

FC

Test Report

Product Name	SpectraGuard Sensor
Model No	SS-300-AT-C-50
FCC ID.	DoC

Applicant	AirTight Networks, Inc.
Address	339 N. Bernardo Avenue, Suite #200 Mountain View, CA United States 94043

Date of Receipt	Aug. 30, 2010
Issue Date	Sep. 17, 2010
Report No.	109037R-RFUSP24V02
Report Version	V1.0

The test results relate only to the samples tested.

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Test Report Certification

Issue Date: Sep. 17, 2010

Report No.: 109037R-RFUSP24V02


Accredited by NIST (NVLAP)

NVLAP Lab Code: 200533-0

Product Name	SpectraGuard Sensor
Applicant	AirTight Networks, Inc.
Address	339 N. Bernardo Avenue, Suite #200 Mountain View, CA United States 94043
Manufacturer	Dong Guan G-Com Computer Co., Ltd.
Model No.	SS-300-AT-C-50
FCC ID.	DoC
EUT Rated Voltage	AC 100-240V, 50/60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	AirTight Networks
Applicable Standard	FCC CFR Title 47 Part 15 Subpart B: 2009 ANSI C63.4: 2003
Test Result	Complied



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Documented By : Anita Chou
(Senior Engineering Adm. Specialist /
Anita Chou)



Tested By : Eason Hung
(Engineer / Eason Hung)

Approved By : Vincent Lin
(Manager / Vincent Lin)



TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION	4
1.1. EUT Description.....	4
1.2. Tested System Details.....	7
1.3. Configuration of Tested System	7
1.4. EUT Exercise Software	7
1.5. Test Facility	8
2. Conducted Emission.....	9
2.1. Test Equipment.....	9
2.2. Test Setup	9
2.3. Limits	10
2.4. Test Procedure	10
2.5. Uncertainty	10
2.6. Test Result of Conducted Emission.....	11
3. Radiated Emission.....	21
3.1. Test Equipment.....	21
3.2. Test Setup	22
3.3. Limits	23
3.4. Test Procedure	23
3.5. Uncertainty	24
3.6. Test Result of Radiated Emission.....	25
4. EMI Reduction Method During Compliance Testing	62

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	SpectraGuard Sensor
Trade Name	AirTight Networks
Model No.	SS-300-AT-C-50
FCC ID.	DoC
Frequency Range	802.11b/g/n-20MHz: 2412-2462MHz, 802.11n-40MHz: 2422-2452MHz 802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz and 5745-5825MHz 802.11n-40MHz: 5190-5310MHz, 5510-5670MHz and 5755-5795MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 24, n-40MHz: 11
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	PCB Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
Power Adapter	MFR: DVE, M/N: DSA-15P-12 US 120150 Input: AC 100-240V ~ 50/60Hz, 0.5A Output: DC 12V, 1.25A

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	WIESON	GY196HT0220-014	6.16dBi in 2.4GHz 6.30dBi in 5.0GHz

Note: The antenna of EUT is conforming to FCC 15.203.

802.11b/g/n-20MHz (2.4GHz Band) 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		

802.11n-40MHz (2.4GHz 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		

802.11a/n-20MHz (5GHz Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz	Channel 149:	5745 MHz
Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz	Channel 165:	5825 MHz

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 54:	5270 MHz	Channel 62:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 118:	5590 MHz	Channel 126:	5630 MHz
Channel 134:	5670 MHz	Channel 151:	5755 MHz	Channel 159:	5795 MHz		

Note:

1. The EUT is a SpectraGuard Sensor with a built-in 2.4GHz and 5GHz WLAN transceiver, 802.11a/b/g/n all functions support 3(Transmit) × 3(Receive) technology.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. These tests are conducted on a sample for demonstrating the compliance of 802.11a/b/g/n receiver with Part 15 Subpart B.
4. Part 15 Subpart C/E compliance for spread spectrum devices is shown on the report no. 109037R-RFUSP28V01 / 109037R-RFUSP32V01 and certified under FCC ID: TOR-SS300ATC50

Test Mode:	Mode 1: Receive 802.11b_11Mbps
	Mode 2: Receive 802.11g_6Mbps
	Mode 3: Receive 802.11a_6Mbps
	Mode 4: Receive 802.11n-20BW_21.6Mbps(2.4GHz Band)
	Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band)
	Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)
	Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band)

