

FCC Test Report (Class II Permissive Change)

Product Name	WiFi abgn module
Model No	RF-WRN
FCC ID.	VTV-RFWRN

Applicant	TSC Auto ID Technology Co., Ltd.
Address	No.35, Sec.2, Ligong 1st Rd., Wujie Town, I-Lan County 26841, Taiwan

Date of Receipt	June 23, 2016
Issue Date	Nov. 07, 2016
Report No.	1660496R-RFUSP26V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

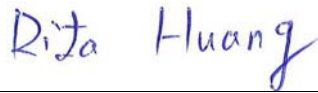
Issue Date: Nov. 07, 2016

Report No.: 1660496R-RFUSP26V00


Quietek

a  DEKRA company


Product Name	WiFi abgn module
Applicant	TSC Auto ID Technology Co., Ltd.
Address	No.35, Sec.2, Ligong 1st Rd., Wujie Town, I-Lan County 26841, Taiwan
Manufacturer	TSC Auto ID Technology Co., Ltd.
Model No.	RF-WRN
FCC ID.	VTV-RFWRN
EUT Rated Voltage	AC 100-240V, 50/60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	TSC
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2015 ANSI C63.4: 2014, ANSI C63.10: 2013 KDB 558074 D01 DTS Meas Guidance v03r05
Test Result	Complied

Documented By : 

 (Senior Adm. Specialist / Rita Huang)

Tested By : 

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Approved By : 

 (Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	WiFi abgn module
Trade Name	TSC
Model No.	RF-WRN
FCC ID.	VTV-RFWRN
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW
Number of Channels	802.11b/g/n-20MHz: 11,
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
Power Adapter (1)	MFR: CWT, M/N: 2AAJ012F US Input: AC 100-240V~50/60Hz, 0.35A Output: 12.0V $\overline{=}$ 1.0A Cable Out: Non-Shielded, 1.15m
Power Adapter (2)	MFR: BILLION, M/N: BA018-120100CXX Input: AC 100-240V~50/60Hz, 0.5A Output: 12.0V $\overline{=}$ 1.0A Cable Out: Non-Shielded, 1.60m
Power Adapter (3)	MFR: BILLION, M/N: BA018-120100AXU Input: AC 100-240V~50/60Hz, 0.5A Output: 12.0V $\overline{=}$ 1.0A Cable Out: Non-Shielded, 1.60m
Power Adapter (4)	MFR: Atech OEM Inc, M/N: C20C-1220AD0-S0 Input: AC 36-60V Output: 12V $\overline{=}$ 2A Cable In: Non-Shielded, 1.05m Cable Out: Non-Shielded, 1.80m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	M.gear	C1721-510007-A(SRF2016788)	PIFA	1.67 dBi for 2.4 GHz

Note:

1. The antenna of EUT conforms 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		

Note:

1. This device is an WiFi abgn module with a built-in 2.4GHz and 5GHz WLAN transceiver, this report for 2.4GHz WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps 、 802.11g is 6Mbps 、 802.11n(20M-BW) is 7.2Mbps)
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
6. This is to request a Class II permissive change for FCC ID: VTV-RFWRN, originally granted on 09/23/2016

The major change filed under this application is:

Change #1: Implementation in new platform

The platform is including six Model number.

The difference of each model for Barcode Printer is shown as below:

Part no.	Configuration
PR20, GR20, CN-20, BP-20, TSC-20	non-TSC logo
Alpha-2R	w-TSC logo
Product name: Barcode Printer	

Change #2: Change the layout of SPI & UART interface board, RF circuit and layout are the same as original.

7. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

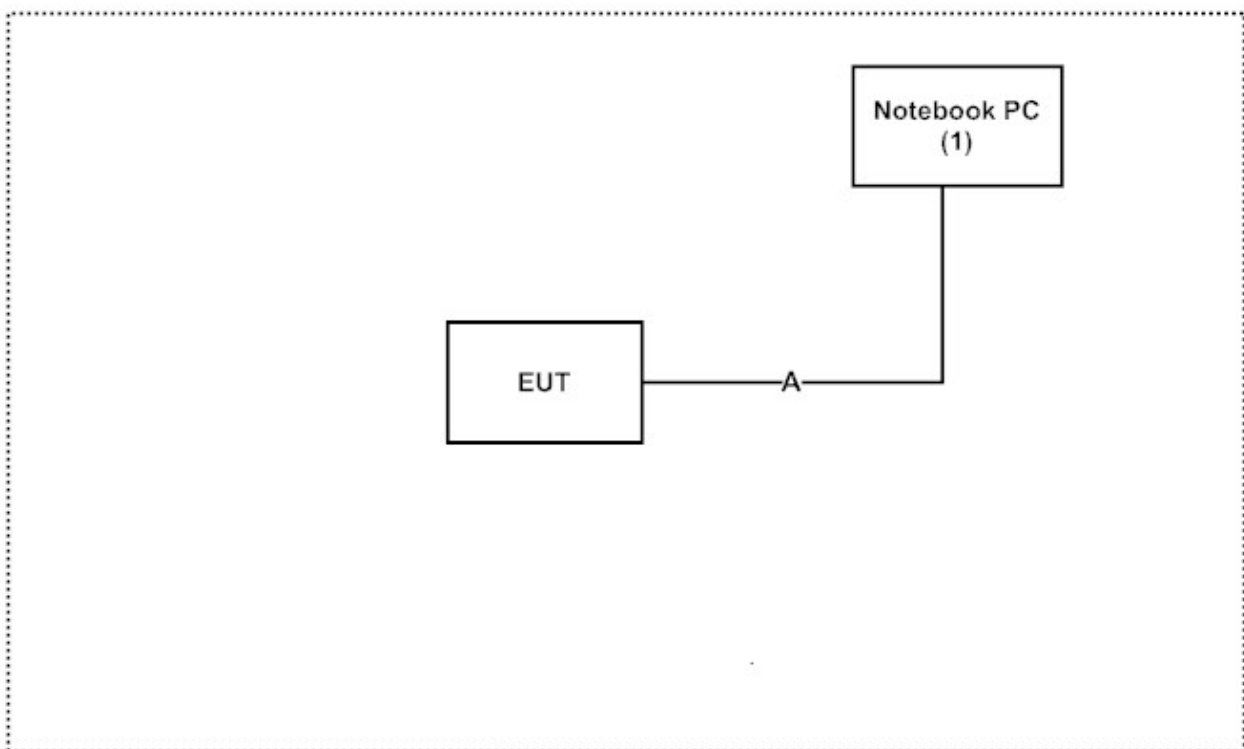
1.3. Tested System Details

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	Notebook PC	DELL	Latitude E5440	74BTK32	Non-Shielded, 0.8m

Signal Cable Type	Signal cable Description
A	USB Cable
	Shielded, 1.10m, with one ferrite core bonded.

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute software “Diagnostic V1.63” on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous Transmit.
5. 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/chinese/about/certificates.aspx?bval=5>
 The address and introduction of Quietek Corporation's laboratories can be founded in our Web site: <http://www.quietek.com/>

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

Site Name: Quietek Corporation
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 Linkou Dist. New Taipei City 24451,
 Taiwan, R.O.C.
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 E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

1.7. List of Test Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	Agilent	N9010A	MY48030495	2016/7/22	2017/7/21
X	Power Meter	Anritsu	ML2495A	6K00003357	2016/6/23	2017/6/22
X	EMI Test Receiver	R&S	ESCS 30	100369	2016/10/13	2017/10/12
X	LISN	R&S	ESH3-Z5	836679/017	2016/1/7	2017/1/6
X	LISN	R&S	ENV216	100097	2016/1/7	2017/1/6
X	Coaxial Cable	QTK(Arnist)	RG 400	LC018-RG	2016/6/25	2017/6/24

For Radiated measurements /Site3/CB8

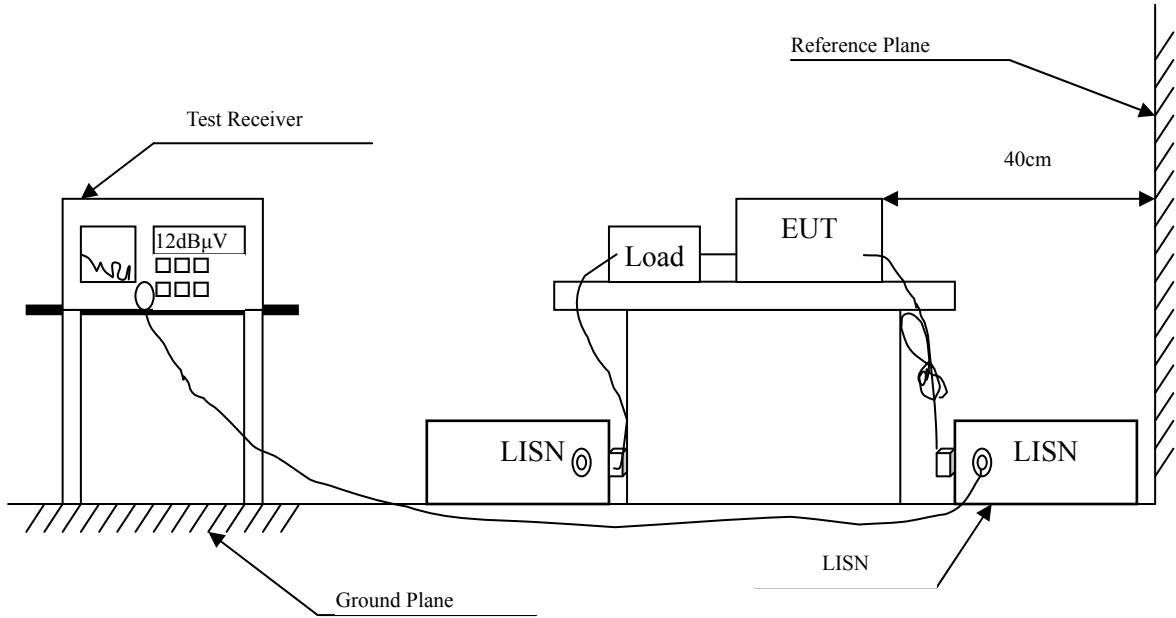
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSP40	100170	2016/1/5	2017/1/4
	Loop Antenna	Teseq	HLA6121	37133	2016/3/18	2017/3/17
X	Bi-Log Antenna	Schaffner Chase	CBL6112B	2707	2016/9/10	2017/9/9
X	Horn Antenna	ETS-Lindgren	3117	00135205	2016/4/6	2017/4/5
X	Horn Antenna	Schwarzbeck	BBHA9170	9170430	2016/1/11	2017/1/10
X	Pre-Amplifier	QTK	AP/0100A	CHM/0901069	2016/6/28	2017/6/27
X	Pre-Amplifier	EMCI	EMC012630SE	980210	2016/1/27	2017/1/26
X	Pre-Amplifier	NARDA WE	DBL-1840N506	013	2016/9/30	2017/9/29
X	Filter	MicroTRON	BRM50701	019	2015/10/20	2016/10/19
X	Filter	Microwave Circuits	N0257881	36681	2015/12/7	2016/12/6
X	EMI Test Receiver	R&S	ESR26	101385	2016/9/29	2017/9/28
X	Coaxial Cable	QTK(Arnist)	SUCOFLEX 106	L1606-015C	2016/6/25	2017/6/24
X	EMI Test Receiver	R&S	ESCS 30	838251/001	2016/7/21	2017/7/20
X	Coaxial Cable	QTK(Arnist)	RG 214	LC003-RG	2016/6/21	2017/6/20
X	Coaxial signal switch	Anritsu	MP59B	6201415889	2016/6/16	2017/6/15

