

RSS-210 / RSS-GEN 99% Bandwidth

Test Conditions / Setup

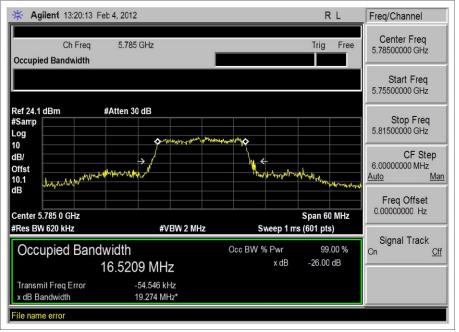
The equipment under test (EUT) is placed on the test bench. The EUT antenna port is connected to the spectrum analyzer using a coaxial cable. The EUT is set in continuous transmit mode and the measurement is taken at the
antenna port.
Temperature: 20°C, Humidity: 40%, Pressure: 100kPa
Frequency range 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)
(202.44 + (200.41 +))(7.20.41 + -))
802.11n (20MHz) (7.2Mbps)
Transmit Frequencies: 5745MHz, 5785MHz, 5825MHz (Channel 149, 157, 165)
902.11n(400411n)(1504bnc)
802.11n (40MHz) (15Mbps)
Transmit Frequencies: 5755MHz, 5795MHz (Channel 151, 159)

Engineer Name: S. Yamamoto

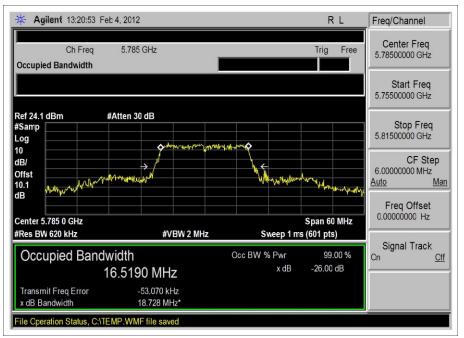
Test Equipment								
Asset/Serial #	Asset/Serial # Description Model Manufacturer Cal Date Cal Due							
02672	Spectrum Analyzer	E4446A	Agilent	08/09/2010	08/09/2012			
02945	3' 40GHz cable	32022-2-2909K-36TC	Astrolab	10/19/2011	10/19/2013			





