

# Cellphone-Mate, Inc.

## TEST REPORT FOR

### Consumer Booster with WiFi Model: Fusion 7

#### Tested To The Following Standards:

FCC Part 15 Subpart C Section(s)  
15.207 and 15.247  
(DTS 2400-2483.5 MHz)

Report No.: 97491-16

Date of issue: November 4, 2015



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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## ADMINISTRATIVE INFORMATION

### Test Report Information

**REPORT PREPARED FOR:**

Cellphone-Mate, Inc.  
48346 Milmont Drive  
Fremont, CA 94538

Representative: Dennis Findley

**REPORT PREPARED BY:**

Morgan Tramontin / Terri Rayle  
CKC Laboratories, Inc.  
5046 Sierra Pines Drive  
Mariposa, CA 95338

Project Number: 97491

**DATE OF EQUIPMENT RECEIPT:**

October 6, 2015

**DATE(S) OF TESTING:**

October 6-9, 2015

### Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

A handwritten signature in black ink, reading "Steve Behm", is positioned above a horizontal line.

**Steve Behm**  
**Director of Quality Assurance & Engineering Services**  
**CKC Laboratories, Inc.**

## Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):  
CKC Laboratories, Inc.  
1120 Fulton Place  
Fremont, CA 94539

## Software Versions

| CKC Laboratories Proprietary Software | Version |
|---------------------------------------|---------|
| EMITest Emissions                     | 5.02.00 |
| EMITest Immunity                      | 5.02.00 |

## Site Registration & Accreditation Information

| Location | CB #   | TAIWAN         | CANADA  | FCC    | JAPAN  |
|----------|--------|----------------|---------|--------|--------|
| Fremont  | US0082 | SL2-IN-E-1148R | 3082B-1 | 958979 | A-0149 |

## SUMMARY OF RESULTS

### Standard / Specification: FCC Part 15 Subpart C

| Test Procedure | Description                     | Modifications | Results |
|----------------|---------------------------------|---------------|---------|
| 15.207         | AC Conducted Emissions          | NA            | Pass    |
| 15.247(a)(2)   | 6dB Bandwidth                   | NA            | Pass    |
| 15.247(b)(3)   | Output Power                    | NA            | Pass    |
| 15.31(e)       | Voltage Variation               | NA            | Pass    |
| 15.247(e)      | Power Spectral Density          | NA            | Pass    |
| 15.247(d)      | Conducted Emissions & Band Edge | NA            | Pass    |
| 15.247(d)      | Radiated Emissions & Band Edge  | NA            | Pass    |

NA = Not applicable.

### Modifications During Testing

This list is a summary of the modifications made to the equipment during testing.

| Summary of Conditions                      |
|--------------------------------------------|
| No modifications were made during testing. |

Modifications listed above must be incorporated into all production units.

### Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

| Summary of Conditions |
|-----------------------|
| None                  |

## EQUIPMENT UNDER TEST (EUT)

During testing numerous configurations may have been utilized. The configurations listed below support compliance to the standard(s) listed in the Summary of Results section.

### Configuration 1

#### *Equipment Tested:*

| Device                     | Manufacturer         | Model #         | S/N          |
|----------------------------|----------------------|-----------------|--------------|
| Consumer Booster with WiFi | Cellphone-Mate, Inc. | Fusion 7        | 01           |
| AC/DC Power Adapter        | Cellphone-Mate, Inc. | GFP451DA-1238-1 | 1411-0000920 |

#### *Support Equipment:*

| Device           | Manufacturer | Model #    | S/N               |
|------------------|--------------|------------|-------------------|
| AC/DC Adapter    | Sony         | PCGA-AC16V | 1477749530023127  |
| Signal Generator | Agilent      | E4433B     | US40052164        |
| Laptop           | Sony         | PCG-6C2L   | CXSM507BRD01-D480 |

### Configuration 2

#### *Equipment Tested:*

| Device                     | Manufacturer                   | Model #         | S/N          |
|----------------------------|--------------------------------|-----------------|--------------|
| WiFi Antenna               | Cellphone-Mate DBA<br>Surecall | SC222W          | NA           |
| Consumer Booster with WiFi | Cellphone-Mate, Inc.           | Fusion 7        | 01           |
| AC/DC Power Adapter        | Cellphone-Mate, Inc.           | GFP451DA-1238-1 | 1411-0000920 |
| HDTV Antenna               | Cellphone-Mate DBA<br>Surecall | SC305H          | NA           |

#### *Support Equipment:*

| Device           | Manufacturer | Model #    | S/N               |
|------------------|--------------|------------|-------------------|
| Laptop           | Sony         | PCG-6C2L   | CXSM507BRD01-D480 |
| Signal Generator | Agilent      | E4433B     | US40052164        |
| AC/DC Adapter    | Sony         | PCGA-AC16V | 1477749530023127  |

### Configuration 3

#### *Equipment Tested:*

| Device                     | Manufacturer                   | Model #         | S/N          |
|----------------------------|--------------------------------|-----------------|--------------|
| Consumer Booster with WiFi | Cellphone-Mate, Inc.           | Fusion 7        | 01           |
| AC/DC Power Adapter        | Cellphone-Mate, Inc.           | GFP451DA-1238-1 | 1411-0000920 |
| WiFi Antenna               | Cellphone-Mate DBA<br>Surecall | SC248W          | NA           |
| HDTV Antenna               | Cellphone-Mate DBA<br>Surecall | SC305H          | NA           |

#### *Support Equipment:*

| Device           | Manufacturer | Model #    | S/N               |
|------------------|--------------|------------|-------------------|
| Laptop           | Sony         | PCG-6C2L   | CXSM507BRD01-D480 |
| Signal Generator | Agilent      | E4433B     | US40052164        |
| AC/DC Adapter    | Sony         | PCGA-AC16V | 1477749530023127  |

## FCC PART 15 SUBPART C

### 15.207 AC Conducted Emissions

#### Test Setup / Conditions / Data

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.207 AC Mains - Average**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Emissions** Time: 14:55:22  
 Tested By: Hieu Song Nguyenpham Sequence#: 15  
 Software: EMITest 5.02.00 120V 60Hz

#### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 2 |              |         |     |

#### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 2 |              |         |     |

#### Test Conditions / Notes:

Conducted Emission  
 Frequency Range: 150kHz to 30MHz

Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa

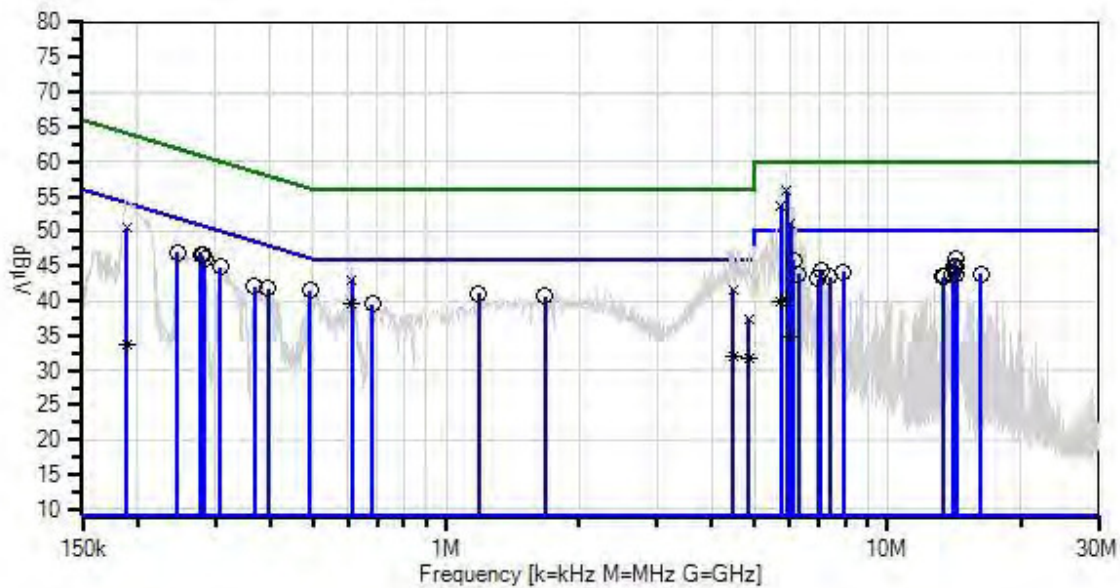
Highest Generation Frequency: 2.4GHz  
 Attenuator = 63 at MAX Level  
 Antenna Gain for **WiFi Antenna (SC222W)**=6dBi  
 Method: ANSI C 63.4 2009

The equipment under test (EUT) is placed on the Styrofoam table top. A remotely located signal generator which sits next to the EUT is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level. HDTV input is connected to the antenna which is sat next to the EUT. The HDTV output ports are connected to F-type cables and terminated by 75Ohm terminator on another end.

The EUT is connected to the laptop through RJ45 on LAN Port which is outside of the chamber to operate the WIFI portion at the beginning and disconnect the port of RJ45 from the laptop due to the LAN port is used for service only. Another RJ45 is hanging on WAN port.

**802.11b Mode**  
 Data rate = 2Mbps  
 Attenuator for 802.11b Mode=32  
**Middle Channel**

CKC Laboratories, Inc. Date: 10/6/2015 Time: 14:55:22 Cellphone-Mate, Inc W/O#: 97491  
 Test Lead: Line 120V 60Hz Sequence#: 15



— Sweep Data  
 x QP Readings  
 Software Version: 5.02.00

— Readings  
 \* Average Readings  
 — 1 - 15.207 AC Mains - Average

○ Peak Readings  
 ▼ Ambient  
 — 2 - 15.207 AC Mains - Quasi-peak

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model               | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|---------------------|------------------|--------------|
| T1 | ANP01211         | Attenuator                  | 23-10-34            | 3/31/2015        | 3/31/2017    |
| T2 | ANP00880         | Cable                       | RG214U              | 6/13/2014        | 6/13/2016    |
| T3 | ANP06691         | Cable                       | PE3062-180          | 8/8/2014         | 8/8/2016     |
| T4 | AN00494          | 50uH LISN-Line Loss (dB)    | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN00494          | 50uH LISN-Return Loss (dB)  | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN03471          | RF Characteristics Analyzer | E4440A              | 12/19/2013       | 12/19/2015   |
| T5 | ANP05258         | High Pass Filter            | HE9615-150K-50-720B | 11/14/2014       | 11/14/2016   |

**Measurement Data:**

Reading listed by margin.

Test Lead: Line

| #  | Freq<br>MHz  | Rdng<br>dB $\mu$ V | T1<br>T5<br>dB | T2<br>dB | T3<br>dB | T4<br>dB | Dist<br>Table | Corr<br>dB $\mu$ V | Spec<br>dB $\mu$ V | Margin<br>dB | Polar<br>Ant |
|----|--------------|--------------------|----------------|----------|----------|----------|---------------|--------------------|--------------------|--------------|--------------|
| 1  | 14.211M      | 35.2               | +9.9<br>+0.2   | +0.3     | +0.0     | +0.5     | +0.0          | 46.1               | 50.0               | -3.9         | Line         |
| 2  | 6.130M       | 34.8               | +9.9<br>+0.2   | +0.2     | +0.0     | +0.8     | +0.0          | 45.9               | 50.0               | -4.1         | Line         |
| 3  | 5.896M<br>QP | 44.8               | +9.9<br>+0.2   | +0.2     | +0.0     | +0.8     | +0.0          | 55.9               | 60.0               | -4.1         | Line         |
| 4  | 278.714k     | 36.0               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 46.7               | 50.9               | -4.2         | Line         |
| 5  | 280.896k     | 35.9               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 46.6               | 50.8               | -4.2         | Line         |
| 6  | 491.785k     | 30.6               | +9.9<br>+0.2   | +0.0     | +0.0     | +0.8     | +0.0          | 41.5               | 46.1               | -4.6         | Line         |
| 7  | 284.532k     | 35.3               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 46.0               | 50.7               | -4.7         | Line         |
| 8  | 1.188M       | 30.2               | +9.8<br>+0.2   | +0.1     | +0.0     | +0.8     | +0.0          | 41.1               | 46.0               | -4.9         | Line         |
| 9  | 14.274M      | 34.0               | +9.9<br>+0.2   | +0.3     | +0.1     | +0.5     | +0.0          | 45.0               | 50.0               | -5.0         | Line         |
| 10 | 245.990k     | 36.2               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 46.9               | 51.9               | -5.0         | Line         |
| 11 | 14.148M      | 34.0               | +9.9<br>+0.2   | +0.3     | +0.0     | +0.5     | +0.0          | 44.9               | 50.0               | -5.1         | Line         |
| 12 | 308.529k     | 34.1               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 44.8               | 50.0               | -5.2         | Line         |
| 13 | 1.672M       | 29.7               | +9.8<br>+0.2   | +0.1     | +0.0     | +0.8     | +0.0          | 40.6               | 46.0               | -5.4         | Line         |
| 14 | 7.067M       | 33.4               | +9.9<br>+0.1   | +0.2     | +0.0     | +0.8     | +0.0          | 44.4               | 50.0               | -5.6         | Line         |
| 15 | 7.923M       | 33.2               | +9.9<br>+0.1   | +0.2     | +0.0     | +0.8     | +0.0          | 44.2               | 50.0               | -5.8         | Line         |
| 16 | 395.794k     | 31.1               | +9.9<br>+0.1   | +0.0     | +0.0     | +0.7     | +0.0          | 41.8               | 47.9               | -6.1         | Line         |

|    |                 |      |              |      |      |      |      |      |      |       |      |
|----|-----------------|------|--------------|------|------|------|------|------|------|-------|------|
| 17 | 14.031M         | 33.0 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 43.9 | 50.0 | -6.1  | Line |
| 18 | 16.229M         | 33.0 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.8 | 50.0 | -6.2  | Line |
| 19 | 6.283M          | 32.7 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 43.8 | 50.0 | -6.2  | Line |
| 20 | 5.742M<br>QP    | 42.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 53.7 | 60.0 | -6.3  | Line |
| 21 | 14.337M         | 32.7 | +9.9<br>+0.2 | +0.3 | +0.1 | +0.5 | +0.0 | 43.7 | 50.0 | -6.3  | Line |
| 22 | 368.888k        | 31.4 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.7 | +0.0 | 42.1 | 48.5 | -6.4  | Line |
| 23 | 610.668k<br>Ave | 28.7 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 39.5 | 46.0 | -6.5  | Line |
| 24 | 679.404k        | 28.8 | +9.8<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 39.5 | 46.0 | -6.5  | Line |
| 25 | 13.355M         | 32.5 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 43.4 | 50.0 | -6.6  | Line |
| 26 | 7.373M          | 32.4 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 43.4 | 50.0 | -6.6  | Line |
| 27 | 13.418M         | 32.5 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 43.4 | 50.0 | -6.6  | Line |
| 28 | 6.959M          | 32.2 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 43.2 | 50.0 | -6.8  | Line |
| 29 | 6.040M<br>QP    | 40.1 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 51.2 | 60.0 | -8.8  | Line |
| 30 | 5.896M<br>Ave   | 29.1 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 40.2 | 50.0 | -9.8  | Line |
| ^  | 5.896M          | 47.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 58.3 | 50.0 | +8.3  | Line |
| 32 | 5.742M<br>Ave   | 28.7 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 39.8 | 50.0 | -10.2 | Line |
| ^  | 5.742M          | 46.4 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 57.5 | 50.0 | +7.5  | Line |
| 34 | 610.668k<br>QP  | 32.2 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 43.0 | 56.0 | -13.0 | Line |
| ^  | 610.668k        | 34.3 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 45.1 | 46.0 | -0.9  | Line |
| 36 | 189.268k<br>QP  | 39.6 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 50.5 | 64.1 | -13.6 | Line |
| 37 | 4.458M<br>Ave   | 21.1 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0 | 32.1 | 46.0 | -13.9 | Line |
| 38 | 4.458M<br>QP    | 30.6 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0 | 41.6 | 56.0 | -14.4 | Line |
| ^  | 4.458M          | 36.7 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0 | 47.7 | 46.0 | +1.7  | Line |

|     |          |      |              |      |      |      |      |      |      |       |      |
|-----|----------|------|--------------|------|------|------|------|------|------|-------|------|
| 40  | 4.839M   | 20.6 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 31.6 | 46.0 | -14.4 | Line |
| Ave |          |      |              |      |      |      |      |      |      |       |      |
| 41  | 6.040M   | 23.8 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 34.9 | 50.0 | -15.1 | Line |
| Ave |          |      |              |      |      |      |      |      |      |       |      |
| ^   | 6.040M   | 42.9 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 54.0 | 50.0 | +4.0  | Line |
|     |          |      |              |      |      |      |      |      |      |       |      |
| 43  | 4.839M   | 26.5 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 37.5 | 56.0 | -18.5 | Line |
| QP  |          |      |              |      |      |      |      |      |      |       |      |
| ^   | 4.839M   | 34.7 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 45.7 | 46.0 | -0.3  | Line |
|     |          |      |              |      |      |      |      |      |      |       |      |
| 45  | 189.268k | 22.8 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 33.7 | 54.1 | -20.4 | Line |
| Ave |          |      |              |      |      |      |      |      |      |       |      |
| ^   | 189.268k | 41.9 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 52.8 | 54.1 | -1.3  | Line |
|     |          |      |              |      |      |      |      |      |      |       |      |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.207 AC Mains - Average**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Emissions** Time: 15:21:35  
 Tested By: Hieu Song Nguyenpham Sequence#: 16  
 Software: EMITest 5.02.00 120V 60Hz

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 2 |              |         |     |

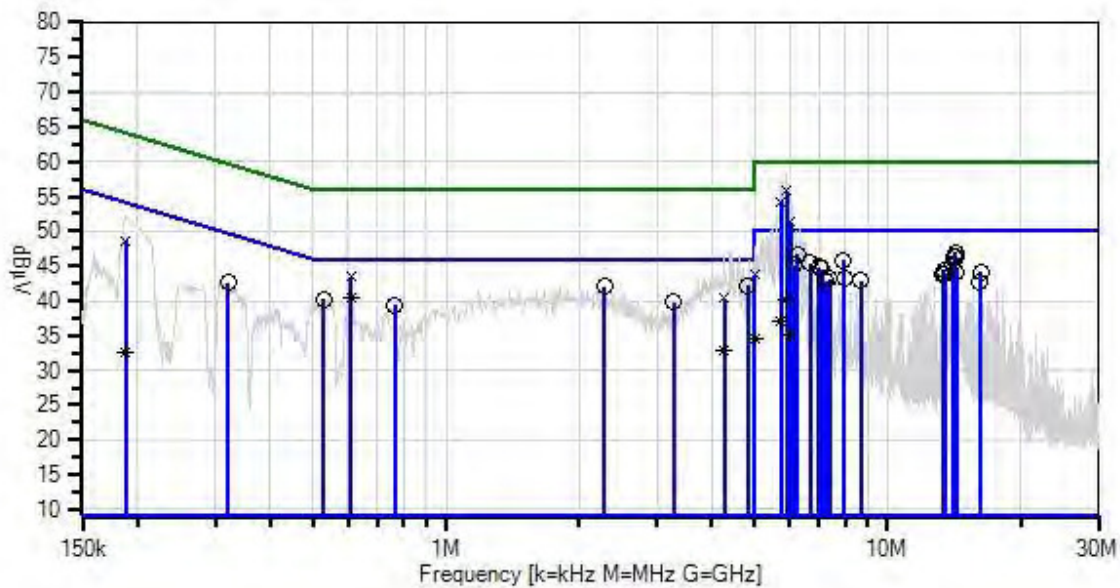
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 2 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Emission<br/>         Frequency Range: 150kHz to 30MHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.4GHz<br/>         Attenuator = 63 at MAX Level<br/>         Antenna Gain for <b>WiFi Antenna (SC222W)</b>=6dBi<br/>         Method: ANSI C 63.4 2009</p> <p>The equipment under test (EUT) is placed on the Styrofoam table top. A remotely located signal generator which sits next to the EUT is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level. HDTV input is connected to the antenna which is sat next to the EUT. The HDTV output ports are connected to F-type cables and terminated by 75Ohm terminator on another end.</p> <p>The EUT is connected to the laptop through RJ45 on LAN Port which is outside of the chamber to operate the WIFI portion at the beginning and disconnect the port of RJ45 from the laptop due to the LAN port is used for service only. Another RJ45 is hanging on WAN port.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2Mbps<br/>         Attenuator for 802.11b Mode=32</p> <p><b>Middle Channel</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc. Date: 10/6/2015 Time: 15:21:35 Cellphone-Mate, Inc W/O#: 97491  
 Test Lead: Neutral 120V 60Hz Sequence#: 16



— Sweep Data  
 x QP Readings  
 Software Version: 5.02.00

— Readings  
 \* Average Readings  
 — 1 - 15.207 AC Mains - Average

o Peak Readings  
 ▼ Ambient  
 — 2 - 15.207 AC Mains - Quasi-peak

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model               | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|---------------------|------------------|--------------|
| T1 | ANP01211         | Attenuator                  | 23-10-34            | 3/31/2015        | 3/31/2017    |
| T2 | ANP00880         | Cable                       | RG214U              | 6/13/2014        | 6/13/2016    |
| T3 | ANP06691         | Cable                       | PE3062-180          | 8/8/2014         | 8/8/2016     |
|    | AN00494          | 50uH LISN-Line Loss (dB)    | 3816/NM             | 3/4/2015         | 3/4/2017     |
| T4 | AN00494          | 50uH LISN-Return Loss (dB)  | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN03471          | RF Characteristics Analyzer | E4440A              | 12/19/2013       | 12/19/2015   |
| T5 | ANP05258         | High Pass Filter            | HE9615-150K-50-720B | 11/14/2014       | 11/14/2016   |

**Measurement Data:**

Reading listed by margin.

Test Lead: Neutral

| #  | Freq     | Rdng       | T1<br>T5     | T2   | T3   | T4   | Dist  | Corr       | Spec       | Margin | Polar |
|----|----------|------------|--------------|------|------|------|-------|------------|------------|--------|-------|
|    | MHz      | dB $\mu$ V | dB           | dB   | dB   | dB   | Table | dB $\mu$ V | dB $\mu$ V | dB     | Ant   |
| 1  | 14.211M  | 36.2       | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0  | 47.0       | 50.0       | -3.0   | Neutr |
| 2  | 6.247M   | 35.8       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0  | 46.7       | 50.0       | -3.3   | Neutr |
| 3  | 14.274M  | 35.4       | +9.9<br>+0.2 | +0.3 | +0.1 | +0.4 | +0.0  | 46.3       | 50.0       | -3.7   | Neutr |
| 4  | 14.148M  | 35.5       | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0  | 46.3       | 50.0       | -3.7   | Neutr |
| 5  | 4.815M   | 31.4       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0  | 42.2       | 46.0       | -3.8   | Neutr |
| 6  | 2.285M   | 31.3       | +9.8<br>+0.2 | +0.1 | +0.0 | +0.7 | +0.0  | 42.1       | 46.0       | -3.9   | Neutr |
| 7  | 7.923M   | 35.1       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0  | 45.9       | 50.0       | -4.1   | Neutr |
| 8  | 5.895M   | 44.8       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0  | 55.7       | 60.0       | -4.3   | Neutr |
| 9  | 6.679M   | 34.6       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0  | 45.4       | 50.0       | -4.6   | Neutr |
| 10 | 6.130M   | 34.3       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0  | 45.2       | 50.0       | -4.8   | Neutr |
| 11 | 14.031M  | 34.3       | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0  | 45.1       | 50.0       | -4.9   | Neutr |
| 12 | 6.977M   | 34.0       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0  | 44.8       | 50.0       | -5.2   | Neutr |
| 13 | 7.103M   | 33.8       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0  | 44.6       | 50.0       | -5.4   | Neutr |
| 14 | 13.418M  | 33.6       | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0  | 44.4       | 50.0       | -5.6   | Neutr |
| 15 | 608.340k | 29.7       | +9.9<br>+0.1 | +0.0 | +0.0 | +0.6 | +0.0  | 40.3       | 46.0       | -5.7   | Neutr |
| 16 | 5.746M   | 43.4       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0  | 54.3       | 60.0       | -5.7   | Neutr |

|    |                |      |              |      |      |      |      |      |      |       |       |
|----|----------------|------|--------------|------|------|------|------|------|------|-------|-------|
| 17 | 14.337M        | 33.3 | +9.9<br>+0.2 | +0.3 | +0.1 | +0.4 | +0.0 | 44.2 | 50.0 | -5.8  | Neutr |
| 18 | 528.874k       | 29.5 | +9.9<br>+0.2 | +0.0 | +0.0 | +0.6 | +0.0 | 40.2 | 46.0 | -5.8  | Neutr |
| 19 | 16.229M        | 33.5 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.3 | +0.0 | 44.2 | 50.0 | -5.8  | Neutr |
| 20 | 13.481M        | 33.1 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.9 | 50.0 | -6.1  | Neutr |
| 21 | 3.271M         | 29.1 | +9.8<br>+0.2 | +0.1 | +0.0 | +0.6 | +0.0 | 39.8 | 46.0 | -6.2  | Neutr |
| 22 | 13.355M        | 32.9 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.7 | 50.0 | -6.3  | Neutr |
| 23 | 765.216k       | 28.7 | +9.9<br>+0.2 | +0.0 | +0.0 | +0.6 | +0.0 | 39.4 | 46.0 | -6.6  | Neutr |
| 24 | 7.373M         | 32.3 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 43.1 | 50.0 | -6.9  | Neutr |
| 25 | 7.986M         | 32.3 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 43.1 | 50.0 | -6.9  | Neutr |
| 26 | 7.256M         | 32.1 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 42.9 | 50.0 | -7.1  | Neutr |
| 27 | 320.893k       | 32.0 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.6 | +0.0 | 42.6 | 49.7 | -7.1  | Neutr |
| 28 | 8.716M         | 32.1 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 42.9 | 50.0 | -7.1  | Neutr |
| 29 | 16.166M        | 32.1 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.3 | +0.0 | 42.8 | 50.0 | -7.2  | Neutr |
| 30 | 6.045M<br>QP   | 40.4 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 51.3 | 60.0 | -8.7  | Neutr |
| 31 | 5.895M<br>Ave  | 29.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 40.1 | 50.0 | -9.9  | Neutr |
| ^  | 5.895M         | 47.5 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 58.4 | 50.0 | +8.4  | Neutr |
| 33 | 4.994M<br>Ave  | 23.6 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 34.4 | 46.0 | -11.6 | Neutr |
| 34 | 4.994M<br>QP   | 32.9 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 43.7 | 56.0 | -12.3 | Neutr |
| ^  | 4.994M         | 37.9 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 48.7 | 46.0 | +2.7  | Neutr |
| 36 | 608.340k<br>QP | 32.8 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.6 | +0.0 | 43.4 | 56.0 | -12.6 | Neutr |
| ^  | 608.340k       | 34.3 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.6 | +0.0 | 44.9 | 46.0 | -1.1  | Neutr |

|     |          |      |      |      |      |      |      |      |      |       |       |
|-----|----------|------|------|------|------|------|------|------|------|-------|-------|
| 38  | 5.746M   | 26.1 | +9.9 | +0.2 | +0.0 | +0.6 | +0.0 | 37.0 | 50.0 | -13.0 | Neutr |
| Ave |          |      | +0.2 |      |      |      |      |      |      |       |       |
| ^   | 5.746M   | 46.4 | +9.9 | +0.2 | +0.0 | +0.6 | +0.0 | 57.3 | 50.0 | +7.3  | Neutr |
|     |          |      | +0.2 |      |      |      |      |      |      |       |       |
| 40  | 4.258M   | 22.1 | +9.9 | +0.1 | +0.0 | +0.6 | +0.0 | 32.9 | 46.0 | -13.1 | Neutr |
| Ave |          |      | +0.2 |      |      |      |      |      |      |       |       |
| 41  | 6.045M   | 24.3 | +9.9 | +0.2 | +0.0 | +0.6 | +0.0 | 35.2 | 50.0 | -14.8 | Neutr |
| Ave |          |      | +0.2 |      |      |      |      |      |      |       |       |
| ^   | 6.045M   | 43.2 | +9.9 | +0.2 | +0.0 | +0.6 | +0.0 | 54.1 | 50.0 | +4.1  | Neutr |
|     |          |      | +0.2 |      |      |      |      |      |      |       |       |
| 43  | 188.542k | 37.9 | +9.9 | +0.0 | +0.0 | +0.6 | +0.0 | 48.7 | 64.1 | -15.4 | Neutr |
| QP  |          |      | +0.3 |      |      |      |      |      |      |       |       |
| 44  | 4.258M   | 29.6 | +9.9 | +0.1 | +0.0 | +0.6 | +0.0 | 40.4 | 56.0 | -15.6 | Neutr |
| QP  |          |      | +0.2 |      |      |      |      |      |      |       |       |
| ^   | 4.258M   | 35.3 | +9.9 | +0.1 | +0.0 | +0.6 | +0.0 | 46.1 | 46.0 | +0.1  | Neutr |
|     |          |      | +0.2 |      |      |      |      |      |      |       |       |
| 46  | 188.542k | 21.8 | +9.9 | +0.0 | +0.0 | +0.6 | +0.0 | 32.6 | 54.1 | -21.5 | Neutr |
| Ave |          |      | +0.3 |      |      |      |      |      |      |       |       |
| ^   | 188.542k | 40.3 | +9.9 | +0.0 | +0.0 | +0.6 | +0.0 | 51.1 | 54.1 | -3.0  | Neutr |
|     |          |      | +0.3 |      |      |      |      |      |      |       |       |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.207 AC Mains - Average**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Emissions** Time: 15:43:19  
 Tested By: Hieu Song Nguyenpham Sequence#: 17  
 Software: EMITest 5.02.00 120V 60Hz

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 3 |              |         |     |

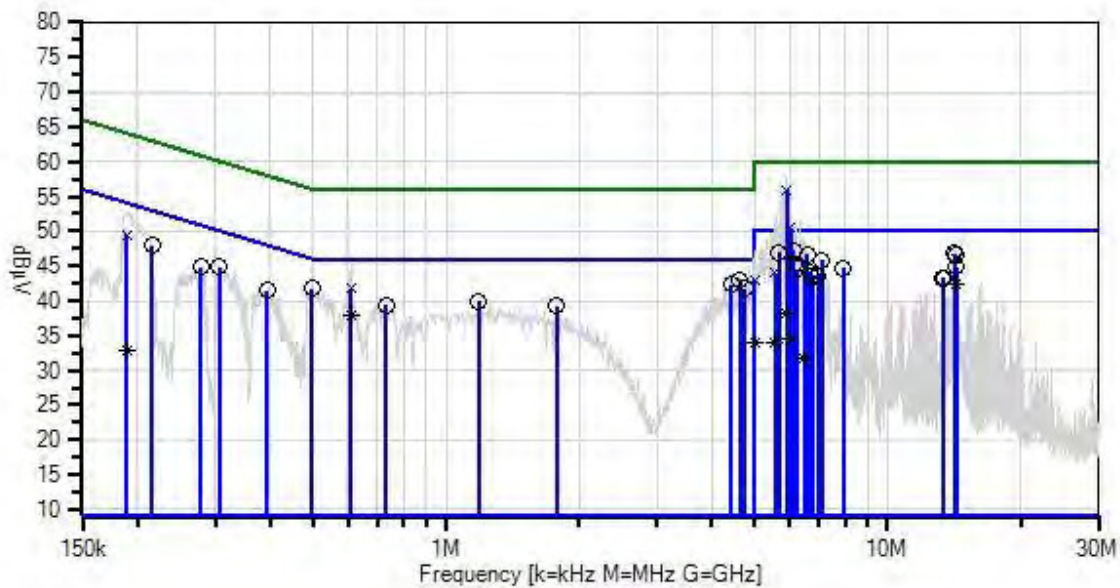
**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 3 |              |         |     |

**Test Conditions / Notes:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Emission<br/>         Frequency Range: 150kHz to 30MHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.4GHz<br/>         Attenuator = 63 at MAX Level<br/>         Antenna Gain for <b>WiFi Antenna (SC248W)</b>=10dBi<br/>         Method: ANSI C 63.4 2009</p> <p>The equipment under test (EUT) is placed on the Styrofoam table top. A remotely located signal generator which sits next to the EUT is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level. HDTV input is connected to the antenna which is sat next to the EUT. The HDTV output ports are connected to F-type cables and terminated by 75Ohm terminator on another end.</p> <p>The EUT is connected to the laptop through RJ45 on LAN Port which is outside of the chamber to operate the WIFI portion at the beginning and disconnect the port of RJ45 from the Laptop due to the LAN port is used for service only. Another RJ45 is hanging on WAN port.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2Mbps<br/>         Attenuator for 802.11b Mode=32</p> <p><b>Middle Channel</b></p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc. Date: 10/6/2015 Time: 15:43:19 Cellphone-Mate, Inc W/O#: 97491  
 Test Lead: Line 120V 60Hz Sequence#: 17



**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model               | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|---------------------|------------------|--------------|
| T1 | ANP01211         | Attenuator                  | 23-10-34            | 3/31/2015        | 3/31/2017    |
| T2 | ANP00880         | Cable                       | RG214U              | 6/13/2014        | 6/13/2016    |
| T3 | ANP06691         | Cable                       | PE3062-180          | 8/8/2014         | 8/8/2016     |
| T4 | AN00494          | 50uH LISN-Line Loss (dB)    | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN00494          | 50uH LISN-Return Loss (dB)  | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN03471          | RF Characteristics Analyzer | E4440A              | 12/19/2013       | 12/19/2015   |
| T5 | ANP05258         | High Pass Filter            | HE9615-150K-50-720B | 11/14/2014       | 11/14/2016   |

**Measurement Data:**

Reading listed by margin.

Test Lead: Line

| #  | Freq     | Rdng       | T1<br>T5     | T2   | T3   | T4   | Dist  | Corr       | Spec       | Margin | Polar |
|----|----------|------------|--------------|------|------|------|-------|------------|------------|--------|-------|
|    | MHz      | dB $\mu$ V | dB           | dB   | dB   | dB   | Table | dB $\mu$ V | dB $\mu$ V | dB     | Ant   |
| 1  | 6.112M   | 36.1       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0  | 47.2       | 50.0       | -2.8   | Line  |
| 2  | 5.679M   | 35.9       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0  | 47.0       | 50.0       | -3.0   | Line  |
| 3  | 4.628M   | 32.0       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0  | 43.0       | 46.0       | -3.0   | Line  |
| 4  | 14.148M  | 35.9       | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0  | 46.8       | 50.0       | -3.2   | Line  |
| 5  | 6.562M   | 35.7       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0  | 46.7       | 50.0       | -3.3   | Line  |
| 6  | 14.274M  | 35.6       | +9.9<br>+0.2 | +0.3 | +0.1 | +0.5 | +0.0  | 46.6       | 50.0       | -3.4   | Line  |
| 7  | 4.432M   | 31.3       | +9.9<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0  | 42.3       | 46.0       | -3.7   | Line  |
| 8  | 5.896M   | 44.8       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0  | 55.9       | 60.0       | -4.1   | Line  |
| 9  | 7.103M   | 34.8       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0  | 45.8       | 50.0       | -4.2   | Line  |
| 10 | 4.739M   | 30.7       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0  | 41.7       | 46.0       | -4.3   | Line  |
| 11 | 496.150k | 30.8       | +9.9<br>+0.2 | +0.0 | +0.0 | +0.8 | +0.0  | 41.7       | 46.1       | -4.4   | Line  |
| 12 | 6.130M   | 34.0       | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0  | 45.1       | 50.0       | -4.9   | Line  |
| 13 | 215.448k | 37.3       | +9.9<br>+0.1 | +0.0 | +0.0 | +0.7 | +0.0  | 48.0       | 53.0       | -5.0   | Line  |
| 14 | 307.076k | 34.1       | +9.9<br>+0.1 | +0.0 | +0.0 | +0.7 | +0.0  | 44.8       | 50.0       | -5.2   | Line  |
| 15 | 14.337M  | 33.8       | +9.9<br>+0.2 | +0.3 | +0.1 | +0.5 | +0.0  | 44.8       | 50.0       | -5.2   | Line  |
| 16 | 7.923M   | 33.7       | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0  | 44.7       | 50.0       | -5.3   | Line  |

|    |                 |      |              |      |      |      |      |      |      |       |      |
|----|-----------------|------|--------------|------|------|------|------|------|------|-------|------|
| 17 | 6.265M          | 33.5 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 44.6 | 50.0 | -5.4  | Line |
| 18 | 6.661M          | 33.2 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 44.2 | 50.0 | -5.8  | Line |
| 19 | 278.715k        | 34.2 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.7 | +0.0 | 44.9 | 50.9 | -6.0  | Line |
| 20 | 1.183M          | 29.1 | +9.8<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0 | 40.0 | 46.0 | -6.0  | Line |
| 21 | 6.950M          | 32.6 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 43.6 | 50.0 | -6.4  | Line |
| 22 | 6.743M          | 32.6 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 43.6 | 50.0 | -6.4  | Line |
| 23 | 392.886k        | 30.8 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.7 | +0.0 | 41.5 | 48.0 | -6.5  | Line |
| 24 | 730.310k        | 28.6 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 39.4 | 46.0 | -6.6  | Line |
| 25 | 1.779M          | 28.4 | +9.8<br>+0.2 | +0.1 | +0.0 | +0.8 | +0.0 | 39.3 | 46.0 | -6.7  | Line |
| 26 | 13.355M         | 32.4 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 43.3 | 50.0 | -6.7  | Line |
| 27 | 13.418M         | 32.2 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 43.1 | 50.0 | -6.9  | Line |
| 28 | 14.212M<br>Ave  | 31.4 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 42.3 | 50.0 | -7.7  | Line |
| 29 | 607.780k<br>Ave | 27.0 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 37.8 | 46.0 | -8.2  | Line |
| 30 | 6.031M<br>QP    | 39.3 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 50.4 | 60.0 | -9.6  | Line |
| 31 | 5.896M<br>Ave   | 27.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 38.3 | 50.0 | -11.7 | Line |
| ^  | 5.896M          | 47.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 58.7 | 50.0 | +8.7  | Line |
| 33 | 4.990M<br>Ave   | 23.0 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 34.0 | 46.0 | -12.0 | Line |
| 34 | 4.990M<br>QP    | 32.0 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 43.0 | 56.0 | -13.0 | Line |
| ^  | 4.990M          | 37.9 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.8 | +0.0 | 48.9 | 46.0 | +2.9  | Line |
| 36 | 14.212M<br>QP   | 35.3 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 46.2 | 60.0 | -13.8 | Line |
| ^  | 14.212M         | 36.4 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.5 | +0.0 | 47.3 | 50.0 | -2.7  | Line |

|    |          |      |              |      |      |      |      |      |      |       |      |
|----|----------|------|--------------|------|------|------|------|------|------|-------|------|
| 38 | 607.780k | 30.9 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 41.7 | 56.0 | -14.3 | Line |
| ^  | 607.780k | 33.1 | +9.9<br>+0.1 | +0.0 | +0.0 | +0.8 | +0.0 | 43.9 | 46.0 | -2.1  | Line |
| 40 | 189.269k | 38.6 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 49.5 | 64.1 | -14.6 | Line |
| 41 | 6.472M   | 34.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 45.3 | 60.0 | -14.7 | Line |
| 42 | 6.031M   | 23.3 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 34.4 | 50.0 | -15.6 | Line |
| ^  | 6.031M   | 43.7 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 54.8 | 50.0 | +4.8  | Line |
| 44 | 5.571M   | 23.0 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 34.1 | 50.0 | -15.9 | Line |
| 45 | 5.571M   | 32.9 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 44.0 | 60.0 | -16.0 | Line |
| ^  | 5.571M   | 40.5 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 51.6 | 50.0 | +1.6  | Line |
| 47 | 6.472M   | 20.5 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 31.6 | 50.0 | -18.4 | Line |
| ^  | 6.472M   | 37.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.8 | +0.0 | 48.7 | 50.0 | -1.3  | Line |
| 49 | 189.269k | 21.9 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 32.8 | 54.1 | -21.3 | Line |
| ^  | 189.269k | 41.0 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.7 | +0.0 | 51.9 | 54.1 | -2.2  | Line |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.207 AC Mains - Average**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Emissions** Time: 16:02:08  
 Tested By: Hieu Song Nguyenpham Sequence#: 18  
 Software: EMITest 5.02.00 120V 60Hz

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 3 |              |         |     |

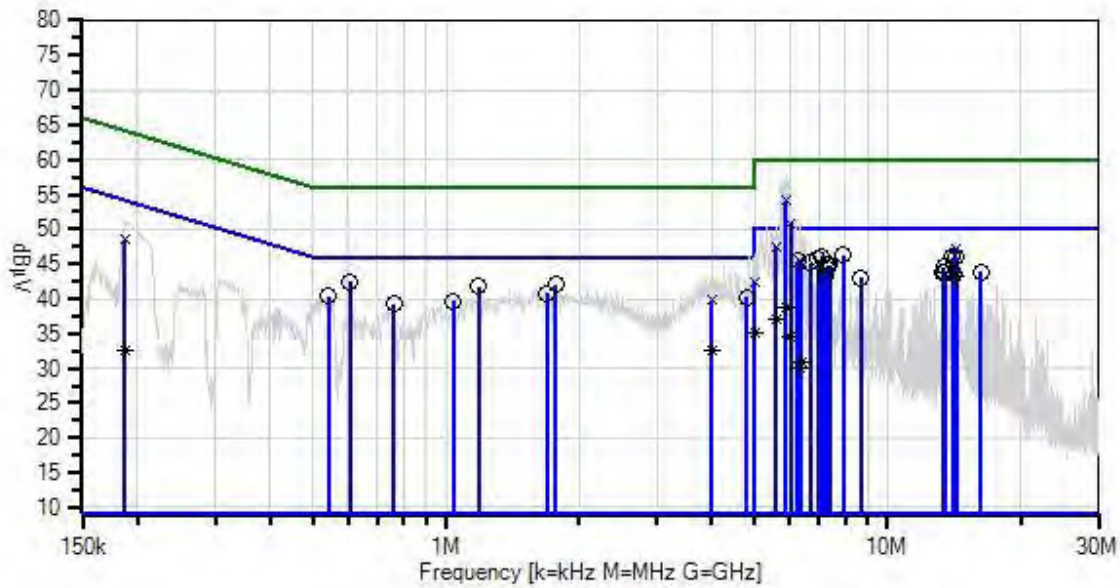
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 3 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Emission<br/>         Frequency Range: 150kHz to 30MHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.4GHz<br/>         Attenuator = 63 at MAX Level<br/>         Antenna Gain for <b>WiFi Antenna (SC248W)</b>=10dBi<br/>         Method: ANSI C 63.4 2009</p> <p>The equipment under test (EUT) is placed on the Styrofoam table top. A remotely located signal generator which sits next to the EUT is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level. HDTV input is connected to the antenna which is sat next to the EUT. The HDTV output ports are connected to F-type cables and terminated by 75Ohm terminator on another end.</p> <p>The EUT is connected to the laptop through RJ45 on LAN Port which is outside of the chamber to operate the WIFI portion at the beginning and disconnect the port of RJ45 from the Laptop due to the LAN port is used for service only. Another RJ45 is hanging on WAN port.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2Mbps<br/>         Attenuator for 802.11b Mode=32</p> <p><b>Middle Channel</b></p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc. Date: 10/6/2015 Time: 16:02:08 Cellphone-Mate, Inc W/O#: 97491  
Test Lead: Neutral 120V 60Hz Sequence#: 18



|                           |                                 |                                    |
|---------------------------|---------------------------------|------------------------------------|
| — Sweep Data              | — Readings                      | ○ Peak Readings                    |
| x QP Readings             | * Average Readings              | ▼ Ambient                          |
| Software Version: 5.02.00 | — 1 - 15.207 AC Mains - Average | — 2 - 15.207 AC Mains - Quasi-peak |

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model               | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|---------------------|------------------|--------------|
| T1 | ANP01211         | Attenuator                  | 23-10-34            | 3/31/2015        | 3/31/2017    |
| T2 | ANP00880         | Cable                       | RG214U              | 6/13/2014        | 6/13/2016    |
| T3 | ANP06691         | Cable                       | PE3062-180          | 8/8/2014         | 8/8/2016     |
|    | AN00494          | 50uH LISN-Line Loss (dB)    | 3816/NM             | 3/4/2015         | 3/4/2017     |
| T4 | AN00494          | 50uH LISN-Return Loss (dB)  | 3816/NM             | 3/4/2015         | 3/4/2017     |
|    | AN03471          | RF Characteristics Analyzer | E4440A              | 12/19/2013       | 12/19/2015   |
| T5 | ANP05258         | High Pass Filter            | HE9615-150K-50-720B | 11/14/2014       | 11/14/2016   |

**Measurement Data:**

Reading listed by margin.