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : Quietek EMI 2.0 V2.1.113

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) 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

2.3. 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: 2014 on conducted measurement.

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

2.4. Uncertainty

± 2.26 dB

2.5. Test Result of Conducted Emission

Product : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 1					
Quasi-Peak					
0.166	9.683	37.620	47.303	-18.240	65.543
0.392	9.672	33.440	43.112	-15.974	59.086
0.705	9.684	15.360	25.044	-30.956	56.000
0.986	9.701	20.010	29.711	-26.289	56.000
2.326	9.751	19.000	28.751	-27.249	56.000
12.283	9.922	17.220	27.142	-32.858	60.000
Average					
0.166	9.683	20.940	30.623	-24.920	55.543
0.392	9.672	23.270	32.942	-16.144	49.086
0.705	9.684	7.900	17.584	-28.416	46.000
0.986	9.701	17.080	26.781	-19.219	46.000
2.326	9.751	7.930	17.681	-28.319	46.000
12.283	9.922	12.370	22.292	-27.708	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 : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 2					
Quasi-Peak					
0.170	9.735	37.040	46.775	-18.654	65.429
0.248	9.738	27.600	37.338	-25.862	63.200
0.357	9.741	27.770	37.511	-22.575	60.086
0.720	9.753	12.750	22.503	-33.497	56.000
1.759	9.796	12.790	22.586	-33.414	56.000
11.830	10.027	12.580	22.607	-37.393	60.000
Average					
0.170	9.735	31.810	41.545	-13.884	55.429
0.248	9.738	24.960	34.698	-18.502	53.200
0.357	9.741	12.040	21.781	-28.305	50.086
0.720	9.753	0.720	10.473	-35.527	46.000
1.759	9.796	5.410	15.206	-30.794	46.000
11.830	10.027	4.010	14.037	-35.963	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 : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - BILLION / BA018-120100CXX
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 1					
Quasi-Peak					
0.252	9.678	28.220	37.898	-25.188	63.086
0.345	9.671	23.730	33.401	-27.028	60.429
0.451	9.674	33.750	43.424	-13.976	57.400
4.134	9.778	8.670	18.448	-37.552	56.000
6.627	9.830	15.640	25.470	-34.530	60.000
21.744	10.029	5.380	15.409	-44.591	60.000
Average					
0.252	9.678	21.050	30.728	-22.358	53.086
0.345	9.671	14.570	24.241	-26.188	50.429
0.451	9.674	24.300	33.974	-13.426	47.400
4.134	9.778	1.120	10.898	-35.102	46.000
6.627	9.830	4.710	14.540	-35.460	50.000
21.744	10.029	1.060	11.089	-38.911	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 : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - BILLION / BA018-120100CXX
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 2					
Quasi-Peak					
0.170	9.735	21.950	31.685	-33.744	65.429
0.463	9.744	30.290	40.034	-17.023	57.057
0.576	9.748	14.810	24.558	-31.442	56.000
0.802	9.755	8.600	18.355	-37.645	56.000
1.224	9.769	8.660	18.429	-37.571	56.000
20.759	10.214	11.450	21.664	-38.336	60.000
Average					
0.170	9.735	15.630	25.365	-30.064	55.429
0.463	9.744	24.780	34.524	-12.533	47.057
0.576	9.748	7.240	16.988	-29.012	46.000
0.802	9.755	3.820	13.575	-32.425	46.000
1.224	9.769	2.480	12.249	-33.751	46.000
20.759	10.214	5.840	16.054	-33.946	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 : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - BILLION / BA018-120100AXU
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 1					
Quasi-Peak					
0.283	9.678	16.130	25.807	-36.393	62.200
0.404	9.673	22.700	32.373	-26.370	58.743
0.474	9.675	28.850	38.525	-18.218	56.743
0.802	9.695	5.350	15.045	-40.955	56.000
6.658	9.831	15.280	25.111	-34.889	60.000
18.459	10.005	7.030	17.035	-42.965	60.000
Average					
0.283	9.678	9.570	19.247	-32.953	52.200
0.404	9.673	17.750	27.423	-21.320	48.743
0.474	9.675	22.710	32.385	-14.358	46.743
0.802	9.695	1.230	10.925	-35.075	46.000
6.658	9.831	4.690	14.521	-35.479	50.000
18.459	10.005	1.830	11.835	-38.165	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 : WiFi abgn module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)
 - BILLION / BA018-120100AXU
 Test Date : 2016/10/28

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 2					
Quasi-Peak					
0.353	9.741	16.800	26.541	-33.659	60.200
0.478	9.745	27.520	37.265	-19.364	56.629
0.716	9.753	12.590	22.343	-33.657	56.000
1.002	9.762	13.290	23.052	-32.948	56.000
7.334	9.920	10.480	20.400	-39.600	60.000
12.474	10.033	11.660	21.693	-38.307	60.000
Average					
0.353	9.741	8.320	18.061	-32.139	50.200
0.478	9.745	22.050	31.795	-14.834	46.629
0.716	9.753	6.650	16.403	-29.597	46.000
1.002	9.762	8.020	17.782	-28.218	46.000
7.334	9.920	4.970	14.890	-35.110	50.000
12.474	10.033	7.300	17.333	-32.667	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. Peak Power Output

3.1. Test Setup



3.2. Limits

The maximum peak power shall be less 1 Watt.

3.3. Test Procedure

The EUT was tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 D01 DTS Meas Guidance v03r04 section 9.1.2 PKPM1 Peak power meter method.

3.4. Uncertainty

± 1.19 dB

3.5. Test Result of Peak Power Output

Product : WiFi abgn module
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)
Test Date : 2016/10/26

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11			
		Measurement Level (dBm)						
01	2412	13.81	--	--	--	16.97	<30dBm	Pass
02	2417	16.71	--	--	--	19.52	<30dBm	Pass
06	2437	16.85	16.72	16.58	16.45	19.68	<30dBm	Pass
10	2457	16.75	--	--	--	19.55	<30dBm	Pass
11	2462	13.72	--	--	--	16.63	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

Product : WiFi abgn module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)
 Test Date : 2016/10/26

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54			
		Measurement Level (dBm)										
01	2412	10.81	--	--	--	--	--	--	--	15.45	<30dBm	Pass
02	2417	16.38	--	--	--	--	--	--	--	20.95	<30dBm	Pass
06	2437	16.52	16.27	16.03	15.78	15.54	15.32	15.08	14.82	21.08	<30dBm	Pass
10	2457	16.31	--	--	--	--	--	--	--	20.92	<30dBm	Pass
11	2462	6.99	--	--	--	--	--	--	--	12.23	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

Product : WiFi abgn module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
 Test Date : 2016/10/26

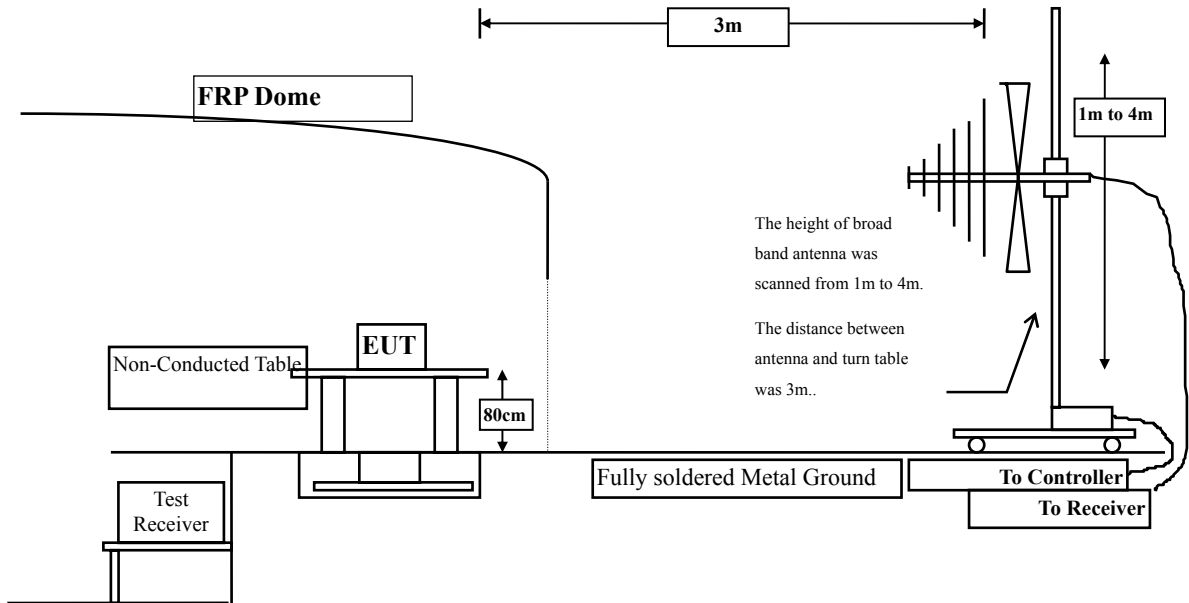
Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2			
		Measurement Level (dBm)										
01	2412	9.11	--	--	--	--	--	--	--	14.11	<30dBm	Pass
02	2417	16.88	--	--	--	--	--	--	--	20.97	<30dBm	Pass
06	2437	17.05	16.78	16.54	16.32	16.04	15.85	15.56	15.33	21.37	<30dBm	Pass
10	2457	16.92	--	--	--	--	--	--	--	20.99	<30dBm	Pass
11	2462	6.17	--	--	--	--	--	--	--	10.37	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

