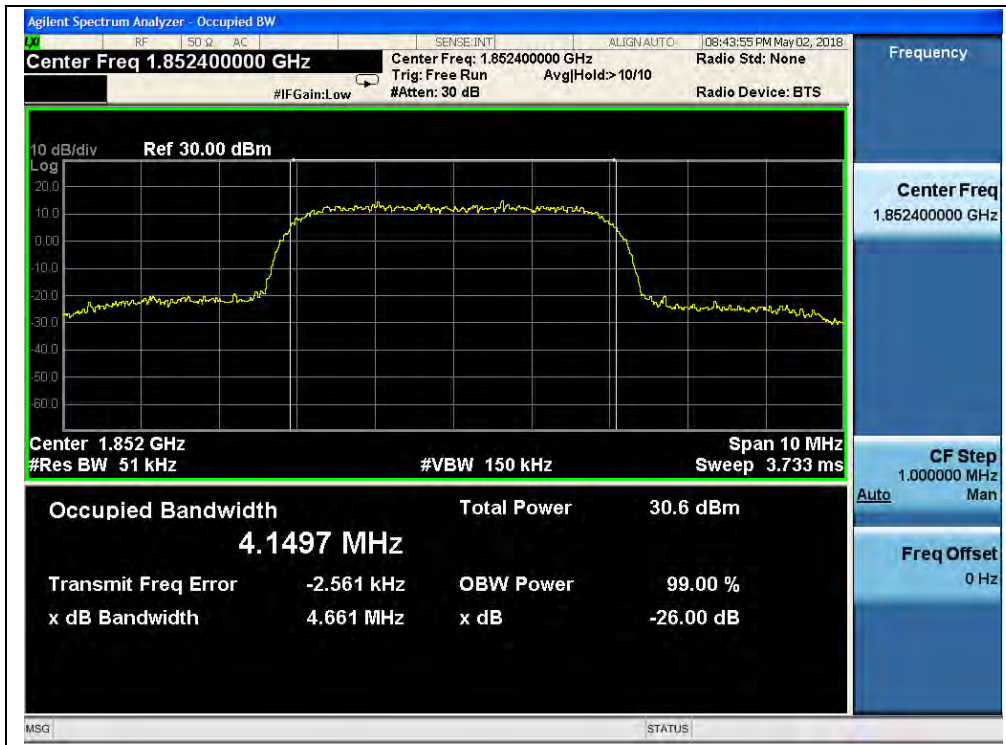
(Plot K1, HSDPA 1700MHz, Channel = 1312)



(Plot K2, HSDPA 1700 MHz, Channel = 1412)



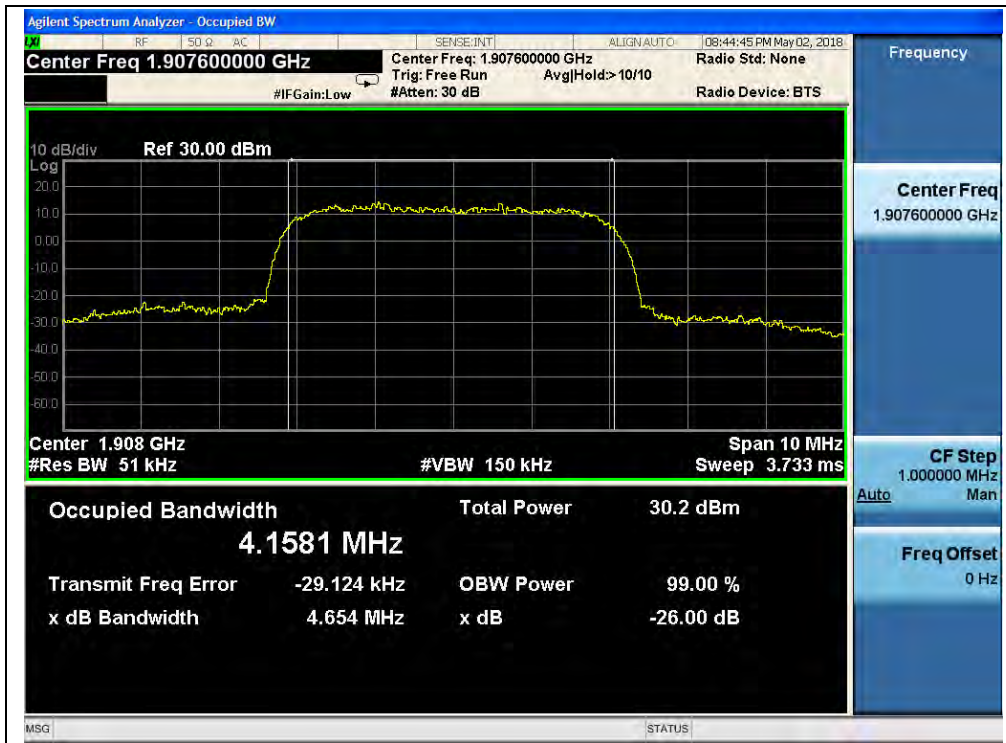
(Plot K3, HSDPA 1700MHz, Channel = 1513)



