Test Report

Product Name	SpectraGuardR Access Point / Sensor
Model No	SS-300-AT-C-60
FCC ID.	TOR-SS300AT60

Applicant	AirTight Networks, Inc.
Address	339 N. Bernardo Avenue, Suite #200, Mountain View, California, USA

Date of Receipt	Oct. 11, 2012
Issue Date	Oct. 29, 2012
Report No.	12A193R-RFUSP28V01
Report Version	V1.0

Testing Laboratory
0914

Test Report Certification

Issue Date: Oct. 29, 2012
Report No.: 12A193R-RFUSP28V01

Accredited by NIST (NVLAP)
NVLAP Lab Code: 200533-0

Product Name	SpectraGuardR Access Point / Sensor
Applicant	AirTight Networks, Inc.
Address	339 N. Bernardo Avenue, Suite #200, Mountain View, California, USA
Manufacturer	DONG GUAN G-COM COMPUTER CO., LTD.
Model No.	SS-300-AT-C-60
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	AirTight
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010 ANSI C63.4: 2003
Test Result	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : Rita Huang

(Senior Adm. Specialist / Rita Huang)

Tested By : Vincent chu

(Engineer / Vincent Chu)

Approved By :

(Manager / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	SpectraGuardR Access Point / Sensor
Trade Name	AirTight
Model No.	SS-300-AT-C-60
FCC ID.	TOR-SS300AT60
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz,802.11n-40MHz:2422-2452MHz 802.11a/n-20MHz:5745-5825MHz ,802.11n-40MHz:5755-5795MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 5, n-40MHz: 2
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 450Mbps
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40MHz: 40MHz
Type of Modulation	802.11b:DSSS DBPSK, DQPSK, CCK 802.11a/g/n: OFDM BPSK, QPSK, 16QAM, 64QAM
Antenna Type	PIFA / Dipole
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Adapter	MFR: DVE, M/N: DSA-15P-123 US 120150 Input: AC 100-240V~50/60Hz, 0.5A Output: DC +12V, 1.25A Cable out: Non-Shielded, 1.7m

Antenna List

No.	Manufacturer	Part No.	Peak Gain	Note
1.	JOYMAX	JWX-614XRSXX-361	3dBi for 2.4GHz 5dBi for 5.725~5.850GHz	External Antenna (Dipole)
2.	MAG.LAYERS	MSA-3810-2G4C1-B4 MSA-3810-2G4C1-B3 MSA-3810-2G4C1-A37	4.14dBi for 2.4GHz 5.72dBi for 5.725~5.850GHz	Internal Antenna (PIFA)

Note: The antenna of EUT is conform to FCC 15.203

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2422 MHz	Channel 2:	2427 MHz	Channel 3:	2432 MHz	Channel 4:	2437 MHz
Channel 5:	2442 MHz	Channel 6:	2447 MHz	Channel 7:	2452 MHz		

802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 151:	5755 MHz	Channel 159:	5795 MHz

Note:

1. This device is a SpectraGuardR Access Point / Sensor with a built-in two WLAN module, module 1 support 2T2R, module 2 support 3T3R technology, this report for 3T3R module.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11a/g is 6Mbps、802.11n(20M-BW) is 21.7Mbps and 、802.11n(40M-BW) is 45Mbps).
4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)
	Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)
	Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)
	Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna)
	Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna)
	Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna)
	Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna)
	Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)
	Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)
	Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)
	Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna)
	Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna)
	Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna)
	Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna)

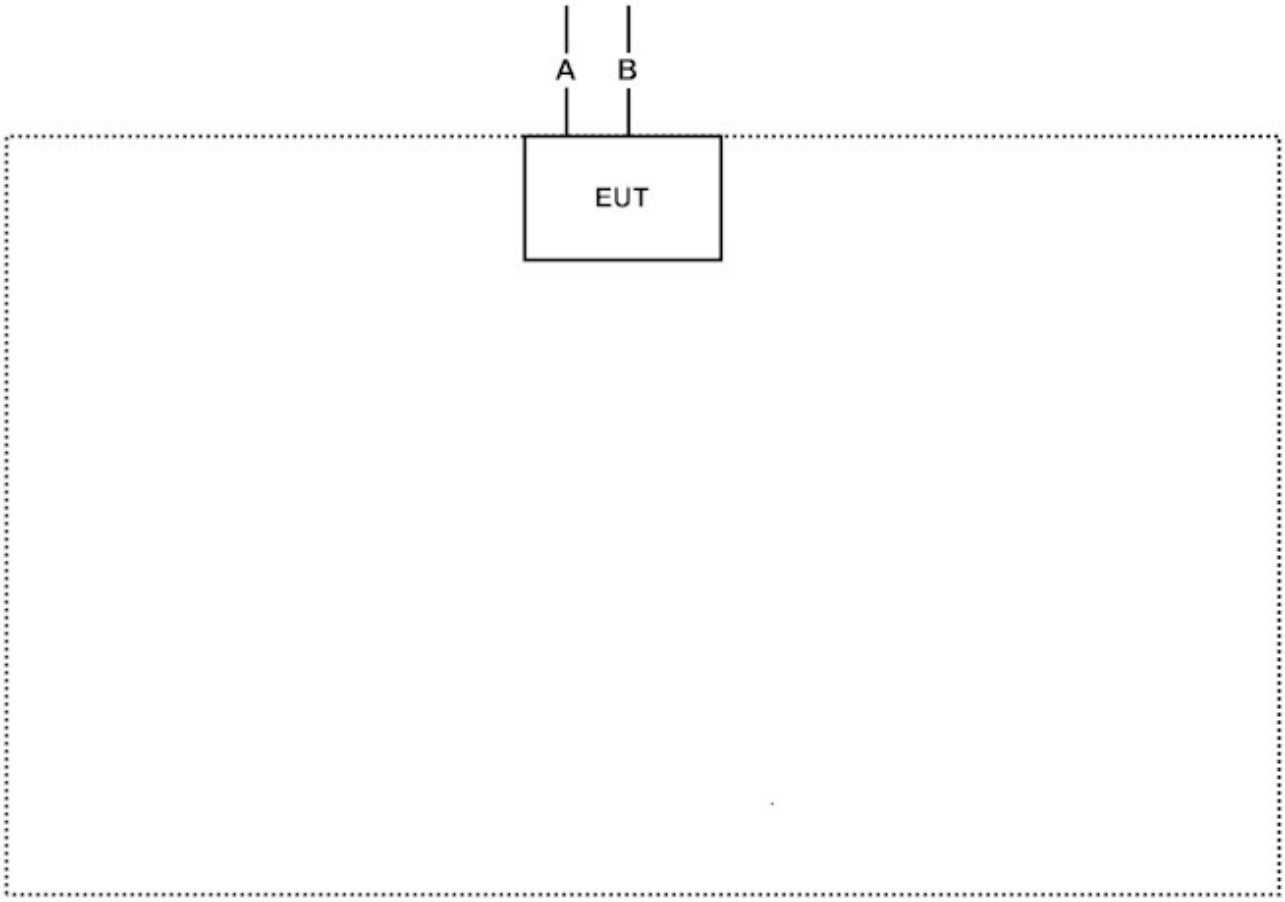
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
(1)	N/A	N/A	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	RJ-45 Cable	Non-Shielded, 2.0m
B	RJ-45 Cable	Non-Shielded, 2.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Connect EUT and Notebook via LAN Cable
(2) Execute “Art2. V2.3 exe” program on the Notebook
(3) Configure the test mode, the test channel, and the data rate.
(4) Start the continuous transmission.
(5) Remove Notebook, Setup the EUT as shown in Section 1.4
(6) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

Site Name: Quietek Corporation
Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
Lin-Kou Shiang, Taipei,
Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Conducted Emission

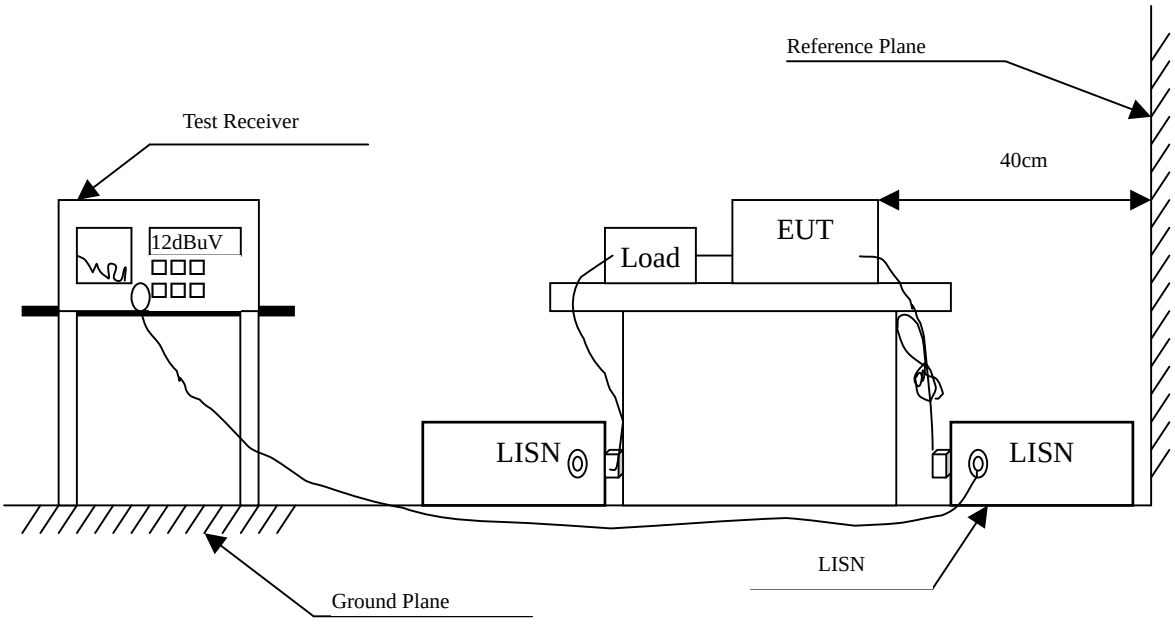
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2012	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2012	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2012	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2012	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2012	
	No.1 Shielded Room				

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked by “X” are used to measure the final test results.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.318	9.830	39.180	49.010	-12.190	61.200
0.525	9.830	34.140	43.970	-12.030	56.000
1.021	9.830	31.700	41.530	-14.470	56.000
1.568	9.840	31.220	41.060	-14.940	56.000
2.537	9.850	33.210	43.060	-12.940	56.000
5.998	9.892	36.350	46.242	-13.758	60.000
Average					
0.318	9.830	29.280	39.110	-12.090	51.200
0.525	9.830	21.350	31.180	-14.820	46.000
1.021	9.830	16.090	25.920	-20.080	46.000
1.568	9.840	16.740	26.580	-19.420	46.000
2.537	9.850	16.920	26.770	-19.230	46.000
5.998	9.892	22.840	32.732	-17.268	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.318	9.840	37.650	47.490	-13.710	61.200
0.513	9.840	29.440	39.280	-16.720	56.000
0.970	9.850	31.190	41.040	-14.960	56.000
1.369	9.850	29.770	39.620	-16.380	56.000
2.220	9.860	30.520	40.380	-15.620	56.000
6.240	9.925	34.670	44.595	-15.405	60.000
Average					
0.318	9.840	29.130	38.970	-12.230	51.200
0.513	9.840	17.740	27.580	-18.420	46.000
0.970	9.850	16.190	26.040	-19.960	46.000
1.369	9.850	14.190	24.040	-21.960	46.000
2.220	9.860	15.930	25.790	-20.210	46.000
6.240	9.925	22.280	32.205	-17.795	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.314	9.830	38.690	48.520	-12.794	61.314
0.525	9.830	34.490	44.320	-11.680	56.000
0.947	9.830	30.800	40.630	-15.370	56.000
1.587	9.840	33.280	43.120	-12.880	56.000
2.314	9.840	33.050	42.890	-13.110	56.000
6.052	9.892	37.540	47.432	-12.568	60.000
Average					
0.314	9.830	29.230	39.060	-12.254	51.314
0.525	9.830	22.000	31.830	-14.170	46.000
0.947	9.830	15.110	24.940	-21.060	46.000
1.587	9.840	16.630	26.470	-19.530	46.000
2.314	9.840	16.940	26.780	-19.220	46.000
6.052	9.892	23.960	33.852	-16.148	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.310	9.840	37.300	47.140	-14.289	61.429
0.541	9.840	34.100	43.940	-12.060	56.000
1.166	9.850	31.100	40.950	-15.050	56.000
1.380	9.850	31.220	41.070	-14.930	56.000
2.716	9.860	30.050	39.910	-16.090	56.000
6.463	9.928	35.720	45.648	-14.352	60.000
Average					
0.310	9.840	28.630	38.470	-12.959	51.429
0.541	9.840	20.990	30.830	-15.170	46.000
1.166	9.850	15.960	25.810	-20.190	46.000
1.380	9.850	15.310	25.160	-20.840	46.000
2.716	9.860	15.440	25.300	-20.700	46.000
6.463	9.928	23.660	33.588	-16.412	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.310	9.830	36.530	46.360	-15.069	61.429
0.377	9.830	35.560	45.390	-14.124	59.514
0.666	9.830	30.160	39.990	-16.010	56.000
1.146	9.830	30.590	40.420	-15.580	56.000
2.267	9.840	32.230	42.070	-13.930	56.000
5.923	9.891	37.520	47.411	-12.589	60.000
Average					
0.310	9.830	25.770	35.600	-15.829	51.429
0.377	9.830	24.920	34.750	-14.764	49.514
0.666	9.830	19.090	28.920	-17.080	46.000
1.146	9.830	17.000	26.830	-19.170	46.000
2.267	9.840	16.180	26.020	-19.980	46.000
5.923	9.891	23.660	33.551	-16.449	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.314	9.840	36.160	46.000	-15.314	61.314
0.373	9.840	35.020	44.860	-14.769	59.629
0.951	9.850	30.500	40.350	-15.650	56.000
1.447	9.850	29.390	39.240	-16.760	56.000
2.271	9.860	31.950	41.810	-14.190	56.000
5.611	9.906	35.640	45.546	-14.454	60.000
Average					
0.314	9.840	27.750	37.590	-13.724	51.314
0.373	9.840	25.380	35.220	-14.409	49.629
0.951	9.850	14.450	24.300	-21.700	46.000
1.447	9.850	14.600	24.450	-21.550	46.000
2.271	9.860	15.940	25.800	-20.200	46.000
5.611	9.906	23.490	33.396	-16.604	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.275	9.830	34.690	44.520	-17.909	62.429
0.361	9.830	33.660	43.490	-16.481	59.971
0.728	9.830	31.630	41.460	-14.540	56.000
1.720	9.840	30.370	40.210	-15.790	56.000
2.525	9.849	28.320	38.169	-17.831	56.000
5.806	9.889	34.370	44.259	-15.741	60.000
Average					
0.275	9.830	24.150	33.980	-18.449	52.429
0.361	9.830	18.070	27.900	-22.071	49.971
0.728	9.830	16.620	26.450	-19.550	46.000
1.720	9.840	16.420	26.260	-19.740	46.000
2.525	9.849	12.940	22.789	-23.211	46.000
5.806	9.889	19.810	29.699	-20.301	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : SpectraGuardR Access Point / Sensor
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.271	9.830	31.940	41.770	-20.773	62.543
0.478	9.840	29.970	39.810	-16.819	56.629
0.591	9.840	27.550	37.390	-18.610	56.000
1.060	9.850	27.270	37.120	-18.880	56.000
1.716	9.860	30.210	40.070	-15.930	56.000
6.677	9.942	33.330	43.272	-16.728	60.000
Average					
0.271	9.830	24.820	34.650	-17.893	52.543
0.478	9.840	18.860	28.700	-17.929	46.629
0.591	9.840	14.790	24.630	-21.370	46.000
1.060	9.850	13.440	23.290	-22.710	46.000
1.716	9.860	16.020	25.880	-20.120	46.000
6.677	9.942	19.620	29.562	-20.438	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Maximum Conducted Power

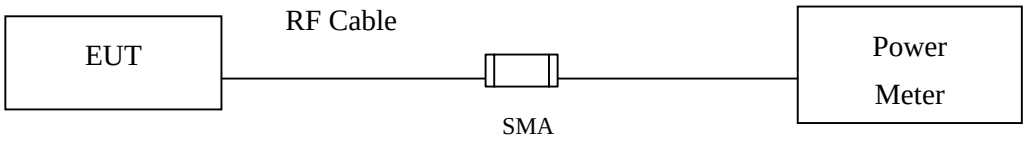
3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2012
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2012
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup



3.3. Limits

The maximum average power shall be less 1 Watt. (Section 15.247 (b)(3))