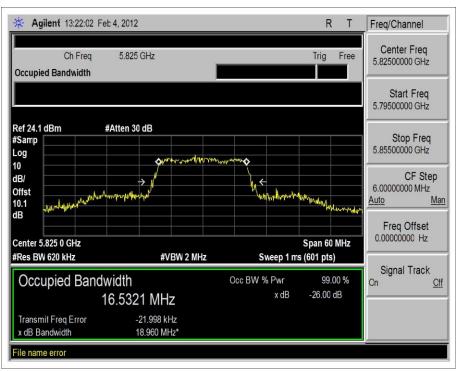


802.11a - Antenna Port 0

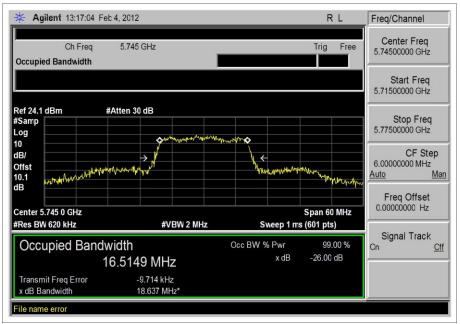


802.11a - Antenna Port 1





802.11a - Antenna Port 0

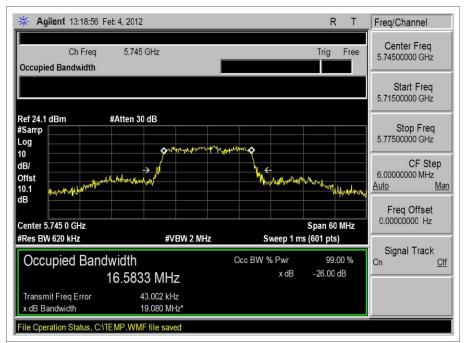


802.11a - Antenna Port 0



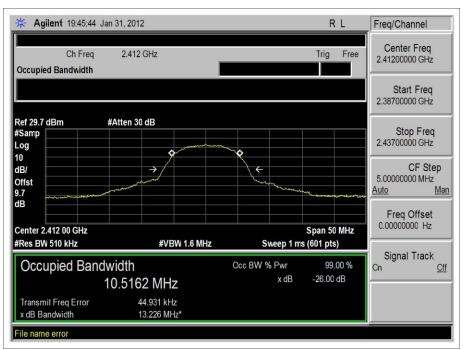


802.11a - Antenna Port 1

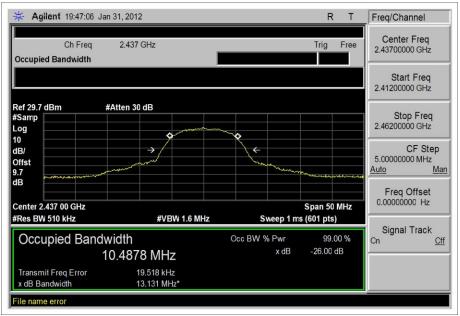


802.11a - Antenna Port 1



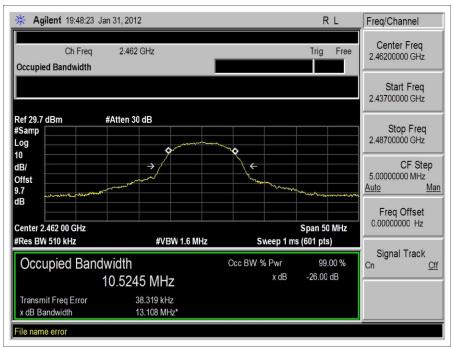


802.11b - Antenna Port 0

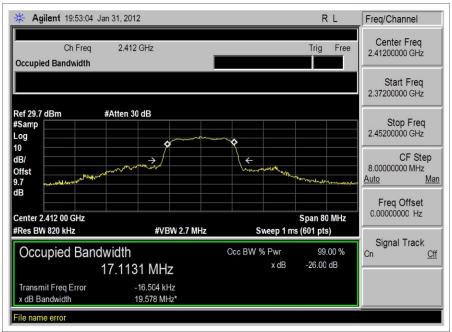


802.11b - Antenna Port 0



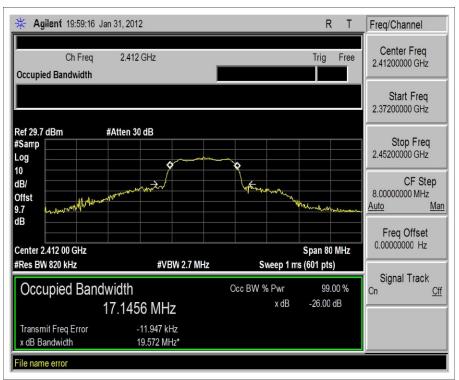


802.11b - Antenna Port 0

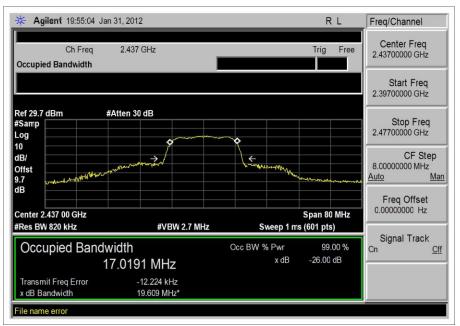


802.11g - Antenna Port 0



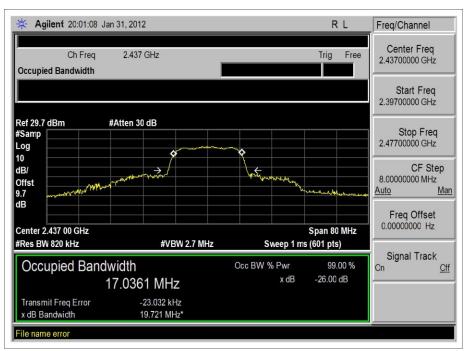


802.11g - Antenna Port 1

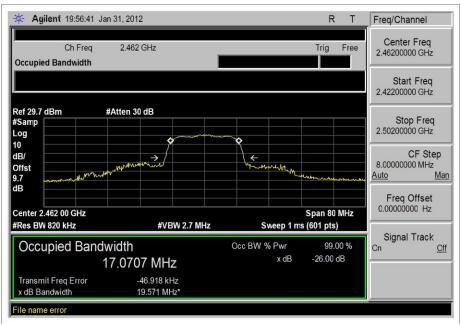


802.11g - Antenna Port 0





802.11g - Antenna Port 1

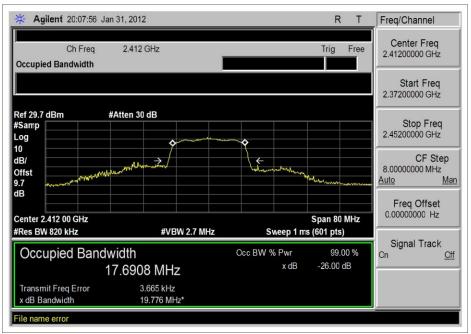


802.11g - Antenna Port 0





802.11g - Antenna Port 1

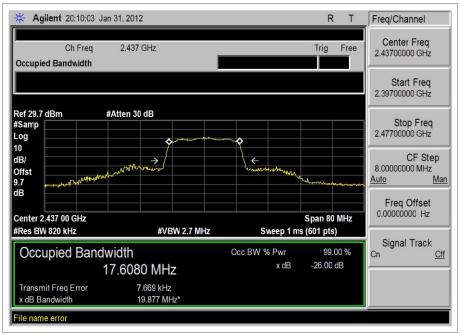


802.11n - Antenna Port 0





802.11n - Antenna Port 1

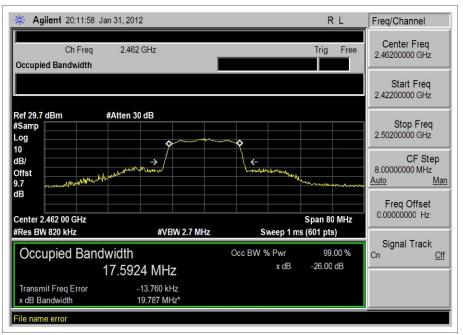


802.11n - Antenna Port 0





802.11n - Antenna Port 1

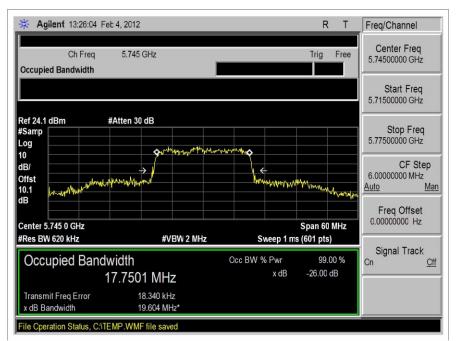


802.11n - Antenna Port 0





802.11n - Antenna Port 1

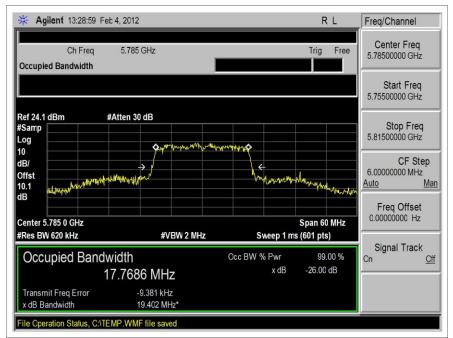


802.11n - Antenna Port 0



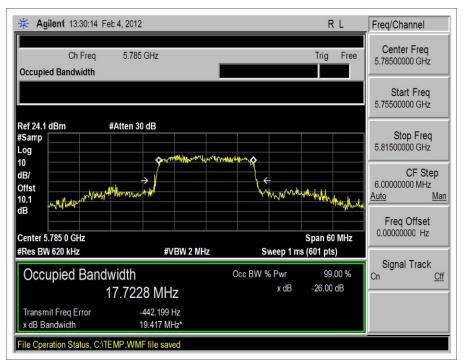


802.11n - Antenna Port 1

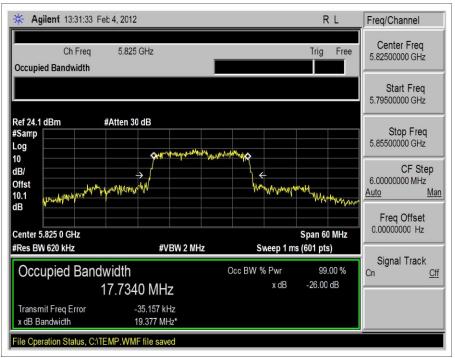


802.11n - Antenna Port 0



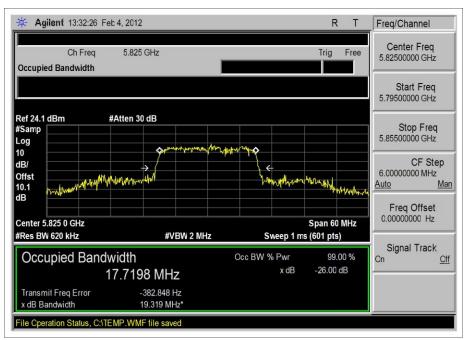


802.11n - Antenna Port 1



802.11n - Antenna Port 0





802.11n - Antenna Port 1



802.11n - Antenna Port 0



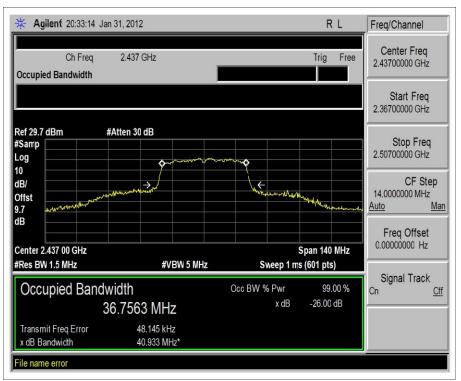


802.11n - Antenna Port 1

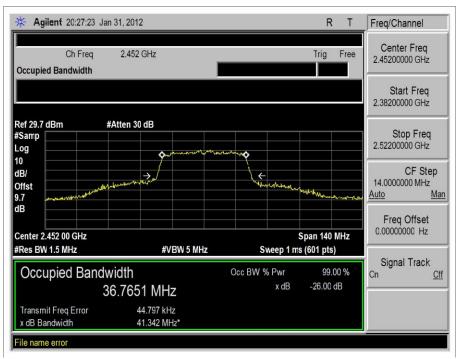


802.11n - Antenna Port 0



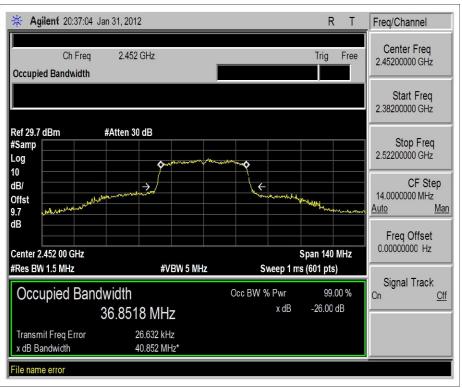


802.11n - Antenna Port 1

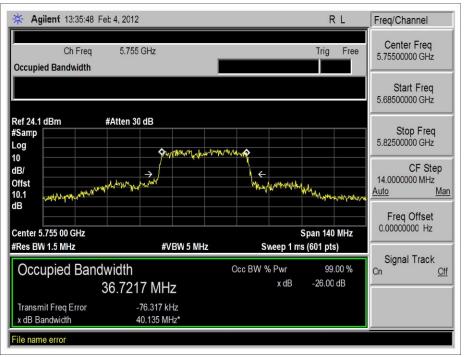


802.11n - Antenna Port 0



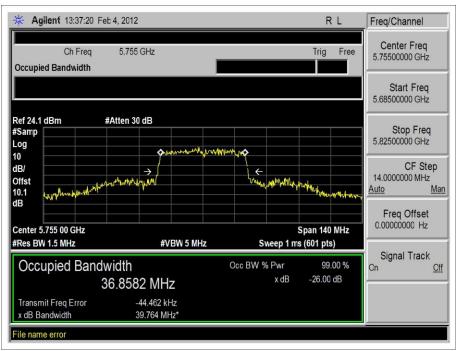


802.11n - Antenna Port 1



802.11n - Antenna Port 0



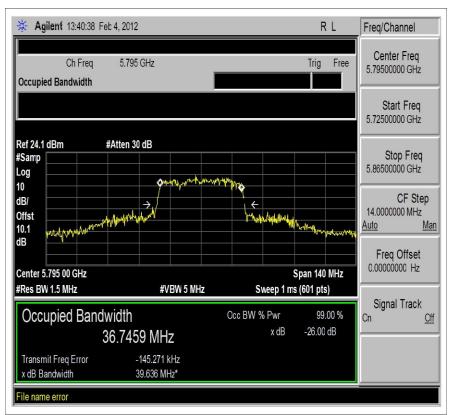


802.11n - Antenna Port 1



802.11n - Antenna Port 0





802.11n - Antenna Port 1

Test Setup Photos





RSS-210 §2.2 Restricted Bands

<u>Data</u>

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

Customer:	Motorola Mobility, Inc.		
Specification:	RSS-210 Unwanted Emissions in Restric	ted Bands (Rad	iated)
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		

Test Equipment:

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
T8	AN03239	Cable	32022-2-29094K- 24TC	8/30/2011	8/30/2013
T9	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	

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: 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.

Ext Attn: 0 dB

Meas	urement Data:	Re	eading lis	ted by ma	argin.		Τe	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 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	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								
6	4923.967M	44.8	+0.0	+0.5	+1.9	+5.0	+0.0	48.7	54.0	-5.3	Horiz
			-37.1	+33.2	+0.4	+0.4					
			+0.4	+0.4	+0.4	+0.4					
			+0.4								
7	4874.088M	44.6	+0.0	+0.5	+1.9	+5.0	+0.0	48.4	54.0	-5.6	Horiz
			-37.1	+33.1	+0.4	+0.4					
			+0.4	+0.4	+0.4	+0.4					
-		10.0	+0.4			• •					
8	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					
	2200.0003.6	53 0	+0.6	0.4			0.0	10.0			* *
9	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					
10	12400.005		+0.0	0.0	2.0	0.0	0.0	10.1	54.0	5.0	
10	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					
^	12400.005	20.0	+0.2	0.0	12.0	10.0		52.0	54.0	-0.2	Haria
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	12499.995 M	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					
10	2389.981M	52.6	+0.2	+0.4	+1.2	12.2		47.0	54.0	-6.1	Horiz
12	2309.901W	52.0	+0.0	+0.4	+1.2	+3.3	+0.0	47.9	54.0	-0.1	HOUL
			-38.0 +0.0	+28.4 +0.0	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$					
			$^{+0.0}_{+0.0}$	$\pm 0.0$	$\pm 0.0$	$\pm 0.0$					
13	37.562M	45.7	+0.0 +0.0	+0.1	-27.8	+1.0	+0.0	33.8	40.0	-6.2	Vert
15	57.302IVI	45.7	+0.0 +14.8	$^{+0.1}_{+0.0}$	-27.8 +0.0	$^{+1.0}_{+0.0}$	$\pm 0.0$	55.8	40.0	-0.2	vert
			+14.8 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			+0.0 +0.0	10.0	10.0	10.0					
14	4823.997M	44.0	+0.0 +0.0	+0.5	+1.9	+5.0	+0.0	47.7	54.0	-6.3	Horiz
14	+023.77/1 <b>v1</b>	-+.0	-37.1	+0.3 +33.0	+1.9 $+0.4$	+0.4	10.0	7/./	54.0	-0.5	TIOUZ
			+0.4	+33.0 +0.4	+0.4	+0.4					
			+0.4	10.7	10.7	10.7					
15	125.002M	50.6	+0.4 +0.0	+0.2	-27.8	+1.9	+0.0	37.0	43.5	-6.5	Vert
15	123.002101	50.0	+12.1	+0.2 +0.0	+0.0	+1.9 $+0.0$	10.0	57.0	т.Э.Э	0.5	v 011
			+12.1 +0.0	$^{+0.0}_{+0.0}$	+0.0 $+0.0$	+0.0 $+0.0$					
			+0.0 $+0.0$	10.0	10.0	10.0					
16	3666.667M	46.2	+0.0	+0.4	+1.7	+4.2	+0.0	46.8	54.0	-7.2	Vert
10	2000.00/101	10.2	-37.4	+31.3	+0.4	+0.4	10.0	10.0	5 1.0	1.4	, 011
			+0.4	+0.4	+0.4	+0.4					
			+0.4	10.7	10.7	10.7					
			10.7								



