

15.247(d) Field Strength of Spurious Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spuriou | s Emissions | |
|-----------------------------|--|-------------|-------------|
| Work Order #: | 92742 | Date: | 2/2/2012 |
| Test Type: | Maximized Emissions | Time: | 18:21:24 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 5 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
|-----|----------|--|--------------------------------|------------------|--------------|
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| Т3 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T4 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T5 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T6 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| T7 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| Т8 | AN03239 | Cable | 32022-2-29094K- 24TC | 8/30/2011 | 8/30/2013 |
| Т9 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T10 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T11 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T12 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T13 | AN02744 | High Pass Filter | 11SH10- 3000/T10000- O/O | 3/5/2010 | 3/5/2012 |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | AN01413 | Horn Antenna-ANSI C63.5 Antenna Factors (dB) | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | AN01413 | Horn Antenna-1 Meter Antenna Factors (dB) - SAE ARP 958 | 84125-80008 | 12/2/2010 | 12/2/2012 |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 2412MHz to 2462MHz

Transmit Frequencies used for this data sheet: 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11. 802.11b (11 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 25GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 26000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

| Meas | urement Data: | R | eading lis | ted by ma | argin. | | Test Distance: 3 Meters | | | | |
|------|---------------|------|------------|-----------|--------|------|-------------------------|-------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | | | T13 | | | | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| 3 | 3 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



| ^ 2500.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
|----------------|------|------------------|---------------|--------------|------------------|-----------|------|-------|------|--------------|
| | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 5 4999.998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| ^ 4999.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 7 2222 2242 | | +0.3 | 0.4 | 1.0 | | 0.0 | 50.0 | 54.0 | 2.7 | X 7 . |
| 7 2333.334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 0.0500.00014 | 54.0 | +0.0 | .0.4 | .1.0 | . 2. 2 | . 0. 0 | 10.0 | 510 | 4.4 | X 7 / |
| 8 2500.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | $^{+0.0}_{+0.0}$ | +0.0 | +0.0 | +0.0 | | | | | |
| A 2500.000M | 565 | +0.0 +0.0 | +0.4 | +1.2 | +3.3 | | 52.1 | 54.0 | -1.9 | Vort |
| ^ 2500.000M | 56.5 | +0.0 -37.9 | +0.4 +28.5 | +1.3 +0.0 | +3.3 +0.0 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | -37.9 +0.0 | +28.3 +0.0 | +0.0 +0.0 | $^{+0.0}_{+0.0}$ | | | | | |
| | | +0.0 $+0.0$ | ± 0.0 | ± 0.0 | ± 0.0 | | | | | |
| 10 4923.967M | 44.8 | +0.0 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 48.7 | 54.0 | -5.3 | Horiz |
| 10 4923.90/101 | 44.0 | -37.1 | +0.3 +33.2 | +1.9 +0.4 | +0.4 | ± 0.0 | 40.7 | 54.0 | -5.5 | HOHZ |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | 10.4 | 10.4 | 10.4 | | | | | |
| 11 4874.088M | 44.6 | +0.4 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 48.4 | 54.0 | -5.6 | Horiz |
| 11 +07+.0000 | 0 | -37.1 | +33.1 | +0.4 | +0.4 | 10.0 | -0 | 54.0 | 5.0 | HOLL |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.1 | 10.1 | 10.1 | 10.1 | | | | | |
| 12 3333.332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| 12 0000.00201 | 10.5 | -37.7 | +30.7 | +0.6 | +0.6 | 10.0 | 10.1 | 5 110 | 5.0 | vert |
| | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | +0.6 | | | | | | | | |
| 13 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 14 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| ^ 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| 16 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |



| 17 | 37.562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
|-----|-------------|------|---------------|------------------|------------------|------------------|------|------|------|------|--------|
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 18 | 4823.997M | 44.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.7 | 54.0 | -6.3 | Horiz |
| | | | -37.1 | +33.0 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| 19 | 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 20 | 26666677 | 16.0 | +0.0 | 0.4 | 1.7 | 1.0 | 0.0 | 16.0 | 54.0 | | ¥.7 . |
| 20 | 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 0.1 | 4000 0001 (| 10.6 | +0.4 | 0.5 | 1.0 | 5.0 | 0.0 | 16.6 | 54.0 | | |
| | 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| | Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ | 4000 00214 | 46.0 | +0.3 | 0.5 | +1.0 | 5.0 | | 50.0 | 510 | 4.0 | Haria |
| ~ | 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | | -37.0 +0.3 | +33.3 +0.3 | +0.3 +0.3 | +0.3 +0.3 | | | | | |
| | | | +0.3 $+0.3$ | +0.3 | +0.5 | +0.3 | | | | | |
| 22 | 3666.665M | 45.8 | +0.3 +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| 23 | 5000.005W | 43.8 | -37.4 | +0.4 +31.3 | +1.7 +0.4 | +4.2 +0.4 | +0.0 | 40.4 | 54.0 | -7.0 | HOUL |
| | | | -37.4 +0.4 | +31.3 +0.4 | +0.4 $+0.4$ | +0.4 $+0.4$ | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 24 | 7499.992M | 37.7 | +0.4 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| | Ave | 51.1 | -36.5 | +35.5 | +0.1 | +0.1 | 10.0 | +0.5 | 54.0 | -1.1 | TIOTIZ |
| | 1100 | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | 10.1 | 10.1 | 10.1 | | | | | |
| ۸ | 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | / 1////2101 | 12.9 | -36.5 | +35.5 | +0.1 | +0.1 | 10.0 | 0110 | 2110 | 2.0 | 110112 |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | | | | | | | | |
| 26 | 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| | Ave | | -38.0 | | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| ٨ | 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 28 | 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| | 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| 29 | | | | | | | | | | | |
| 29 | 575.009111 | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| 29 | 272.002101 | | +15.5 +0.0 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | | | | | |



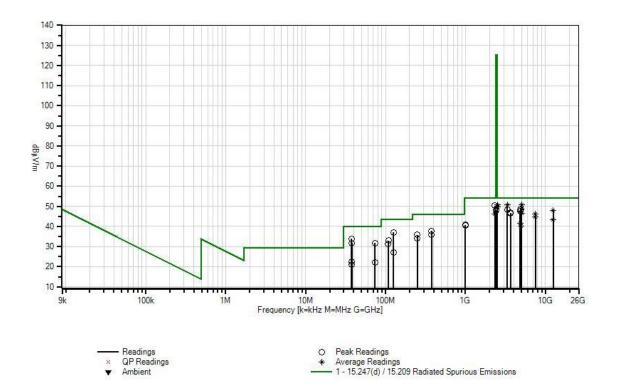
| 30 | 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
|----|---------------------|------|-----------------------|------------------|------------------|------------------|-----------|------|-------|-------|------------|
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | _ | e – | | _ | | | _ | . - |
| 31 | 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| | 7499.993M | 36.1 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| | Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | - 100 0000 f | 12.0 | +0.1 | 0.5 | | | 0.0 | | - 4 0 | ~ ~ ~ | |
| Λ | 7499.993M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| | | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 24 | 275 02 60 6 | 44 6 | +0.1 | .0.2 | 27.0 | . 2 5 | .0.0 | 26.0 | 16.0 | 10.0 | II. ' |
| 34 | 375.036M | 44.6 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 35 | 240.00014 | 47.0 | +0.0 | +0.2 | -27.8 | 120 | | 25.0 | 16.0 | -10.2 | Vent |
| 33 | 249.999M | 47.9 | +0.0 | | | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | $^{+12.7}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | | | | | |
| | | | +0.0 +0.0 | ± 0.0 | ± 0.0 | ± 0.0 | | | | | |
| 36 | 108.846M | 47.9 | +0.0 +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| 50 | 100.040101 | 47.7 | +0.0 +10.9 | $^{+0.1}_{+0.0}$ | +0.0 | $^{+1.8}_{+0.0}$ | ± 0.0 | 52.7 | 43.3 | -10.0 | ven |
| | | | +10.9 +0.0 | $^{+0.0}_{+0.0}$ | +0.0 $+0.0$ | +0.0 $+0.0$ | | | | | |
| | | | +0.0 $+0.0$ | ± 0.0 | +0.0 | ± 0.0 | | | | | |
| 37 | 12499.993 | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| 57 | M | 27.0 | -35.9 | +38.7 | +0.2 | +0.2 | 10.0 | 10.2 | 5110 | 10.0 | vert |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | | | | | | | | |
| ۸ | 12499.993 | 37.4 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| | M | | -35.9 | +38.7 | +0.2 | +0.2 | | | 2.1.0 | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | | | | | | | | |
| 39 | 250.014M | 46.1 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 40 | 108.139M | 46.5 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| | | | +10.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 41 | 4873.968M | 37.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 41.6 | 54.0 | -12.4 | Vert |
| | Ave | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| ^ | 4873.968M | 47.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 51.6 | 54.0 | -2.4 | Vert |
| | | | 27.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | | -37.1 | | | | | | | | |
| | | | -37.1 +0.4 +0.4 | +35.1 +0.4 | +0.4 $+0.4$ | +0.4 $+0.4$ | | | | | |



| 42 | 4002 07014 | 27.0 | .0.0 | .0.5 | .1.0 | . 5.0 | .0.0 | 41 5 | 54.0 | 10 5 | N.Z. and |
|------------|------------|------|-------------------|------------------|------------------|-----------|--------|------|------|-------|----------|
| | 4823.970M | 37.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 41.5 | 54.0 | -12.5 | Vert |
| | Ave | | -37.1 +0.4 | +33.0 +0.4 | $^{+0.4}_{+0.4}$ | +0.4 | | | | | |
| | | | | +0.4 | +0.4 | +0.4 | | | | | |
| ^ | 4922 07014 | 17 5 | +0.4 | 0.5 | +1.0 | 5.0 | | 51.0 | 54.0 | 2.0 | Mart |
| ~ | 4823.970M | 47.5 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 51.2 | 54.0 | -2.8 | Vert |
| | | | -37.1 | +33.0 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 45 | 000.000 | 265 | +0.4 | .0.0 | 27.2 | | .0.0 | 40.0 | 54.0 | 12.0 | N |
| 45 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 10 | 000.00/14 | 26.1 | +0.0 | 10.0 | 27.2 | 16.2 | | 40.4 | 54.0 | 12.0 | Haria |
| 46 | 999.996M | 36.1 | $^{+0.0}_{+24.8}$ | $^{+0.6}_{+0.0}$ | -27.3 +0.0 | +6.2 +0.0 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | | | | | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 17 | 4022.07014 | 26.4 | +0.0 | 0.5 | +1.0 | 5.0 | .0.0 | 40.2 | 54.0 | 127 | Mart |
| | 4923.970M | 36.4 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 40.3 | 54.0 | -13.7 | Vert |
| | Ave | | -37.1 | +33.2 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | 4022.07014 | 477 | +0.4 | .0.5 | .1.0 | . 5.0 | .0.0 | 51.0 | 54.0 | 2.4 | Mart |
| ~ | 4923.970M | 47.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 51.6 | 54.0 | -2.4 | Vert |
| | | | -37.1 | +33.2 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 10 | 105 00014 | 10.5 | +0.4 | .0.0 | 07.0 | 1.0 | . 0. 0 | 26.0 | 42.5 | 16.6 | TT · |
| 49 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 50 | 27 (95)4 | 24.2 | +0.0 | 0.1 | 27.0 | , 1.0 | | 22.2 | 40.0 | 177 | II. |
| 50 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| <i>E</i> 1 | 72.0(2) (| 41.0 | +0.0 | .0.1 | 27.0 | .1.4 | .0.0 | 22.0 | 40.0 | 10.0 | II! |
| 51 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | 27.542)5 | 22.6 | +0.0 | 0.1 | 27.0 | 1.0 | 0.0 | 20.0 | 10.0 | 10.1 | |
| 52 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



CKC Laboratories, Inc. Date: 2/2/2012 Time: 18:21:24 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 5 Ext ATTN: 0 dB



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| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious E | missions | |
|-----------------------------|---|------------|-------------|
| Work Order #: | 92742 | Date: | 2/2/2012 |
| Test Type: | Maximized Emissions | Time: | 18:21:24 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 6 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

| I est Equi | pmeni. | | | | |
|------------|----------|--|--------------------------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T3 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T4 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T5 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T6 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| T7 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| Τ8 | AN03239 | Cable | 32022-2-29094K- 24TC | 8/30/2011 | 8/30/2013 |
| Т9 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T10 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T11 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T12 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T13 | AN02744 | High Pass Filter | 11SH10- 3000/T10000- O/O | 3/5/2010 | 3/5/2012 |
| | AN01413 | Horn Antenna-ANSI C63.5 Antenna Factors (dB) | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | AN01413 | Horn Antenna-1 Meter Antenna Factors (dB) - SAE ARP 958 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 2412MHz to 2462MHz