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Maximum Conducted Power

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	19.09	--	--	--	<30dBm	Pass
06	2437	20.1	19.95	19.86	19.77	<30dBm	Pass
11	2462	16.61	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	17.58	--	--	--	<30dBm	Pass
06	2437	19.11	19.05	18.92	18.81	<30dBm	Pass
11	2462	16.31	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	18.37	--	--	--	<30dBm	Pass
06	2437	19.43	19.35	19.26	19.11	<30dBm	Pass
11	2462	16.51	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
1	2412	1	19.09	17.58	18.37	23.16	<30dBm	Pass
6	2437	1	20.10	19.11	19.43	24.34	<30dBm	Pass
11	2462	1	16.61	16.31	16.51	21.25	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	12.54	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21	20.95	20.84	20.73	20.65	20.57	20.49	20.34	<30dBm	Pass
11	2462	12.88	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	12	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	20.46	20.37	20.27	20.16	20.05	19.94	19.87	19.75	<30dBm	Pass
11	2462	12.64	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	12.3	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	20.41	20.34	20.26	20.16	20.07	19.94	19.82	19.7	<30dBm	Pass
11	2462	13.01	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
1	2412	6	12.54	12.00	12.30	17.06	<30dBm	Pass
6	2437	6	21.00	20.46	20.41	25.40	<30dBm	Pass
11	2462	6	12.88	12.64	13.01	17.62	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	16.01	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.67	17.55	17.43	17.35	17.28	17.16	17.11	17.06	<30dBm	Pass
165	5825	17.01	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	15.15	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.31	17.23	17.15	17.06	16.95	16.83	16.77	16.62	<30dBm	Pass
165	5825	17.41	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	15.66	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.78	17.65	17.52	17.47	17.36	17.26	17.12	17.03	<30dBm	Pass
165	5825	18.08	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
149	5745	6	16.01	15.15	15.66	20.39	<30dBm	Pass
157	5785	6	17.67	17.31	17.78	22.36	<30dBm	Pass
165	5825	6	17.01	17.41	18.08	22.29	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	13.51	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.24	21.09	20.95	20.84	20.71	20.66	20.55	20.4	<30dBm	Pass
11	2462	12.71	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	13.01	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	20.54	20.43	20.34	20.27	20.16	20.08	19.95	19.81	<30dBm	Pass
11	2462	12.46	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	13.61	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	20.5	20.41	20.34	20.29	20.16	20.07	19.94	19.86	<30dBm	Pass
11	2462	13	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
1	2412	HT16	13.51	13.01	13.61	18.16	<30dBm	Pass
6	2437	HT16	21.24	20.54	20.50	25.54	<30dBm	Pass
11	2462	HT16	12.71	12.46	13.00	17.50	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	10.34	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	21.23	21.16	21.07	20.93	20.81	20.77	20.64	20.51	<30dBm	Pass
9	2452	10.36	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	9.88	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	20.71	20.64	20.53	20.47	20.36	20.22	20.18	20.04	<30dBm	Pass
9	2452	9.71	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	10.31	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	20.8	20.76	20.64	20.51	20.43	20.31	20.27	20.16	<30dBm	Pass
9	2452	10.21	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
3	2422	HT16	10.34	9.88	10.31	14.95	<30dBm	Pass
6	2437	HT16	21.23	20.71	20.80	25.69	<30dBm	Pass
9	2452	HT16	10.36	9.71	10.21	14.87	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	16.27	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.61	17.52	17.43	17.35	17.29	17.15	17.03	16.93	<30dBm	Pass
165	5825	17.08	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	15.41	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.36	17.23	17.12	17.03	16.94	16.84	16.77	16.63	<30dBm	Pass
165	5825	17.41	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	15.81	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.41	17.32	17.21	17.15	17.03	16.91	16.86	16.72	<30dBm	Pass
165	5825	17.91	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
149	5745	HT16	16.27	15.41	15.81	20.62	<30dBm	Pass
157	5785	HT16	17.61	17.36	17.41	22.23	<30dBm	Pass
165	5825	HT16	17.08	17.41	17.91	22.25	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	14.23	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	17.81	17.72	17.61	17.53	17.44	17.35	17.23	17.11	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	13.31	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	17.51	17.42	17.35	17.26	17.16	17.08	16.91	16.81	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	14.27	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	17.61	17.52	17.41	17.36	17.28	17.15	17.06	16.91	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
151	5755	HT16	14.23	13.31	14.27	18.73	<30dBm	Pass
159	5795	HT16	17.81	17.51	17.61	22.42	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	19.87	--	--	--	<30dBm	Pass
06	2437	19.75	19.65	19.52	19.43	<30dBm	Pass
11	2462	19.64	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	19.98	--	--	--	<30dBm	Pass
06	2437	19.86	19.75	19.66	19.47	<30dBm	Pass
11	2462	19.8	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	19.25	--	--	--	<30dBm	Pass
06	2437	19.02	18.92	18.83	18.76	<30dBm	Pass
11	2462	19.51	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency	Data Rata	Chain A Power	Chain B Power	Chain C Power	Chain A+B+C Power	Limit	Result
	(MHz)	(Mbps)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	
1	2412	1	19.87	19.98	19.25	24.48	<30dBm	Pass
6	2437	1	19.75	19.86	19.02	24.33	<30dBm	Pass
11	2462	1	19.64	19.80	19.51	24.42	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	14.49	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.41	21.34	21.22	21.15	21.06	20.96	20.87	20.73	<30dBm	Pass
11	2462	13.77	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	15.2	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.63	21.59	21.43	21.35	21.27	21.13	21.05	20.96	<30dBm	Pass
11	2462	14.38	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	14.09	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.03	20.95	20.86	20.71	20.63	20.51	20.44	20.31	<30dBm	Pass
11	2462	14.15	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
1	2412	6	14.49	15.20	14.09	19.39	<30dBm	Pass
6	2437	6	21.41	21.63	21.03	26.13	<30dBm	Pass
11	2462	6	13.77	14.38	14.15	18.88	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	16.11	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.33	17.25	17.15	17.06	16.95	16.81	16.73	16.66	<30dBm	Pass
165	5825	17.31	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	15	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.62	17.53	17.43	17.35	17.23	17.11	17.05	17	<30dBm	Pass
165	5825	17.51	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	15.63	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.41	17.35	17.22	17.15	17.06	16.96	16.83	16.77	<30dBm	Pass
165	5825	18.38	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
149	5745	6	16.11	15.00	15.63	20.37	<30dBm	Pass
157	5785	6	17.33	17.62	17.41	22.23	<30dBm	Pass
165	5825	6	17.31	17.51	18.38	22.53	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	14.63	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.44	21.36	21.24	21.16	21.06	20.94	20.85	20.77	<30dBm	Pass
11	2462	13.66	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	15.22	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.83	21.76	21.64	21.55	21.43	21.37	21.22	21.13	<30dBm	Pass
11	2462	14.05	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
01	2412	14.11	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.11	21.06	20.96	20.84	20.76	20.65	20.53	20.41	<30dBm	Pass
11	2462	14.14	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
1	2412	HT16	14.63	15.22	14.11	19.45	<30dBm	Pass
6	2437	HT16	21.44	21.83	21.11	26.24	<30dBm	Pass
11	2462	HT16	13.66	14.05	14.14	18.73	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	13.15	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	21.41	21.36	21.22	21.15	21.08	20.96	20.84	20.77	<30dBm	Pass
9	2452	13	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	13.27	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	21.67	21.56	21.44	21.35	21.22	21.13	21.06	21	<30dBm	Pass
9	2452	13.12	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
3	2422	13.01	--	--	--	--	--	--	--	<30dBm	Pass
6	2437	20.96	20.85	20.77	20.63	20.55	20.41	20.35	20.2	<30dBm	Pass
9	2452	13.33	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
3	2422	HT16	13.15	13.27	13.01	17.92	<30dBm	Pass
6	2437	HT16	21.41	21.67	20.96	26.13	<30dBm	Pass
9	2452	HT16	13.00	13.12	13.33	17.92	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	16.03	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.44	17.32	17.23	17.12	17.03	16.94	16.86	16.77	<30dBm	Pass
165	5825	17.21	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	15	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.41	17.32	17.24	17.16	17.05	16.95	16.83	16.71	<30dBm	Pass
165	5825	17.51	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		21.7	43.3	65	86.7	130.7	173.3	195	216.7		
		Measurement Level (dBm)									
149	5745	15.51	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.6	17.52	17.43	17.37	17.25	17.16	17.06	17	<30dBm	Pass
165	5825	18.51	--	--	--	--	--	--	--	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
149	5745	HT16	16.03	15.00	15.51	20.30	<30dBm	Pass
157	5785	HT16	17.44	17.41	17.60	22.26	<30dBm	Pass
165	5825	HT16	17.21	17.51	18.51	22.55	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

Product : SpectraGuardR Access Point / Sensor
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna)

CHAIN A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	15	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	17.31	17.21	17.16	17.08	17	16.96	16.84	16.77	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	14.02	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	17.22	17.16	17.05	16.96	16.88	16.74	16.68	16.51	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN C

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		45	90	135	180	270	360	405	450		
		Measurement Level (dBm)									
151	5755	14.41	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	18.01	17.91	17.86	17.76	17.64	17.55	17.42	17.32	<30dBm	Pass

Note: Average Power for different data rate = Reading value on Power Meter +cable loss

CHAIN A+B+C

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain A+B+C Power (dBm)	Limit (dBm)	Result
151	5755	HT16	15.00	14.02	14.41	19.27	<30dBm	Pass
159	5795	HT16	17.31	17.22	18.01	22.30	<30dBm	Pass

Note: Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW))

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the radiated emission test:

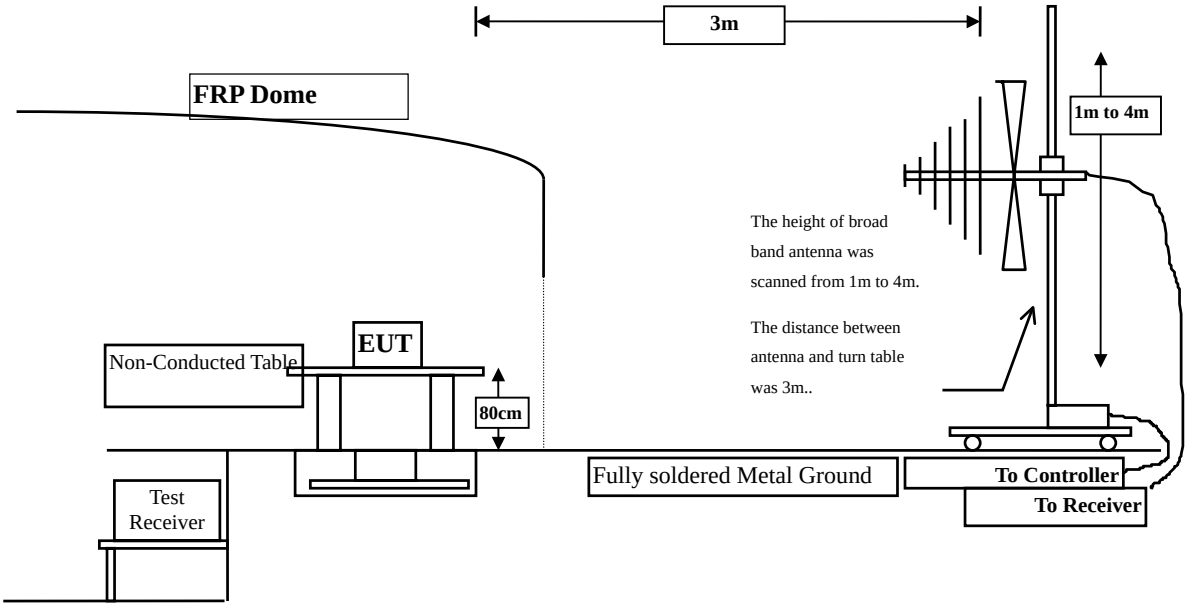
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2012
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2012
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2012
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