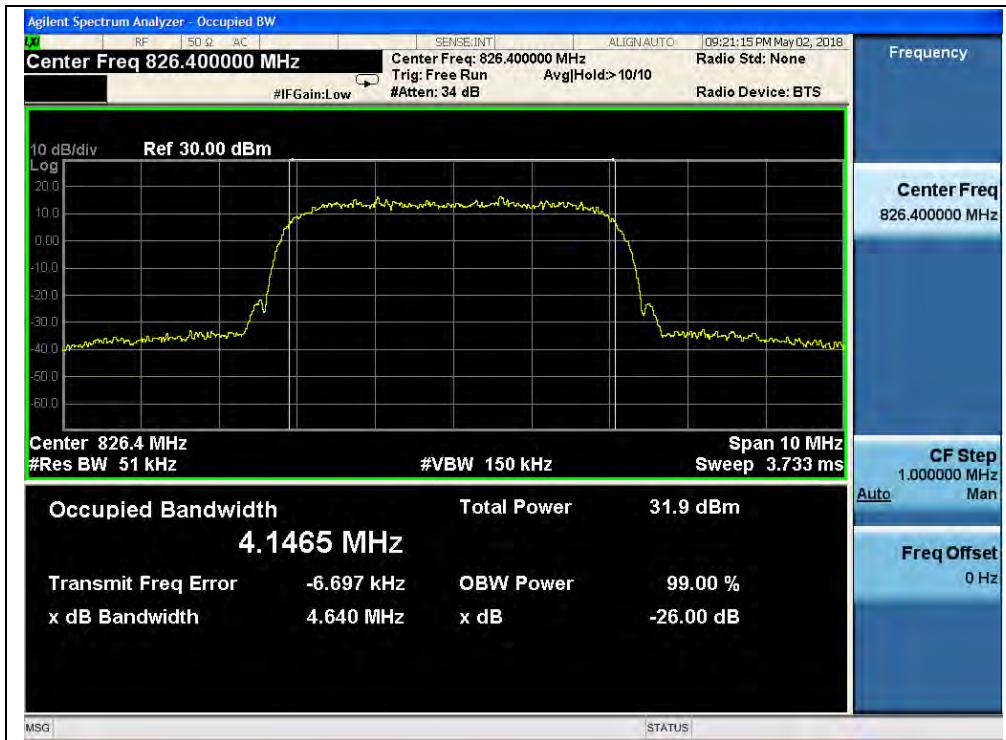
(Plot L1, HSDPA 1900MHz, Channel = 9262)