Transmit Frequencies used for this data sheet: 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11. 802.11g (6 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 25GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 26000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

| | | - | | | | | _ | | | | |
|------|---------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| Meas | urement Data: | Re | eading lis | ted by ma | argin. | | Те | est Distance | e: 3 Meters | | |
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | | | T13 | | | | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| 3 | 8 4999.998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
| | Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | | | | | | | | |



| ^ 4999.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
|---------------|------|---------------|---------------|--------------|-------------|-----------|-------|-------|------|--------|
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 5 2500.000M | 55.1 | +0.3 +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| Ave | 55.1 | +0.0 -37.9 | +0.4 +28.5 | +1.3 +0.0 | +0.0 | ± 0.0 | 50.7 | 54.0 | -3.5 | TIOTIZ |
| Ave | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| ^ 2500.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
| 2000100011 | 09.2 | -37.9 | +28.5 | +0.0 | +0.0 | | 0.110 | 0.110 | 1010 | 110112 |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 7 2333.334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 8 2500.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| ^ 2500.000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 10.0000.00016 | 10.0 | +0.0 | 0.4 | | 2.0 | 0.0 | 10.4 | | | |
| 10 3333.332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 11 4923.948M | 44.4 | +0.6 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 48.3 | 54.0 | -5.7 | Vert |
| 11 4723.74011 | 44.4 | +0.0 -37.1 | +0.3 +33.2 | +1.9 $+0.4$ | +0.4 | ± 0.0 | 40.5 | 54.0 | -3.7 | ven |
| | | +0.4 | +33.2 +0.4 | +0.4 $+0.4$ | +0.4 $+0.4$ | | | | | |
| | | +0.4 | 10.4 | 10.4 | 10.4 | | | | | |
| 12 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| 12 2370.00011 | 52.7 | -38.0 | +28.4 | +0.0 | +0.0 | 10.0 | 10.2 | 51.0 | 5.0 | ven |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 13 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| ^ 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| Μ | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| 15 4873.973M | 44.1 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.9 | 54.0 | -6.1 | Vert |
| | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 16 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |



| 17 37.562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
|---------------------|------|-------------------|------------------|------------------|------------------|-----------|---------------|-------|------|--------|
| | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 10, 1000, 0100 5 | 10 - | +0.0 | 0.7 | 1.0 | | 0.0 | 1 | | - 4 | |
| 18 4923.942M | 43.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.6 | 54.0 | -6.4 | Horiz |
| | | -37.1 | +33.2 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 10 125 00214 | 50.6 | +0.4 | .0.0 | 27.0 | .1.0 | .0.0 | 27.0 | 12 5 | 65 | XZ |
| 19 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | $^{+12.1}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | | | | | |
| | | +0.0 +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 20 4823.981M | 43.5 | +0.0 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.2 | 54.0 | -6.8 | Horiz |
| 20 4625.96110 | 45.5 | -37.1 | +0.3 +33.0 | +1.9 +0.4 | +3.0 +0.4 | +0.0 | 47.2 | 54.0 | -0.8 | HOUL |
| | | +0.4 | +33.0 | +0.4 | +0.4 | | | | | |
| | | +0.4 | 10.4 | 10.4 | 10.4 | | | | | |
| 21 4873.960M | 43.2 | +0.4 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.0 | 54.0 | -7.0 | Horiz |
| 21 +075.700141 | 73.4 | -37.1 | +0.3 +33.1 | +1.9 $+0.4$ | +0.4 | 10.0 | т <i>і</i> .0 | 54.0 | 7.0 | TIOUT |
| | | +0.4 | +33.1 +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | 10.7 | 10.7 | 10.7 | | | | | |
| 22 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | 0.110 | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 23 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| 25 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 0.6 | | +0.4 | ^ - | | | 0.0 | 16.2 | = 4 0 | | |
| 26 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | | -36.5 | | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| ^ 7499.992M | 42.0 | +0.1 | +0.7 | 10.2 | 165 | | 515 | 54.0 | -2.5 | Uoria |
| ·· /499.9921VI | 42.9 | +0.0 -36.5 | +0.7 +35.5 | +2.3 +0.1 | +6.5 +0.1 | +0.0 | 51.5 | 54.0 | -2.3 | Horiz |
| | | -30.5 +0.1 | +35.5 +0.1 | +0.1 +0.1 | $^{+0.1}_{+0.1}$ | | | | | |
| | | +0.1 +0.1 | ± 0.1 | ± 0.1 | ± 0.1 | | | | | |
| 28 2333.332M | 51.1 | +0.1 +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| 28 2555.552W Ave | 51.1 | -38.0 | +0.4 +28.3 | +1.2 $+0.0$ | +3.2 $+0.0$ | ± 0.0 | 40.2 | 54.0 | -7.0 | TIOUTZ |
| | | -38.0 +0.0 | +28.3 +0.0 | +0.0 $+0.0$ | $^{+0.0}_{+0.0}$ | | | | | |
| | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| ^ 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| 2000.002141 | 57.2 | -38.0 | +28.3 | +0.0 | +0.0 | 10.0 | 02.0 | 2 1.0 | 1., | 110112 |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| | | 10.0 | | | | | | | | |



| 30 | 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
|----|----------------|-------|-------|-------|-------|------|------|------|------|-------|--------------|
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 31 | 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 32 | 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 33 | 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 34 | 4824.002M | 41.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 45.4 | 54.0 | -8.6 | Vert |
| | | | -37.1 | +33.0 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| | 7499.993M | 36.1 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| | Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | | | | | | | | |
| ^ | 7499.993M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| | | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | | | | | | | 40.0 | |
| 37 | 375.036M | 44.6 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 20 | 240.00034 | 1 | +0.0 | 0.0 | 25.0 | • • | 0.0 | 22.0 | 44.0 | 10.0 | |
| 38 | 249.999M | 47.9 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 20 | 100.0407 | 47.0 | +0.0 | .0.1 | 07.0 | .1.0 | .0.0 | 22.0 | 42.5 | 10.6 | X 7 · |
| 39 | 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 40 | 12400.002 | 27.6 | +0.0 | 10.0 | 12.0 | .0.0 | .0.0 | 42.0 | 54.0 | 10.0 | Vert |
| 40 | 12499.993 | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| ^ | 12400.002 | 27 4 | +0.2 | .0.0 | . 2.0 | ,00 | | 52.0 | 540 | 1.0 | Varia |
| ~ | 12499.993 M | 37.4 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 40 | 250 01 43 4 | 1 - 1 | +0.2 | .0.2 | 07.0 | | .0.0 | 24.0 | 100 | 10.0 | TT' |
| 42 | 250.014M | 46.1 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |

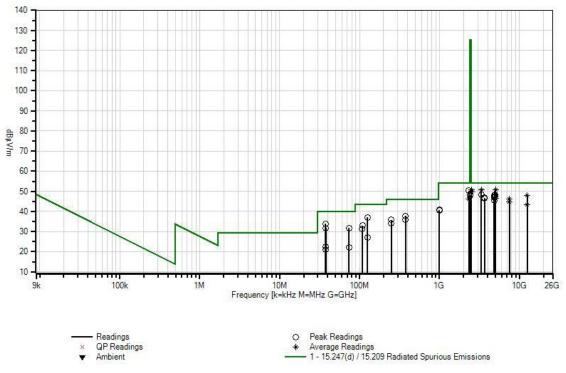


| 10 | 100 1001 | 16.5 | 0.0 | 0.1 | 27.0 | 1.0 | 0.0 | 01.4 | 10.5 | 10.1 | ×7 . |
|----|----------|------|-------|-------|-------|------|------|------|------|-------|-------|
| 43 | 108.139M | 46.5 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| | | | +10.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 44 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 45 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 46 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 47 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 48 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| 1 | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 49 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| 1 | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| 1 | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | . 510 | . 510 | | | | | | |
| L | | | 10.0 | | | | | | | | |



Ambient

CKC Laboratories, Inc. Date: 2/2/2012 Time: 18:21:24 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 6 Ext ATTN: 0 dB





| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious I | Emissions | |
|-----------------------------|---|------------|-------------|
| Work Order #: | 92742 | Date: | 2/2/2012 |
| Test Type: | Maximized Emissions | Time: | 18:21:24 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 7 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

| I est Lyui | pmeni. | | | | |
|------------|----------|--|--------------------------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T3 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T4 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T5 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T6 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| T7 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T8 | AN03239 | Cable | 32022-2-29094K- 24TC | 8/30/2011 | 8/30/2013 |
| Т9 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T10 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T11 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T12 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T13 | AN02744 | High Pass Filter | 11SH10- 3000/T10000- O/O | 3/5/2010 | 3/5/2012 |
| | AN01413 | Horn Antenna-ANSI C63.5 Antenna Factors (dB) | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | AN01413 | Horn Antenna-1 Meter Antenna Factors (dB) - SAE ARP 958 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 2412MHz to 2462MHz

Transmit Frequencies used for this data sheet: 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11. 802.11n (20MHz) (7.2 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 25GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 26000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

| Meası | urement Data: | Re | eading lis | ted by ma | argin. | | Te | est Distance | e: 3 Meters | | |
|-------|---------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | | | T13 | | | | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| 3 | 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



| ^ 250 | 0.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
|--------|-----------|------|---------------|---------------|------------------|--------------|------|------|-------|------|--------------|
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 5 499 | 9.998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
| Ave | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | | | | | | | | |
| ^ 499 | 9.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 7 102 | 2 07114 | 16.7 | +0.3 | 0.5 | 1.0 | | 0.0 | 50.6 | 54.0 | | X 7 . |
| 7 492 | 3.871M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.6 | 54.0 | -3.4 | Vert |
| | | | -37.1 | +33.2 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 0 400 | 4.04214 | 107 | +0.4 | .0.5 | .10 | . 5.0 | .0.0 | 50.4 | 54.0 | 2.6 | N.C |
| 8 482 | 4.043M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.4 | 54.0 | -3.6 | Vert |
| | | | -37.1 | +33.0 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 0 222 | 2 22414 | 55.2 | +0.4 | +0.4 | +1.2 | +3.2 | | 50.2 | 54.0 | -3.7 | Vort |
| 9 233 | 3.334M | 55.2 | +0.0 -38.0 | +0.4 +28.3 | +1.2 | +5.2 +0.0 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | | -38.0 +0.0 | +28.3 +0.0 | $^{+0.0}_{+0.0}$ | +0.0 +0.0 | | | | | |
| | | | +0.0 $+0.0$ | ± 0.0 | ± 0.0 | ± 0.0 | | | | | |
| 10 402 | 3.803M | 46.2 | +0.0 $+0.0$ | +0.5 | +1.9 | +5.0 | +0.0 | 50.1 | 54.0 | -3.9 | Horiz |
| 10 492 | .5.605101 | 40.2 | +0.0 -37.1 | +0.3 +33.2 | +1.9 +0.4 | +3.0 $+0.4$ | +0.0 | 50.1 | 54.0 | -3.9 | HOUL |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | 10.4 | 10.4 | 10.4 | | | | | |
| 11 250 | 0.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| Ave | | 54.0 | -37.9 | +28.5 | +0.0 | +0.0 | 10.0 | 47.0 | 54.0 | 7.7 | ven |
| 1100 | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| ^ 250 | 0.000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | 01000111 | 0010 | -37.9 | +28.5 | +0.0 | +0.0 | | 0211 | 0.110 | 117 | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 13 487 | 4.018M | 45.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 49.5 | 54.0 | -4.5 | Horiz |
| | | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| 14 487 | 3.987M | 45.4 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 49.2 | 54.0 | -4.8 | Vert |
| | | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| 15 482 | 4.030M | 45.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 48.7 | 54.0 | -5.3 | Horiz |
| | | | -37.1 | +33.0 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | | +0.4 | | | | | | | | |
| 16 333 | 3.332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |



| r | | | | | | | | | | |
|----------------|-------|------------------|--------------|--------------|-------------|-----------|------|-------|------|--------|
| 17 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 18 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| ^ 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| 20 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| 20 2009.901.01 | 02.0 | -38.0 | +28.4 | +0.0 | +0.0 | 10.0 | 11.5 | 5110 | 0.1 | HOLL |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| 21 37.562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| 21 37.302101 | 43.7 | +0.0 +14.8 | +0.1 +0.0 | +0.0 | +1.0 +0.0 | ± 0.0 | 55.0 | 40.0 | -0.2 | VCIT |
| | | +14.8 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 $+0.0$ | | | | | |
| | | $^{+0.0}_{+0.0}$ | ± 0.0 | ± 0.0 | +0.0 | | | | | |
| 22 125 002M | 50.0 | | .0.2 | 27.0 | +1.0 | | 27.0 | 12 5 | 65 | Maart |
| 22 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | 16.0 | +0.0 | 0.4 | | | 0.0 | 15.0 | | | |
| 23 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 24 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| 26 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 27 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | +0.1 | | | | | | | | |
| ^ 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | +0.1 | | | | | | | | |
| 29 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| Ave | J 1.1 | -38.0 | +28.3 | +0.0 | +0.0 | 10.0 | 10.2 | 2 1.0 | 7.0 | 110112 |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| | | 10.0 | | | | | | | | |



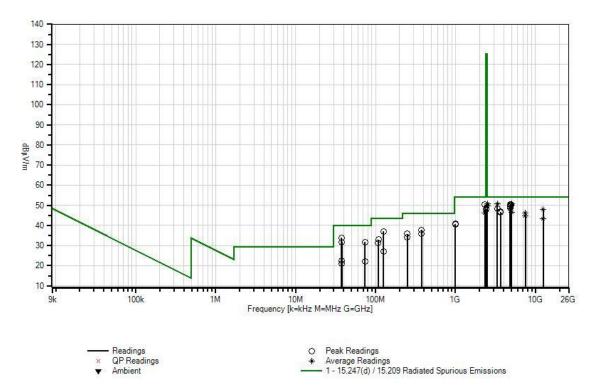
| • | 2222 2223 (| 57.0 | . 0. 0 | 0.4 | .1.0 | . 2. 0 | . 0. 0 | 52.2 | 54.0 | 17 | |
|----|-------------|------|---------------|------------------|------------------|------------------|--------|------|------|-------|------------|
| ~ | 2333.332M | 57.2 | +0.0 -38.0 | +0.4 +28.3 | $^{+1.2}_{+0.0}$ | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | | -38.0 +0.0 | +28.3 +0.0 | +0.0 +0.0 | $^{+0.0}_{+0.0}$ | | | | | |
| | | | +0.0 +0.0 | ± 0.0 | +0.0 | ± 0.0 | | | | | |
| 31 | 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| 51 | 57.7000 | 45.0 | +14.7 | +0.1 $+0.0$ | +0.0 | +0.0 | 10.0 | 51.0 | 40.0 | 0.2 | vent |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 32 | 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 33 | 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 34 | 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 35 | 7499.993M | 36.1 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| | Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | 7400.00214 | 42.0 | +0.1 | .07 | | | .0.0 | 515 | 54.0 | 2.5 | N. Land |
| ~ | 7499.993M | 42.9 | +0.0 -36.5 | +0.7 +35.5 | $^{+2.3}_{+0.1}$ | +6.5 +0.1 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| | | | -30.3 +0.1 | +33.3 +0.1 | +0.1 $+0.1$ | +0.1 $+0.1$ | | | | | |
| | | | +0.1 $+0.1$ | ± 0.1 | ± 0.1 | ± 0.1 | | | | | |
| 37 | 375.036M | 44.6 | +0.1 +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| 57 | 375.05011 | 11.0 | +15.5 | +0.0 | +0.0 | +0.0 | 10.0 | 50.0 | 10.0 | 10.0 | TIONE |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 38 | 249.999M | 47.9 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 39 | 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 40 | 12499.993 | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | 12400.002 | 27.4 | +0.2 | .0.0 | | .0.0 | .0.0 | 52.0 | 540 | 1.0 | N 7 |
| ^ | 12499.993 | 37.4 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 40 | 250.01414 | 16 1 | +0.2 | 10.2 | 27.0 | 120 | | 24.0 | 160 | 12.0 | Uoria |
| 42 | 250.014M | 46.1 | +0.0 +12.7 | +0.2 +0.0 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | | +12.7 +0.0 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | | | | | |
| | | | +0.0 +0.0 | ± 0.0 | ± 0.0 | ± 0.0 | | | | | |
| L | | | ± 0.0 | | | | | | | | |



| 10 | 100 1001 | 16.5 | 0.0 | 0.1 | 27.0 | 1.0 | 0.0 | 01.4 | 10.5 | 10.1 | ×7 . |
|----|----------|------|-------|-------|-------|------|------|------|------|-------|-------|
| 43 | 108.139M | 46.5 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| | | | +10.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 44 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 45 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 46 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 47 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 48 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| 1 | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 49 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| 1 | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| 1 | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | . 510 | . 510 | | | | | | |
| L | | | 10.0 | | | | | | | | |