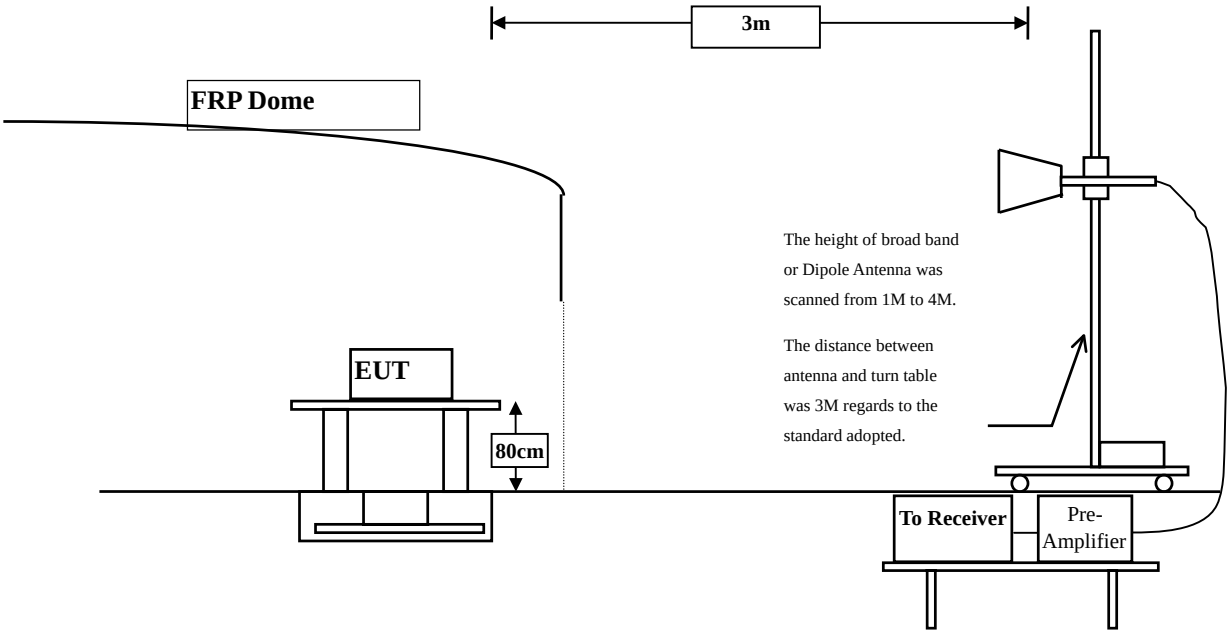
2. The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 30MHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	48.750	49.179	-24.821	74.000
7236.000	7.177	40.920	48.097	-25.903	74.000
9648.000	8.019	44.180	52.200	-21.800	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	41.330	42.167	-31.833	74.000
7236.000	7.676	39.350	47.026	-26.974	74.000
9648.000	8.556	41.360	49.917	-24.083	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	44.940	45.017	-28.983	74.000
7311.000	7.512	49.020	56.532	-17.468	74.000
9748.000	7.630	46.190	53.820	-20.180	74.000
12185.000	10.952	43.800	54.752	-19.248	74.000
Average					
Detector:					
7311.000	7.512	43.430	50.942	-3.058	54.000
12185.000	10.952	36.910	47.862	-6.138	54.000
Vertical					
Peak Detector:					
4874.000	0.532	43.110	43.642	-30.358	74.000
7311.000	8.089	40.100	48.189	-25.811	74.000
9748.000	8.266	42.040	50.307	-23.693	74.000
12185.000	11.809	39.220	51.029	-22.971	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.191	47.060	47.251	-26.749	74.000
7386.000	8.373	43.160	51.534	-22.466	74.000
9848.000	7.964	42.250	50.214	-23.786	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.805	41.930	42.735	-31.265	74.000
7386.000	9.180	39.110	48.290	-25.710	74.000
9848.000	8.801	40.300	49.101	-24.899	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	41.960	42.389	-31.611	74.000
7236.000	7.177	39.780	46.957	-27.043	74.000
9648.000	8.019	39.840	47.860	-26.140	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	41.780	42.617	-31.383	74.000
7236.000	7.676	39.500	47.176	-26.824	74.000
9648.000	8.556	40.020	48.577	-25.423	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	63.760	63.837	-10.163	74.000
7311.000	7.512	58.340	65.852	-8.148	74.000
9748.000	7.630	58.490	66.120	-7.880	74.000
12185.000	10.952	58.730	69.682	-4.318	74.000
Average					
Detector:					
4874.000	0.076	46.140	46.217	-7.783	54.000
7311.000	7.512	43.150	50.662	-3.338	54.000
9748.000	7.630	40.900	48.530	-5.470	54.000
12185.000	10.952	39.020	49.972	-4.028	54.000
Vertical					
Peak Detector:					
4874.000	0.532	45.950	46.482	-27.518	74.000
7311.000	8.089	46.270	54.359	-19.641	74.000
9748.000	8.266	54.350	62.617	-11.383	74.000
12185.000	11.809	53.330	65.139	-8.861	74.000
Average					
Detector:					
7311.000	8.089	30.740	38.829	-15.171	54.000
9748.000	8.266	36.140	44.407	-9.593	54.000
12185.000	11.809	33.270	45.079	-8.921	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.191	44.700	44.891	-29.109	74.000
7386.000	8.373	47.630	56.004	-17.996	74.000
9848.000	7.964	39.220	47.184	-26.816	74.000
Average					
Detector:					
7386.000	8.373	27.370	35.744	-18.256	54.000
Vertical					
Peak Detector:					
4924.000	0.805	41.360	42.165	-31.835	74.000
7386.000	9.180	38.900	48.080	-25.920	74.000
9848.000	8.801	39.470	48.271	-25.729	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5745 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11490.000	13.004	45.770	58.774	-15.226	74.000
Average Detector:					
11490.000	13.004	30.400	43.404	-10.596	54.000
Vertical Peak Detector:					
11490.000	14.520	41.950	56.470	-17.530	74.000
Average Detector:					
11490.000	14.520	28.320	42.840	-11.160	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11570.000	13.207	45.470	58.677	-15.323	74.000
Average Detector:					
11570.000	13.207	30.670	43.877	-10.123	54.000
Vertical Peak Detector:					
11570.000	14.573	42.720	57.292	-16.708	74.000
Average Detector:					
11570.000	14.573	29.420	43.992	-10.008	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	11.504	46.480	57.984	-16.016	74.000
Average Detector:					
11650.000	11.504	32.480	43.984	-10.016	54.000
Vertical Peak Detector:					
11650.000	12.959	45.270	58.229	-15.771	74.000
Average Detector:					
11650.000	12.959	31.500	44.459	-9.541	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	41.750	42.179	-31.821	74.000
7236.000	7.177	39.290	46.467	-27.533	74.000
9648.000	8.019	39.610	47.630	-26.370	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	41.170	42.007	-31.993	74.000
7236.000	7.676	38.500	46.176	-27.824	74.000
9648.000	8.556	39.580	48.137	-25.863	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	60.500	60.577	-13.423	74.000
7311.000	7.512	55.820	63.332	-10.668	74.000
9748.000	7.630	53.030	60.660	-13.340	74.000
12185.000	10.952	54.440	65.392	-8.608	74.000
Average					
Detector:					
4874.000	0.076	44.670	44.747	-9.253	54.000
7311.000	7.512	41.510	49.022	-4.978	54.000
9748.000	7.630	38.380	46.010	-7.990	54.000
12185.000	10.952	36.900	47.852	-6.148	54.000
Vertical					
Peak Detector:					
4874.000	0.532	42.910	43.442	-30.558	74.000
7311.000	8.089	42.760	50.849	-23.151	74.000
9748.000	8.266	51.210	59.477	-14.523	74.000
12185.000	11.809	49.200	61.009	-12.991	74.000
Average					
Detector:					
9748.000	8.266	35.020	43.287	-10.713	54.000
12185.000	11.809	31.640	43.449	-10.551	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4924.000	0.191	42.170	42.361	-31.639	74.000
7386.000	8.373	41.560	49.934	-24.066	74.000
9848.000	7.964	40.260	48.224	-25.776	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4924.000	0.805	42.270	43.075	-30.925	74.000
7386.000	9.180	38.400	47.580	-26.420	74.000
9848.000	8.801	39.550	48.351	-25.649	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	0.280	41.550	41.831	-32.169	74.000
7266.000	7.106	39.530	46.636	-27.364	74.000
9688.000	7.663	40.180	47.843	-26.157	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	0.707	41.620	42.328	-31.672	74.000
7266.000	7.626	39.140	46.766	-27.234	74.000
9688.000	8.284	39.830	48.114	-25.886	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4874.000	0.076	57.590	57.667	-16.333	74.000
7311.000	7.512	51.410	58.922	-15.078	74.000
9748.000	7.630	51.240	58.870	-15.130	74.000
12185.000	10.952	52.130	63.082	-10.918	74.000
Average Detector:					
4874.000	0.076	42.940	43.017	-10.983	54.000
7311.000	7.512	38.240	45.752	-8.248	54.000
9748.000	7.630	36.800	44.430	-9.570	54.000
12185.000	10.952	37.210	48.162	-5.838	54.000
Vertical Peak Detector:					
4874.000	0.532	50.078	50.610	-23.390	74.000
7311.000	8.089	37.291	45.380	-28.620	74.000
9748.000	8.266	48.583	56.850	-17.150	74.000
12185.000	11.809	46.221	58.030	-15.970	74.000
Average Detector:					
9748.000	8.266	34.563	42.830	-11.170	54.000
12185.000	11.809	30.281	42.090	-11.910	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	0.000	41.850	41.851	-32.149	74.000
7356.000	8.308	38.980	47.288	-26.712	74.000
9808.000	7.850	38.920	46.770	-27.230	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	0.513	41.800	42.314	-31.686	74.000
7356.000	9.022	38.960	47.982	-26.018	74.000
9808.000	8.512	39.040	47.552	-26.448	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna) (5745MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11490.000	13.004	43.110	56.114	-17.886	74.000
Average					
Detector:					
11490.000	13.004	28.410	41.414	-12.586	54.000
Vertical					
Peak Detector:					
11490.000	14.520	39.420	53.940	-20.060	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11570.000	13.207	42.650	55.857	-18.143	74.000
Average Detector:					
11570.000	13.207	27.950	41.157	-12.843	54.000
Vertical Peak Detector:					
11570.000	14.573	41.240	55.812	-18.188	74.000
Average Detector:					
11570.000	14.573	27.720	42.292	-11.708	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna) (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	11.504	43.710	55.214	-18.786	74.000
Average Detector:					
11650.000	11.504	29.980	41.484	-12.516	54.000
Vertical Peak Detector:					
11650.000	12.959	42.160	55.119	-18.881	74.000
Average Detector:					
11650.000	12.959	28.310	41.269	-12.731	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	13.044	40.200	53.243	-20.757	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11510.000	14.536	39.280	53.816	-20.184	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna) (5795 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11590.000	13.364	40.940	54.304	-19.696	74.000
Average Detector:					
11590.000	13.364	27.990	41.354	-12.646	54.000
Vertical Peak Detector:					
11590.000	14.687	40.300	54.987	-19.013	74.000
Average Detector:					
11590.000	14.687	25.750	40.437	-13.563	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	46.160	46.589	-27.411	74.000
7236.000	7.177	39.770	46.947	-27.053	74.000
9648.000	8.019	43.620	51.640	-22.360	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	44.170	45.007	-28.993	74.000
7236.000	7.676	40.930	48.606	-25.394	74.000
9648.000	8.556	40.850	49.407	-24.593	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	53.010	53.087	-20.913	74.000
7311.000	7.512	47.580	55.092	-18.908	74.000
9748.000	7.630	44.370	52.000	-22.000	74.000
Average					
Detector:					
7311.000	7.512	41.150	48.662	-5.338	54.000
Vertical					
Peak Detector:					
4874.000	0.532	51.060	51.592	-22.408	74.000
7311.000	8.089	53.130	61.219	-12.781	74.000
9748.000	8.266	44.070	52.337	-21.663	74.000
Average					
Detector:					
7311.000	8.089	42.390	50.479	-3.521	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.805	50.120	50.925	-23.075	74.000
7386.000	9.180	47.390	56.570	-17.430	74.000
9848.000	8.801	44.370	53.171	-20.829	74.000
Average					
Detector:					
7386.000	9.180	41.780	50.960	-3.040	54.000
Vertical					
Peak Detector:					
4824.000	0.428	41.900	42.329	-31.671	74.000
7236.000	7.177	38.950	46.127	-27.873	74.000
9648.000	8.019	39.930	47.950	-26.050	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	41.900	42.329	-31.671	74.000
7236.000	7.177	38.950	46.127	-27.873	74.000
9648.000	8.019	39.930	47.950	-26.050	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	41.020	41.857	-32.143	74.000
7236.000	7.676	39.140	46.816	-27.184	74.000
9648.000	8.556	39.550	48.107	-25.893	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	61.770	61.847	-12.153	74.000
7311.000	7.512	48.940	56.452	-17.548	74.000
9748.000	7.630	54.240	61.870	-12.130	74.000
Average Detector:					
4874.000	0.076	44.670	44.747	-9.253	54.000
7311.000	7.512	34.210	41.722	-12.278	54.000
9748.000	7.630	36.310	43.940	-10.060	54.000
Vertical					
Peak Detector:					
4874.000	0.532	60.810	61.342	-12.658	74.000
7311.000	8.089	56.250	64.339	-9.661	74.000
9748.000	8.266	57.310	65.577	-8.423	74.000
Average Detector:					
4874.000	0.532	43.980	44.512	-9.488	54.000
7311.000	8.089	41.610	49.699	-4.301	54.000
9748.000	8.266	40.520	48.787	-5.213	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.191	44.530	44.721	-29.279	74.000
7386.000	8.373	39.420	47.794	-26.206	74.000
9848.000	7.964	40.110	48.074	-25.926	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.805	42.230	43.035	-30.965	74.000
7386.000	9.180	43.980	53.160	-20.840	74.000
9848.000	8.801	39.730	48.531	-25.469	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	41.430	41.859	-32.141	74.000
7236.000	7.177	38.500	45.677	-28.323	74.000
9648.000	8.019	39.330	47.350	-26.650	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	41.480	42.317	-31.683	74.000
7236.000	7.676	39.380	47.056	-26.944	74.000
9648.000	8.556	39.600	48.157	-25.843	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4874.000	0.076	60.280	60.357	-13.643	74.000
7311.000	7.512	44.840	52.352	-21.648	74.000
9748.000	7.630	50.680	58.310	-15.690	74.000
Average Detector:					
4874.000	0.076	43.600	43.677	-10.323	54.000
9748.000	7.630	34.270	41.900	-12.100	54.000
Vertical Peak Detector:					
4874.000	0.532	58.190	58.722	-15.278	74.000
7311.000	8.089	53.540	61.629	-12.371	74.000
9748.000	8.266	56.340	64.607	-9.393	74.000
Average Detector:					
4874.000	0.532	42.840	43.372	-10.628	54.000
7311.000	8.089	37.430	45.519	-8.481	54.000
9748.000	8.266	39.690	47.957	-6.043	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.191	41.110	41.301	-32.699	74.000
7386.000	8.373	38.210	46.584	-27.416	74.000
9848.000	7.964	39.280	47.244	-26.756	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.805	40.360	41.165	-32.835	74.000
7386.000	9.180	41.500	50.680	-23.320	74.000
9848.000	8.801	39.810	48.611	-25.389	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	0.280	41.650	41.931	-32.069	74.000
7266.000	7.106	38.300	45.406	-28.594	74.000
9688.000	7.663	38.660	46.323	-27.677	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	0.707	40.990	41.698	-32.302	74.000
7266.000	7.626	38.810	46.436	-27.564	74.000
9688.000	8.284	39.190	47.474	-26.526	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	56.360	56.437	-17.563	74.000
7311.000	7.512	42.290	49.802	-24.198	74.000
9748.000	7.630	45.860	53.490	-20.510	74.000
Average					
Detector:					
4874.000	0.076	40.610	40.687	-13.313	54.000
Vertical					
Peak Detector:					
4874.000	0.532	54.010	54.542	-19.458	74.000
7311.000	8.089	50.300	58.389	-15.611	74.000
9748.000	8.266	53.450	61.717	-12.283	74.000
Average					
Detector:					
4874.000	0.532	39.540	40.072	-13.928	54.000
7311.000	8.089	35.900	43.989	-10.011	54.000
9748.000	8.266	35.740	44.007	-9.993	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	0.000	41.070	41.071	-32.929	74.000
7356.000	8.308	38.020	46.328	-27.672	74.000
9808.000	7.850	38.960	46.810	-27.190	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	0.513	40.720	41.234	-32.766	74.000
7356.000	9.022	37.770	46.792	-27.208	74.000
9808.000	8.512	38.720	47.232	-26.768	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna) (5745MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11490.000	13.004	40.390	53.394	-20.606	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11490.000	14.520	40.950	55.470	-18.530	74.000
Average					
Detector:					
11490.000	14.520	27.310	41.830	-12.170	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11570.000	13.207	40.380	53.587	-20.413	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11570.000	14.573	41.700	56.272	-17.728	74.000
Average Detector:					
11570.000	14.573	26.180	40.752	-13.248	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna) (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	11.504	39.960	51.464	-22.536	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11650.000	12.959	42.170	55.129	-18.871	74.000
Average Detector:					
11650.000	12.959	26.810	39.769	-14.231	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	13.044	39.240	52.283	-21.717	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11510.000	14.536	39.180	53.716	-20.284	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna) (5795 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11590.000	13.364	40.130	53.494	-20.506	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11590.000	14.687	39.680	54.367	-19.633	74.000
Average Detector:					
11590.000	14.687	26.890	41.577	-12.423	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
189.080	-10.027	44.689	34.662	-8.838	43.500
241.460	-6.590	42.004	35.414	-10.586	46.000
375.320	0.918	32.466	33.384	-12.616	46.000
720.640	3.826	30.345	34.171	-11.829	46.000
800.180	6.417	29.070	35.487	-10.513	46.000
961.200	6.810	28.231	35.041	-18.959	54.000
Vertical					
92.080	-5.373	38.557	33.184	-10.316	43.500
239.520	-6.138	37.154	31.016	-14.984	46.000
600.360	1.302	34.417	35.719	-10.281	46.000
720.640	-0.754	30.189	29.435	-16.565	46.000
800.180	2.637	27.079	29.716	-16.284	46.000
953.440	3.015	31.362	34.377	-11.623	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
189.080	-10.027	43.730	33.703	-9.797	43.500
241.460	-6.590	41.442	34.852	-11.148	46.000
480.080	1.870	28.953	30.823	-15.177	46.000
749.740	3.963	29.888	33.851	-12.149	46.000
800.180	6.417	29.471	35.888	-10.112	46.000
961.200	6.810	28.639	35.449	-18.551	54.000
Vertical					
92.080	-5.373	37.987	32.614	-10.886	43.500
239.520	-6.138	37.679	31.541	-14.459	46.000
400.540	-2.868	30.119	27.251	-18.749	46.000
480.080	-3.390	32.359	28.969	-17.031	46.000
749.740	2.023	27.298	29.321	-16.679	46.000
961.200	3.310	28.645	31.955	-22.045	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5785MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
191.020	-9.679	43.285	33.606	-9.894	43.500
245.340	-6.478	40.584	34.106	-11.894	46.000
400.540	0.942	30.240	31.182	-14.818	46.000
480.080	1.870	28.839	30.709	-15.291	46.000
800.180	6.417	29.821	36.238	-9.762	46.000
961.200	6.810	28.562	35.372	-18.628	54.000
Vertical					
92.080	-5.373	39.008	33.635	-9.865	43.500
239.520	-6.138	38.347	32.209	-13.791	46.000
499.480	-0.199	30.194	29.994	-16.006	46.000
720.640	-0.754	33.797	33.043	-12.957	46.000
800.180	2.637	27.478	30.115	-15.885	46.000
961.200	3.310	28.634	31.944	-22.056	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
189.080	-10.027	43.749	33.722	-9.778	43.500
241.460	-6.590	41.425	34.835	-11.165	46.000
480.080	1.870	28.942	30.812	-15.188	46.000
679.900	2.823	33.695	36.518	-9.482	46.000
800.180	6.417	29.762	36.179	-9.821	46.000
961.200	6.810	28.470	35.280	-18.720	54.000
Vertical					
92.080	-5.373	38.984	33.611	-9.889	43.500
179.380	-0.824	31.661	30.837	-12.663	43.500
239.520	-6.138	38.830	32.692	-13.308	46.000
383.080	0.195	32.136	32.331	-13.669	46.000
600.360	1.302	33.815	35.117	-10.883	46.000
961.200	3.310	28.384	31.694	-22.306	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(Dipole Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
189.080	-10.027	43.862	33.835	-9.665	43.500
243.400	-6.546	40.837	34.291	-11.709	46.000
400.540	0.942	28.131	29.073	-16.927	46.000
720.640	3.826	30.038	33.864	-12.136	46.000
800.180	6.417	30.485	36.902	-9.098	46.000
961.200	6.810	27.880	34.690	-19.310	54.000
Vertical					
92.080	-5.373	38.240	32.867	-10.633	43.500
239.520	-6.138	39.049	32.911	-13.089	46.000
400.540	-2.868	30.468	27.600	-18.400	46.000
720.640	-0.754	29.712	28.958	-17.042	46.000
800.180	2.637	26.915	29.552	-16.448	46.000
961.200	3.310	27.224	30.534	-23.466	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(Dipole Antenna) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
189.080	-10.027	43.906	33.879	-9.621	43.500
375.320	0.918	31.547	32.465	-13.535	46.000
480.080	1.870	28.141	30.011	-15.989	46.000
720.640	3.826	28.995	32.821	-13.179	46.000
800.180	6.417	29.821	36.238	-9.762	46.000
961.200	6.810	27.858	34.668	-19.332	54.000
Vertical					
92.080	-5.373	39.689	34.316	-9.184	43.500
239.520	-6.138	39.449	33.311	-12.689	46.000
480.080	-3.390	32.114	28.724	-17.276	46.000
720.640	-0.754	31.081	30.327	-15.673	46.000
840.920	2.284	22.890	25.174	-20.826	46.000
961.200	3.310	28.652	31.962	-22.038	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)(Dipole Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
191.020	-9.679	43.383	33.704	-9.796	43.500
243.400	-6.546	41.333	34.787	-11.213	46.000
375.320	0.918	30.220	31.138	-14.862	46.000
720.640	3.826	29.495	33.321	-12.679	46.000
800.180	6.417	30.157	36.574	-9.426	46.000
961.200	6.810	27.372	34.182	-19.818	54.000
Vertical					
92.080	-5.373	37.794	32.421	-11.079	43.500
239.520	-6.138	39.045	32.907	-13.093	46.000
480.080	-3.390	32.217	28.827	-17.173	46.000
720.640	-0.754	29.709	28.955	-17.045	46.000
800.180	2.637	26.645	29.282	-16.718	46.000
961.200	3.310	28.731	32.041	-21.959	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
119.240	-7.291	40.313	33.023	-10.477	43.500
194.900	-10.473	46.122	35.649	-7.851	43.500
418.000	-0.231	37.220	36.989	-9.011	46.000
507.240	2.529	32.689	35.218	-10.782	46.000
749.740	3.963	32.412	36.375	-9.625	46.000
901.060	5.878	31.786	37.664	-8.336	46.000
Vertical					
128.940	-3.710	40.672	36.962	-6.538	43.500
439.340	-6.981	39.853	32.872	-13.128	46.000
507.240	0.429	34.286	34.715	-11.285	46.000
608.120	2.175	30.819	32.994	-13.006	46.000
749.740	2.023	32.920	34.943	-11.057	46.000
879.720	1.188	33.410	34.598	-11.402	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
94.020	-10.730	39.666	28.936	-14.564	43.500
406.360	0.628	37.492	38.121	-7.879	46.000
499.480	1.991	35.496	37.486	-8.514	46.000
625.580	1.419	31.288	32.708	-13.292	46.000
747.800	3.915	32.004	35.919	-10.081	46.000
901.060	5.878	31.892	37.770	-8.230	46.000
Vertical					
105.660	-4.576	43.332	38.755	-4.745	43.500
410.240	-4.492	42.360	37.869	-8.131	46.000
507.240	0.429	34.460	34.889	-11.111	46.000
608.120	2.175	28.571	30.746	-15.254	46.000
749.740	2.023	33.589	35.612	-10.388	46.000
901.060	1.858	29.284	31.142	-14.858	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5785MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
109.540	-7.537	40.247	32.709	-10.791	43.500
507.240	2.529	34.223	36.752	-9.248	46.000
608.120	3.925	30.124	34.049	-11.951	46.000
749.740	3.963	30.047	34.010	-11.990	46.000
854.500	7.380	28.853	36.233	-9.767	46.000
901.060	5.878	31.117	36.995	-9.005	46.000
Vertical					
101.780	-5.570	44.459	38.888	-4.612	43.500
130.880	-3.777	42.162	38.384	-5.116	43.500
507.240	0.429	38.386	38.815	-7.185	46.000
608.120	2.175	36.529	38.704	-7.296	46.000
749.740	2.023	34.078	36.101	-9.899	46.000
901.060	1.858	30.254	32.112	-13.888	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit - 802.11n-20BW_21.7Mbps(2.4G Band)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
97.900	-10.097	42.731	32.634	-10.866	43.500
507.240	2.529	34.888	37.417	-8.583	46.000
600.360	3.472	30.128	33.600	-12.400	46.000
749.740	3.963	32.537	36.500	-9.500	46.000
842.860	6.248	28.527	34.775	-11.225	46.000
916.580	6.470	34.402	40.872	-5.128	46.000
Vertical					
125.060	-3.725	43.078	39.353	-4.147	43.500
396.660	-2.039	36.573	34.534	-11.466	46.000
507.240	0.429	36.923	37.352	-8.648	46.000
608.120	2.175	34.558	36.733	-9.267	46.000
749.740	2.023	32.716	34.739	-11.261	46.000
901.060	1.858	30.391	32.249	-13.751	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit - 802.11n-40BW_45Mbps(2.4G Band)(PIFA Antenna) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
128.940	-7.390	38.287	30.897	-12.603	43.500
375.320	0.918	38.968	39.886	-6.114	46.000
499.480	1.991	34.789	36.779	-9.221	46.000
600.360	3.472	28.725	32.197	-13.803	46.000
749.740	3.963	32.504	36.467	-9.533	46.000
912.700	6.450	31.160	37.610	-8.390	46.000
Vertical					
80.440	-4.848	37.239	32.391	-7.609	40.000
427.700	-8.160	41.165	33.005	-12.995	46.000
507.240	0.429	34.413	34.842	-11.158	46.000
747.800	1.665	33.399	35.064	-10.936	46.000
901.060	1.858	30.096	31.954	-14.046	46.000
968.960	3.936	27.475	31.411	-22.589	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_21.7Mbps(5G Band)(PIFA Antenna) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
103.720	-8.230	39.986	31.755	-11.745	43.500
507.240	2.529	33.971	36.500	-9.500	46.000
600.360	3.472	30.140	33.612	-12.388	46.000
749.740	3.963	31.892	35.855	-10.145	46.000
850.620	6.773	29.066	35.839	-10.161	46.000
918.520	6.718	29.355	36.073	-9.927	46.000
Vertical					
123.120	-3.630	43.202	39.572	-3.928	43.500
388.900	-0.726	41.171	40.445	-5.555	46.000
507.240	0.429	35.771	36.200	-9.800	46.000
598.420	1.114	33.192	34.306	-11.694	46.000
749.740	2.023	33.968	35.991	-10.009	46.000
916.580	-0.560	37.950	37.390	-8.610	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuardR Access Point / Sensor
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit - 802.11n-40BW_45Mbps(5G Band)(PIFA Antenna) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
90.140	-12.085	40.863	28.778	-14.722	43.500
342.340	-2.566	39.799	37.233	-8.767	46.000
499.480	1.991	35.783	37.773	-8.227	46.000
600.360	3.472	28.040	31.512	-14.488	46.000
749.740	3.963	32.341	36.304	-9.696	46.000
901.060	5.878	32.869	38.747	-7.253	46.000
Vertical					
121.180	-3.559	38.786	35.227	-8.273	43.500
406.360	-4.472	36.394	31.923	-14.077	46.000
507.240	0.429	33.827	34.256	-11.744	46.000
608.120	2.175	28.878	31.053	-14.947	46.000
747.800	1.665	32.638	34.303	-11.697	46.000
901.060	1.858	29.715	31.573	-14.427	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

5. RF antenna conducted test

5.1. Test Equipment

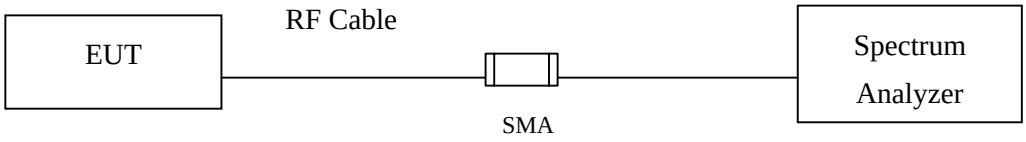
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with "X" are used to measure the final test results.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.5. Uncertainty