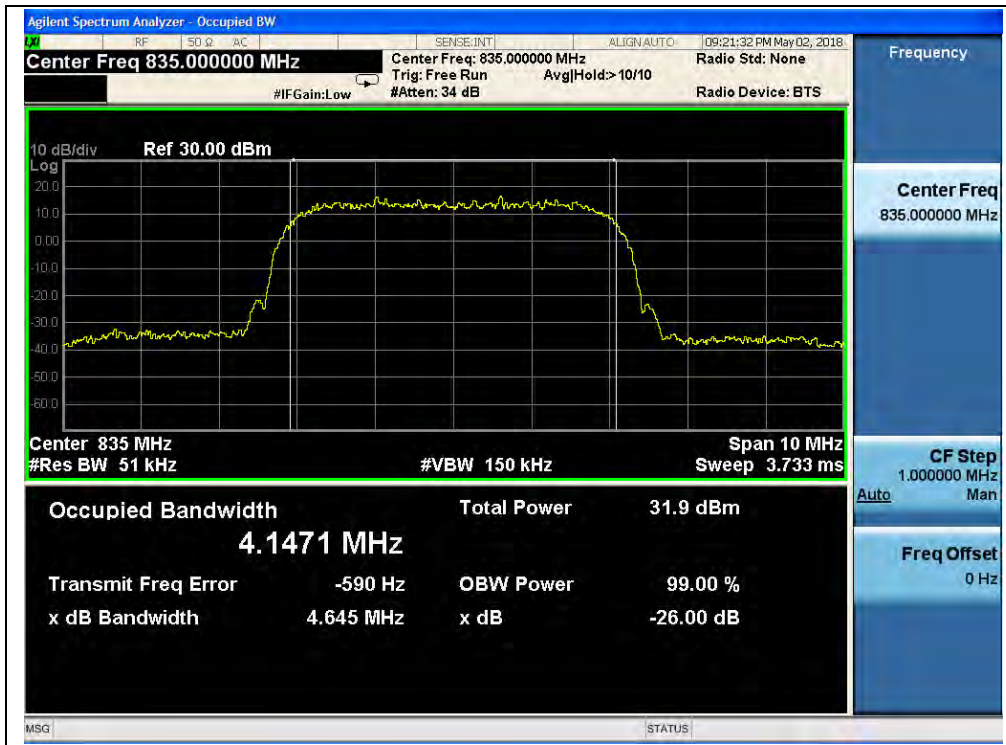
(Plot L2, HSDPA 1900 MHz, Channel = 9400)



(Plot L3, HSDPA 1900MHz, Channel = 9538)



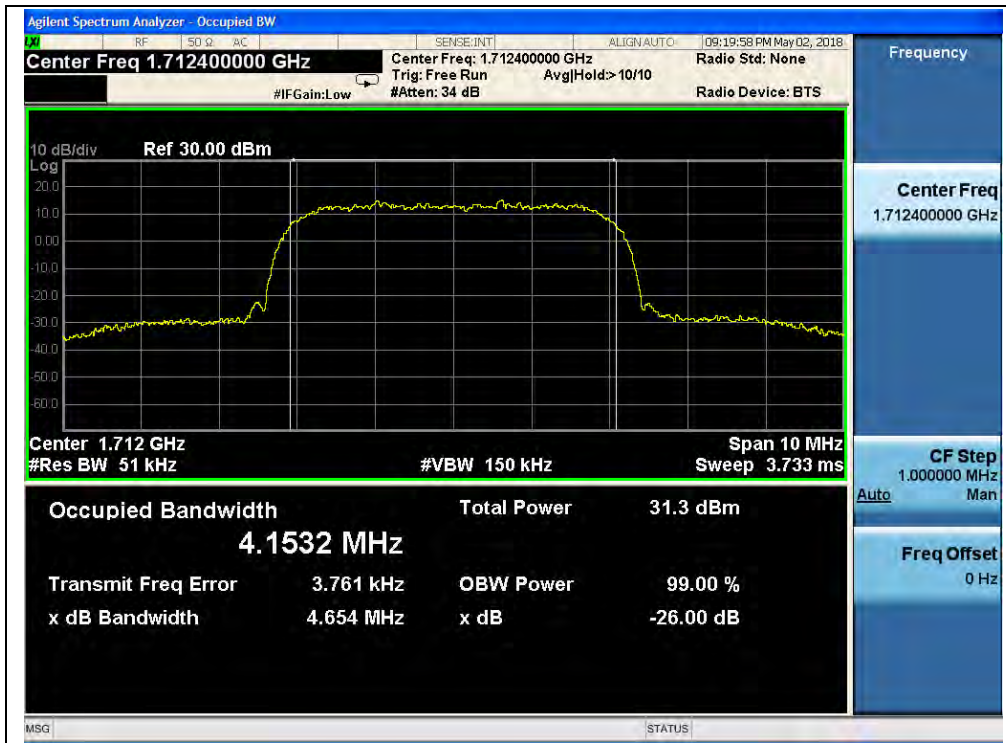
(Plot M1, HSUPA 850MHz, Channel = 4132)