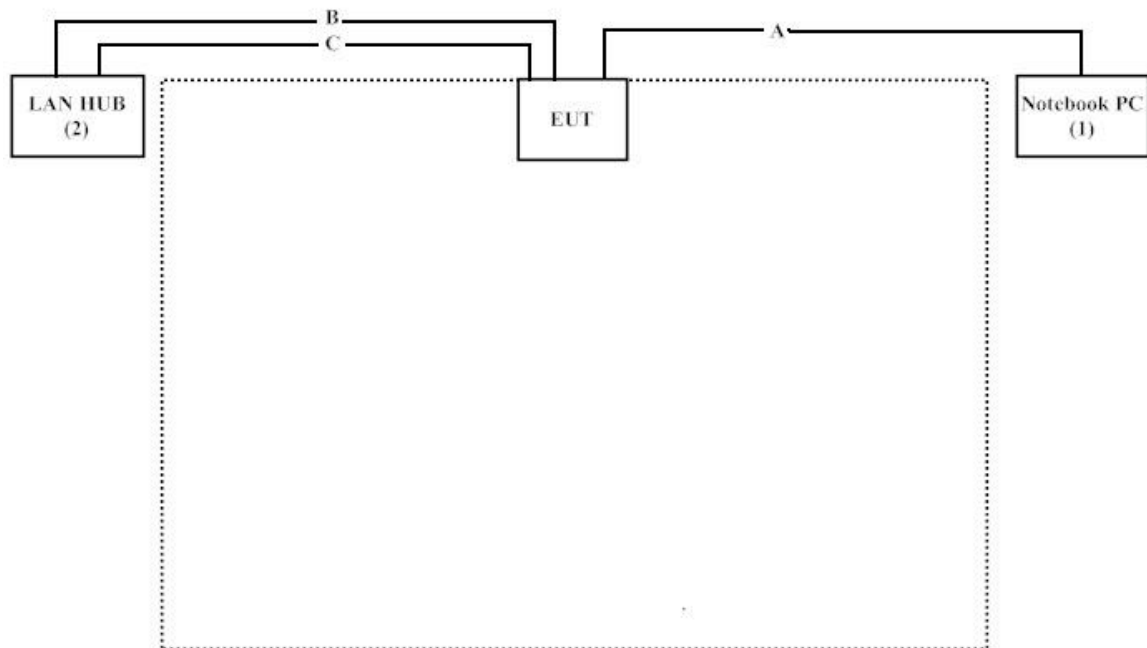
1.2. Tested System Details

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	NOTEBOOK PC	DELL	D400	N/A
2	LAN HUB	D-Link	DES-1008D	DR9R16C002163

Signal Cable Type	Signal cable Description
A	LAN CABLE
B	LAN CABLE
C	LAN CABLE

1.3. Configuration of Tested System



1.4. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.3.
- (2) Execute the ART program (Version 07B30) on the EUT
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press "OK" to start the continuous Transmitter.
- (5) Verify that the EUT works properly.