CKC Laboratories, Inc. Date: 2/2/2012 Time: 18:21:24 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 7 Ext ATTN: 0 dB





| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious Er | nissions | |
|-----------------------------|--|------------|-------------|
| Work Order #: | 92742 | Date: | 2/2/2012 |
| Test Type: | Maximized Emissions | Time: | 18:21:24 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 8 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

| I est Equi | pmeni. | | | | |
|------------|----------|--|--------------------------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T3 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T4 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T5 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T6 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| T7 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| Τ8 | AN03239 | Cable | 32022-2-29094K- 24TC | 8/30/2011 | 8/30/2013 |
| Т9 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T10 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T11 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T12 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T13 | AN02744 | High Pass Filter | 11SH10- 3000/T10000- O/O | 3/5/2010 | 3/5/2012 |
| | AN01413 | Horn Antenna-ANSI C63.5 Antenna Factors (dB) | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | AN01413 | Horn Antenna-1 Meter Antenna Factors (dB) - SAE ARP 958 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 2422MHz to 2452MHz

Transmit Frequencies used for this data sheet: 2422MHz (Low), 2437MHz (Middle), and 2452MHz (High). Channels 3, 6, and 9. 802.11n (40MHz) (15 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 25GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 26000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

| Meas | urement Data: | Re | eading lis | ted by ma | argin. | | Те | est Distance | e: 3 Meters | | |
|------|---------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | | | T13 | | | | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| 3 | 3 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



| ^ 2500 | .000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
|---------|---------|--------------|-------|----------|-------|------|------|------|------|------|-------|
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 5 4999 | .998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
| Ave | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | | | | | | | | |
| ^ 4999 | .997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | | | | | | | | |
| 7 2333 | .334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 8 2500 | .000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| Ave | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| ^ 2500 | .000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 10 3333 | .332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | | | | | | | | |
| 11 2390 | .000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| | | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 12 1249 | | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | | | | | | | | |
| ^ 1249 | | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
|] | М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 14 2222 | 00125 | 5 0 - | +0.2 | <u> </u> | | | 0.0 | 47.0 | 54.0 | | |
| 14 2389 | .981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 15 5- | 7 (0) 1 | 45.5 | +0.0 | 0.4 | 25.0 | 4.0 | 0.0 | 22.0 | 40.0 | | X 7 |
| 15 37. | 562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 16 125 | .002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



| 17 4042 75014 | 42.2 | | .05 | .1.0 | | .0.0 | 47.0 | 510 | 7.0 | Vert |
|----------------|------|---------------|---------------|------------------|-------------|-----------|------|-------|------|------------|
| 17 4843.750M | 43.3 | +0.0 -37.1 | +0.5 +33.0 | $^{+1.9}_{+0.4}$ | +5.0 +0.4 | +0.0 | 47.0 | 54.0 | -7.0 | Vert |
| | | -57.1 +0.4 | +33.0 | +0.4 +0.4 | +0.4 $+0.4$ | | | | | |
| | | +0.4 $+0.4$ | +0.4 | +0.4 | +0.4 | | | | | |
| 18 4844.420M | 43.3 | +0.4 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 47.0 | 54.0 | -7.0 | Horiz |
| 10 4044.420101 | 45.5 | -37.1 | +0.5 +33.0 | +1.9 +0.4 | +0.4 | ± 0.0 | 47.0 | 54.0 | -7.0 | TIOUZ |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | 10.1 | 10.1 | 10.1 | | | | | |
| 19 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| 1, 00000000000 | | -37.4 | +31.3 | +0.4 | +0.4 | | | 0.110 | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 20 4903.170M | 42.9 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.7 | 54.0 | -7.3 | Horiz |
| | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 21 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | | | | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 22 2666 6653 6 | 45.0 | +0.3 | 0.4 | 1.7 | 1.0 | 0.0 | 16.1 | 54.0 | | |
| 23 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 24 4873.700M | 42.6 | +0.4 +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| 24 4075.700101 | 42.0 | -37.1 | +0.5 $+33.1$ | +1.9 +0.4 | +0.4 | ± 0.0 | 40.4 | 54.0 | -7.0 | TIOUZ |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | 10.4 | 10.4 | 10.4 | | | | | |
| 25 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | 0,11 | -36.5 | +35.5 | +0.1 | +0.1 | | | 0.110 | | 110112 |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | +0.1 | | | | | | | | |
| ^ 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | +0.1 | | | | | | | | |
| 27 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| Ave | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| ^ 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | _ | | _ | _ | | | _ | . - |
| 29 4903.770M | 42.2 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.0 | 54.0 | -8.0 | Vert |
| | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |



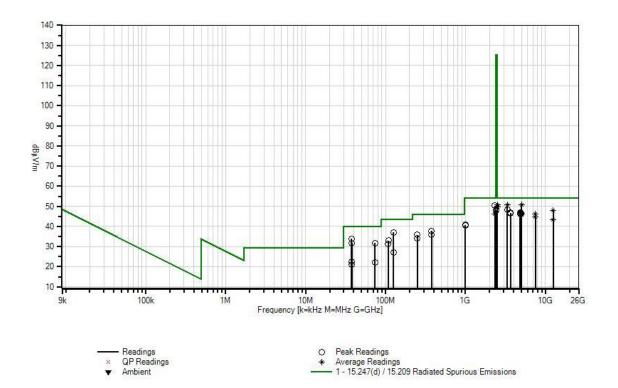
| - | | | | | | | | | | |
|---------------------|-------------|------------------|---------------|--------------|--------------|-----------|------|------|-------|--------------|
| 30 4873.900M | 42.2 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.0 | 54.0 | -8.0 | Vert |
| | | -37.1 | +33.1 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| | | +0.4 | | | | | | | | |
| 31 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 32 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 22 74 00 53 4 | 71 4 | +0.0 | 0.1 | 27.0 | 1.4 | 0.0 | 21.7 | 40.0 | 0.0 | X 7 |
| 33 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 24 72 01014 | E1 E | +0.0 | .0.1 | 27.0 | , 1 4 | .0.0 | 21 7 | 10.0 | 0.2 | V and |
| 34 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | $^{+0.0}_{+0.0}$ | +0.0 | +0.0 | +0.0 | | | | | |
| 35 7499.993M | 36.1 | +0.0 +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| 33 7499.995M Ave | 50.1 | +0.0 -36.5 | +0.7 +35.5 | +2.3 +0.1 | +0.3 +0.1 | +0.0 | 44.7 | 34.0 | -9.5 | ven |
| Ave | | -36.3 +0.1 | +33.3 +0.1 | +0.1 +0.1 | +0.1 $+0.1$ | | | | | |
| | | +0.1 $+0.1$ | ± 0.1 | ± 0.1 | ± 0.1 | | | | | |
| ^ 7499.993M | 42.9 | +0.1 +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| 1477.773IVI | 42.9 | +0.0 -36.5 | +0.7 +35.5 | +2.3 +0.1 | +0.3 +0.1 | ± 0.0 | 51.5 | 54.0 | -2.3 | vert |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| | | +0.1 | 10.1 | 10.1 | 10.1 | | | | | |
| 37 375.036M | 44.6 | +0.1 +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| 57 575.050141 | 0 | +15.5 | +0.0 | +0.0 | +0.0 | 10.0 | 50.0 | 40.0 | 10.0 | HOHZ |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| 38 249.999M | 47.9 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| 50 217.77711 | 17.5 | +12.7 | +0.2 | +0.0 | +0.0 | 10.0 | 2210 | 10.0 | 10.2 | vort |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 39 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| 40 12499.993 | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| ^ 12499.993 | 37.4 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | | +0.2 | | | | | | | | |
| 42 250.014M | 46.1 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | | | | | | | | |
| | | | | | | | | | | |



| 43 | 100 1201 | 165 | +0.0 | +0.1 | 27.0 | 10 | +0.0 | 31.4 | 43.5 | -12.1 | Vort |
|----|------------|------|---------------|--------------|-------------|------------------|------|------|------|-------|-------|
| 43 | 108.139M | 46.5 | | +0.1 +0.0 | -27.8 | $^{+1.8}_{+0.0}$ | +0.0 | 51.4 | 45.5 | -12.1 | Vert |
| | | | +10.8 | | +0.0 | | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | 000.0003.6 | | +0.0 | 0.6 | | | | 10.0 | | 10.0 | ** |
| 44 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 45 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 46 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 47 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |
| 48 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | 10.0 | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | 10.0 | 10.0 | 10.0 | | | | | |
| 49 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| +9 | 57.54211 | 52.0 | +0.0 +14.8 | +0.1 +0.0 | +0.0 | $^{+1.0}_{+0.0}$ | F0.0 | 20.9 | 40.0 | -19.1 | TIOUZ |
| | | | +14.8 +0.0 | +0.0 $+0.0$ | +0.0 $+0.0$ | $^{+0.0}_{+0.0}$ | | | | | |
| | | | | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | | | | | | | | |



CKC Laboratories, Inc. Date: 2/2/2012 Time: 18:21:24 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 8 Ext ATTN: 0 dB



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| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious l | Emissions | |
|-----------------------------|---|------------|-------------|
| Work Order #: | 92742 | Date: | 2/5/2012 |
| Test Type: | Maximized Emissions | Time: | 13:01:35 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 17 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

| I est Equi | pmeni. | | | | |
|------------|----------|---------------------|-----------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | AN03239 | Cable | 32022-2-29094K- | 8/30/2011 | 8/30/2013 |
| | | | 24TC | | |
| T3 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T4 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T5 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T6 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T7 | AN02744 | High Pass Filter | 11SH10- | 3/5/2010 | 3/5/2012 |
| | | | 3000/T10000- | | |
| | | | O/O | | |
| T8 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T9 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T10 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T11 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T12 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| | AN01413 | Horn Antenna-ANSI | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | C63.5 Antenna | | | |
| | | Factors (dB) | | | |
| | AN01413 | Horn Antenna-1 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | Meter Antenna | | | |
| | | Factors (dB) - SAE | | | |
| | | ARP 958 | | | |
| | AN03158 | Active Horn Antenna | | 4/1/2010 | 4/1/2012 |
| | | | 26004000-33-8P | | |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 5745MHz to 5825MHz

Transmit Frequencies used for this data sheet: 5745MHz (Low), 5785MHz (Middle), and 5825MHz (High). Channels 149, 157, and 165. 802.11a (6 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 40GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 40000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

| Meası | urement Data: | Re | eading lis | ted by ma | argin. | | Te | est Distance | e: 3 Meters | | |
|-------|---------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 3 | 4999.998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
| | Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ | 4999.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |



| | 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
|------------|------------|------|------------------|---------------|------------------|------------------|--------|------|-------|------|--------------|
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ | 2500.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 7 | 2333.334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| 0 | 2500.00014 | 54.0 | +0.0 | +0.0 | +0.0 | +0.0 | 0.0 | 10.6 | 54.0 | | X 7 |
| | 2500.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| • | 2500.00014 | | +0.0 | +0.0 | +0.0 | +0.0 | . 0. 0 | 50.1 | 510 | 1.0 | X 7 (|
| Λ | 2500.000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| 10 | 11650 220 | 26.0 | +0.0 | +0.0 | +0.0 | +0.0 | . 0. 0 | 10.7 | 510 | 4.5 | TT · |
| 10 | 11650.230 | 36.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.5 | 54.0 | -4.5 | Horiz |
| | М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| 11 | 11570 270 | 265 | +2.8 | +8.5 | -36.4 | +36.5 | .0.0 | 40.1 | 54.0 | 4.0 | II. |
| 11 | 11570.270 | 36.5 | $^{+0.0}_{+0.0}$ | +0.0 | +0.0 | $^{+0.0}_{+0.8}$ | +0.0 | 49.1 | 54.0 | -4.9 | Horiz |
| | Μ | | | +0.0 | +0.0 | | | | | | |
| 10 | 3333.332M | 48.9 | +2.8 +0.0 | +8.5 +0.4 | -36.3 +1.6 | +36.4 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| 12 | 5555.552M | 48.9 | +0.0 -37.7 | +0.4 +30.7 | $^{+1.0}_{+0.6}$ | +3.9 +0.6 | +0.0 | 48.4 | 54.0 | -3.0 | vert |
| | | | +0.6 | +30.7 +0.6 | +0.0 $+0.6$ | +0.0 +0.6 | | | | | |
| 12 | 11491.270 | 35.9 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 | 48.3 | 54.0 | -5.7 | Vert |
| 15 | M | 55.9 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.8 | +0.0 | 40.5 | 54.0 | -3.7 | ven |
| | 101 | | +0.0 +2.8 | +0.0 +8.5 | -36.3 | +36.3 | | | | | |
| 14 | 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| 14 | 2570.00011 | 52.7 | -38.0 | +28.4 | +0.0 | +0.0 | 10.0 | 70.2 | 54.0 | -5.0 | ven |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 15 | 11651.030 | 35.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| 15 | M | 55.5 | +0.0 | +0.0 | +0.0 | +0.8 | 10.0 | 10.2 | 51.0 | 5.0 | vert |
| | | | +2.8 | +8.5 | -36.4 | +36.5 | | | | | |
| 16 | 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| 10 | M | 0210 | -35.9 | +38.7 | +0.2 | +0.2 | | | 0.110 | 0.15 | 110112 |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| | 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| | М | | | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 18 | 114.300M | 51.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.4 | 43.5 | -6.1 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |
| 19 | 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 20 | 37.562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 21 | 37.562M | 45.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| <i>2</i> 1 | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | | | | | | | | | |



| 22 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
|--------------|------|-------|-------|-------|-------|------|------|------|------|-------|
| | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 23 125.002M | 50.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +1.9 | +12.1 | +0.0 | | | | | |
| 24 11569.530 | 34.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 47.3 | 54.0 | -6.7 | Vert |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.4 | | | | | |
| 25 11489.770 | 34.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 46.9 | 54.0 | -7.1 | Horiz |
| Μ | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.3 | | | | | |
| 26 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 27 264.011M | 50.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 38.7 | 46.0 | -7.3 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | -27.7 | +2.9 | +12.9 | +0.0 | | | | | |
| 28 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 30 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 31 170.000M | 51.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.8 | 43.5 | -7.7 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +2.3 | +9.7 | +0.0 | | | | | |
| 32 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| ^ 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 34 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| Ave | | | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 36 5359.898M | 40.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 46.0 | 54.0 | -8.0 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 37 5359.843M | 40.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 45.8 | 54.0 | -8.2 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 38 37.706M | 43.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| | | | | | | | | | | |