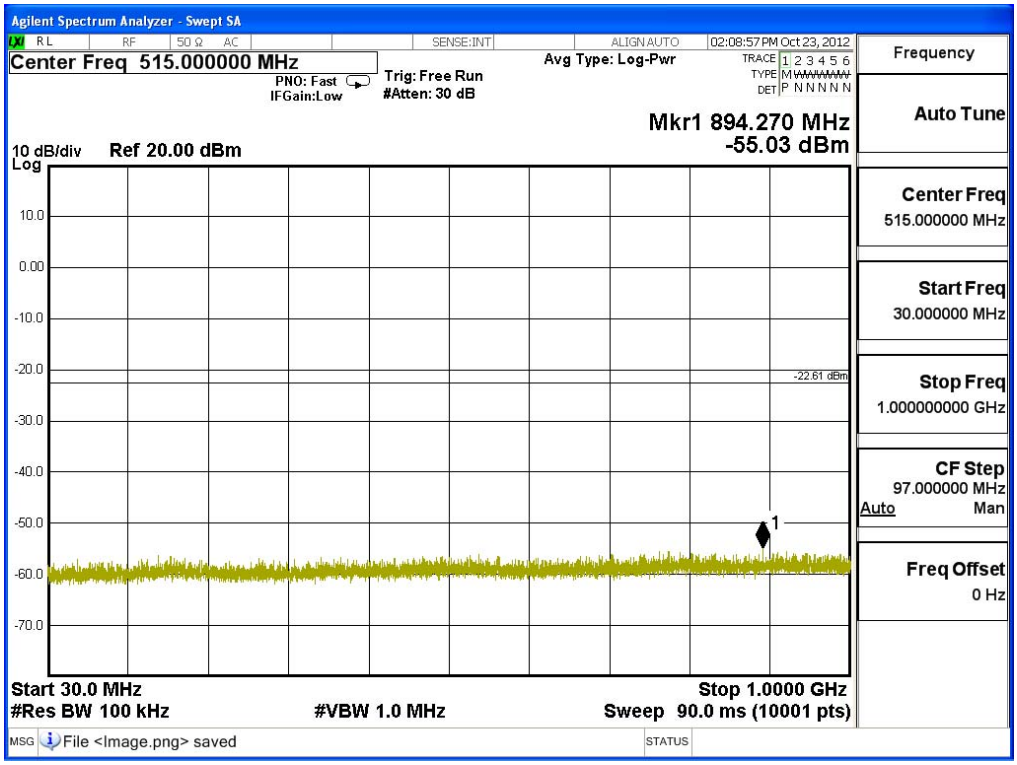
The measurement uncertainty

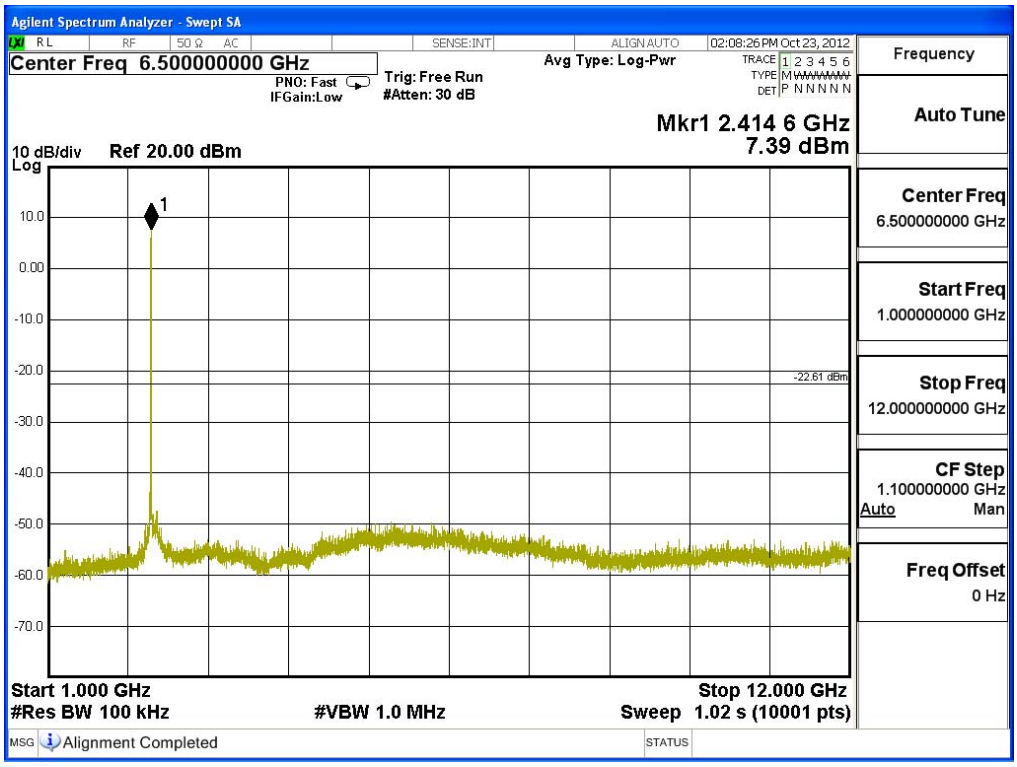
Conducted is defined as ± 1.27dB

5.6. Test Result of RF antenna conducted test

Product : SpectraGuardR Access Point / Sensor
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

Channel 01 (2412MHz) 30MHz-25GHz-Chain A

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Trig: Free Run
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10 dB/div
Log
Ref 20.00 dBm
-22.61 dBm
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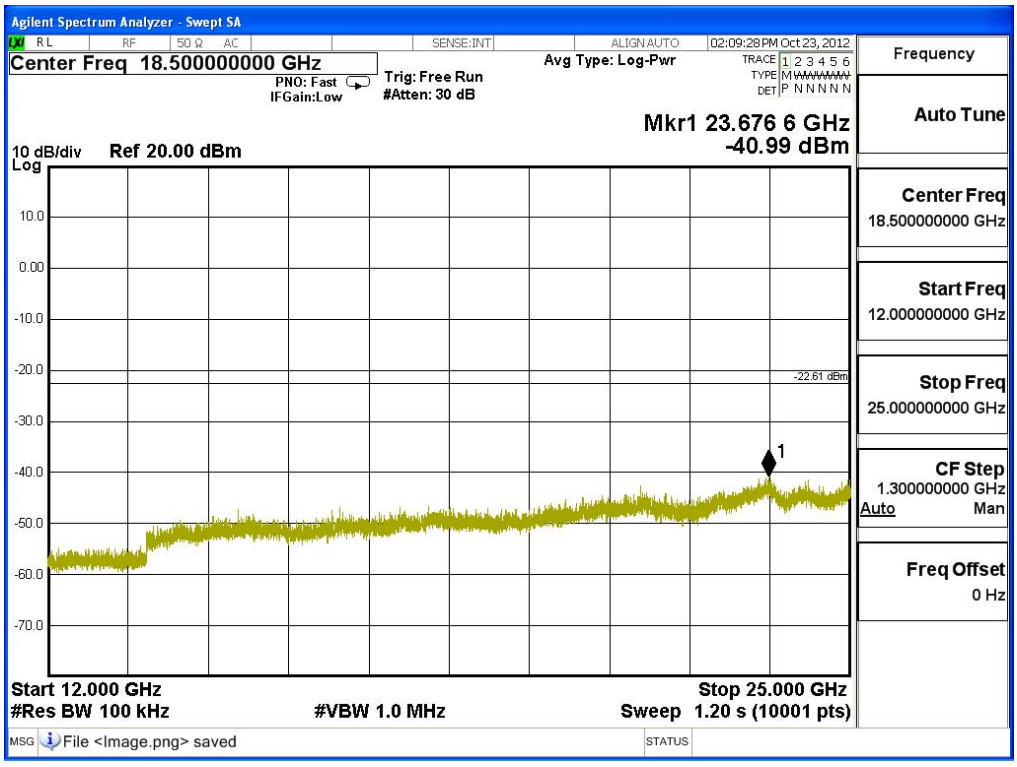
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10 dB/div
Log
Ref 20.00 dBm
-22.61 dBm
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#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
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Freq Offset
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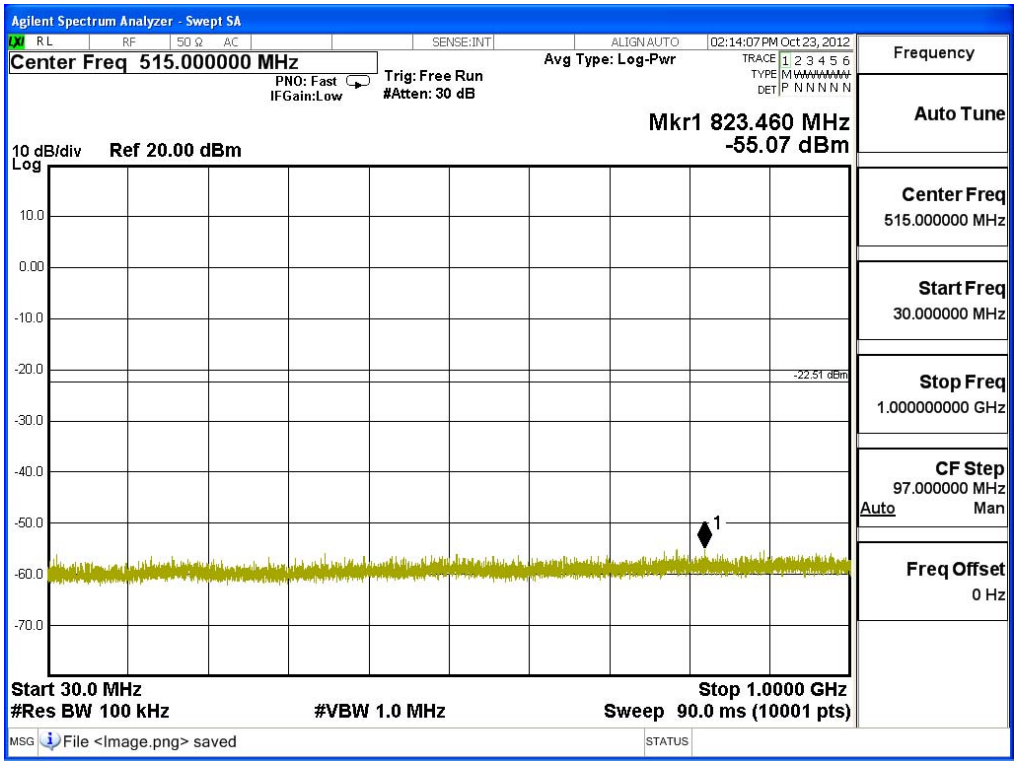
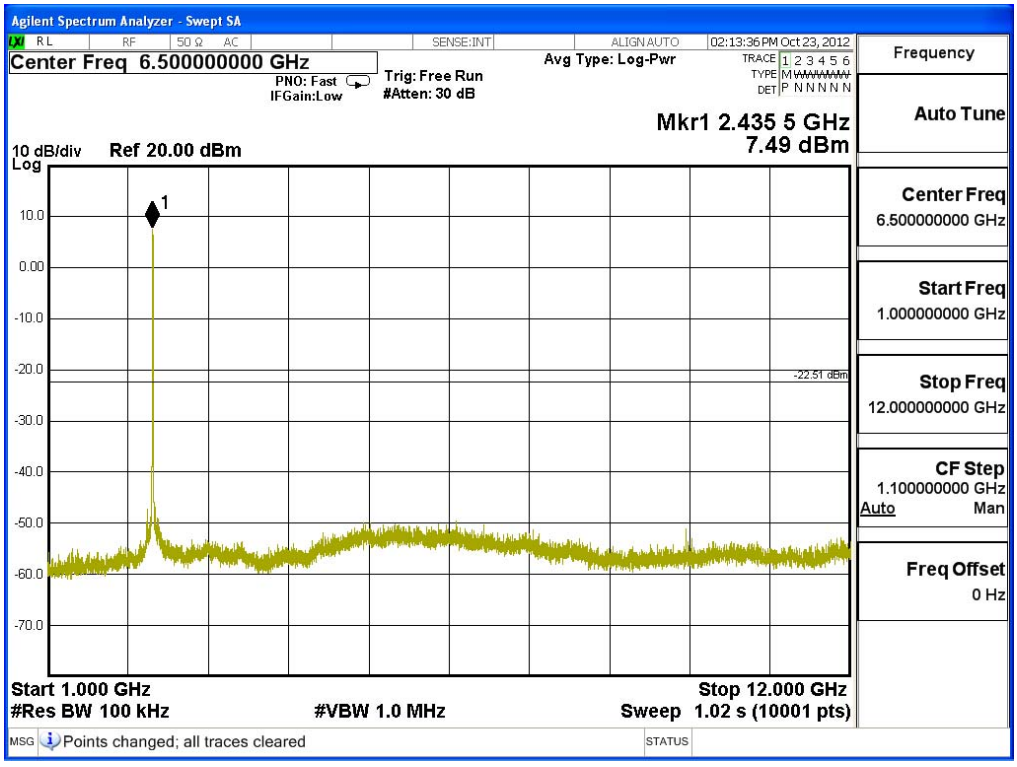
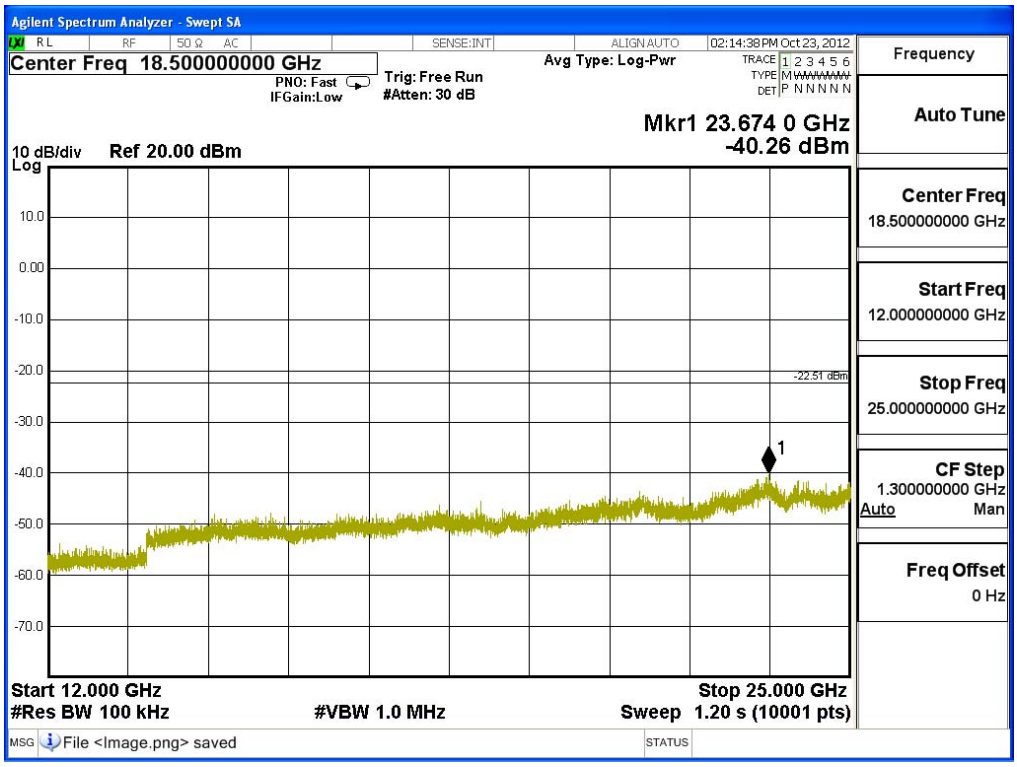
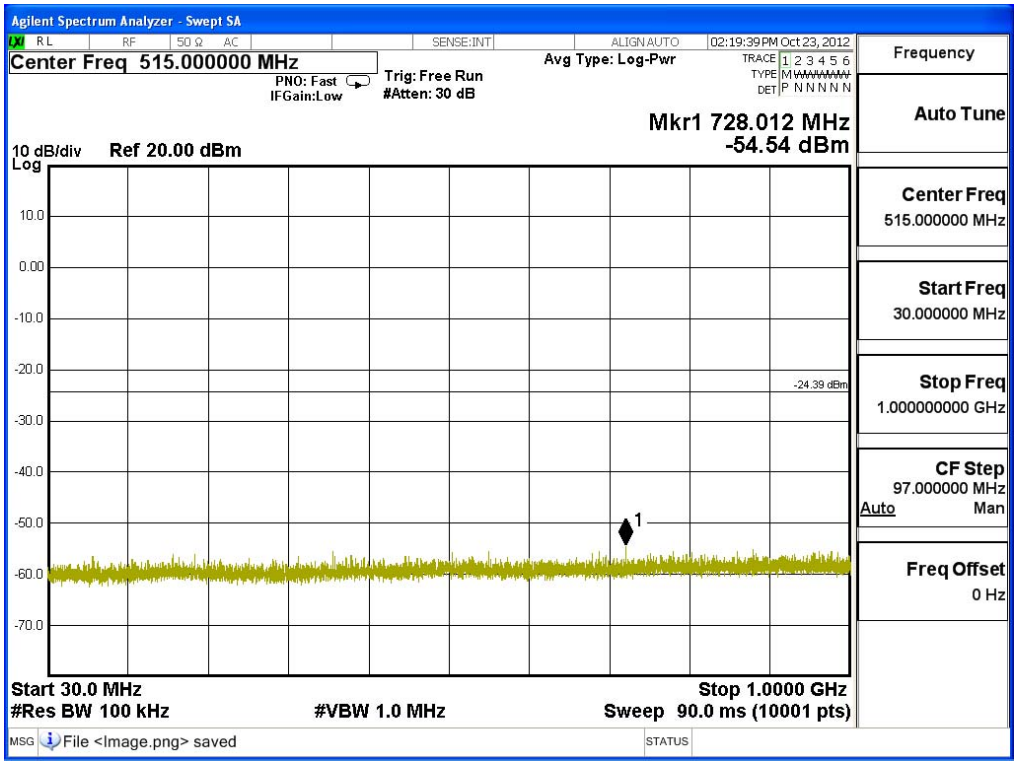
Channel 06 (2437MHz) 30MHz -25GHz-Chain A

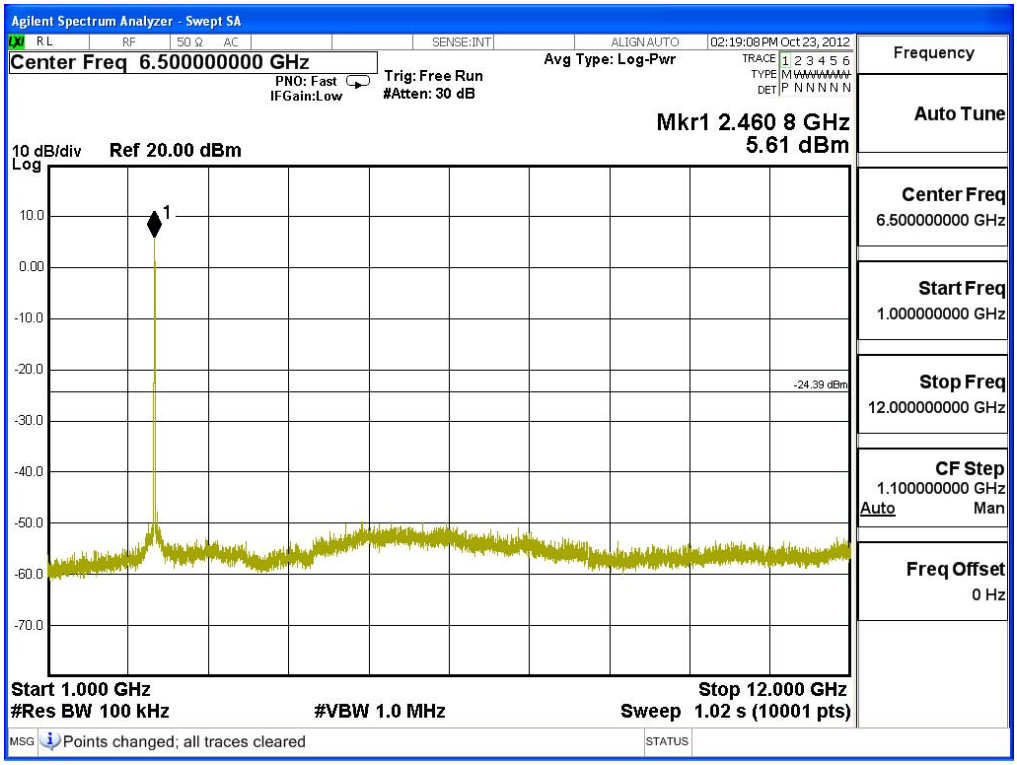


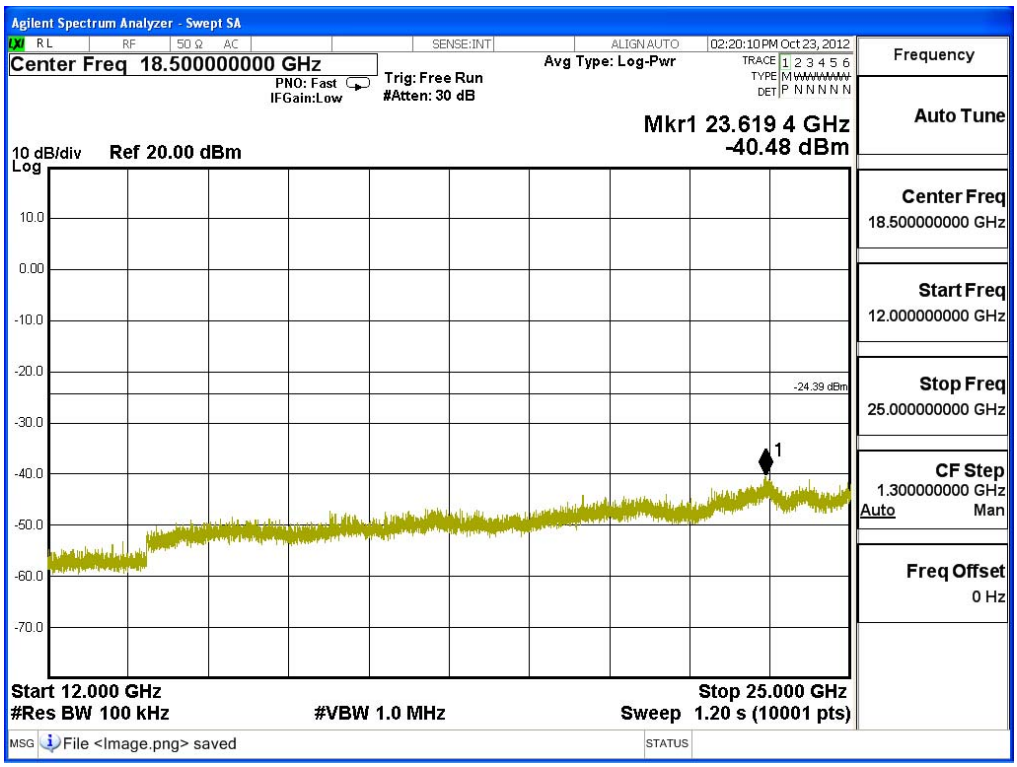



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
02:14:38 PM Oct 23, 2012
Mkr1 23.674 0 GHz
-40.26 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.51 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