Test Lead: Neutral

| #  | Freq<br>MHz | Rdng<br>dBμV | T1<br>T5<br>dB | T2<br>dB | T3<br>dB | T4<br>dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|----|-------------|--------------|----------------|----------|----------|----------|---------------|--------------|--------------|--------------|--------------|
| 1  | 606.685k    | 31.9         | +9.9<br>+0.1   | +0.0     | +0.0     | +0.6     | +0.0          | 42.5         | 46.0         | -3.5         | Neutr        |
| 2  | 7.923M      | 35.5         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 46.3         | 50.0         | -3.7         | Neutr        |
| 3  | 7.103M      | 35.3         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 46.1         | 50.0         | -3.9         | Neutr        |
| 4  | 14.337M     | 35.1         | +9.9<br>+0.2   | +0.3     | +0.1     | +0.4     | +0.0          | 46.0         | 50.0         | -4.0         | Neutr        |
| 5  | 1.775M      | 31.3         | +9.8<br>+0.2   | +0.1     | +0.0     | +0.6     | +0.0          | 42.0         | 46.0         | -4.0         | Neutr        |
| 6  | 14.031M     | 35.2         | +9.9<br>+0.2   | +0.3     | +0.0     | +0.4     | +0.0          | 46.0         | 50.0         | -4.0         | Neutr        |
| 7  | 6.950M      | 34.9         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 45.7         | 50.0         | -4.3         | Neutr        |
| 8  | 1.183M      | 31.0         | +9.8<br>+0.2   | +0.1     | +0.0     | +0.6     | +0.0          | 41.7         | 46.0         | -4.3         | Neutr        |
| 9  | 6.265M      | 34.5         | +9.9<br>+0.2   | +0.2     | +0.0     | +0.6     | +0.0          | 45.4         | 50.0         | -4.6         | Neutr        |
| 10 | 6.670M      | 34.3         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 45.1         | 50.0         | -4.9         | Neutr        |
| 11 | 7.310M      | 34.1         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 44.9         | 50.0         | -5.1         | Neutr        |
| 12 | 1.694M      | 30.1         | +9.8<br>+0.2   | +0.1     | +0.0     | +0.6     | +0.0          | 40.8         | 46.0         | -5.2         | Neutr        |
| 13 | 7.373M      | 34.0         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 44.8         | 50.0         | -5.2         | Neutr        |
| 14 | 13.418M     | 33.7         | +9.9<br>+0.2   | +0.3     | +0.0     | +0.4     | +0.0          | 44.5         | 50.0         | -5.5         | Neutr        |
| 15 | 7.283M      | 33.5         | +9.9<br>+0.1   | +0.2     | +0.0     | +0.6     | +0.0          | 44.3         | 50.0         | -5.7         | Neutr        |
| 16 | 541.236k    | 29.6         | +9.9<br>+0.2   | +0.0     | +0.0     | +0.6     | +0.0          | 40.3         | 46.0         | -5.7         | Neutr        |

|    |                |      |              |      |      |      |      |      |      |       |       |
|----|----------------|------|--------------|------|------|------|------|------|------|-------|-------|
| 17 | 4.807M         | 29.4 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 40.2 | 46.0 | -5.8  | Neutr |
| 18 | 5.888M<br>QP   | 43.3 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 54.2 | 60.0 | -5.8  | Neutr |
| 19 | 13.481M        | 33.1 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.9 | 50.0 | -6.1  | Neutr |
| 20 | 16.229M        | 33.1 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.3 | +0.0 | 43.8 | 50.0 | -6.2  | Neutr |
| 21 | 13.355M        | 32.9 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.7 | 50.0 | -6.3  | Neutr |
| 22 | 1.039M         | 28.8 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.6 | +0.0 | 39.6 | 46.0 | -6.4  | Neutr |
| 23 | 14.094M        | 32.7 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.5 | 50.0 | -6.5  | Neutr |
| 24 | 763.034k       | 28.5 | +9.9<br>+0.2 | +0.0 | +0.0 | +0.6 | +0.0 | 39.2 | 46.0 | -6.8  | Neutr |
| 25 | 14.213M<br>Ave | 32.3 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 43.1 | 50.0 | -6.9  | Neutr |
| 26 | 7.256M         | 32.3 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 43.1 | 50.0 | -6.9  | Neutr |
| 27 | 8.716M         | 32.2 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 43.0 | 50.0 | -7.0  | Neutr |
| 28 | 6.023M<br>QP   | 40.0 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 50.9 | 60.0 | -9.1  | Neutr |
| 29 | 4.998M<br>Ave  | 24.2 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 35.0 | 46.0 | -11.0 | Neutr |
| 30 | 5.888M<br>Ave  | 27.8 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 38.7 | 50.0 | -11.3 | Neutr |
| ^  | 5.888M         | 47.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 58.1 | 50.0 | +8.1  | Neutr |
| 32 | 5.583M<br>QP   | 36.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 47.5 | 60.0 | -12.5 | Neutr |
| 33 | 5.583M<br>Ave  | 26.3 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 37.2 | 50.0 | -12.8 | Neutr |
| ^  | 5.583M         | 40.8 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 51.7 | 50.0 | +1.7  | Neutr |

|    |          |      |              |      |      |      |      |      |      |       |       |
|----|----------|------|--------------|------|------|------|------|------|------|-------|-------|
| 35 | 14.213M  | 36.2 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 47.0 | 60.0 | -13.0 | Neutr |
| ^  | 14.213M  | 37.6 | +9.9<br>+0.2 | +0.3 | +0.0 | +0.4 | +0.0 | 48.4 | 50.0 | -1.6  | Neutr |
| 37 | 3.994M   | 21.7 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.6 | +0.0 | 32.5 | 46.0 | -13.5 | Neutr |
| 38 | 4.998M   | 31.6 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 42.4 | 56.0 | -13.6 | Neutr |
| ^  | 4.998M   | 37.2 | +9.9<br>+0.1 | +0.2 | +0.0 | +0.6 | +0.0 | 48.0 | 46.0 | +2.0  | Neutr |
| 40 | 6.310M   | 34.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 45.5 | 60.0 | -14.5 | Neutr |
| 41 | 6.364M   | 34.4 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 45.3 | 60.0 | -14.7 | Neutr |
| 42 | 6.023M   | 23.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 34.5 | 50.0 | -15.5 | Neutr |
| ^  | 6.023M   | 43.0 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 53.9 | 50.0 | +3.9  | Neutr |
| 44 | 187.088k | 37.8 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.6 | +0.0 | 48.6 | 64.2 | -15.6 | Neutr |
| 45 | 3.994M   | 29.0 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.6 | +0.0 | 39.8 | 56.0 | -16.2 | Neutr |
| ^  | 3.994M   | 32.8 | +9.9<br>+0.2 | +0.1 | +0.0 | +0.6 | +0.0 | 43.6 | 46.0 | -2.4  | Neutr |
| 47 | 6.364M   | 20.1 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 31.0 | 50.0 | -19.0 | Neutr |
| ^  | 6.364M   | 38.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 49.1 | 50.0 | -0.9  | Neutr |
| 49 | 6.310M   | 19.2 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 30.1 | 50.0 | -19.9 | Neutr |
| ^  | 6.310M   | 39.6 | +9.9<br>+0.2 | +0.2 | +0.0 | +0.6 | +0.0 | 50.5 | 50.0 | +0.5  | Neutr |
| 51 | 187.088k | 21.8 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.6 | +0.0 | 32.6 | 54.2 | -21.6 | Neutr |
| ^  | 187.088k | 40.1 | +9.9<br>+0.3 | +0.0 | +0.0 | +0.6 | +0.0 | 50.9 | 54.2 | -3.3  | Neutr |

## Test Setup Photos



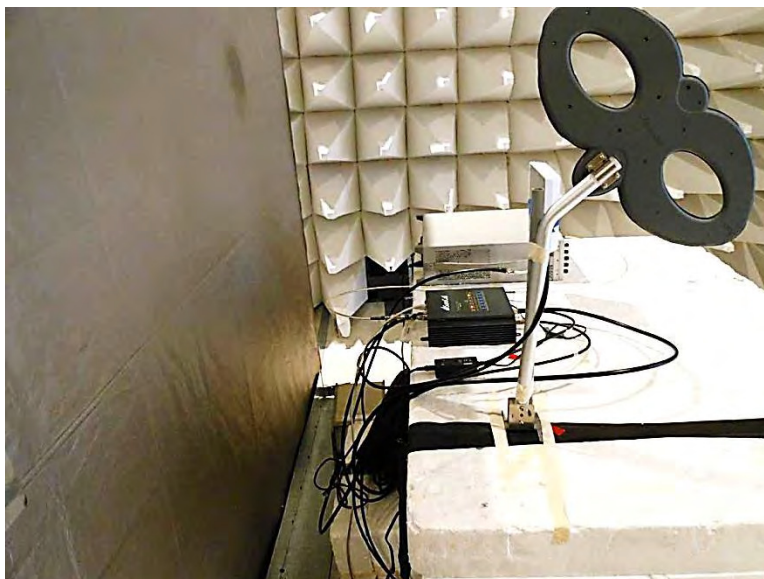
SC222W Antenna



SC222W Antenna



SC248W Antenna



SC248W Antenna

## 15.247(a)(2) 6dB Bandwidth

### Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **OBW Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

#### Test Equipment:

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Test Conditions / Notes:

Application: MP\_TEST MFC version 1.3.8.0

Temperature: 22.0°C

Humidity: 39.6 %

Atmospheric Pressure: 100.5kPa

Highest Generation Frequency: 2.462 GHz

Attenuator = 63 at MAX Level

Method: KDB 558074 v03r03 section 8.1

RBW=100kHz and VBW=300kHz

The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.

**Attenuator for 802.11b Mode=32**

The Data rate is at 2Mbps

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **OBW Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

***Test Equipment:***

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 8.1  
  
 RBW=100kHz and VBW=300kHz  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11g Mode=38**  
 The Data rate is at 54Mbps

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **OBW Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 8.1  
  
 RBW=100kHz and VBW=300kHz  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT20 =35**  
 The Data rate is at MCS0

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **OBW Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

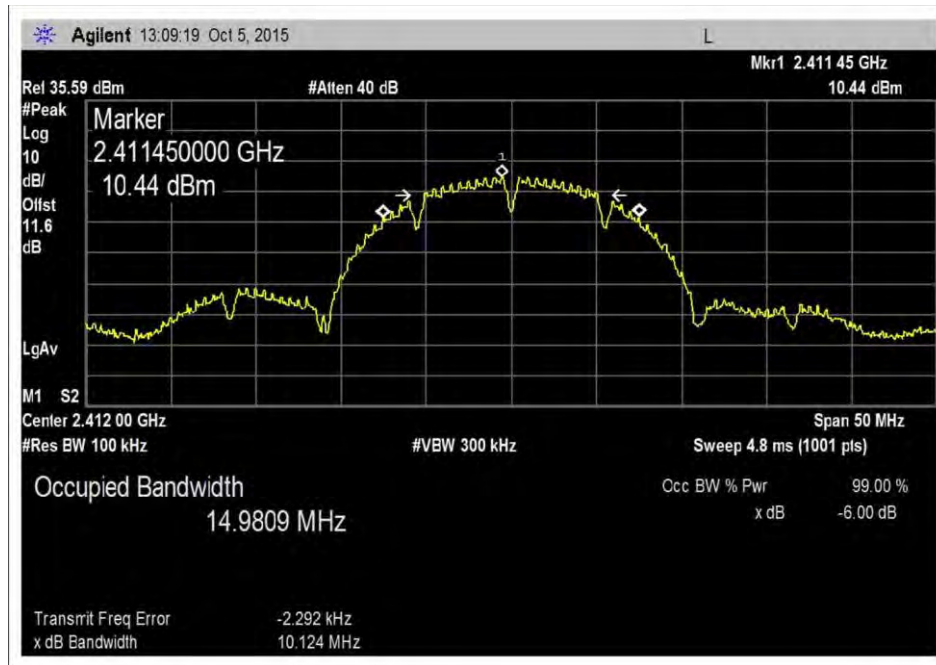
| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

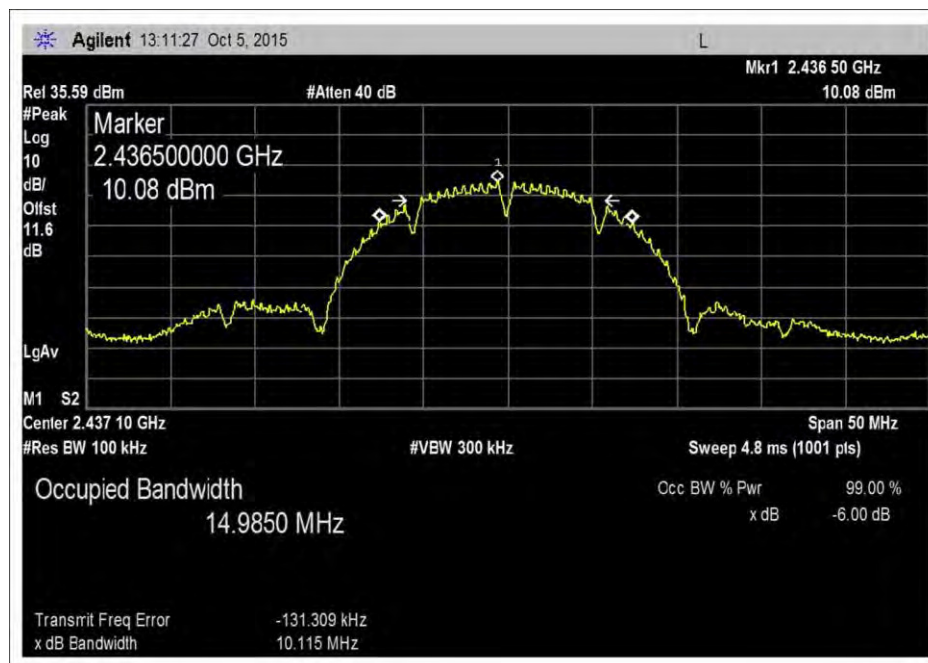
Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 8.1  
  
 RBW=100kHz and VBW=300kHz  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT40 Mode=32**  
 The Data rate is at MCS1

## Plots

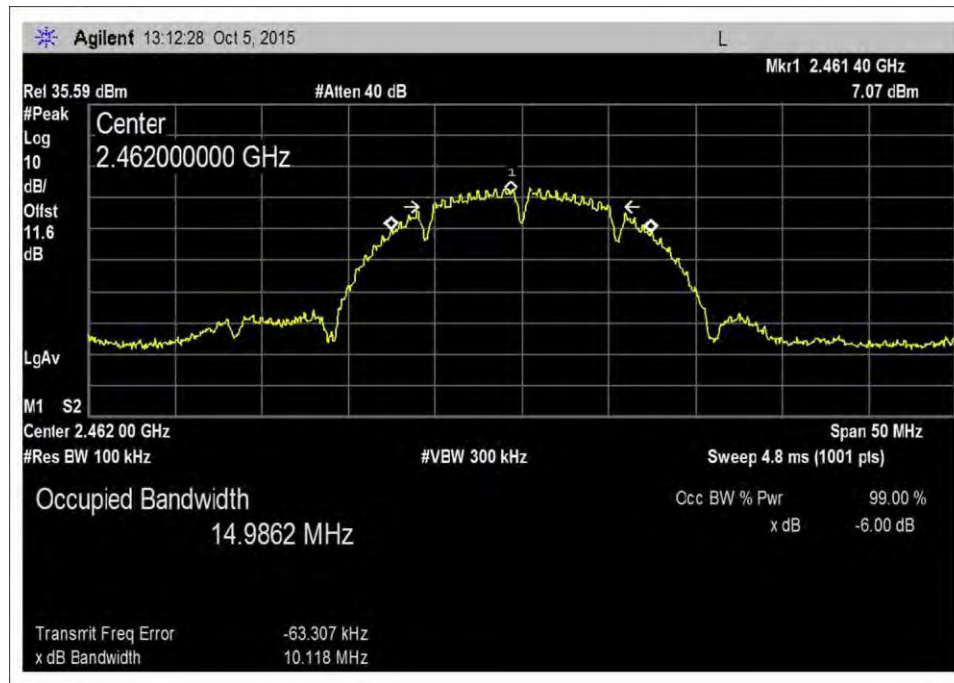
### 802.11b-Mode



Low Channel

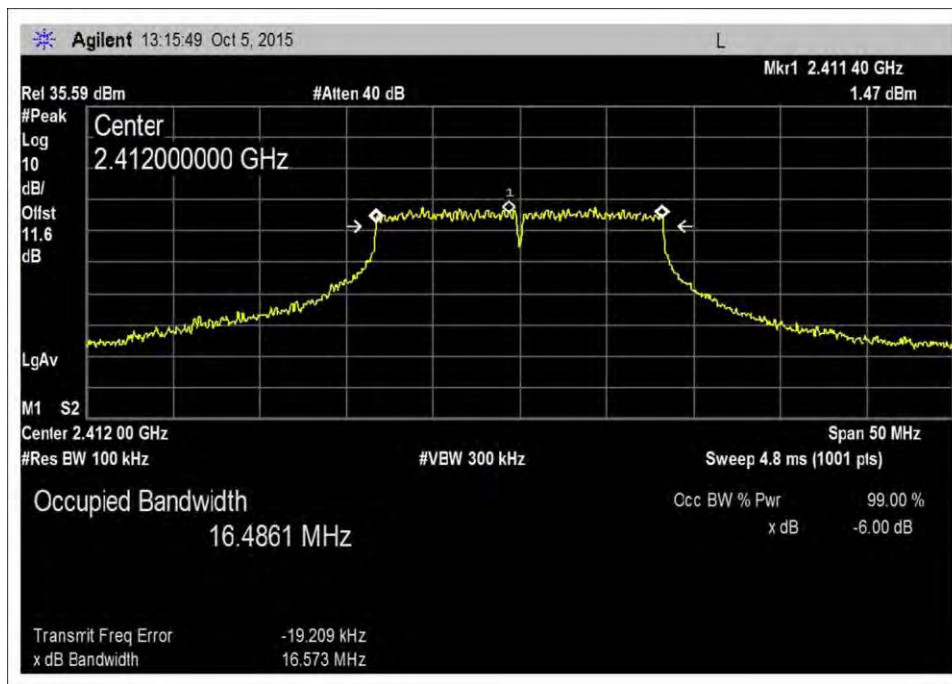


Middle Channel

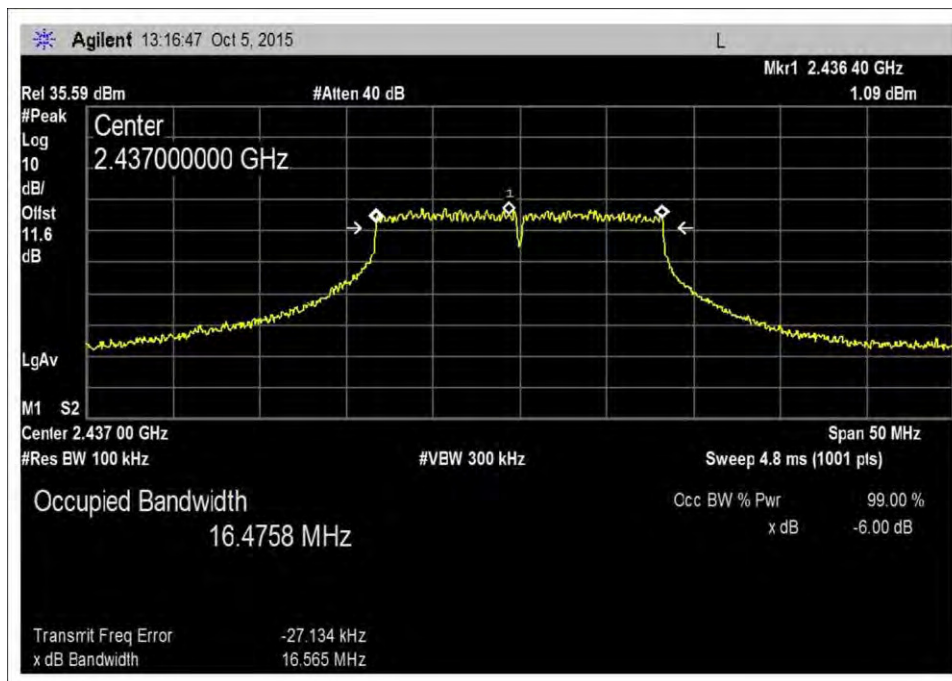


High Channel

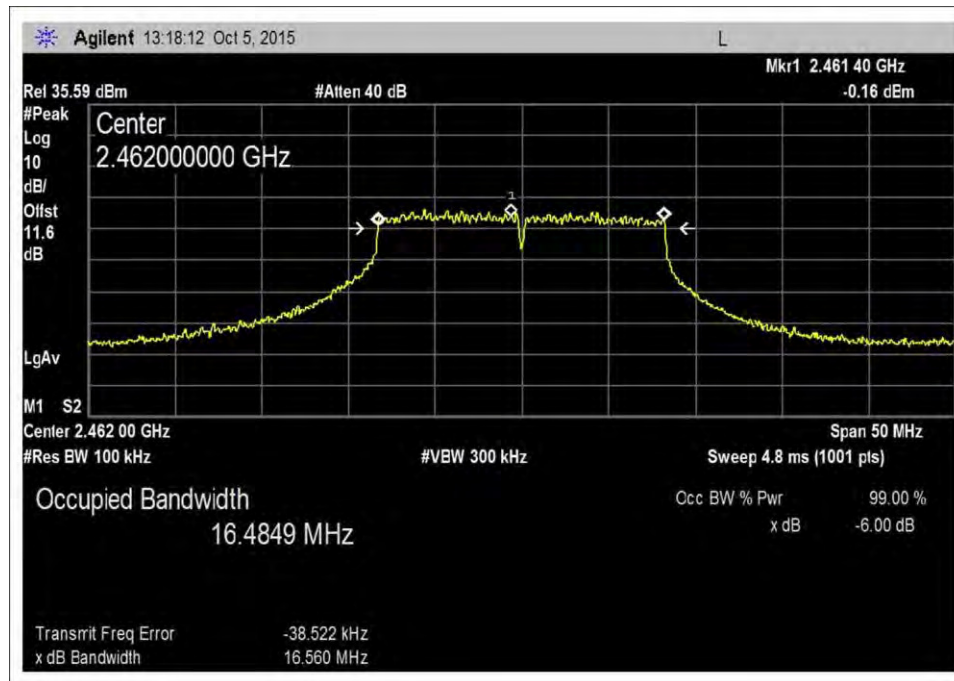
### 802.11g-Mode



Low Channel

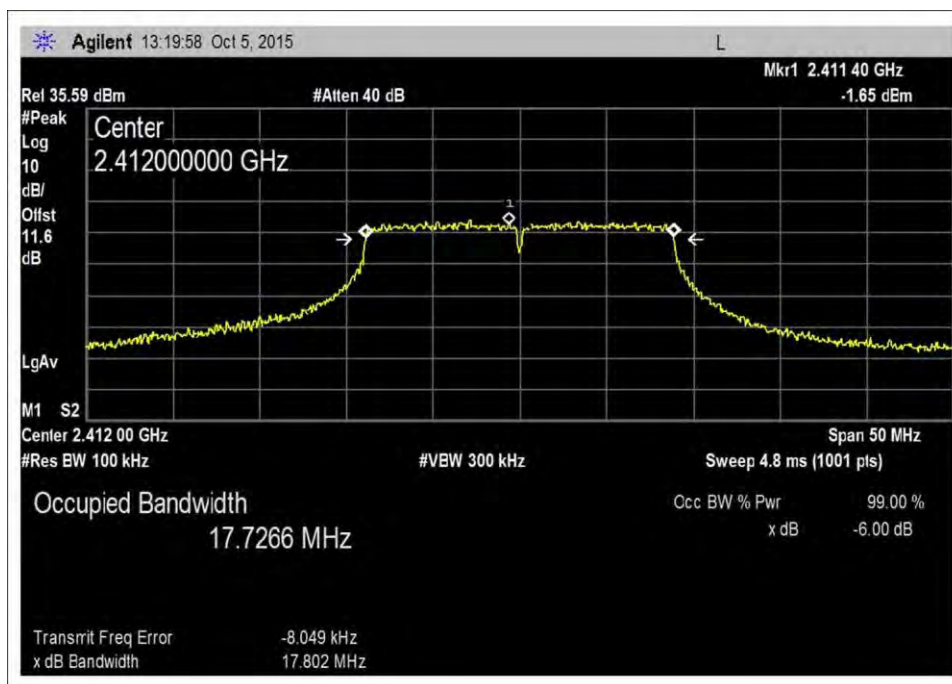


Middle Channel

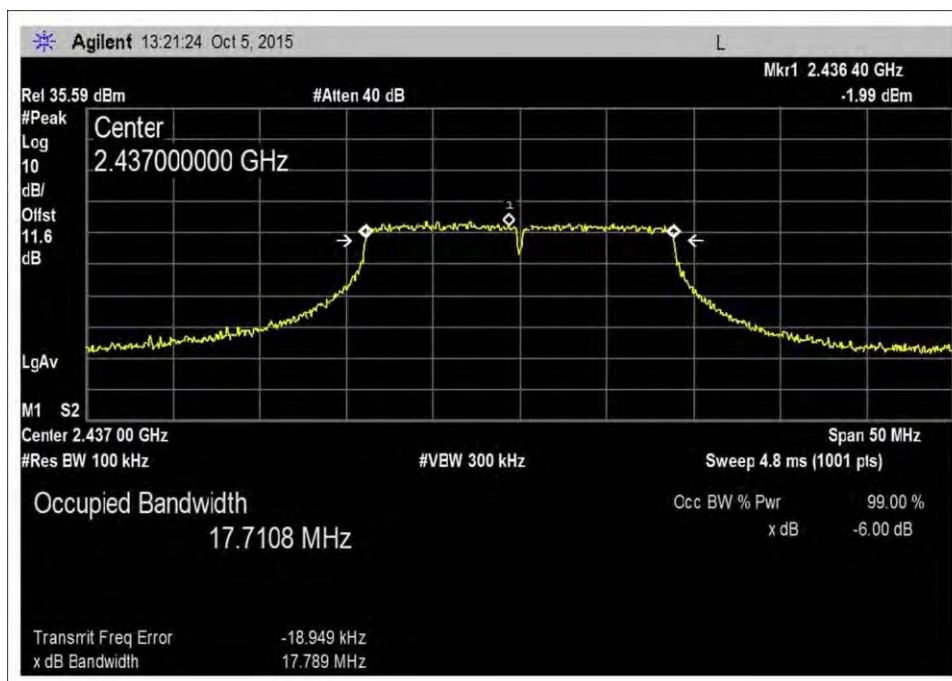


High Channel

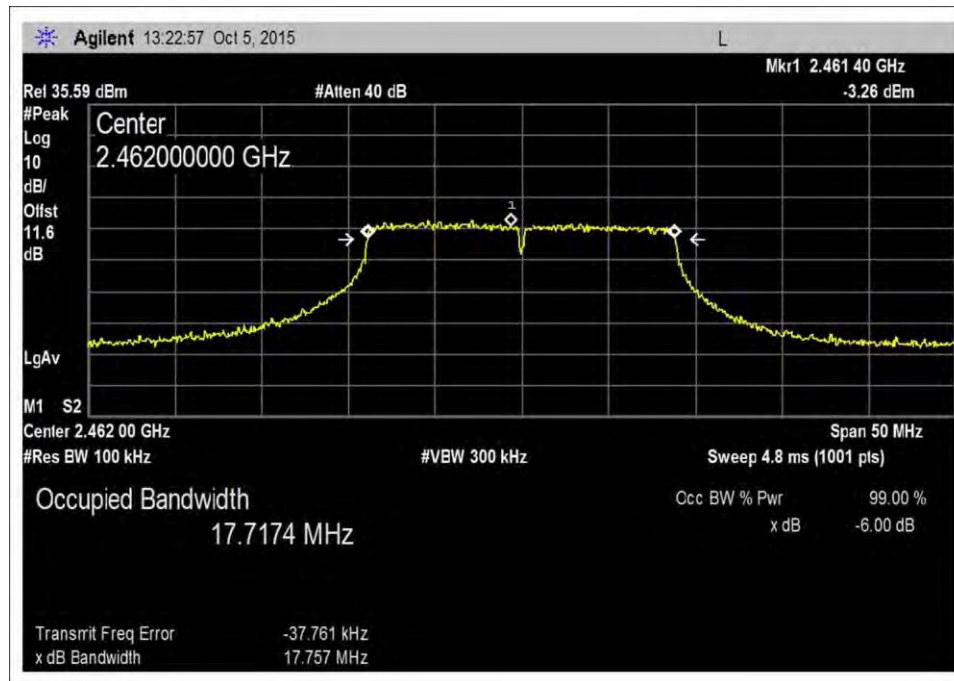
### 802.11n HT20 - Mode



Low Channel

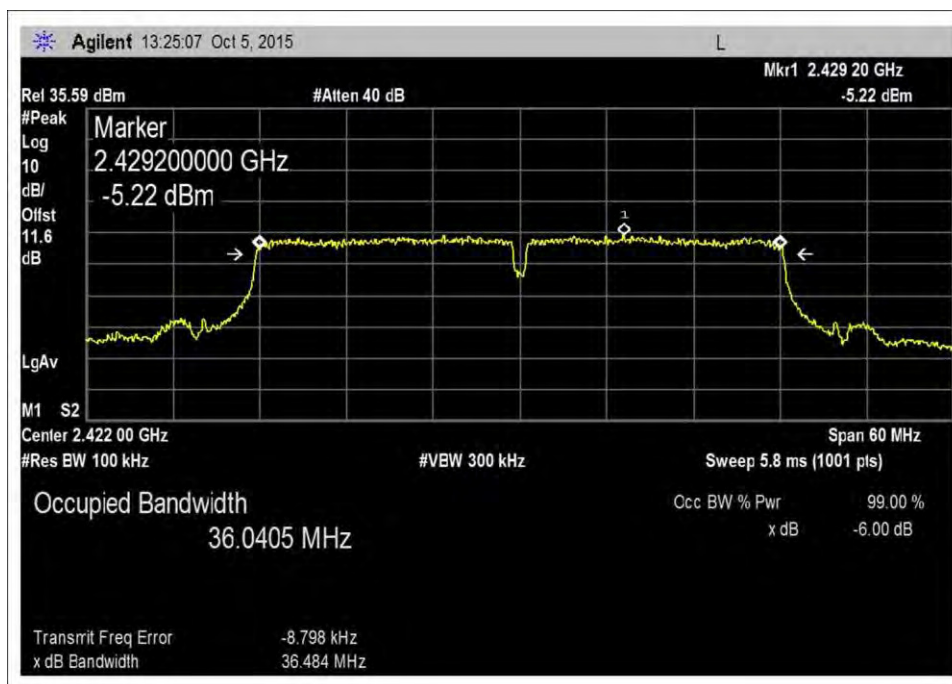


Middle Channel

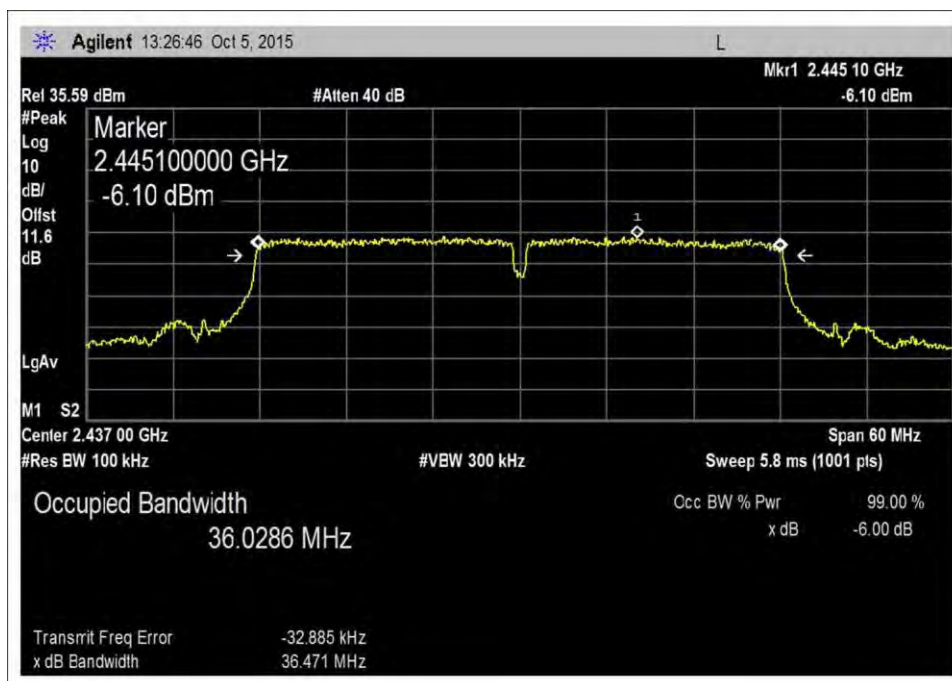


High Channel

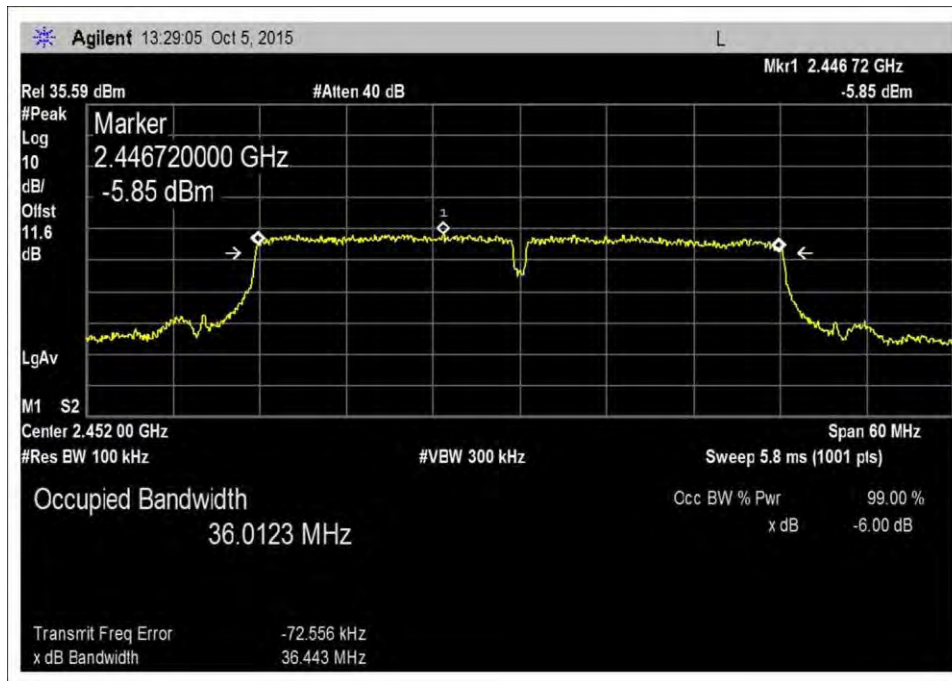
### 802.11n HT40 - Mode



Low Channel

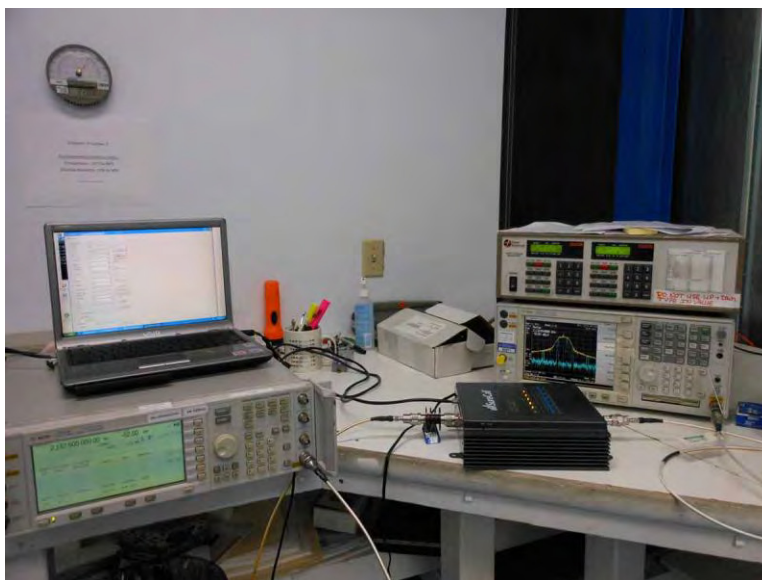


Middle Channel



High Channel

## Test Setup Photo



## 15.247(b)(3) Output Power

### Test Conditions / Setup / Data

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(b) Power Output (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

#### Test Equipment:

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Test Conditions / Notes:

Application: MP\_TEST MFC version 1.3.8.0

Temperature: 22.0°C

Humidity: 39.6 %

Atmospheric Pressure: 100.5kPa

Highest Generation Frequency: 2.462 GHz

Attenuator = 63 at MAX Level

Test Method: KDB 558074 v03r03 section 9.2.2.7

The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI.