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| +0.0 +0.0 +0.0 +0.0 |
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| $-44 / 5.017 M 51.5 \pm 0.0 \pm 0.0 \pm 0.0 \pm 0.0 \pm 0.0 51.7 40.0 = 0.5 VCI$ |
| +0.0 $+0.0$ $+0.0$ $+0.1$ |
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| +0.0 $+0.0$ $+0.0$ $+0.1$ |
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| 46 166.370M 50.5 +0.0 +0.0 +0.0 +0.0 +0.0 35.2 43.5 -8.3 Vert |
| +0.0 $+0.0$ $+0.0$ $+0.2$ |
| -27.8 +2.2 +10.1 +0.0 |
| 47 264.010M 49.2 +0.0 +0.0 +0.0 +0.0 +0.0 37.6 46.0 -8.4 Vert |
| +0.0 $+0.0$ $+0.0$ $+0.3$ |
| -27.7 $+2.9$ $+12.9$ $+0.0$ |
| 48 156.840M 48.9 +0.0 +0.0 +0.0 +0.0 +0.0 34.4 43.5 -9.1 Vert |
| +0.0 $+0.0$ $+0.0$ $+0.1$ |
| -27.7 $+2.2$ $+10.9$ $+0.0$ |
| 49 7499.993M 36.1 +0.0 +0.7 +2.3 +6.5 +0.0 44.7 54.0 -9.3 Vert |
| Ave -36.5 +35.5 +0.1 +0.1 |
| +0.1 +0.1 +0.1 +0.1 |
| ^ 7499.993M 42.9 +0.0 +0.7 +2.3 +6.5 +0.0 51.5 54.0 -2.5 Vert |
| -36.5 + 35.5 + 0.1 + 0.1 |
| +0.1 +0.1 +0.1 +0.1 |
| 51 375.036M 44.6 +0.0 +0.0 +0.0 +0.0 +0.0 36.0 46.0 -10.0 Horiz |
| +0.0 $+0.0$ $+0.0$ $+0.3$ |
| -27.9 +3.5 +15.5 +0.0 |
| 52 333.344M 45.9 +0.0 +0.0 +0.0 +0.0 40.0 36.0 46.0 -10.0 Horiz |
| +0.0 $+0.0$ $+0.0$ $+0.3$ |
| |
| 53 375.036M 44.6 +0.0 +0.3 -27.9 +3.5 +0.0 36.0 46.0 -10.0 Horiz |
| +15.5 $+0.0$ $+0.0$ $+0.0$ |
| +0.0 $+0.0$ |
| 54 249.999M 47.9 $+0.0$ $+0.0$ $+0.0$ $+0.0$ $+0.0$ 35.8 46.0 -10.2 Vert |
| +0.0 $+0.0$ $+0.0$ $+0.227.8 +2.8 +12.7 +0.0$ |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
| 55 249.999M 47.9 $+0.0$ $+0.2$ -27.8 $+2.8$ $+0.0$ 35.8 46.0 -10.2 Vert |
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| |



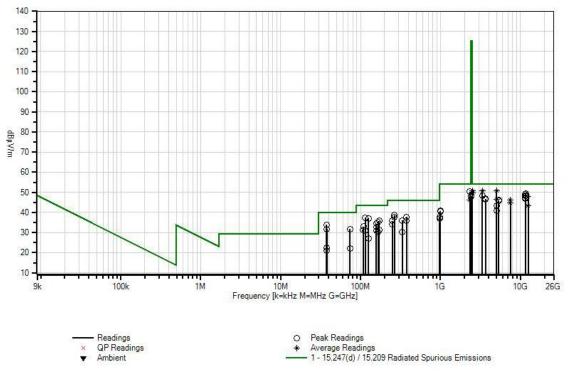
| | | 20.1 | | | | | | 10.5 | = 4 0 | 10 7 | ** • |
|------|----------------|------|------------------|------------------|------------------|------------------|-----------|------|-------|-------|--------------|
| 56 | 5039.775M | 39.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 43.5 | 54.0 | -10.5 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.5 | | | | | |
| | 100.04634 | 17.0 | +1.9 | +5.0 | -37.0 | +33.4 | 0.0 | | 10.5 | 10.6 | X 7 . |
| 57 | 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| 50 | 100.04614 | 17.0 | +0.0 | +0.0 | +0.0 | +0.0 | .0.0 | 22.0 | 42.5 | 10.0 | X 7 (|
| 58 | 108.846M | 47.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| 50 | 156 94214 | 47.0 | -27.8 | +1.8 | +10.9 | +0.0 | .0.0 | 22.7 | 12 5 | 10.9 | Haria |
| 59 | 156.843M | 47.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 32.7 | 43.5 | -10.8 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| (0) | 12400.002 | 27.6 | -27.7 | +2.2 | +10.9 | +0.0 | .0.0 | 42.0 | 54.0 | 10.9 | Vert |
| 60 | 12499.993 M | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| | | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave 12499.993 | 27.4 | +0.2 | +0.2 | +0.2 | +0.2 | .0.0 | 52.0 | 54.0 | 1.0 | Vert |
| X | | 37.4 | +0.0 -35.9 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| | М | | | +38.7 | +0.2 | +0.2 | | | | | |
| 62 | 250 01 4M | 46.1 | +0.2 | +0.2 +0.2 | +0.2 | +0.2 | +0.0 | 34.0 | 46.0 | 12.0 | Homin |
| 62 | 250.014M | 40.1 | +0.0 +12.7 | +0.2 +0.0 | -27.8 +0.0 | +2.8 +0.0 | +0.0 | 54.0 | 46.0 | -12.0 | Horiz |
| | | | +12.7 +0.0 | +0.0 +0.0 | +0.0 $+0.0$ | +0.0 +0.0 | | | | | |
| 63 | 250.014M | 46.1 | | | | | +0.0 | 34.0 | 46.0 | -12.0 | Homin |
| 03 | 250.014M | 40.1 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.2}$ | +0.0 | 54.0 | 46.0 | -12.0 | Horiz |
| | | | +0.0 -27.8 | +0.0 +2.8 | +0.0 +12.7 | | | | | | |
| 61 | 109 1201 | 46.5 | +0.0 | | | +0.0 | +0.0 | 31.4 | 43.5 | 12.1 | Vont |
| 64 | 108.139M | 40.5 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.1}$ | +0.0 | 51.4 | 43.5 | -12.1 | Vert |
| | | | +0.0 -27.8 | +0.0 $+1.8$ | +0.0 $+10.8$ | +0.1 +0.0 | | | | | |
| 65 | 108.139M | 46.5 | +0.0 | +1.0 +0.1 | -27.8 | +0.0 +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| 05 | 106.139101 | 40.5 | +0.0 +10.8 | +0.1 +0.0 | +0.0 | $^{+1.8}_{+0.0}$ | +0.0 | 51.4 | 43.3 | -12.1 | ven |
| | | | +10.8 +0.0 | +0.0 +0.0 | +0.0 +0.0 | $^{+0.0}_{+0.0}$ | | | | | |
| 66 | 170.043M | 46.9 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 | 31.3 | 43.5 | -12.2 | Horiz |
| 00 | 170.043101 | 40.9 | +0.0 +0.0 | +0.0 +0.0 | +0.0 $+0.0$ | +0.0 +0.2 | ± 0.0 | 51.5 | 45.5 | -12.2 | TIOTIZ |
| | | | -27.8 | +0.0 +2.3 | +9.7 | +0.2 +0.0 | | | | | |
| 67 | 156.800M | 45.6 | +0.0 | +2.3 +0.0 | +0.0 | +0.0 | +0.0 | 31.1 | 43.5 | -12.4 | Vert |
| 07 | 130.800101 | 45.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.1 | ± 0.0 | 51.1 | 45.5 | -12.4 | ven |
| | | | -27.7 | +2.2 | +10.9 | +0.1 | | | | | |
| 68 | 114.309M | 45.2 | +0.0 | +2.2 +0.0 | +10.9 +0.0 | +0.0 | +0.0 | 30.8 | 43.5 | -12.7 | Horiz |
| 00 | 117.307101 | 73.2 | +0.0 $+0.0$ | +0.0 $+0.0$ | +0.0 $+0.0$ | +0.0 +0.2 | 10.0 | 50.0 | -J.J | 12.1 | TIOUT |
| | | | -27.8 | +1.8 | +11.4 | +0.2 $+0.0$ | | | | | |
| 69 | 5040.021M | 36.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.9 | 54.0 | -13.1 | Vert |
| 0) | 2010.021141 | 50.0 | +0.0 | +0.0 | +0.0 | +0.5 | 10.0 | 10.7 | 5 1.0 | 13.1 | , 011 |
| | | | +1.9 | +5.0 | -37.0 | +33.4 | | | | | |
| 70 | 999.999M | 36.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| ,,,, | //////// | 20.2 | +0.0 | +0.0 | +0.0 | +0.6 | 10.0 | 10.0 | 21.0 | 13.2 | , 011 |
| | | | -27.3 | +6.2 | +24.8 | +0.0 | | | | | |
| 71 | 999.999M | 36.5 | +0.0 | +0.2 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| , 1 | //////// | 20.2 | +24.8 | +0.0 | +0.0 | +0.2 | 10.0 | 10.0 | 21.0 | 13.2 | , 011 |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 72 | 166.363M | 45.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.1 | 43.5 | -13.4 | Horiz |
| , 2 | 100.000111 | | +0.0 | +0.0 | +0.0 | +0.2 | | | | 10.1 | |
| 1 | | | -27.8 | +2.2 | +10.1 | +0.2 | | | | | |
| L | | | _/.0 | | | | | | | | |



| - | | | | | | | | | | | |
|----|----------|------|-------|------|-------|------|------|------|------|-------|-------|
| 73 | 999.996M | 36.1 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.3 | +6.2 | +24.8 | +0.0 | | | | | |
| 74 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 75 | 333.362M | 40.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.4 | 46.0 | -15.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.8 | +3.2 | +14.4 | +0.0 | | | | | |
| 76 | 976.045M | 33.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.7 | 54.0 | -16.3 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.2 | +6.1 | +24.5 | +0.0 | | | | | |
| 77 | 125.008M | 40.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +1.9 | +12.1 | +0.0 | | | | | |
| 78 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 79 | 976.052M | 33.0 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 54.0 | -17.0 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.2 | +6.1 | +24.5 | +0.0 | | | | | |
| 80 | 37.685M | 34.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| 81 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 82 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 83 | 73.962M | 41.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.6 | +0.0 | | | | | |
| 84 | 37.542M | 32.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.8 | +0.0 | | | | | |
| 85 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| L | | | | | | | | | | | |



CKC Laboratories, Inc. Date: 2/5/2012 Time: 13:01:35 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 17 Ext ATTN: 0 dB





Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious H | Emissions | |
|-----------------------------|---|------------|-------------|
| Work Order #: | 92742 | Date: | 2/5/2012 |
| Test Type: | Maximized Emissions | Time: | 13:01:35 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 18 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

Test Equipment:

| I est Equi | pmeni. | | | | |
|------------|----------|---------------------|-----------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | AN03239 | Cable | 32022-2-29094K- | 8/30/2011 | 8/30/2013 |
| | | | 24TC | | |
| T3 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T4 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T5 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T6 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T7 | AN02744 | High Pass Filter | 11SH10- | 3/5/2010 | 3/5/2012 |
| | | | 3000/T10000- | | |
| | | | O/O | | |
| T8 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T9 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T10 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T11 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T12 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| | AN01413 | Horn Antenna-ANSI | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | C63.5 Antenna | | | |
| | | Factors (dB) | | | |
| | AN01413 | Horn Antenna-1 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | Meter Antenna | | | |
| | | Factors (dB) - SAE | | | |
| | | ARP 958 | | | |
| | AN03158 | Active Horn Antenna | | 4/1/2010 | 4/1/2012 |
| | | | 26004000-33-8P | | |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} - \mathbf{EU1}).$ | | |
|----------------------|------------------------------|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | - | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Equipment Under Test (* = EUT):

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 5745MHz to 5825MHz

Transmit Frequencies used for this data sheet: 5745MHz (Low), 5785MHz (Middle), and 5825MHz (High). Channels 149, 157, and 165. 802.11n (20MHz) (7.2 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 40GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 40000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