17	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								
19	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								
20	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					4.5.5			
22	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					
	27.70 () (	12.0	+0.0	0.1	27.0	1.0	0.0	21.0	40.0	0.0	¥ 7 .
24	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					
25	74.00514	<b>71</b> 4	+0.0	.0.1	27.0	. 1 . 4	. 0. 0	21.7	40.0	0.2	<b>X</b> 7 (
25	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					
20	72 91014	515	+0.0	+0.1	27.0	111	+0.0	217	40.0	0 2	Vert
26	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					
77	7499.993M	26.1	+0.0 +0.0	+0.7	10.2	165	+0.0	44.7	54.0	-9.3	Vort
	Ave	36.1	+0.0 -36.5	+0.7 +35.5	+2.3 +0.1	+6.5 +0.1	+0.0	44./	54.0	-9.3	Vert
	AVE		-30.5 +0.1	+35.5 +0.1	+0.1 +0.1	+0.1 $+0.1$					
			+0.1 +0.1	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$					
^	7499.993M	42.9	+0.1 +0.0	+0.7	+2.3	+6.5	+0.0	51.5	54.0	-2.5	Vert
	17777777111	42.7	-36.5	+0.7 +35.5	+2.3 +0.1	+0.3 $+0.1$	$\pm 0.0$	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 $+0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$					
29	249.999M	47.9	+0.1 +0.0	+0.2	-27.8	+2.8	+0.0	35.8	46.0	-10.2	Vert
29	<u> ムサフ・フフプIVI</u>	+7.7	+0.0 +12.7	+0.2 +0.0	-27.8 +0.0	+2.8 +0.0	$\pm 0.0$	55.0	+0.0	-10.2	VEIL
			+12.7 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			+0.0 +0.0	10.0	10.0	10.0					
			10.0								

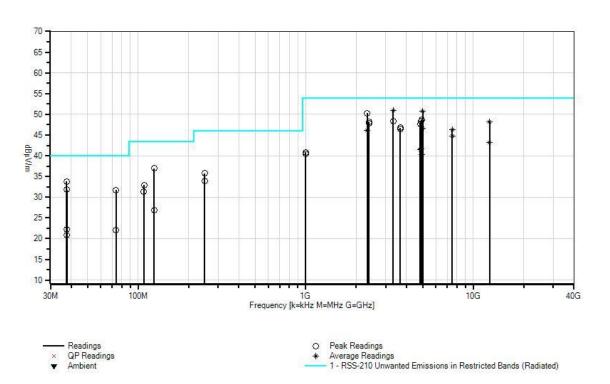


											_
30	108.846M	47.9	+0.0	+0.1	-27.8	+1.8	+0.0	32.9	43.5	-10.6	Vert
			+10.9	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0					
~ ~ ~	12400.002	25.6	+0.0		2.0	0.0	0.0	12.2		10.0	<b>X</b> X
31	12499.993	27.6	+0.0	+0.8	+2.9	+8.9	+0.0	43.2	54.0	-10.8	Vert
	М		-35.9	+38.7	+0.2	+0.2					
	Ave		+0.2	+0.2	+0.2	+0.2					
			+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					
		4.4.4	+0.2	0.0	25.0	• •	0.0	24.0	16.0	12.0	
33	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					
~ /	100 1003 4	4	+0.0	<u> </u>	25.0	1.0	0.0	21.1	10 7	12.4	<b>X</b> X
34	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					
25	4072 0 601 6	27.0	+0.0	0.5	1.0		0.0	11.6	54.0	10.4	X 7
	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					
•	4072 0 601 6	47.0	+0.4	0.5	1.0		0.0	51.6	54.0		X 7
Λ	4873.968M	47.8	+0.0	+0.5	+1.9	+5.0	+0.0	51.6	54.0	-2.4	Vert
			-37.1	+33.1	+0.4	+0.4					
			+0.4	+0.4	+0.4	+0.4					
27	4922 07014	27.0	+0.4	0.5	+1.0	. 5.0		415	54.0	10.5	Mart
51	4823.970M	37.8	+0.0	+0.5	+1.9	+5.0	+0.0	41.5	54.0	-12.5	Vert
	Ave		-37.1	+33.0	+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					
39	999.999M	36.5	+0.4	106	27.2	+6.2	+0.0	40.8	54.0	12.0	Vert
39	777.7771VI	30.3	$^{+0.0}_{+24.8}$	$^{+0.6}_{+0.0}$	-27.3 +0.0	+0.2 +0.0	+0.0	40.8	54.0	-13.2	ven
			+24.8 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			+0.0 +0.0	± 0.0	± 0.0	± 0.0					
40	999.996M	36.1	+0.0 +0.0	+0.6	-27.3	+6.2	+0.0	40.4	54.0	-13.6	Horiz
40	777.770M	30.1	+0.0 +24.8	+0.0 +0.0	+0.0	+0.2 +0.0	+0.0	40.4	54.0	-13.0	Horiz
			+24.8 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			$^{+0.0}_{+0.0}$	± 0.0	±0.0	± 0.0					
/1	4923.970M	36.4	+0.0 +0.0	+0.5	+1.9	+5.0	+0.0	40.3	54.0	-13.7	Vert
41		50.4	+0.0 -37.1	+0.5 +33.2	+1.9 +0.4	+5.0 +0.4	± 0.0	40.3	54.0	-13./	vert
	Ave		-37.1 +0.4	+33.2 +0.4	$^{+0.4}_{+0.4}$	$^{+0.4}_{+0.4}$					
			+0.4 $+0.4$	+0.4	+0.4	+0.4					
^	4923.970M	47.7	+0.4 +0.0	+0.5	+1.0	15.0	+0.0	51.6	54.0	-2.4	Vert
	4923.970M	4/./	+0.0 -37.1	+0.5 +33.2	$^{+1.9}_{+0.4}$	+5.0 +0.4	+0.0	51.0	54.0	-2.4	ven
			-37.1 +0.4	+33.2 +0.4	$^{+0.4}_{+0.4}$	$^{+0.4}_{+0.4}$					
			+0.4 $+0.4$	+0.4	±0.4	+0.4					
			+0.4								



43	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								
44	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								
45	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					
			+0.0								
46	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 5 Ext ATTN: 0 dB





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

Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restri	cted Bands (Rad	iated)
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		

Test Equipment:

I est Lyuy	pmem.				
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
T9	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	

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: 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.

Ext Attn: 0 dB

Meas	urement Data:	Re	eading lis	ted by ma	argin.		Τe	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	dBµV/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	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 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					
<	40.0	+0.0			2.0	0.0	40.4	= 4 0		X 7
6 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					
7 4022 04914	4.4.4	+0.6	.0.5	.10	. 5.0	.0.0	40.2	54.0	57	Mart
7 4923.948M	44.4	+0.0	+0.5	+1.9	+5.0	+0.0	48.3	54.0	-5.7	Vert
		-37.1	+33.2	+0.4	+0.4					
		+0.4	+0.4	+0.4	+0.4					
8 2390.000M	52.9	+0.4 +0.0	+0.4	+1.2	+3.3	+0.0	48.2	54.0	-5.8	Vert
6 2390.000M	52.9	+0.0 -38.0	+0.4 +28.4	$^{+1.2}_{+0.0}$	+3.3 +0.0	+0.0	40.2	54.0	-3.8	ven
		+0.0	+28.4 +0.0	+0.0 +0.0	+0.0 +0.0					
		+0.0 +0.0	± 0.0	± 0.0	± 0.0					
9 12499.995	32.5	+0.0	+0.8	+2.9	+8.9	+0.0	48.1	54.0	-5.9	Horiz
M	02.0	-35.9	+38.7	+0.2	+0.2	10.0	10.1	5 110	5.7	HOHE
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								
11 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								
12 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	_	a –		_			-	
13 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					
14 4022 04224	127	+0.0	105	+1.0	15.0	+0.0	17 6	54.0	6.4	Haria
14 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	+0.4					
15 125.002M	50.6	+0.4 +0.0	+0.2	-27.8	+1.9	+0.0	37.0	43.5	-6.5	Vert
15 125.002M	50.0	+0.0 +12.1	+0.2 +0.0	+0.0	+1.9 $+0.0$	± 0.0	57.0	+5.5	-0.5	VEIL
		+12.1 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
		+0.0 +0.0	10.0	10.0	10.0					
16 4823.981M	43.5	+0.0 +0.0	+0.5	+1.9	+5.0	+0.0	47.2	54.0	-6.8	Horiz
10 TO23.7011VI	т	-37.1	+33.0	+1.9 +0.4	+0.4	10.0	11.4	54.0	0.0	TIOUT
		+0.4	+0.4	+0.4	+0.4					
		+0.4								
		10.7								