A remotely located signal generator is connected to input port of EUT.

Output power with the booster max DL output power at the indoor antenna port with AWGN signal of 4.1MHz AWGN and sequentially with a GSM signal. The DL power input signal at the outdoor antenna port is set at 3dB above AGC level. DL input signal: 881.5MHz and 2132.5MHz, 4.1MHz AWGN / GSM

**Attenuator for 802.11b Mode=32**

| Result Table (b-Mode) |                                     |                                                             |                                                              |                                                     |                                                      |                    |
|-----------------------|-------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|--------------------|
| Frequency (MHz)       | Measured Power in dBm (Booster off) | Measured Power in dBm (Booster on) at 881.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 2132.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 881.5MHz, GSM | Measured Power in dBm (Booster on) at 2132.5MHz, GSM | Power Limit in dBm |
| 2412 Low Channel      | 21.47                               | 21.39                                                       | 21.34                                                        | 21.17                                               | 21.36                                                | 30                 |
| 2437 Middle Channel   | 21.31                               | 21.02                                                       | 21.08                                                        | 20.95                                               | 21.09                                                | 30                 |
| 2462 High Channel     | 20.5                                | 19.94                                                       | 19.84                                                        | 19.73                                               | 19.86                                                | 30                 |

Note: The data rate is at 2Mbps when the RF output power is highest.

**Test Method:** The Emissions Bandwidth measurements were made using the automatic bandwidth capability of the spectrum analyzer using the settings set out in KDB "558074 D01 DTS Meas Guidance v03r03, Section 9.2.2.7. The offset of the analyzer was set to correct for the cable and attenuator used during measurement. The units are in dBm. The limit is 1 Watt or 30dBm

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(b) Power Output (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Test Method: KDB 558074 v03r03 section 9.2.2.7  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI.  
 A remotely located signal generator is connected to input port of EUT.  
 Output power with the booster max DL output power at the indoor antenna port with AWGN signal of 4.1MHz  
 AWGN and sequentially with a GSM signal. The DL power input signal at the outdoor antenna port is set at 3dB  
 above AGC level. DL input signal: 881.5MHz and 2132.5MHz, 4.1MHz AWGN / GSM  
  
**Attenuator for 802.11g Mode=38**

| Result Table (g-Mode) |                                     |                                                             |                                                              |                                                     |                                                      |                    |
|-----------------------|-------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|--------------------|
| Frequency (MHz)       | Measured Power in dBm (Booster off) | Measured Power in dBm (Booster on) at 881.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 2132.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 881.5MHz, GSM | Measured Power in dBm (Booster on) at 2132.5MHz, GSM | Power Limit in dBm |
| 2412 Low Channel      | 19.22                               | 19.14                                                       | 19.28                                                        | 19.01                                               | 19.09                                                | 30                 |
| 2437 Middle Channel   | 19.1                                | 18.96                                                       | 19.26                                                        | 18.84                                               | 18.87                                                | 30                 |
| 2462 High Channel     | 17.91                               | 17.75                                                       | 17.89                                                        | 17.6                                                | 17.68                                                | 30                 |

Note: The data rate is at 54Mbps when the RF output power is highest.

**Test Method:** The Emissions Bandwidth measurements were made using the automatic bandwidth capability of the spectrum analyzer using the settings set out in KDB "558074 D01 DTS Meas Guidance v03r03, Section 9.2.2.7. The offset of the analyzer was set to correct for the cable and attenuator used during measurement. The units are in dBm. The limit is 1 Watt or 30dBm.

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(b) Power Output (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Test Method: KDB 558074 v03r03 section 9.2.2.7  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI.  
 A remotely located signal generator is connected to input port of EUT.  
 Output power with the booster max DL output power at the indoor antenna port with AWGN signal of 4.1MHz  
 AWGN and sequentially with a GSM signal. The DL power input signal at the outdoor antenna port is set at 3dB  
 above AGC level. DL input signal: 881.5MHz and 2132.5MHz, 4.1MHz AWGN / GSM  
  
**Attenuator for 802.11n HT20 mode = 35**

| Result Table (n20-Mode) |                                     |                                                             |                                                              |                                                     |                                                      |                    |
|-------------------------|-------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|--------------------|
| Frequency (MHz)         | Measured Power in dBm (Booster off) | Measured Power in dBm (Booster on) at 881.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 2132.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 881.5MHz, GSM | Measured Power in dBm (Booster on) at 2132.5MHz, GSM | Power Limit in dBm |
| 2412 Low Channel        | 17.51                               | 17.4                                                        | 17.5                                                         | 17.27                                               | 17.26                                                | 30                 |
| 2437 Middle Channel     | 17.34                               | 17.19                                                       | 17.25                                                        | 17.05                                               | 17.22                                                | 30                 |
| 2462 High Channel       | 16.31                               | 16.05                                                       | 16.03                                                        | 15.8                                                | 15.95                                                | 30                 |

Note: The data rate is at MCS0 when the RF output power is highest.

**Test Method:** The Emissions Bandwidth measurements were made using the automatic bandwidth capability of the spectrum analyzer using the settings set out in KDB "558074 D01 DTS Meas Guidance v03r03, Section 9.2.2.7. The offset of the analyzer was set to correct for the cable and attenuator used during measurement. The units are in dBm. The limit is 1 Watt or 30dBm.

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(b) Power Output (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
 Test Method: KDB 558074 v03r03 section 9.2.2.7  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI.  
 A remotely located signal generator is connected to input port of EUT.  
 Output power with the booster max DL output power at the indoor antenna port with AWGN signal of 4.1MHz  
 AWGN and sequentially with a GSM signal. The DL power input signal at the outdoor antenna port is set at 3dB  
 above AGC level. DL input signal: 881.5MHz and 2132.5 MHz, 4.1MHz AWGN / GSM.  
  
**Attenuator for 802.11n HT40 mode =32**

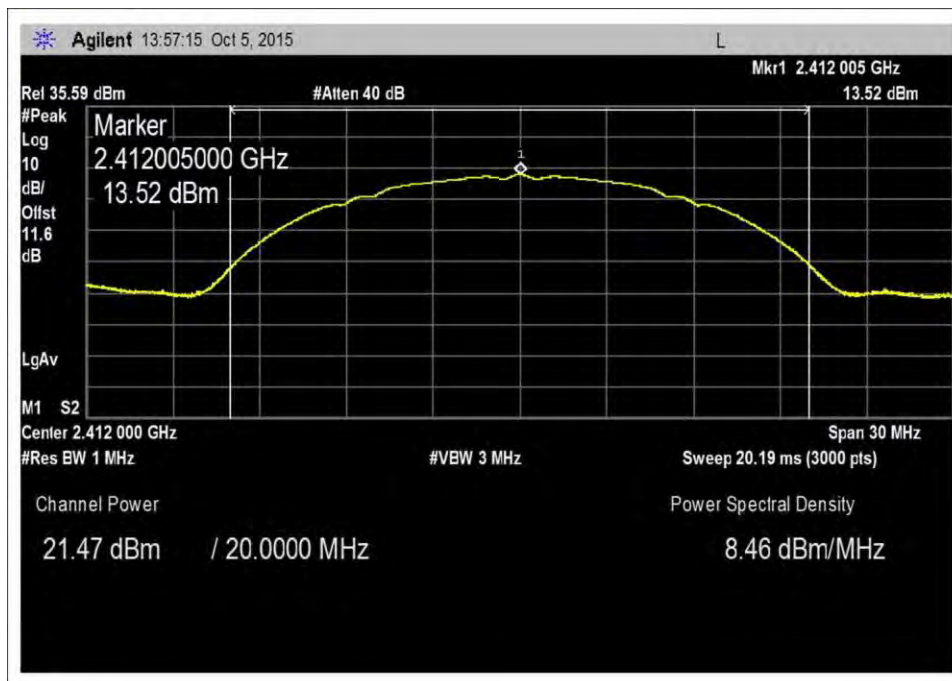
| Result Table (n40-Mode) |                                     |                                                             |                                                              |                                                     |                                                      |                    |
|-------------------------|-------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|--------------------|
| Frequency (MHz)         | Measured Power in dBm (Booster off) | Measured Power in dBm (Booster on) at 881.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 2132.5MHz, 4.1MHz AWGN | Measured Power in dBm (Booster on) at 881.5MHz, GSM | Measured Power in dBm (Booster on) at 2132.5MHz, GSM | Power Limit in dBm |
| 2412 Low Channel        | 15.83                               | 15.81                                                       | 15.77                                                        | 15.5                                                | 15.61                                                | 30                 |
| 2437 Middle Channel     | 15.64                               | 15.5                                                        | 15.5                                                         | 15.31                                               | 15.4                                                 | 30                 |
| 2462 High Channel       | 15.03                               | 14.9                                                        | 14.92                                                        | 14.75                                               | 14.87                                                | 30                 |

The data rate is at MCS1 when the RF output power is highest.

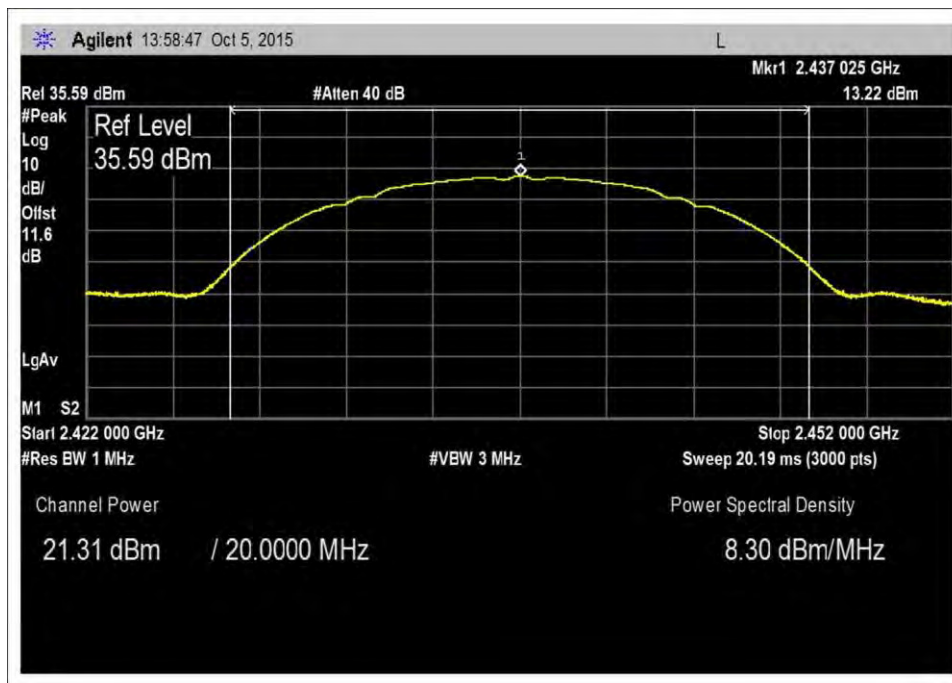
**Test Method:** The Emissions Bandwidth measurements were made using the automatic bandwidth capability of the spectrum analyzer using the settings set out in KDB "558074 D01 DTS Meas Guidance v03r03, Section 9.2.2.7. The offset of the analyzer was set to correct for the cable and attenuator used during measurement. The units are in dBm. The limit is 1 Watt or 30dBm.

## Plots

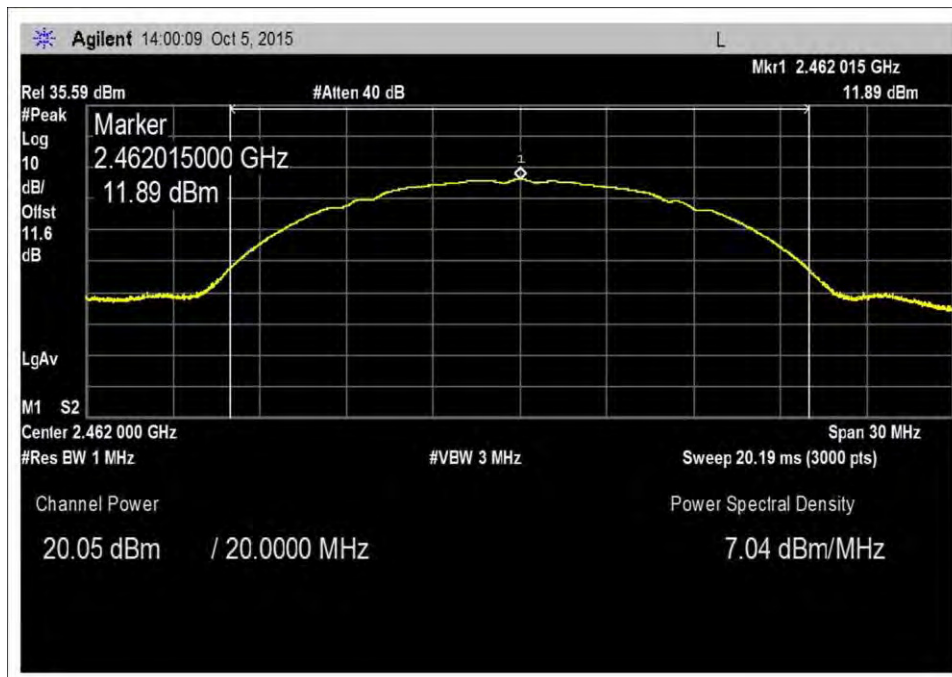
### 802.11b-Mode – Booster Off



Low Channel

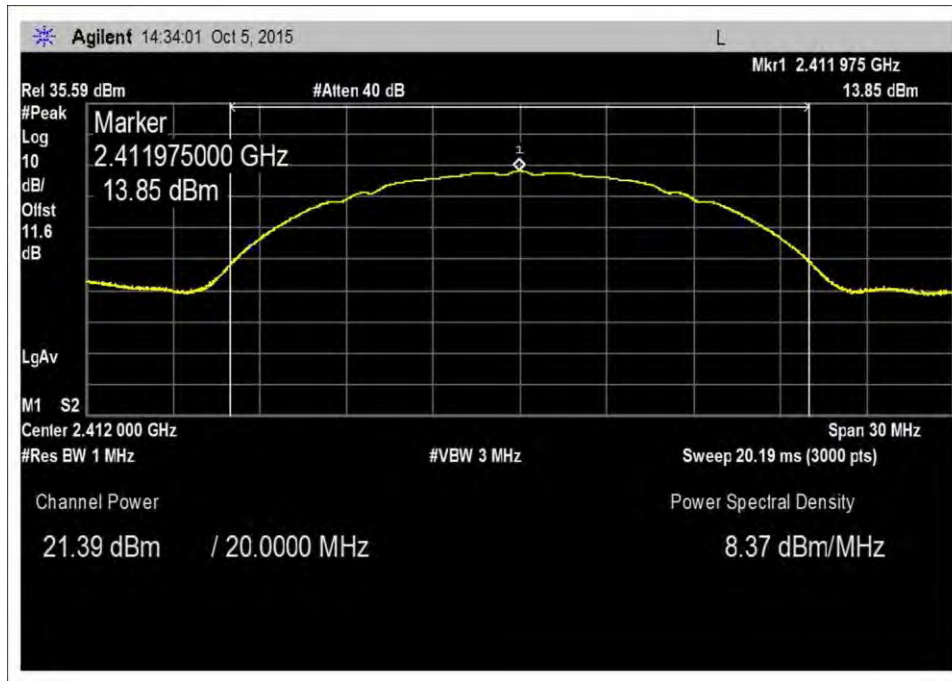


Middle Channel

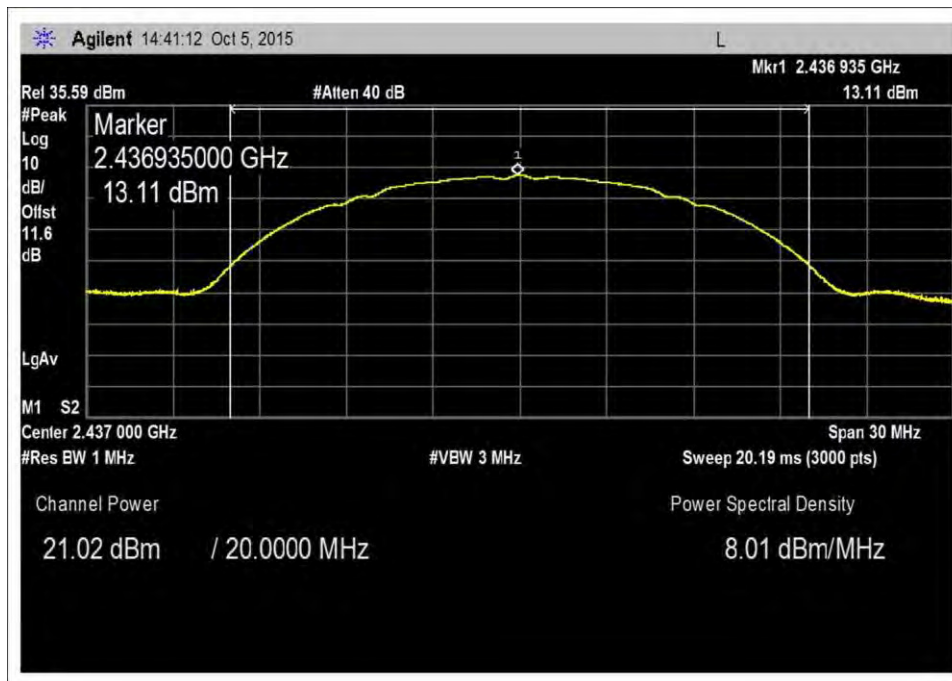


High Channel

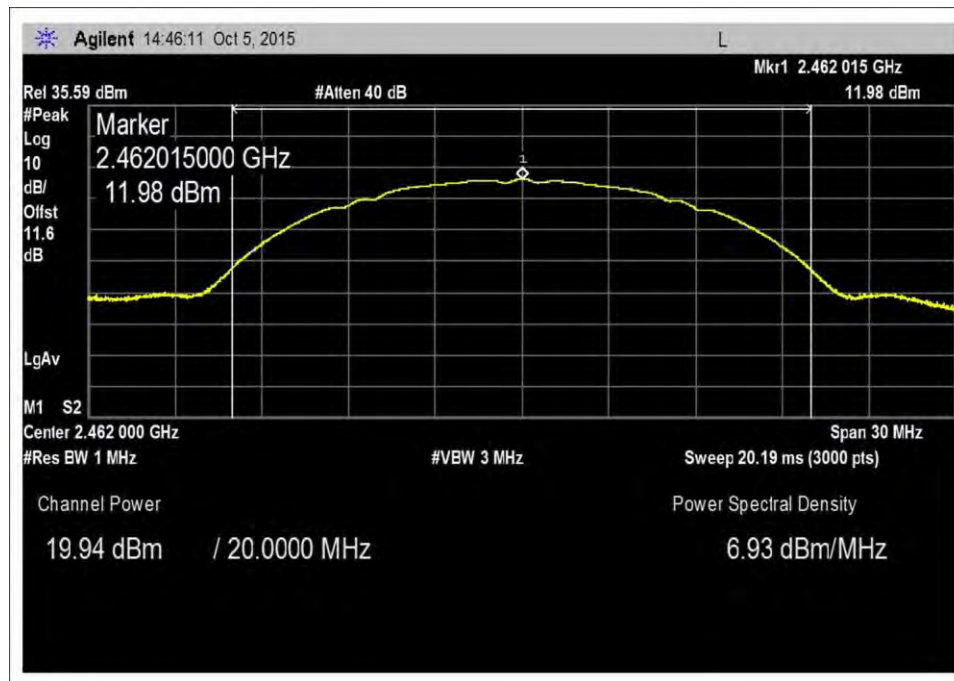
### 802.11b-Mode – 881.5 AWGN-Booster On



Low Channel

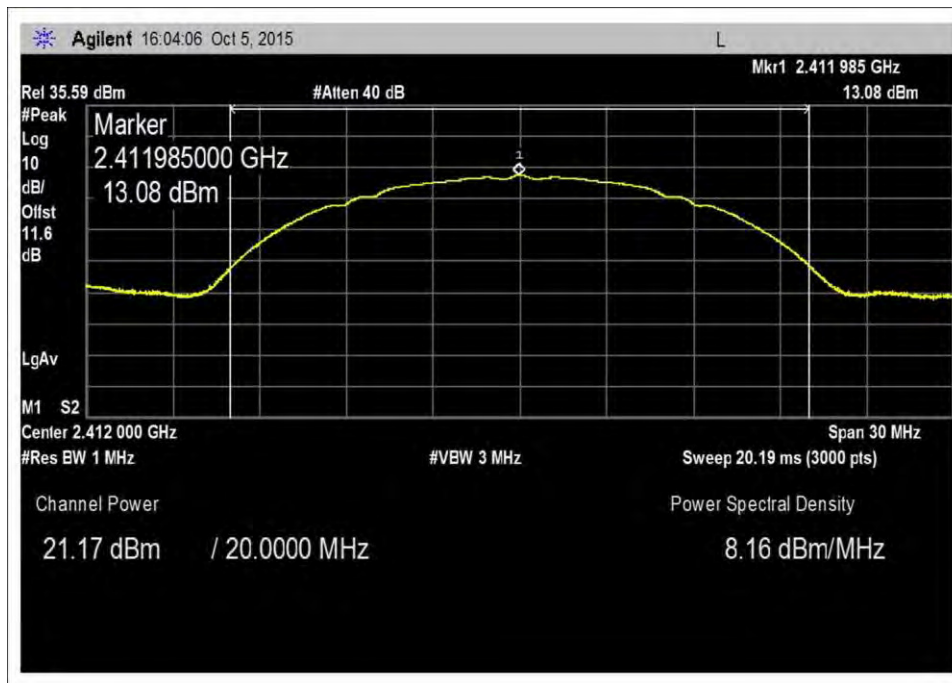


Middle Channel

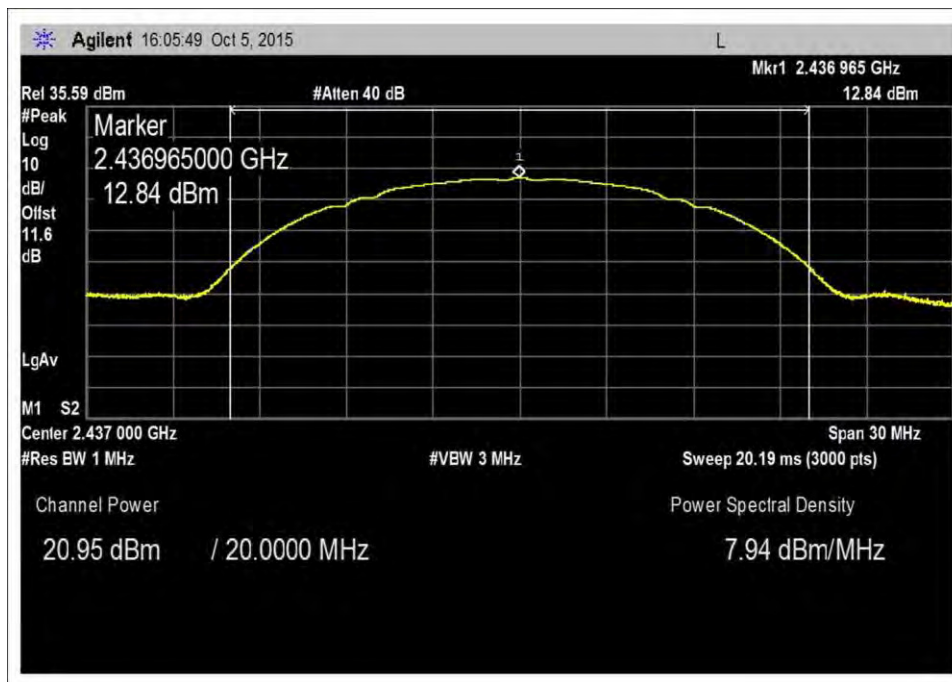


High Channel

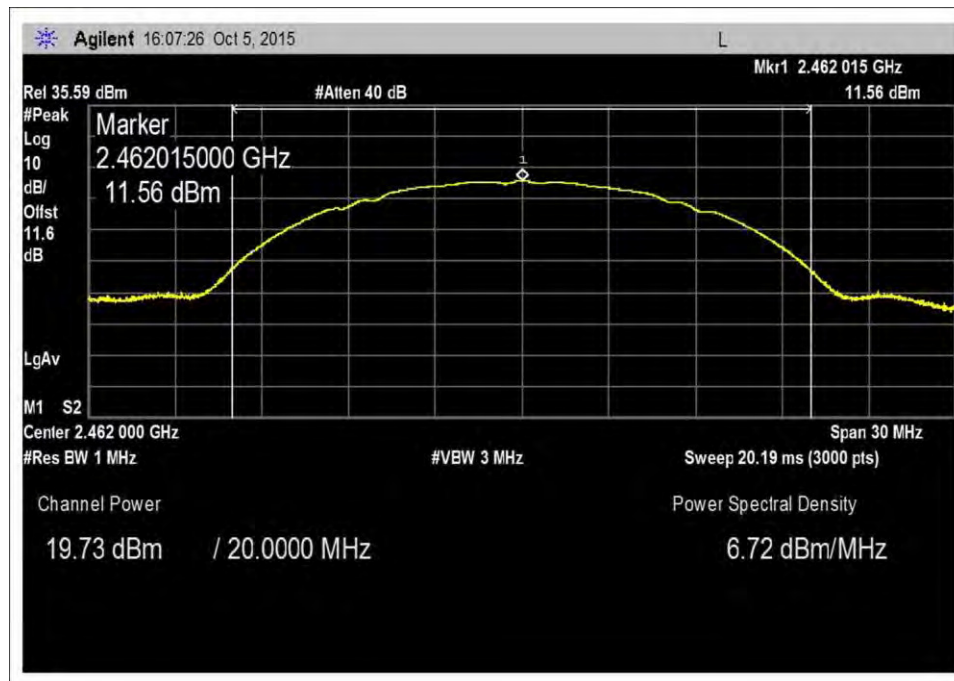
### 802.11b-Mode – 881.5 GSM-Booster On



Low Channel

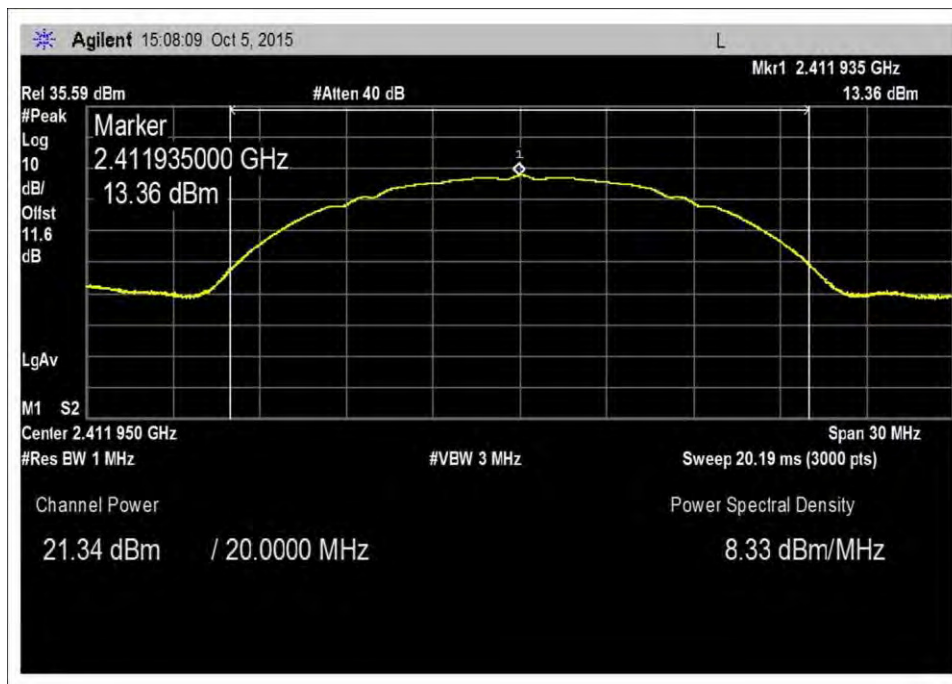


Middle Channel

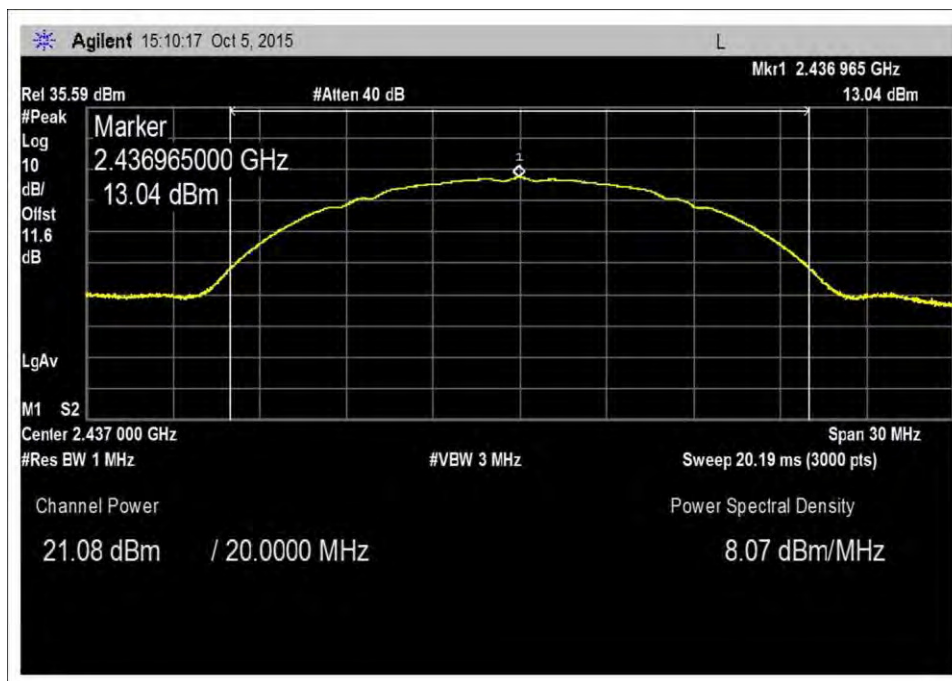


High Channel

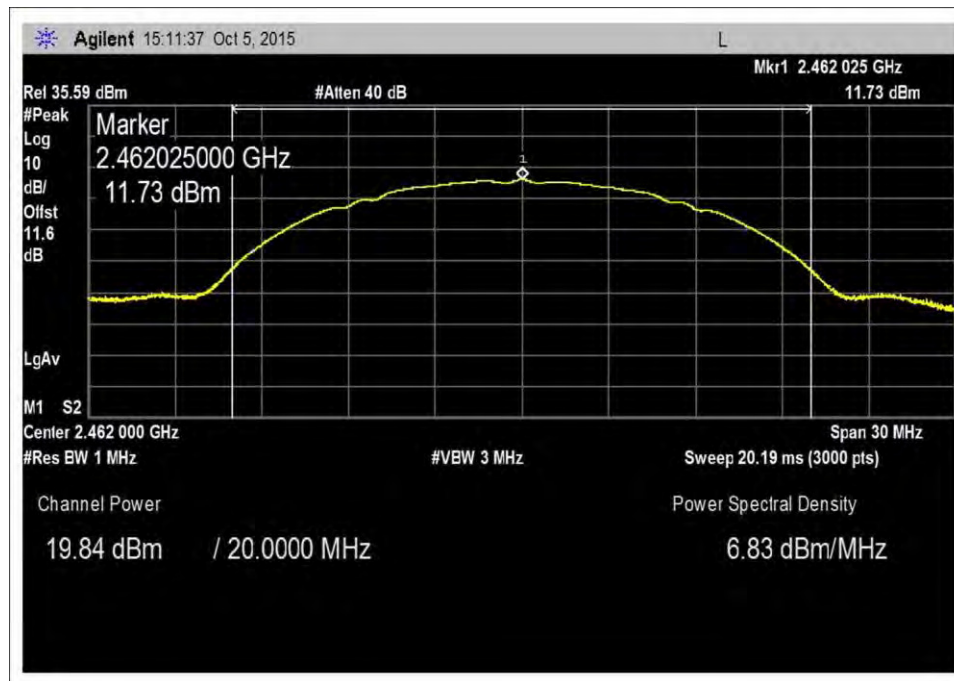
### 802.11b-Mode – 2132.5 AWGN-Booster On



Low Channel

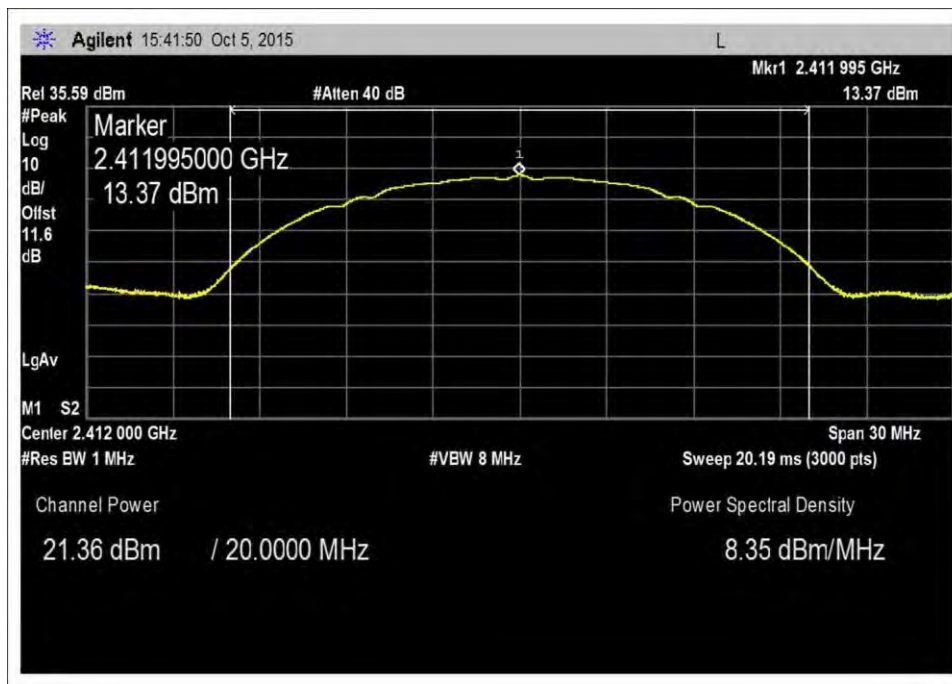


Middle Channel

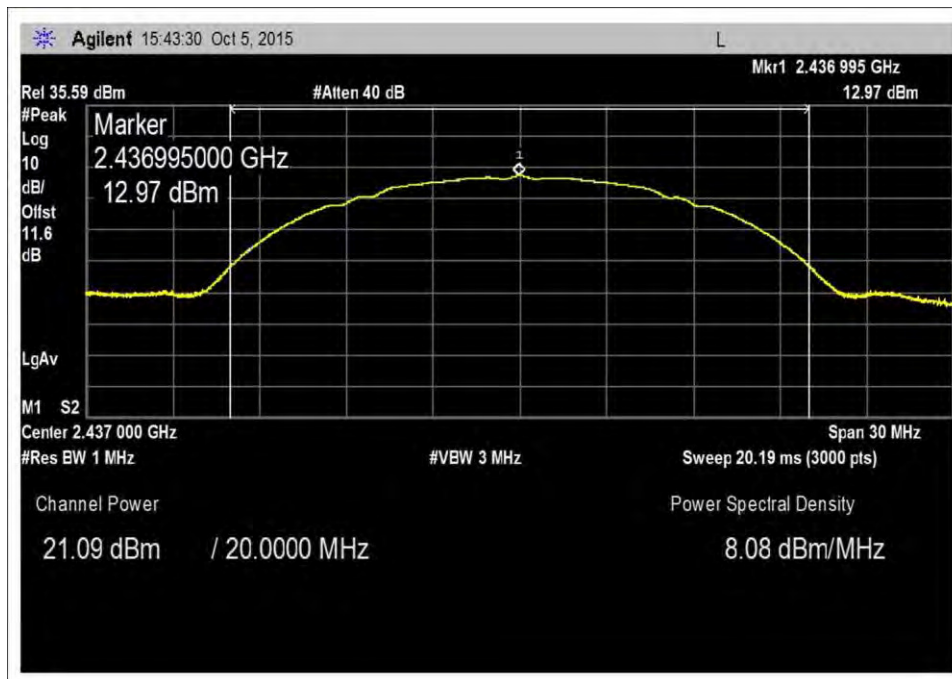


High Channel

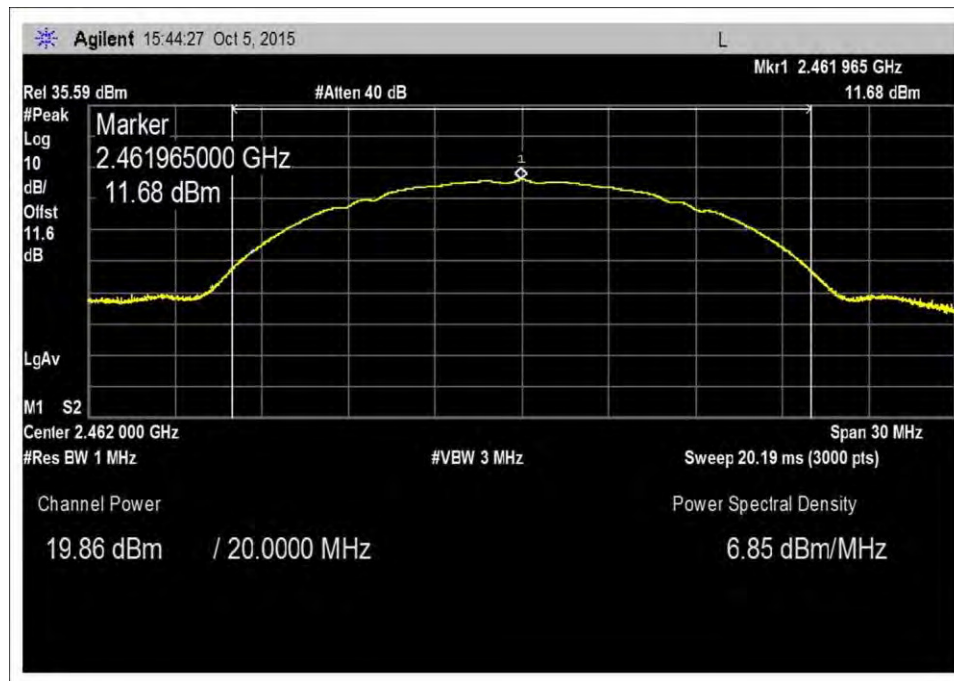
### 802.11b-Mode – 2132.5 GSM-Booster On