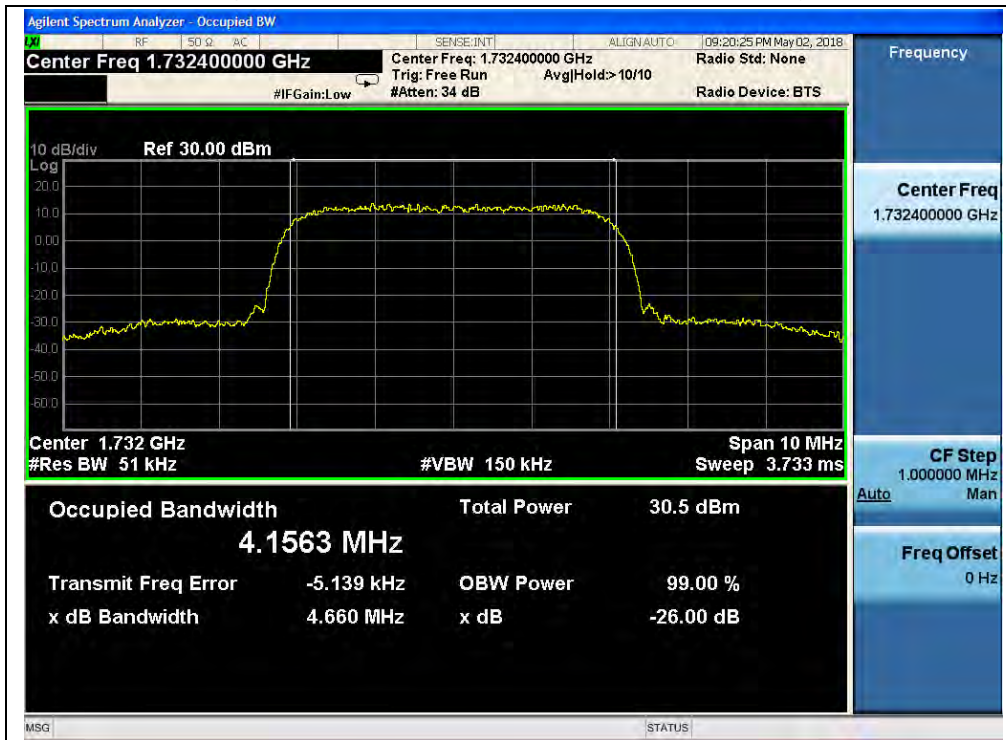
(Plot M2, HSUPA 850 MHz, Channel = 4175)



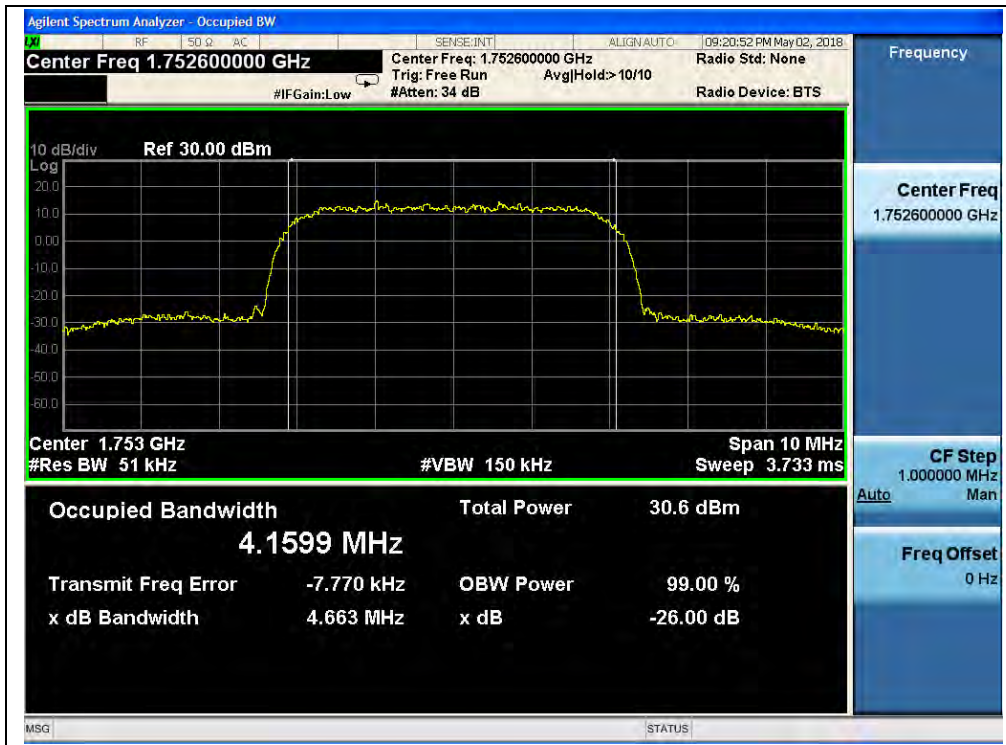
(Plot M3, HSUPA 850MHz, Channel = 4233)