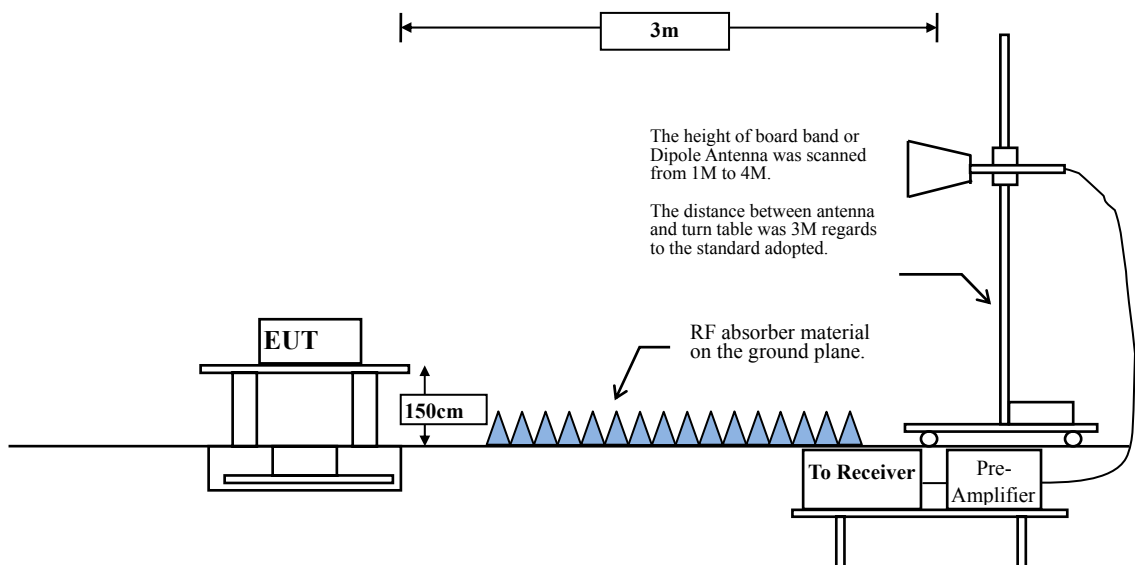
4. Radiated Emission

4.1. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB 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	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 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 C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~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 from 9kHz - 10th Harmonic of fundamental was investigated.

4.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

4.5. Test Result of Radiated Emission

Product : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4824.000	1.497	46.320	47.817	-26.183	74.000
7236.000	5.472	40.700	46.172	-27.828	74.000
9648.000	6.722	40.370	47.093	-26.907	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	1.905	45.700	47.605	-26.395	74.000
7236.000	5.971	39.950	45.921	-28.079	74.000
9648.000	7.259	39.500	46.760	-27.240	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 : WiFi abgn module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz) - CWT / 2AAJ012F US
Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4874.000	0.976	50.150	51.127	-22.873	74.000
7311.000	5.489	43.760	49.250	-24.750	74.000
9748.000	7.246	39.840	47.085	-26.915	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	1.432	48.860	50.292	-23.708	74.000
7311.000	6.066	43.590	49.657	-24.343	74.000
9748.000	7.882	38.810	46.692	-27.308	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
------------------	-------------------------	--------------------------------	--------------------------------------	--------------	-----------------------

Horizontal

Peak Detector:

4924.000	35.257	47.830	49.163	-24.837	74.000
7386.000	41.660	40.330	46.978	-27.022	74.000
9848.000	42.300	39.800	48.106	-25.894	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	1.947	46.160	48.107	-25.893	74.000
7386.000	7.454	40.020	47.474	-26.526	74.000
9848.000	9.143	39.570	48.712	-25.288	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4824.000	1.497	42.030	43.527	-30.473	74.000
7236.000	5.472	39.180	44.652	-29.348	74.000
9648.000	6.722	39.260	45.983	-28.017	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	1.905	40.750	42.655	-31.345	74.000
7236.000	5.971	38.930	44.901	-29.099	74.000
9648.000	7.259	38.950	46.210	-27.790	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4874.000	0.976	43.960	44.937	-29.063	74.000
7311.000	5.489	41.850	47.340	-26.660	74.000
9748.000	7.246	38.850	46.095	-27.905	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	1.432	43.280	44.712	-29.288	74.000
7311.000	6.066	41.240	47.307	-26.693	74.000
9748.000	7.882	39.160	47.042	-26.958	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 : WiFi abgn module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz) - CWT / 2AAJ012F US
Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
------------------	-------------------------	--------------------------------	--------------------------------------	--------------	-----------------------

Horizontal

Peak Detector:

4924.000	1.333	41.020	42.353	-31.647	74.000
7386.000	6.647	38.310	44.958	-29.042	74.000
9848.000	8.306	39.390	47.696	-26.304	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	1.947	40.590	42.537	-31.463	74.000
7386.000	7.454	38.580	46.034	-27.966	74.000
9848.000	9.143	39.460	48.602	-25.398	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
------------------	-------------------------	--------------------------------	--------------------------------------	--------------	-----------------------

Horizontal

Peak Detector:

4824.000	35.550	41.210	42.707	-31.293	74.000
7236.000	40.724	38.830	44.302	-29.698	74.000
9648.000	41.356	39.390	46.113	-27.887	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	1.905	40.990	42.895	-31.105	74.000
7236.000	5.971	39.080	45.051	-28.949	74.000
9648.000	7.259	38.900	46.160	-27.840	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4874.000	0.976	44.040	45.017	-28.983	74.000
7311.000	5.489	40.770	46.260	-27.740	74.000
9748.000	7.246	38.850	46.095	-27.905	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	1.432	42.770	44.202	-29.798	74.000
7311.000	6.066	40.560	46.627	-27.373	74.000
9748.000	7.882	39.940	47.822	-26.178	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 : WiFi abgn module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/27

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

Horizontal

Peak Detector:

4924.000	1.333	40.800	42.133	-31.867	74.000
7386.000	6.647	39.360	46.008	-27.992	74.000
9848.000	8.306	39.370	47.676	-26.324	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	1.947	40.300	42.247	-31.753	74.000
7386.000	7.454	38.100	45.554	-28.446	74.000
9848.000	9.143	39.400	48.542	-25.458	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 : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
Horizontal					
154.160	-8.002	34.859	26.857	-16.643	43.500
266.680	-5.510	48.245	42.735	-3.265	46.000
400.540	0.942	40.740	41.682	-4.318	46.000
674.080	2.713	36.507	39.220	-6.780	46.000
800.180	6.417	30.744	37.161	-8.839	46.000
934.040	6.956	27.695	34.651	-11.349	46.000
Vertical					
266.680	-5.600	41.027	35.427	-10.573	46.000
371.440	-0.310	29.834	29.524	-16.476	46.000
534.400	1.272	28.858	30.130	-15.870	46.000
674.080	0.003	40.475	40.478	-5.522	46.000
800.180	2.637	27.691	30.328	-15.672	46.000
934.040	2.986	29.122	32.108	-13.892	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz) - CWT / 2AAJ012F US
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
Horizontal					
266.680	-5.510	48.442	42.932	-3.068	46.000
381.140	1.386	35.023	36.409	-9.591	46.000
400.540	0.942	38.542	39.484	-6.516	46.000
699.300	2.956	27.788	30.744	-15.256	46.000
800.180	6.417	29.259	35.676	-10.324	46.000
934.040	6.956	27.298	34.254	-11.746	46.000
Vertical					
266.680	-5.600	40.976	35.376	-10.624	46.000
379.200	0.881	28.978	29.859	-16.141	46.000
534.400	1.272	29.922	31.194	-14.806	46.000
697.360	0.691	29.950	30.641	-15.359	46.000
877.780	0.847	30.937	31.784	-14.216	46.000
934.040	2.986	29.566	32.552	-13.448	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)
 - CWT / 2AAJ012F US
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
266.680	-5.510	49.798	44.288	-1.712	46.000
381.140	1.386	37.280	38.666	-7.334	46.000
400.540	0.942	35.600	36.542	-9.458	46.000
701.240	2.759	28.296	31.055	-14.945	46.000
802.120	6.356	29.677	36.033	-9.967	46.000
934.040	6.956	27.805	34.761	-11.239	46.000
Vertical					
266.680	-5.600	40.348	34.748	-11.252	46.000
375.320	0.388	31.079	31.467	-14.533	46.000
604.240	2.199	24.405	26.605	-19.395	46.000
701.240	-0.541	31.936	31.395	-14.605	46.000
802.120	2.966	26.803	29.769	-16.231	46.000
934.040	2.986	29.701	32.687	-13.313	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz) - BILLION / BA018-120100CXX
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
Horizontal					
127.000	-7.362	33.617	26.255	-17.245	43.500
266.680	-5.510	40.731	35.221	-10.779	46.000
462.620	3.589	31.182	34.771	-11.229	46.000
606.180	4.196	29.660	33.856	-12.144	46.000
827.340	7.361	29.746	37.107	-8.893	46.000
996.120	8.107	30.274	38.381	-15.619	54.000
Vertical					
266.680	-5.600	38.677	33.077	-12.923	46.000
400.540	-2.868	33.459	30.591	-15.409	46.000
515.000	0.081	31.431	31.512	-14.488	46.000
600.360	1.302	31.866	33.168	-12.832	46.000
802.120	2.966	30.386	33.352	-12.648	46.000
920.460	3.272	29.569	32.841	-13.159	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz) - BILLION / BA018-120100CXX
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
39.700	-3.625	33.672	30.047	-9.953	40.000
121.180	-7.289	33.742	26.453	-17.047	43.500
266.680	-5.510	40.762	35.252	-10.748	46.000
462.620	3.589	31.018	34.607	-11.393	46.000
606.180	4.196	29.385	33.581	-12.419	46.000
800.180	6.417	30.177	36.594	-9.406	46.000
Vertical					
80.440	-4.848	34.406	29.558	-10.442	40.000
266.680	-5.600	39.151	33.551	-12.449	46.000
381.140	0.816	30.116	30.932	-15.068	46.000
534.400	1.272	32.477	33.749	-12.251	46.000
806.000	3.686	29.943	33.629	-12.371	46.000
968.960	3.936	29.976	33.912	-20.088	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. 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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)
 - BILLION / BA018-120100CXX
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
125.060	-7.335	34.459	27.124	-16.376	43.500
266.680	-5.510	41.095	35.585	-10.415	46.000
406.360	0.628	30.639	31.268	-14.732	46.000
610.060	3.657	29.491	33.148	-12.852	46.000
802.120	6.356	30.254	36.610	-9.390	46.000
1000.000	9.564	29.178	38.742	-15.258	54.000
Vertical					
179.380	-0.824	30.030	29.206	-14.294	43.500
266.680	-5.600	39.270	33.670	-12.330	46.000
377.260	0.647	29.856	30.503	-15.497	46.000
596.480	0.907	29.201	30.108	-15.892	46.000
800.180	2.637	31.708	34.345	-11.655	46.000
943.740	3.383	29.814	33.197	-12.803	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz) - BILLION / BA018-120100AXU
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
Horizontal					
109.540	-7.537	29.151	21.613	-21.887	43.500
169.680	-9.726	35.476	25.750	-17.750	43.500
266.680	-5.510	43.158	37.648	-8.352	46.000
460.680	4.030	28.976	33.006	-12.994	46.000
608.120	3.925	29.613	33.538	-12.462	46.000
854.500	7.380	29.612	36.992	-9.008	46.000
Vertical					
266.680	-5.600	40.972	35.372	-10.628	46.000
388.900	-0.726	29.613	28.887	-17.113	46.000
540.220	2.169	29.353	31.522	-14.478	46.000
687.660	2.292	29.260	31.552	-14.448	46.000
769.140	2.558	30.030	32.588	-13.412	46.000
924.340	3.149	29.376	32.525	-13.475	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz) - BILLION / BA018-120100AXU
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
165.800	-9.915	33.992	24.077	-19.423	43.500
266.680	-5.510	42.936	37.426	-8.574	46.000
544.100	4.373	29.793	34.166	-11.834	46.000
728.400	3.841	30.855	34.695	-11.305	46.000
823.460	7.241	30.386	37.627	-8.373	46.000
998.060	8.838	29.491	38.329	-15.671	54.000
Vertical					
266.680	-5.600	40.656	35.056	-10.944	46.000
381.140	0.816	29.604	30.420	-15.580	46.000
530.520	1.192	30.043	31.235	-14.765	46.000
610.060	2.087	29.964	32.051	-13.949	46.000
773.020	2.405	29.128	31.533	-14.467	46.000
922.400	3.200	29.068	32.268	-13.732	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)
 - BILLION / BA018-120100AXU
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V/m	Margin dB	Limit dB μ V/m
Horizontal					
266.680	-5.510	43.941	38.431	-7.569	46.000
460.680	4.030	29.569	33.599	-12.401	46.000
604.240	4.289	30.209	34.499	-11.501	46.000
714.820	3.801	31.088	34.889	-11.111	46.000
800.180	6.417	30.855	37.272	-8.728	46.000
889.420	6.654	30.531	37.185	-8.815	46.000
Vertical					
266.680	-5.600	41.626	36.026	-9.974	46.000
388.900	-0.726	30.202	29.476	-16.524	46.000
505.300	0.056	29.201	29.257	-16.743	46.000
681.840	1.622	28.802	30.424	-15.576	46.000
800.180	2.637	31.030	33.667	-12.333	46.000
881.660	1.379	29.746	31.125	-14.875	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)
 - Atech OEM Inc / C20C-1220AD0-S0
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
231.760	-8.217	39.484	31.267	-14.733	46.000
266.680	-5.510	40.597	35.087	-10.913	46.000
344.280	-1.814	34.531	32.717	-13.283	46.000
456.800	2.432	29.778	32.210	-13.790	46.000
695.420	3.482	29.655	33.137	-12.863	46.000
934.040	6.956	26.571	33.527	-12.473	46.000
Vertical					
266.680	-5.600	40.017	34.417	-11.583	46.000
344.280	-0.584	32.151	31.567	-14.433	46.000
534.400	1.272	27.231	28.503	-17.497	46.000
681.840	1.622	26.708	28.330	-17.670	46.000
802.120	2.966	29.946	32.912	-13.088	46.000
934.040	2.986	27.747	30.733	-15.267	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)
 - Atech OEM Inc / C20C-1220AD0-S0
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
266.680	-5.510	39.791	34.281	-11.719	46.000
381.140	1.386	27.552	28.938	-17.062	46.000
534.400	3.162	27.264	30.426	-15.574	46.000
687.660	3.302	30.320	33.622	-12.378	46.000
802.120	6.356	26.345	32.701	-13.299	46.000
934.040	6.956	26.659	33.615	-12.385	46.000
Vertical					
266.680	-5.600	39.618	34.018	-11.982	46.000
338.460	-1.640	34.519	32.878	-13.122	46.000
534.400	1.272	27.015	28.287	-17.713	46.000
598.420	1.114	30.479	31.593	-14.407	46.000
685.720	2.254	26.189	28.443	-17.557	46.000
817.640	2.966	28.126	31.092	-14.908	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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : WiFi abgn module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)
 - Atech OEM Inc / C20C-1220AD0-S0
 Test Date : 2016/10/27

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
231.760	-8.217	39.075	30.858	-15.142	46.000
266.680	-5.510	39.791	34.281	-11.719	46.000
557.680	2.511	26.700	29.210	-16.790	46.000
687.660	3.302	30.320	33.622	-12.378	46.000
720.640	3.826	30.830	34.656	-11.344	46.000
802.120	6.356	26.982	33.338	-12.662	46.000
Vertical					
266.680	-5.600	39.618	34.018	-11.982	46.000
338.460	-1.640	34.519	32.878	-13.122	46.000
454.860	-4.096	28.272	24.175	-21.825	46.000
598.420	1.114	30.479	31.593	-14.407	46.000
802.120	2.966	27.796	30.762	-15.238	46.000
935.980	2.820	29.463	32.283	-13.717	46.000

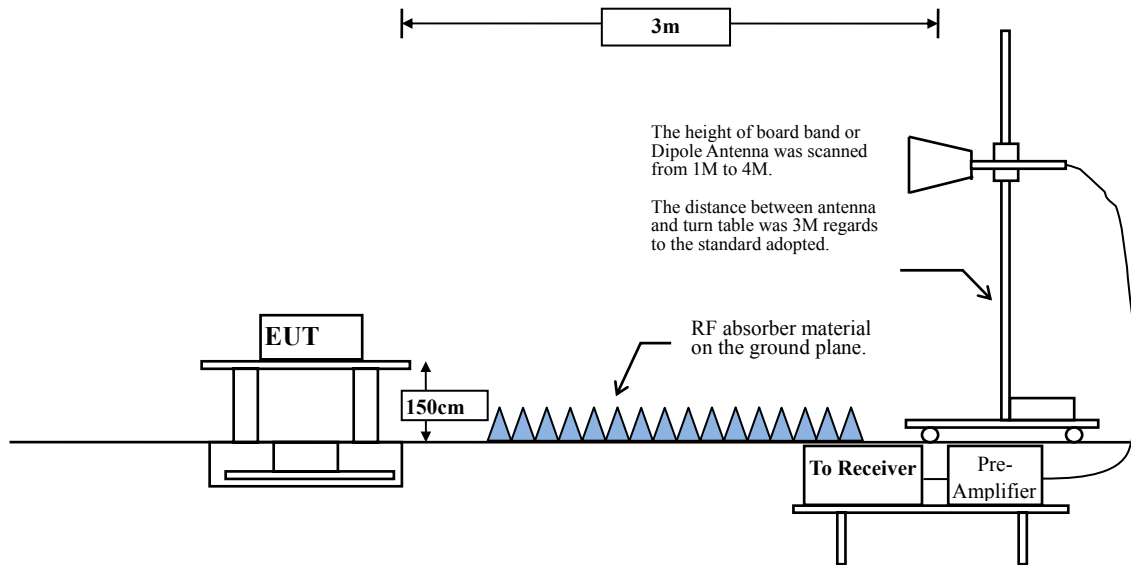
Note:

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.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. Band Edge

5.1. Test Setup

RF Radiated Measurement:



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 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 from 1 meter to 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 C63.10:2013 on radiated measurement.