Low Channel

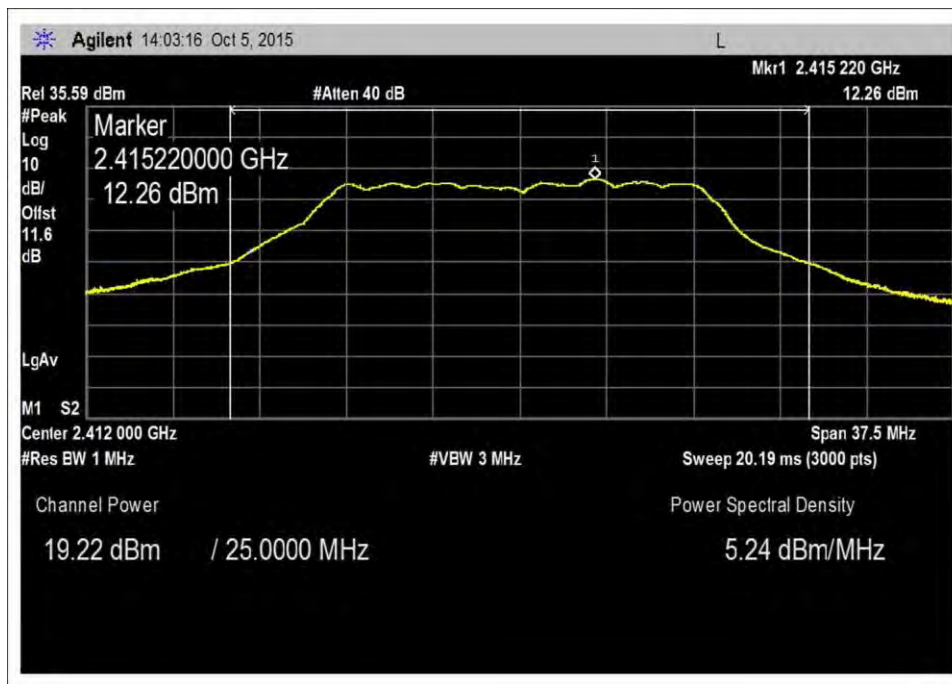


Middle Channel

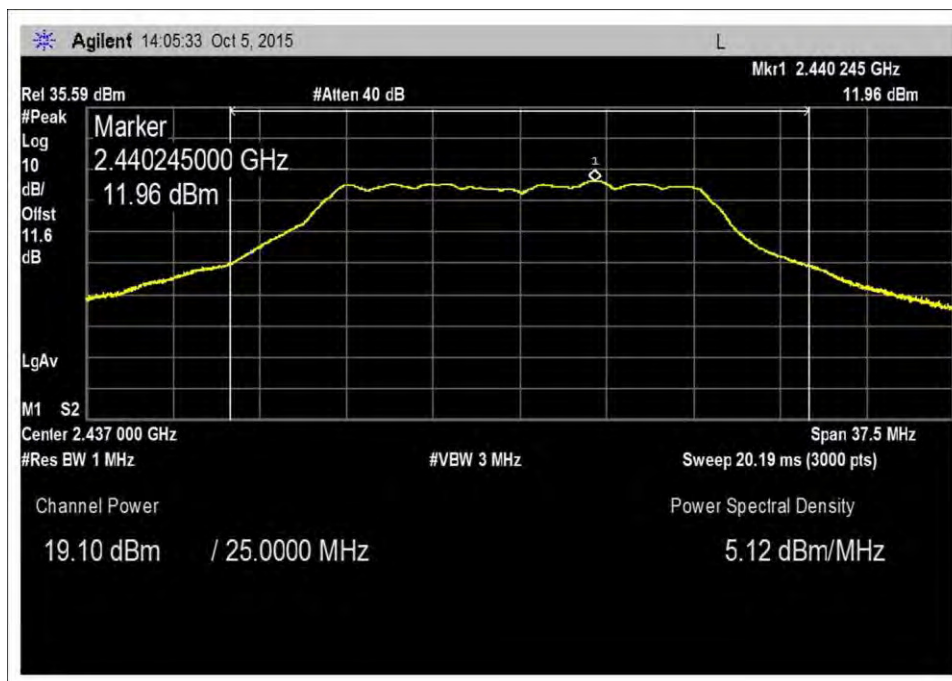


High Channel

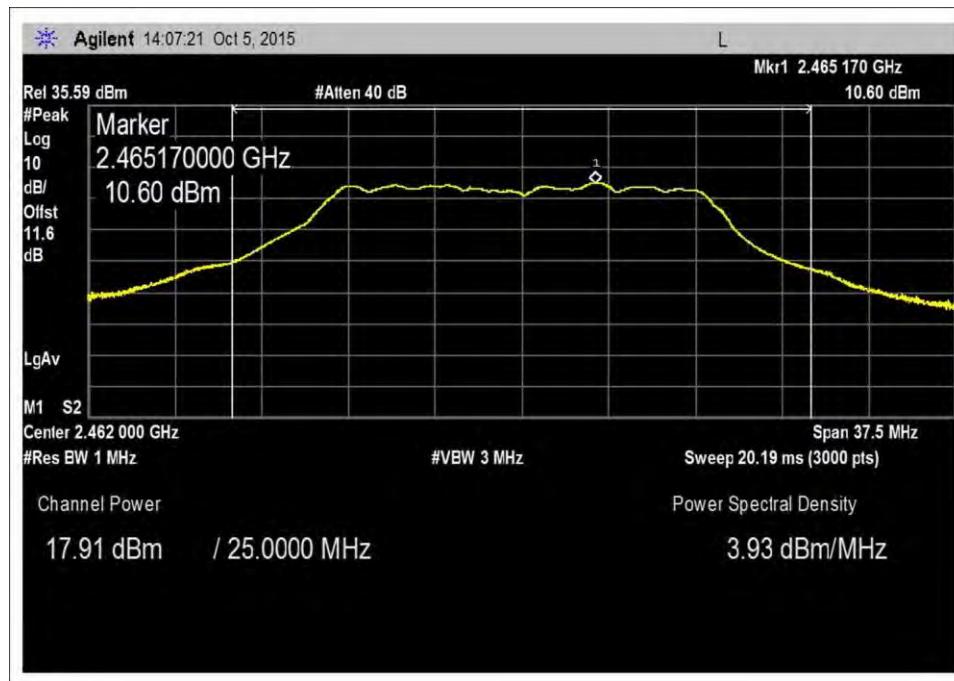
### 802.11g-Mode – Booster Off



Low Channel

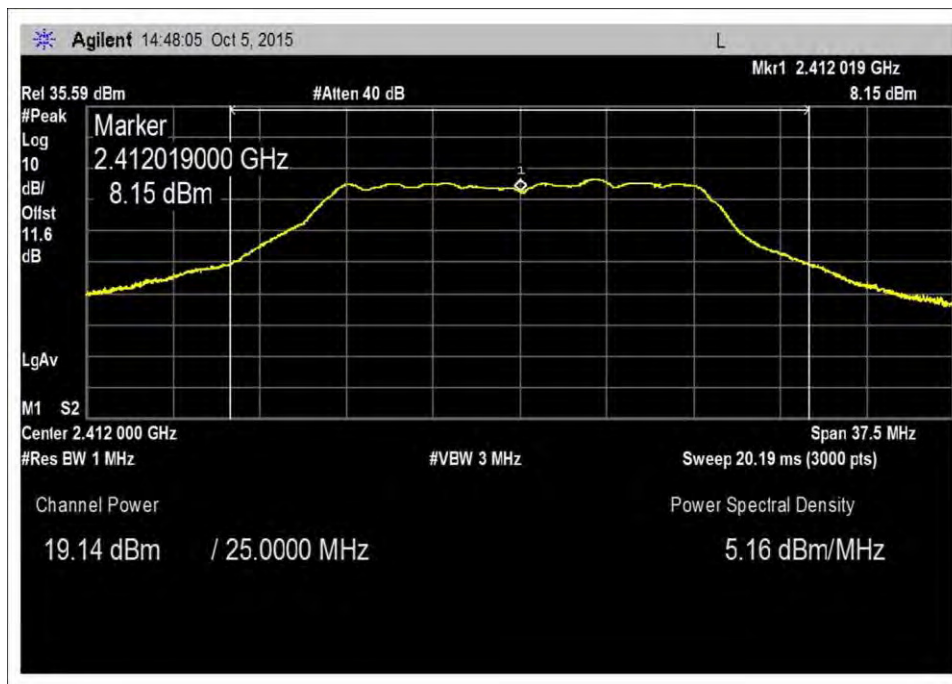


Middle Channel

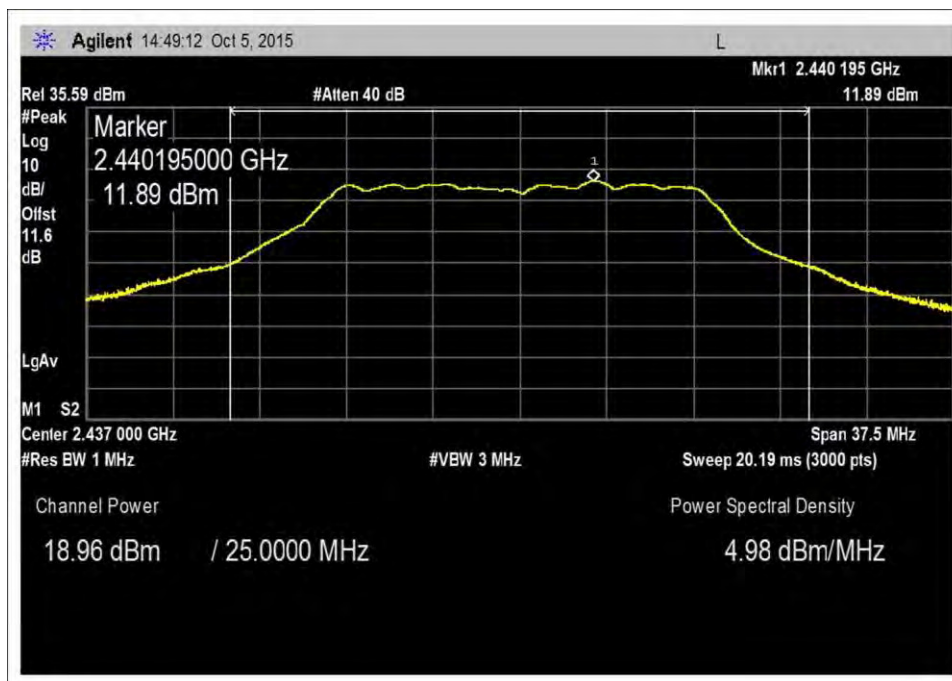


High Channel

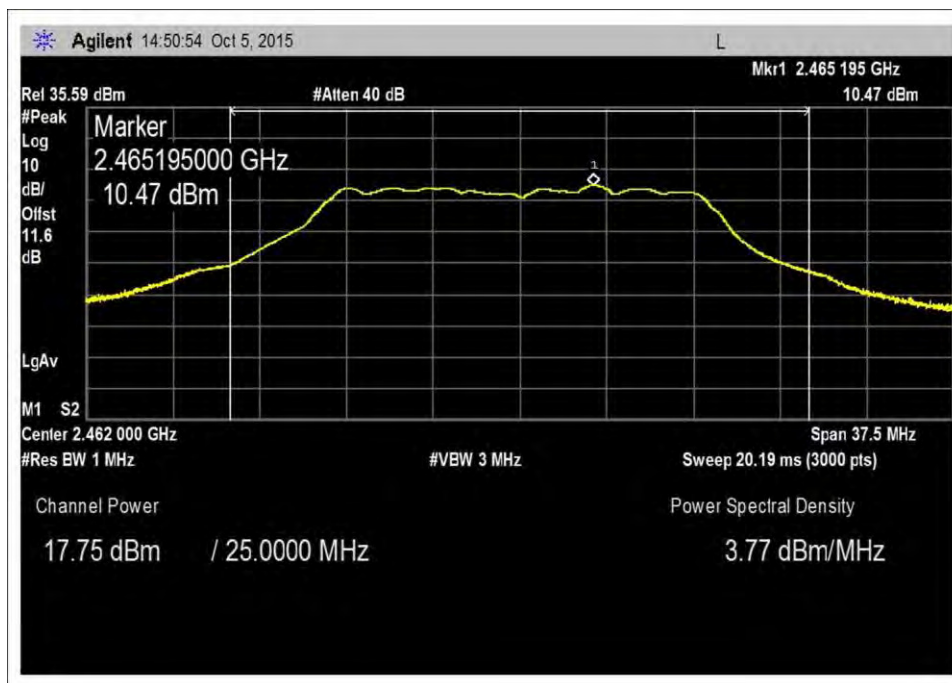
### 802.11g-Mode – 881.5 AWGN-Booster On



Low Channel

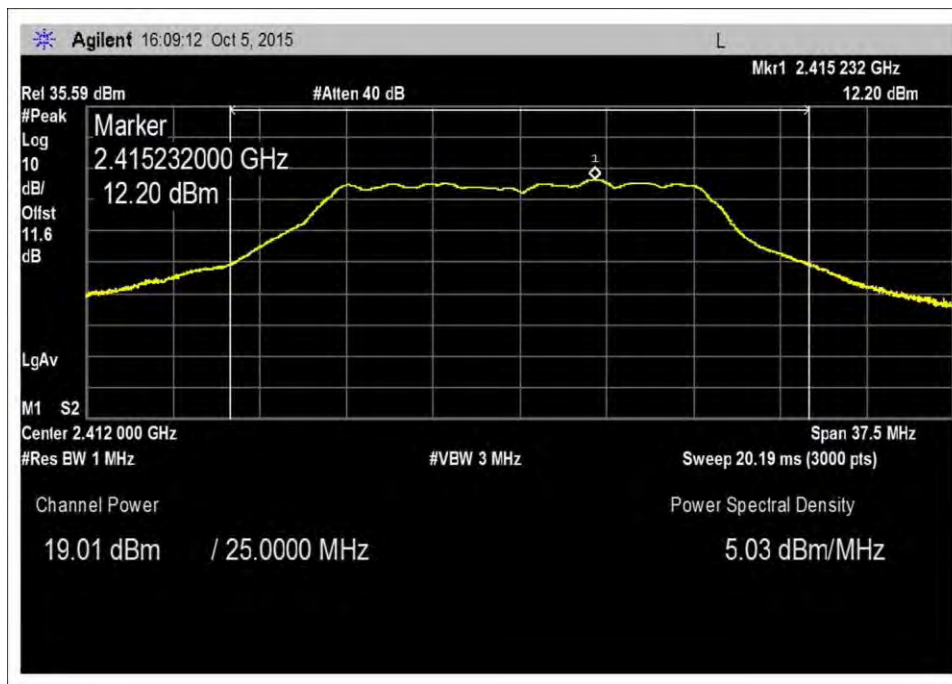


Middle Channel

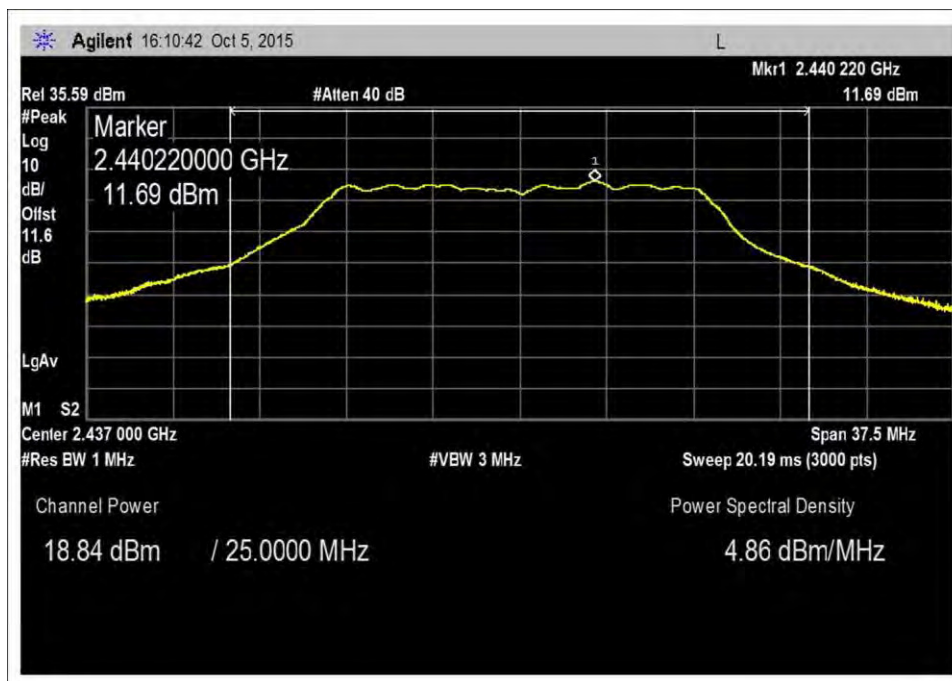


High Channel

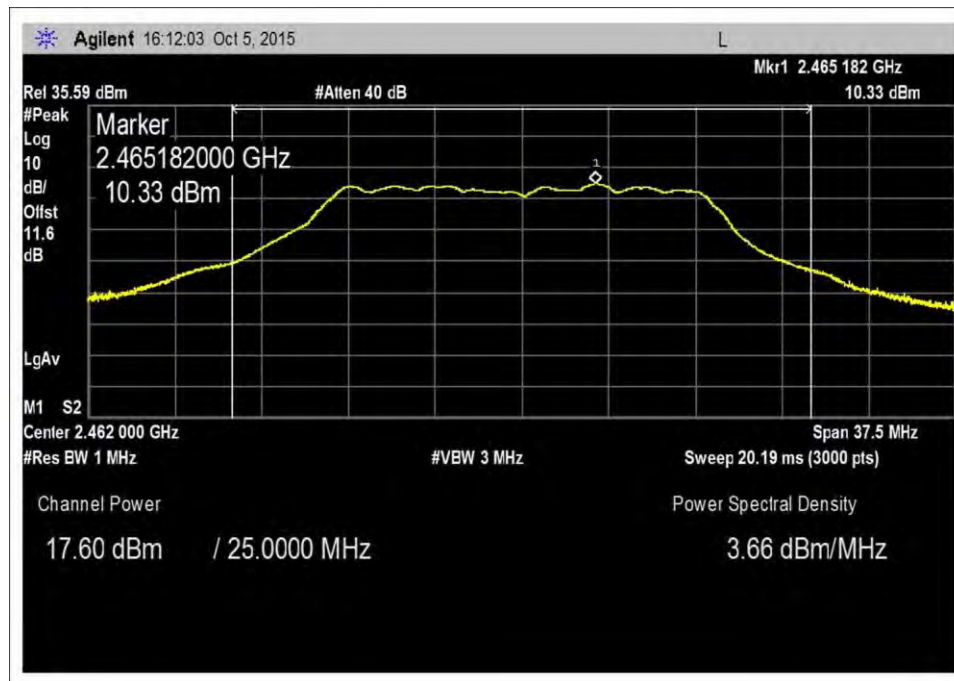
### 802.11g-Mode – 881.5 GSM-Booster On



Low Channel

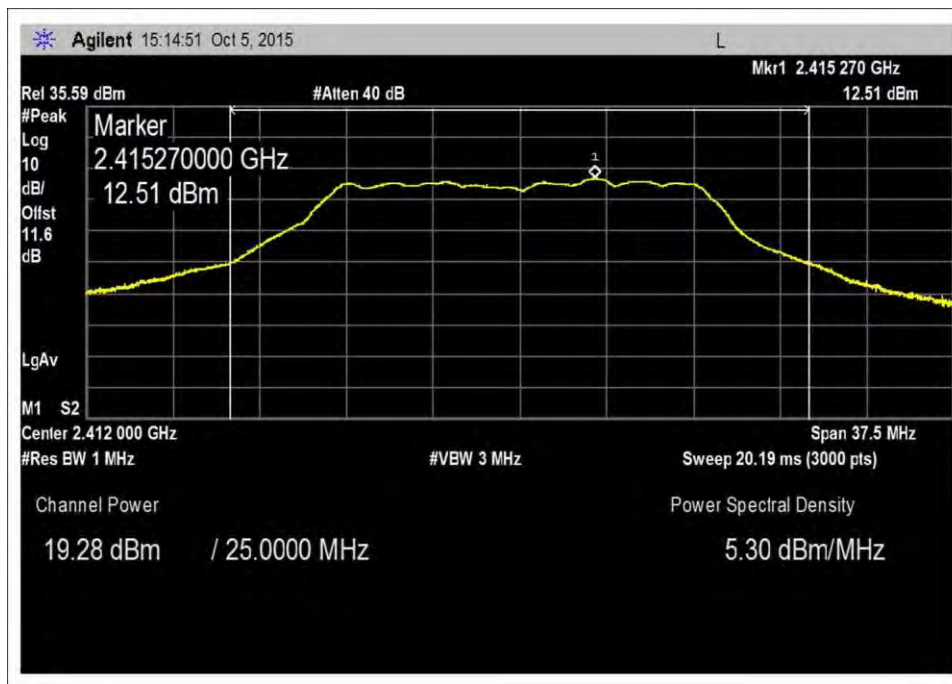


Middle Channel

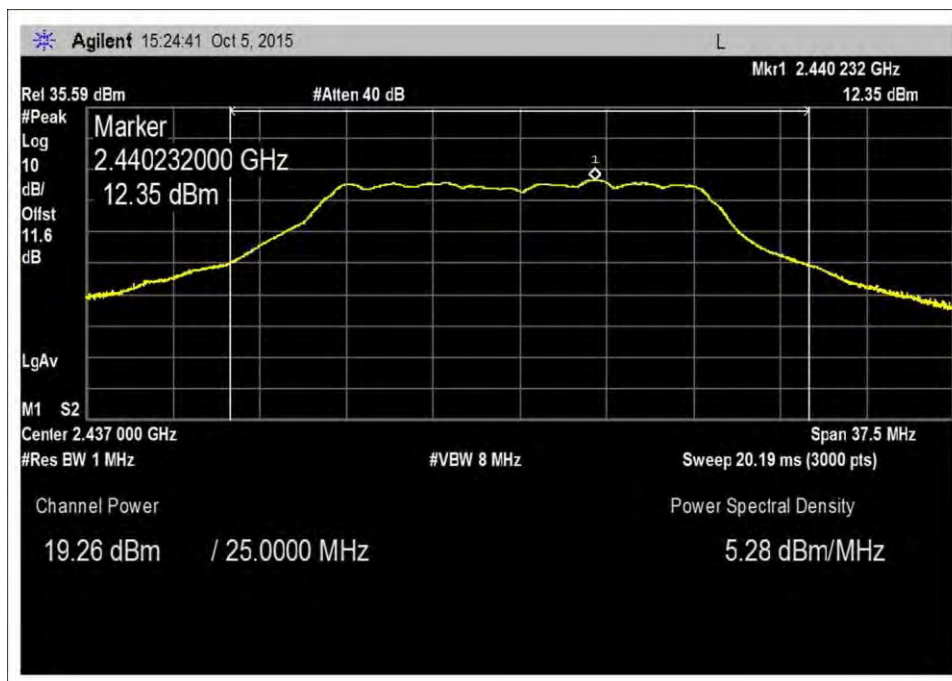


High Channel

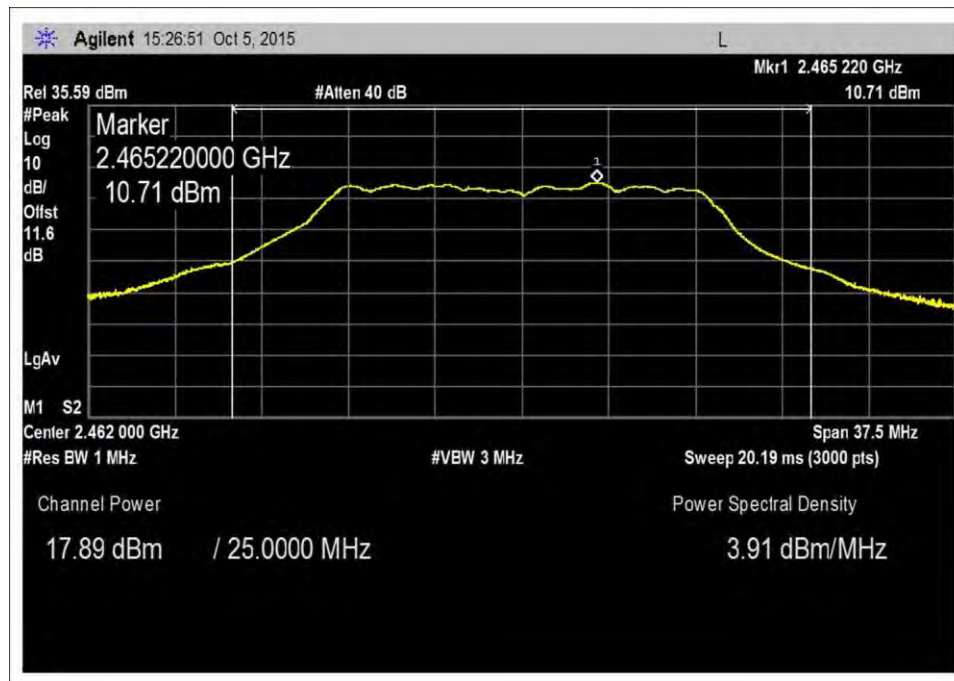
### 802.11g-Mode – 2132.5 AWGN-Booster On



Low Channel

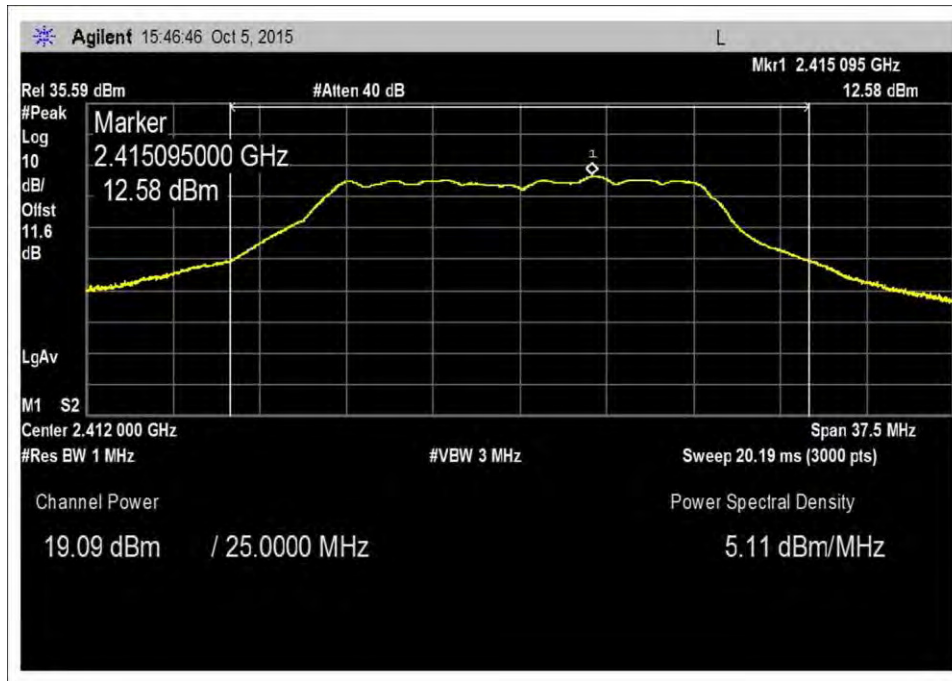


Middle Channel

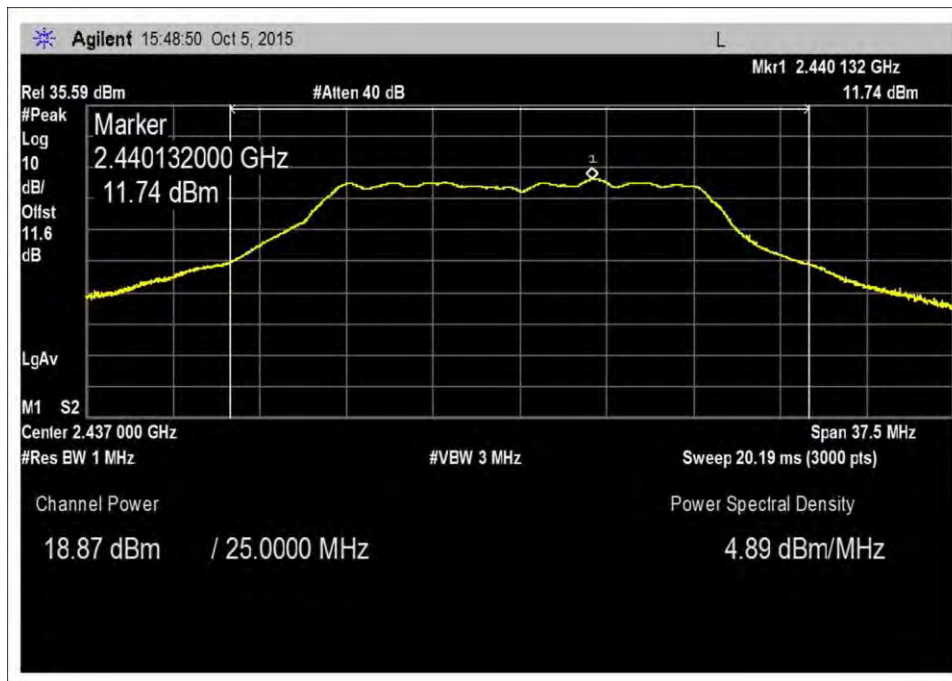


High Channel

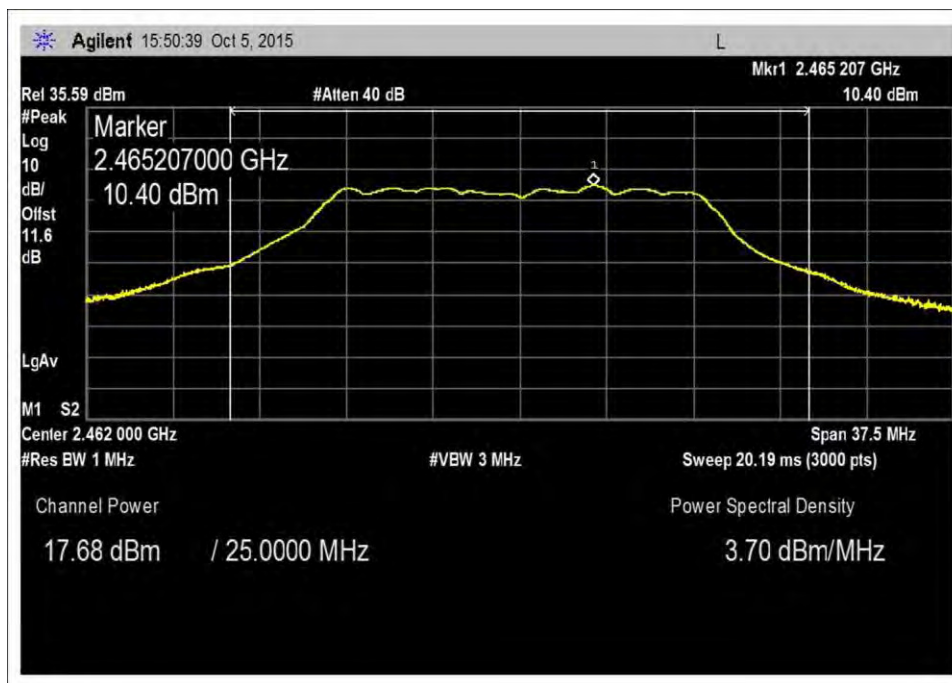
### 802.11g-Mode – 2132.5 GSM-Booster On