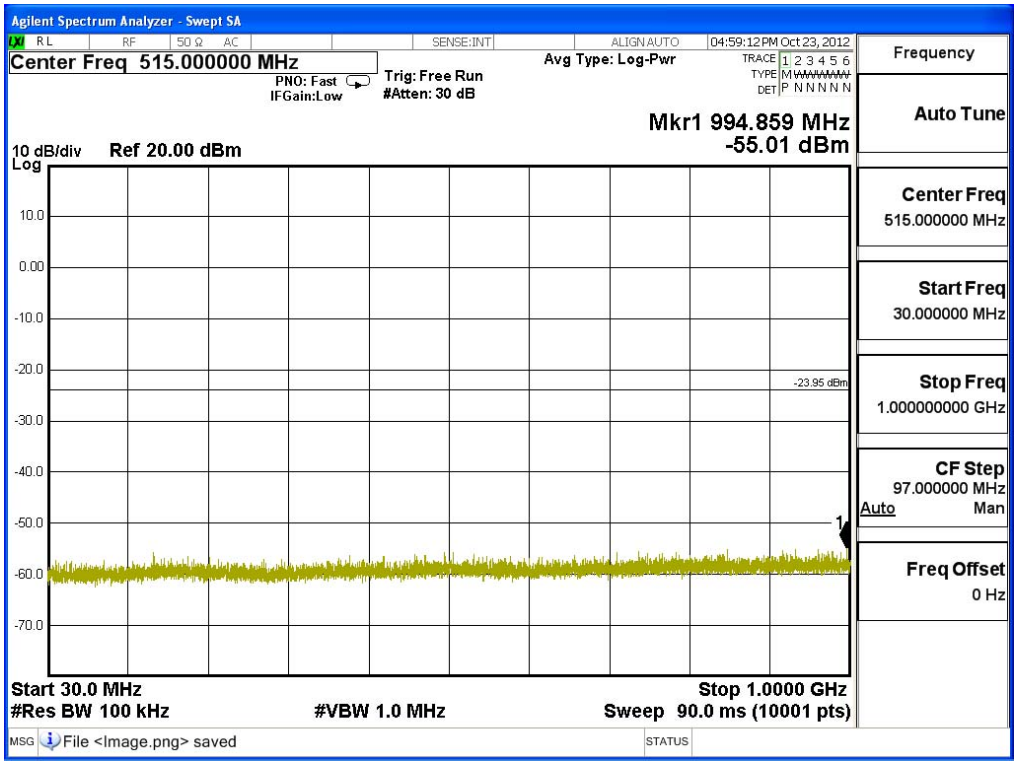
Channel 11 (2462MHz) 30MHz -25GHz-Chain A

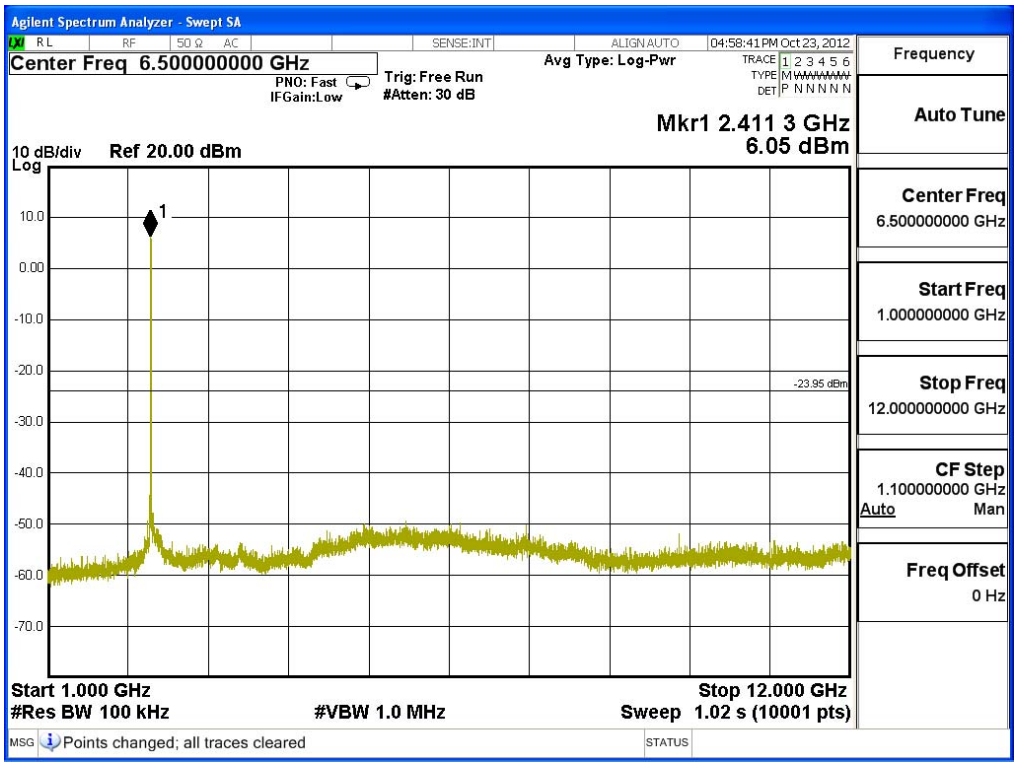


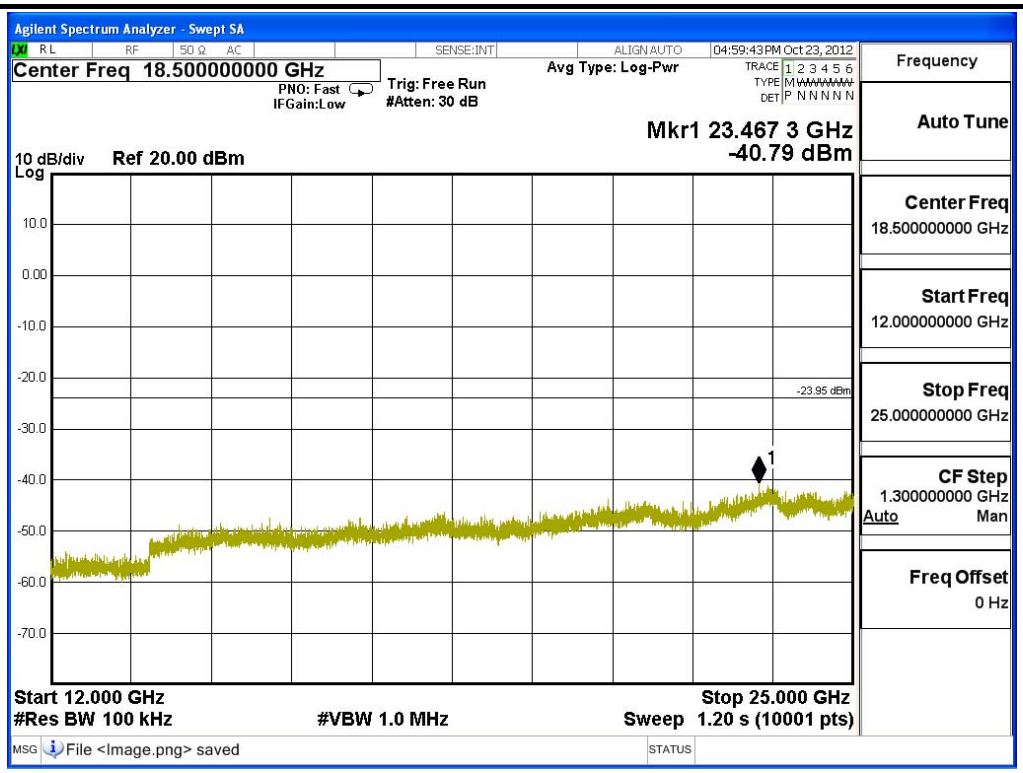



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
02:20:10 PM Oct 23, 2012
Mkr1 23.619 4 GHz
-40.48 dBm
10 dB/div
Log
Ref 20.00 dBm
-24.39 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

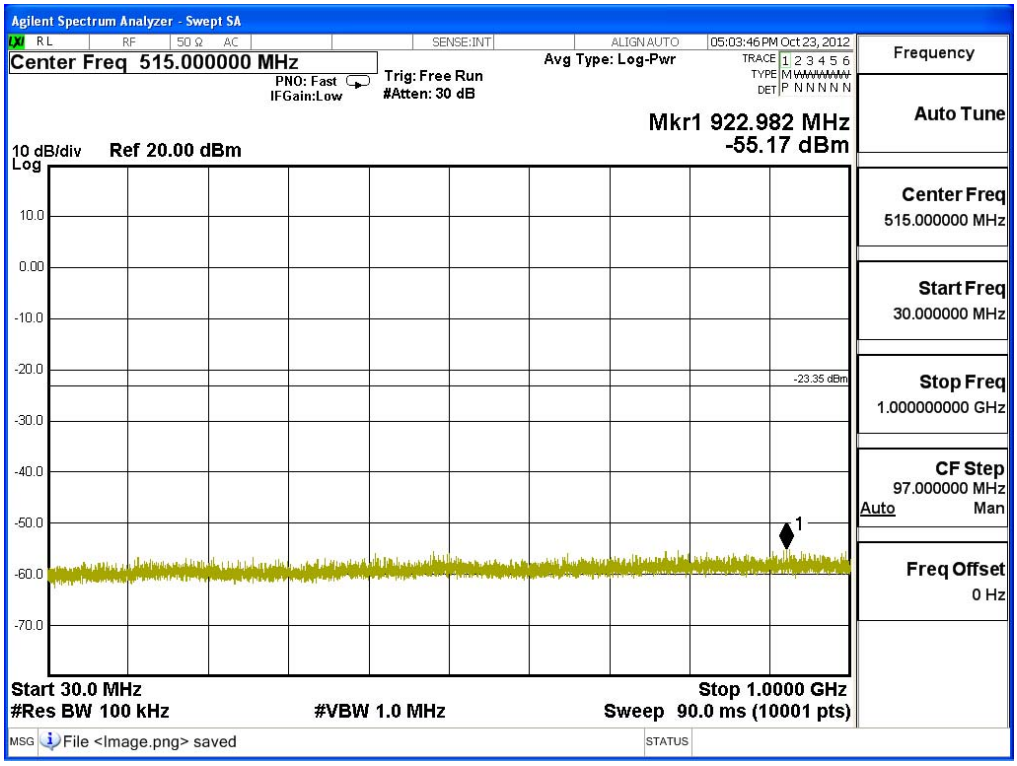
Channel 01 (2412MHz) 30MHz-25GHz-Chain B

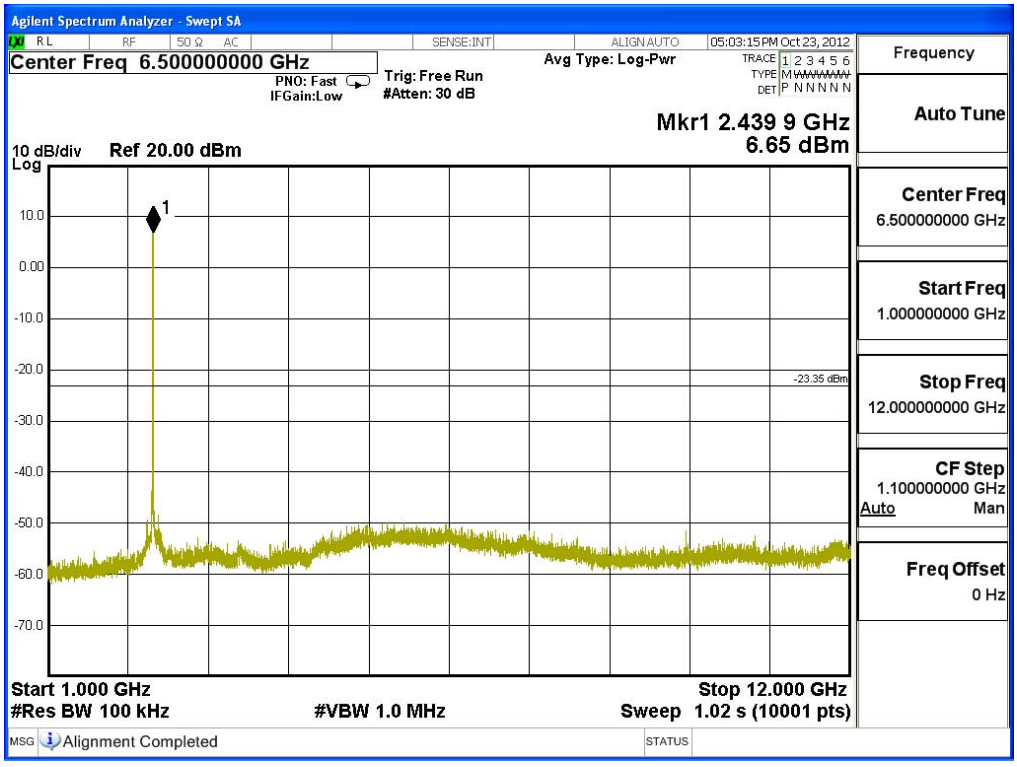


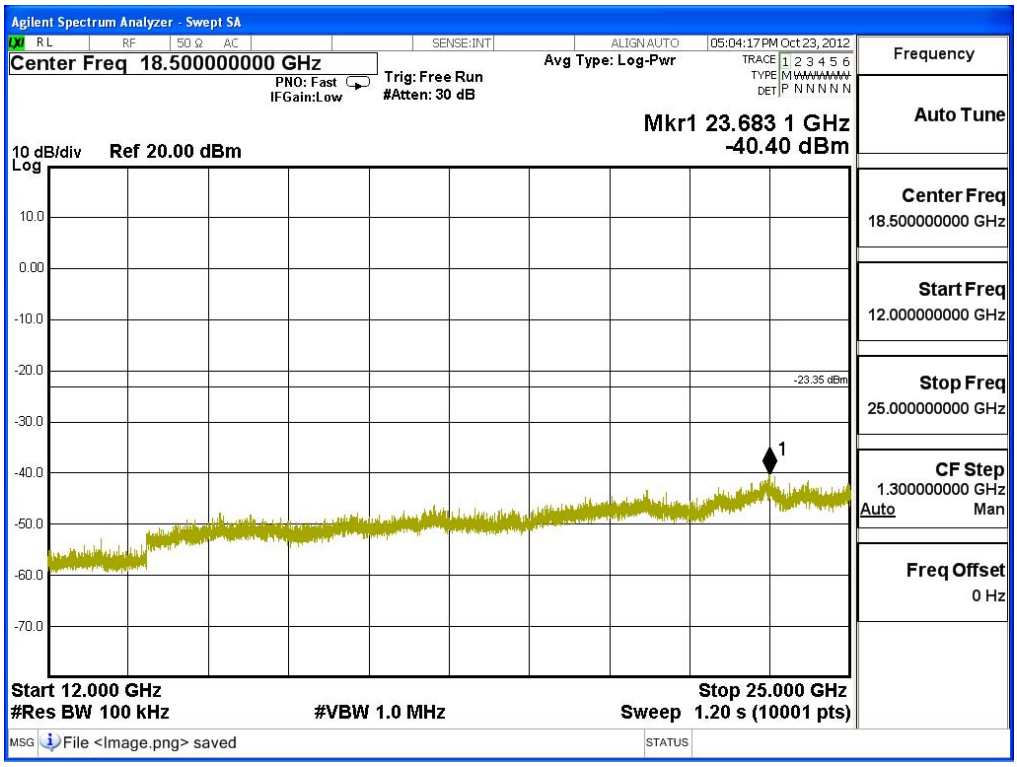



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
04:59:43 PM Oct 23, 2012
Mkr1 23.467 3 GHz
-40.79 dBm
10 dB/div
Log
Ref 20.00 dBm
-23.95 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

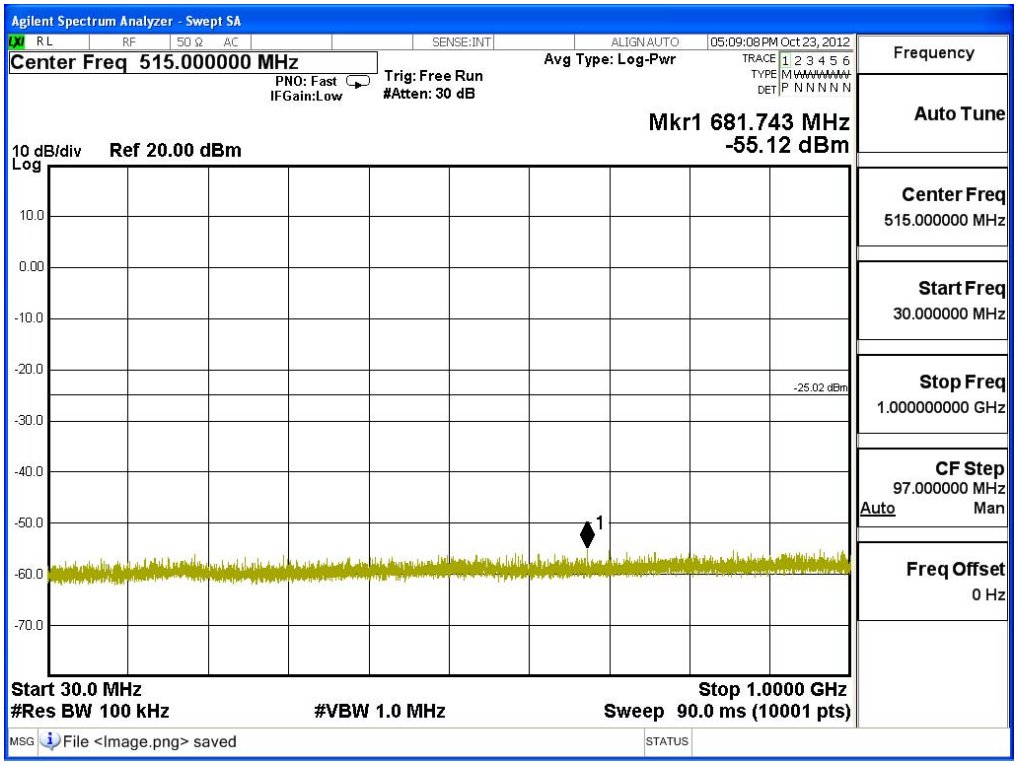
Channel 06 (2437MHz) 30MHz -25GHz-Chain B