17	4873.960M	43.2	+0.0	+0.5	+1.9	+5.0	+0.0	47.0	54.0	-7.0	Horiz
			-37.1	+33.1	+0.4	+0.4					
			+0.4	+0.4	+0.4	+0.4					
			+0.4								
18	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								
	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								
21	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					
	7400 0000 6	07.7	+0.4	0.7		~ ~	0.0	16.0	54.0		
	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					
	7400.00214	42.0	+0.1	07	10.2			515	510	2.5	Haria
Λ	7499.992M	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	Horiz
			-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					
24	2333.332M	51.1	+0.1 +0.0	+0.4	+1.2	+3.2	+0.0	46.2	54.0	-7.8	Horiz
	Ave	51.1	-38.0	+0.4 +28.3	+1.2 $+0.0$	+3.2 $+0.0$	± 0.0	40.2	54.0	-7.8	HOHZ
	Ave		-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					
^	2333.332M	57.2	+0.0	+0.4	+1.2	+3.2	+0.0	52.3	54.0	-1.7	Horiz
	2555.552141	57.2	-38.0	+28.3	+0.0	+0.0	10.0	52.5	54.0	-1./	HOLL
			+0.0	+0.0	+0.0	+0.0					
			+0.0	10.0	10.0	10.0					
26	37.706M	43.8	+0.0	+0.1	-27.8	+1.0	+0.0	31.8	40.0	-8.2	Vert
20	27.700111	10.0	+14.7	+0.1	+0.0	+0.0	10.0	21.0	10.0	0.2	, 010
			+0.0	+0.0	+0.0	+0.0					
			+0.0								
27	73.819M	51.5	+0.0	+0.1	-27.9	+1.4	+0.0	31.7	40.0	-8.3	Vert
<i></i>			+6.6	+0.0	+0.0	+0.0				5.0	
			+0.0	+0.0	+0.0	+0.0					
			+0.0								
				0.1	-27.9	+1.4	+0.0	31.7	40.0	-8.3	Vert
28	74.005M	51.4	+0.0	+0.1				• •			
28	74.005M	51.4	$^{+0.0}_{+6.7}$	$^{+0.1}_{+0.0}$							
28	74.005M	51.4	+6.7	+0.0	+0.0	+0.0					
28	74.005M	51.4	+6.7 +0.0								
			+6.7 +0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	45.4	54.0	-8.6	
	74.005M 4824.002M	51.4 41.7	+6.7 +0.0 +0.0 +0.0	+0.0 +0.0 +0.5	+0.0 +0.0 +1.9	+0.0 +0.0 +5.0	+0.0	45.4	54.0	-8.6	Vert
			+6.7 +0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	45.4	54.0	-8.6	

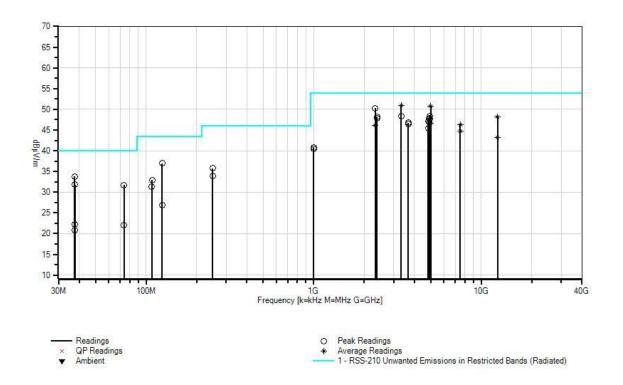


30	7499.993M	36.1	+0.0	+0.7	+2.3	+6.5	+0.0	44.7	54.0	-9.3	Vert
	Ave		-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
			+0.1								
Λ	7499.993M	42.9	+0.0	+0.7	+2.3	+6.5	+0.0	51.5	54.0	-2.5	Vert
			-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
	240.0003.6	15.0	+0.1	0.0	25.0	• •			44.0	10.0	
32	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					
- 22	100.04614	47.0	+0.0	.0.1	27.0	.1.0	.0.0	22.0	42.5	10.0	X 7 /
33	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					
24	12400.002	27.6	+0.0	.0.0	.2.0	.0.0	.0.0	42.0	54.0	10.0	X7t
34	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	+0.2 +0.0	+0.8	+2.9	+8.9	+0.0	53.0	54.0	-1.0	Vert
	12499.995 M	57.4	-35.9	+0.8 +38.7	+2.9 +0.2	+0.9 $+0.2$	+0.0	55.0	54.0	-1.0	ven
	111		+0.2	+38.7 +0.2	+0.2 +0.2	+0.2 $+0.2$					
			+0.2	10.2	10.2	10.2					
36	250.014M	46.1	+0.2	+0.2	-27.8	+2.8	+0.0	34.0	46.0	-12.0	Horiz
50	230.01401	40.1	+12.7	+0.2 $+0.0$	+0.0	+0.0	10.0	54.0	40.0	12.0	HOHL
			+0.0	+0.0	+0.0	+0.0					
			+0.0		1010						
37	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								
38	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								
39	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								
40	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								
41	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								
42	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					
			+0.0								



Γ	43	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 6 Ext ATTN: 0 dB





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

Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restric	ted Bands (Rad	iated)
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		

Test Equipment:

I est Lyuy	pmem.				
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
T9	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	(1 - EUI).		
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: 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.

Ext Attn: 0 dB

Meas	urement Data:	Re	eading lis	ted by ma	argin.		Τe	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	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								



^ 4999.997N	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 4923.871N	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					
		+0.4								
6 4824.043N	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					
		+0.4								
7 2333.334N	1 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 4923.803N	46.2	+0.0	+0.5	+1.9	+5.0	+0.0	50.1	54.0	-3.9	Horiz
		-37.1	+33.2	+0.4	+0.4					
		+0.4	+0.4	+0.4	+0.4					
0.4054.040		+0.4	0.7	1.0		0.0	40.7			
9 4874.018N	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					
10 1052 0053		+0.4	0.7	1.0		0.0	40.0		1.0	
10 4873.987N	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					
11 4024 0203	45.0	+0.4	.0.7	.1.0		.0.0	10 7	54.0	5.2	TT ·
11 4824.030N	4 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					
10, 2000, 2001	<u> </u>	+0.4	.0.4	.1.0	.2.0	.0.0	40.4	54.0	E C	XZt
12 3333.332N	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					
13 2390.000N	1 520		+0.4	+1.2	12.2		48.2	54.0	-5.8	Vert
15 2390.000N	4 52.9	+0.0 -38.0	$^{+0.4}_{+28.4}$	$^{+1.2}_{+0.0}$	+3.3 +0.0	+0.0	40.2	54.0	-3.8	vert
		-38.0 +0.0	+28.4 +0.0	+0.0 +0.0	$^{+0.0}_{+0.0}$					
		+0.0 +0.0	± 0.0	± 0.0	± 0.0					
14 12499.995	32.5	+0.0 +0.0	+0.8	+2.9	+8.9	+0.0	48.1	54.0	-5.9	Horiz
14 12499.995 M	52.5	+0.0 -35.9	+0.8 +38.7	+2.9 +0.2	+0.9	± 0.0	40.1	54.0	-3.9	TIOUZ
Ave		-55.9 +0.2	+38.7 +0.2	+0.2 $+0.2$	+0.2 $+0.2$					
AVE		+0.2 $+0.2$	+0.2	+0.2	+0.2					
^ 12499.995	38.2	+0.2 $+0.0$	+0.8	+2.9	+8.9	+0.0	53.8	54.0	-0.2	Horiz
M 12499.995	30.2	+0.0 -35.9	+0.8 +38.7	+2.9 +0.2	+0.9	± 0.0	55.0	54.0	-0.2	TIOUZ
IVI		-55.9 +0.2	+38.7 +0.2	+0.2 +0.2	+0.2 $+0.2$					
		+0.2 $+0.2$	⊤0.∠	F0.2	F U. 2					
16 2389.981N	4 52.6	+0.2 +0.0	+0.4	+1.2	+3.3	+0.0	47.9	54.0	-6.1	Horiz
10 2309.90IN	JZ.0	+0.0 -38.0	+0.4 +28.4	$^{+1.2}_{+0.0}$	+3.3 +0.0	± 0.0	47.7	54.0	-0.1	TIOUZ
		-38.0 +0.0	+28.4 +0.0	+0.0 +0.0	$^{+0.0}_{+0.0}$					
		+0.0 +0.0	± 0.0	± 0.0	± 0.0					
l		TU.U								



17 37.5621	M 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								
18 125.002	M 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					
10 0444 447		+0.0	0.4				14.0			
19 3666.667	M 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					
20 4000 002	N 40.6	+0.4	.0.5	.1.0	. 5.0	.0.0	16.6	54.0	7.4	TT '
20 4999.992	M 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					
A 4000.002	M 46.0	+0.3	.0.5	+1.0	.5.0	.0.0	50.0	54.0	4.0	TT!
^ 4999.992	M 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 3666.665	M 150	+0.3	+0.4	+17	+4.2	+0.0	46.4	54.0	-7.6	Horiz
22 5000.005	M 45.8	+0.0 -37.4	+0.4 +31.3	$^{+1.7}_{+0.4}$	$^{+4.2}_{+0.4}$	+0.0	40.4	54.0	-7.0	HOLIZ
		-37.4 +0.4	+31.3 +0.4	+0.4 $+0.4$	+0.4 $+0.4$					
		+0.4 $+0.4$	+0.4	+0.4	+0.4					
23 7499.992	M 37.7	+0.0	+0.7	+2.3	+6.5	+0.0	46.3	54.0	-7.7	Horiz
Ave	IVI 57.7	-36.5	+35.5	+2.3 $+0.1$	+0.3 +0.1	+0.0	40.5	54.0	-/./	TIOTIZ
1100		+0.1	+0.1	+0.1	+0.1					
		+0.1	10.1	10.1	10.1					
^ 7499.992	M 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		0110	0.110	210	110112
		+0.1	+0.1	+0.1	+0.1					
		+0.1								
25 2333.332	M 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								
^ 2333.332	M 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								
27 37.706	M 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								
28 74.005	M 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								
29 73.8191	M 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								