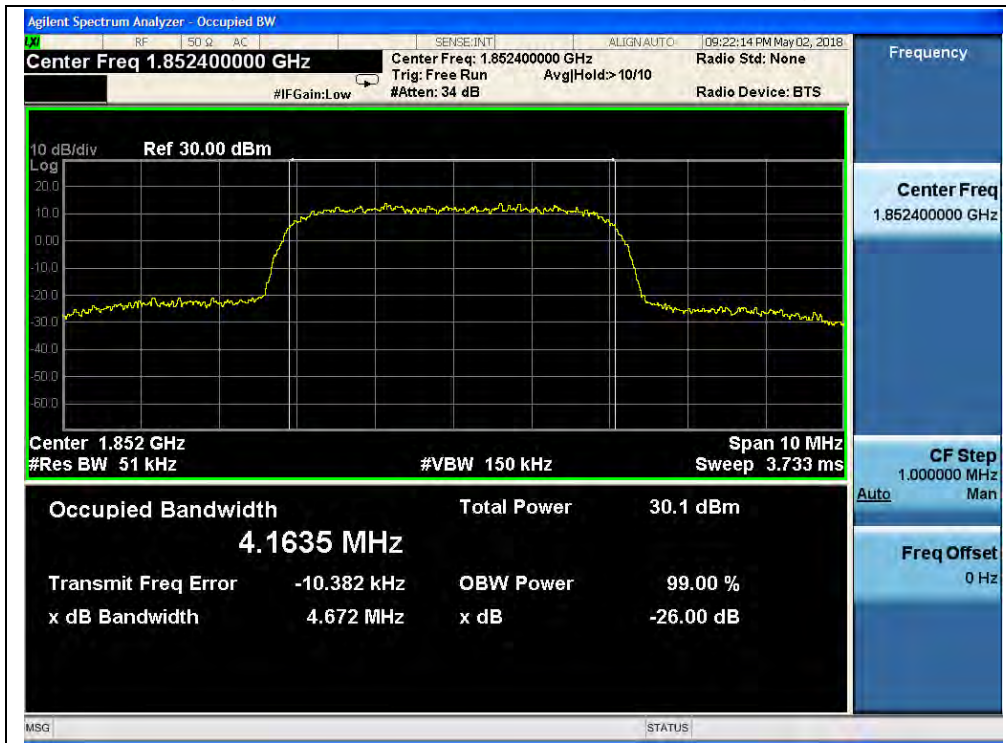
(Plot N1, HSUPA 1700MHz, Channel =1312)