1.5. 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

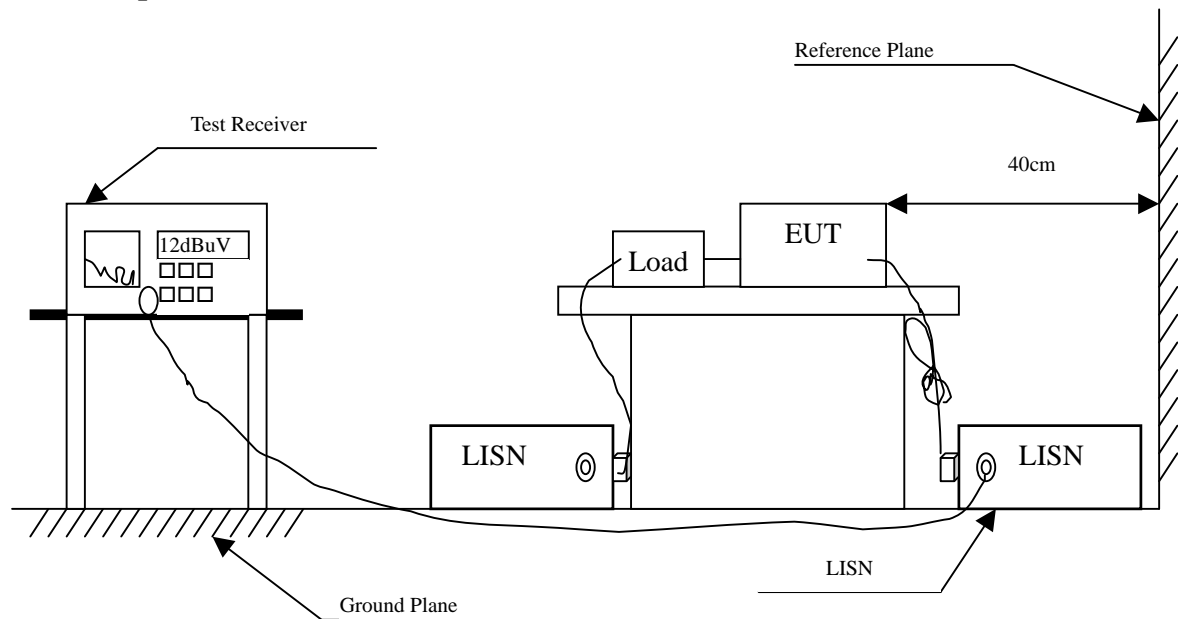
2.1. Test Equipment

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

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2010	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2010	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2010	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2010	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart B Paragraph 15.107 (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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 1					
Quasi-Peak					
0.212	9.698	36.840	46.538	-17.691	64.229
0.267	9.665	43.250	52.915	-9.742	62.657
0.326	9.650	40.870	50.520	-10.451	60.971
0.361	9.650	40.360	50.010	-9.961	59.971
0.888	9.670	35.280	44.950	-11.050	56.000
6.627	9.740	27.270	37.010	-22.990	60.000
Average					
0.212	9.698	13.410	23.108	-31.121	54.229
0.267	9.665	35.150	44.815	-7.842	52.657
0.326	9.650	26.080	35.730	-15.241	50.971
0.361	9.650	30.820	40.470	-9.501	49.971
0.888	9.670	31.250	40.920	-5.080	46.000
6.627	9.740	22.300	32.040	-17.960	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.162	9.751	34.190	43.941	-21.716	65.657
0.267	9.675	42.380	52.055	-10.602	62.657
0.365	9.651	39.290	48.941	-10.916	59.857
0.474	9.640	34.040	43.680	-13.063	56.743
0.935	9.670	31.830	41.500	-14.500	56.000
6.369	9.730	29.600	39.330	-20.670	60.000
Average					
0.162	9.751	9.250	19.001	-36.656	55.657
0.267	9.675	23.960	33.635	-19.022	52.657
0.365	9.651	19.520	29.171	-20.686	49.857
0.474	9.640	24.610	34.250	-12.493	46.743
0.935	9.670	16.390	26.060	-19.940	46.000
6.369	9.730	16.830	26.560	-23.440	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.170	9.740	44.220	53.960	-11.469	65.429
0.357	9.650	32.290	41.940	-18.146	60.086
0.533	9.640	28.460	38.100	-17.900	56.000
0.701	9.630	32.360	41.990	-14.010	56.000
1.412	9.670	31.080	40.750	-15.250	56.000
1.951	9.680	29.390	39.070	-16.930	56.000
Average					
0.170	9.740	34.300	44.040	-11.389	55.429
0.357	9.650	24.590	34.240	-15.846	50.086
0.533	9.640	20.430	30.070	-15.930	46.000
0.701	9.630	23.420	33.050	-12.950	46.000
1.412	9.670	15.320	24.990	-21.010	46.000
1.951	9.680	14.950	24.630	-21.370	46.000

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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.170	9.743	41.690	51.433	-13.996	65.429
0.357	9.654	33.980	43.634	-16.452	60.086
0.709	9.650	31.850	41.500	-14.500	56.000
0.877	9.671	29.480	39.151	-16.849	56.000
1.408	9.670	32.050	41.720	-14.280	56.000
2.998	9.690	29.700	39.390	-16.610	56.000
Average					
0.170	9.743	29.610	39.353	-16.076	55.429
0.357	9.654	25.910	35.564	-14.522	50.086
0.709	9.650	21.790	31.440	-14.560	46.000
0.877	9.671	18.370	28.041	-17.959	46.000
1.408	9.670	18.130	27.800	-18.200	46.000
2.998	9.690	10.160	19.850	-26.150	46.000

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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.259	9.670	42.920	52.590	-10.296	62.886
0.357	9.650	40.140	49.790	-10.296	60.086
0.705	9.630	32.120	41.750	-14.250	56.000
1.185	9.670	30.110	39.780	-16.220	56.000
6.509	9.740	32.160	41.900	-18.100	60.000
11.013	9.850	29.440	39.290	-20.710	60.000
Average					
0.259	9.670	34.600	44.270	-8.616	52.886
0.357	9.650	32.300	41.950	-8.136	50.086
0.705	9.630	21.370	31.000	-15.000	46.000
1.185	9.670	20.750	30.420	-15.580	46.000
6.509	9.740	23.430	33.170	-16.830	50.000
11.013	9.850	21.230	31.080	-18.920	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.212	9.708	36.660	46.368	-17.861	64.229
0.365	9.651	38.880	48.531	-11.326	59.857
0.623	9.650	31.250	40.900	-15.100	56.000
1.291	9.670	27.590	37.260	-18.740	56.000
6.517	9.740	29.090	38.830	-21.170	60.000
10.974	9.850	29.010	38.860	-21.140	60.000
Average					
0.212	9.708	15.560	25.268	-28.961	54.229
0.365	9.651	23.360	33.011	-16.846	49.857
0.623	9.650	20.430	30.080	-15.920	46.000
1.291	9.670	11.790	21.460	-24.540	46.000
6.517	9.740	16.380	26.120	-23.880	50.000
10.974	9.850	23.650	33.500	-16.500	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5590MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.263	9.667	42.950	52.617	-10.154	62.771
0.306	9.650	40.140	49.790	-11.753	61.543
0.466	9.640	34.400	44.040	-12.931	56.971
0.896	9.670	31.990	41.660	-14.340	56.000
6.400	9.740	29.400	39.140	-20.860	60.000
10.978	9.850	29.460	39.310	-20.690	60.000
Average					
0.263	9.667	24.460	34.127	-18.644	52.771
0.306	9.650	19.260	28.910	-22.633	51.543
0.466	9.640	21.850	31.490	-15.481	46.971
0.896	9.670	25.800	35.470	-10.530	46.000
6.400	9.740	22.630	32.370	-17.630	50.000
10.978	9.850	21.140	30.990	-19.010	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5590MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.154	9.760	33.490	43.251	-22.635	65.886
0.271	9.672	41.660	51.332	-11.211	62.543
0.326	9.660	39.420	49.080	-11.891	60.971
0.423	9.650	34.000	43.650	-14.550	58.200
0.880	9.670	34.150	43.820	-12.180	56.000
6.435	9.730	31.310	41.040	-18.960	60.000
Average					
0.154	9.760	25.530	35.291	-20.595	55.886
0.271	9.672	28.500	38.172	-14.371	52.543
0.326	9.660	18.220	27.880	-23.091	50.971
0.423	9.650	20.330	29.980	-18.220	48.200
0.880	9.670	24.990	34.660	-11.340	46.000
6.435	9.730	17.750	27.480	-22.520	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.158	9.756	32.530	42.286	-23.485	65.771
0.259	9.670	42.880	52.550	-10.336	62.886
0.470	9.640	33.880	43.520	-13.337	56.857
0.677	9.630	32.850	42.480	-13.520	56.000
0.834	9.650	29.890	39.540	-16.460	56.000
11.095	9.850	29.390	39.240	-20.760	60.000
Average					
0.158	9.756	29.350	39.106	-16.665	55.771
0.259	9.670	35.910	45.580	-7.306	52.886
0.470	9.640	11.560	21.200	-25.657	46.857
0.677	9.630	16.150	25.780	-20.220	46.000
0.834	9.650	19.810	29.460	-16.540	46.000
11.095	9.850	24.800	34.650	-15.350	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 : SpectraGuard Sensor
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.154	9.760	33.870	43.631	-22.255	65.886
0.267	9.675	42.380	52.055	-10.602	62.657
0.365	9.651	39.010	48.661	-11.196	59.857
0.494	9.640	30.330	39.970	-16.201	56.171
0.873	9.672	33.160	42.832	-13.168	56.000
6.505	9.736	31.290	41.026	-18.974	60.000
Average					
0.154	9.760	25.650	35.411	-20.475	55.886
0.267	9.675	18.910	28.585	-24.072	52.657
0.365	9.651	20.950	30.601	-19.256	49.857
0.494	9.640	21.070	30.710	-15.461	46.171
0.873	9.672	23.510	33.182	-12.818	46.000
6.505	9.736	26.240	35.976	-14.024	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. Radiated Emission