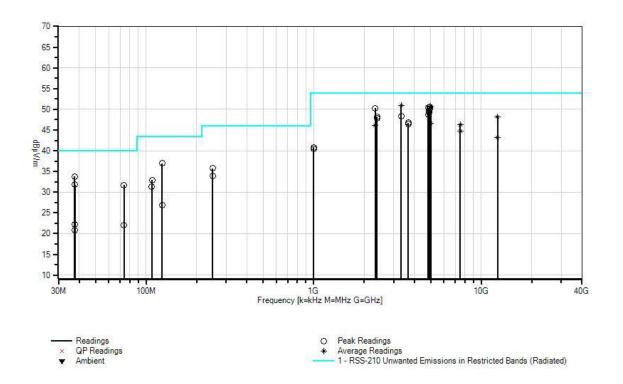


30	7499.993M	36.1	+0.0	+0.7	+2.3	+6.5	+0.0	44.7	54.0	-9.3	Vert
	Ave		-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
			+0.1								
^	7499.993M	42.9	+0.0	+0.7	+2.3	+6.5	+0.0	51.5	54.0	-2.5	Vert
			-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
			+0.1								
32	249.999M	47.9	+0.0	+0.2	-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								
33	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								
34	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					
			+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								
36	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					
07	100 10014	16.5	+0.0	0.1	27.0	1.0	0.0	21.4	10.5	10.1	X X .
37	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					
	000.00014	265	+0.0	0.6	27.0	<u> </u>	0.0	40.0	54.0	10.0	X X .
38	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					
20	000.000	26.1	+0.0	.0.6	27.2		. 0. 0	10.4	54.0	12.6	TT '
39	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					
40	125 0001	40.5	+0.0	10.2	27.0	+1.0		26.0	12 5	166	Uoria
40	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	+0.0	+0.0	+0.0					
41	37.685M	34.3	+0.0 +0.0	+0.1	-27.8	J 1 0	+0.0	22.3	40.0	-17.7	Horiz
41	37.083WI	54.5	+0.0 +14.7	$^{+0.1}_{+0.0}$	-27.8 +0.0	$^{+1.0}_{+0.0}$	+0.0	22.3	40.0	-1/./	Horiz
			+14.7 +0.0	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			+0.0 +0.0	± 0.0	± 0.0	± 0.0					
42	73.962M	41.8	+0.0 +0.0	+0.1	-27.9	+ 1 <i>1</i>	+0.0	22.0	40.0	-18.0	Horiz
42	13.902IVI	41.0	+0.0 +6.6	+0.1 +0.0	-27.9 +0.0	$^{+1.4}_{+0.0}$	± 0.0	22.0	40.0	-10.0	TIOUZ
			+0.0 $+0.0$	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.0}$					
			+0.0 $+0.0$	± 0.0	± 0.0	± 0.0					
			± 0.0								



Γ	43	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 7 Ext ATTN: 0 dB





Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restr	ricted Bands (Rad	iated)
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 esi 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
T9	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	$(^{\circ} = EU1).$		
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	

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.		$\begin{array}{c} 8 \\ 12 \\ \hline B \\ +3.9 \\ +0.0 \\ \hline 50.9 \\ 54.0 \\ -3.1 \\ \hline \end{array}$				
#	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	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	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								
6	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								
7	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								
8	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					
			+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								
10	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					
11	27.5(2) (45 7	+0.0	.0.1	27.0	.1.0	. 0. 0	22.0	10.0	()	X 7 (
11	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	125.00214	50.6	+0.0	.0.0	27.0	.1.0	.0.0	27.0	42.5	65	N. Land
12	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					
12	4944 40014	12.2	+0.0	10.5	+1.0	15.0	+0.0	47.0	54.0	7.0	II.a!-
13	4844.420M	43.3	+0.0	+0.5	+1.9	+5.0	+0.0	47.0	54.0	-7.0	Horiz
			-37.1	+33.0	+0.4	+0.4					
			$^{+0.4}_{+0.4}$	+0.4	+0.4	+0.4					
1.4	4843.750M	43.3	+0.4 +0.0	+0.5	+1.9	+5.0	+0.0	47.0	54.0	-7.0	Vert
14	+0+3.73UM	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
			+0.4	+33.0	+0.4 +0.4	+0.4 $+0.4$					
			+0.4 +0.4	⊤0.4	±0.4	±0.4					
15	3666.667M	46.2	+0.4 +0.0	+0.4	+1.7	+4.2	+0.0	46.8	54.0	-7.2	Vert
13	5000.007101	40.2	+0.0 -37.4	+0.4 +31.3	+1.7 +0.4	+4.2 +0.4	± 0.0	40.0	J 4 .0	-1.2	v CI t
			-37.4 +0.4	+31.3 +0.4	+0.4 $+0.4$	+0.4 $+0.4$					
			+0.4 +0.4	⊤0.4	±0.4	±0.4					
16	4903.170M	42.9	+0.4 +0.0	+0.5	+1.9	+5.0	+0.0	46.7	54.0	-7.3	Horiz
10	+703.170101	42.7	+0.0 -37.1	+0.3 +33.1	+1.9 +0.4	+3.0	± 0.0	40.7	54.0	-1.5	TIOUZ
			+0.4	+33.1 +0.4	+0.4 $+0.4$	+0.4 $+0.4$					
			+0.4 +0.4	F U. 4	F U.4	F U. 4					
1			10.4								



	4999.992M	42.6	+0.0	+0.5	+1.9	+5.0	+0.0	46.6	54.0	-7.4	Horiz
F	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					
10	2666 66514	45.0	+0.3	.0.4	. 1 7	. 1.0	. 0. 0	16.1	54.0	7.6	
19	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					
20	4972 70014	12.0	+0.4	0.5	+1.0	5.0		16.4	54.0	7.0	Haria
20	4873.700M	42.6	+0.0	+0.5	+1.9	+5.0	+0.0	46.4	54.0	-7.6	Horiz
			-37.1 +0.4	+33.1 +0.4	+0.4 +0.4	$^{+0.4}_{+0.4}$					
			+0.4 $+0.4$	+0.4	+0.4	+0.4					
21	7499.992M	37.7		+0.7	12.2	16.5	+0.0	46.3	54.0	-7.7	Horiz
	7499.992M Ave	51.1	+0.0 -36.5	+0.7 +35.5	+2.3 +0.1	+6.5 +0.1	+0.0	40.3	54.0	-/./	HOLIZ
F	Ave		-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					
^	7499.992M	42.9	+0.1 +0.0	+0.7	+2.3	+6.5	+0.0	51.5	54.0	-2.5	Horiz
	7499.992101	42.9	-36.5	+35.5	+2.3 $+0.1$	+0.3 +0.1	± 0.0	51.5	54.0	-2.5	TIOTIZ
			+0.1	+0.1	+0.1	+0.1					
			+0.1	10.1	10.1	10.1					
23	2333.332M	51.1	+0.0	+0.4	+1.2	+3.2	+0.0	46.2	54.0	-7.8	Horiz
	Ave	51.1	-38.0	+28.3	+0.0	+0.0	10.0	10.2	51.0	7.0	HOLL
1			+0.0	+0.0	+0.0	+0.0					
			+0.0		1010	1010					
^	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								
25	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								
26	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								
27	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					
	BA 0407 -		+0.0		<u> </u>			0 · -	10.5		
28	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		25.0		0.0		40.0	<i>c</i> •	**
29	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	+0.0					
			+0.0 $+0.0$	10.0	10.0	10.0					

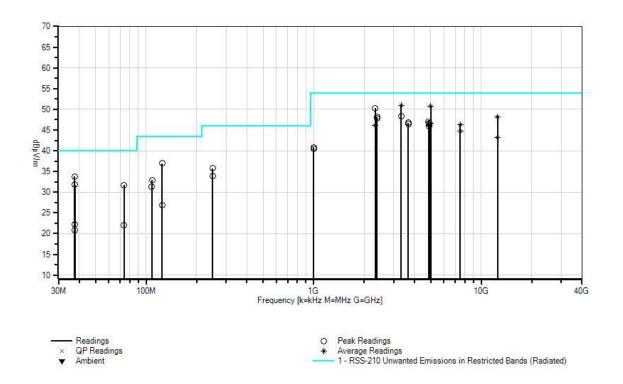


30	7499.993M	36.1	+0.0	+0.7	+2.3	+6.5	+0.0	44.7	54.0	-9.3	Vert
	Ave		-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
			+0.1								
Λ	7499.993M	42.9	+0.0	+0.7	+2.3	+6.5	+0.0	51.5	54.0	-2.5	Vert
			-36.5	+35.5	+0.1	+0.1					
			+0.1	+0.1	+0.1	+0.1					
	240.0003.6	15.0	+0.1	0.0	25.0	• •			44.0	10.0	
32	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					
- 22	100.04614	47.0	+0.0	.0.1	27.0	.1.0	.0.0	22.0	42.5	10.0	X 7 /
33	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					
24	12400.002	27.6	+0.0	.0.0	.2.0	.0.0	.0.0	42.0	54.0	10.0	X7t
34	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	+0.2 +0.0	+0.8	+2.9	+8.9	+0.0	53.0	54.0	-1.0	Vert
	12499.995 M	57.4	-35.9	+0.8 +38.7	+2.9 +0.2	+0.9 $+0.2$	+0.0	55.0	54.0	-1.0	ven
	111		+0.2	+38.7 +0.2	+0.2 +0.2	+0.2 $+0.2$					
			+0.2	10.2	10.2	10.2					
36	250.014M	46.1	+0.2	+0.2	-27.8	+2.8	+0.0	34.0	46.0	-12.0	Horiz
50	230.01401	40.1	+12.7	+0.2 $+0.0$	+0.0	+0.0	10.0	54.0	40.0	12.0	HOHL
			+0.0	+0.0	+0.0	+0.0					
			+0.0		1010						
37	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								
38	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								
39	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								
40	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								
41	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								
42	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					
			+0.0								