Ext Attn: 0 dB

| Measu | rement Data: | Re | eading lis | ted by ma | argin. | | Te | est Distance | e: 3 Meters | | |
|-------|--------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 3 | 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ | 2500.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |



| 5 4999.998M | 46.7 | | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
|--------------|------|-------|-------|-------|-------|------|------|------|------|-------|
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ 4999.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 7 2333.334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 8 2500.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ 2500.000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 10 11570.002 | 36.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.4 | 54.0 | -4.6 | Vert |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.4 | | | | | |
| 11 11490.003 | 36.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.2 | 54.0 | -4.8 | Horiz |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.3 | | | | | |
| 12 11570.005 | 36.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.2 | 54.0 | -4.8 | Horiz |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.4 | | | | | |
| 13 11490.007 | 36.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.1 | 54.0 | -4.9 | Vert |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.3 | +36.3 | | | | | |
| 14 11650.025 | 36.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 48.9 | 54.0 | -5.1 | Horiz |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.4 | +36.5 | | | | | |
| 15 11650.020 | 35.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 48.5 | 54.0 | -5.5 | Vert |
| М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | +2.8 | +8.5 | -36.4 | +36.5 | | | | | |
| 16 3333.332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 17 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 18 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| М | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| ^ 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| Μ | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 20 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 21 114.300M | 51.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.4 | 43.5 | -6.1 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | - | | |
| | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |
| | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |



| 22 37.562M | 45.7 | | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
|--------------|------|-------|-------|-------|-------|------|------|------|------|-------|
| | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 23 37.562M | 45.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | -27.8 | +1.0 | +14.8 | +0.0 | | | | | |
| 24 125.002M | 50.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +1.9 | +12.1 | +0.0 | | | | | |
| 25 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 26 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 27 264.011M | 50.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 38.7 | 46.0 | -7.3 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | -27.7 | +2.9 | +12.9 | +0.0 | | | | | |
| 28 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 30 5439.907M | 40.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 46.4 | 54.0 | -7.6 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +2.0 | +5.4 | -36.9 | +34.3 | | | | | |
| 31 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 32 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| ^ 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 34 170.000M | 51.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.8 | 43.5 | -7.7 | Vert |
| | | | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +2.3 | +9.7 | +0.0 | | | | | |
| 35 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| Ave | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 37 5359.954M | 40.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 45.9 | 54.0 | -8.1 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 38 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | | | | | | - | | |



| 39 | 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
|----|-----------|------|-------|-------|-------|-------|------|------|------|-------|-------|
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 40 | 37.706M | 43.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| 41 | 5359.958M | 40.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 45.8 | 54.0 | -8.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 42 | 375.009M | 46.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.9 | +3.5 | +15.5 | +0.0 | | | | | |
| 43 | 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 44 | 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 45 | 73.819M | 51.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.6 | +0.0 | | | | | |
| 46 | 74.005M | 51.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.7 | +0.0 | | | | | |
| 47 | 166.370M | 50.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.2 | 43.5 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.2 | +10.1 | +0.0 | | | | | |
| 48 | 264.010M | 49.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.6 | 46.0 | -8.4 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.7 | +2.9 | +12.9 | +0.0 | | | | | |
| 49 | 5440.070M | 39.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 45.6 | 54.0 | -8.4 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | +2.0 | +5.4 | -36.9 | +34.3 | | | | | |
| 50 | 156.840M | 48.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 34.4 | 43.5 | -9.1 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.7 | +2.2 | +10.9 | +0.0 | | | | | |
| | 7499.993M | 36.1 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| | Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| ^ | 7499.993M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| | | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 53 | 5039.971M | 40.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 44.6 | 54.0 | -9.4 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.5 | | | | | |
| | | | +1.9 | +5.0 | -37.0 | +33.4 | | | | | |
| 54 | 5039.927M | 40.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 44.5 | 54.0 | -9.5 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.5 | | | | | |
| | | | +1.9 | +5.0 | -37.0 | +33.4 | | | | | |
| 55 | 375.036M | 44.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.9 | +3.5 | +15.5 | +0.0 | | | | | |
| | | | | | | | | | | | |



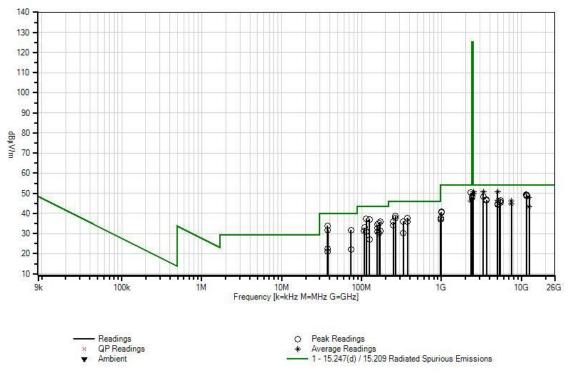
| | | 15.0 | | | | | 0.0 | 2.4.0 | 14.0 | 10.0 | ** • |
|-----|------------------|------|------------------|------------------|------------------|--------------|-----------|--------|------|-------|--------------|
| 56 | 333.344M | 45.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | 275.02.01 | 11.0 | -27.8 | +3.2 | +14.4 | +0.0 | .0.0 | 26.0 | 16.0 | 10.0 | |
| 57 | 375.036M | 44.6 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| 50 | 240.00014 | 47.0 | +0.0 | +0.0 | +0.0 | +0.0 | .0.0 | 25.0 | 16.0 | 10.0 | X 7 (|
| 58 | 249.999M | 47.9 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| 50 | 240.00014 | 47.0 | +0.0 | +0.0 | +0.0 | +0.0 | .0.0 | 25.0 | 16.0 | 10.0 | N. C. M. |
| 59 | 249.999M | 47.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| (0) | 100.04/01 | 47.0 | -27.8 | +2.8 | +12.7 | +0.0 | .0.0 | 22.0 | 42 5 | 10.0 | N. Land |
| 60 | 108.846M | 47.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| (1 | 100.04/01 | 47.0 | -27.8 | +1.8 | +10.9 | +0.0 | .0.0 | 22.0 | 42 5 | 10.0 | N. Land |
| 61 | 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| (2) | 12400.002 | 27.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 42.0 | 54.0 | 10.0 | N. Land |
| 62 | 12499.993 M | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| | | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave 12499.993 | 37.4 | +0.2 | +0.2 | +0.2 | +0.2 | +0.0 | 53.0 | 54.0 | 1.0 | V+ |
| ~ | | 57.4 | +0.0 -35.9 | +0.8 | +2.9 | +8.9 | +0.0 | 55.0 | 54.0 | -1.0 | Vert |
| | М | | | +38.7 | +0.2 | +0.2 | | | | | |
| 64 | 156.843M | 47.2 | +0.2 | +0.2 | +0.2 | +0.2 | +0.0 | 32.7 | 12 5 | 10.0 | II.a.r.!- |
| 04 | 150.845M | 47.2 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | +0.0 +0.1 | +0.0 | 32.7 | 43.5 | -10.8 | Horiz |
| | | | +0.0 -27.7 | +0.0 +2.2 | +0.0 +10.9 | +0.1 +0.0 | | | | | |
| 65 | 250.014M | 46.1 | +0.0 | +2.2 +0.0 | +10.9 +0.0 | | +0.0 | 34.0 | 46.0 | -12.0 | Uoriz |
| 05 | 230.014W | 40.1 | +0.0 +0.0 | +0.0 +0.0 | $^{+0.0}_{+0.0}$ | +0.0 +0.2 | +0.0 | 54.0 | 40.0 | -12.0 | Horiz |
| | | | -27.8 | +0.0 +2.8 | +0.0 +12.7 | +0.2 $+0.0$ | | | | | |
| 66 | 250.014M | 46.1 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| 00 | 230.01410 | 40.1 | +12.7 | +0.2 +0.0 | +0.0 | +2.8 +0.0 | ± 0.0 | 54.0 | 40.0 | -12.0 | TIOTIZ |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 67 | 108.139M | 46.5 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| 07 | 100.139101 | 40.5 | +10.8 | +0.1 +0.0 | +0.0 | +1.0 +0.0 | ± 0.0 | 51.4 | 45.5 | -12.1 | VCIT |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 68 | 108.139M | 46.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| 00 | 100.107101 | 10.5 | +0.0 | +0.0 | +0.0 | +0.0 | 10.0 | J 1. T | 15.5 | 12.1 | , 011 |
| | | | -27.8 | +1.8 | +10.8 | +0.1 | | | | | |
| 69 | 170.043M | 46.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.3 | 43.5 | -12.2 | Horiz |
| | 1,01010101 | 10.7 | +0.0 | +0.0 | +0.0 | +0.2 | . 0.0 | 21.5 | 10.0 | 12.2 | |
| | | | -27.8 | +2.3 | +9.7 | +0.2 | | | | | |
| 70 | 156.800M | 45.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.1 | 43.5 | -12.4 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | -27.7 | +2.2 | +10.9 | +0.0 | | | | | |
| 71 | 114.309M | 45.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.8 | 43.5 | -12.7 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | • • | | | |
| | | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |
| 72 | 999.999M | 36.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.3 | +6.2 | +24.8 | +0.0 | | | | | |
| L | | | | | | | | | | | |



| - | | | | | | | | | | | |
|-----|-------------|-------|------------------|------------------|------------------|------------------|-----------|------|------|---------|--------|
| 73 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | 16626216 | 15.4 | +0.0 | +0.0 | +0.0 | +0.0 | 0.0 | 20.1 | 10.5 | 12.4 | |
| 74 | 166.363M | 45.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.1 | 43.5 | -13.4 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | 000 00 00 0 | 261 | -27.8 | +2.2 | +10.1 | +0.0 | 0.0 | 40.4 | 54.0 | 12.6 | |
| 75 | 999.996M | 36.1 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| 76 | 000.00714 | 26.1 | -27.3 | +6.2 | +24.8 | +0.0 | .0.0 | 40.4 | 54.0 | 12.0 | II! |
| 76 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| 77 | 222.26214 | 40.2 | +0.0 | +0.0 | +0.0 | +0.0 | .0.0 | 20.4 | 16.0 | 15.0 | XZt |
| 77 | 333.362M | 40.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.4 | 46.0 | -15.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| 78 | 976.045M | 33.7 | -27.8 | +3.2 | +14.4 | +0.0 | +0.0 | 37.7 | 54.0 | -16.3 | Uoria |
| /8 | 970.045M | 33.7 | $^{+0.0}_{+0.0}$ | +0.0 | +0.0 | $^{+0.0}_{+0.6}$ | +0.0 | 57.7 | 54.0 | -10.5 | Horiz |
| | | | -27.2 | +0.0 +6.1 | +0.0 | | | | | | |
| 79 | 125.008M | 40.5 | +0.0 | +0.1 +0.2 | +24.5 | +0.0 +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| 19 | 125.00810 | 40.5 | +0.0 +12.1 | +0.2 +0.0 | +0.0 | +1.9 +0.0 | +0.0 | 20.9 | 45.5 | -10.0 | HOLIZ |
| | | | +12.1 +0.0 | +0.0 $+0.0$ | $^{+0.0}_{+0.0}$ | +0.0 $+0.0$ | | | | | |
| 80 | 125.008M | 40.5 | +0.0 +0.0 | +0.0 $+0.0$ | +0.0 +0.0 | +0.0 +0.0 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| 80 | 125.0081 | 40.5 | +0.0 +0.0 | $^{+0.0}_{+0.0}$ | $^{+0.0}_{+0.0}$ | +0.0 +0.2 | ± 0.0 | 20.9 | 45.5 | -10.0 | TIOTIZ |
| | | | -27.8 | +1.9 | +12.1 | +0.2 | | | | | |
| 81 | 976.052M | 33.0 | +0.0 | +1.9 +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 54.0 | -17.0 | Vert |
| 01 | 770.052111 | 55.0 | +0.0 | +0.0 | +0.0 | +0.6 | 10.0 | 57.0 | 54.0 | -17.0 | ven |
| | | | -27.2 | +6.1 | +24.5 | +0.0 | | | | | |
| 82 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| 02 | 57.005141 | 54.5 | +14.7 | +0.1 | +0.0 | +0.0 | 10.0 | 22.5 | 40.0 | 17.7 | HOHZ |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 83 | 37.685M | 34.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| 0.5 | 2 | 2 112 | +0.0 | +0.0 | +0.0 | +0.0 | | -2.0 | | - / • / | |
| | | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| 84 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 85 | 73.962M | 41.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | - | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.6 | +0.0 | | | | | |
| 86 | 37.542M | 32.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.8 | +0.0 | | | | | |
| 87 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | | | | | | | | | |



CKC Laboratories, Inc. Date: 2/5/2012 Time: 13:01:35 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 18 Ext ATTN: 0 dB





Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

| Customer: Specification: | Motorola Mobility, Inc. 15.247(d) / 15.209 Radiated Spurious I | Emissions | |
|-----------------------------|---|------------|-------------|
| Work Order #: | 92742 | Date: | 2/5/2012 |
| Test Type: | Maximized Emissions | Time: | 13:01:35 |
| Equipment: | DOCSIS 3.0 Wi-Fi Gateway | Sequence#: | 19 |
| Manufacturer: | Motorola Mobility, Inc. | Tested By: | S. Yamamoto |
| Model: | SBG6580 P2 | | |
| S/N: | 355601130600070507050085 | | |

Test Equipment:

| I est Equi | pmem | | | | |
|------------|----------|---------------------|-----------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/9/2010 | 8/9/2012 |
| T2 | AN03239 | Cable | 32022-2-29094K- | 8/30/2011 | 8/30/2013 |
| | | | 24TC | | |
| T3 | ANP05421 | Cable | Sucoflex 104A | 2/12/2010 | 2/12/2012 |
| T4 | ANP06081 | Cable | L1-PNMNM-48 | 4/28/2011 | 4/28/2013 |
| T5 | AN00786 | Preamp | 83017A | 8/5/2010 | 8/5/2012 |
| T6 | AN00849 | Horn Antenna | 3115 | 4/23/2010 | 4/23/2012 |
| T7 | AN02744 | High Pass Filter | 11SH10- | 3/5/2010 | 3/5/2012 |
| | | | 3000/T10000- | | |
| | | | O/O | | |
| T8 | ANP05050 | Cable | RG223/U | 3/21/2011 | 3/21/2013 |
| T9 | AN00309 | Preamp | 8447D | 5/7/2010 | 5/7/2012 |
| T10 | ANP05198 | Cable | 8268 | 12/21/2010 | 12/21/2012 |
| T11 | AN01995 | Biconilog Antenna | CBL6111C | 3/8/2010 | 3/8/2012 |
| T12 | AN00314 | Loop Antenna | 6502 | 6/30/2010 | 6/30/2012 |
| | AN01413 | Horn Antenna-ANSI | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | C63.5 Antenna | | | |
| | | Factors (dB) | | | |
| | AN01413 | Horn Antenna-1 | 84125-80008 | 12/2/2010 | 12/2/2012 |
| | | Meter Antenna | | | |
| | | Factors (dB) - SAE | | | |
| | | ARP 958 | | | |
| | AN03158 | Active Horn Antenna | | 4/1/2010 | 4/1/2012 |
| | | | 26004000-33-8P | | |
| | ANP06153 | Cable | 16301 | 10/27/2011 | 10/27/2013 |
| | | | | | |



| Equipment Under Test | $(^{\circ} = \mathbf{E} \mathbf{U} \mathbf{I}).$ | | |
|----------------------|--|---------------|------------------------|
| Function | Manufacturer | Model # | S/N |
| DOCSIS 3.0 Wi-Fi | Motorola Mobility, Inc. | SBG6580 P2 | 3556011306000705070500 |
| Gateway* | | | 85 |
| Support Devices: | | | |
| Function | Manufacturer | Model # | S/N |
| Broadband Router | CASA Systems | C2200 | FD3460 |
| Gigabit Switch | Netgear | GS105v2 | |
| Laptop Computer | HP | Compaq 6910p | |
| Performance Analysis | Spirent | SMB-600B | N06012143 |
| System | | | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| 8 Way Splitter | Regal | DS8DGV10 | |
| DHCP Server | HP | Compaq 6910p | |
| Diplexer | Eagle Comtronics | EDPF-65/85 | (none) |
| Laptop Computer | Dell | Precision M70 | |
| | | | |

Equipment Under Test (* = EUT):

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT and its AC to DC adapter are stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The CM Ethernet ports are connected to the SmartBits performance analysis system. The CM RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The SmartBits is turned on and running data. The EUT is transmitting continuously.