3.1. Test Equipment

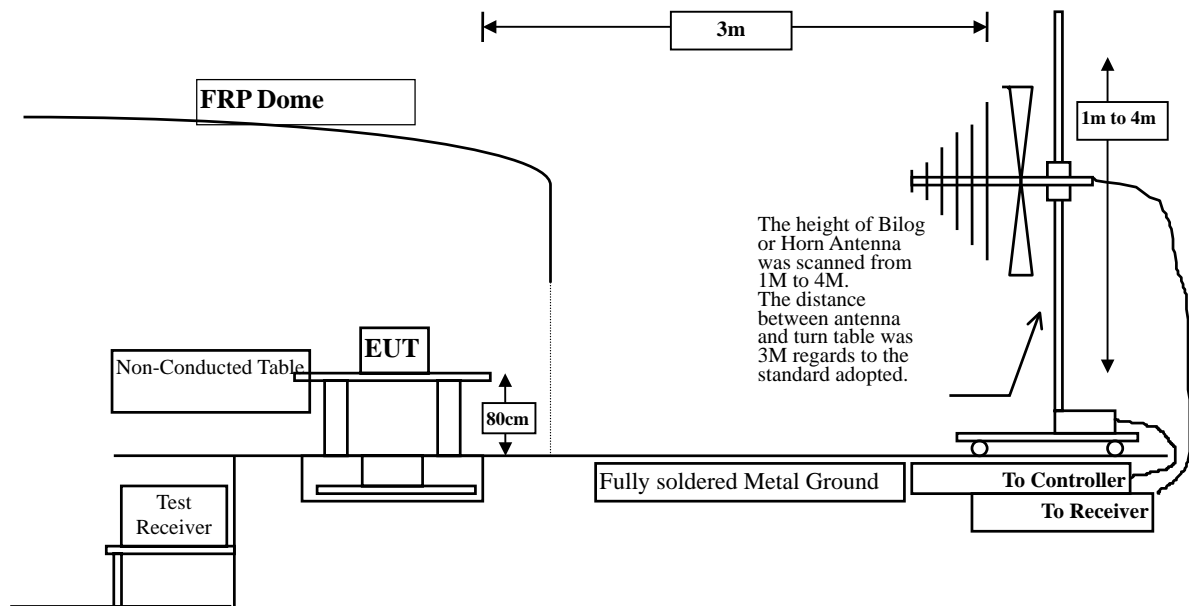
The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2010
	X	Pre-Amplifier	HP	8447D/2944A09549	Sep., 2010
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2010
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2009
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2010
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