Γ	43	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 8 Ext ATTN: 0 dB





Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restr	icted Bands (Rad	iated)
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		

1 CSt Equi					
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- 24TC	8/30/2011	8/30/2013
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- 3000/T10000- O/O	3/5/2010	3/5/2012
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 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
	AN03158	Active Horn Antenna	AMFW-5F- 26004000-33-8P	4/1/2010	4/1/2012
	ANP06153	Cable	16301	10/27/2011	10/27/2013



Equipment Under Test	(1 - EUI).		
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					



5 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	10.5			
6 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					
		+2.8	+8.5	-36.4	+36.5					
7 11570.270	36.5	+0.0	+0.0	+0.0	+0.0	+0.0	49.1	54.0	-4.9	Horiz
М		+0.0	+0.0	+0.0	+0.8					
	10.0	+2.8	+8.5	-36.3	+36.4					
8 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					
9 11491.270	35.9	+0.0	+0.0	+0.0	+0.0	+0.0	48.3	54.0	-5.7	Vert
М		+0.0	+0.0	+0.0	+0.8					
		+2.8	+8.5	-36.3	+36.3					
10 11651.030	35.5	+0.0	+0.0	+0.0	+0.0	+0.0	48.2	54.0	-5.8	Vert
М		+0.0	+0.0	+0.0	+0.8					
		+2.8	+8.5	-36.4	+36.5					
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					
12 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
М		-35.9	+38.7	+0.2	+0.2					
		+0.2	+0.2	+0.2	+0.2					
14 114.300M	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					
15 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					
16 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					
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					
18 125.002M	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					
19 125.002M	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					
20 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					
21 11489.770	34.5	+0.0	+0.0	+0.0	+0.0	+0.0	46.9	54.0	-7.1	Horiz
М		+0.0	+0.0	+0.0	+0.8					
		+2.8	+8.5	-36.3	+36.3					



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					
			+0.4	+0.4	+0.4	+0.4					
23	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					
	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					
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					
	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					
۸	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					
29	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					
31	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					
32	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					
33	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					
34	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					
35	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					
36	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					
37	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					
							0.0	21 5			T 7 .
38	73.819M	51.5	+0.0	+0.1	-27.9	+1.4	+0.0	31.7	40.0	-8.3	Vert
38	73.819M	51.5	+0.0 +6.6	+0.1 +0.0	-27.9 +0.0	$^{+1.4}_{+0.0}$	+0.0	31.7	40.0	-8.3	Vert



·											
39	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					
40	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					
-	E 400 00 0 6	10.0	+0.1	+0.1	+0.1	+0.1	0.0				
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					
	222.24.17.6	4.5.0	+0.1	+0.1	+0.1	+0.1	0.0		44.0	10.0	
43	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					
	240.00034	17.0	-27.8	+3.2	+14.4	+0.0	0.0	25.0	16.0	10.0	X 7 .
44	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					
4.5	240.00034	47.0	+0.0	+0.0	+0.0	+0.0	.0.0	250	100	10.0	V 74
45	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					
1.6	5020 775M	20.4	-27.8	+2.8	+12.7	+0.0	. 0. 0	12.5	54.0	10.5	
46	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					
47	100.04/01/	47.0	+1.9	+5.0	-37.0	+33.4	.0.0	22.0	12 5	10.0	N. Land
47	108.846M	47.9	+0.0 +10.9	$^{+0.1}_{+0.0}$	-27.8 +0.0	$^{+1.8}_{+0.0}$	+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					
48	108.846M	47.9	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	32.9	43.5	-10.6	Vert
40	100.040101	47.9	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.1	+0.0	52.9	43.3	-10.0	ven
			-27.8	+1.8	+10.9	+0.1					
/0	12499.993	27.6	+0.0	+0.8	+2.9	+8.9	+0.0	43.2	54.0	-10.8	Vert
49	M	27.0	-35.9	+38.7	+2.9 +0.2	+0.2	± 0.0	43.2	54.0	-10.0	ven
	Ave		+0.2	+0.2	+0.2	+0.2					
	12499.993	37.4	+0.2	+0.2	+2.9	+8.9	+0.0	53.0	54.0	-1.0	Vert
	M	57.7	-35.9	+38.7	+0.2	+0.2	10.0	55.0	5 1.0	1.0	, 011
	-		+0.2	+0.2	+0.2	+0.2					
51	156.843M	47.2	+0.0	+0.0	+0.0	+0.0	+0.0	32.7	43.5	-10.8	Horiz
	10 010 10111	.,	+0.0		+0.0	+0.0				10.0	
			-27.7	+2.2	+10.9	+0.0					
52	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					
53	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					
54	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					
55	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					
L											

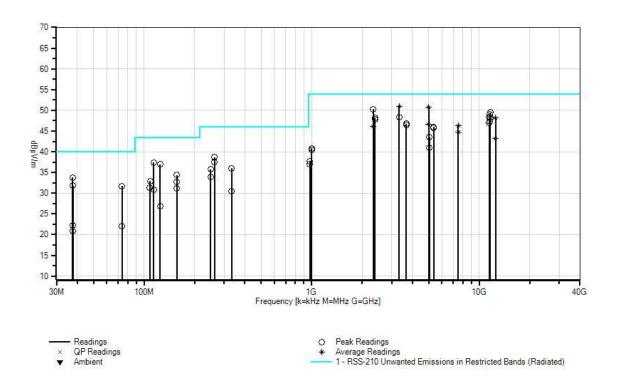


$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
-27.7 +2.2 +10.9 +0.0 57 114.309M 45.2 +0.0 +0.0 +0.0 +0.0 +0.0 30.8 43.5 -12.7 Hor +0.0 +0.0 +0.0 +0.2
57 114.309M 45.2 +0.0 +0.0 +0.0 +0.0 +0.0 30.8 43.5 -12.7 Hor +0.0 +0.0 +0.0 +0.2
+0.0 $+0.0$ $+0.0$ $+0.2$
-27.8 + 1.8 + 11.4 + 0.0
58 5040.021M 36.8 +0.0 +0.0 +0.0 +0.0 +0.0 40.9 54.0 -13.1 Ve
+0.0 $+0.0$ $+0.0$ $+0.5$
+1.9 +5.0 -37.0 +33.4
59 999.999M 36.5 +0.0 +0.0 +0.0 +0.0 +0.0 40.8 54.0 -13.2 Ve
+0.0 $+0.0$ $+0.0$ $+0.6$
-27.3 +6.2 +24.8 +0.0
60 999.999M 36.5 +0.0 +0.6 -27.3 +6.2 +0.0 40.8 54.0 -13.2 Ve
+24.8 $+0.0$ $+0.0$ $+0.0$
+0.0 +0.0 +0.0 +0.0
61 999.996M 36.1 +0.0 +0.0 +0.0 +0.0 +0.0 40.4 54.0 -13.6 Hor
+0.0 $+0.0$ $+0.0$ $+0.6$
-27.3 +6.2 +24.8 +0.0
62 999.996M 36.1 +0.0 +0.6 -27.3 +6.2 +0.0 40.4 54.0 -13.6 Hor
+24.8 $+0.0$ $+0.0$ $+0.0$
+0.0 +0.0 +0.0 +0.0
63 333.362M 40.3 +0.0 +0.0 +0.0 +0.0 +0.0 30.4 46.0 -15.6 Ve
+0.0 $+0.0$ $+0.0$ $+0.3$
-27.8 +3.2 +14.4 +0.0
64 976.045M 33.7 +0.0 +0.0 +0.0 +0.0 +0.0 37.7 54.0 -16.3 Hor
+0.0 $+0.0$ $+0.0$ $+0.6$
-27.2 +6.1 +24.5 +0.0
65 125.008M 40.5 +0.0 +0.2 -27.8 +1.9 +0.0 26.9 43.5 -16.6 Hor
+12.1 $+0.0$ $+0.0$ $+0.0$
+0.0 +0.0 +0.0 +0.0 66 125.008M 40.5 +0.0 +0.0 +0.0 +0.0 +0.0 26.9 43.5 -16.6 Hor
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
-27.2 + 6.1 + 24.5 + 0.0
68 37.685M 34.3 +0.0 +0.0 +0.0 +0.0 +0.0 22.3 40.0 -17.7 Hor
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
+0.0 $+0.0$ $+0.1$ $+0.1-27.8$ $+1.0$ $+14.7$ $+0.0$
69 37.685M 34.3 +0.0 +0.1 -27.8 +1.0 +0.0 22.3 40.0 -17.7 Hor
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
+14.7 $+0.0$ $+0.0$ $+0.0$ $+0.0$ $+0.0$
70 73.962M 41.8 +0.0 +0.0 +0.0 +0.0 +0.0 22.0 40.0 -18.0 Hor
+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0
-27.9 + 1.4 + 6.6 + 0.0
71 73.962M 41.8 +0.0 +0.1 -27.9 +1.4 +0.0 22.0 40.0 -18.0 Hor
+6.6 +0.0 +0.0 +0.0 +0.0
+0.0 $+0.0$ $+0.0$ $+0.0$
72 37.542M 32.8 +0.0 +0.0 +0.0 +0.0 +0.0 20.9 40.0 -19.1 Hor
+0.0 +0.0 +0.0 +0.0 +0.1
-27.8 + 1.0 + 14.8 + 0.0



73	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 17 Ext ATTN: 0 dB





Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restr	icted Bands (Rad	iated)
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		

I USI LYUU					
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-		
			0/0		
Τ8	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	AMFW-5F-	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	

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.