Low Channel

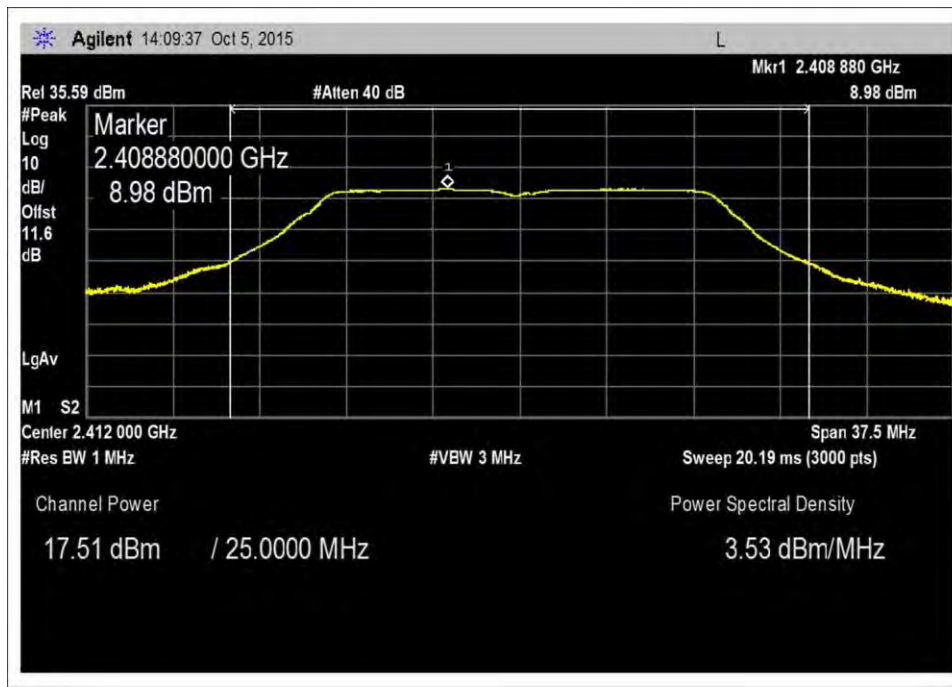


Middle Channel

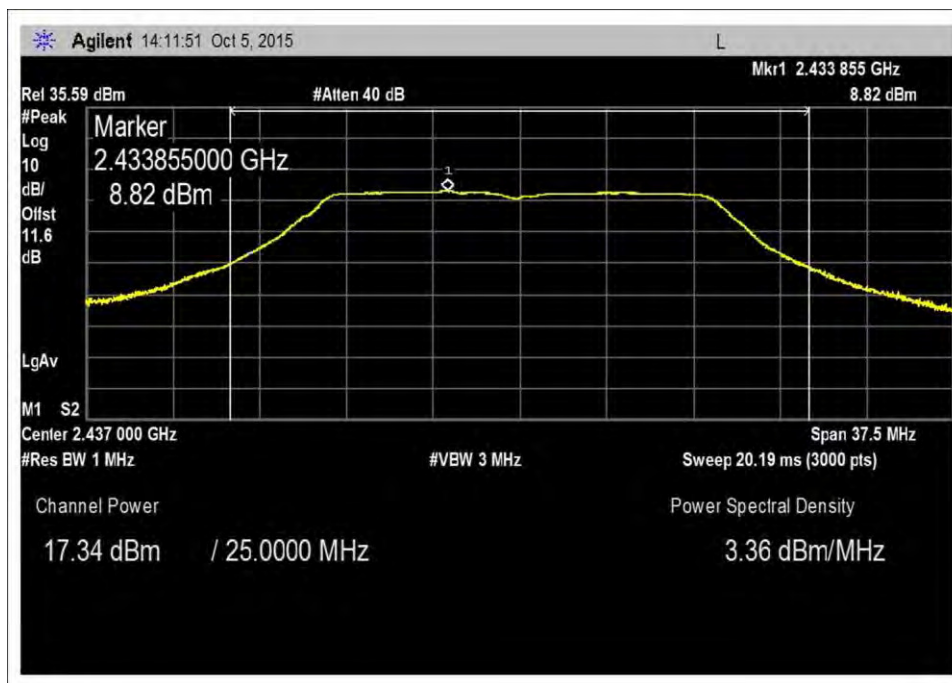


High Channel

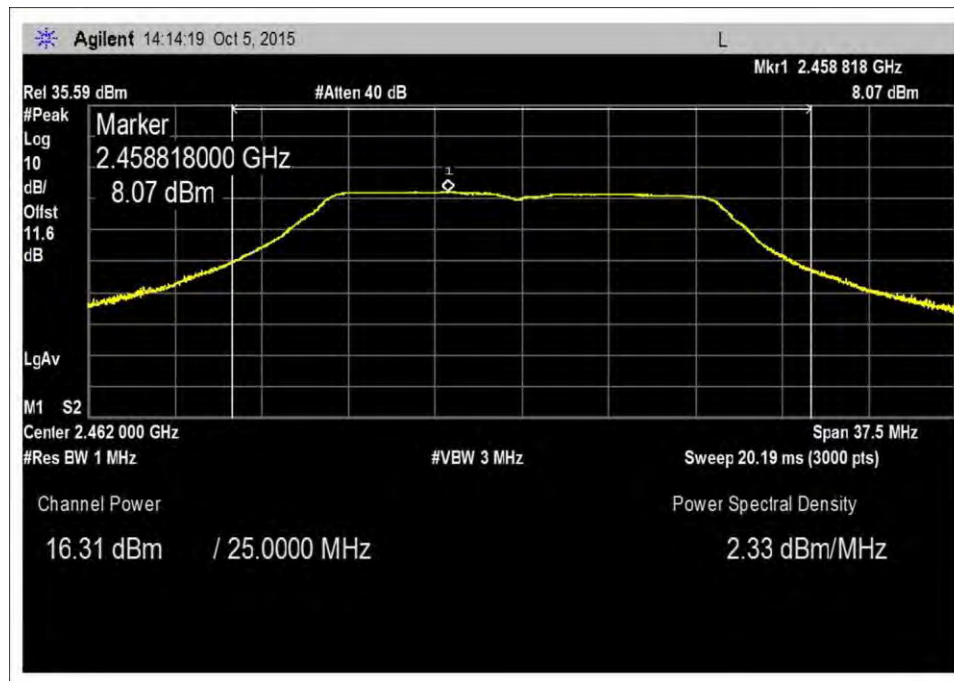
### 802.11n HT20-Mode – Booster Off



Low Channel

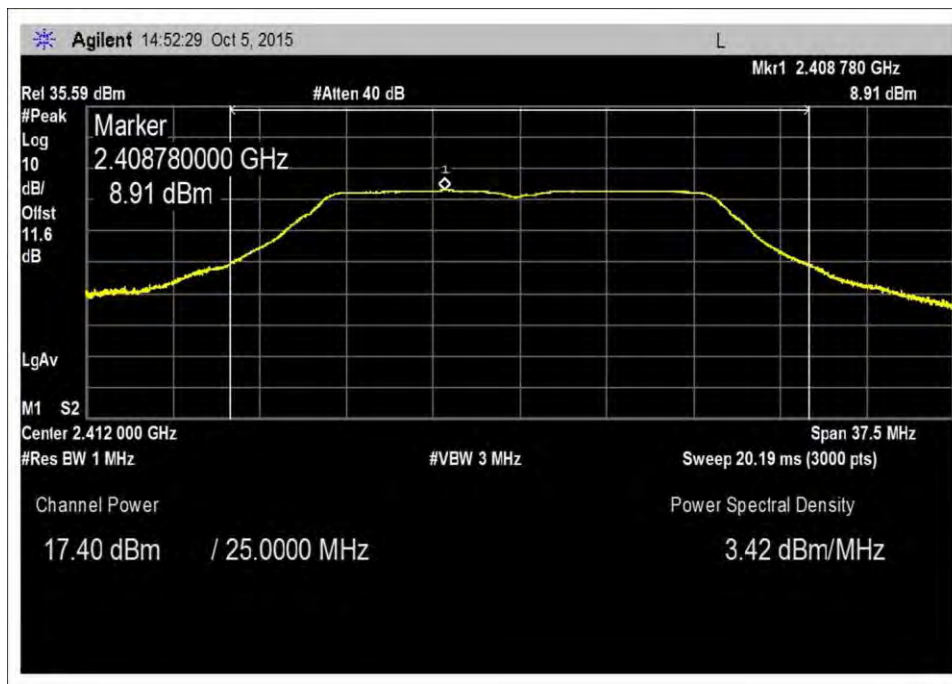


Middle Channel

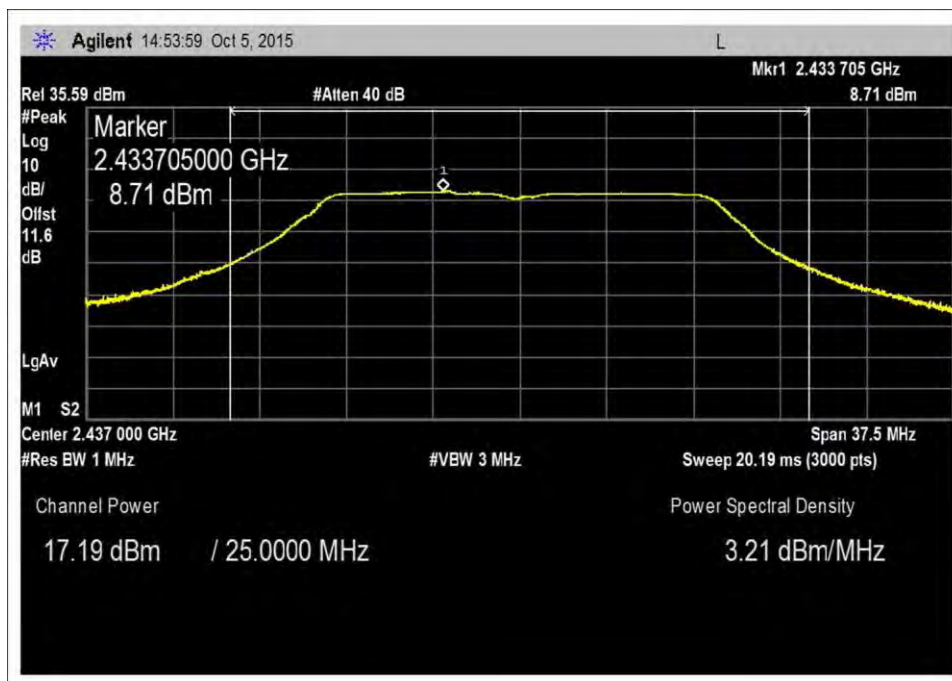


High Channel

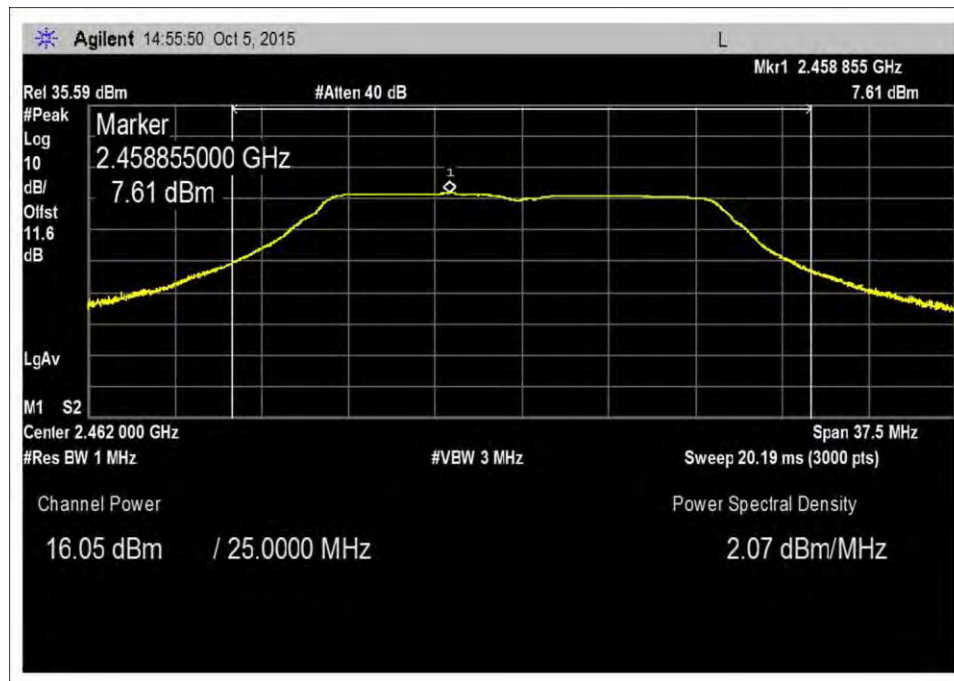
### 802.11n HT20-Mode – 881.5 AWGN-Booster On



Low Channel

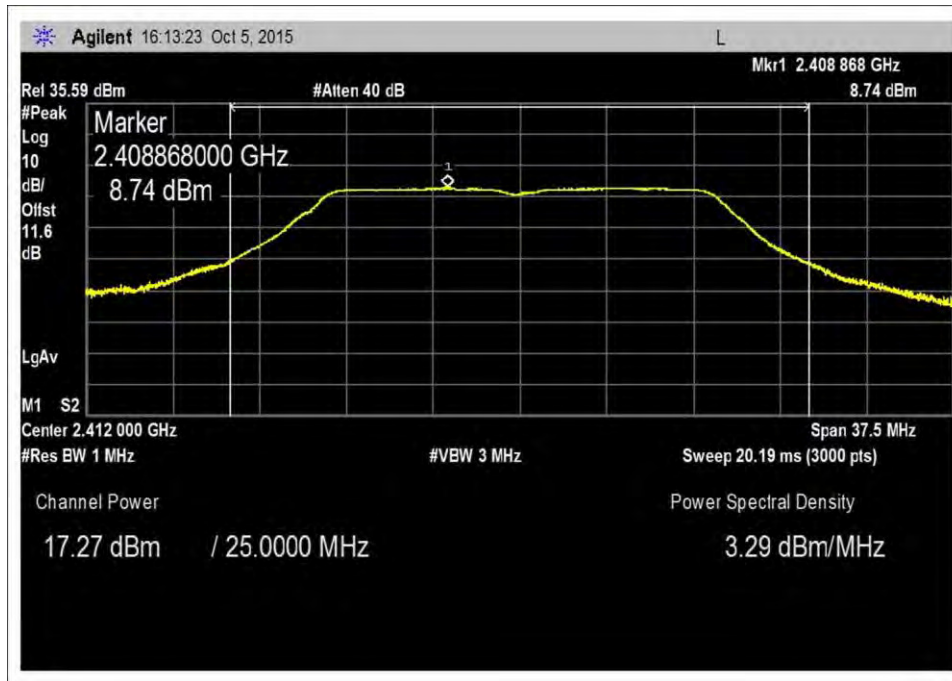


Middle Channel

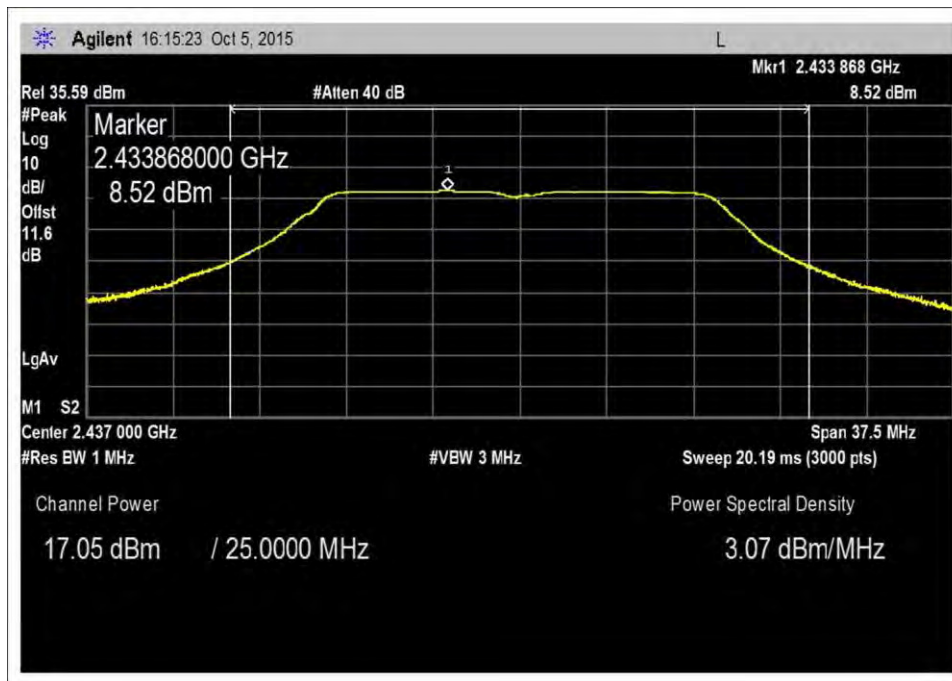


High Channel

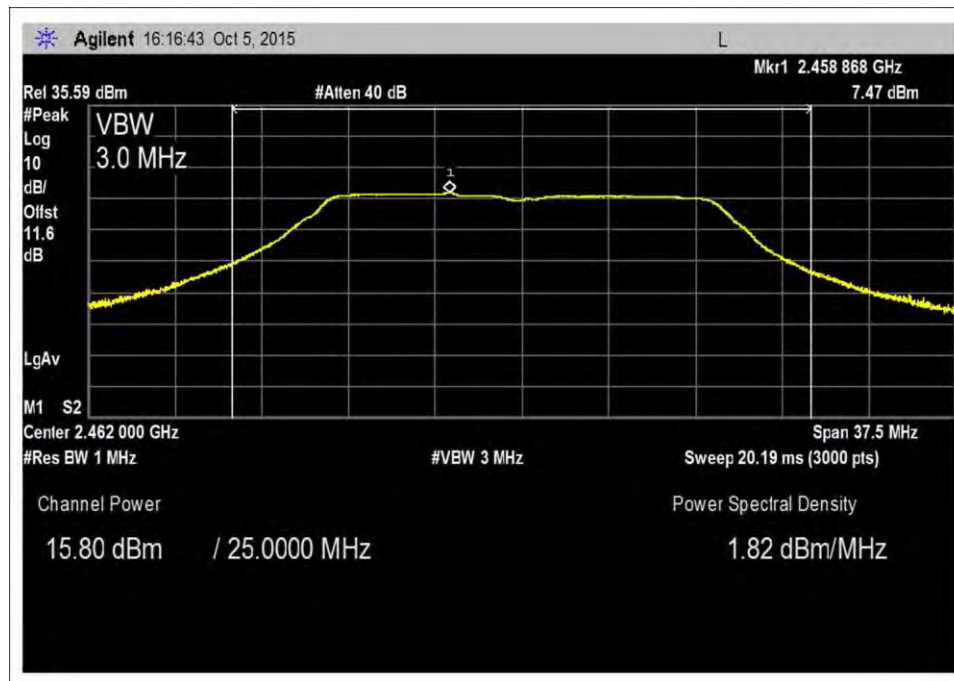
### 802.11n HT20-Mode – 881.5 GSM-Booster On



Low Channel

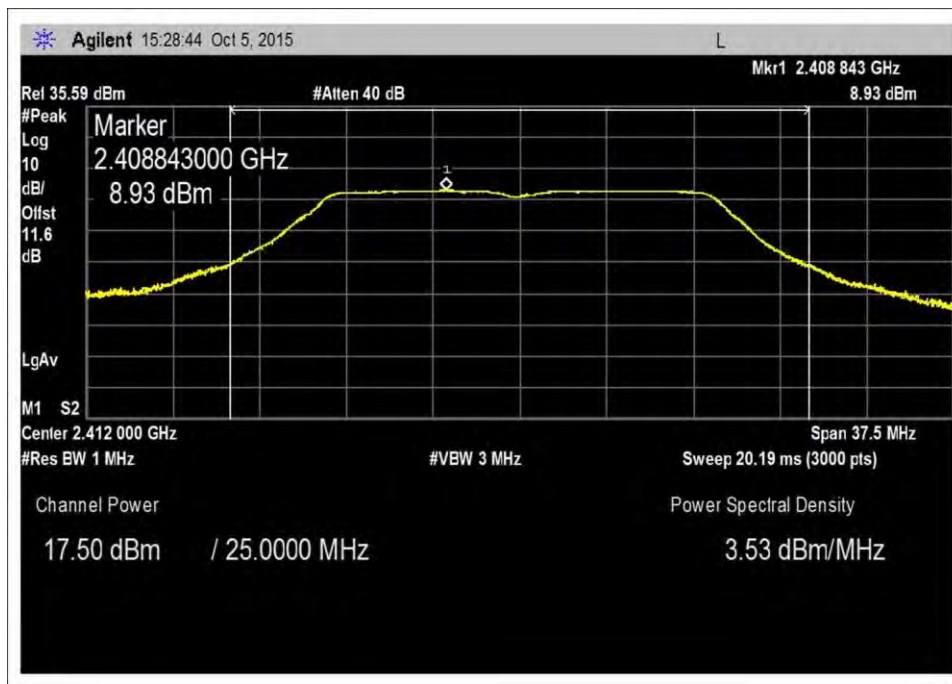


Middle Channel

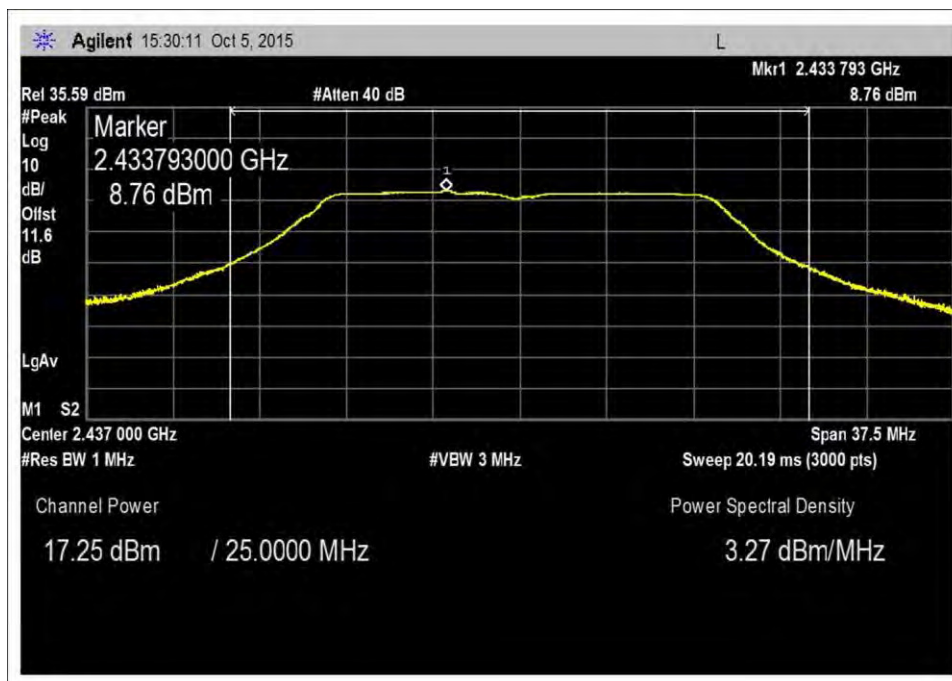


High Channel

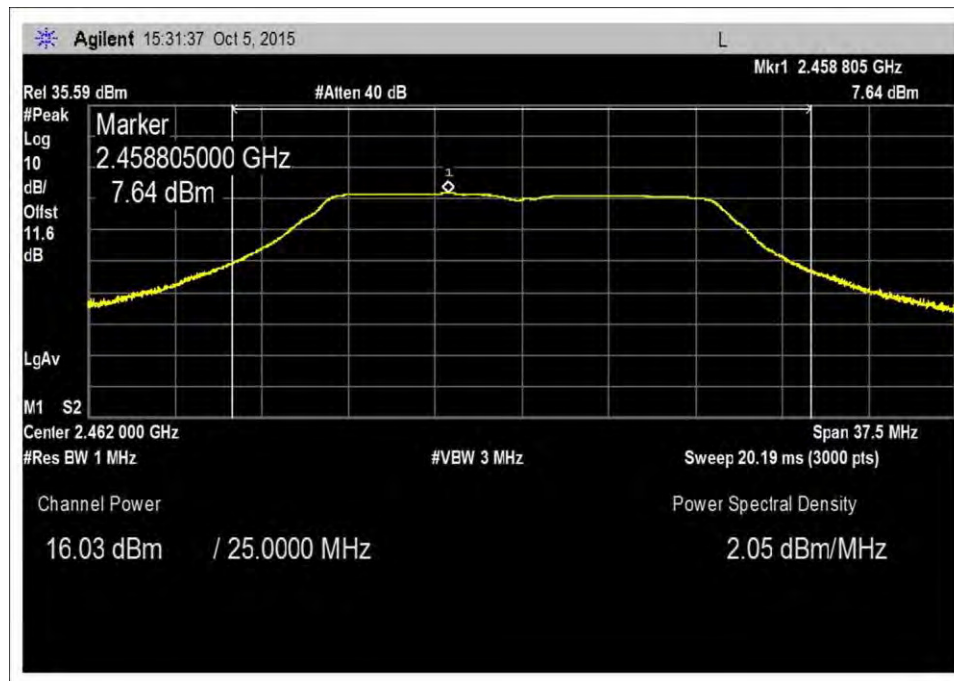
**802.11n HT20-Mode – 2132.5 AWGN-Booster On**



Low Channel

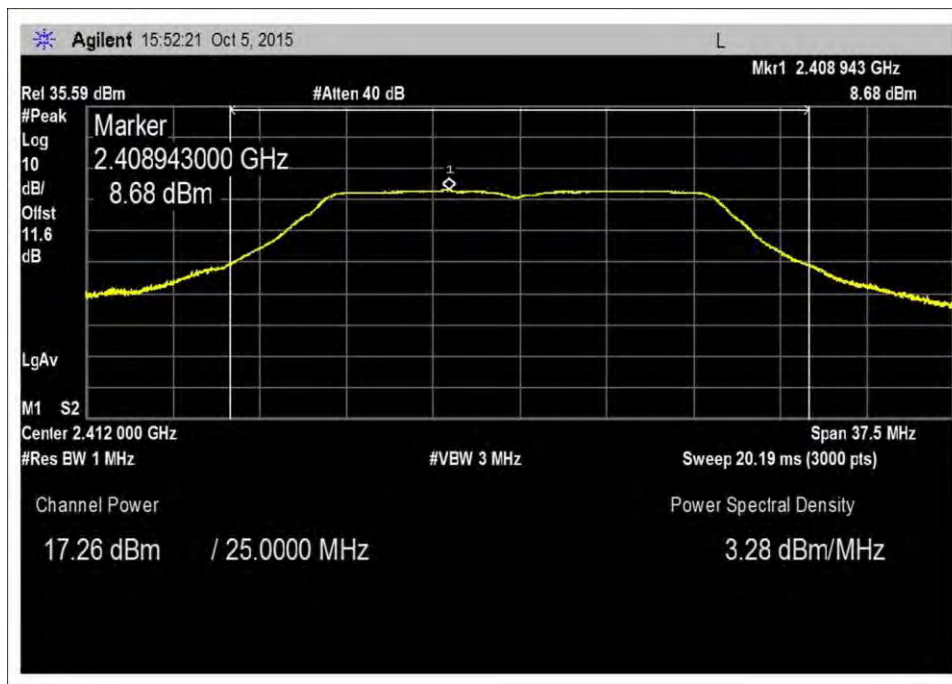


Middle Channel

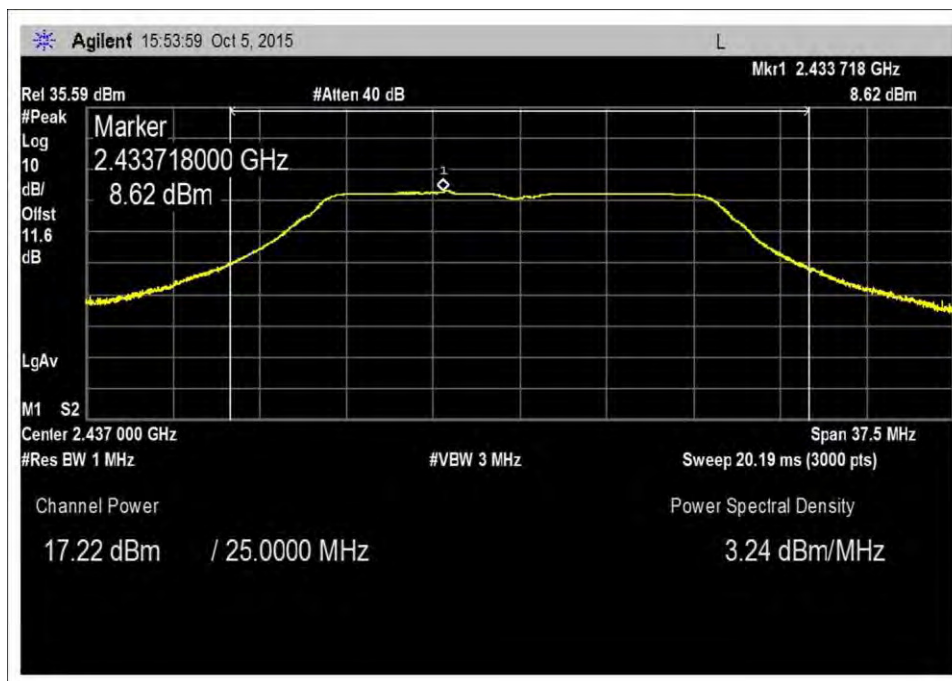


High Channel

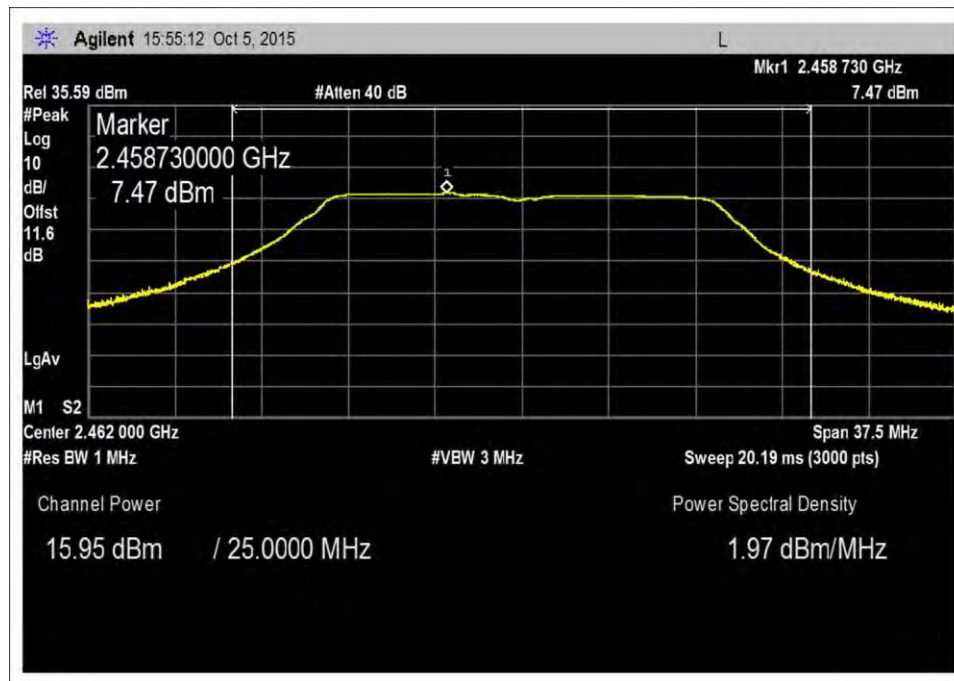
**802.11n HT20-Mode – 2132.5 GSM-Booster On**



Low Channel

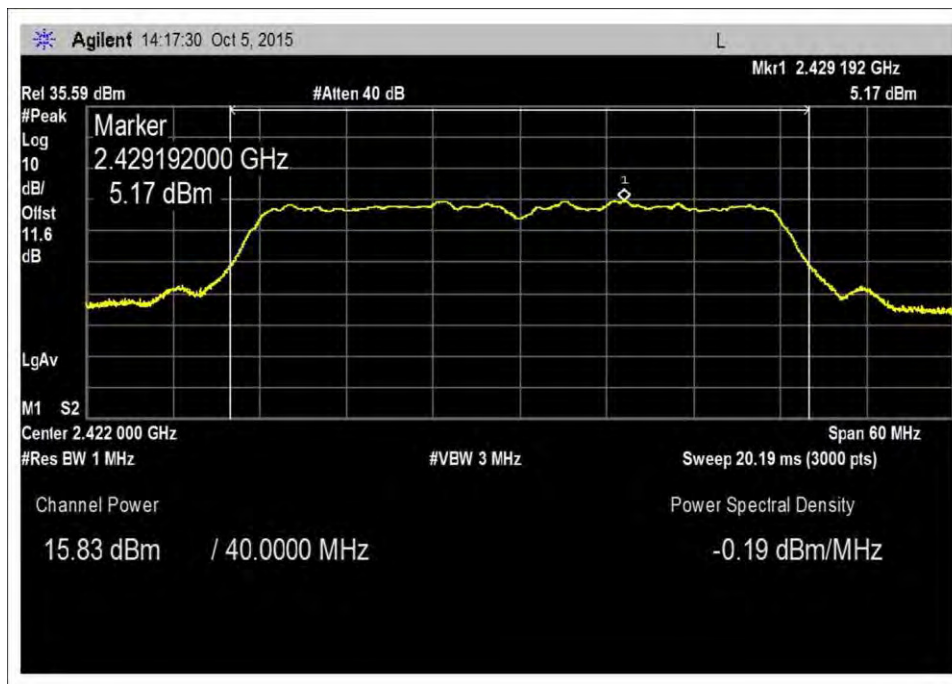


Middle Channel

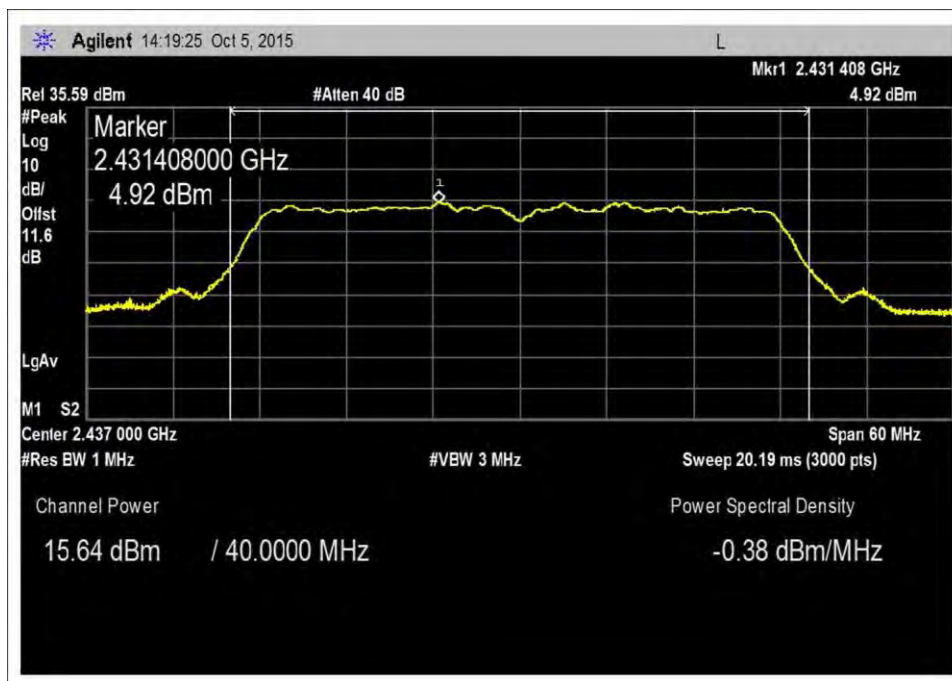


High Channel

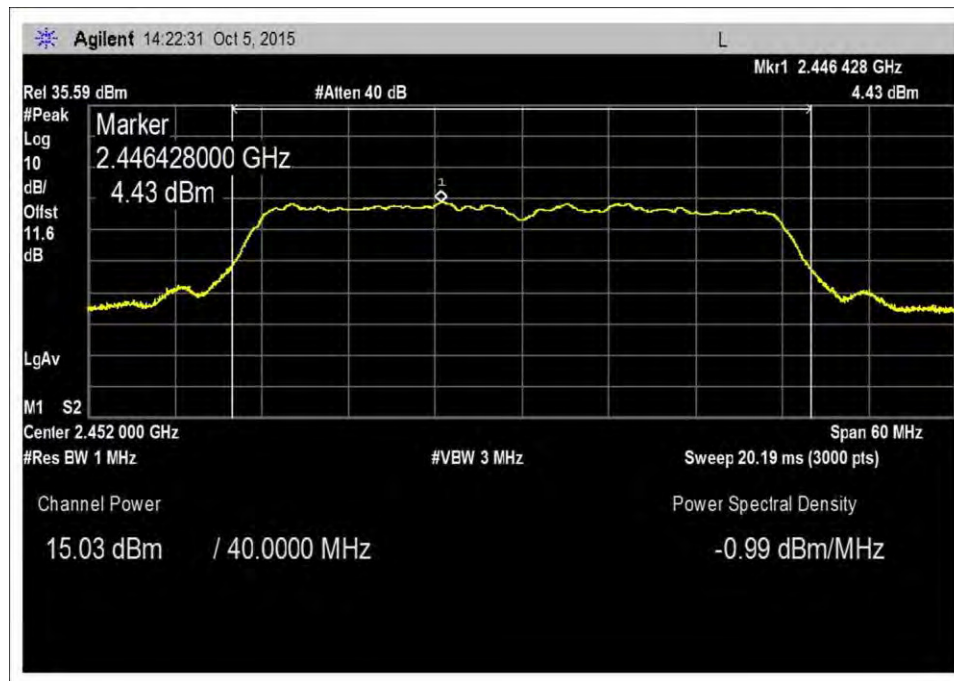
### 802.11n HT40-Mode – Booster Off



Low Channel

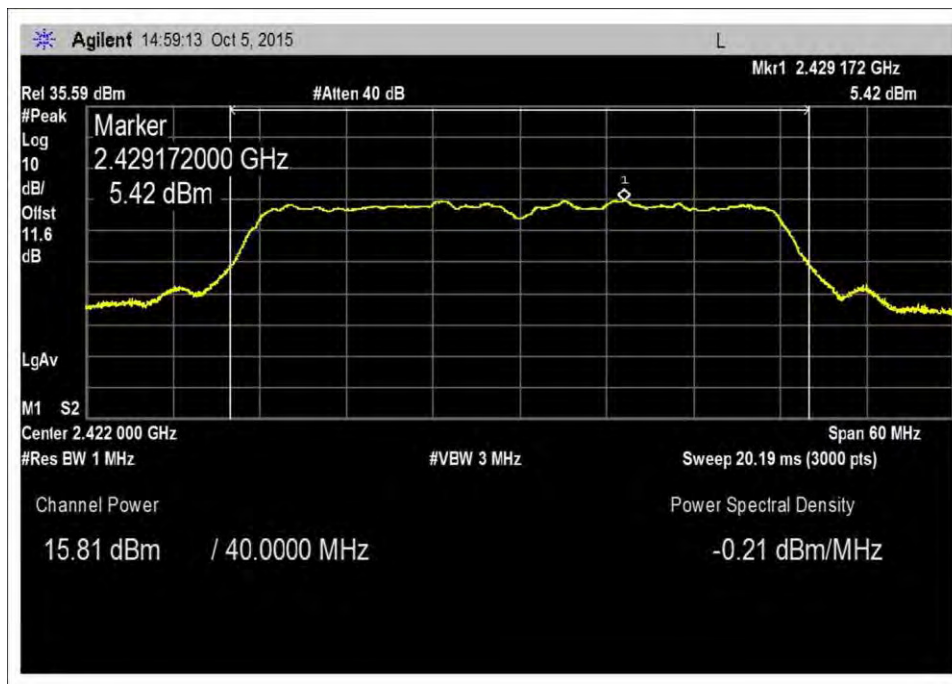


Middle Channel

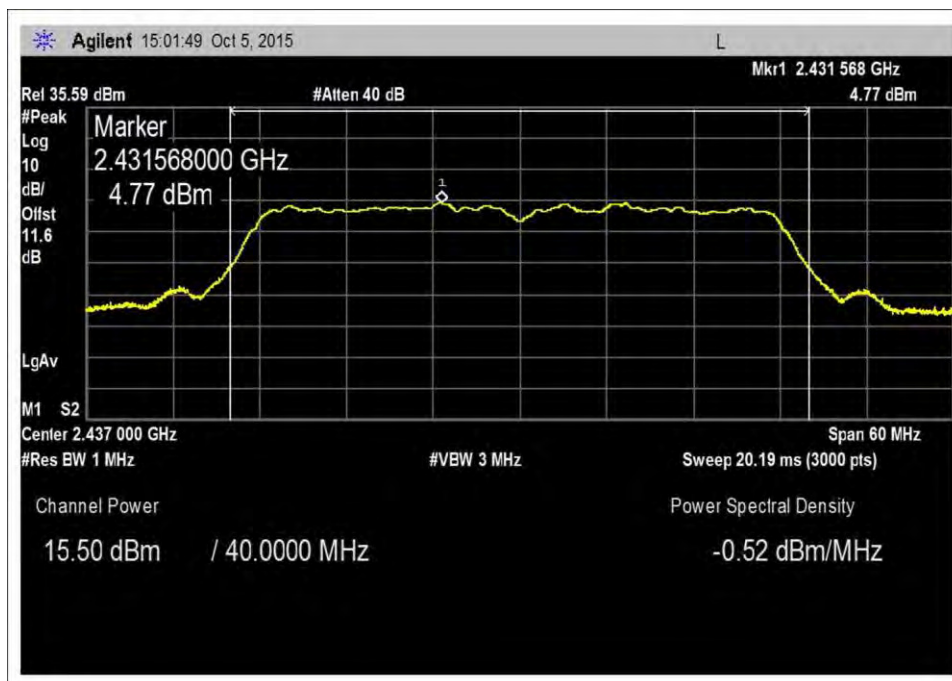


High Channel

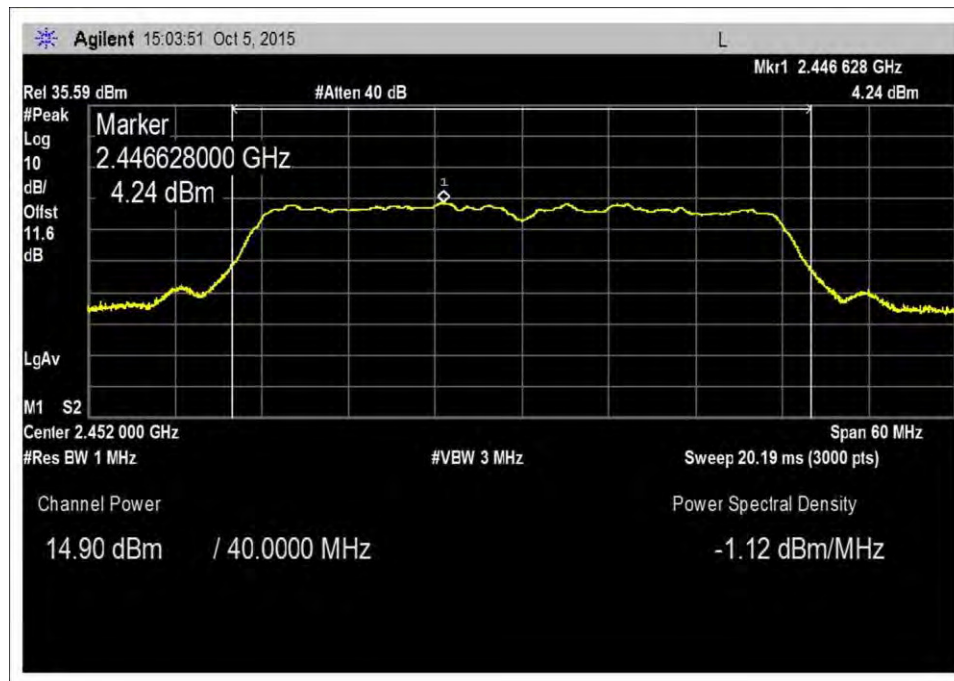
### 802.11n HT40-Mode – 881.5 AWGN-Booster On