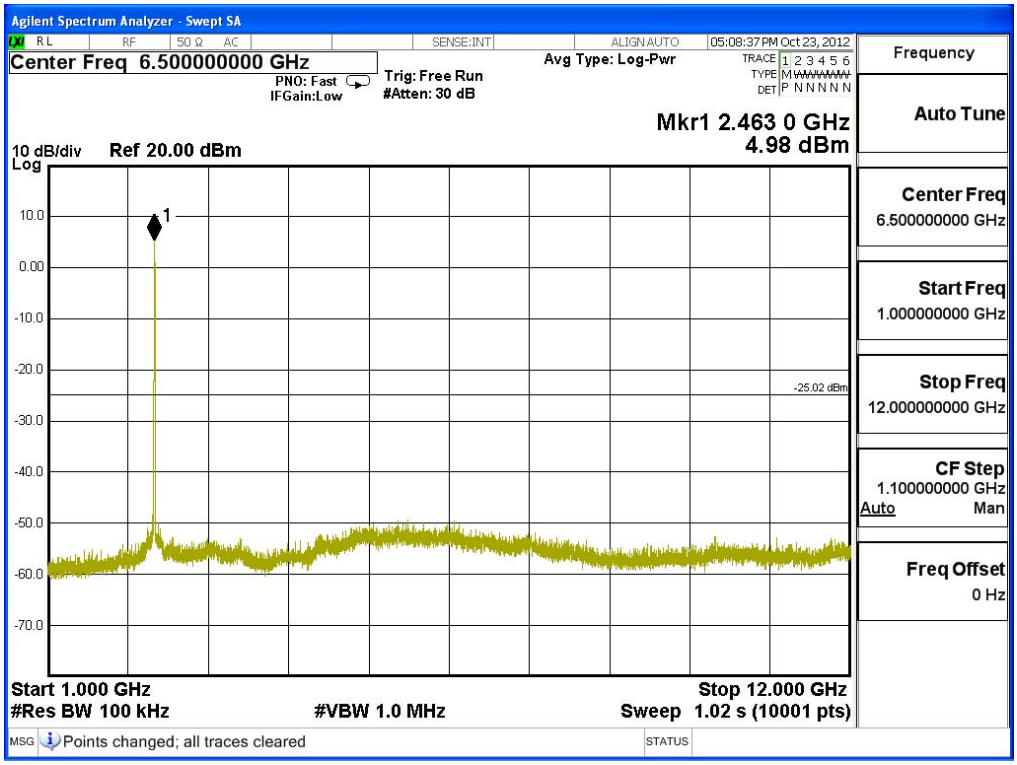


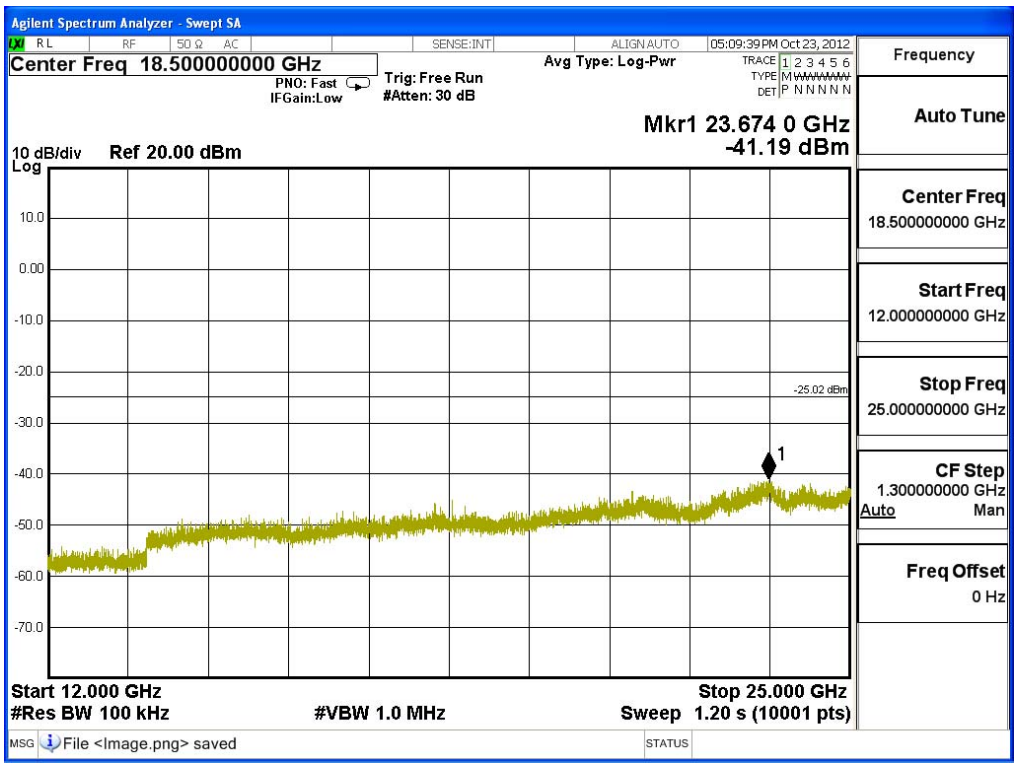



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
05:04:17 PM Oct 23, 2012
Mkr1 23.683 1 GHz
-40.40 dBm
10 dB/div
Log
Ref 20.00 dBm
-23.35 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

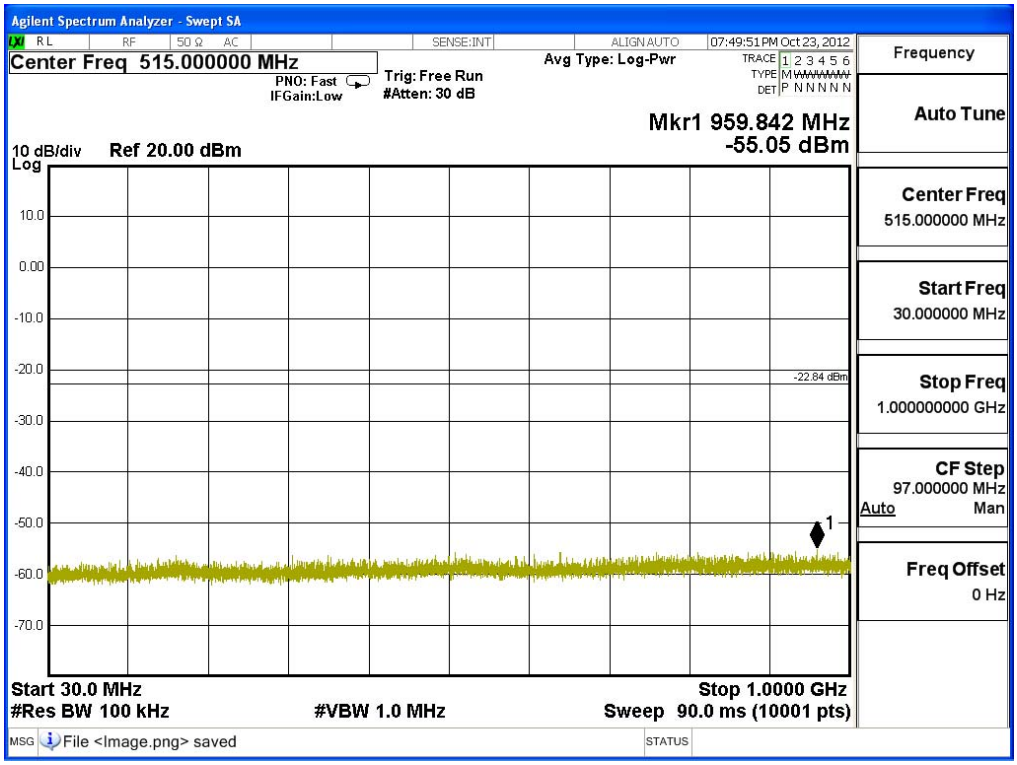
Channel 11 (2462MHz) 30MHz -25GHz-Chain B

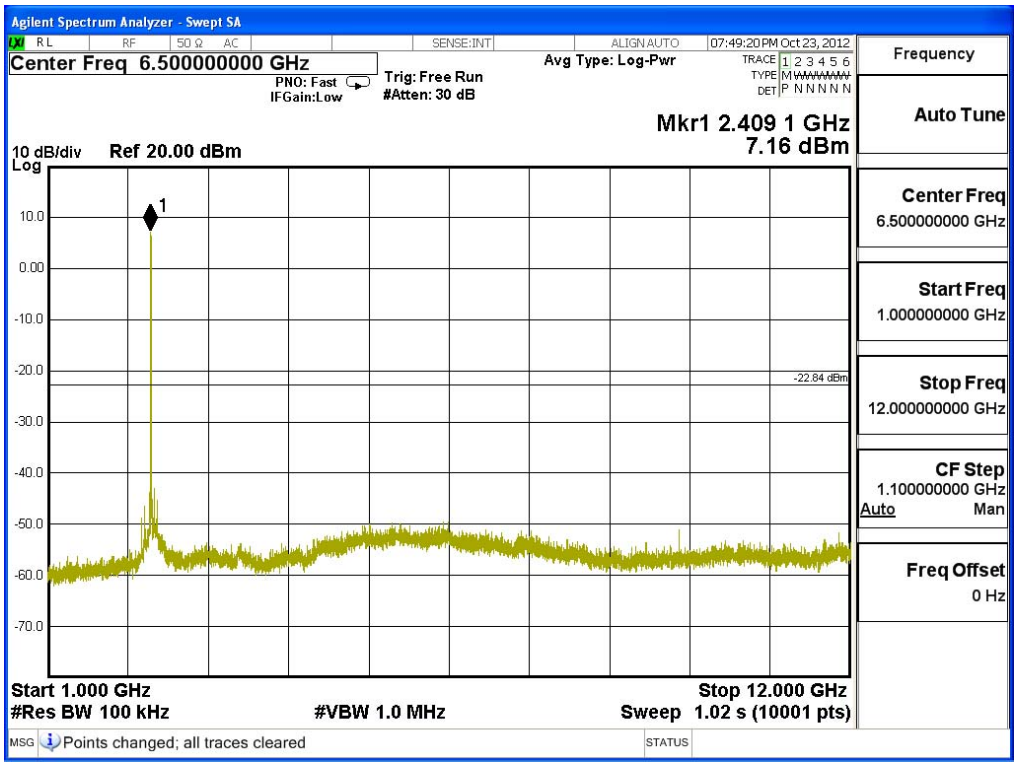


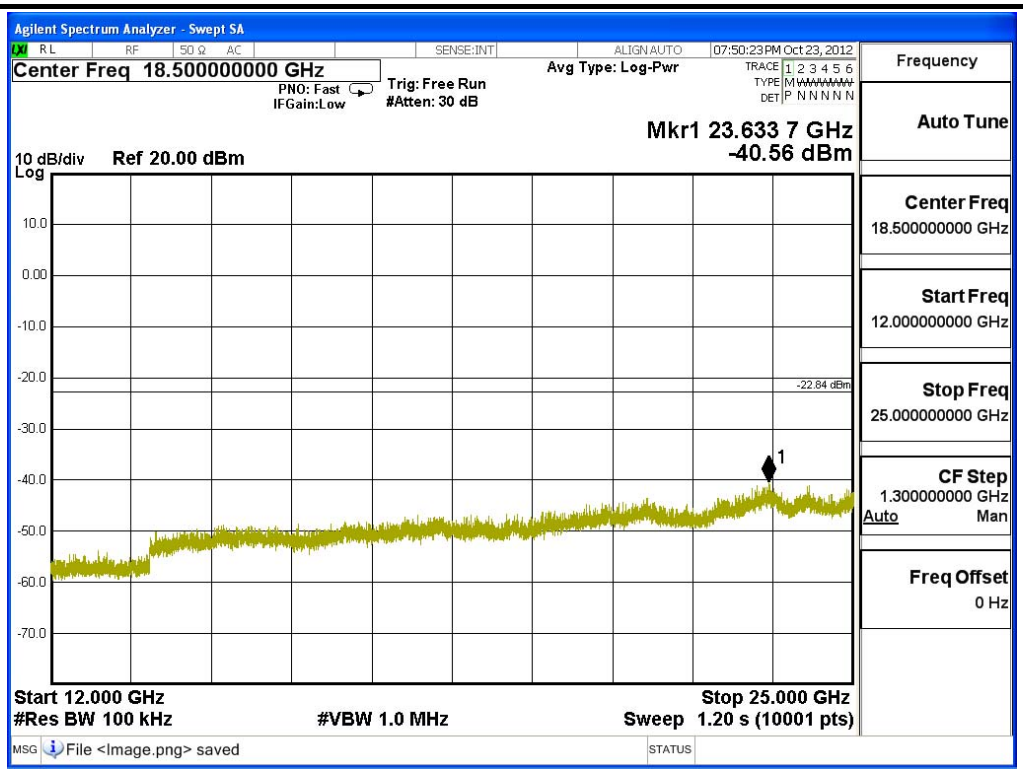



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
05:09:39 PM Oct 23, 2012
Mkr1 23.674 0 GHz
-41.19 dBm
10 dB/div
Log
Ref 20.00 dBm
-25.02 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

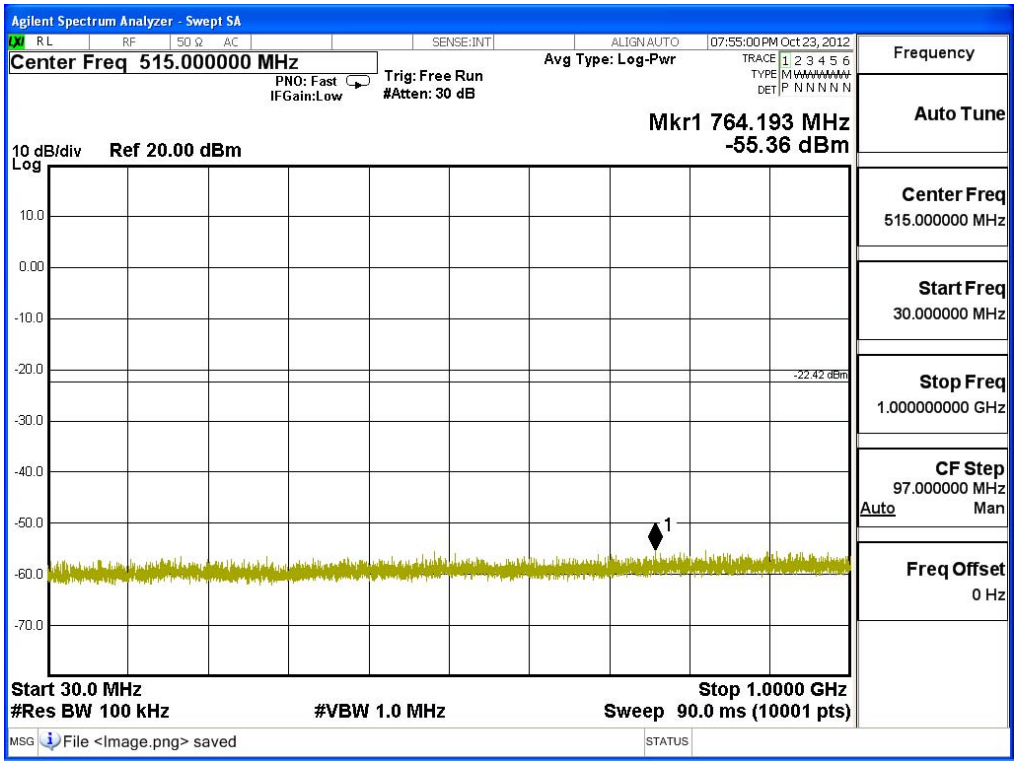
Channel 01 (2412MHz) 30MHz-25GHz-Chain C

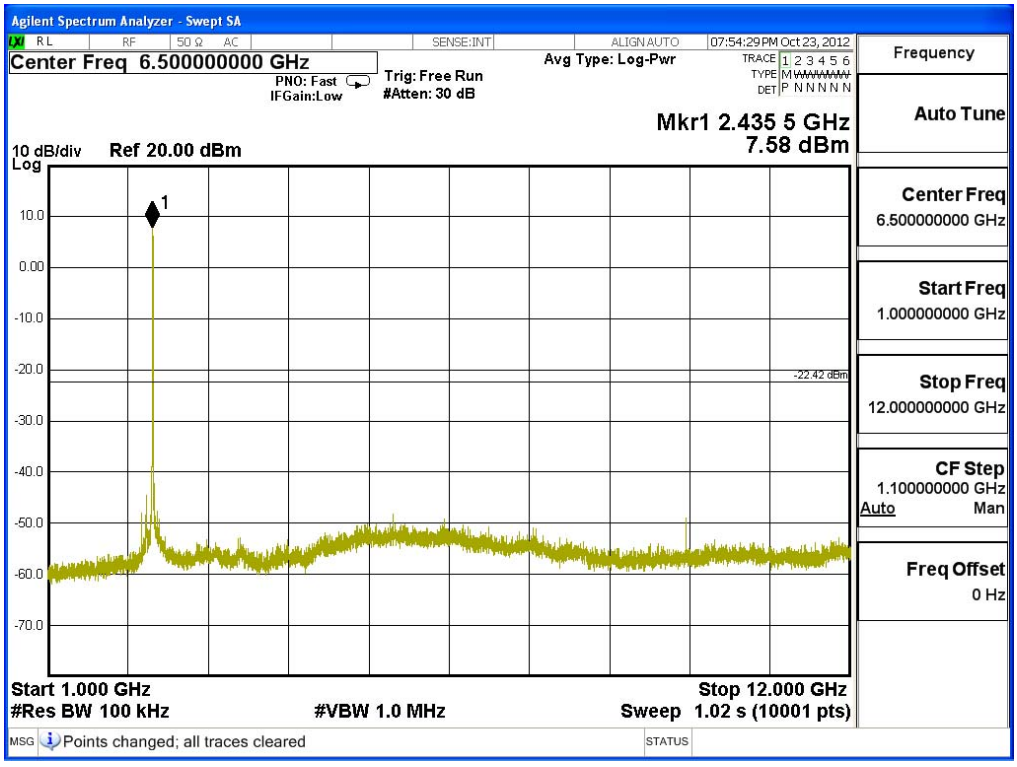


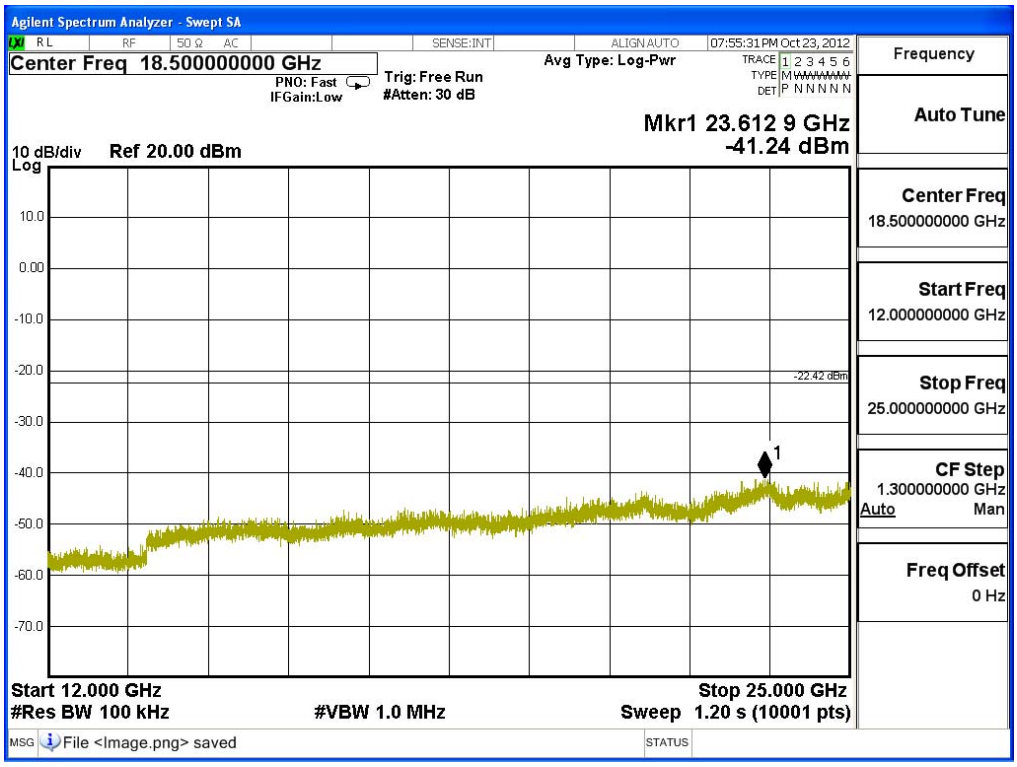



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
07:50:23 PM Oct 23, 2012
Mkr1 23.633 7 GHz
-40.56 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.84 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