Measu	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					



5	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					
6	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					
7	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					
	11100.000	2.6.0	+2.8	+8.5	-36.3	+36.4		40.0		1.0	
8	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					
9	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					
10	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					
11	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					
12	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		10.0			
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					
1.4	12400.005	22.5	+0.0	+0.0	+0.0	+0.0	0.0	40.1	54.0	5.0	
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	20.0	+0.2	+0.2	+0.2	+0.2	.0.0	52.0	54.0	0.2	II!
~	12499.995 M	38.2	+0.0 -35.9	+0.8 +38.7	+2.9 +0.2	+8.9	+0.0	53.8	54.0	-0.2	Horiz
	111		-33.9 +0.2		+0.2 $+0.2$	+0.2					
16	2290 091M	52.6		+0.2		+0.2		47.9	54.0	-6.1	Homin
10	2389.981M	52.6	+0.0 -38.0	+0.4 +28.4	$^{+1.2}_{+0.0}$	+3.3 +0.0	+0.0	47.9	54.0	-0.1	Horiz
			-58.0 +0.0	+28.4 +0.0	+0.0 $+0.0$	+0.0 +0.0					
17	114.300M	51.8	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	37.4	43.5	-6.1	Vert
1/	114.300101	51.0	+0.0 +0.0		+0.0 +0.0	+0.0 +0.2	± 0.0	51.4	+9.9	-0.1	v CI t
			-27.8	+0.0 $+1.8$	+11.4	+0.2 +0.0					
18	37.562M	45.7	+0.0	+0.0	+0.0	+0.0	+0.0	33.8	40.0	-6.2	Vert
10	57.502111	- 1,5,1	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.1	10.0	55.0	-10.0	-0.2	vert
			-27.8	+0.0 $+1.0$	+14.8	+0.1 +0.0					
19	37.562M	45.7	+0.0	+0.1	-27.8	+1.0	+0.0	33.8	40.0	-6.2	Vert
1)	57.502141	13.1	+14.8	+0.1	+0.0	+0.0	10.0	55.0	10.0	0.2	, 011
			+0.0	+0.0	+0.0	+0.0					
20	125.002M	50.6	+0.0	+0.2	-27.8	+1.9	+0.0	37.0	43.5	-6.5	Vert
20	122.002111	50.0	+12.1	+0.2 +0.0	+0.0	+1.9 +0.0	10.0	51.0	rJ.J	0.5	7011
			+0.0	+0.0	+0.0	+0.0					
21	125.002M	50.6	+0.0	+0.0	+0.0	+0.0	+0.0	37.0	43.5	-6.5	Vert
	120.00200	20.0	+0.0	+0.0	+0.0	+0.2		27.0		5.5	
			-27.8	+1.9	+12.1	+0.2					
t											



22	26666677	16.0	0.0	0.4	1 7	1.0	0.0	16.0	54.0	7.0	X 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					
22	264.0111	50.2	+0.4	+0.4	+0.4	+0.4		207	16.0	7.2	II.a.r.!-
23	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					
- 24	4000 00214	12.6	-27.7	+2.9	+12.9	+0.0	.0.0	16.6	54.0	7.4	TT
	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					
•	4999.992M	16.0	+0.3	+0.3	+0.3	+0.3		50.0	54.0	4.0	Hania
Λ	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					
26	5 420 0073 4	10.0	+0.3	+0.3	+0.3	+0.3		16.1	54.0	7.6	X 7 (
26	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					
27	2666 66514	45.0	+2.0	+5.4	-36.9	+34.3	.0.0	16.4	54.0	7.6	TT '
27	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					
20	7400 00014	27.7	+0.4	+0.4	+0.4	+0.4		16.2	54.0	~ ~ ~	TT '
	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					
•	7400 00014	42.0	+0.1	+0.1	+0.1	+0.1	.0.0	51.5	54.0	2.5	TT '
A	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					
20	0000 0000	711	+0.1	+0.1	+0.1	+0.1		16.0	54.0	7.0	TT '
	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					
	2222 22214	57.0	+0.0	+0.0	+0.0	+0.0		52.3	54.0	-1.7	II.a.r.!-
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2333.332M	57.2	+0.0 -38.0	+0.4 +28.3	$^{+1.2}_{+0.0}$	+3.2 +0.0	+0.0	52.5	54.0	-1./	Horiz
			-38.0 +0.0		+0.0 $+0.0$	+0.0 +0.0					
20	5359.954M	40.5		+0.0			+0.0	45.9	54.0	-8.1	Homin
52	5559.954M	40.3	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.6}$	+0.0	43.9	54.0	-0.1	Horiz
			+0.0 $+1.9$	+0.0 $+5.3$							
22	27 706M	12.0			-36.9	+34.1		21.0	40.0	0 1	Vort
33	37.706M	43.8	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.1}$	+0.0	31.8	40.0	-8.2	Vert
			+0.0 -27.8	+0.0 $+1.0$	+0.0 +14.7	+0.1 +0.0					
34	37.706M	43.8	+0.0	+1.0 +0.1	-27.8	+0.0 +1.0	+0.0	31.8	40.0	-8.2	Vert
54	37.700M	43.0	+0.0 +14.7	+0.1 +0.0		$^{+1.0}_{+0.0}$	$\pm 0.0$	51.0	40.0	-0.2	veit
			+14.7 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0					
25	5359.958M	40.4	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	45.8	54.0	-8.2	Vert
55	5557.750WI	40.4	+0.0 $+0.0$	+0.0 +0.0	+0.0 +0.0	+0.0 +0.6	$\pm 0.0$	40.0	J <del>4</del> .0	-0.2	v CI t
			+0.0 +1.9	+0.0 +5.3	-36.9	+0.0 +34.1					
36	73.819M	51.5	+1.9 +0.0	+0.1	-27.9	+1.4	+0.0	31.7	40.0	-8.3	Vert
50	/ 5.01711	51.5	+0.0 +6.6	+0.1 +0.0	+0.0	$^{+1.4}_{+0.0}$	$\pm 0.0$	51.7	+0.0	-0.5	v CI t
			+0.0 $+0.0$	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0					
37	74.005M	51.4	+0.0 +0.0	+0.0 +0.1	-27.9	+0.0	+0.0	31.7	40.0	-8.3	Vert
57	74.003M	51.4	+0.0 +6.7	+0.1 +0.0	+0.0	$^{+1.4}_{+0.0}$	$\pm 0.0$	51.7	40.0	-0.3	veit
			+0.7 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0					
38	73.819M	51.5	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	31.7	40.0	-8.3	Vert
- 38	/3.01711	51.5	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.1	$\pm 0.0$	51.7	40.0	-0.3	ven
			+0.0 -27.9	+0.0 +1.4	+0.0 +6.6	+0.1 +0.0					
L			-21.7	⊤1.4	±0.0	$\pm 0.0$					



39	74.005M	51.4	+0.0	+0.0	+0.0	+0.0	+0.0	31.7	40.0	-8.3	Vert
39	74.003WI	51.4	+0.0 $+0.0$	+0.0 +0.0	+0.0 +0.0	+0.0 +0.1	$\pm 0.0$	51.7	40.0	-0.5	ven
			-27.9	+0.0 $+1.4$	+6.7	+0.1 +0.0					
40	264.010M	49.2	+0.0	+0.0	+0.0	+0.0	+0.0	37.6	46.0	-8.4	Vert
	20 110 1 0101	.,	+0.0	+0.0	+0.0	+0.3		0110		011	, 011
			-27.7	+2.9	+12.9	+0.0					
41	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					
42	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					
43	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					
45	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					
46	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					
47	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					
10	240.00034	17.0	-27.8	+3.2	+14.4	+0.0	0.0	25.0	16.0	10.0	X 7
48	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					
40	240.00014	47.0	-27.8	+2.8	+12.7	+0.0	.0.0	25.0	16.0	10.0	Mart
49	249.999M	47.9	+0.0 +12.7	+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					
50	108.846M	47.9	+0.0 +0.0	+0.0 +0.1	+0.0 -27.8	+0.0 +1.8	+0.0	32.9	43.5	-10.6	Vert
50	108.840101	47.9	+0.0 +10.9	+0.1 +0.0	-27.8 +0.0	$^{+1.8}_{+0.0}$	+0.0	52.9	45.5	-10.0	ven
			+10.9 $+0.0$	+0.0 $+0.0$	+0.0 $+0.0$	+0.0 $+0.0$					
51	108.846M	47.9	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	32.9	43.5	-10.6	Vert
51	100.040101	77.7	+0.0 $+0.0$	+0.0 $+0.0$	+0.0 $+0.0$	+0.0 +0.1	10.0	54.9	-5.5	10.0	ven
			-27.8	+1.8	+10.9	+0.1					
52	12499.993	27.6	+0.0	+0.8	+2.9	+8.9	+0.0	43.2	54.0	-10.8	Vert
	M	27.0	-35.9	+38.7	+0.2	+0.2	. 0.0		21.0	10.0	, 011
	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
	M		-35.9	+38.7	+0.2	+0.2					
			+0.2	+0.2	+0.2	+0.2					
54	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					
55	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					
L											