Low Channel

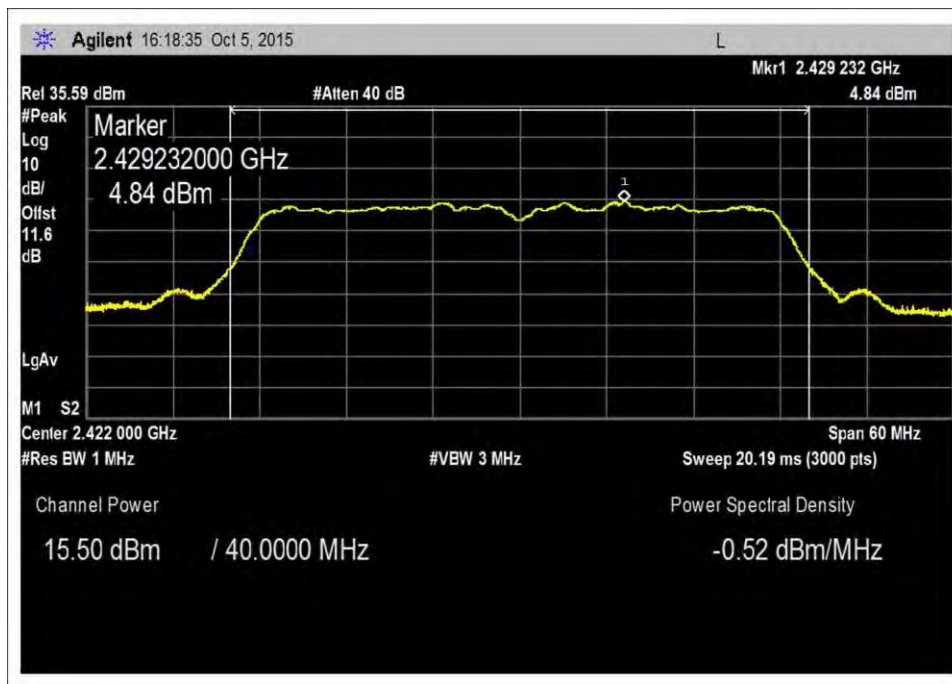


Middle Channel

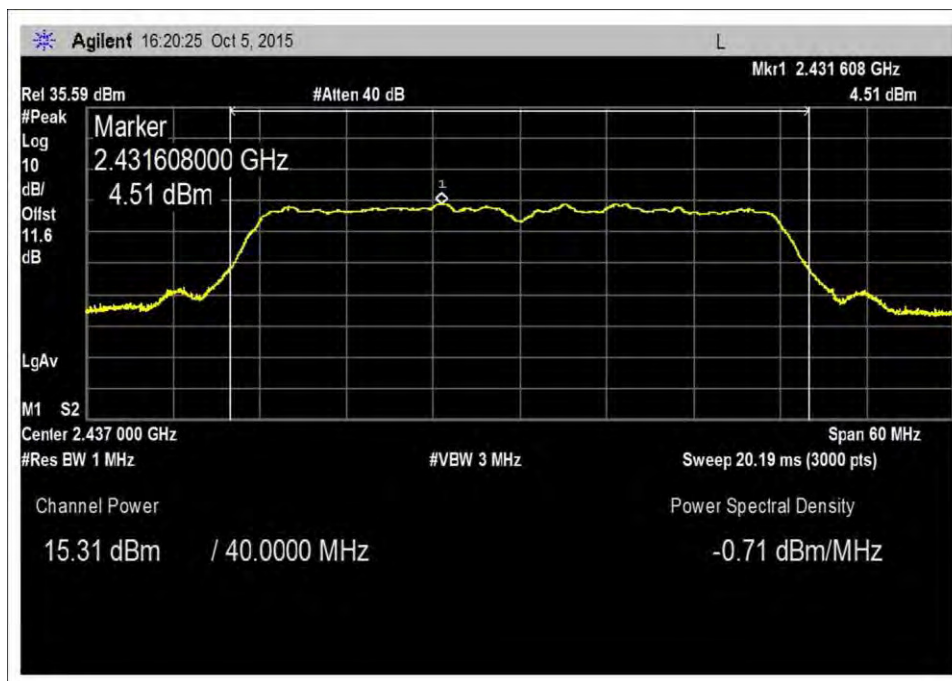


High Channel

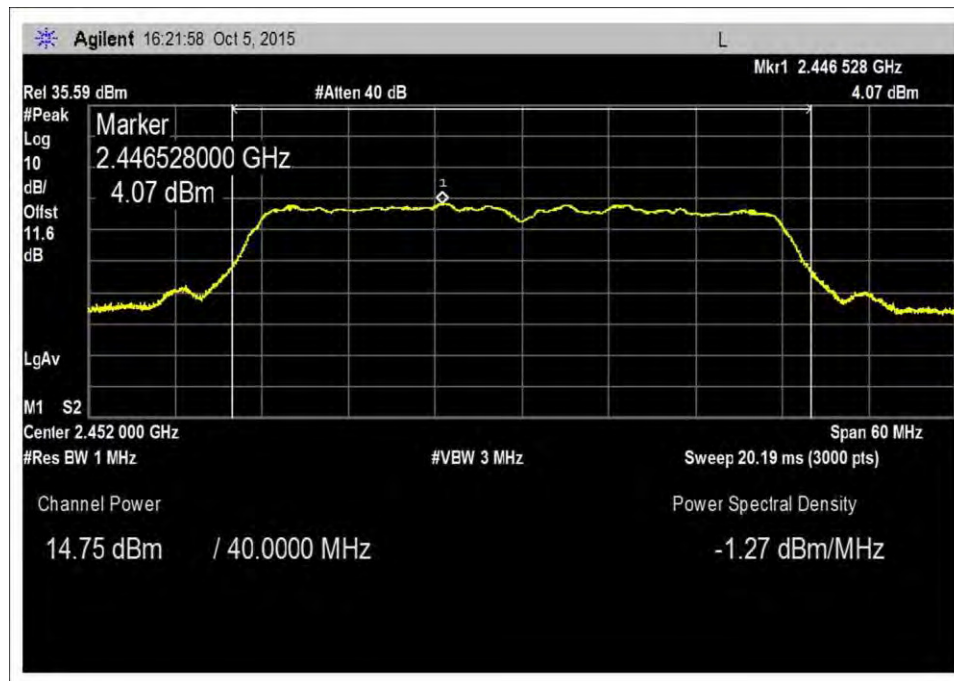
### 802.11n HT40-Mode – 881.5 GSM-Booster On



Low Channel

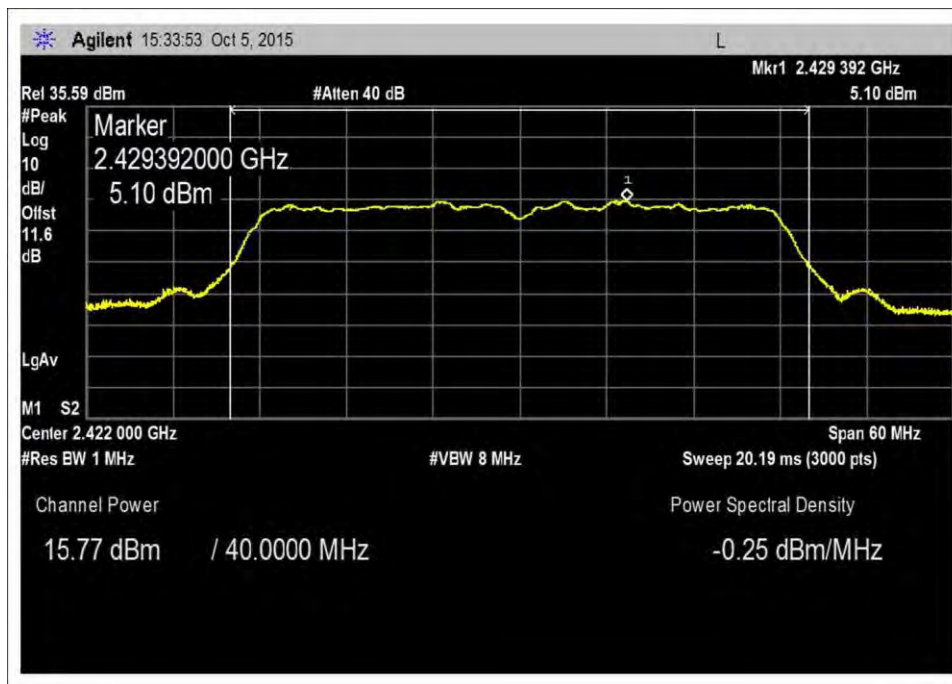


Middle Channel

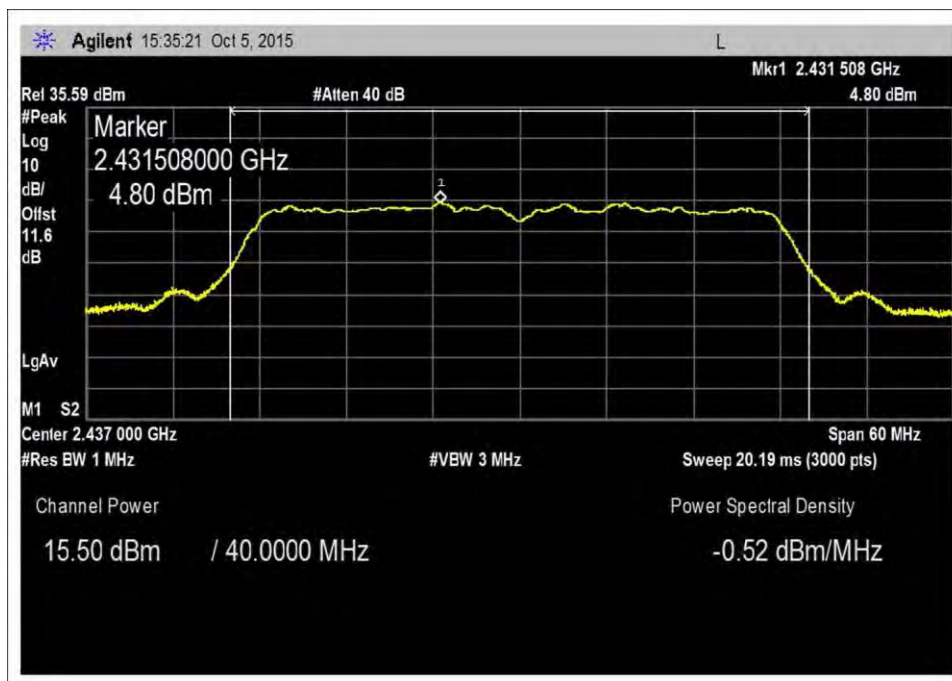


High Channel

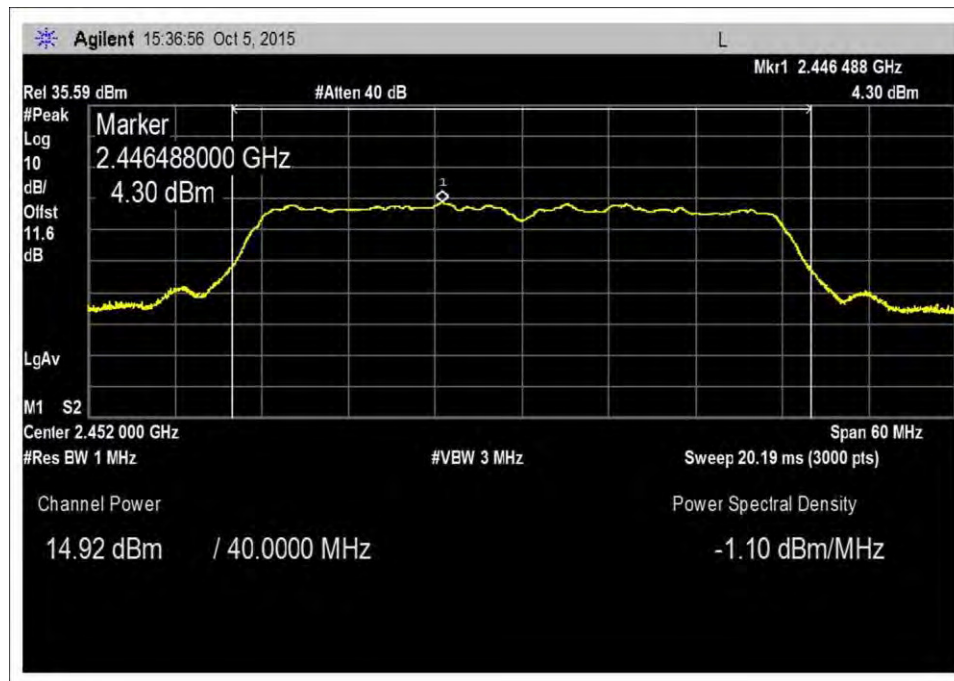
**802.11n HT40-Mode – 2132.5 AWGN-Booster On**



Low Channel

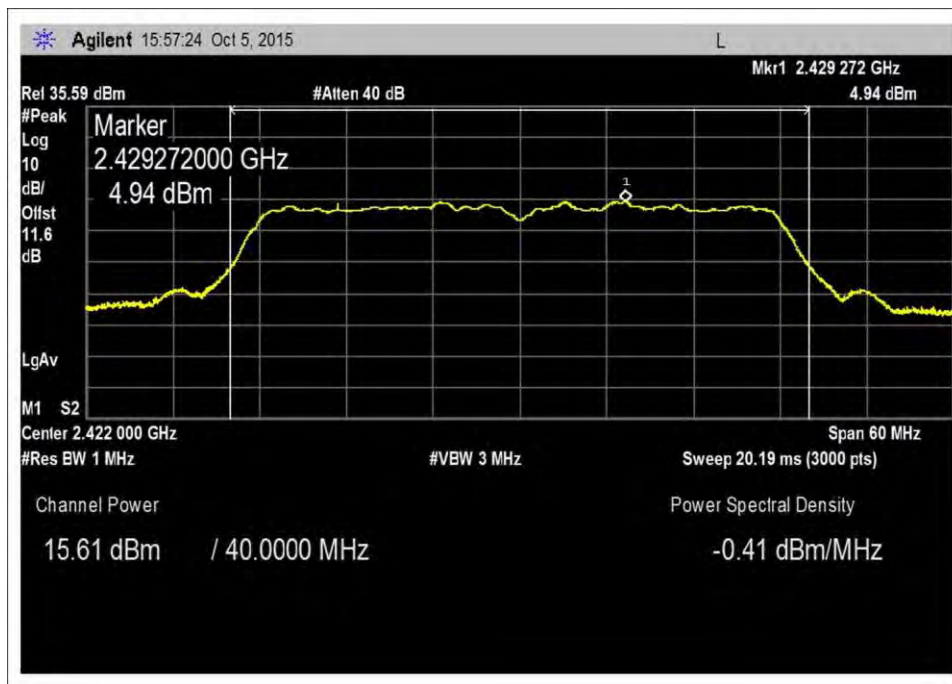


Middle Channel

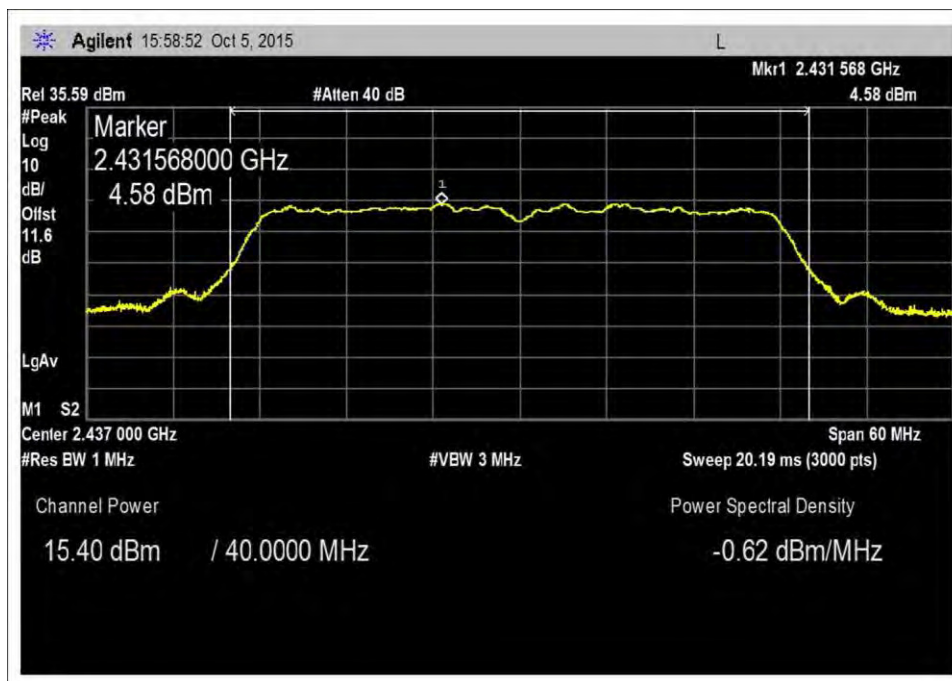


High Channel

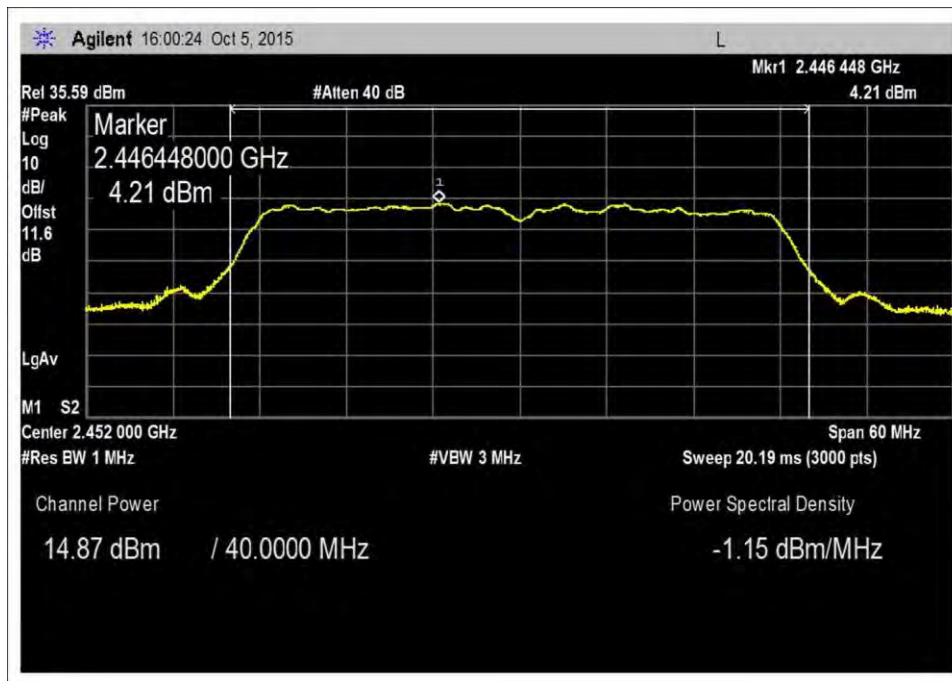
**802.11n HT40-Mode – 2132.5 GSM-Booster On**



Low Channel

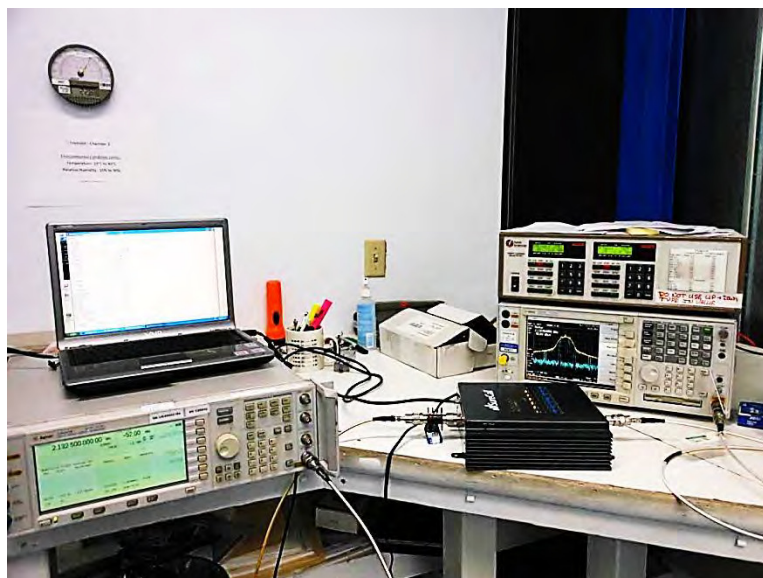


Middle Channel



High Channel

## Test Setup Photo



## 15.31(e) Voltage Variation

### Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.31e**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

#### Test Equipment:

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Test Conditions / Notes:

Application: MP\_TEST MFC version 1.3.8.0

Temperature: 22.0°C

Humidity: 39.6 %

Atmospheric Pressure: 100.5kPa

Highest Generation Frequency: 2.462 GHz

Attenuator = 63 at MAX Level

The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.

#### Attenuator for 802.11b Mode=32

The Data rate is at 2Mbps

**15.31(e) the RF output power was not changed when adjusting the voltage 120V down to 85% and up to 115%.**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.31e**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11g Mode=38**  
 The Data rate is at 54Mbps  
  
**15.31(e) the RF output power was not changed when adjusting the voltage 120V down to 85% and up to 115%.**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.31e**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT20 Mode=35**  
 The Data rate is at MCS0  
  
**15.31(e) the RF output power was not changed when adjusting the voltage 120V down to 85% and up to 115%.**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.31e**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

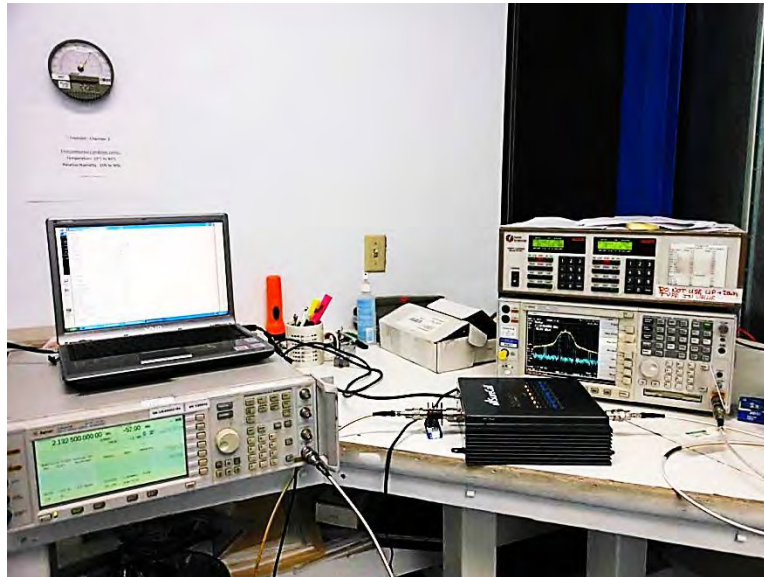
**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 Attenuator = 63 at MAX Level  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT40 Mode=32**  
 The Data rate is at MCS1  
  
**15.31(e) the RF output power was not changed when adjusting the voltage 120V down to 85% and up to 115%.**

### Test Setup Photo



## 15.247(e) Power Spectral Density

### Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(e) Peak Power Spectral Density (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

#### Test Equipment:

| ID | Asset # | Description       | Model                        | Calibration Date | Cal Due Date |
|----|---------|-------------------|------------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-<br>29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                    | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                       | 12/19/2013       | 12/19/2015   |

#### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

#### Test Conditions / Notes:

Application: MP\_TEST MFC version 1.3.8.0

Temperature: 22.0° C

Humidity: 39.6 %

Atmospheric Pressure: 100.5kPa

Highest Generation Frequency: 2.462 GHz

Attenuator = 63 at MAX Level

Test Method: KDB 558074 v03r03 section 10.2

RBW=3 kHz and VBW=10 kHz

The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.

**Attenuator for 802.11b Mode=32**

#### Results Table

| Frequency (MHz)     | Measured Power in (dBm/3kHz ) | Power Limit in (dBm/kHz) | Pass/Fail |
|---------------------|-------------------------------|--------------------------|-----------|
| 2412 Low Channel    | -10.24                        | 8                        | Pass      |
| 2437 Middle Channel | -10.58                        | 8                        | Pass      |
| 2462 High Channel   | -11.93                        | 8                        | Pass      |

The data rate is at 2Mbps when the RF output power is highest.

The Power Spectral Density measurements were made using the methods set out in KDB "558074 D01 DTS Meas Guidance v03r03", Section 10.2 Measurement Procedure PKPSD. The offset of the analyzer was set to correct for the cable and attenuator used during measurement.

The units are in dBm. The limit is 8dBm.

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(e) Peak Power Spectral Density (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application: MP_TEST MFC version 1.3.8.0<br><br>Temperature: 22.0°C<br>Humidity: 39.6 %<br>Atmospheric Pressure: 100.5kPa<br><br>Highest Generation Frequency: 2.462 GHz<br>Attenuator = 63 at MAX Level<br>Test Method: KDB 558074 v03r03 section 10.2<br>RBW=3 kHz and VBW=10 kHz<br><br>The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.<br><br><b>Attenuator for 802.11g Mode=38</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Results Table**

| Frequency (MHz)     | Measured Power in (dBm/3kHz ) | Power Limit in (dBm/kHz) | Pass/Fail |
|---------------------|-------------------------------|--------------------------|-----------|
| 2412 Low Channel    | -11.64                        | 8                        | Pass      |
| 2437 Middle Channel | -11.77                        | 8                        | Pass      |
| 2462 High Channel   | -13.22                        | 8                        | Pass      |

The data rate is at 54Mbps when the RF output power is highest

The Power Spectral Density measurements were made using the methods set out in KDB "558074 D01 DTS Meas Guidance v03r03", Section 10.2 Measurement Procedure PKPSD. The offset of the analyzer was set to correct for the cable and attenuator used during measurement.

The units are in dBm. The limit is 8dBm.

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(e) Peak Power Spectral Density (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application: MP_TEST MFC version 1.3.8.0<br><br>Temperature: 22.0° C<br>Humidity: 39.6 %<br>Atmospheric Pressure: 100.5kPa<br><br>Highest Generation Frequency: 2.462 GHz<br>Attenuator = 63 at MAX Level<br>Test Method: KDB 558074 v03r03 section 10.2<br>RBW=3 kHz and VBW=10 kHz<br><br>The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.<br><br><b>Attenuator for 802.11n HT20 Mode=35</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Results Table**

| Frequency (MHz)     | Measured Power in (dBm/3kHz ) | Power Limit in (dBm/kHz) | Pass/Fail |
|---------------------|-------------------------------|--------------------------|-----------|
| 2412 Low Channel    | -14.48                        | 8                        | Pass      |
| 2437 Middle Channel | -14.88                        | 8                        | Pass      |
| 2462 High Channel   | -15.93                        | 8                        | Pass      |

The data rate is at MCS0 when the RF output power is highest

The Power Spectral Density measurements were made using the methods set out in KDB "558074 D01 DTS Meas Guidance v03r03", Section 10.2 Measurement Procedure PKPSD. The offset of the analyzer was set to correct for the cable and attenuator used during measurement.

The units are in dBm. The limit is 8dBm.

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(e) Peak Power Spectral Density (2400-2483.5 MHz DTS)**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
| T2 | P06467  | Attenuator        | PE7014-10                | 5/13/2015        | 5/13/2017    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application: MP_TEST MFC version 1.3.8.0<br><br>Temperature: 22.0°C<br>Humidity: 39.6 %<br>Atmospheric Pressure: 100.5kPa<br><br>Highest Generation Frequency: 2.462 GHz<br>Attenuator = 63 at MAX Level<br>Test Method: KDB 558074 v03r03 section 10.2<br>RBW=3 kHz and VBW=10 kHz<br><br>The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT. The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.<br><br><b>Attenuator for 802.11n HT40 Mode=32</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Results Table**

| Frequency (MHz)     | Measured Power in (dBm/3kHz ) | Power Limit in (dBm/kHz) | Pass/Fail |
|---------------------|-------------------------------|--------------------------|-----------|
| 2422 Low Channel    | -18.56                        | 8                        | Pass      |
| 2437 Middle Channel | -18.17                        | 8                        | Pass      |
| 2452 High Channel   | -19.67                        | 8                        | Pass      |

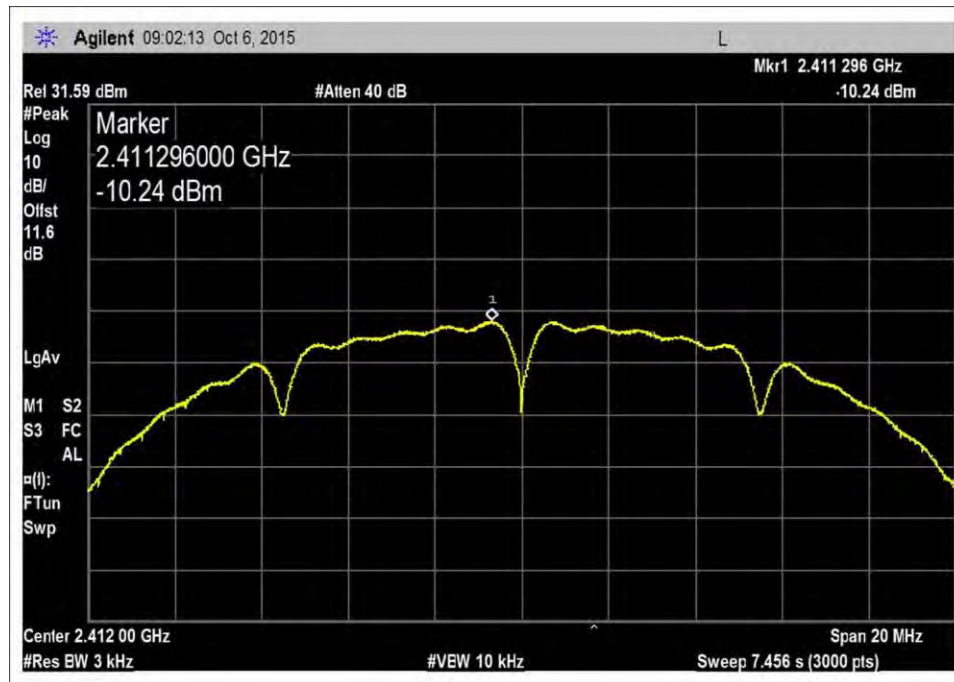
The data rate is at MCS1 when the RF output power is highest

The Power Spectral Density measurements were made using the methods set out in KDB "558074 D01 DTS Meas Guidance v03r03", Section 10.2 Measurement Procedure PKPSD. The offset of the analyzer was set to correct for the cable and attenuator used during measurement.

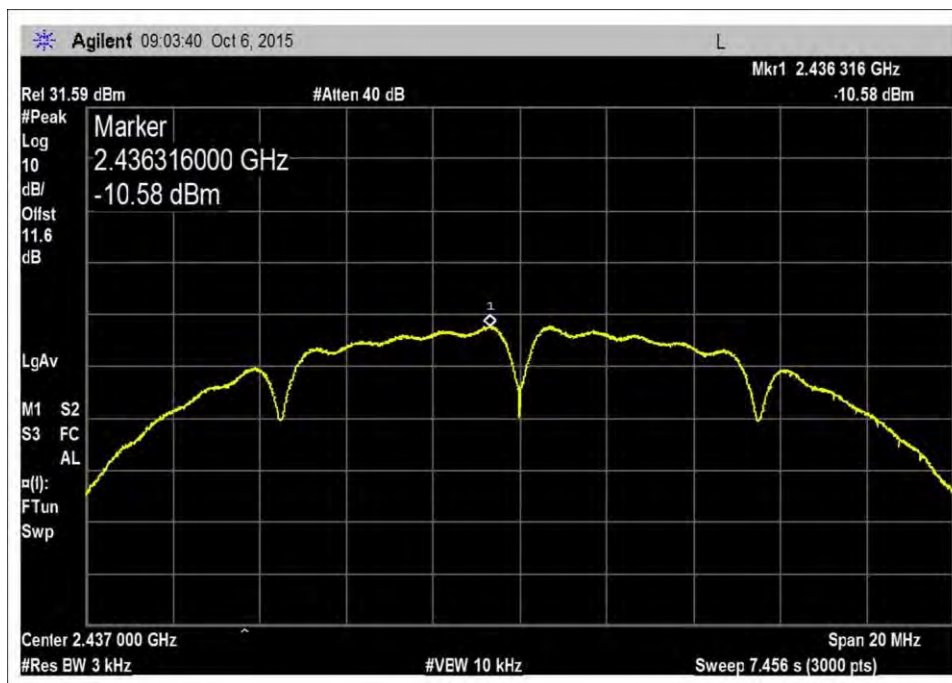
The units are in dBm. The limit is 8dBm.