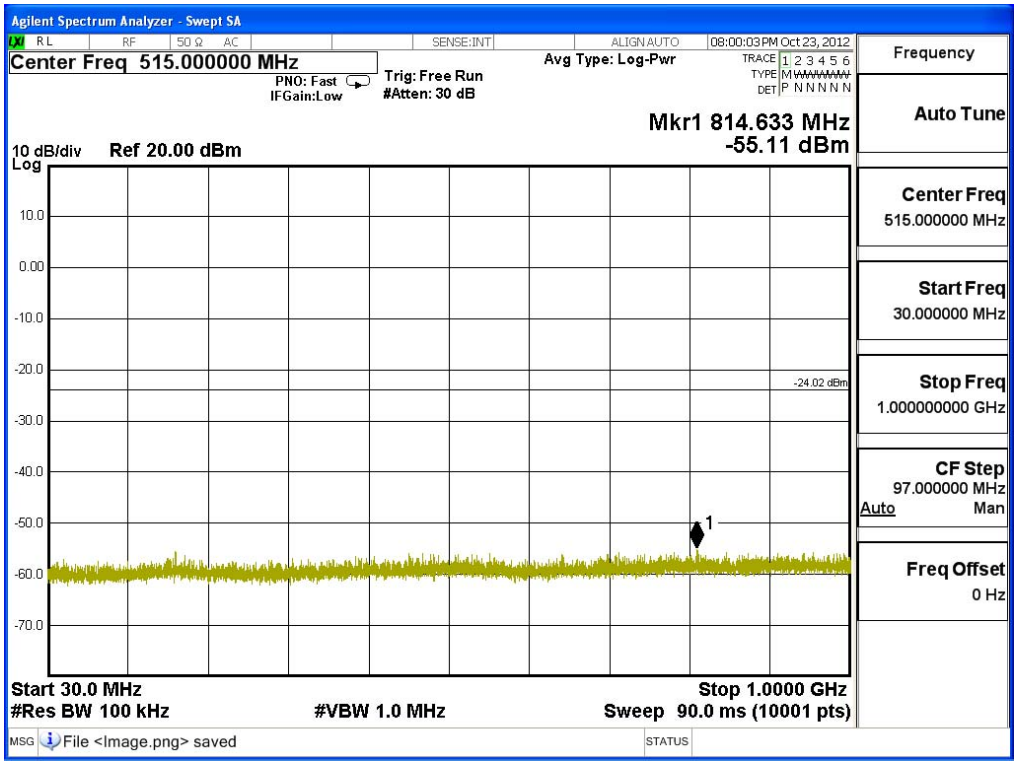
Channel 06 (2437MHz) 30MHz -25GHz-Chain C

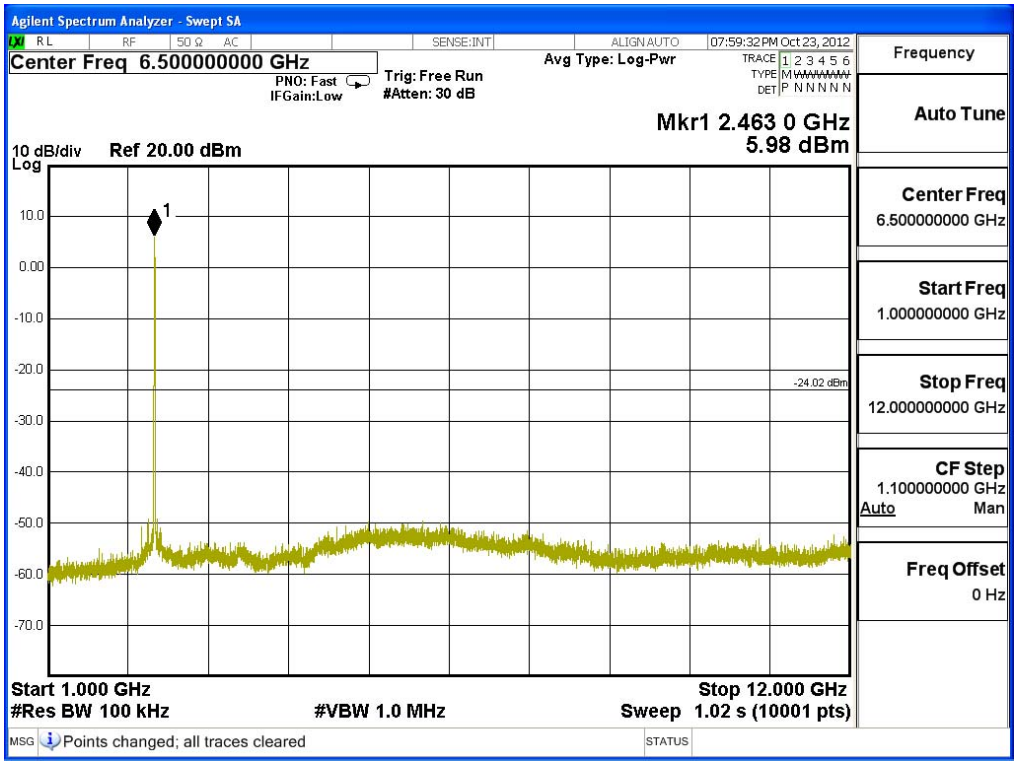


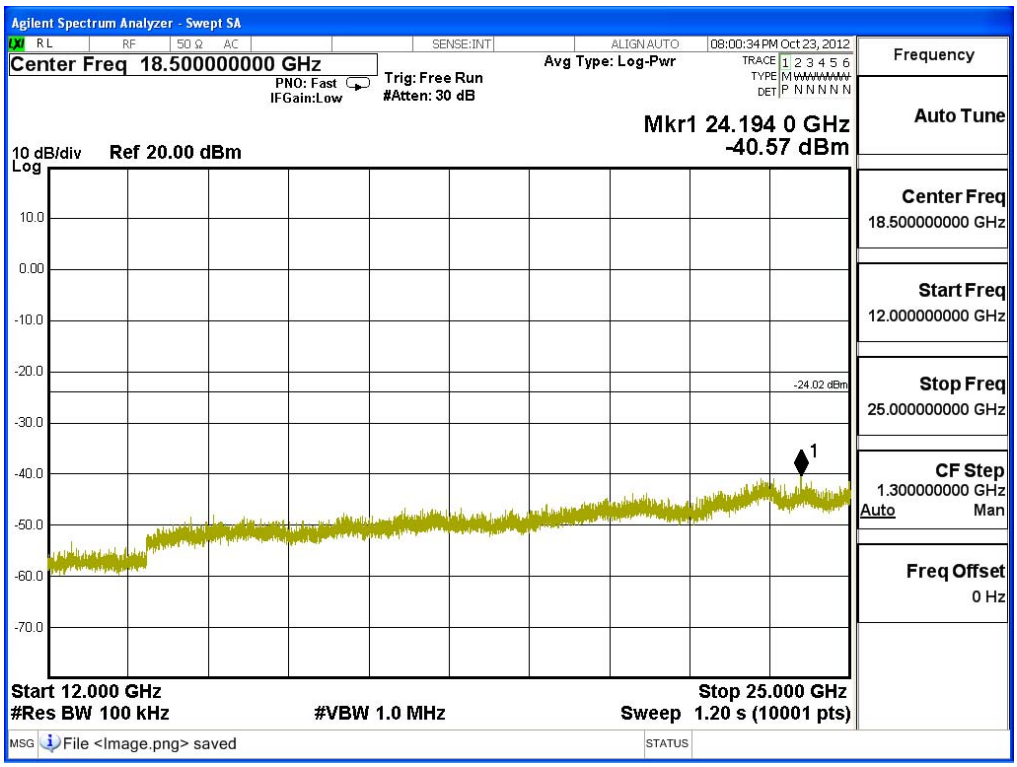



Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
07:55:31 PM Oct 23, 2012
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 23.612 9 GHz
-41.24 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-22.42 dBm
1
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
MSG
File <Image.png> saved
STATUS
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel 11 (2462MHz) 30MHz -25GHz-Chain C

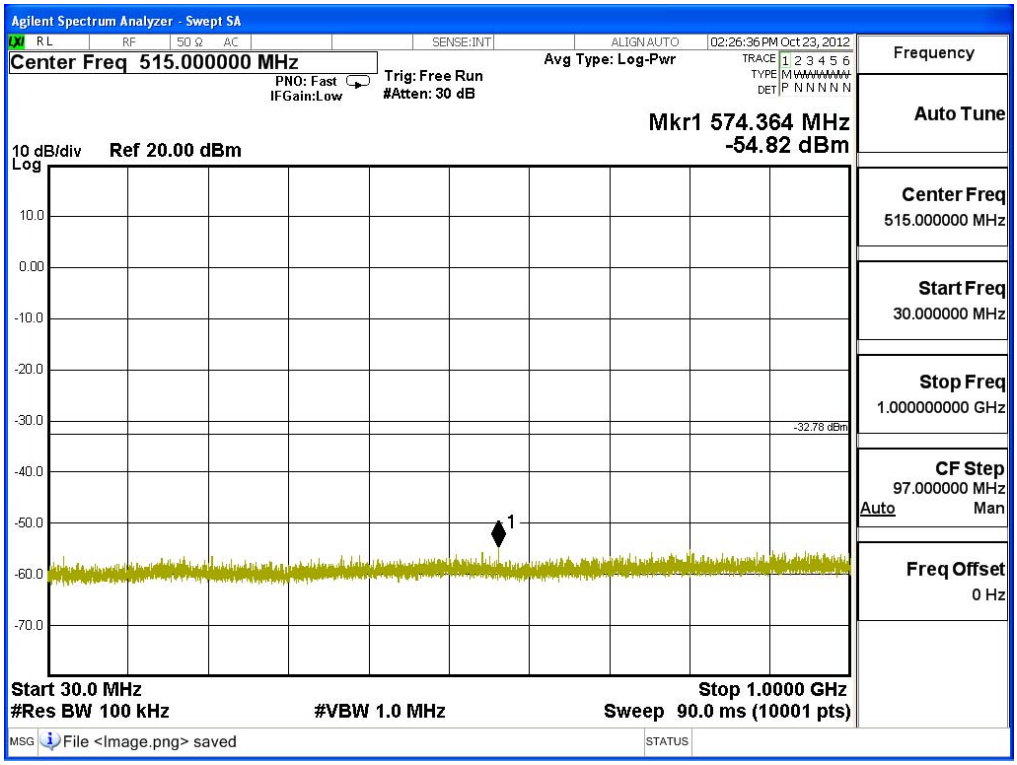


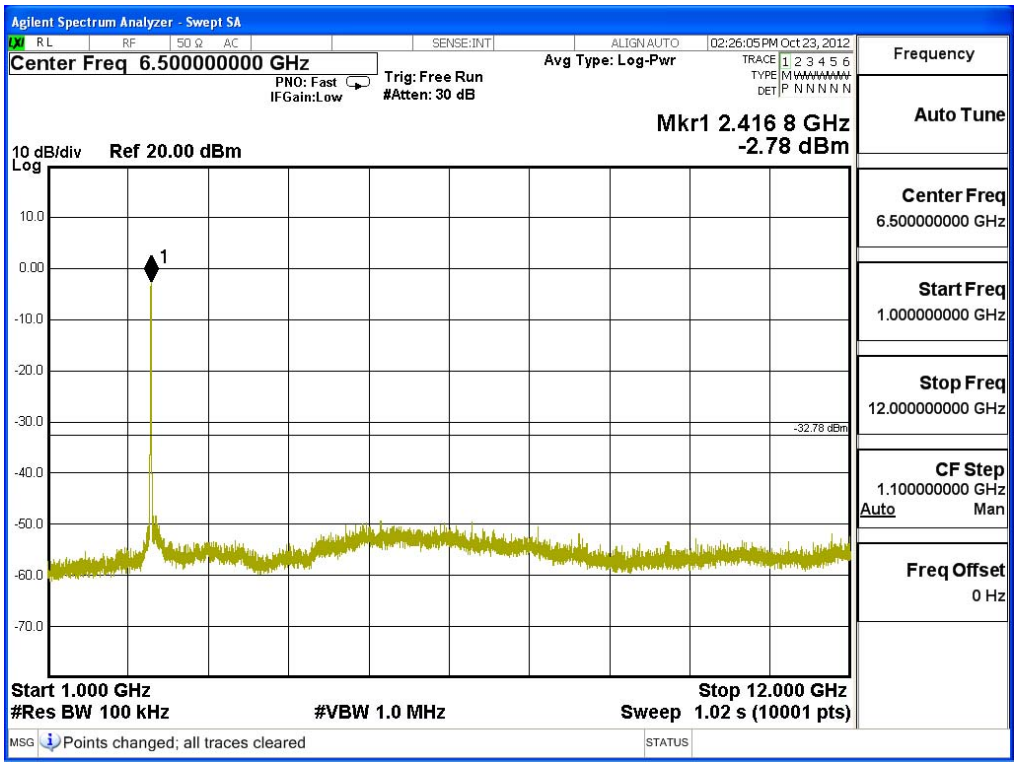


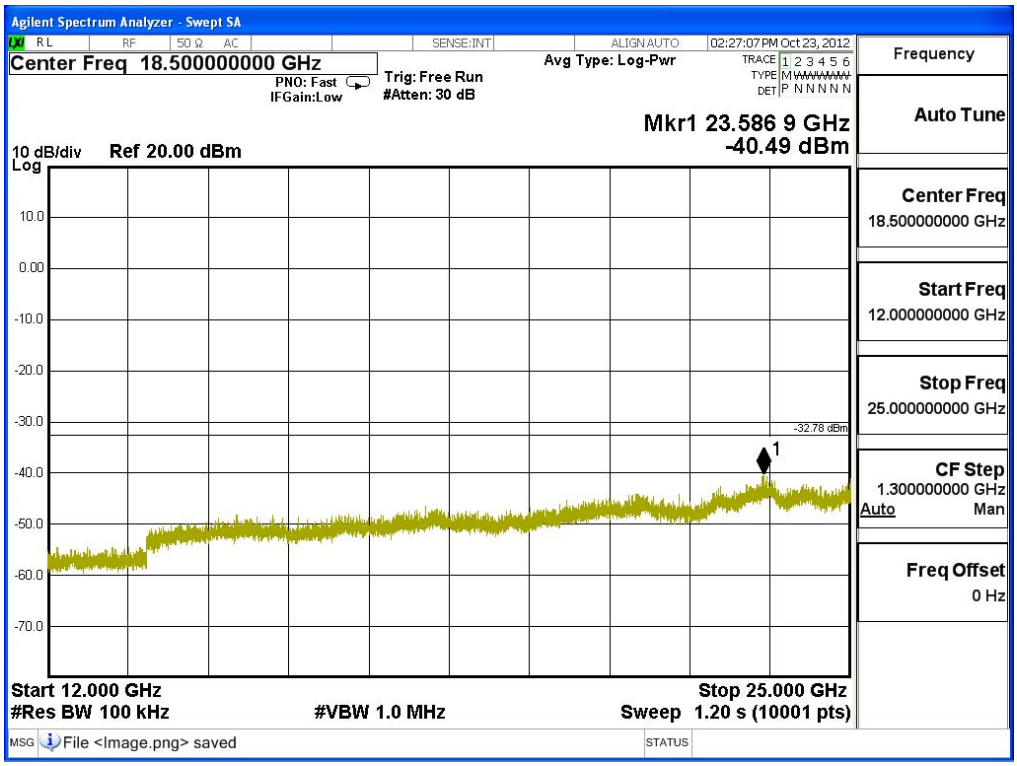

Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
08:00:34 PM Oct 23, 2012
Mkr1 24.194 0 GHz
-40.57 dBm
10 dB/div
Log
Ref 20.00 dBm
-24.02 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

Product : SpectraGuardR Access Point / Sensor
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

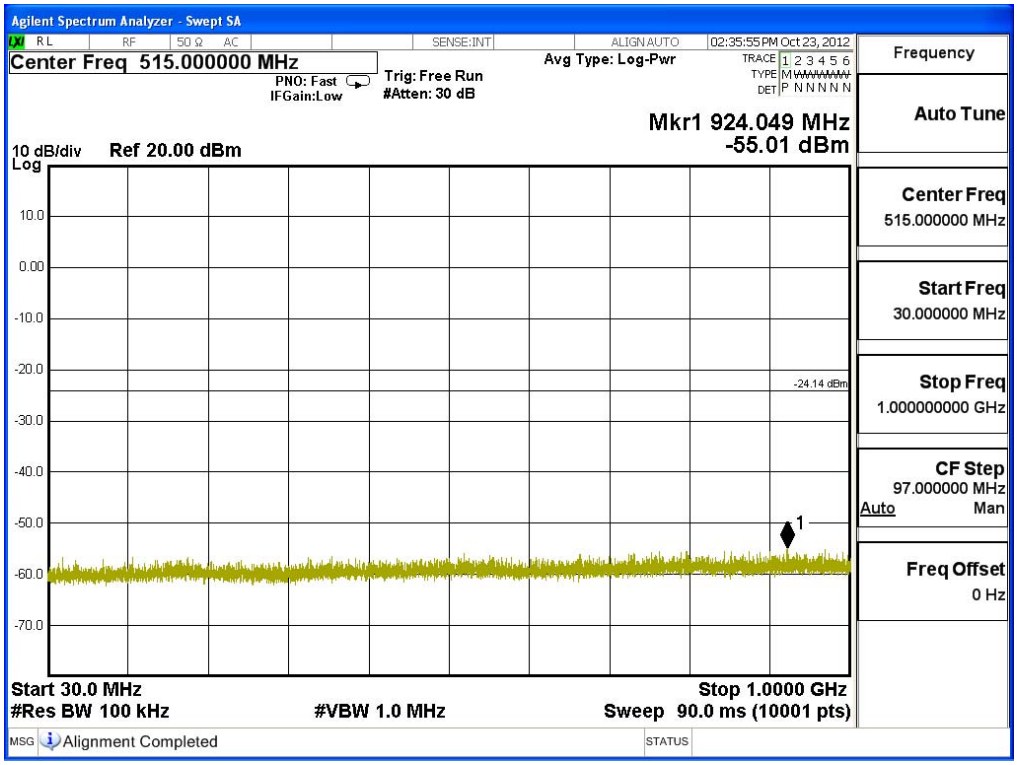
Channel 01 (2412MHz) 30MHz -25GHz-Chain A