Frequency range of EUT: 5755MHz to 5795MHz

Transmit Frequencies used for this data sheet: 5755MHz (Low), and 5795MHz (High). Channels 151, and 159. 802.11n (40MHz) (15 Mbps)

Antenna: Antenna Gain: 4.1 dBi max at 2.4GHz band. Antenna Gain: 4.4 dBi max at 5GHz band Frequency range of measurement = 9 kHz to 40GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz- 40000 MHz RBW=1 MHz, VBW=1 MHz. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa.

Ext Attn: 0 dB

| Meas | urement Data: | Re | eading lis | ted by ma | argin. | | Te | est Distance | e: 3 Meters | | |
|------|---------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | T7 | T8 | | | | | |
| | | | T9 | T10 | T11 | T12 | | | | | |
| | MHz | dBµV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 3333.332M | 51.4 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 50.9 | 54.0 | -3.1 | Horiz |
| | Ave | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| ^ | 3333.332M | 53.2 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 52.7 | 54.0 | -1.3 | Horiz |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 3 | 2500.000M | 55.1 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 50.7 | 54.0 | -3.3 | Horiz |
| | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ | 2500.000M | 59.2 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 54.8 | 54.0 | +0.8 | Horiz |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |



| 5 | 4999.998M | 46.7 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.7 | 54.0 | -3.3 | Vert |
|----|-----------|------|-------------------|-------|-------|-------|------|------|---------|------|-------|
| | Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ۸ | 4999.997M | 49.8 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 53.8 | 54.0 | -0.2 | Vert |
| | | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 7 | 2333.334M | 55.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
| | | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 8 | 11590.020 | 37.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 50.1 | 54.0 | -3.9 | Vert |
| | М | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | | +2.8 | +8.5 | -36.3 | +36.4 | | | | | |
| | 2500.000M | 54.0 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| 4 | Ave | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ | 2500.000M | 56.5 | +0.0 | +0.4 | +1.3 | +3.3 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
| | | | -37.9 | +28.5 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 11 | 11590.063 | 36.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.2 | 54.0 | -4.8 | Horiz |
| | Μ | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | | +2.8 | +8.5 | -36.3 | +36.4 | | | | | |
| 12 | 11509.988 | 36.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 49.1 | 54.0 | -4.9 | Vert |
| | Μ | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | | +2.8 | +8.5 | -36.3 | +36.3 | | | | | |
| 13 | 11510.078 | 36.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 48.9 | 54.0 | -5.1 | Horiz |
| | Μ | | +0.0 | +0.0 | +0.0 | +0.8 | | | | | |
| | | | +2.8 | +8.5 | -36.3 | +36.3 | | | | | |
| 14 | 3333.332M | 48.9 | +0.0 | +0.4 | +1.6 | +3.9 | +0.0 | 48.4 | 54.0 | -5.6 | Vert |
| | | | -37.7 | +30.7 | +0.6 | +0.6 | | | | | |
| | | | +0.6 | +0.6 | +0.6 | +0.6 | | | | | |
| 15 | 2390.000M | 52.9 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 48.2 | 54.0 | -5.8 | Vert |
| | | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 16 | 12499.995 | 32.5 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 48.1 | 54.0 | -5.9 | Horiz |
| | Μ | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| ^ | 12499.995 | 38.2 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.8 | 54.0 | -0.2 | Horiz |
| | М | | | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | 4 | | | |
| 18 | 2389.981M | 52.6 | +0.0 | +0.4 | +1.2 | +3.3 | +0.0 | 47.9 | 54.0 | -6.1 | Horiz |
| | | | -38.0 | +28.4 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 19 | 114.300M | 51.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.4 | 43.5 | -6.1 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |
| 20 | 37.562M | 45.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.8 | +0.0 | | | | | |
| 21 | 37.562M | 45.7 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 33.8 | 40.0 | -6.2 | Vert |
| | | | $^{+14.8}_{+0.0}$ | +0.0 | +0.0 | +0.0 | | | | | |
| | | | | +0.0 | +0.0 | +0.0 | | | | | |



| 22 125.002M | 50.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
|--------------|------|-------|-------|-------|-------|------|------|------|------|-------|
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +1.9 | +12.1 | +0.0 | | | | | |
| 23 125.002M | 50.6 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 37.0 | 43.5 | -6.5 | Vert |
| | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 24 5440.111M | 41.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 47.1 | 54.0 | -6.9 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +2.0 | +5.4 | -36.9 | +34.3 | | | | | |
| 25 3666.667M | 46.2 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.8 | 54.0 | -7.2 | Vert |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 26 264.011M | 50.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 38.7 | 46.0 | -7.3 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | -27.7 | +2.9 | +12.9 | +0.0 | | | | | |
| 27 4999.992M | 42.6 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 46.6 | 54.0 | -7.4 | Horiz |
| Ave | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| ^ 4999.992M | 46.0 | +0.0 | +0.5 | +1.9 | +5.0 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | | -37.0 | +33.3 | +0.3 | +0.3 | | | | | |
| | | +0.3 | +0.3 | +0.3 | +0.3 | | | | | |
| 29 5439.935M | 40.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 46.5 | 54.0 | -7.5 | Horiz |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +2.0 | +5.4 | -36.9 | +34.3 | | | | | |
| 30 3666.665M | 45.8 | +0.0 | +0.4 | +1.7 | +4.2 | +0.0 | 46.4 | 54.0 | -7.6 | Horiz |
| | | -37.4 | +31.3 | +0.4 | +0.4 | | | | | |
| | | +0.4 | +0.4 | +0.4 | +0.4 | | | | | |
| 31 170.000M | 51.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.8 | 43.5 | -7.7 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | -27.8 | +2.3 | +9.7 | +0.0 | | | | | |
| 32 7499.992M | 37.7 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| Ave | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| ^ 7499.992M | 42.9 | +0.0 | +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| | | -36.5 | +35.5 | +0.1 | +0.1 | | | | | |
| | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 34 2333.332M | 51.1 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 46.2 | 54.0 | -7.8 | Horiz |
| Ave | | | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| ^ 2333.332M | 57.2 | +0.0 | +0.4 | +1.2 | +3.2 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | -38.0 | +28.3 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 36 5359.941M | 40.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 46.1 | 54.0 | -7.9 | Vert |
| | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 37 37.706M | 43.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 38 375.009M | 46.4 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
| | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | | | | | | | | |



| 39 | 375.009M | 46.4 | +0.0 | +0.0 | +0.0 | | +0.0 | 37.8 | 46.0 | -8.2 | Vert |
|------|--|------|---------------|---------------|---------------|------------------|------|------|------|-------|--------------|
| - 39 | 373.009M | 40.4 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.0 | +0.0 +0.3 | +0.0 | 57.8 | 40.0 | -0.2 | ven |
| | | | -27.9 | +3.5 | +15.5 | +0.0 | | | | | |
| 40 | 37.706M | 43.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.8 | 40.0 | -8.2 | Vert |
| | 0,1,00111 | | +0.0 | +0.0 | +0.0 | +0.1 | | 0110 | | 0.2 | |
| | | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| 41 5 | 359.883M | 40.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 45.8 | 54.0 | -8.2 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | +1.9 | +5.3 | -36.9 | +34.1 | | | | | |
| 42 | 166.370M | 50.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.2 | 43.5 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.2 | +10.1 | +0.0 | | | | | |
| 43 | 73.819M | 51.5 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 44 | 73.819M | 51.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.6 | +0.0 | | | | | |
| 45 | 74.005M | 51.4 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +6.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 46 | 74.005M | 51.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.7 | 40.0 | -8.3 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.7 | +0.0 | | | | | |
| 47 2 | 264.010M | 49.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.6 | 46.0 | -8.4 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| 10 | 15604036 | 10.0 | -27.7 | +2.9 | +12.9 | +0.0 | 0.0 | 24.4 | 10.5 | 0.1 | X 7 . |
| 48 | 156.840M | 48.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 34.4 | 43.5 | -9.1 | Vert |
| | | | +0.0 -27.7 | +0.0 +2.2 | +0.0 | $^{+0.1}_{+0.0}$ | | | | | |
| 40.7 | 499.993M | 36.1 | +0.0 | +2.2 +0.7 | +10.9 +2.3 | +0.0 +6.5 | +0.0 | 44.7 | 54.0 | -9.3 | Vert |
| | 499.9951vi ve | 50.1 | +0.0 -36.5 | +0.7 +35.5 | +2.5 +0.1 | +0.3 +0.1 | +0.0 | 44.7 | 54.0 | -9.5 | ven |
| | ve | | +0.1 | +35.5 +0.1 | +0.1 $+0.1$ | +0.1 $+0.1$ | | | | | |
| ^ 7 | 499.993M | 42.9 | +0.1 +0.0 | +0.1 +0.7 | +2.3 | +6.5 | +0.0 | 51.5 | 54.0 | -2.5 | Vert |
| 1 | + <i>))</i> , <i>))</i> , <i>5</i> , <i>1</i> | 72.7 | -36.5 | +35.5 | +0.1 | +0.3 | 10.0 | 51.5 | 54.0 | -2.5 | ven |
| | | | +0.1 | +0.1 | +0.1 | +0.1 | | | | | |
| 51 4 | 960.009M | 40.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 44.7 | 54.0 | -9.3 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.5 | | | | , | |
| | | | +1.9 | +5.0 | -37.0 | +33.2 | | | | | |
| 52 4 | 959.758M | 40.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 44.3 | 54.0 | -9.7 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.5 | | | | | |
| | | | +1.9 | +5.0 | -37.0 | +33.2 | | | | | |
| 53 3 | 375.036M | 44.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.9 | +3.5 | +15.5 | +0.0 | | | | | |
| 54 | 333.344M | 45.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| L | | | -27.8 | +3.2 | +14.4 | +0.0 | | | | | |
| 55 3 | 375.036M | 44.6 | +0.0 | +0.3 | -27.9 | +3.5 | +0.0 | 36.0 | 46.0 | -10.0 | Horiz |
| 1 | | | +15.5 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +13.3 +0.0 | +0.0 | +0.0 | +0.0 | | | | | |



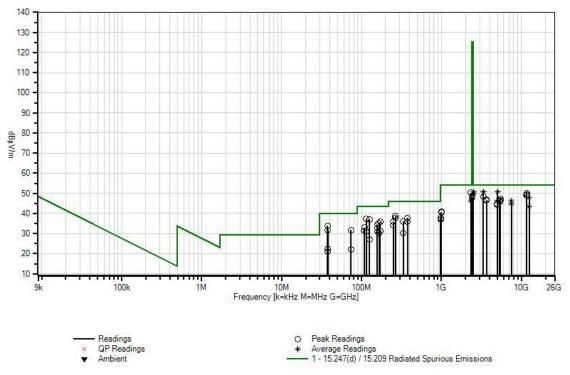
| 56 | 249.999M | 47.9 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
|----|-----------|------|-------|-------|-------|------|------|------|------|-------|-------|
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | 10.0 | |
| 57 | 249.999M | 47.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 35.8 | 46.0 | -10.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.8 | +12.7 | +0.0 | | | | | |
| 58 | 108.846M | 47.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | 100.01.01 | | -27.8 | +1.8 | +10.9 | +0.0 | | | 10.7 | | |
| 59 | 108.846M | 47.9 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 32.9 | 43.5 | -10.6 | Vert |
| | | | +10.9 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 60 | 156.843M | 47.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 32.7 | 43.5 | -10.8 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.7 | +2.2 | +10.9 | +0.0 | | | | | |
| 61 | 12499.993 | 27.6 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 43.2 | 54.0 | -10.8 | Vert |
| | Μ | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | Ave | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| ^ | 12499.993 | 37.4 | +0.0 | +0.8 | +2.9 | +8.9 | +0.0 | 53.0 | 54.0 | -1.0 | Vert |
| | Μ | | -35.9 | +38.7 | +0.2 | +0.2 | | | | | |
| | | | +0.2 | +0.2 | +0.2 | +0.2 | | | | | |
| 63 | 250.014M | 46.1 | +0.0 | +0.2 | -27.8 | +2.8 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | | +12.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 64 | 250.014M | 46.1 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 34.0 | 46.0 | -12.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.8 | +12.7 | +0.0 | | | | | |
| 65 | 108.139M | 46.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.8 | +10.8 | +0.0 | | | | | |
| 66 | 108.139M | 46.5 | +0.0 | +0.1 | -27.8 | +1.8 | +0.0 | 31.4 | 43.5 | -12.1 | Vert |
| | | | +10.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 67 | 170.043M | 46.9 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.3 | 43.5 | -12.2 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.3 | +9.7 | +0.0 | | | | | |
| 68 | 156.800M | 45.6 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 31.1 | 43.5 | -12.4 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.7 | +2.2 | +10.9 | +0.0 | | | | | |
| 69 | 114.309M | 45.2 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.8 | 43.5 | -12.7 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +1.8 | +11.4 | +0.0 | | | | | |
| 70 | 999.999M | 36.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.3 | +6.2 | +24.8 | +0.0 | | | | | |
| 71 | 999.999M | 36.5 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.8 | 54.0 | -13.2 | Vert |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 72 | 166.363M | 45.4 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.1 | 43.5 | -13.4 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +2.2 | +10.1 | +0.0 | | | | | |
| - | | | | | | | | | | | |



| - | | | | | | | | | | | |
|----|----------|------|-------|------|-------|------|------|------|------|-------|-------|
| 73 | 999.996M | 36.1 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.3 | +6.2 | +24.8 | +0.0 | | | | | |
| 74 | 999.996M | 36.1 | +0.0 | +0.6 | -27.3 | +6.2 | +0.0 | 40.4 | 54.0 | -13.6 | Horiz |
| | | | +24.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 75 | 333.362M | 40.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 30.4 | 46.0 | -15.6 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.3 | | | | | |
| | | | -27.8 | +3.2 | +14.4 | +0.0 | | | | | |
| 76 | 976.045M | 33.7 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.7 | 54.0 | -16.3 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.2 | +6.1 | +24.5 | +0.0 | | | | | |
| 77 | 125.008M | 40.5 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.2 | | | | | |
| | | | -27.8 | +1.9 | +12.1 | +0.0 | | | | | |
| 78 | 125.008M | 40.5 | +0.0 | +0.2 | -27.8 | +1.9 | +0.0 | 26.9 | 43.5 | -16.6 | Horiz |
| | | | +12.1 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 79 | 976.052M | 33.0 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 37.0 | 54.0 | -17.0 | Vert |
| | | | +0.0 | +0.0 | +0.0 | +0.6 | | | | | |
| | | | -27.2 | +6.1 | +24.5 | +0.0 | | | | | |
| 80 | 37.685M | 34.3 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.7 | +0.0 | | | | | |
| 81 | 37.685M | 34.3 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 22.3 | 40.0 | -17.7 | Horiz |
| | | | +14.7 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 82 | 73.962M | 41.8 | +0.0 | +0.1 | -27.9 | +1.4 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +6.6 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| 83 | 73.962M | 41.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 22.0 | 40.0 | -18.0 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.9 | +1.4 | +6.6 | +0.0 | | | | | |
| 84 | 37.542M | 32.8 | +0.0 | +0.0 | +0.0 | +0.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +0.0 | +0.0 | +0.0 | +0.1 | | | | | |
| | | | -27.8 | +1.0 | +14.8 | +0.0 | | | | | |
| 85 | 37.542M | 32.8 | +0.0 | +0.1 | -27.8 | +1.0 | +0.0 | 20.9 | 40.0 | -19.1 | Horiz |
| | | | +14.8 | +0.0 | +0.0 | +0.0 | | | | | |
| | | | +0.0 | +0.0 | +0.0 | +0.0 | | | | | |
| L | | | | | | | | | | | |