## Test Data

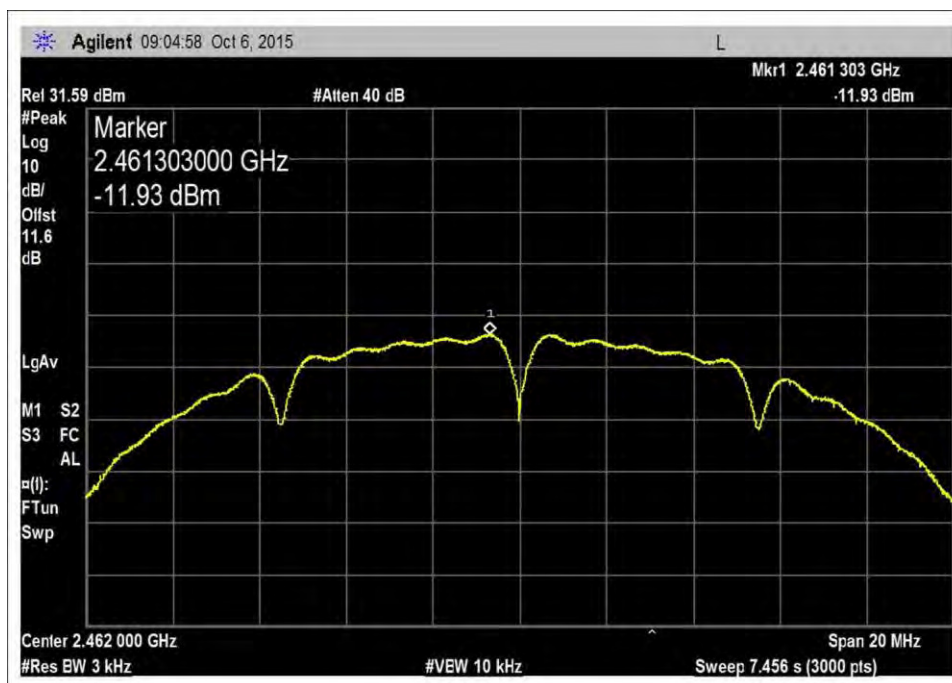
### 802.11b - Mode



Low Channel

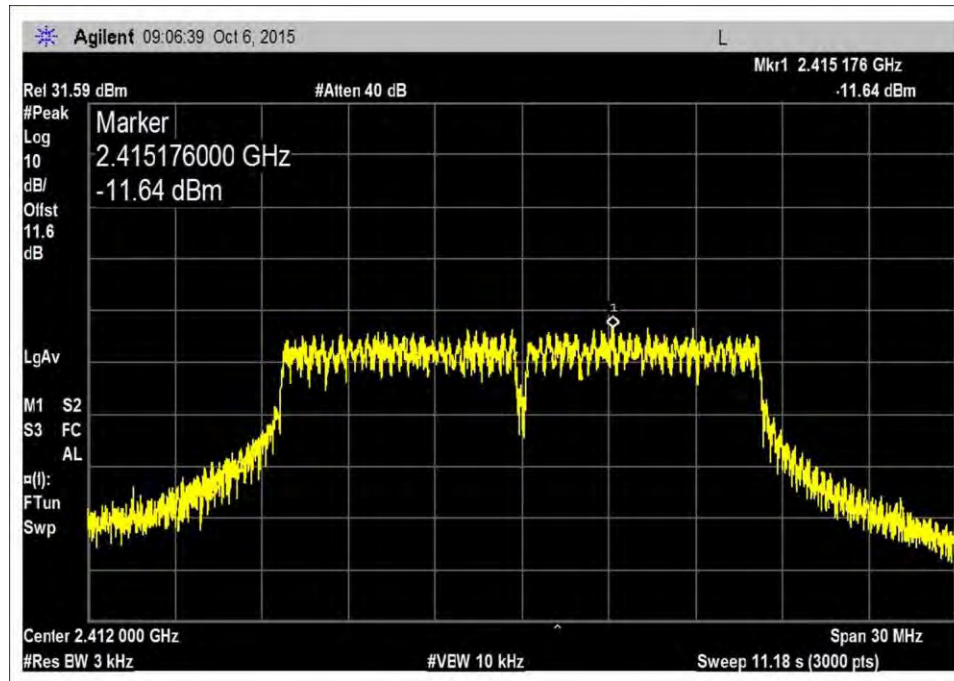


Middle Channel

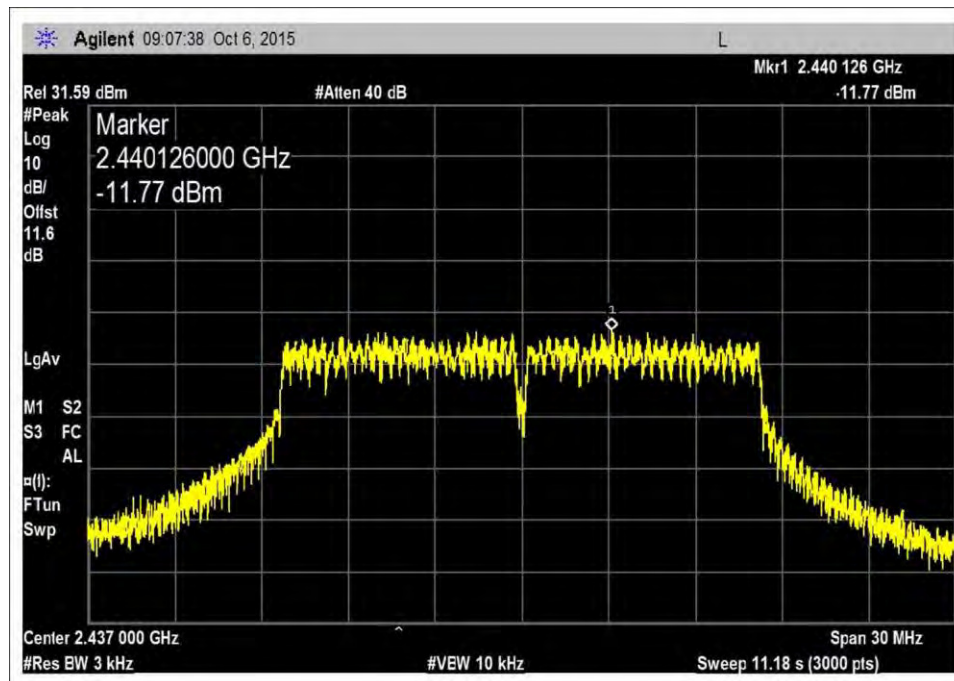


High Channel

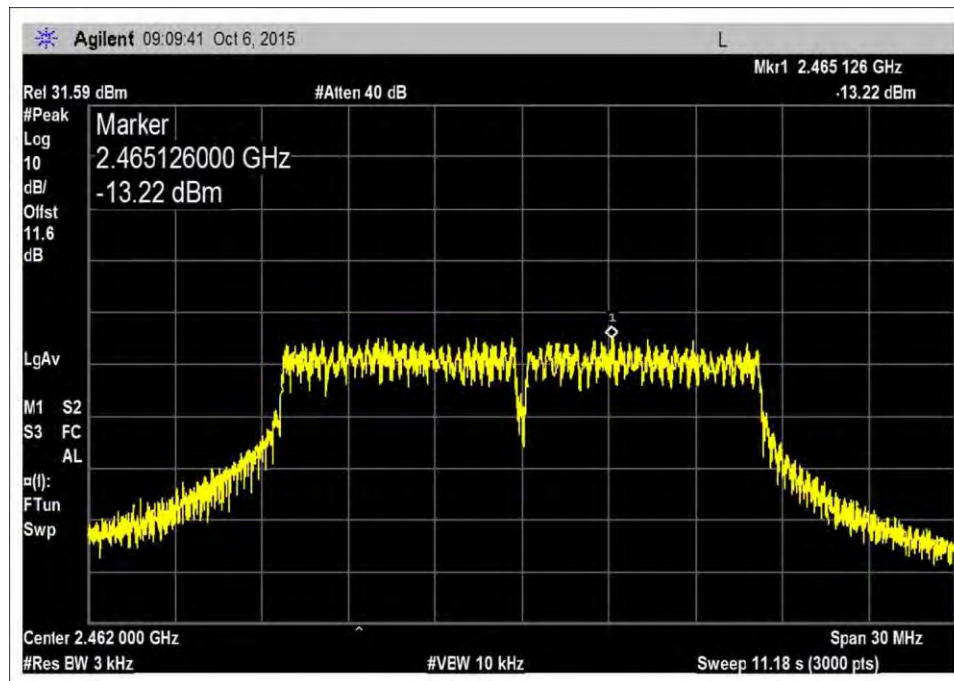
## 802.11g- Mode



Low Channel

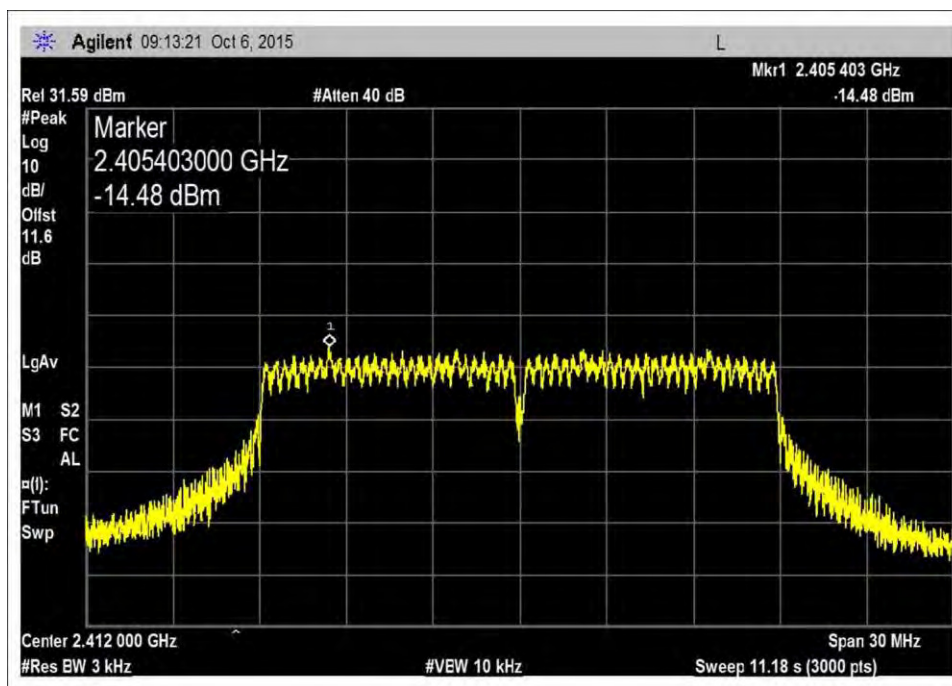


Middle Channel

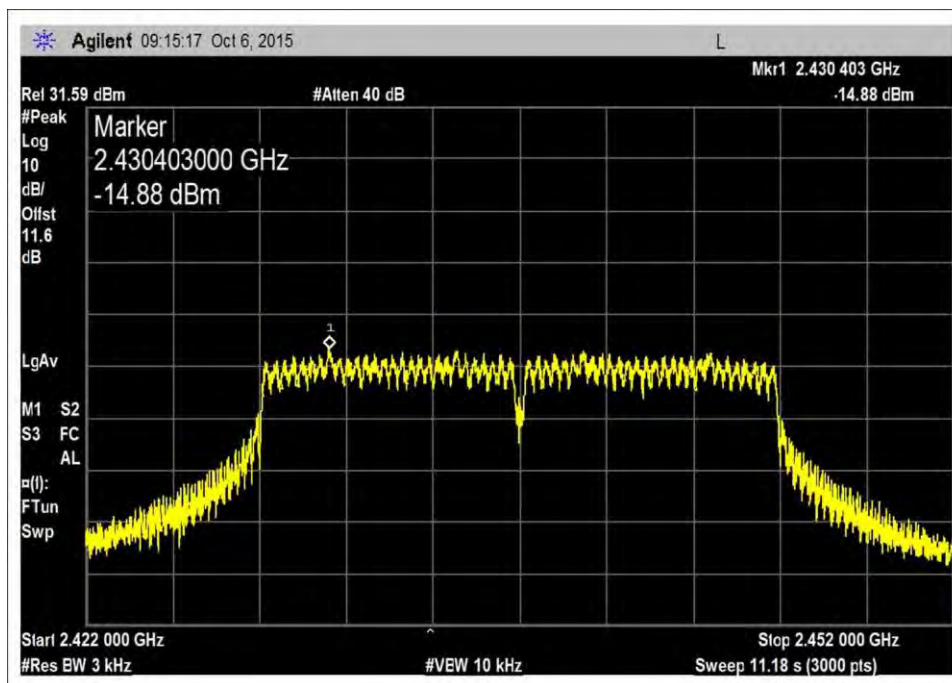


High Channel

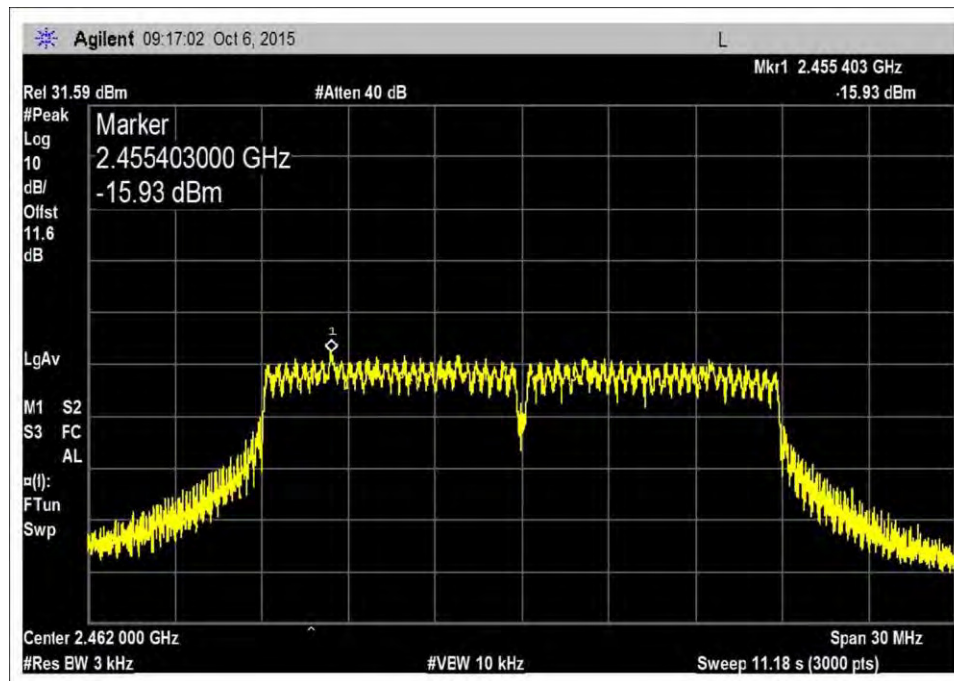
### 802.11n HT20 – Mode



Low Channel

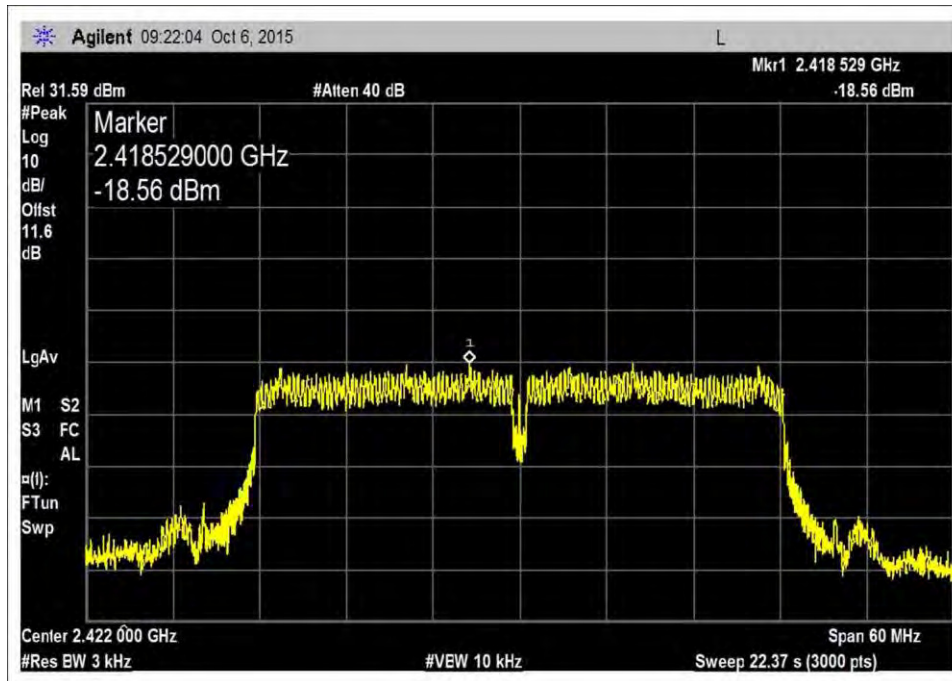


Middle Channel

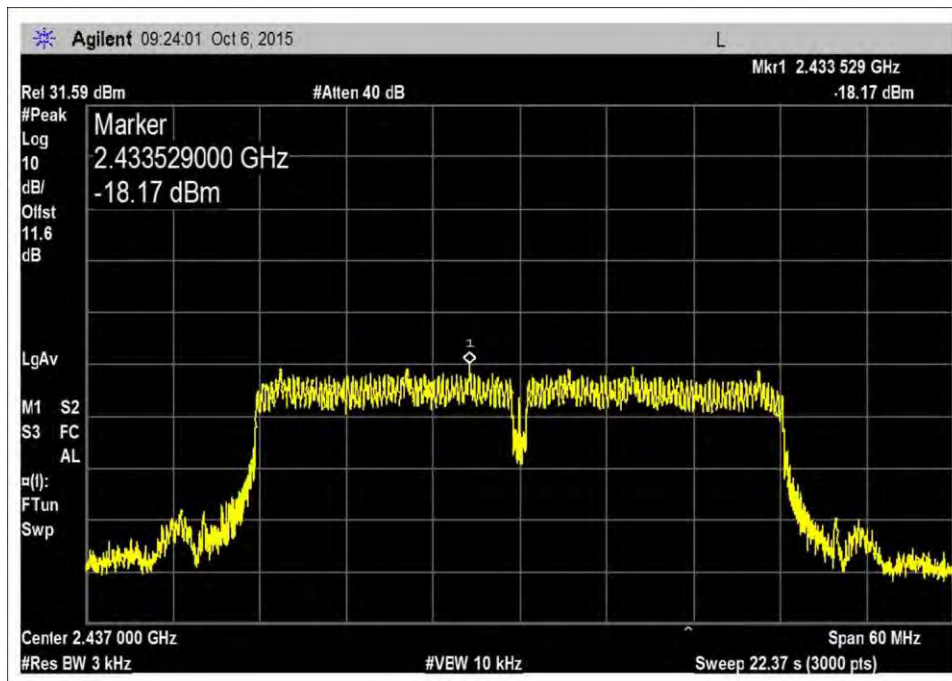


High Channel

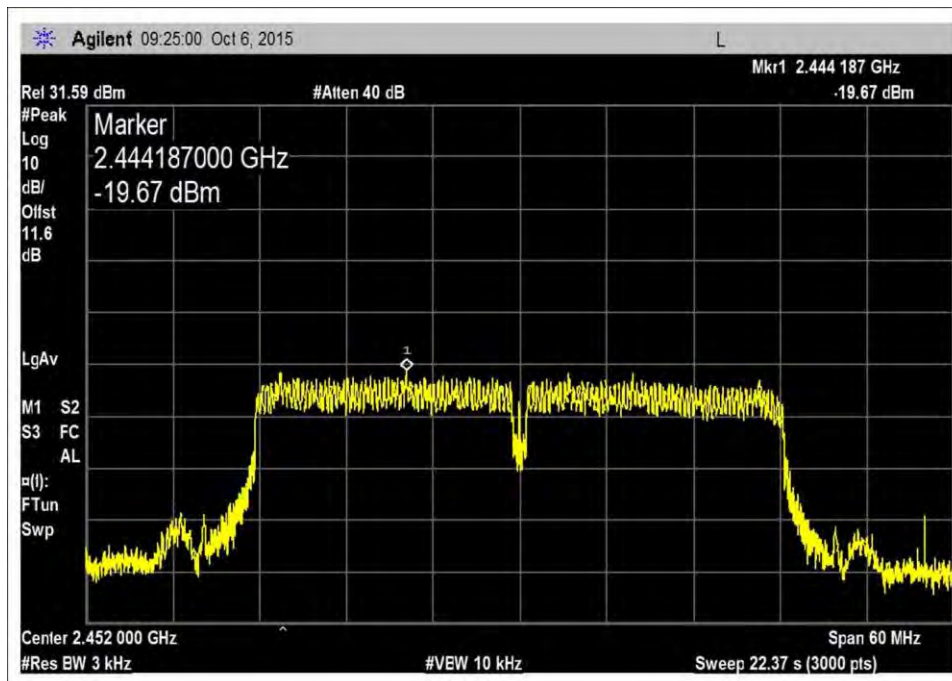
### 802.11n HT40 - Mode



Low Channel

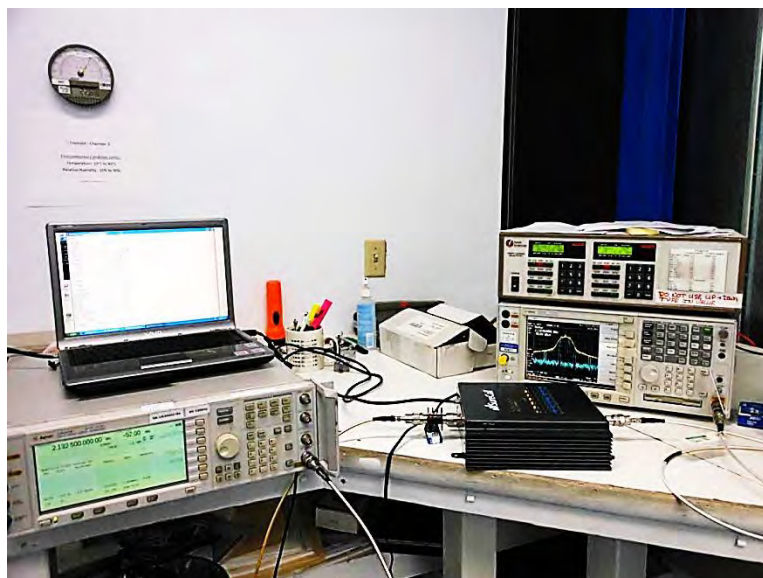


Middle Channel



High Channel

## Test Setup Photo



## 15.247(d) Conducted Emissions & Band Edge

### Test Setup / Conditions

The Reference level measurement for Emission in non restricted frequency bands were made using the methods set out in KDB "558074 D01 DTS Meas Guidance v03r03", Section 11 Emissions in non-restricted frequency band.  
NOTE: The Reference Level is the limit line for Conducted Spurious Emission for Non-Restricted Frequency Band.

#### 802.11b Mode

| Reference Limit in 100kHz |               |                |                      |
|---------------------------|---------------|----------------|----------------------|
| Channel                   | dBm in 100kHz | dBuV in 100kHz | Reference Limit dBuV |
| Low                       | 9.42          | 116.42         | 96.42                |
| Middle                    | 8.92          | 115.92         | 95.92                |
| High                      | 7.45          | 114.45         | 94.45                |

The Data rate =2Mbps. Set attenuator at 32.

#### 802.11g Mode

| Reference Limit in 100kHz |               |                |                      |
|---------------------------|---------------|----------------|----------------------|
| Channel                   | dBm in 100kHz | dBuV in 100kHz | Reference Limit dBuV |
| Low                       | 1.59          | 108.59         | 88.59                |
| Middle                    | 1.62          | 108.62         | 88.62                |
| High                      | 0.62          | 107.62         | 87.62                |

The Data rate =54Mbps. Set attenuator at 38.

#### 802.11n HT20 Mode

| Reference Limit in 100kHz |               |                |                      |
|---------------------------|---------------|----------------|----------------------|
| Channel                   | dBm in 100kHz | dBuV in 100kHz | Reference Limit dBuV |
| Low                       | -1.38         | 105.62         | 85.62                |
| Middle                    | -1.63         | 105.37         | 85.37                |
| High                      | -2.67         | 104.33         | 84.33                |

The Data rate =MCS0. Set attenuator at 35.

#### 802.11n HT40 Mode

| Reference Limit in 100kHz |               |                |                      |
|---------------------------|---------------|----------------|----------------------|
| Channel                   | dBm in 100kHz | dBuV in 100kHz | Reference Limit dBuV |
| Low                       | -6.3          | 100.7          | 80.7                 |
| Middle                    | -6.77         | 100.23         | 80.23                |
| High                      | -6.76         | 100.24         | 80.24                |

The Data rate =MCS1. Set attenuator at 32.

Worst case for the limit for all modes: **80.24dBuV**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 10:48:11 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 3  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

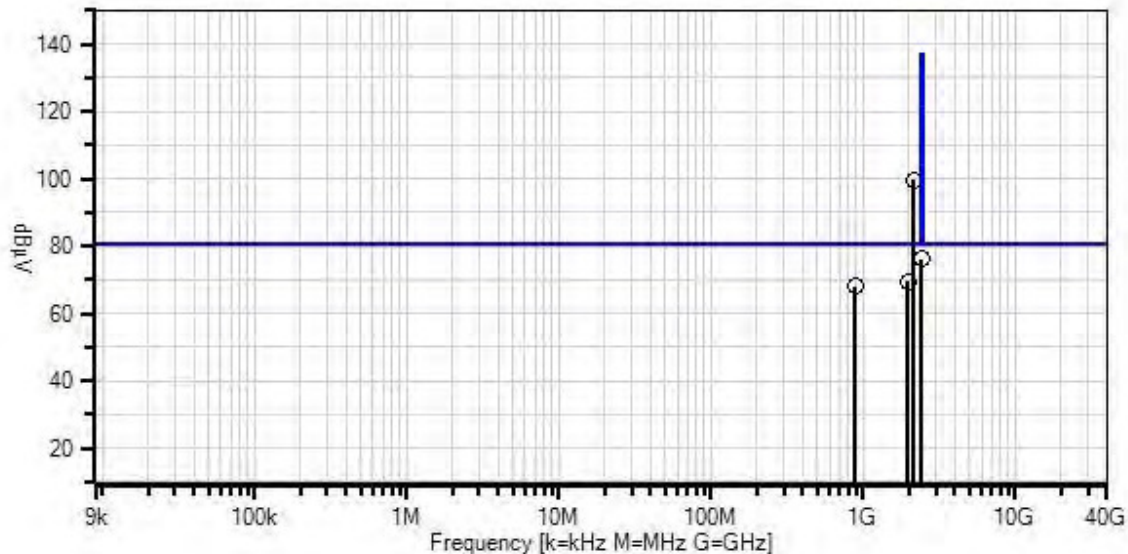
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2 Mbps<br/>         Attenuator for 802.11b Mode = 32</p> <p><b>Low Channel</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 10:48:11 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 3



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

#### Test Equipment:

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Measurement Data:

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|---------------|--------------|--------------|--------------|--------------|
| 1 | 2131.975M   | 88.9         | +9.9     | +1.0     | +0.0          | 99.8         | 80.4         | +19.4        | None         |
| 2 | 2396.771M   | 65.1         | +9.9     | +1.1     | +0.0          | 76.1         | 80.4         | -4.3         | None         |
| 3 | 1962.928M   | 58.6         | +9.9     | +1.0     | +0.0          | 69.5         | 80.4         | -10.9        | None         |
| 4 | 885.338M    | 57.3         | +9.9     | +0.7     | +0.0          | 67.9         | 80.4         | -12.5        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:11:24 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 4  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

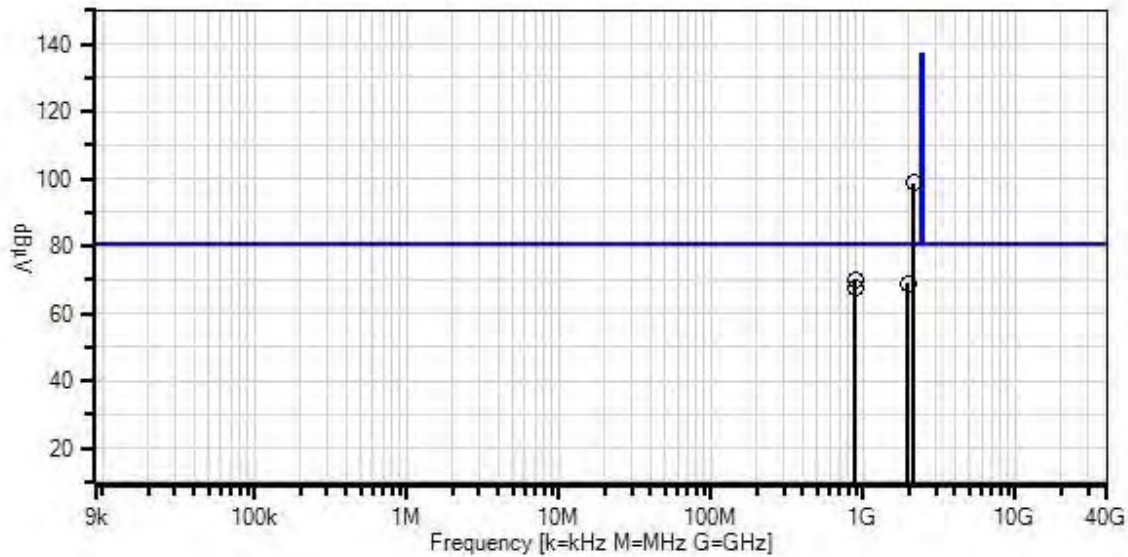
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2 Mbps<br/>         Attenuator for 802.11b Mode = 32</p> <p><b>Middle Channel</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:11:24 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 4



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|---------------|--------------|--------------|--------------|--------------|
| 1 | 2131.448M   | 87.8         | +9.9     | +1.0     | +0.0          | 98.7         | 80.4         | +18.3        | None         |
| 2 | 884.944M    | 59.2         | +9.9     | +0.7     | +0.0          | 69.8         | 80.4         | -10.6        | None         |
| 3 | 1963.872M   | 58.0         | +9.9     | +1.0     | +0.0          | 68.9         | 80.4         | -11.5        | None         |
| 4 | 889.289M    | 57.2         | +9.9     | +0.7     | +0.0          | 67.8         | 80.4         | -12.6        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:18:17 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 5  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

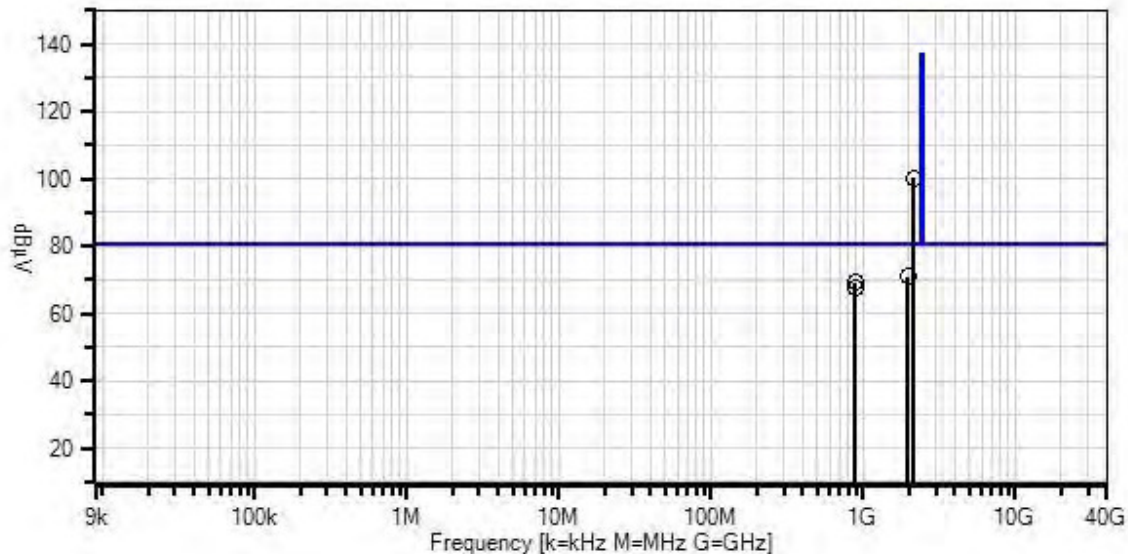
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11b Mode</b><br/>         Data rate = 2 Mbps<br/>         Attenuator for 802.11b Mode = 32</p> <p><b>High Channel</b></p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:18:17 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 5



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 2134.440M   | 89.4         | +9.9     | +1.0     |    |    | +0.0          | 100.3        | 80.4         | +19.9        | None         |
| 2 | 1963.872M   | 60.0         | +9.9     | +1.0     |    |    | +0.0          | 70.9         | 80.4         | -9.5         | None         |
| 3 | 884.944M    | 58.5         | +9.9     | +0.7     |    |    | +0.0          | 69.1         | 80.4         | -11.3        | None         |
| 4 | 889.289M    | 57.0         | +9.9     | +0.7     |    |    | +0.0          | 67.6         | 80.4         | -12.8        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:33:17 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 6  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

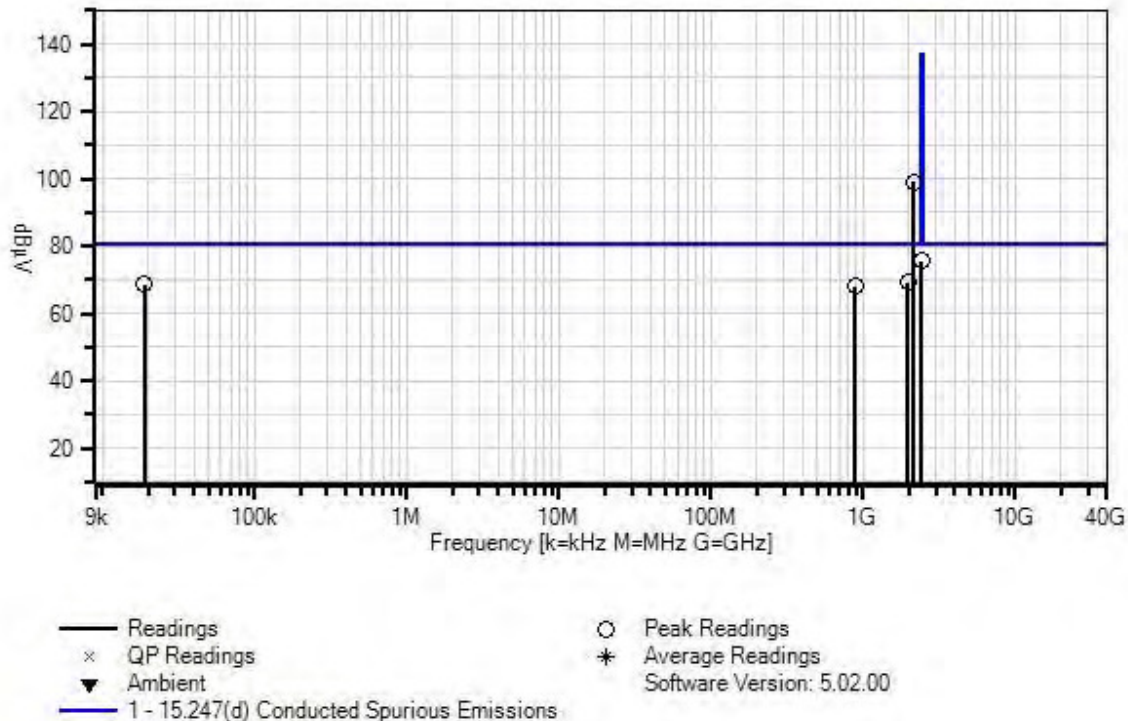
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conducted Spurious Emission<br>Frequency Range: 9kHz to 25GHz<br><br>Temperature: 22.0° C<br>Humidity: 39.6 %<br>Atmospheric Pressure: 100.5kPa<br><br>Highest Generation Frequency: 2.462GHz<br>RBW=100 kHz and VBW=300kHz<br>Attenuator = 63 at MAX Level<br>Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11<br><br>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br>A remotely located signal generator is connected to input port of EUT.<br>The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.<br><br><b>802.11g Mode</b><br>Data rate =54 Mbps<br>Attenuator for 802.11g Mode=38<br><b>Low Channel</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:33:17 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 6



#### Test Equipment:

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Measurement Data:

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|---------------|--------------|--------------|--------------|--------------|
| 1 | 2131.448M   | 88.1         | +9.9     | +1.0     | +0.0          | 99.0         | 80.4         | +18.6        | None         |
| 2 | 2397.773M   | 64.7         | +9.9     | +1.1     | +0.0          | 75.7         | 80.4         | -4.7         | None         |
| 3 | 1963.872M   | 58.2         | +9.9     | +1.0     | +0.0          | 69.1         | 80.4         | -11.3        | None         |
| 4 | 18.983k     | 58.9         | +9.8     | +0.0     | +0.0          | 68.7         | 80.4         | -11.7        | None         |
| 5 | 884.944M    | 57.4         | +9.9     | +0.7     | +0.0          | 68.0         | 80.4         | -12.4        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:39:36 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 7  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

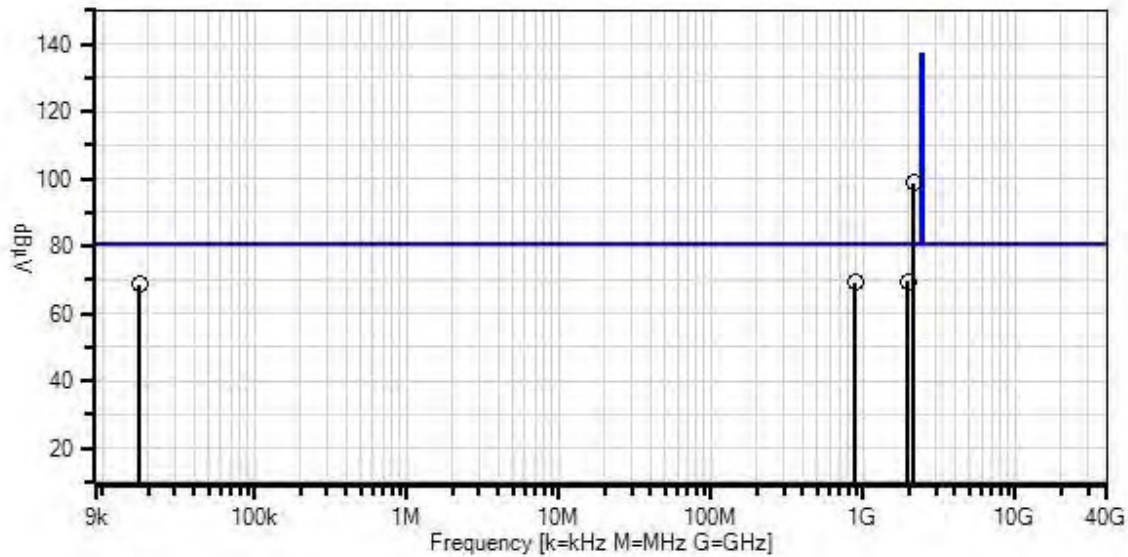
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11g Mode</b><br/>         Data rate = 54 Mbps<br/>         Attenuator for 802.11g Mode = 38</p> <p><b>Middle Channel</b></p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:39:36 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 7



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

#### Test Equipment:

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Measurement Data:

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 2134.440M   | 87.8         | +9.9     | +1.0     |    |    | +0.0          | 98.7         | 80.4         | +18.3        | None         |
| 2 | 1963.872M   | 58.5         | +9.9     | +1.0     |    |    | +0.0          | 69.4         | 80.4         | -11.0        | None         |
| 3 | 882.337M    | 58.6         | +9.9     | +0.7     |    |    | +0.0          | 69.2         | 80.4         | -11.2        | None         |
| 4 | 17.707k     | 58.9         | +9.8     | +0.0     |    |    | +0.0          | 68.7         | 80.4         | -11.7        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:45:47 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 8  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

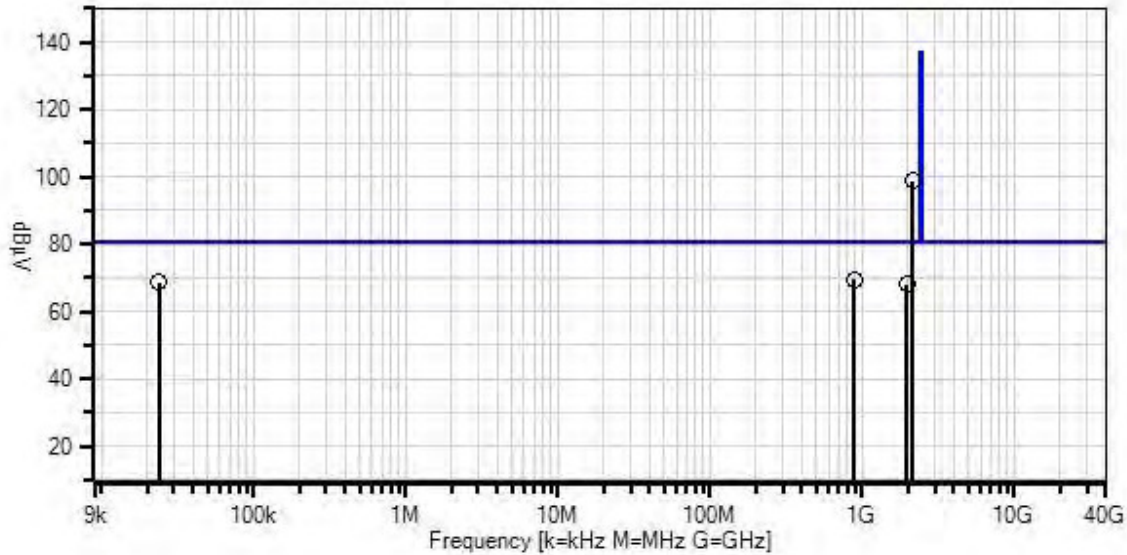
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11g Mode</b><br/>         Data rate = 54 Mbps<br/>         Attenuator for 802.11g Mode = 38</p> <p><b>High Channel</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:45:47 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 8



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV          | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|-----------------------|--------------|--------------|
| 1 | 2131.448M   | 87.9         | +9.9     | +1.0     |    |    | +0.0          | 98.8         | 80.4                  | +18.4        | None         |
|   |             |              |          |          |    |    |               |              | 4.1MHz AWGN<br>Signal |              |              |
| 2 | 885.813M    | 59.0         | +9.9     | +0.7     |    |    | +0.0          | 69.6         | 80.4                  | -10.8        | None         |
| 3 | 24.085k     | 58.9         | +9.8     | +0.0     |    |    | +0.0          | 68.7         | 80.4                  | -11.7        | None         |
| 4 | 1963.872M   | 57.0         | +9.9     | +1.0     |    |    | +0.0          | 67.9         | 80.4                  | -12.5        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 11:54:11 AM  
 Tested By: Hieu Song Nguyenpham Sequence#: 9  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

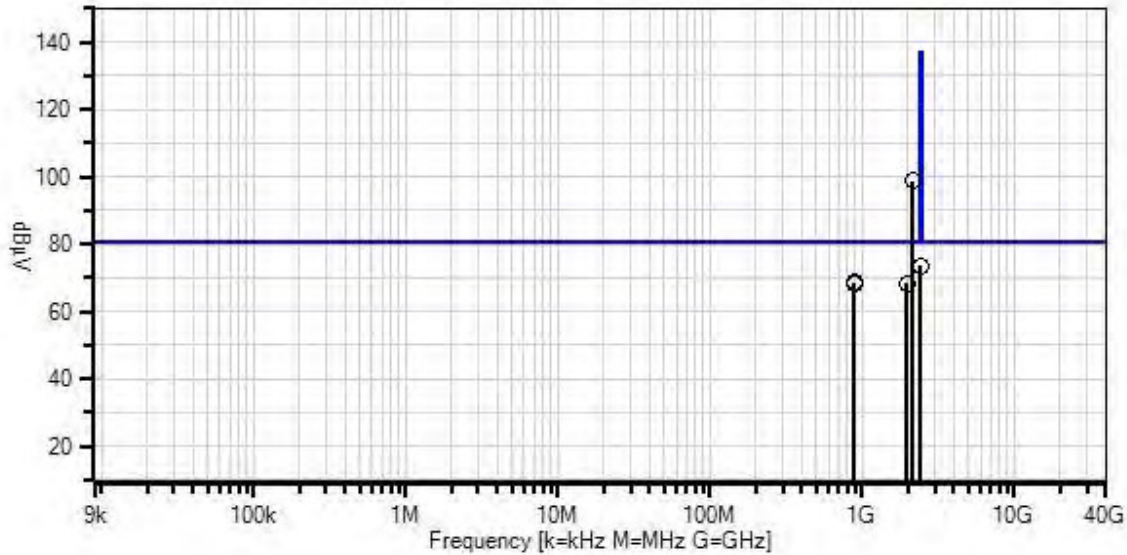
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT20 Mode</b><br/>         Data rate =MCS0<br/>         Attenuator for 802.11n HT20 Mode=35</p> <p><b>Low Channel</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 11:54:11 AM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 9



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 2134.440M   | 87.8         | +9.9     | +1.0     |    |    | +0.0          | 98.7         | 80.4         | +18.3        | None         |
| 2 | 2397.773M   | 62.5         | +9.9     | +1.1     |    |    | +0.0          | 73.5         | 80.4         | -6.9         | None         |
| 3 | 888.420M    | 58.0         | +9.9     | +0.7     |    |    | +0.0          | 68.6         | 80.4         | -11.8        | None         |
| 4 | 884.944M    | 57.8         | +9.9     | +0.7     |    |    | +0.0          | 68.4         | 80.4         | -12.0        | None         |
| 5 | 1963.872M   | 57.5         | +9.9     | +1.0     |    |    | +0.0          | 68.4         | 80.4         | -12.0        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 12:01:27 PM  
 Tested By: Hieu Song Nguyenpham Sequence#: 10  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

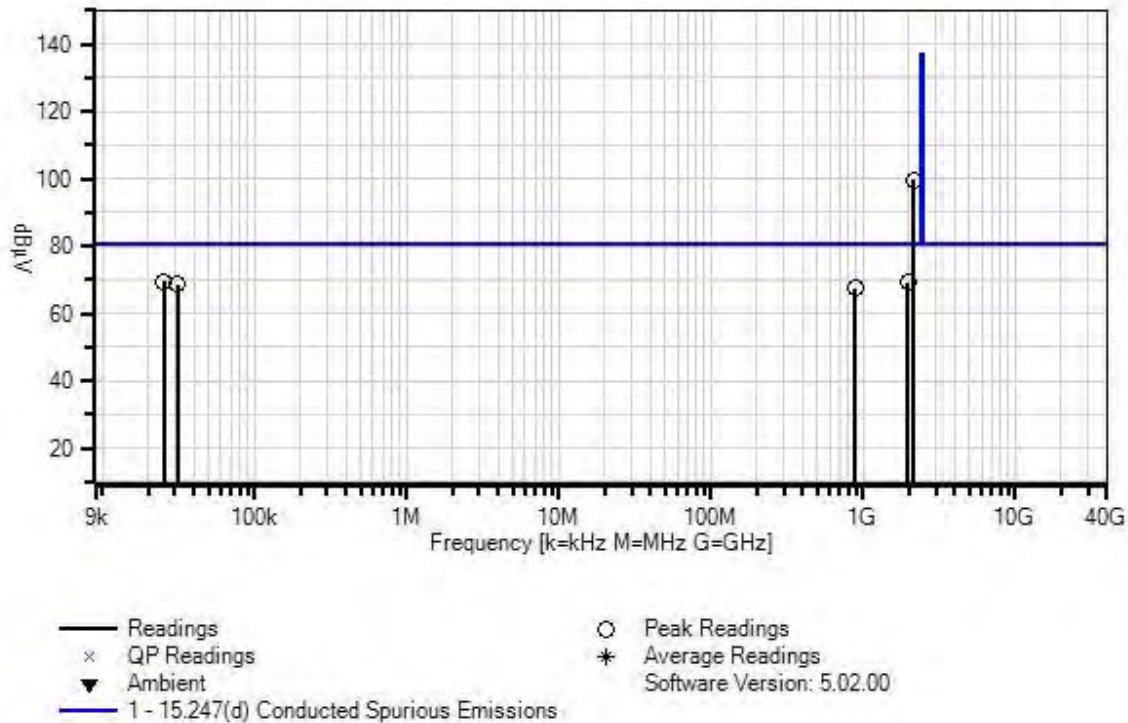
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT20 Mode</b><br/>         Data rate = MCS0<br/>         Attenuator for 802.11n HT20 Mode=35</p> <p><b>Middle Channel</b></p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 12:01:27 PM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 10



#### Test Equipment:

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

#### Measurement Data:

Reading listed by margin.