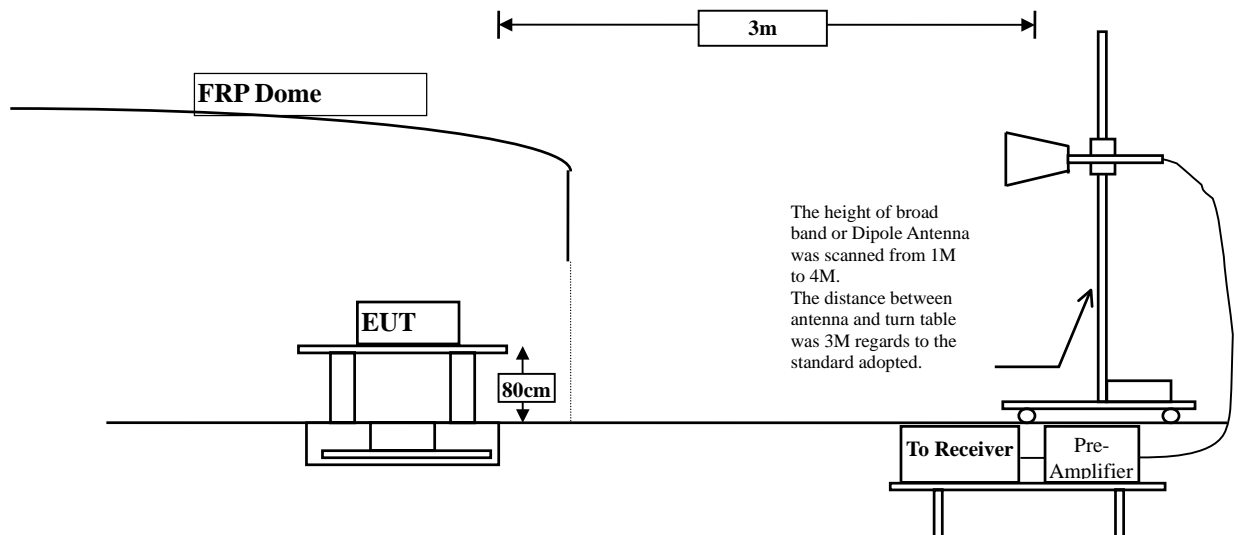
- Note:
1. All equipments are calibrated every one year.
 2. Test equipments marked by “X” are used to measure the final test results.

3.2. Test Setup

Below 1GHz



Above 1GHz



3.3. Limits

FCC Part 15 Subpart B Paragraph 15.109 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 :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be 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 beamwidth of the antenna.

The worst radiated emission is measured on the Final Measurement.

The frequency range from 30MHz to 10th harmonics is checked.

3.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

3.6. Test Result of Radiated Emission

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Receive 802.11n-20BW_21.6Mbps(2.4GHz Band) (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
2412.000	-4.644	43.120	38.477	-35.523	74.000
4824.000	0.246	40.520	40.767	-33.233	74.000
7236.000	7.359	39.940	47.299	-26.701	74.000
9648.000	7.759	38.650	46.410	-27.590	74.000
Average Detector					
--					
Vertical					
Peak Detector					
2412.000	-6.167	41.765	35.599	-38.401	74.000
4824.000	0.654	41.060	41.715	-32.285	74.000
7236.000	7.858	40.040	47.898	-26.102	74.000
9648.000	8.296	39.050	47.346	-26.654	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Receive 802.11n-20BW_21.6Mbps(2.4GHz Band) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
2437.000	-4.637	42.120	37.483	-36.517	74.000
4874.000	-0.058	40.550	40.493	-33.507	74.000
7311.000	7.672	39.460	47.132	-26.868	74.000
9748.000	7.753	39.990	47.743	-26.257	74.000
Average Detector					
--					
Vertical					
Peak Detector					
2437.000	-6.106	41.950	35.844	-38.156	74.000
4874.000	0.398	41.270	41.668	-32.332	74.000
7311.000	8.249	38.640	46.889	-27.111	74.000
9748.000	8.389	40.020	48.410	-25.590	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Receive 802.11n-20BW_21.6Mbps(2.4GHz Band) (2462MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
2462.000	-4.623	42.380	37.757	-36.243	74.000
4924.000	0.063	40.920	40.983	-33.017	74.000
7386.000	8.504	37.990	46.495	-27.505	74.000
9848.000	8.156	39.890	48.046	-25.954	74.000
Average Detector					
--					
Vertical					
Peak Detector					
2462.000	-6.035	42.910	36.875	-37.125	74.000
4924.000	0.677	41.050	41.727	-32.273	74.000
7386.000	9.311	38.600	47.911	-26.089	74.000
9848.000	8.993	40.060	49.052	-24.948	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2422MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

2422.000	-0.952	38.250	37.298	-36.702	74.000
4844.000	3.023	36.280	39.303	-34.697	74.000
7266.000	11.082	35.980	47.062	-26.938	74.000

Average Detector

--

Vertical

Peak Detector

2422.000	-1.650	39.580	37.931	-36.069	74.000
4844.000	6.030	36.280	42.309	-31.691	74.000
7266.000	11.902	35.900	47.802	-26.198	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

2437.000	-0.856	39.280	38.425	-35.575	74.000
4874.000	2.918	36.280	39.197	-34.803	74.000
7311.000	11.728	34.950	46.677	-27.323	74.000

Average Detector

--

Vertical

Peak Detector

2437.000	-1.566	36.850	35.284	-38.716	74.000
4874.000	5.692	36.580	42.271	-31.729	74.000
7311.000	12.563	35.950	48.512	-25.488	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2452MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