5.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

5.5. Test Result of Band Edge

Product : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	51.092	50.625	74.00	54.00	Pass
01 (Peak)	2397.102	-0.443	65.723	65.280	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	64.497	64.064	74.00	54.00	Pass
01 (Peak)	2409.855	-0.386	101.565	101.179	--	--	--
01 (Average)	2389.275	-0.469	41.743	41.273	74.00	54.00	Pass
01 (Average)	2390.000	-0.467	41.582	41.115	74.00	54.00	Pass
01 (Average)	2397.102	-0.443	60.752	60.309	--	--	--
01 (Average)	2400.000	-0.432	58.201	57.768	--	--	--
01 (Average)	2409.275	-0.389	97.570	97.181	--	--	--

Figure Channel 01: Horizontal (Peak)

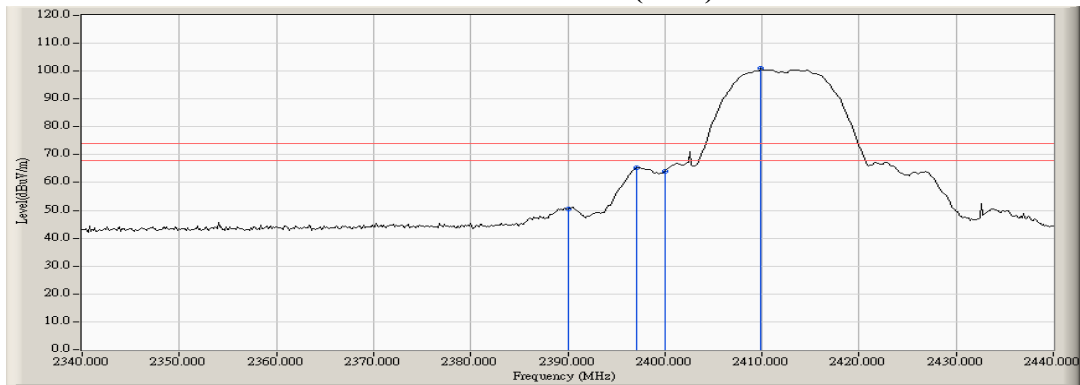
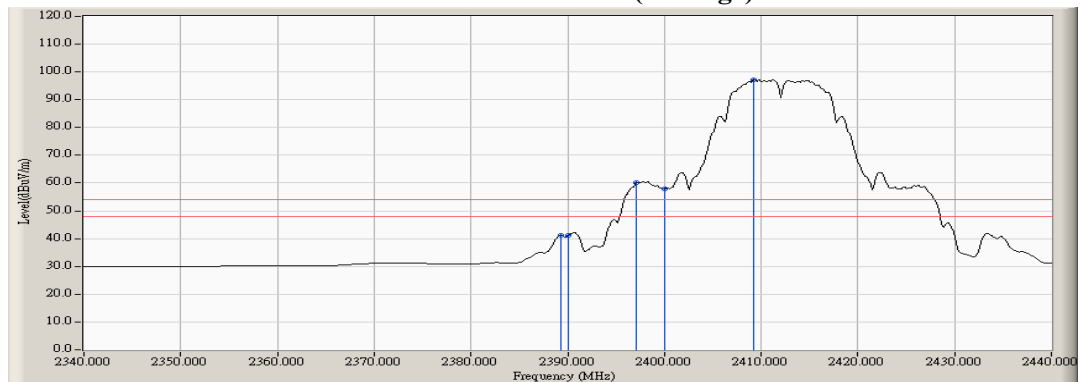


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	50.412	49.945	74.00	54.00	Pass
01 (Peak)	2397.102	-0.443	65.334	64.891	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	64.519	64.086	74.00	54.00	Pass
01 (Peak)	2413.478	-0.369	101.334	100.965	--	--	--
01 (Average)	2390.000	-0.467	41.391	40.924	74.00	54.00	Pass
01 (Average)	2397.681	-0.441	60.859	60.418	--	--	--
01 (Average)	2400.000	-0.432	58.430	57.997	--	--	--
01 (Average)	2414.783	-0.363	98.192	97.829	--	--	--

Figure Channel 01: VERTICAL (Peak)

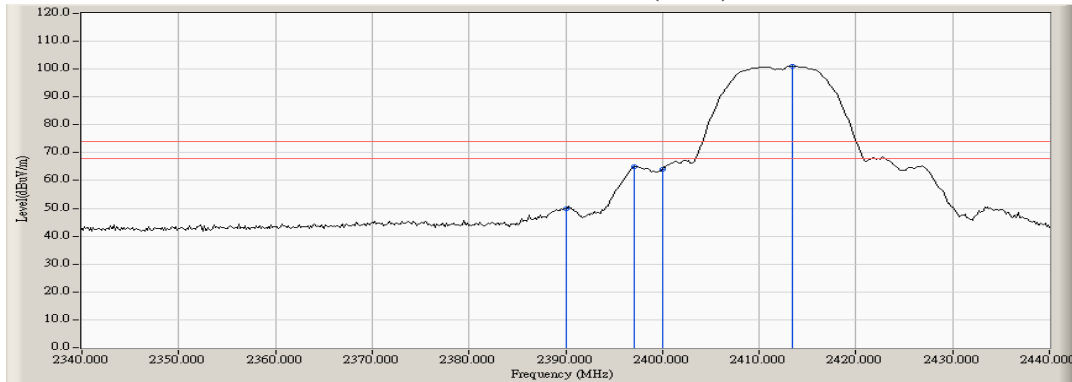
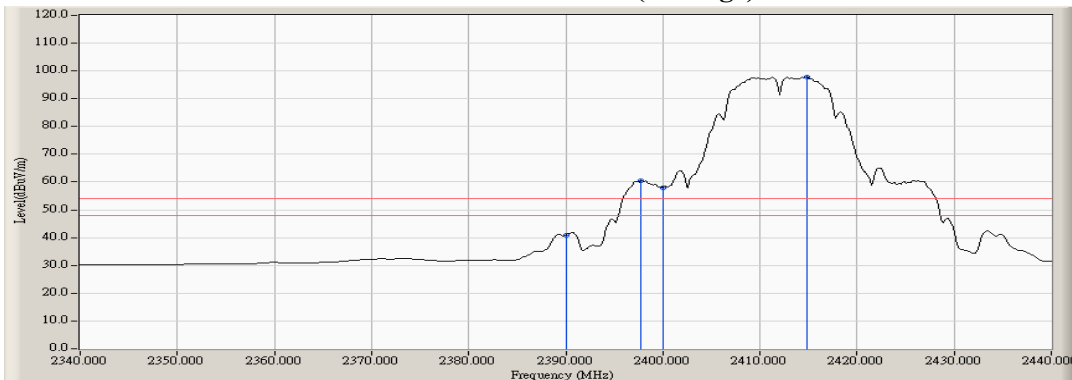


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2417MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	56.942	56.475	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	69.628	69.195	--	--	--
01 (Peak)	2415.600	-0.360	108.068	107.709	--	--	--
01 (Average)	2390.000	-0.467	48.024	47.557	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	61.693	61.260	--	--	--
01 (Average)	2414.200	-0.365	103.912	103.546	--	--	--

Figure Channel 01: Horizontal (Peak)

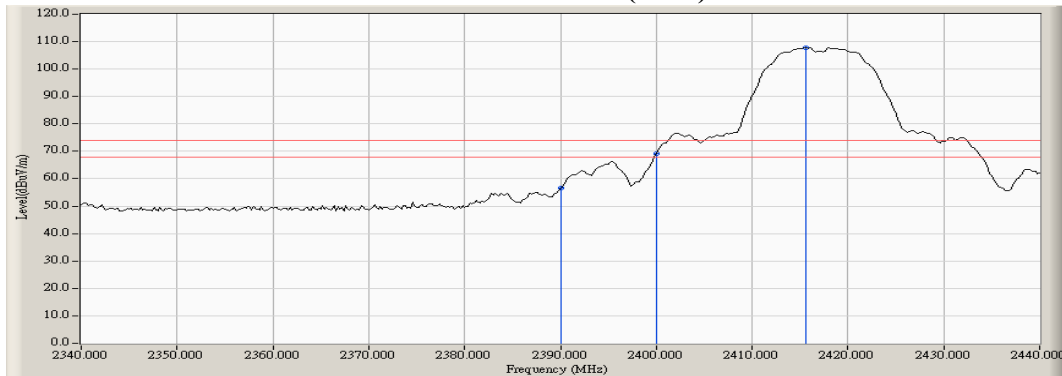
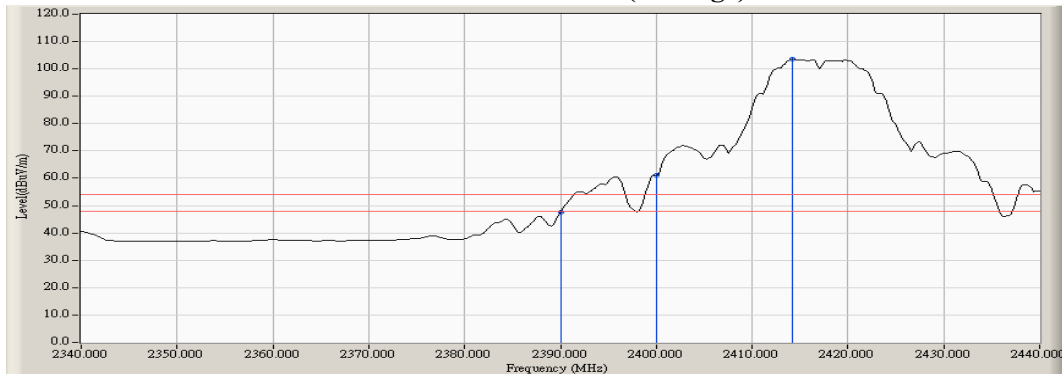