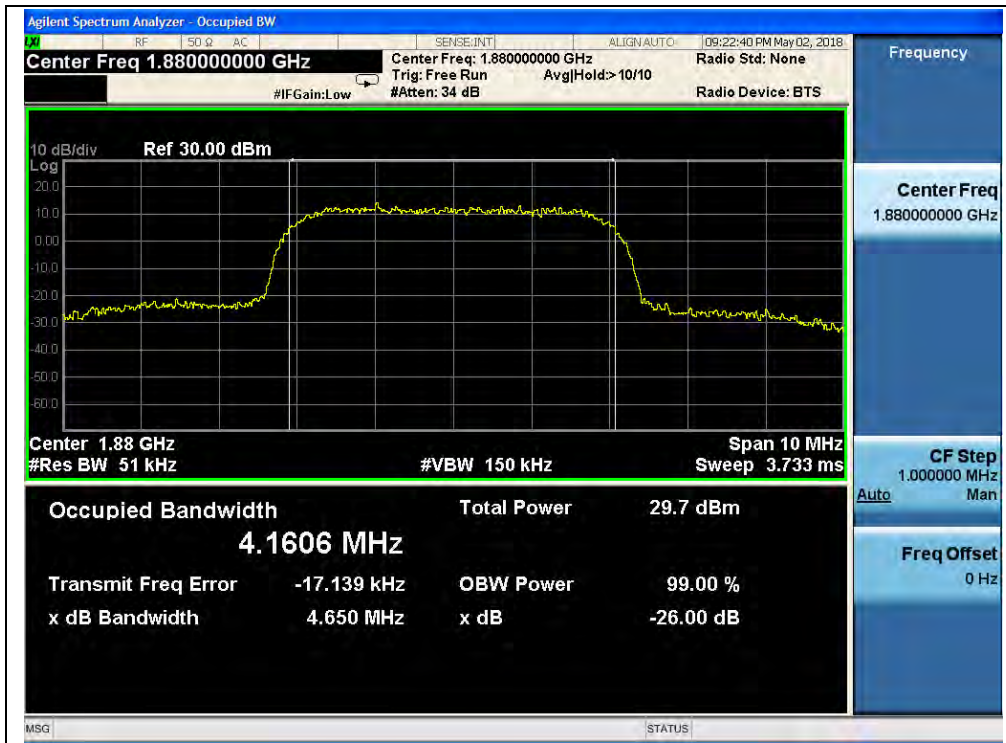
(Plot N2, HSUPA 1700 MHz, Channel = 1412)



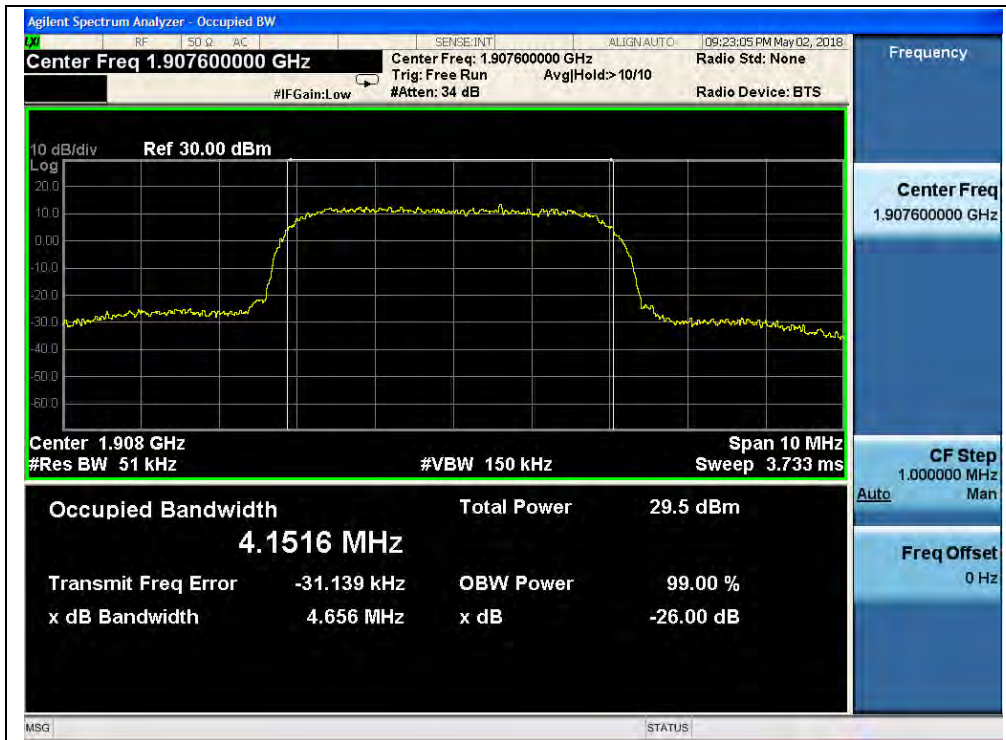
(Plot N3, HSUPA 1700MHz, Channel = 1513)