2452.000	-0.758	38.950	38.191	-35.809	74.000
4904.000	2.823	37.210	40.034	-33.966	74.000
7356.000	11.941	35.290	47.231	-26.769	74.000

Average Detector

--

Vertical

Peak Detector

2452.000	-1.480	36.380	34.899	-39.101	74.000
4904.000	5.439	36.420	41.860	-32.140	74.000
7356.000	12.951	35.980	48.931	-25.069	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5180.000	3.234	41.730	44.964	-29.036	74.000
10360.000	13.054	35.190	48.244	-25.756	74.000

Average Detector

--

Vertical

Peak Detector

5180.000	5.341	41.080	46.422	-27.578	74.000
10360.000	13.848	33.240	47.088	-26.912	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5220.000	3.308	42.250	45.558	-28.442	74.000
10440.000	13.462	36.190	49.651	-24.349	74.000

Average Detector

--

Vertical

Peak Detector

5220.000	5.470	41.030	46.500	-27.500	74.000
10440.000	14.385	34.650	49.035	-24.965	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5240.000	3.451	41.090	44.541	-29.459	74.000
10480.000	13.813	36.230	50.044	-23.956	74.000

Average Detector

--

Vertical

Peak Detector

5240.000	5.542	39.490	45.031	-28.969	74.000
10480.000	14.740	35.070	49.810	-24.190	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5260.000	3.592	40.480	44.072	-29.928	74.000
10520.000	14.115	35.440	49.555	-24.445	74.000

Average Detector

--

Vertical

Peak Detector

5260.000	5.612	38.930	44.542	-29.458	74.000
10520.000	14.918	35.240	50.158	-23.842	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5300.000	3.867	38.310	42.177	-31.823	74.000
10600.000	14.616	36.030	50.645	-23.355	74.000

Average Detector

--

Vertical

Peak Detector

5300.000	5.751	38.060	43.811	-30.189	74.000
10600.000	14.947	37.430	52.377	-21.623	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5320MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5320.000	3.813	38.400	42.212	-31.788	74.000
10640.000	14.790	36.140	50.930	-23.070	74.000

Average Detector

--

Vertical

Peak Detector

5320.000	5.730	37.510	43.239	-30.761	74.000
10640.000	15.183	36.790	51.973	-22.027	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5500.000	4.814	38.610	43.424	-30.576	74.000
11000.000	16.156	36.340	52.496	-21.504	74.000

Average Detector

--

Vertical

Peak Detector

5500.000	6.275	37.590	43.865	-30.135	74.000
11000.000	16.889	36.310	53.199	-20.801	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5600MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5600.000	4.131	39.110	43.241	-30.759	74.000
11200.000	16.946	35.730	52.676	-21.324	74.000

Average Detector

--

Vertical

Peak Detector

5600.000	5.717	39.030	44.747	-29.253	74.000
11200.000	18.016	35.440	53.456	-20.544	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band)(5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5700.000	4.627	38.320	42.947	-31.053	74.000
11400.000	16.623	36.030	52.654	-21.346	74.000

Average Detector

--

Vertical

Peak Detector

5700.000	5.983	36.860	42.842	-31.158	74.000
11400.000	17.231	36.100	53.332	-20.668	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5745MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5745.000	4.656	39.150	43.807	-30.193	74.000
11490.000	17.196	34.600	51.797	-22.203	74.000

Average Detector

--

Vertical

Peak Detector

5745.000	5.988	39.800	45.789	-28.211	74.000
11490.000	18.124	35.750	53.875	-20.125	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5785MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5785.000	4.663	37.100	41.763	-32.237	74.000
11570.000	16.899	34.100	50.999	-23.001	74.000

Average Detector

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Vertical

Peak Detector

5785.000	5.981	38.210	44.191	-29.809	74.000
11570.000	17.788	35.800	53.588	-20.412	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5825MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5825.000	4.813	37.340	42.154	-31.846	74.000
11650.000	16.325	35.160	51.486	-22.514	74.000

Average Detector

--

Vertical

Peak Detector

5825.000	6.007	38.610	44.617	-29.383	74.000
11650.000	17.441	35.020	52.462	-21.538	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5190.000	3.196	39.530	42.727	-31.273	74.000
10380.000	13.081	38.970	52.051	-21.949	74.000

Average Detector

--

Vertical

Peak Detector

5190.000	5.366	39.130	44.497	-29.503	74.000
10380.000	13.938	38.020	51.958	-22.042	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5230MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5230.000	3.380	42.070	45.449	-28.551	74.000
10640.000	14.790	39.020	53.810	-20.190	74.000

Average Detector

--

Vertical

Peak Detector

5230.000	5.506	43.830	49.335	-24.665	74.000
10640.000	15.183	38.140	53.323	-20.677	74.000

Average Detector

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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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5270.000	3.662	40.230	43.892	-30.108	74.000
10540.000	14.241	36.900	51.141	-22.859	74.000