Test Distance: None

| #                  | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|--------------------|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1                  | 2134.440M   | 88.8         | +9.9     | +1.0     |    |    | +0.0          | 99.7         | 80.4         | +19.3        | None         |
| 4.1MHz AWGN Signal |             |              |          |          |    |    |               |              |              |              |              |
| 2                  | 25.317k     | 59.6         | +9.8     | +0.0     |    |    | +0.0          | 69.4         | 80.4         | -11.0        | None         |
| 3                  | 1963.872M   | 58.2         | +9.9     | +1.0     |    |    | +0.0          | 69.1         | 80.4         | -11.3        | None         |
| 4                  | 31.141k     | 58.7         | +9.8     | +0.0     |    |    | +0.0          | 68.5         | 80.4         | -11.9        | None         |
| 5                  | 884.944M    | 57.0         | +9.9     | +0.7     |    |    | +0.0          | 67.6         | 80.4         | -12.8        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 12:08:08 PM  
 Tested By: Hieu Song Nguyenpham Sequence#: 11  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

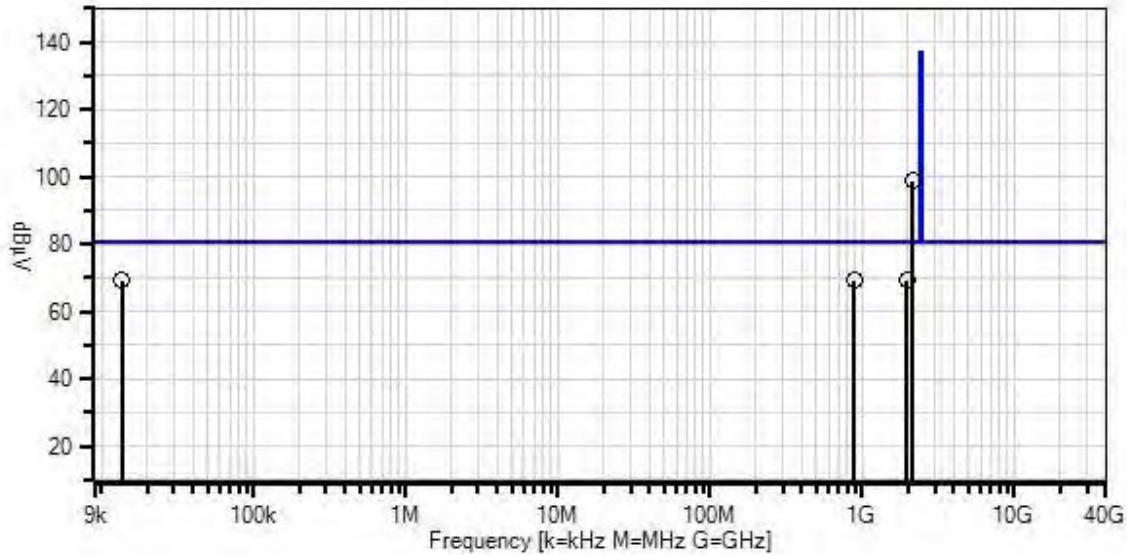
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT20 Mode</b><br/>         Data rate = MCS0<br/>         Attenuator for 802.11n HT20 Mode=35</p> <p><b>High Channel</b></p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 12:08:08 PM Cellphone-Mate, Inc W/O#: 97491  
Test Distance: None Sequence#: 11



— Readings  
× QP Readings  
▼ Ambient  
— 1 - 15.247(d) Conducted Spurious Emissions  
○ Peak Readings  
\* Average Readings  
Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 2134.440M   | 88.0         | +9.9     | +1.0     |    |    | +0.0          | 98.9         | 80.4         | +18.5        | None         |
| 2 | 1963.872M   | 58.3         | +9.9     | +1.0     |    |    | +0.0          | 69.2         | 80.4         | -11.2        | None         |
| 3 | 13.793k     | 59.4         | +9.8     | +0.0     |    |    | +0.0          | 69.2         | 80.4         | -11.2        | None         |
| 4 | 884.944M    | 58.5         | +9.9     | +0.7     |    |    | +0.0          | 69.1         | 80.4         | -11.3        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 1:11:19 PM  
 Tested By: Hieu Song Nguyenpham Sequence#: 12  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

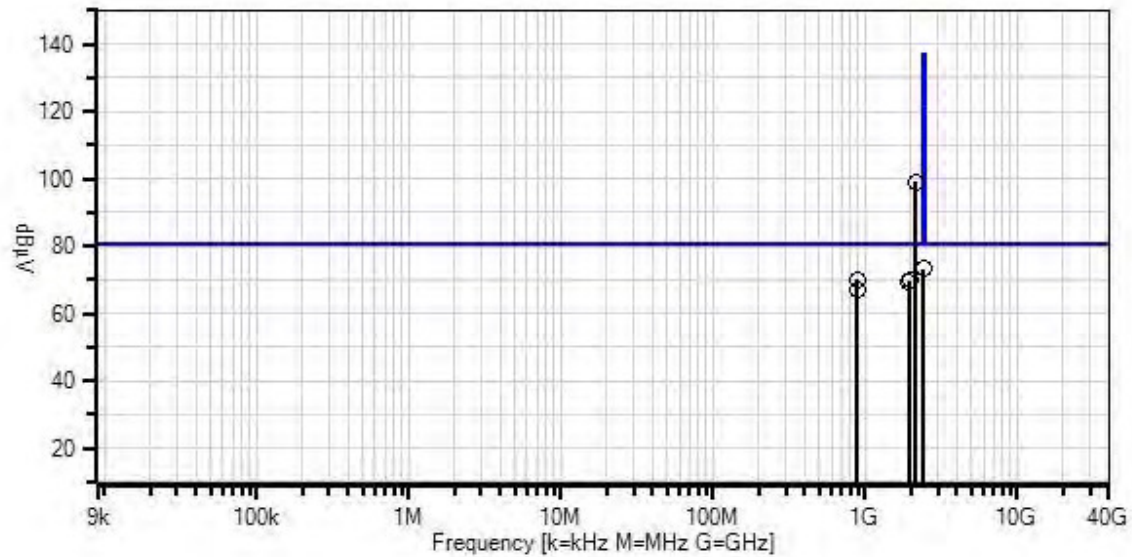
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT40 Mode</b><br/>         Data rate =MCS1<br/>         Attenuator for 802.11n HT40 Mode=32</p> <p><b>Low Channel</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 1:11:19 PM Cellphone-Mate, Inc WO#: 97491  
 Test Distance: None Sequence#: 12



— Readings  
 × QP Readings  
 ▼ Ambient  
 — 1 - 15.247(d) Conducted Spurious Emissions

○ Peak Readings  
 \* Average Readings  
 Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB |  |  | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV          | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|--|--|---------------|--------------|-----------------------|--------------|--------------|
| 1 | 2131.448M   | 88.2         | +9.9     | +1.0     |  |  | +0.0          | 99.1         | 80.4                  | +18.7        | None         |
|   |             |              |          |          |  |  |               |              | 4.1MHz AWGN<br>Signal |              |              |
| 2 | 2397.773M   | 62.4         | +9.9     | +1.1     |  |  | +0.0          | 73.4         | 80.4                  | -7.0         | None         |
| 3 | 885.813M    | 59.5         | +9.9     | +0.7     |  |  | +0.0          | 70.1         | 80.4                  | -10.3        | None         |
| 4 | 1963.872M   | 59.0         | +9.9     | +1.0     |  |  | +0.0          | 69.9         | 80.4                  | -10.5        | None         |
| 5 | 1936.940M   | 58.3         | +9.9     | +1.0     |  |  | +0.0          | 69.2         | 80.4                  | -11.2        | None         |
| 6 | 889.289M    | 56.7         | +9.9     | +0.7     |  |  | +0.0          | 67.3         | 80.4                  | -13.1        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 1:29:44 PM  
 Tested By: Hieu Song Nguyenpham Sequence#: 13  
 Software: EMITest 5.02.00

***Equipment Tested:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

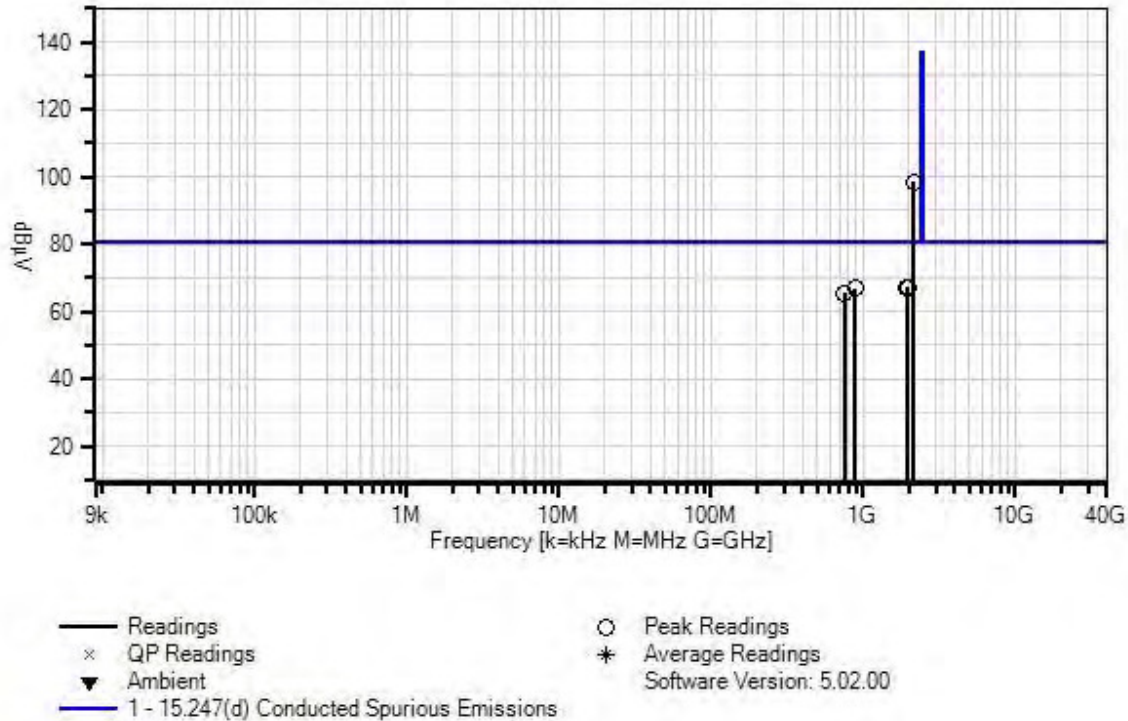
***Support Equipment:***

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

***Test Conditions / Notes:***

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0° C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT40 Mode</b><br/>         Data rate =MCS1<br/>         Attenuator for 802.11n HT40 Mode=32</p> <p><b>Middle Channel</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 1:29:44 PM Cellphone-Mate, Inc WO#: 97491  
Test Distance: None Sequence#: 13



**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | dB | dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----|----|---------------|--------------|--------------|--------------|--------------|
| 1 | 2131.448M   | 87.5         | +9.9     | +1.0     |    |    | +0.0          | 98.4         | 80.4         | +18.0        | None         |
| 2 | 1963.872M   | 56.2         | +9.9     | +1.0     |    |    | +0.0          | 67.1         | 80.4         | -13.3        | None         |
| 3 | 1936.940M   | 56.0         | +9.9     | +1.0     |    |    | +0.0          | 66.9         | 80.4         | -13.5        | None         |
| 4 | 883.206M    | 56.2         | +9.9     | +0.7     |    |    | +0.0          | 66.8         | 80.4         | -13.6        | None         |
| 5 | 747.633M    | 54.8         | +9.9     | +0.7     |    |    | +0.0          | 65.4         | 80.4         | -15.0        | None         |

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **97491** Date: 10/6/2015  
 Test Type: **Conducted Spurious Emission** Time: 1:35:58 PM  
 Tested By: Hieu Song Nguyenpham Sequence#: 14  
 Software: EMITest 5.02.00

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

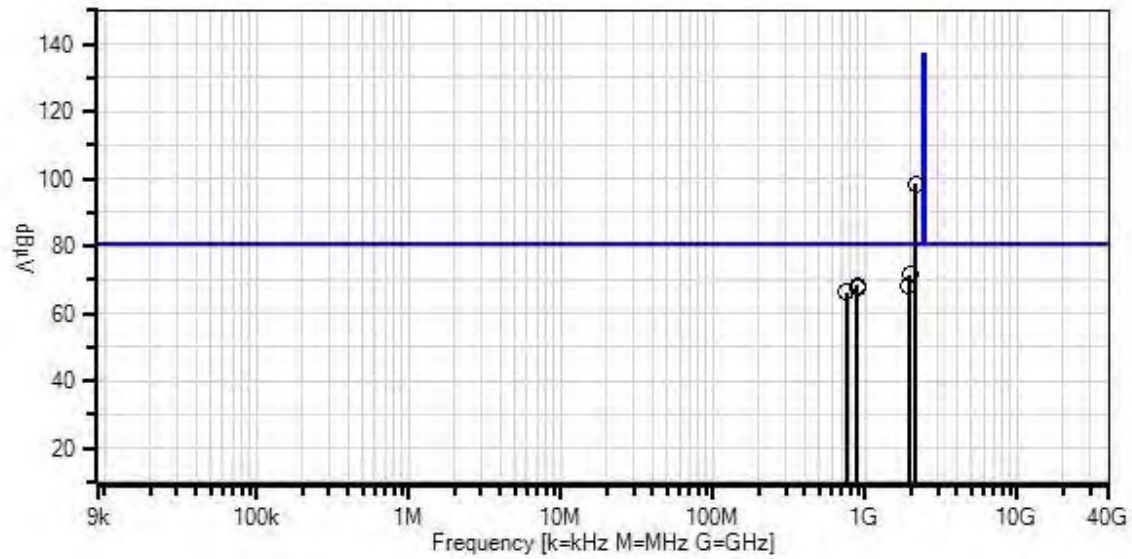
**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Conducted Spurious Emission<br/>         Frequency Range: 9kHz to 25GHz</p> <p>Temperature: 22.0°C<br/>         Humidity: 39.6 %<br/>         Atmospheric Pressure: 100.5kPa</p> <p>Highest Generation Frequency: 2.462GHz<br/>         RBW=100 kHz and VBW=300kHz<br/>         Attenuator = 63 at MAX Level<br/>         Method: KDB 558074 D01 DTS Meas Guidance v03r03 Section 11</p> <p>The equipment under test (EUT) is placed on the table top. The EUT set at maximum gain.<br/>         A remotely located signal generator is connected to input port of EUT.<br/>         The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.</p> <p><b>802.11n HT40 Mode</b><br/>         Data rate =MCS1<br/>         Attenuator for 802.11n HT40 Mode=32</p> <p><b>High Channel</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CKC Laboratories, Inc Date: 10/6/2015 Time: 1:35:58 PM Cellphone-Mate, Inc WO#: 97491  
 Test Distance: None Sequence#: 14



— Readings  
 × QP Readings  
 ▼ Ambient  
 — 1 - 15.247(d) Conducted Spurious Emissions  
 ○ Peak Readings  
 \* Average Readings  
 Software Version: 5.02.00

**Test Equipment:**

| ID | Asset #/Serial # | Description                 | Model                    | Calibration Date | Cal Due Date |
|----|------------------|-----------------------------|--------------------------|------------------|--------------|
| T1 | ANP06239         | Attenuator                  | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | ANP06710         | Cable                       | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | AN03471          | RF Characteristics Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Measurement Data:**

Reading listed by margin.

Test Distance: None

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB |  |  | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV          | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|--|--|---------------|--------------|-----------------------|--------------|--------------|
| 1 | 2131.448M   | 87.5         | +9.9     | +1.0     |  |  | +0.0          | 98.4         | 80.4                  | +18.0        | None         |
|   |             |              |          |          |  |  |               |              | 4.1MHz AWGN<br>Signal |              |              |
| 2 | 1963.872M   | 60.6         | +9.9     | +1.0     |  |  | +0.0          | 71.5         | 80.4                  | -8.9         | None         |
| 3 | 882.337M    | 57.8         | +9.9     | +0.7     |  |  | +0.0          | 68.4         | 80.4                  | -12.0        | None         |
| 4 | 1936.940M   | 57.3         | +9.9     | +1.0     |  |  | +0.0          | 68.2         | 80.4                  | -12.2        | None         |
| 5 | 888.420M    | 56.9         | +9.9     | +0.7     |  |  | +0.0          | 67.5         | 80.4                  | -12.9        | None         |
| 6 | 748.502M    | 55.8         | +9.9     | +0.7     |  |  | +0.0          | 66.4         | 80.4                  | -14.0        | None         |

## Band Edge

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **Band edge Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

### Test Equipment:

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06239  | Attenuator        | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

### Equipment Tested:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

### Support Equipment:

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

### Test Conditions / Notes:

Application: MP\_TEST MFC version 1.3.8.0

Temperature: 22.0 C

Humidity: 39.6 %

Atmospheric Pressure: 100.5kPa

Highest Generation Frequency: 2.462 GHz

RBW=100kHz and VBW=300kHz

Attenuator = 63 at MAX Level

Method: KDB 558074 v03r03 section 11

The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT.

The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.

**Attenuator for 802.11b Mode=32**

The Data rate is at 2Mbps

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **Band edge Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06239  | Attenuator        | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 RBW=100kHz and VBW=300kHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 11  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT.  
 The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11g Mode=38**  
 The Data rate is at 54Mbps

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **Band edge Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06239  | Attenuator        | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 RBW=100kHz and VBW=300kHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 11  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT.  
 The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT20 Mode=35**  
 The Data rate is at MCS0

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170  
 Customer: **Cellphone-Mate, Inc.**  
 Specification: **Band edge Set up**  
 Work Order #: **97491** Date: 10/05/2015  
 Test Type: **Conducted Power Measurement** Time:  
 Tested By: Hieu Song Nguyenpham Sequence#:  
 Software: EMITest 5.02.00

**Test Equipment:**

| ID | Asset # | Description       | Model                    | Calibration Date | Cal Due Date |
|----|---------|-------------------|--------------------------|------------------|--------------|
| T1 | P06239  | Attenuator        | 54A-10                   | 7/9/2014         | 7/9/2016     |
| T2 | P06710  | Cable             | 32026-29094K-29094K-72TC | 9/18/2014        | 9/18/2016    |
|    | 03471   | Spectrum Analyzer | E4440A                   | 12/19/2013       | 12/19/2015   |

**Equipment Tested:**

| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Support Equipment:**

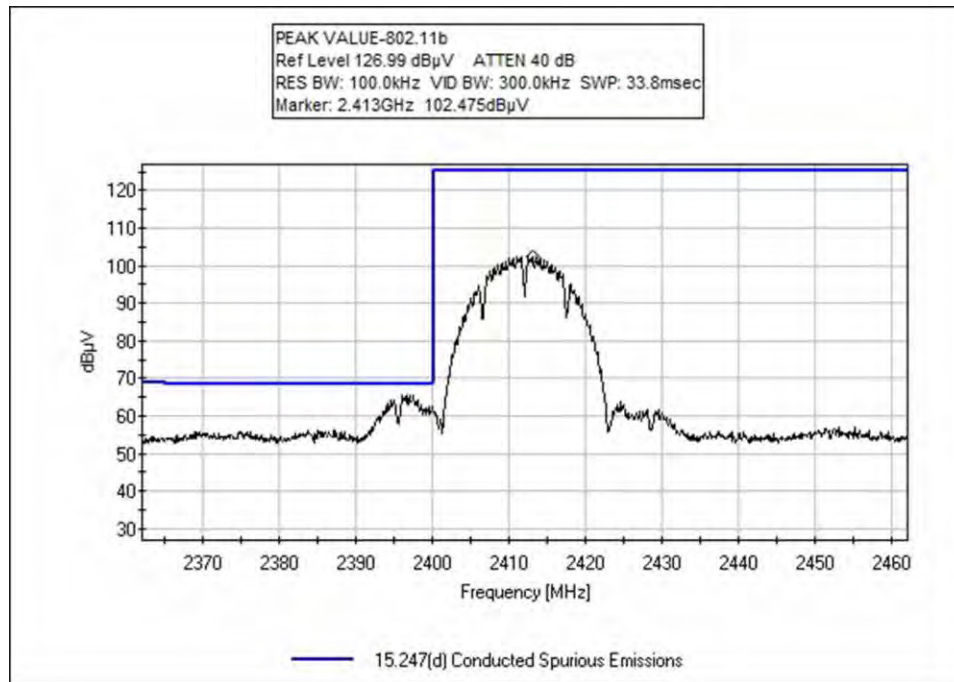
| Device          | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|-----|
| Configuration 1 |              |         |     |

**Test Conditions / Notes:**

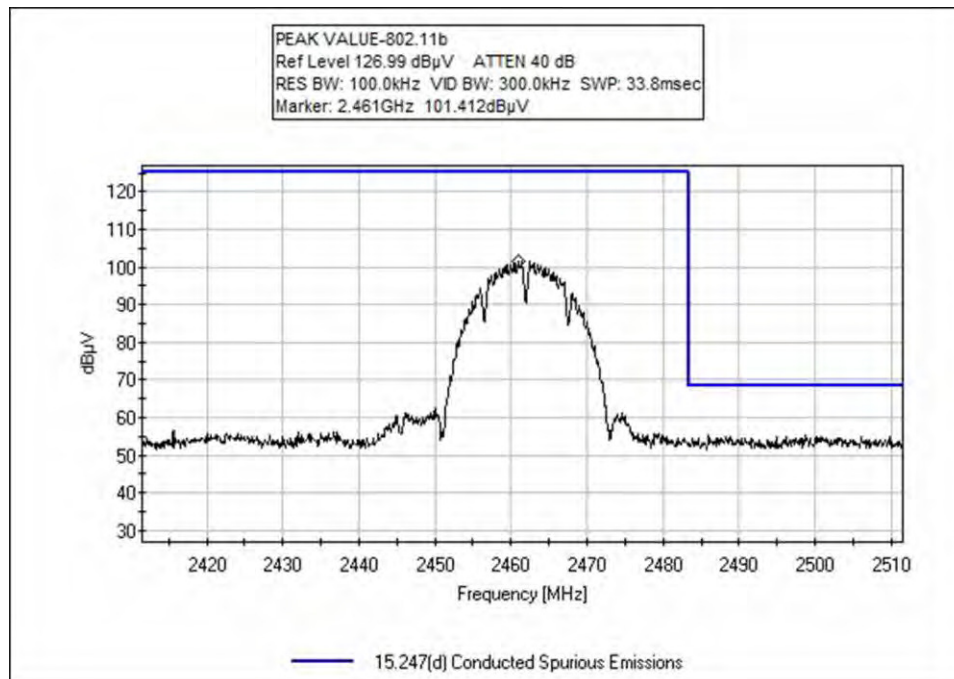
Application: MP\_TEST MFC version 1.3.8.0  
  
 Temperature: 22.0°C  
 Humidity: 39.6 %  
 Atmospheric Pressure: 100.5kPa  
  
 Highest Generation Frequency: 2.462 GHz  
 RBW=100kHz and VBW=300kHz  
 Attenuator = 63 at MAX Level  
 Method: KDB 558074 v03r03 section 11  
  
 The equipment under test (EUT) is placed on the table. The EUT is set up as intended to operate on WIFI continuously transmitting. A remotely located signal generator is connected to input port of EUT.  
 The DL power input signal 2132.5MHz, 4.1MHz AWGN at the outdoor antenna port is set at 3dB above AGC level.  
  
**Attenuator for 802.11n HT40 Mode=32**  
 The Data rate is at MCS1

## Plots

### 802.11b – Mode

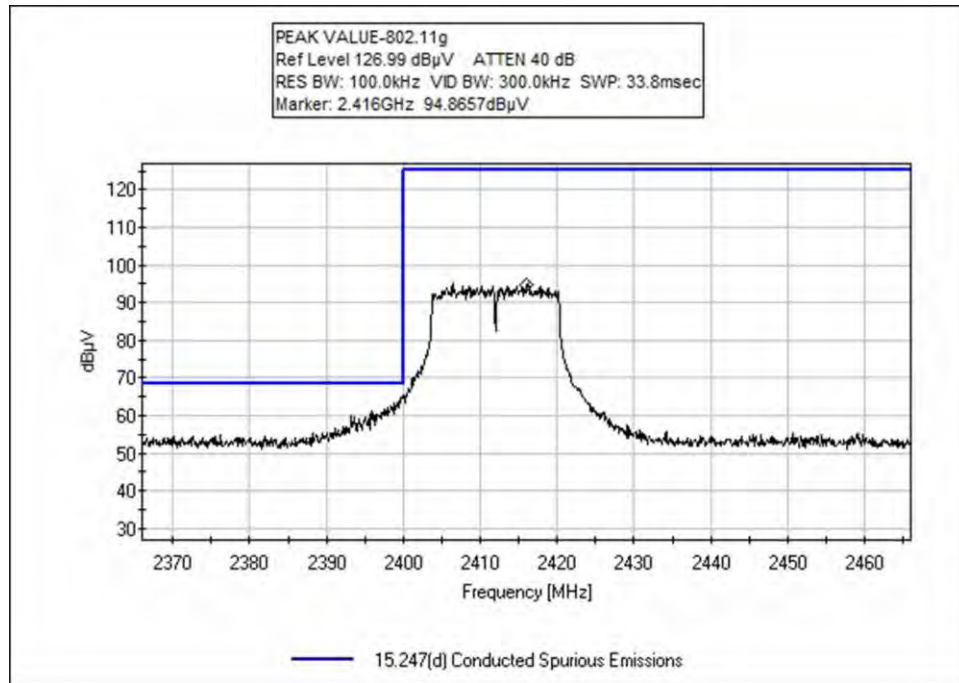


Low Channel

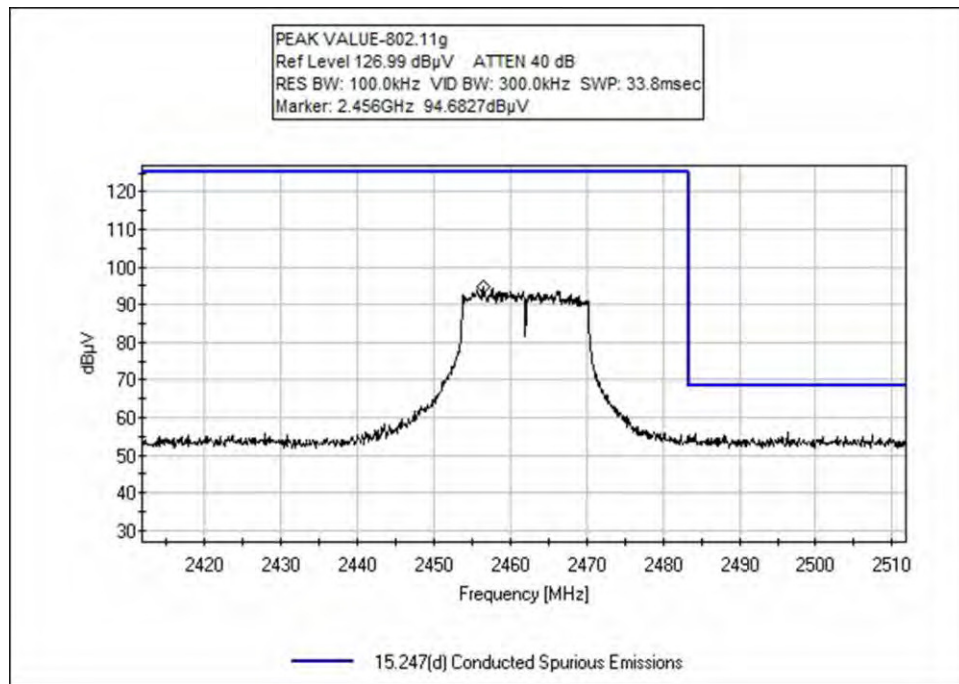


High Channel

### 802.11g- Mode

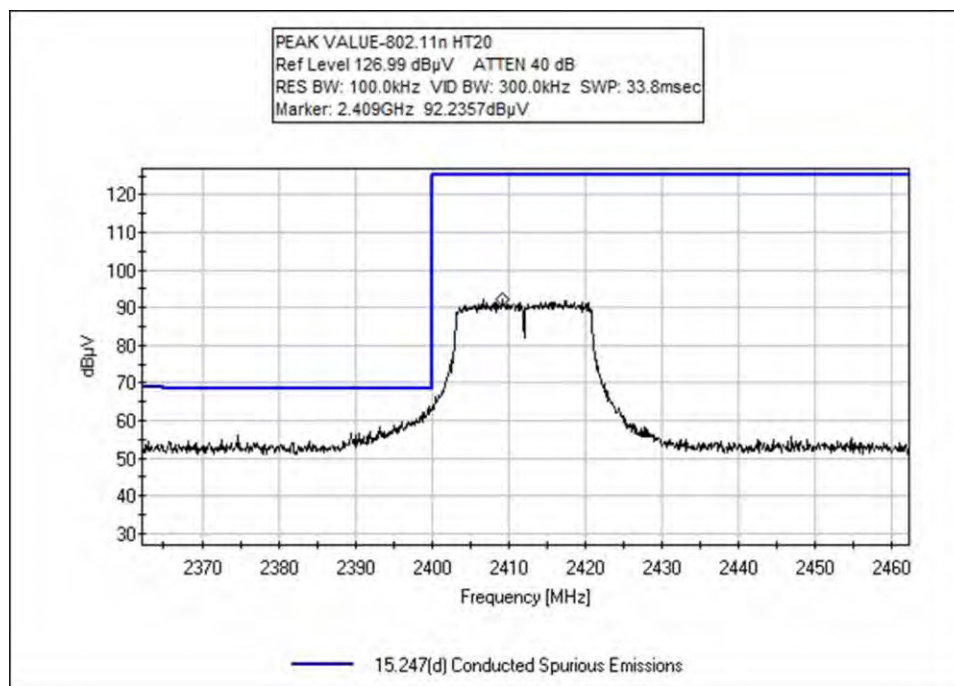


Low Channel

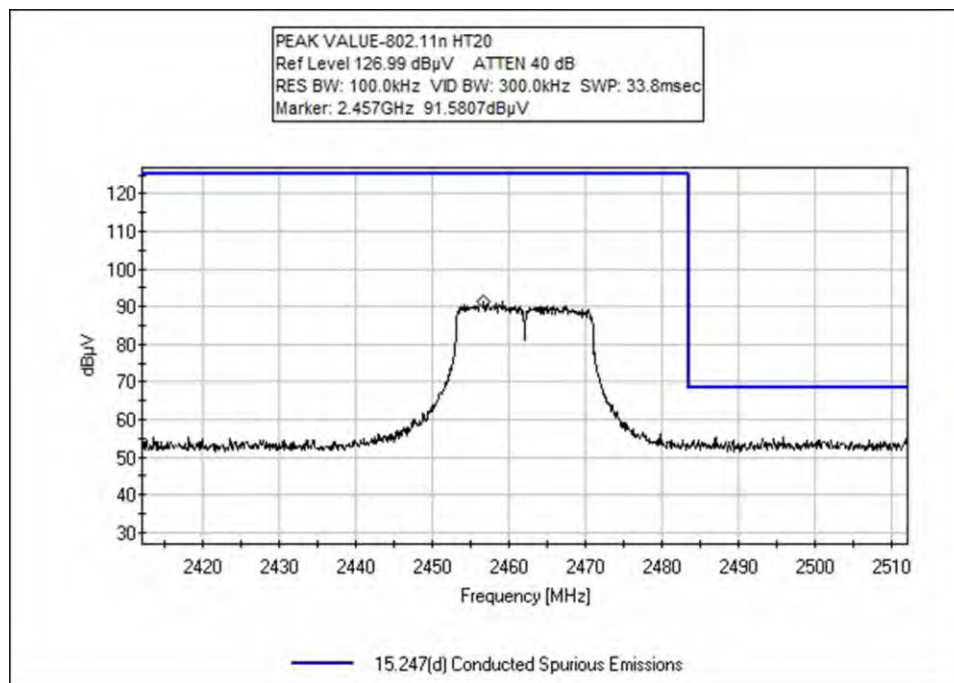


High Channel

### 802.11n HT20- Mode

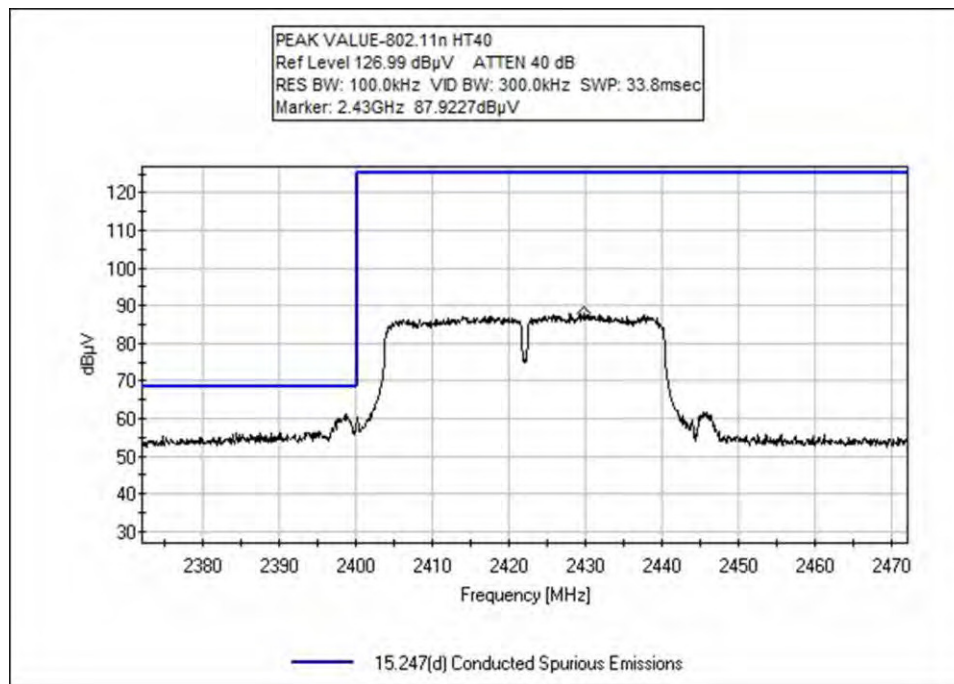


Low Channel

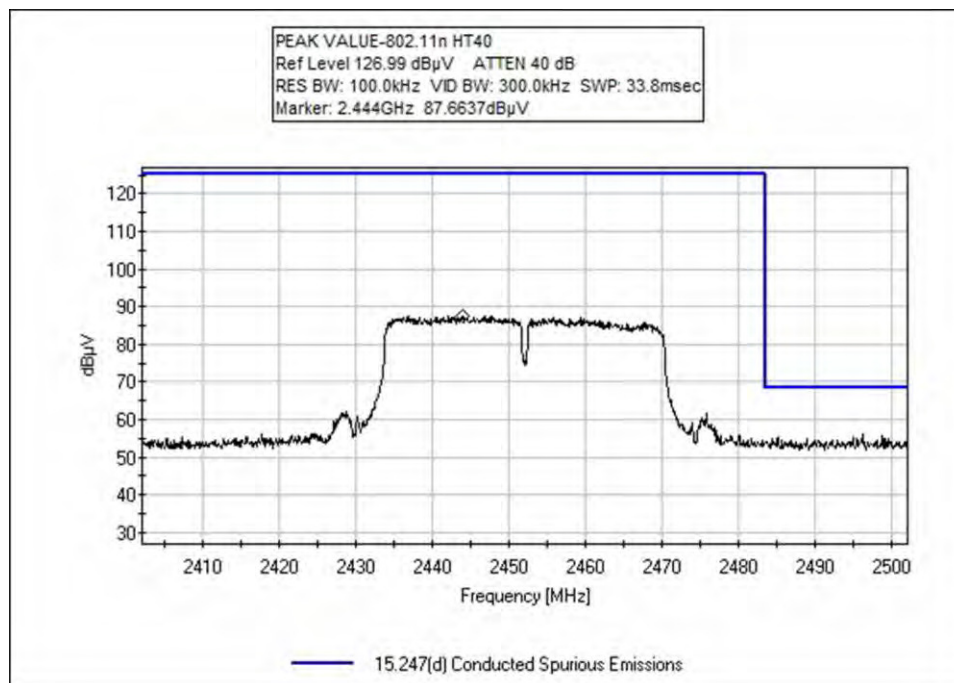


High Channel

### 802.11n HT40 - Mode



Low Channel



High Channel