(Plot O1, HSUPA 1900MHz, Channel = 9262)



(Plot O2, HSUPA 1900 MHz, Channel = 9400)

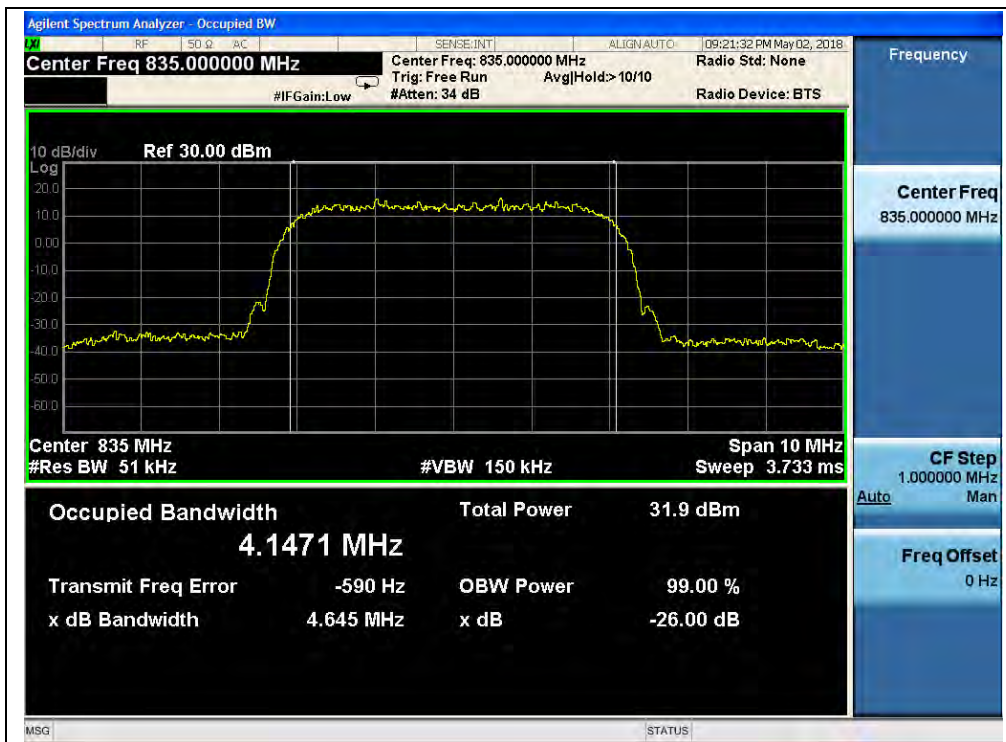


(Plot O3, HSUPA 1900MHz, Channel = 9538)