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2417MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	56.949	56.482	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	67.408	66.975	--	--	--
01 (Peak)	2418.600	-0.346	105.960	105.614	--	--	--
01 (Average)	2390.000	-0.467	48.257	47.790	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	59.795	59.362	--	--	--
01 (Average)	2414.400	-0.365	101.752	101.387	--	--	--

Figure Channel 01: VERTICAL (Peak)

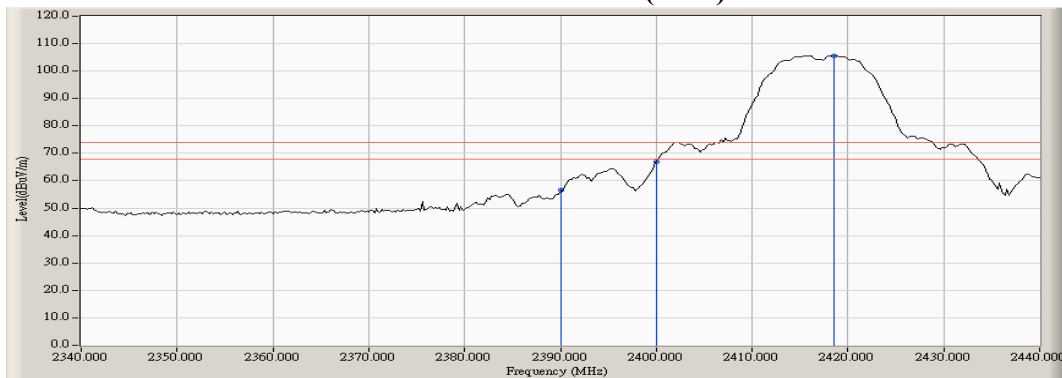
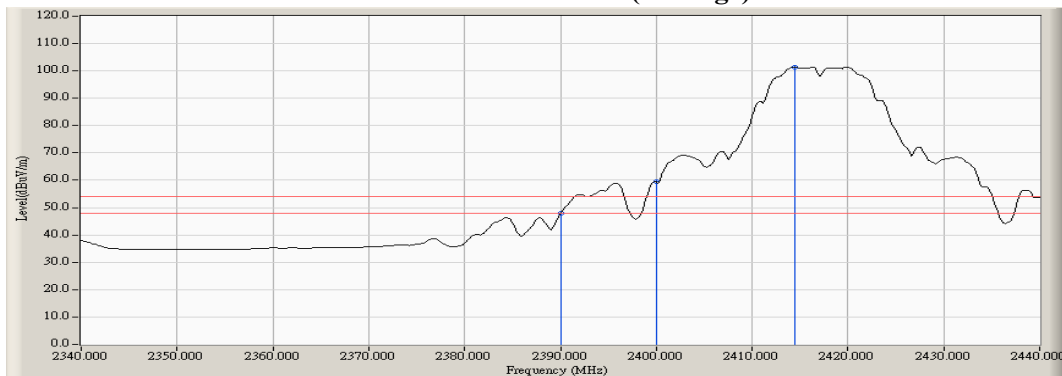


Figure Channel 01: VERTICAL (Average)



- Note:1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2455.500	-0.270	106.322	106.052	--	--	--
01 (Peak)	2483.500	-0.174	56.726	56.552	74.00	54.00	Pass
01 (Average)	2454.300	-0.272	102.692	102.421	--	--	--
01 (Average)	2483.500	-0.174	48.322	48.148	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2455.500	-0.269	104.149	103.879	--	--	--
01 (Peak)	2483.500	-0.174	54.677	54.503	74.00	54.00	Pass
01 (Average)	2459.700	-0.256	99.957	99.702	--	--	--
01 (Average)	2483.500	-0.174	45.390	45.216	74.00	54.00	Pass

Figure Channel 01: VERTICAL (Peak)

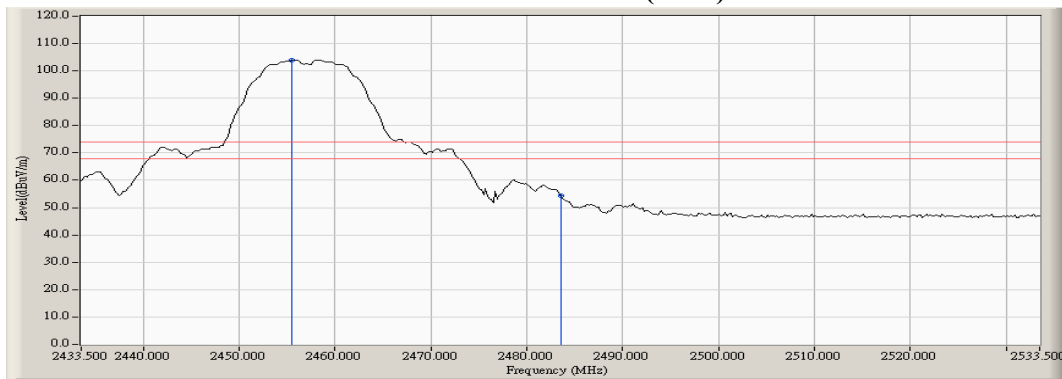


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2463.065	-0.242	99.607	99.365	--	--	--
11 (Peak)	2483.500	-0.174	51.839	51.665	74.00	54.00	Pass
11 (Average)	2462.775	-0.244	96.414	96.170	--	--	--
11 (Average)	2483.500	-0.174	44.699	44.525	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

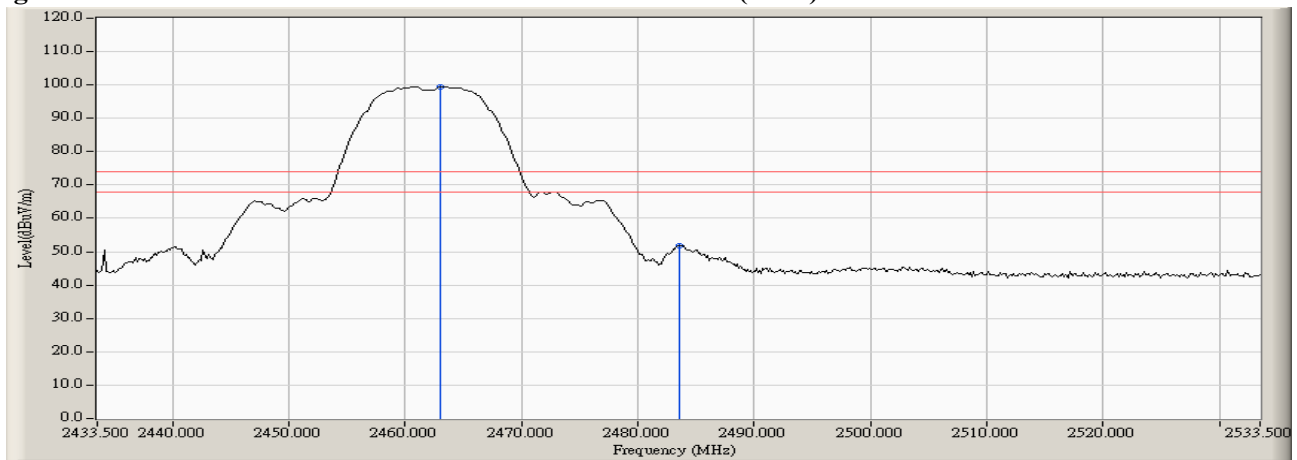
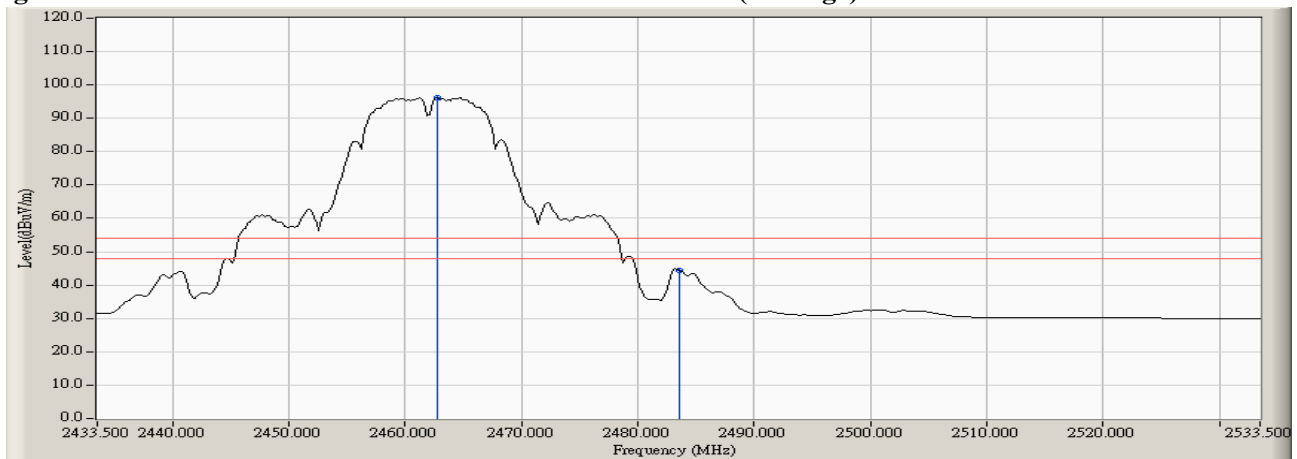


Figure Channel 11: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2460.457	-0.252	100.281	100.029	--	--	--
11 (Peak)	2483.500	-0.174	50.247	50.073	74.00	54.00	Pass
11 (Average)	2459.152	-0.258	97.184	96.927	--	--	--
11 (Average)	2483.500	-0.174	41.655	41.481	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