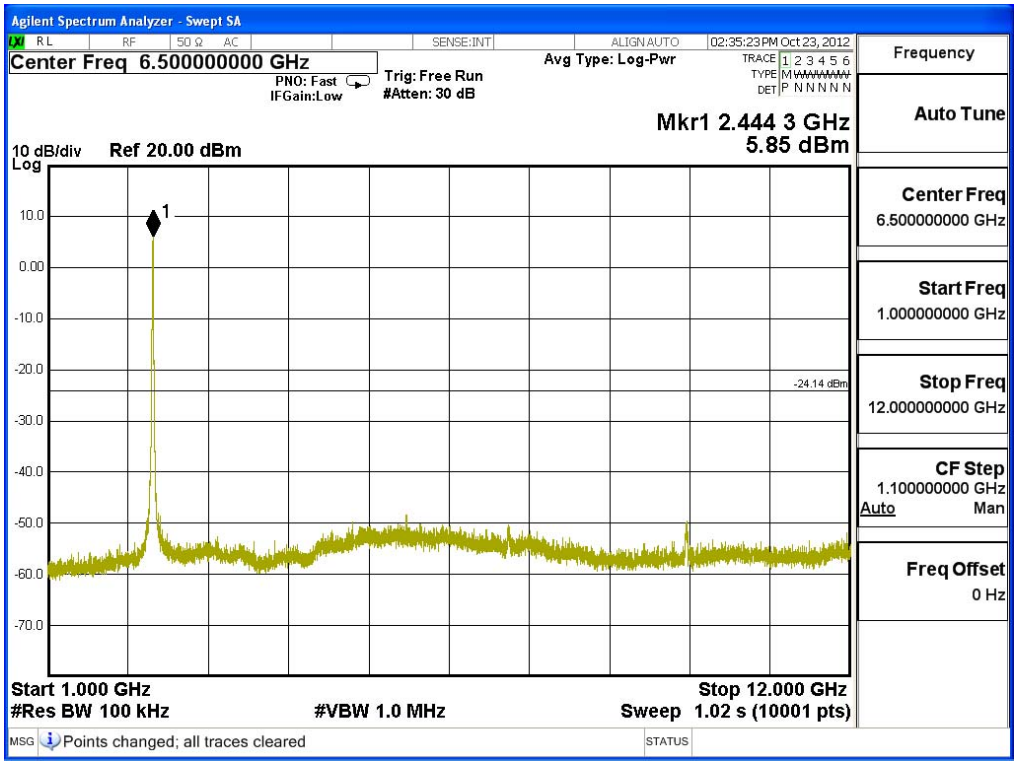


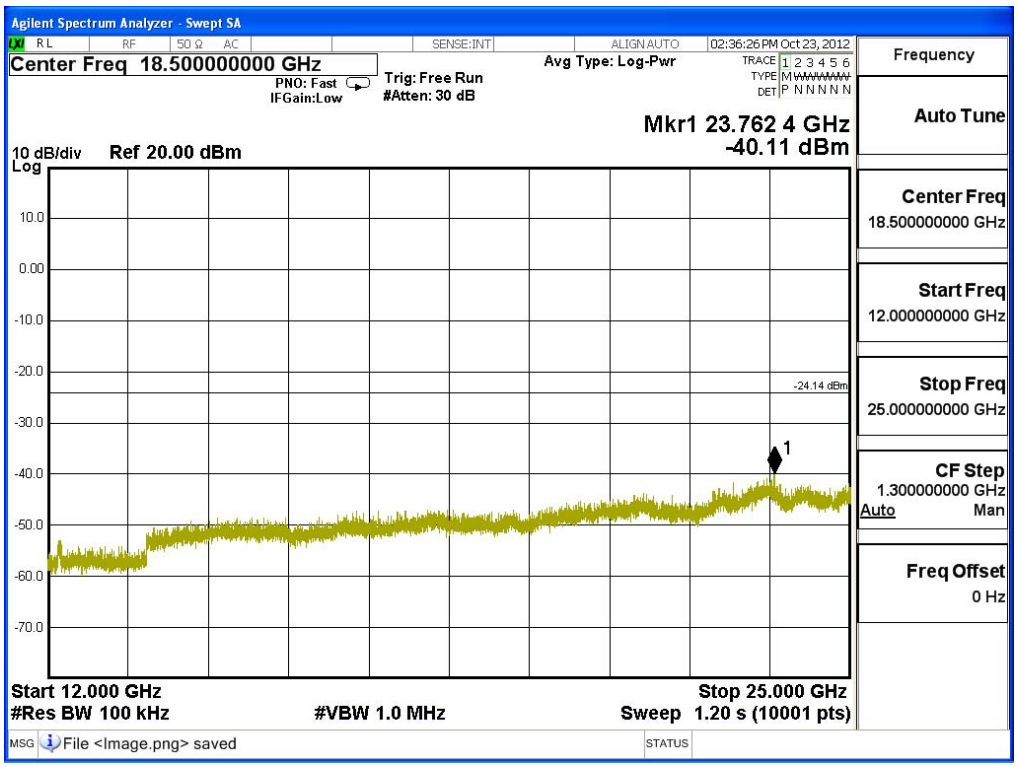

Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
02:26:05 PM Oct 23, 2012
Mkr1 2.416 8 GHz
-2.78 dBm
10 dB/div
Log
Ref 20.00 dBm
-32.78 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
02:27:07 PM Oct 23, 2012
Mkr1 23.586 9 GHz
-40.49 dBm
10 dB/div
Log
Ref 20.00 dBm
-32.78 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz

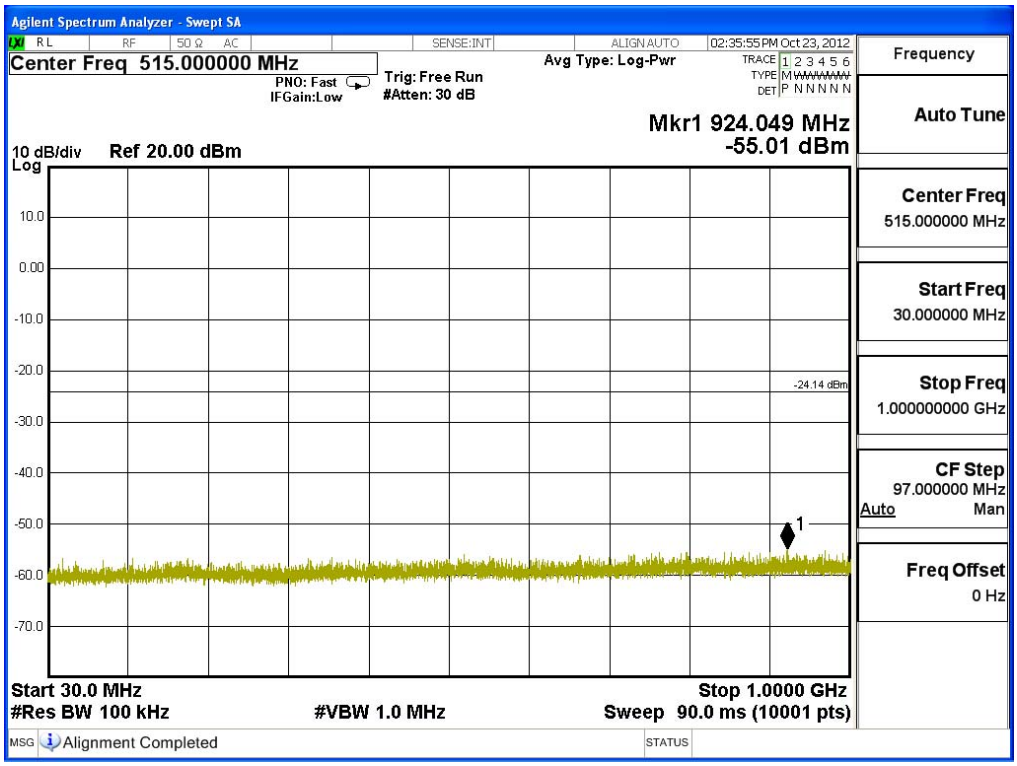
Channel 06 (2437MHz) 30MHz -25GHz-Chain A

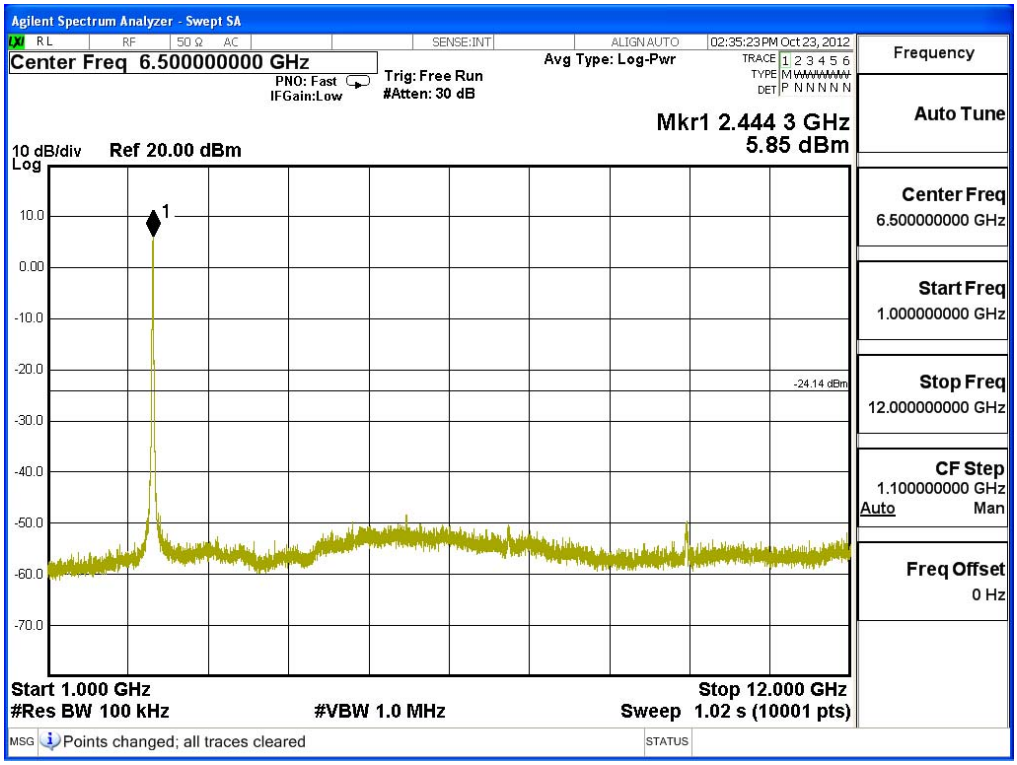


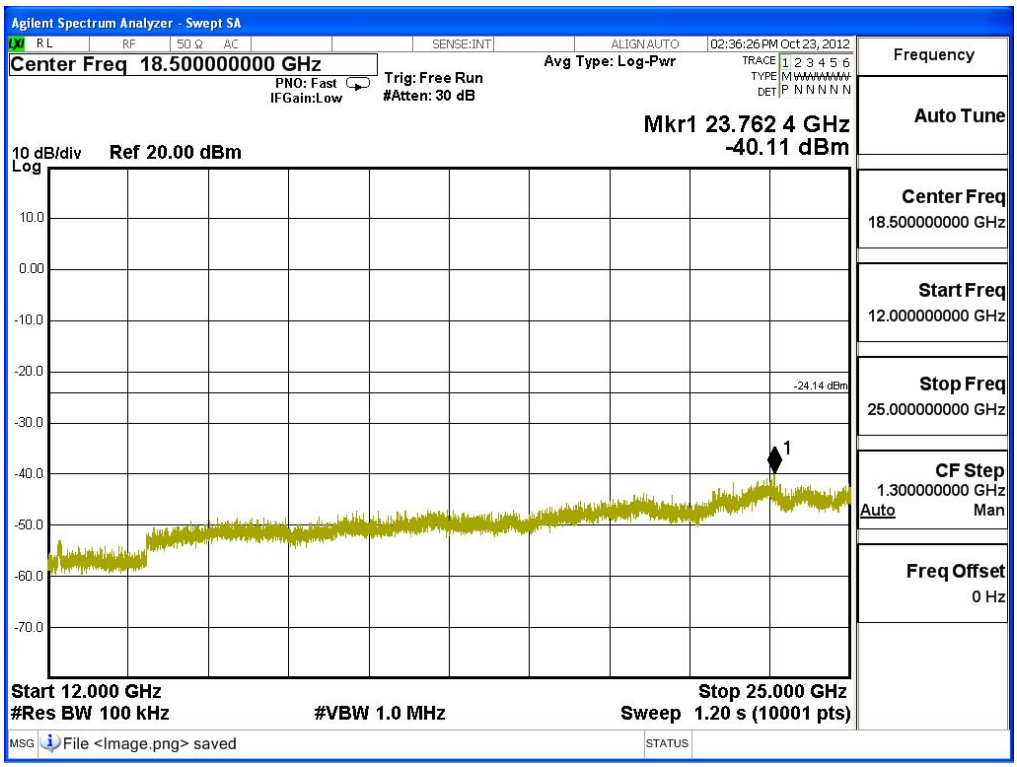



Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
02:36:26 PM Oct 23, 2012
Mkr1 23.762 4 GHz
-40.11 dBm
10 dB/div
Log
Ref 20.00 dBm
-24.14 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz
File <Image.png> saved

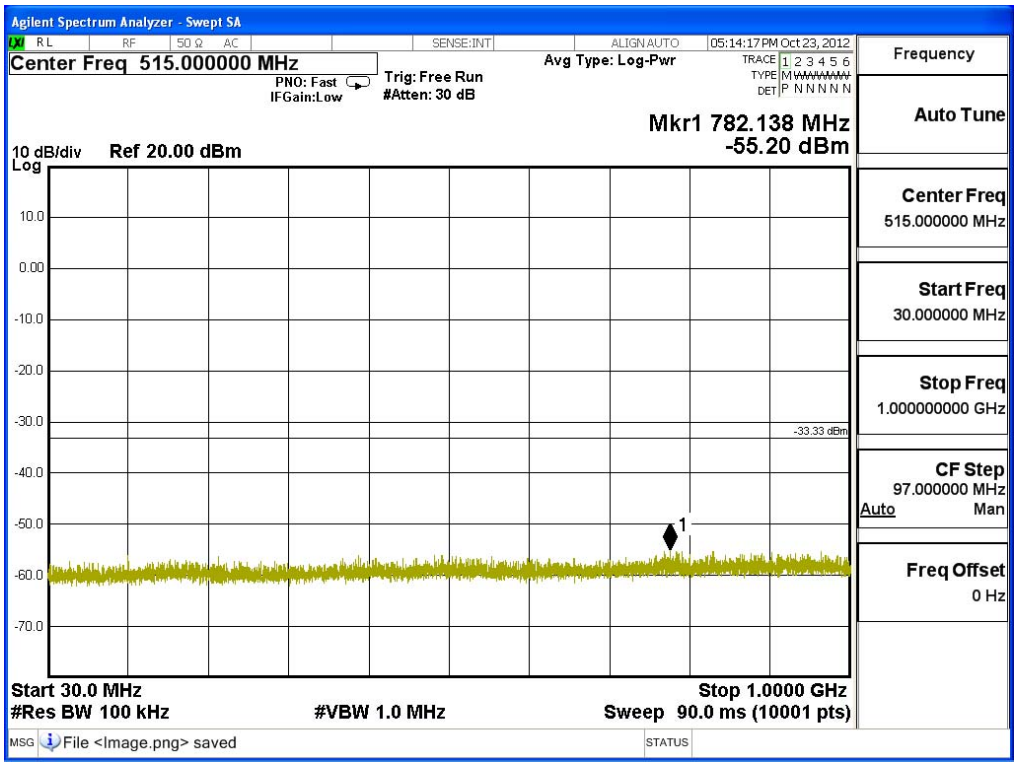
Channel 11 (2462MHz) 30MHz -25GHz-Chain A

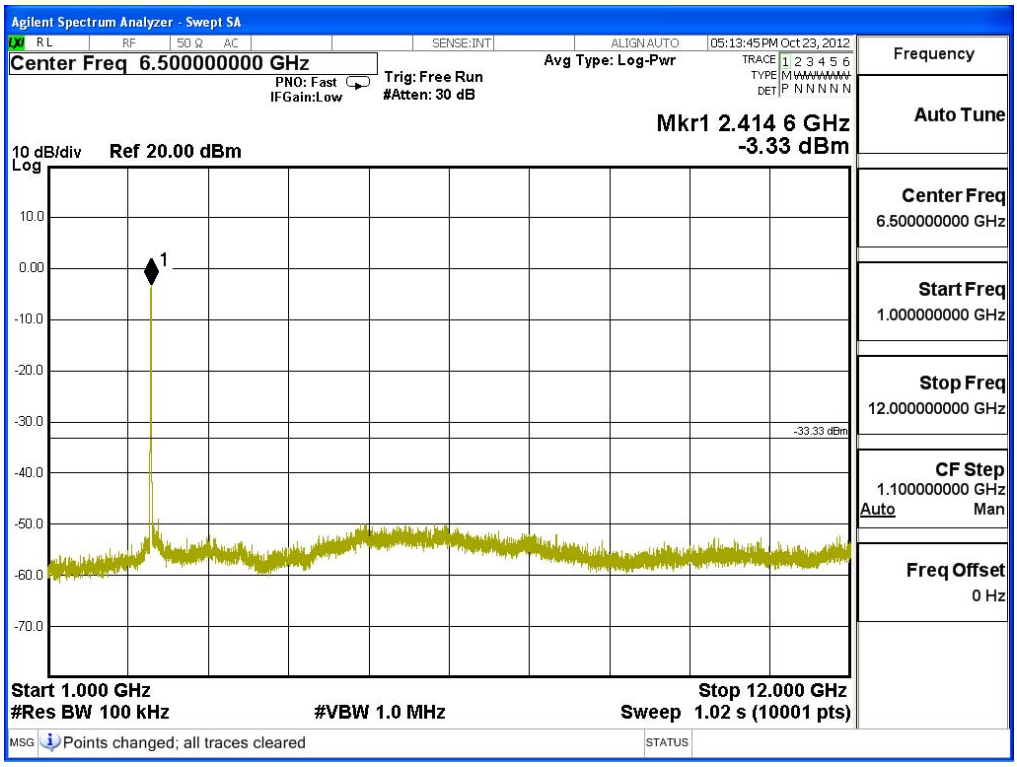


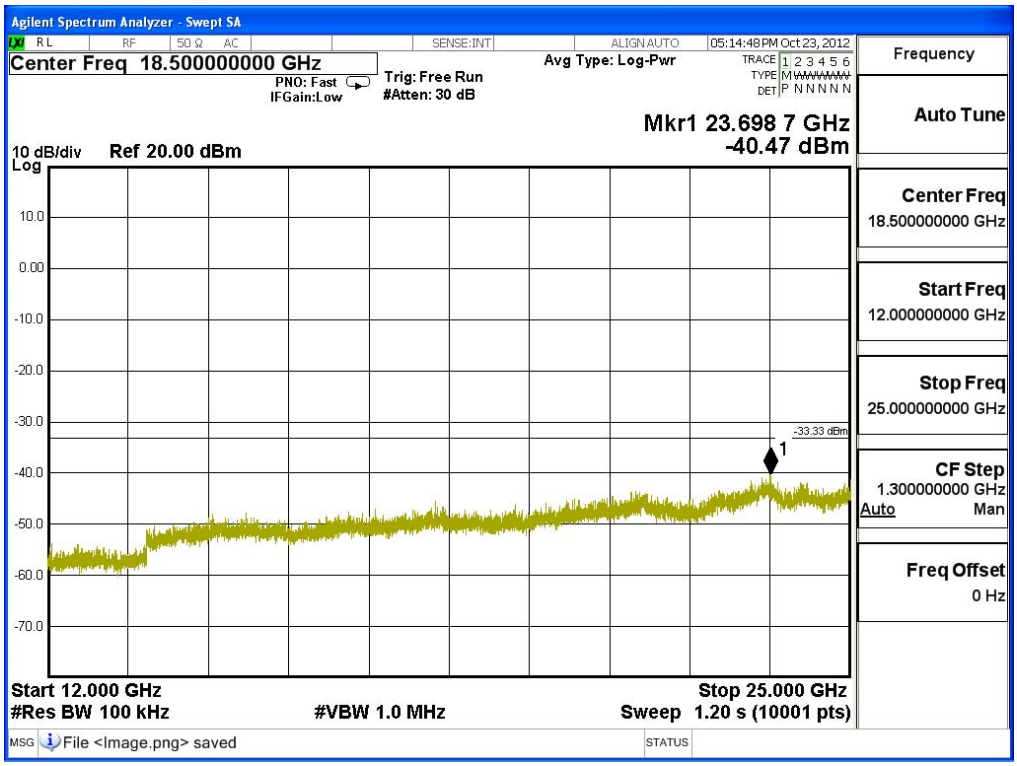




Channel 01 (2412MHz) 30MHz -25GHz-Chain B




Agilent Spectrum Analyzer - Swept SA
Center Freq 6.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
05:13:45 PM Oct 23, 2012
Mkr1 2.414 6 GHz
-3.33 dBm
10 dB/div
Log
Ref 20.00 dBm
-33.33 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 12.000 GHz
Sweep 1.02 s (10001 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
6.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
12.000000000 GHz
CF Step
1.100000000 GHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 18.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
05:14:48 PM Oct 23, 2012
Mkr1 23.698 7 GHz
-40.47 dBm
10 dB/div
Log
Ref 20.00 dBm
-33.33 dBm
Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)
File <Image.png> saved
Frequency
Auto Tune
Center Freq
18.500000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
25.000000000 GHz
CF Step
1.300000000 GHz
Auto
Man
Freq Offset
0 Hz