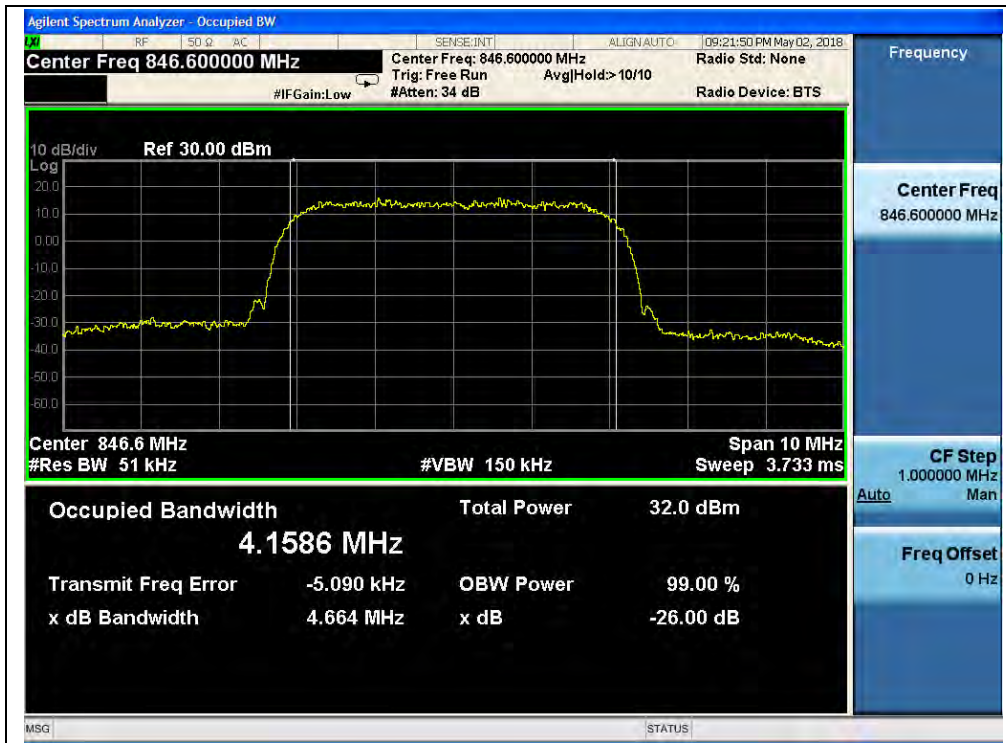




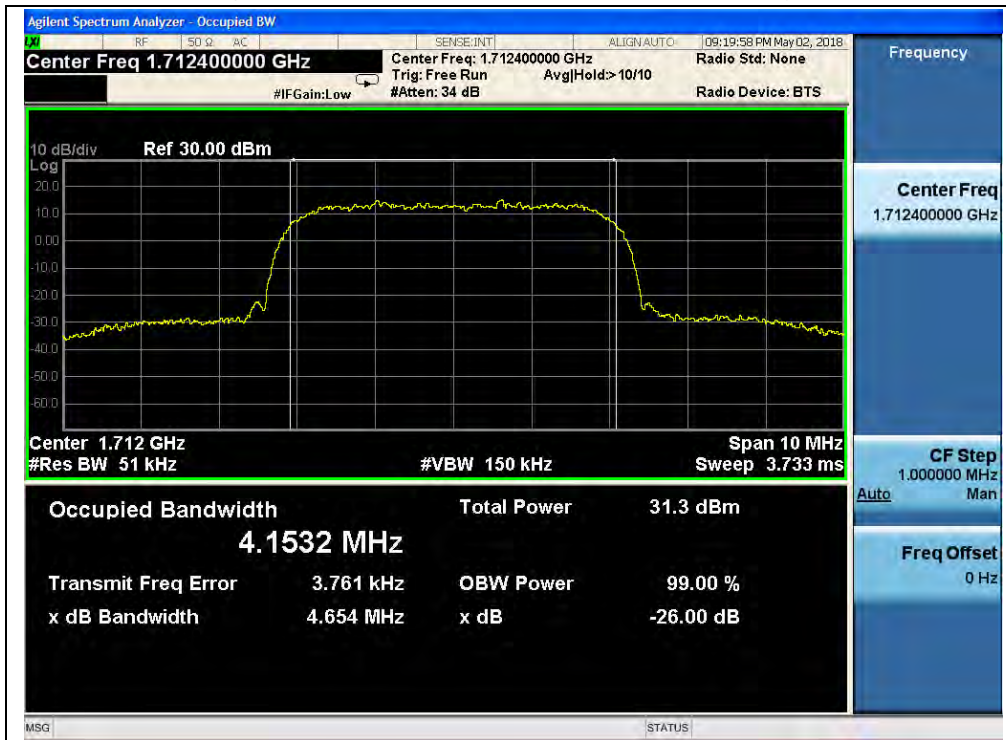
(Plot P1, HSPA+ 850MHz, Channel = 4132)



(Plot P2, HSPA+850 MHz, Channel = 4175)



(Plot P3, HSPA+ 850MHz, Channel = 4233)



(Plot Q1, HSPA+ 1700MHz, Channel =1312)