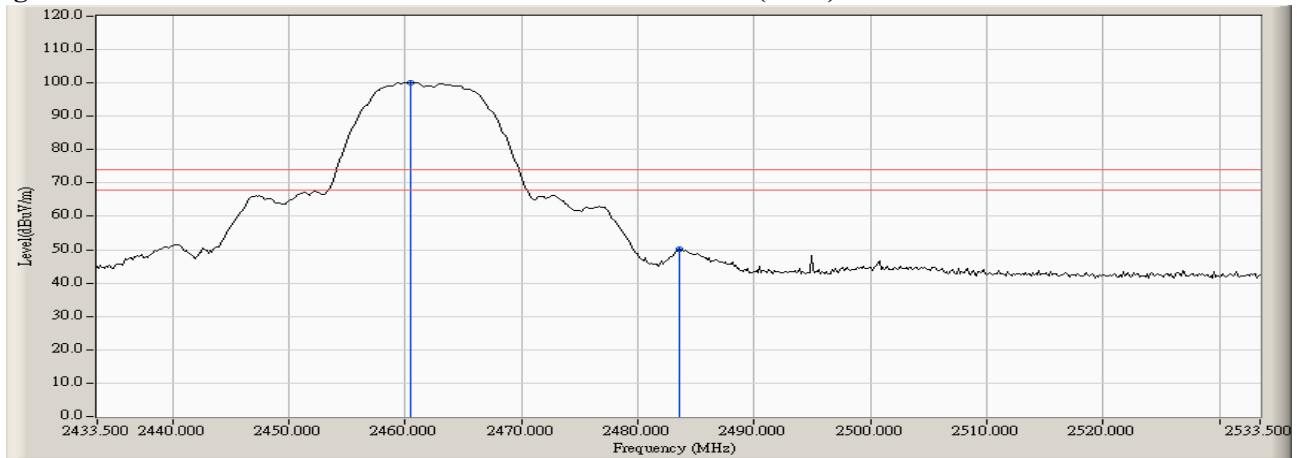


Figure Channel 11: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	59.869	59.402	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	71.551	71.118	--	--	--
01 (Peak)	2410.145	-0.385	96.719	96.335	--	--	--
01 (Average)	2390.000	-0.467	38.088	37.621	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	50.353	49.920	--	--	--
01 (Average)	2414.058	-0.366	86.077	85.711	--	--	--

Figure Channel 01: Horizontal (Peak)

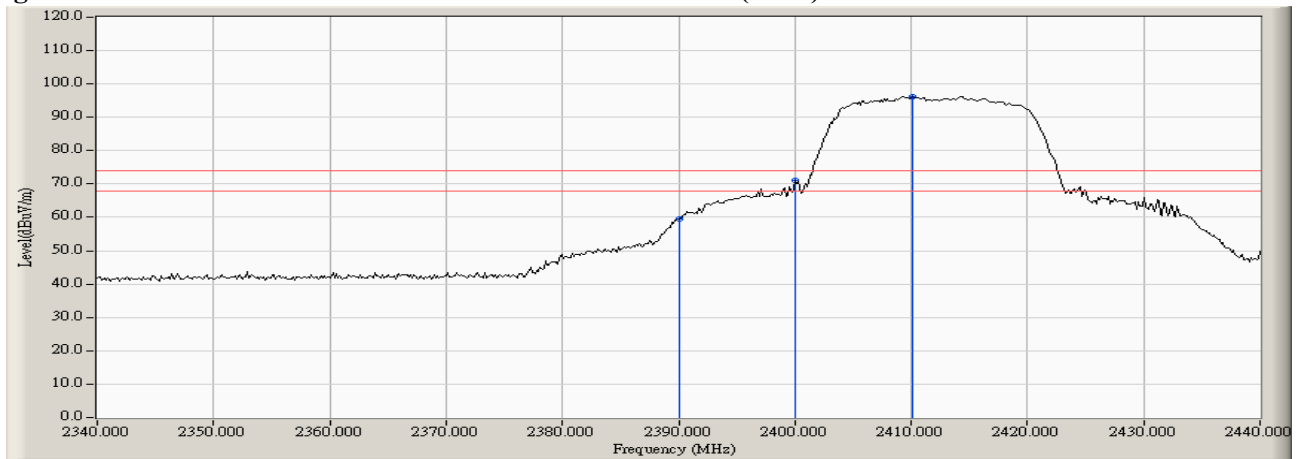
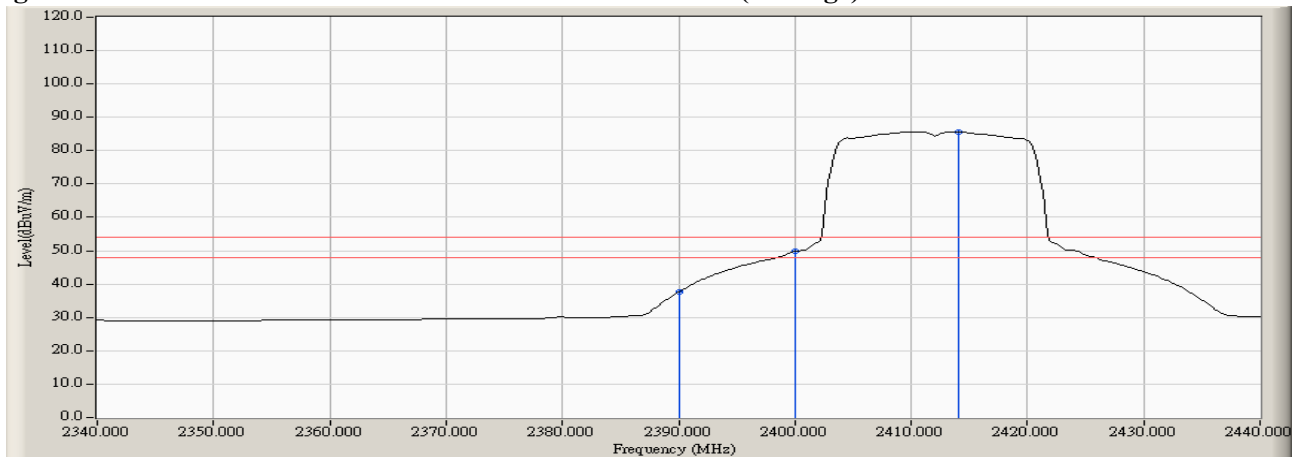


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	60.756	60.289	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	72.619	72.186	--	--	--
01 (Peak)	2414.058	-0.366	97.831	97.465	--	--	--
01 (Average)	2390.000	-0.467	39.443	38.976	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	51.672	51.239	--	--	--
01 (Average)	2414.058	-0.366	87.625	87.259	--	--	--

Figure Channel 01: VERTICAL (Peak)

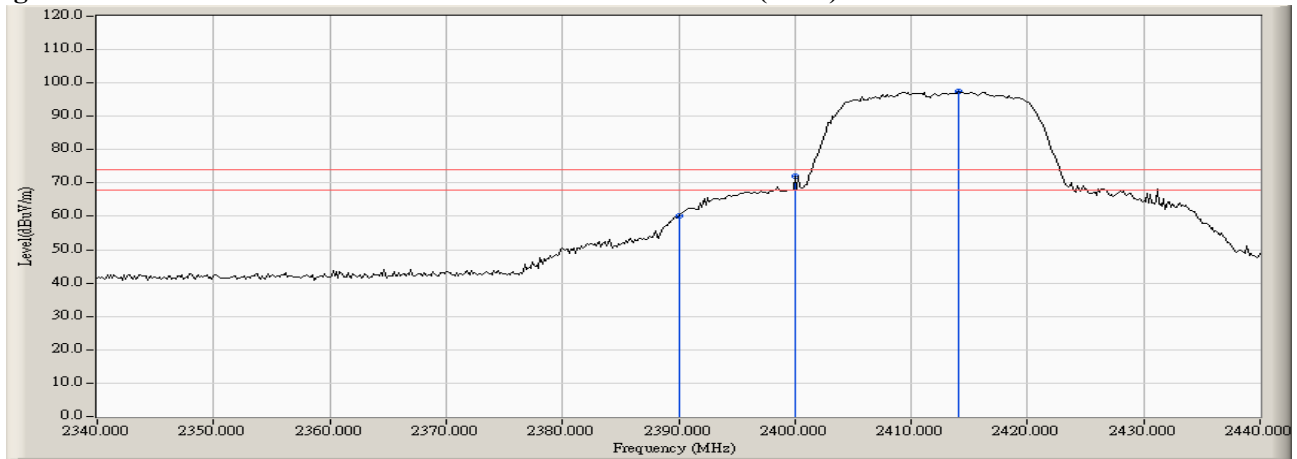
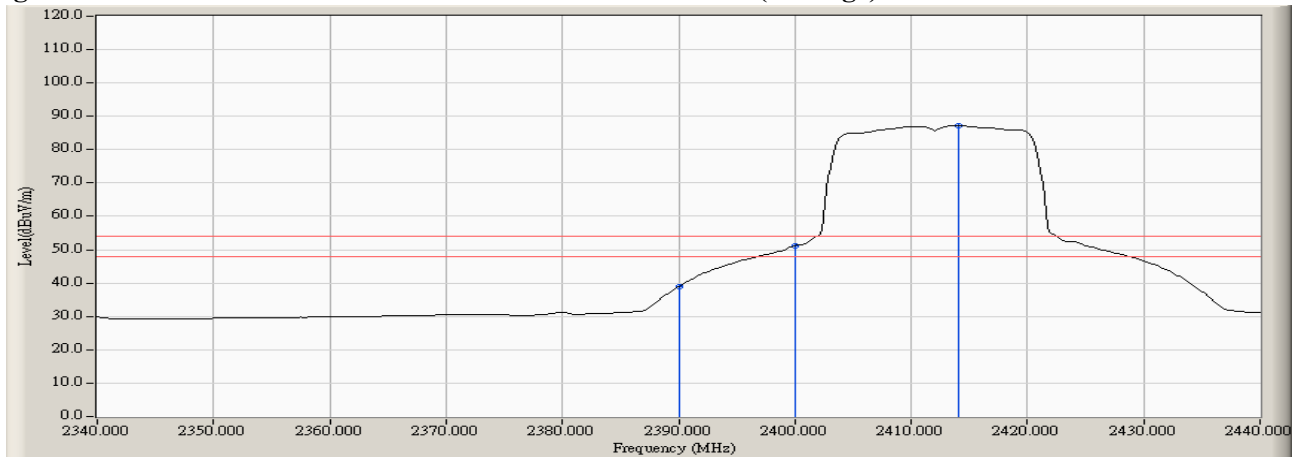