Average Detector

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Vertical

Peak Detector

5270.000	5.647	41.220	46.867	-27.133	74.000
10540.000	14.919	36.140	51.059	-22.941	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5310.000	3.844	38.150	41.995	-32.005	74.000
10620.000	14.703	37.540	52.243	-21.757	74.000

Average Detector

--

Vertical

Peak Detector

5310.000	5.742	38.440	44.182	-29.818	74.000
10620.000	15.050	38.050	53.100	-20.900	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5510.000	4.809	38.120	42.929	-31.071	74.000
11020.000	16.269	37.280	53.548	-20.452	74.000

Average Detector

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Vertical

Peak Detector

5510.000	6.258	39.710	45.968	-28.032	74.000
11020.000	17.019	36.150	53.169	-20.831	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5590MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5590.000	4.168	39.430	43.598	-30.402	74.000
11180.000	16.892	37.030	53.922	-20.078	74.000

Average Detector

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Vertical

Peak Detector

5590.000	5.755	38.620	44.375	-29.625	74.000
11180.000	17.916	35.230	53.146	-20.854	74.000

Average Detector

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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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5670.000	4.483	37.770	42.253	-31.747	74.000
11340.000	16.558	35.210	51.767	-22.233	74.000

Average Detector

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Vertical

Peak Detector

5670.000	5.906	37.410	43.316	-30.684	74.000
11340.000	17.317	35.360	52.677	-21.323	74.000

Average Detector

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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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5755.000	4.658	39.810	44.468	-29.532	74.000
11510.000	17.214	35.610	52.824	-21.176	74.000

Average Detector

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Vertical

Peak Detector

5755.000	5.986	37.590	43.577	-30.423	74.000
11510.000	18.171	35.810	53.981	-20.019	74.000

Average Detector

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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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5795MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

5795.000	4.667	36.810	41.477	-32.523	74.000
11590.000	16.791	35.490	52.280	-21.720	74.000

Average Detector

--

Vertical

Peak Detector

5795.000	5.978	38.920	44.898	-29.102	74.000
11590.000	17.657	35.030	52.686	-21.314	74.000