CKC Laboratories, Inc. Date: 2/5/2012 Time: 13:01:35 Motorola Mobility, Inc. WO#: 92742 15:247(d) / 15:209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 19 Ext ATTN: 0 dB





Test Setup Photos







15.247(e) Power Spectral Density

The equipment under test (EUT) is placed on the test bench. The EUT antenna port is connected to the spectrum analyzer using a coaxial cable. The EUT is set in continuous transmit mode and the measurement is taken at the antenna port. Temperature: 20°C, Humidity: 40%, Pressure: 100kPa Frequency range of EUT: 2412 to 2462MHz 802.11b (11Mbps), Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11) 802.11g (6Mbps) Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11) 802.11n (20MHz) (7.2Mbps) Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11) 802.11n (40MHz) (15Mbps) Transmit Frequencies: 2422MHz, 2437MHz, 2452MHz (Channel 3, 6, 9) Frequency range of EUT: 5745 to 5825MHz 802.11a (6Mbps), Transmit Frequencies: 5745MHz, 5785MHz, 5825MHz (Channel 1, 6, 11) 802.11n (20MHz) (7.2Mbps) Transmit Frequencies: 5745MHz, 5785MHz, 5825MHz (Channel 149, 157, 165) 802.11n (40MHz) (15Mbps) Transmit Frequencies: 5755MHz, 5795MHz (Channel 151, 159) Data Plots

In accordance with 558074 D01 DTS Meas Guidance v01 the measurement is taken with a RBW=100kHz. The specification limit is given with respect to a 3kHz bandwidth. The bandwidth correction factor therefore is 10Log(3kHz/100kHz) = -15.2dB. The data taken with a 100kHz bandwidth could not be altered so the limit line was corrected. The limit line on the plot was adjusted from +8dBm to +23.2dBm (+8dBm + 15.2dB).



| | Port 0 (dBm) | Port 1 (dBm) | Port 0 (mW) | Port 1 (mW) | Port 0 + 1 (mW) | Port 0 + 1 (dBm) | PSD Total (dBm) |
|--------------------------|--------------|--------------|-------------|-------------|-----------------|------------------|-----------------|
| 802.11b, 2412MHz | -6.4 | | 0.23 | | 0.23 | -6.40 | -6.40 |
| 802.11b, 2437MHz | -6.7 | | 0.21 | | 0.21 | -6.70 | -6.70 |
| 802.11b, 2462MHz | -6.9 | | 0.20 | | 0.20 | -6.90 | -6.90 |
| 802.11g, 2412MHz | -10.7 | -10 | 0.09 | 0.10 | 0.19 | -7.33 | -7.33 |
| 802.11g, 2437MHz | -10.6 | -9.8 | 0.09 | 0.10 | 0.19 | -7.17 | -7.17 |
| 802.11g, 2462MHz | -10.8 | -10.3 | 0.08 | 0.09 | 0.18 | -7.53 | -7.53 |
| 802.11n (20MHz), 2412MHz | -10.5 | -10.7 | 0.09 | 0.09 | 0.17 | -7.59 | -7.59 |
| 802.11n (20MHz), 2437MHz | -10.4 | -10.2 | 0.09 | 0.10 | 0.19 | -7.29 | -7.29 |
| 802.11n (20MHz), 2462MHz | -10.8 | -10.7 | 0.08 | 0.09 | 0.17 | -7.74 | -7.74 |
| 802.11n (40MHz), 2422MHz | -15 | -14.5 | 0.03 | 0.04 | 0.07 | -11.73 | -11.73 |
| 802.11n (40MHz), 2437MHz | -14.7 | -14.5 | 0.03 | 0.04 | 0.07 | -11.59 | -11.59 |
| 802.11n (40MHz), 2452MHz | | -14.6 | 0.03 | 0.03 | 0.07 | -11.74 | -11.74 |
| 802.11a, 5745MHz | -11.5 | -12.8 | 0.07 | 0.05 | 0.07 | -11.50 | -11.50 |
| 802.11a, 5785MHz | -12.1 | -13 | 0.06 | 0.05 | 0.06 | -12.10 | -12.10 |
| 802.11a, 5825MHz | -12.1 | -12.8 | 0.06 | 0.05 | 0.06 | -12.10 | -12.10 |
| 802.11n (20MHz), 5745MHz | -11.8 | -12.6 | 0.07 | 0.05 | 0.12 | -9.17 | -9.17 |
| 802.11n (20MHz), 5785MHz | -12 | -13.1 | 0.06 | 0.05 | 0.11 | -9.50 | -9.50 |
| 802.11n (20MHz), 5825MHz | -11.9 | -13 | 0.06 | 0.05 | 0.11 | -9.40 | -9.40 |
| 802.11n (40MHz), 5755MHz | -15.4 | -15.4 | 0.03 | 0.03 | 0.06 | -12.39 | -12.39 |
| 802.11n (40MHz), 5795MHz | -16.1 | -15.7 | 0.02 | 0.03 | 0.05 | -12.89 | -12.89 |

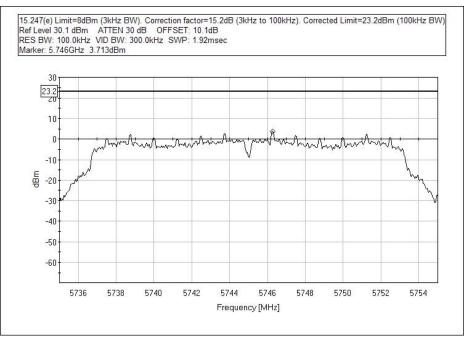
Note: Calculated values in above table are taken from the plot so the final column (PSD Total) to be compared with the actual limit of +8dBm. Calculation from plots are: marker reading -15.2dB =amplitude value with respect to a 3kHz bandwidth.

Engineer Name: S. Yamamoto

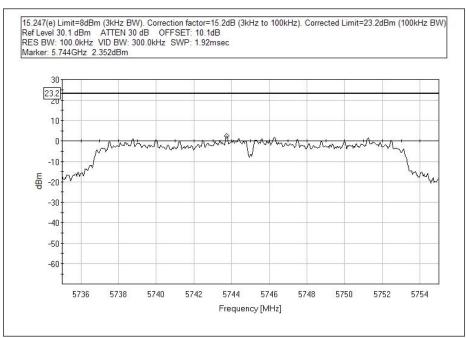
| Test Equipment | | | | | | | | | | | |
|----------------|-------------------|--------------------|--------------|------------|------------|--|--|--|--|--|--|
| Asset/Serial # | Description | Model | Manufacturer | Cal Date | Cal Due | | | | | | |
| 02672 | Spectrum Analyzer | E4446A | Agilent | 08/09/2010 | 08/09/2012 | | | | | | |
| 02945 | 3' 40GHz cable | 32022-2-2909K-36TC | Astrolab | 10/19/2011 | 10/19/2013 | | | | | | |



<u>Test Plots</u>

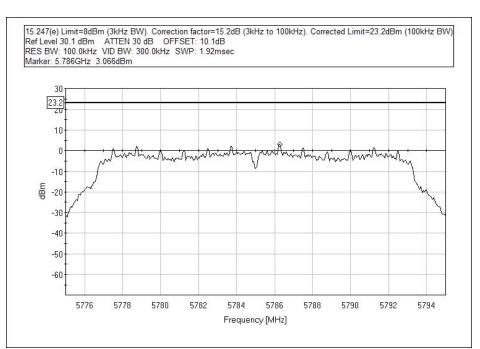




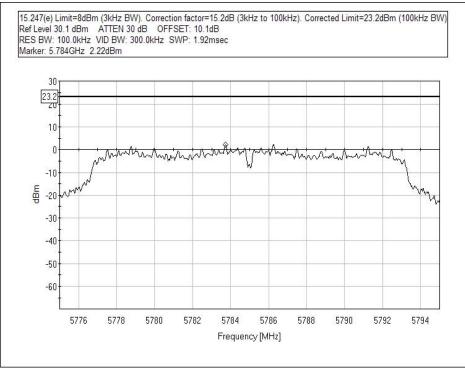


802.11a - Antenna Port 1



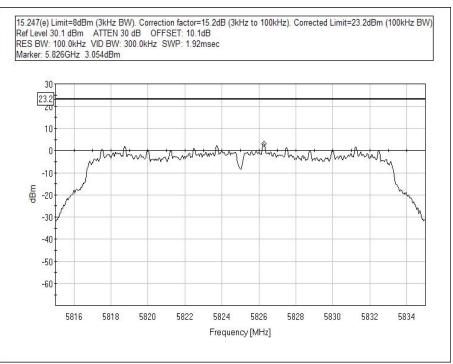


802.11a - Antenna Port 0

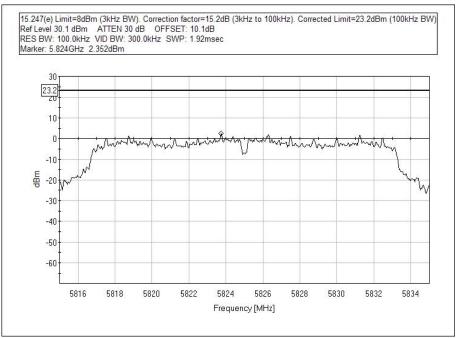


802.11a - Antenna Port 1



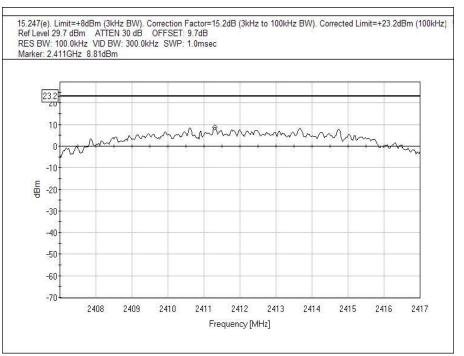




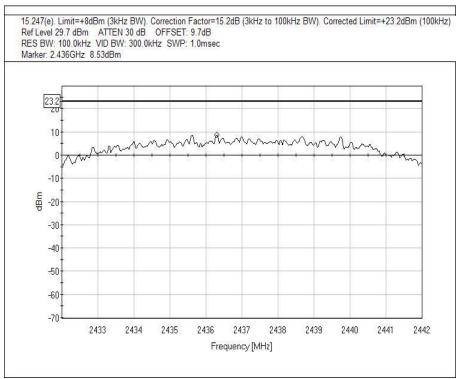


802.11a - Antenna Port 1





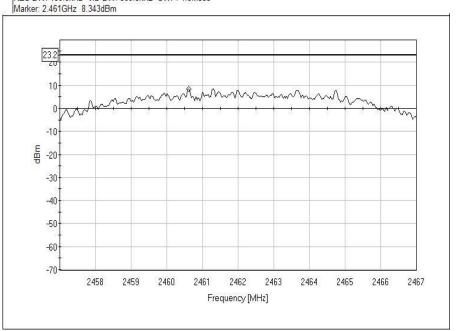
802.11b - Antenna Port 0



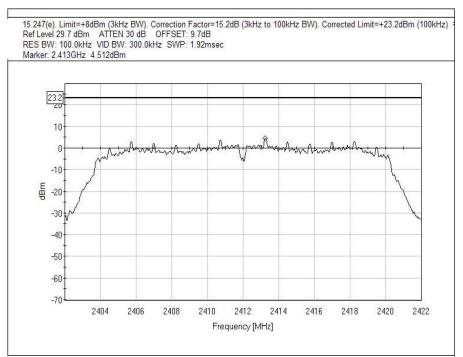
802.11b - Antenna Port 0



15.247(e). Limit=+8dBm (3kHz BW). Correction Factor=15.2dB (3kHz to 100kHz BW). Corrected Limit=+23.2dBm (100kHz) Ref Level 29.7 dBm ATTEN 30 dB OFFSET: 9.7dB RES BW: 100.0kHz VID BW: 300.0kHz SWP: 1.0msec