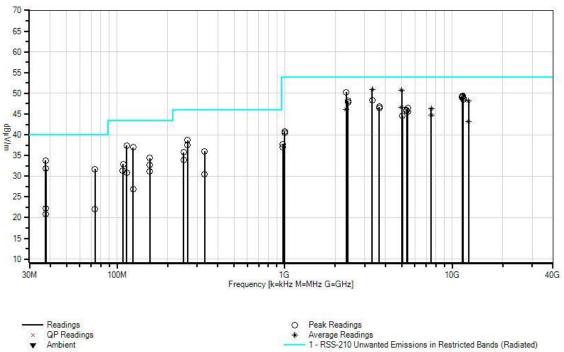


51	250 01 41 4	101		.0.2	07.0	10.0	.0.0	24.0	10.0	12.0	II.
56	250.014M	46.1	+0.0 +12.7	+0.2 +0.0	-27.8 +0.0	+2.8 +0.0	+0.0	34.0	46.0	-12.0	Horiz
			+12.7 +0.0	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$					
57	108.139M	46.5	+0.0 +0.0	+0.0 +0.1	-27.8	+0.0 +1.8	+0.0	31.4	43.5	-12.1	Vert
51	100.137141	+0.J	+0.0 $+10.8$	+0.1 +0.0	+0.0	+1.0 $+0.0$	10.0	51.7	т	12.1	vert
			+0.0	+0.0	+0.0	+0.0					
58	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					
59	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					
60	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					
61	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					
62	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					
63	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					
64	000.000	261	-27.3	+6.2	+24.8	+0.0	0.0	10.1	54.0	10.6	
64	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					
65	333.362M	40.3	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	30.4	46.0	-15.6	Vert
05	555.502IVI	40.5	+0.0 +0.0	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	+0.0 $+0.3$	$\pm 0.0$	50.4	40.0	-13.0	ven
			-27.8	+0.0 +3.2	+0.0 $+14.4$	+0.3 $+0.0$					
66	976.045M	33.7	+0.0	+0.0	+0.0	+0.0	+0.0	37.7	54.0	-16.3	Horiz
00	770.045101	55.7	+0.0	+0.0	+0.0	+0.6	10.0	57.7	54.0	10.5	TIOTIZ
			-27.2	+6.1	+24.5	+0.0					
67	125.008M	40.5	+0.0	+0.2	-27.8	+1.9	+0.0	26.9	43.5	-16.6	Horiz
0,		.0.0	+12.1	+0.2	+0.0	+0.0				10.0	
			+0.0	+0.0	+0.0	+0.0					
68	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					
69	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					
70	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					
71	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					
L			+0.0	+0.0	+0.0	+0.0					
72	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					



73	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					
74	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					
75	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 18 Ext ATTN: 0 dB



Ambient .



Customer: Specification:	Motorola Mobility, Inc. RSS-210 Unwanted Emissions in Restr	ricted Bands (Rad	iated)
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		

1 csi 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	AMFW-5F-	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: 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.

Meası	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					
	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					



r											
5	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					
6	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					
7	11590.063	36.5	+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					
8	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					
9	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					
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	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					
12	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
	Μ		-35.9	+38.7	+0.2	+0.2					
			+0.2	+0.2	+0.2	+0.2					
14	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					
15	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					
16	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					
17	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					
18	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					
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	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					
21	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					



22	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					
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					
^	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					
25	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					
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					
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					
^	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					
29	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					
31	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					
32	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					
33	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					
34	5359.883M	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					
35	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					
36	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					
37	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					
38	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					



39	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	1.5.4.0.1.6.1.6	10.0	-27.7	+2.9	+12.9	+0.0	0.0		10.5	0.1	* *
40	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					
	10.50.0003.5	10.0	-27.7	+2.2	+10.9	+0.0	0.0			0.0	
41	4960.009M	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					
10	7400 0000 6	261	+1.9	+5.0	-37.0	+33.2	0.0	447	54.0	0.0	<b>X</b> 7 .
	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					
	7400 0000 6	12.0	+0.1	+0.1	+0.1	+0.1	0.0	51.5	54.0		<b>X</b> 7 .
^	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					
	4050 5503 6	10.4	+0.1	+0.1	+0.1	+0.1	0.0	11.0	54.0	0.7	<b>X</b> 7 .
44	4959.758M	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					
4.5	222.2443.6	15.0	+1.9	+5.0	-37.0	+33.2	0.0	260	16.0	10.0	
45	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					
1.6	240.00034	17.0	-27.8	+3.2	+14.4	+0.0	0.0	25.0	16.0	10.0	<b>X</b> 7 .
46	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					
17	240.00034	17.0	-27.8	+2.8	+12.7	+0.0	0.0	25.0	16.0	10.0	<b>X</b> 7 .
47	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					
10	100.04614	17.0	+0.0	+0.0	+0.0	+0.0	. 0. 0	22.0	12.5	10.0	<b>X</b> 7 (
48	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					
40	100.04614	17.0	+0.0	+0.0	+0.0	+0.0	. 0. 0	22.0	12.5	10.0	<b>X</b> 7 (
49	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 04214	47.0	-27.8	+1.8	+10.9	+0.0	.0.0	22.7	12 5	10.0	II!
50	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					
<i>E</i> 1	12400.002	27.6	-27.7	+2.2	+10.9	+0.0	+0.0	42.2	54.0	10.0	Vert
51	12499.993 M	27.6	+0.0 -35.9	+0.8 +38.7	+2.9 +0.2	+8.9 +0.2	+0.0	43.2	54.0	-10.8	Vert
	Ave		-35.9 +0.2	+38.7 +0.2	+0.2 +0.2	+0.2 +0.2					
	12499.993	37.4	+0.2 +0.0	+0.2 +0.8	+0.2 +2.9	+0.2 +8.9	+0.0	53.0	54.0	-1.0	Vert
	12499.995 M	37.4	+0.0 -35.9	+0.8 +38.7	+2.9 +0.2	+8.9 +0.2	+0.0	55.0	54.0	-1.0	ven
1	11/1		-35.9 +0.2	+38.7 +0.2	+0.2 +0.2	+0.2 +0.2					
53	250.014M	46.1	+0.2 +0.0	+0.2 +0.0	+0.2 +0.0		+0.0	34.0	46.0	-12.0	Horiz
	230.014M	40.1	$^{+0.0}_{+0.0}$	$^{+0.0}_{+0.0}$	+0.0 +0.0	$^{+0.0}_{+0.2}$	+0.0	34.0	40.0	-12.0	HOLIZ
1			-27.8	+0.0 +2.8	+0.0 +12.7	+0.2 $+0.0$					
51	250.014M	46.1	+0.0	+2.8 +0.2	-27.8	+0.0 +2.8	+0.0	34.0	46.0	-12.0	Horiz
34	230.014M	40.1	+0.0 +12.7	+0.2 +0.0	-27.8 +0.0	+2.8 +0.0	$\pm 0.0$	54.0	40.0	-12.0	TIOUZ
			+12.7 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 $+0.0$					
55	108.139M	46.5	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0	31.4	43.5	-12.1	Vert
55	100.139101	40.5	+0.0 +0.0	+0.0 +0.0	+0.0 +0.0	+0.0 +0.1	$\pm 0.0$	51.4	43.3	-12.1	ven
1			+0.0 -27.8	+0.0 +1.8	+0.0 +10.8	$^{+0.1}_{+0.0}$					
L			-21.0	11.0	110.0	10.0					

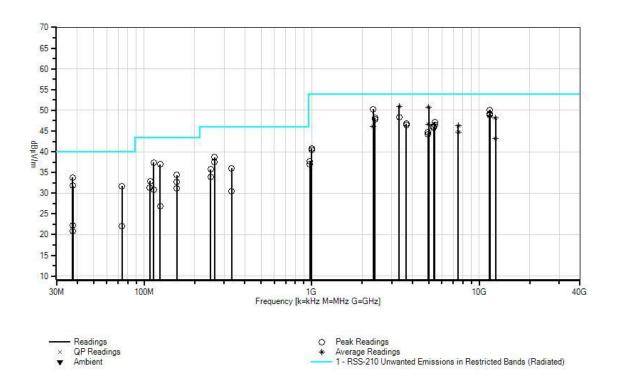


r											
56	108.139M	46.5	+0.0	+0.1	-27.8	+1.8	+0.0	31.4	43.5	-12.1	Vert
			+10.8	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0					
57	156.800M	45.6	+0.0	+0.0	+0.0	+0.0	+0.0	31.1	43.5	-12.4	Vert
			+0.0	+0.0	+0.0	+0.1					
			-27.7	+2.2	+10.9	+0.0					
58	114.309M	45.2	+0.0	+0.0	+0.0	+0.0	+0.0	30.8	43.5	-12.7	Horiz
			+0.0	+0.0	+0.0	+0.2					
			-27.8	+1.8	+11.4	+0.0					
59	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					
60	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					
61	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					
62	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					
63	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					
64	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					
65	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					
66	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					
67	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					
68	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					
69	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					
70	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					
71	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					
72	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					



73	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 RSS-210 Unwanted Emissions in Restricted Bands (Radiated) Test Distance: 3 Meters Sequence#: 19 Ext ATTN: 0 dB





## Test Setup Photos







# SUPPLEMENTAL INFORMATION

### **Measurement Uncertainty**

Uncertainty Value	Parameter		
4.73 dB	Radiated Emissions		
3.34 dB	Mains Conducted Emissions		
3.30 dB	Disturbance Power		

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Compliance is deemed to occur provided measurements are below the specified limits.

### **Emissions Test Details**

#### **TESTING PARAMETERS**

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

#### **CORRECTION FACTORS**

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in  $dB\mu V/m$ , the spectrum analyzer reading in  $dB\mu V$  was corrected by using the following formula. This reading was then compared to the applicable specification limit.



SAMPLE CALCULATIONS						
	Meter reading	(dBµV)				
+	Antenna Factor	(dB)				
+	Cable Loss	(dB)				
-	Distance Correction	(dB)				
-	Preamplifier Gain	(dB)				
=	Corrected Reading	(dBµV/m)				

#### TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE						
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING			
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz			
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz			
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz			

#### SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

#### Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band. **Quasi-Peak** 

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

#### Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.