Average Detector

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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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Receive 802.11n-20BW_21.6Mbps(2.4GHz Band) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
375.320	-1.209	35.005	33.796	-12.204	46.000
499.480	0.048	32.612	32.660	-13.340	46.000
625.580	1.770	37.037	38.807	-7.193	46.000
749.740	3.320	32.266	35.586	-10.414	46.000
875.840	5.271	33.288	38.559	-7.441	46.000
1000.000	9.119	27.836	36.955	-17.045	54.000
Vertical:					
161.920	-6.696	41.317	34.622	-8.878	43.500
375.320	-2.029	29.990	27.961	-18.039	46.000
499.480	-0.852	33.403	32.551	-13.449	46.000
625.580	-2.600	30.245	27.645	-18.355	46.000
749.740	2.510	30.176	32.686	-13.314	46.000
967.020	8.071	22.130	30.201	-23.799	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Receive 802.11n-40BW_45Mbps(2.4GHz Band) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
183.260	-12.294	43.151	30.857	-12.643	43.500
375.320	-1.209	35.063	33.854	-12.146	46.000
499.480	0.048	32.051	32.099	-13.901	46.000
625.580	1.770	37.277	39.047	-6.953	46.000
875.840	5.271	32.755	38.026	-7.974	46.000
1000.000	9.119	27.029	36.148	-17.852	54.000
Vertical:					
161.920	-6.696	41.635	34.940	-8.560	43.500
249.220	-7.634	36.642	29.008	-16.992	46.000
499.480	-0.852	36.111	35.259	-10.741	46.000
749.740	2.510	31.510	34.020	-11.980	46.000
920.460	5.517	23.319	28.836	-17.164	46.000
1000.000	4.329	24.293	28.622	-25.378	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
375.320	-1.209	35.518	34.309	-11.691	46.000
499.480	0.048	32.036	32.084	-13.916	46.000
625.580	1.770	37.205	38.975	-7.025	46.000
749.740	3.320	31.853	35.173	-10.827	46.000
875.840	5.271	33.492	38.763	-7.237	46.000
1000.000	9.119	26.300	35.419	-18.581	54.000
Vertical:					
159.980	-6.185	39.499	33.314	-10.186	43.500
249.220	-7.634	36.684	29.050	-16.950	46.000
375.320	-2.029	29.890	27.861	-18.139	46.000
499.480	-0.852	34.813	33.961	-12.039	46.000
749.740	2.510	31.334	33.844	-12.156	46.000
968.960	8.191	22.618	30.809	-23.191	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
30.000	2.120	31.610	33.730	-6.270	40.000
86.260	-9.948	43.004	33.056	-6.944	40.000
375.320	-1.209	34.546	33.337	-12.663	46.000
499.480	0.048	31.493	31.541	-14.459	46.000
625.580	1.770	36.562	38.332	-7.668	46.000
875.840	5.271	32.752	38.023	-7.977	46.000
Vertical:					
161.920	-6.696	39.843	33.148	-10.352	43.500
375.320	-2.029	31.817	29.788	-16.212	46.000
499.480	-0.852	34.225	33.373	-12.627	46.000
625.580	-2.600	30.632	28.032	-17.968	46.000
749.740	2.510	30.784	33.294	-12.706	46.000
967.020	8.071	21.168	29.239	-24.761	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
88.200	-9.696	42.257	32.561	-10.939	43.500
375.320	-1.209	34.926	33.717	-12.283	46.000
625.580	1.770	37.164	38.934	-7.066	46.000
749.740	3.320	30.973	34.293	-11.707	46.000
875.840	5.271	32.889	38.160	-7.840	46.000
1000.000	9.119	27.549	36.668	-17.332	54.000
Vertical:					
163.860	-7.204	39.302	32.098	-11.402	43.500
375.320	-2.029	30.320	28.291	-17.709	46.000
499.480	-0.852	33.505	32.653	-13.347	46.000
749.740	2.510	32.041	34.551	-11.449	46.000
965.080	7.932	22.297	30.229	-23.771	54.000
1000.000	4.329	22.697	27.026	-26.974	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Receive 802.11n-20BW_21.6Mbps(5GHz Band) (5785MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
299.660	-3.585	37.455	33.870	-12.130	46.000
456.800	-0.067	34.698	34.631	-11.369	46.000
586.780	3.436	36.442	39.878	-6.122	46.000
749.740	3.320	34.862	38.182	-7.818	46.000
850.620	5.982	33.161	39.143	-6.857	46.000
1000.000	9.119	31.632	40.751	-13.249	54.000
Vertical:					
125.060	-4.046	37.425	33.379	-10.121	43.500
499.480	-0.852	32.954	32.102	-13.898	46.000
687.660	2.444	28.984	31.428	-14.572	46.000
749.740	2.510	32.899	35.409	-10.591	46.000
846.740	2.601	33.543	36.144	-9.856	46.000
1000.000	4.329	32.583	36.912	-17.088	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
86.260	-9.948	42.873	32.925	-7.075	40.000
375.320	-1.209	35.477	34.268	-11.732	46.000
499.480	0.048	30.556	30.604	-15.396	46.000
749.740	3.320	30.717	34.037	-11.963	46.000
875.840	5.271	32.115	37.386	-8.614	46.000
1000.000	9.119	27.870	36.989	-17.011	54.000
Vertical:					
161.920	-6.696	42.009	35.314	-8.186	43.500
375.320	-2.029	29.130	27.101	-18.899	46.000
499.480	-0.852	33.198	32.346	-13.654	46.000
625.580	-2.600	29.431	26.831	-19.169	46.000
749.740	2.510	31.613	34.123	-11.877	46.000
968.960	8.191	22.407	30.598	-23.402	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
88.200	-9.696	41.771	32.075	-11.425	43.500
375.320	-1.209	35.171	33.962	-12.038	46.000
625.580	1.770	37.418	39.188	-6.812	46.000
749.740	3.320	31.427	34.747	-11.253	46.000
875.840	5.271	31.923	37.194	-8.806	46.000
1000.000	9.119	27.326	36.445	-17.555	54.000
Vertical:					
161.920	-6.696	40.749	34.054	-9.446	43.500
375.320	-2.029	29.546	27.517	-18.483	46.000
499.480	-0.852	34.949	34.097	-11.903	46.000
749.740	2.510	27.515	30.025	-15.975	46.000
930.160	6.477	22.359	28.836	-17.164	46.000
1000.000	4.329	24.774	29.103	-24.897	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5590MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
30.000	2.120	31.927	34.047	-5.953	40.000
375.320	-1.209	34.196	32.987	-13.013	46.000
499.480	0.048	32.266	32.314	-13.686	46.000
625.580	1.770	37.064	38.834	-7.166	46.000
875.840	5.271	33.484	38.755	-7.245	46.000
1000.000	9.119	27.856	36.975	-17.025	54.000
Vertical:					
163.860	-7.204	41.312	34.108	-9.392	43.500
375.320	-2.029	30.403	28.374	-17.626	46.000
499.480	-0.852	34.090	33.238	-12.762	46.000
749.740	2.510	28.621	31.131	-14.869	46.000
875.840	1.621	26.714	28.335	-17.665	46.000
967.020	8.071	22.417	30.488	-23.512	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard Sensor
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Receive 802.11n-40BW_45Mbps(5GHz Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
144.460	-10.377	42.152	31.775	-11.725	43.500
255.040	-5.098	38.500	33.402	-12.598	46.000
456.800	-0.067	34.433	34.366	-11.634	46.000
749.740	3.320	34.479	37.799	-8.201	46.000
850.620	5.982	32.631	38.613	-7.387	46.000
1000.000	9.119	31.519	40.638	-13.362	54.000
Vertical:					
181.320	-9.512	42.047	32.535	-10.965	43.500
202.660	-7.739	44.509	36.770	-6.730	43.500
499.480	-0.852	33.648	32.796	-13.204	46.000
716.760	-0.653	33.685	33.032	-12.968	46.000
782.720	3.035	35.895	38.930	-7.070	46.000
1000.000	4.329	33.388	37.717	-16.283	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. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

4. EMI Reduction Method During Compliance Testing

No modification was made during testing.