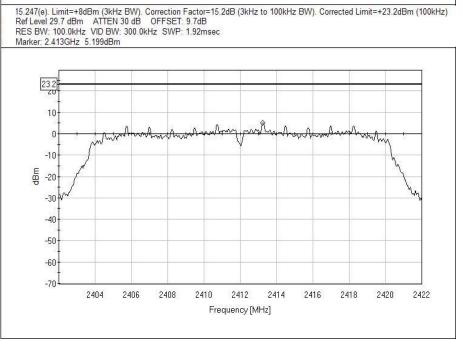




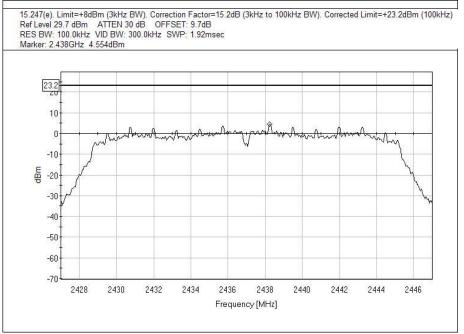


802.11g - Antenna Port 0



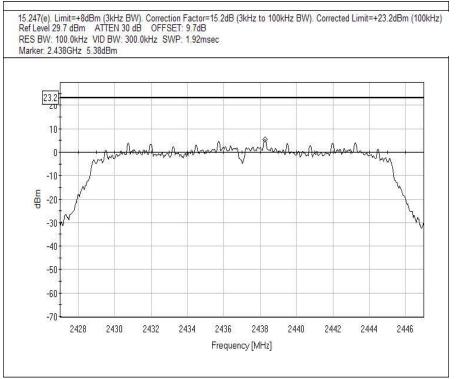




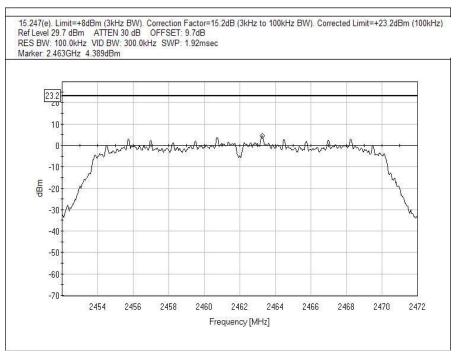


802.11g - Antenna Port 0







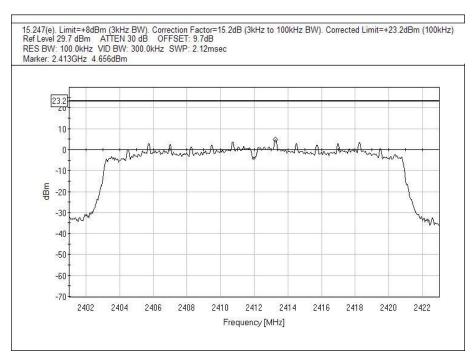


802.11g - Antenna Port 0



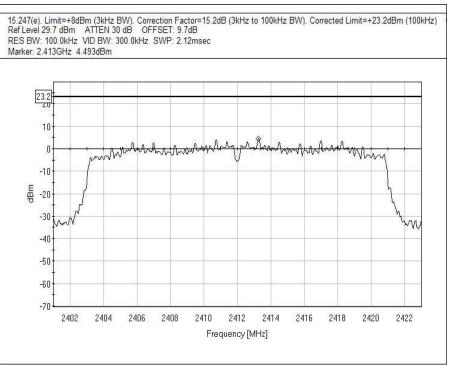
15.247(e). Limit=+8dBm (3kHz BW). Correction Factor=15.2dB (3kHz to 100kHz BW). Corrected Limit=+23.2dBm (100kHz) Ref Level 29.7 dBm ATTEN 30 dB OFFSET: 9.7dB RES BW: 100.0kHz VID BW: 300.0kHz SWP: 1.92msec Marker: 2.463GHz 4.922dBm 23.2 10min Anima manan Ang Anitali Annam 0 -10 dBm -20 -30 -40 -50 -60 -70 2454 2456 2458 2460 2462 2464 2466 2468 2470 2472 Frequency [MHz]



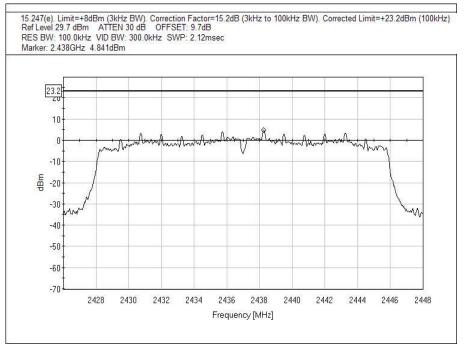


802.11n - Antenna Port 0



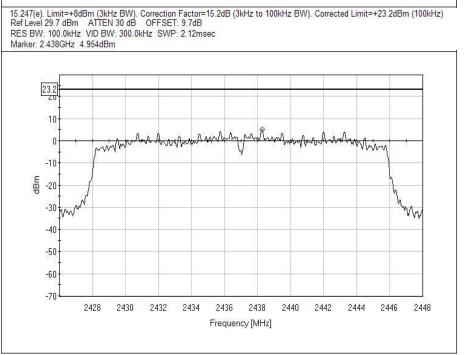




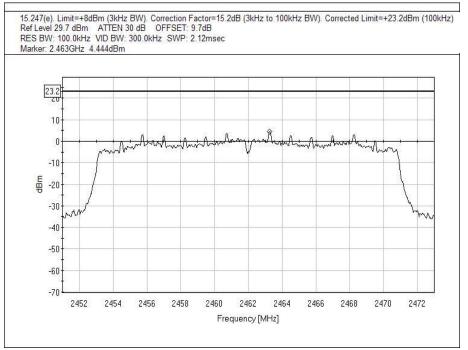


802.11n - Antenna Port 0



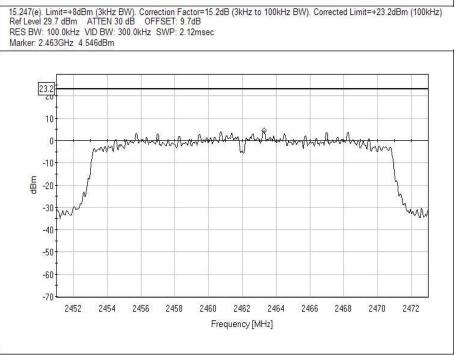




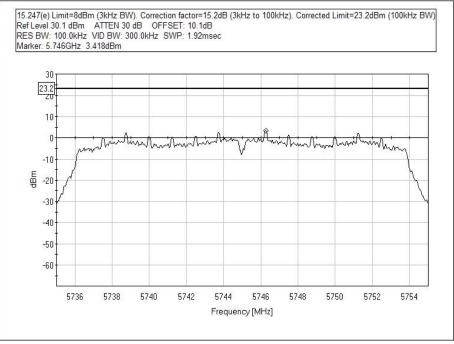


802.11n - Antenna Port 0



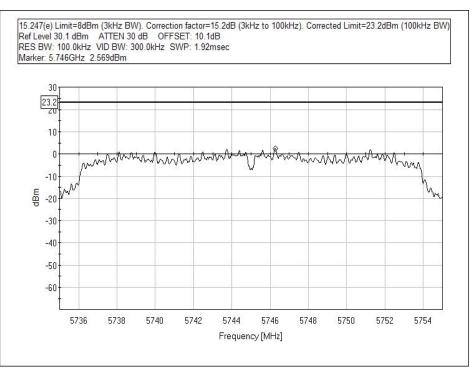




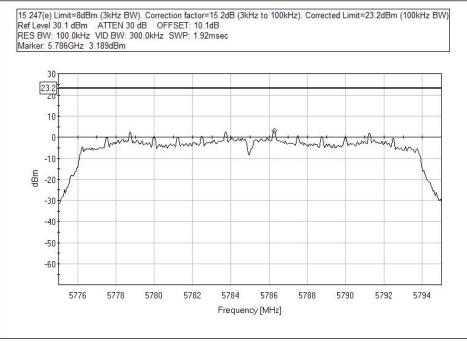


802.11n - Antenna Port 0



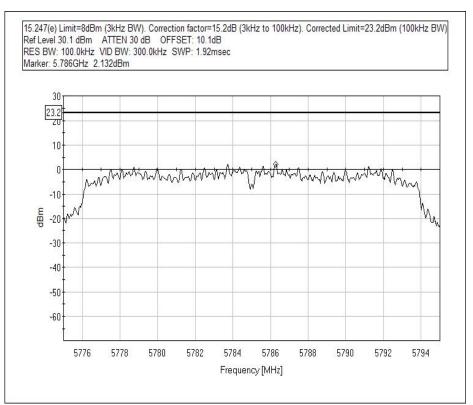




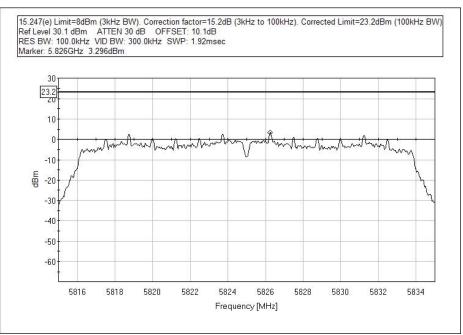


802.11n - Antenna Port 0



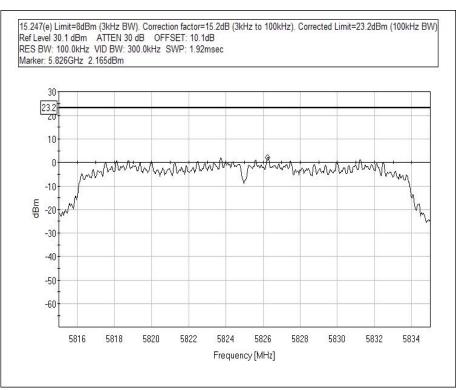


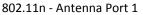
802.11n - Antenna Port 1

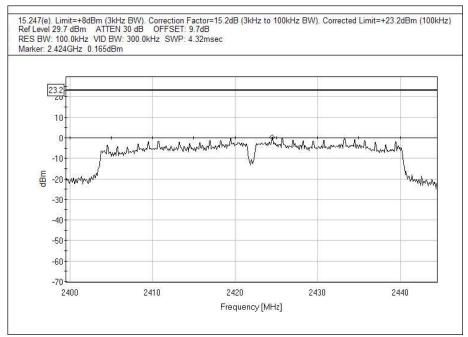


802.11n - Antenna Port 0



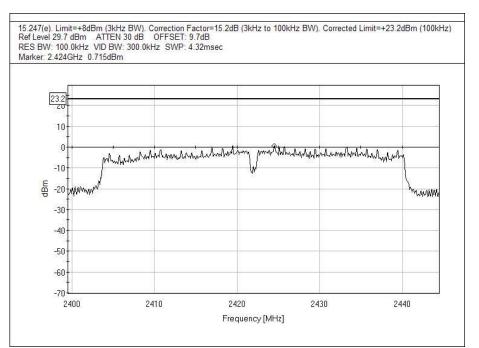




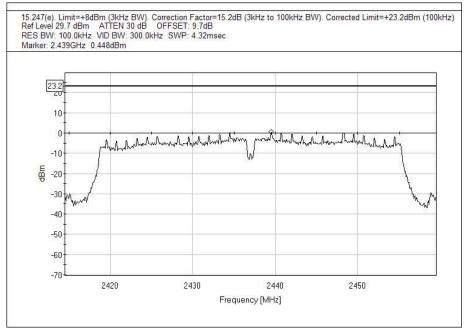


802.11n - Antenna Port 0



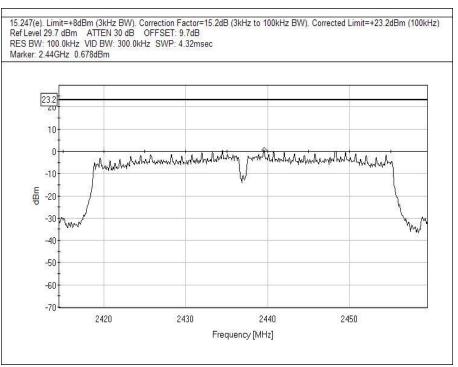




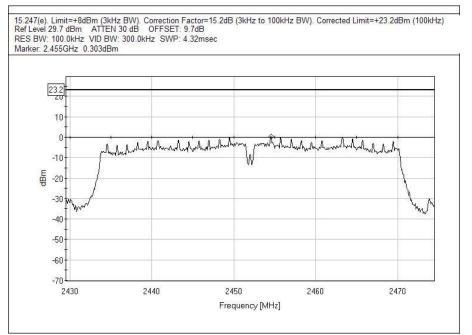


802.11n - Antenna Port 0



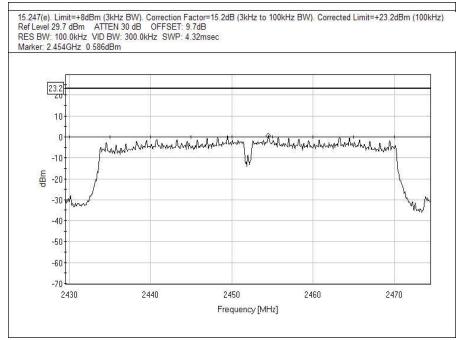




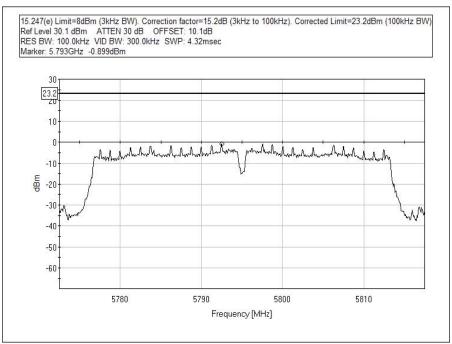


802.11n - Antenna Port 0



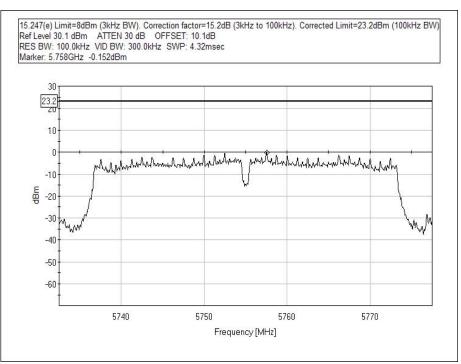


802.11n - Antenna Port 1

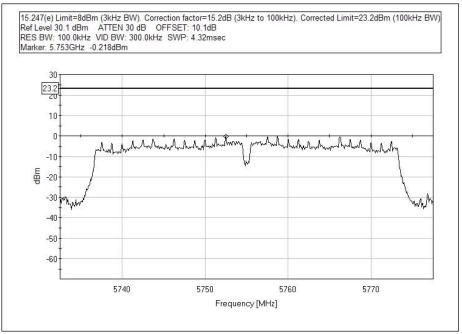


802.11n - Antenna Port 0



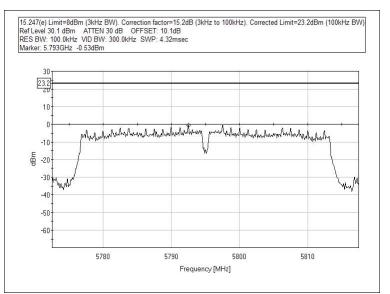






802.11n - Antenna Port 0





802.11n - Antenna Port 1

Test Setup Photos