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2417MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	69.882	69.415	74.00	54.00	Pass
01 (Peak)	2398.000	-0.440	80.268	79.828	--	--	--
01 (Peak)	2400.000	-0.432	79.317	78.884	--	--	--
01 (Peak)	2418.000	-0.349	106.574	106.226	--	--	--
01 (Average)	2390.000	-0.467	38.088	37.621	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	50.353	49.920	--	--	--
01 (Average)	2414.058	-0.366	86.077	85.711	--	--	--

Figure Channel 01: Horizontal (Peak)

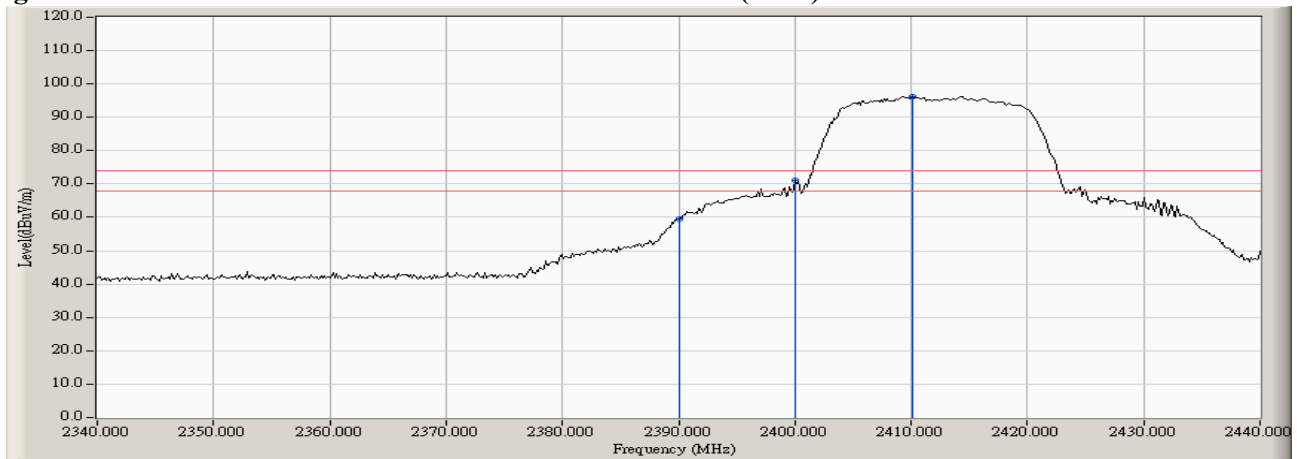
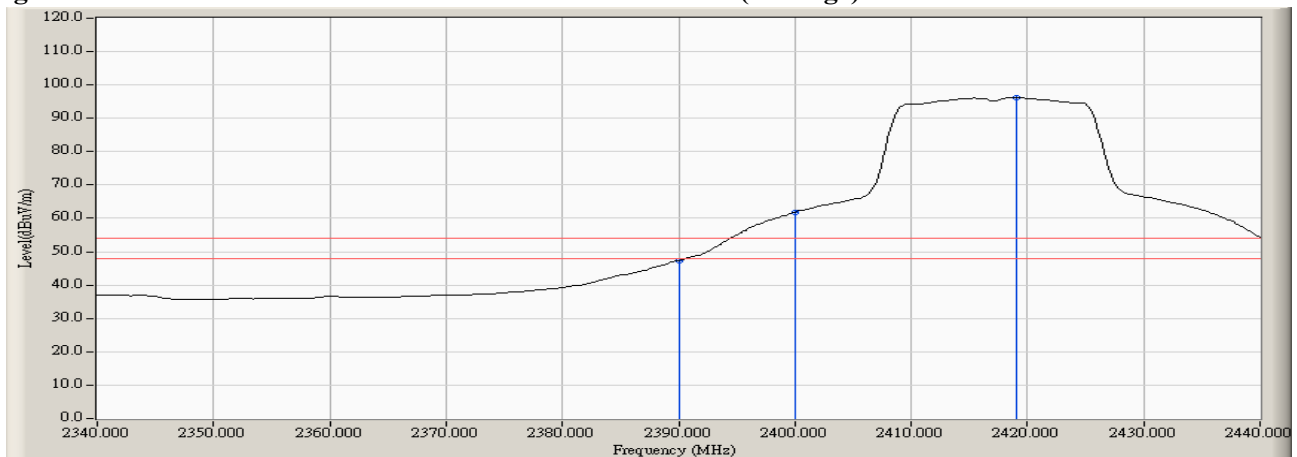


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2417MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	63.911	63.444	74.00	54.00	Pass
01 (Peak)	2398.400	-0.438	71.989	71.551	--	--	--
01 (Peak)	2400.000	-0.432	70.990	70.557	--	--	--
01 (Peak)	2420.400	-0.338	103.014	102.676			
01 (Average)	2390.000	-0.467	39.195	38.728	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	50.623	50.190	--	--	--
01 (Average)	2420.200	-0.339	92.712	92.373	--	--	--

Figure Channel 01:

VERTICAL (Peak)

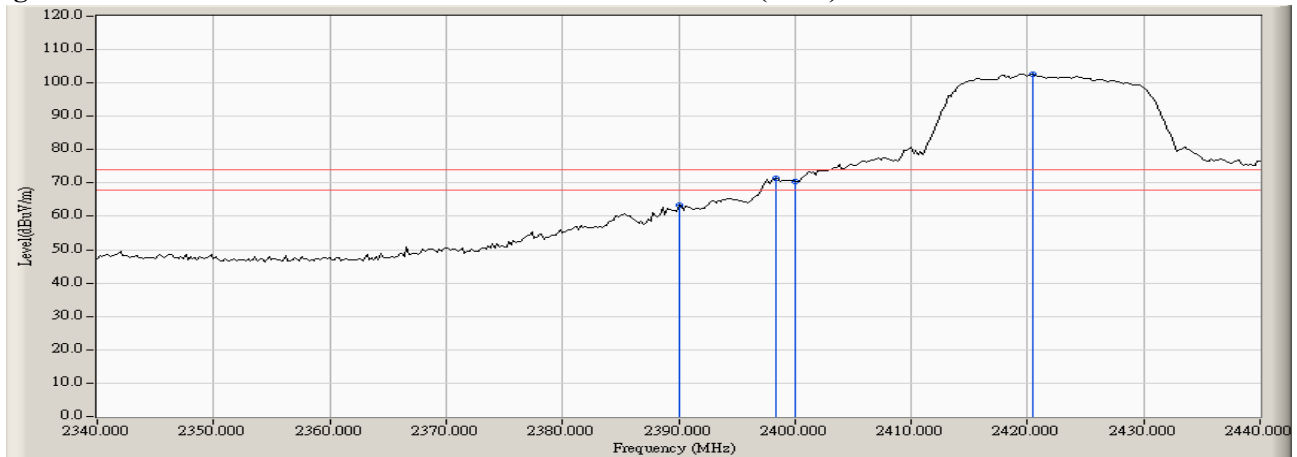
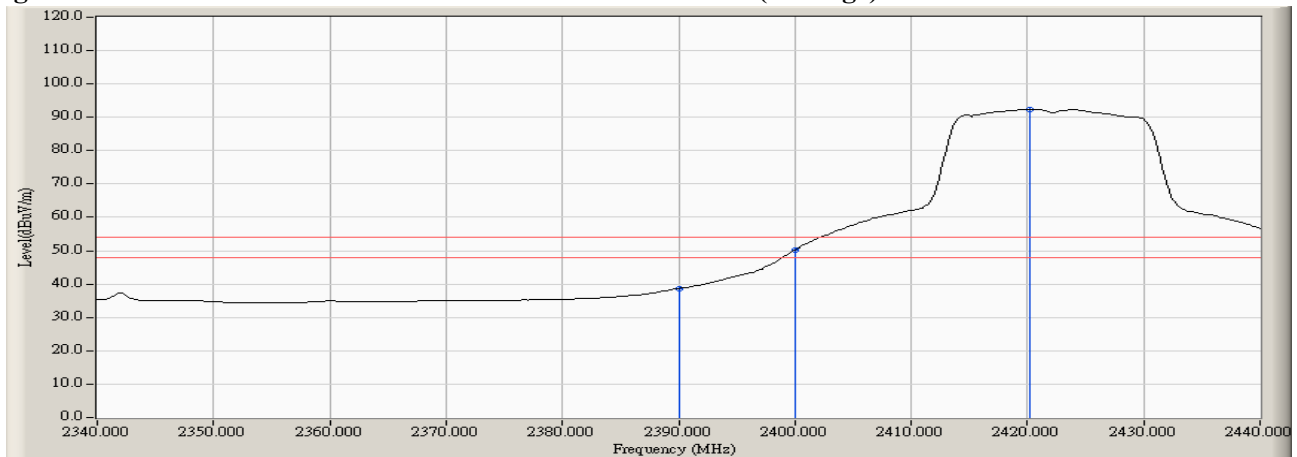


Figure Channel 01:

VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2454.500	-0.271	105.498	105.227	--	--	--
01 (Peak)	2483.500	-0.174	67.124	66.950	74.00	54.00	Pass
01 (Peak)	2488.300	-0.163	68.917	68.754	74.00	54.00	Pass
01 (Average)	2455.300	-0.270	95.290	95.020	--	--	--
01 (Average)	2483.500	-0.174	46.796	46.622	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

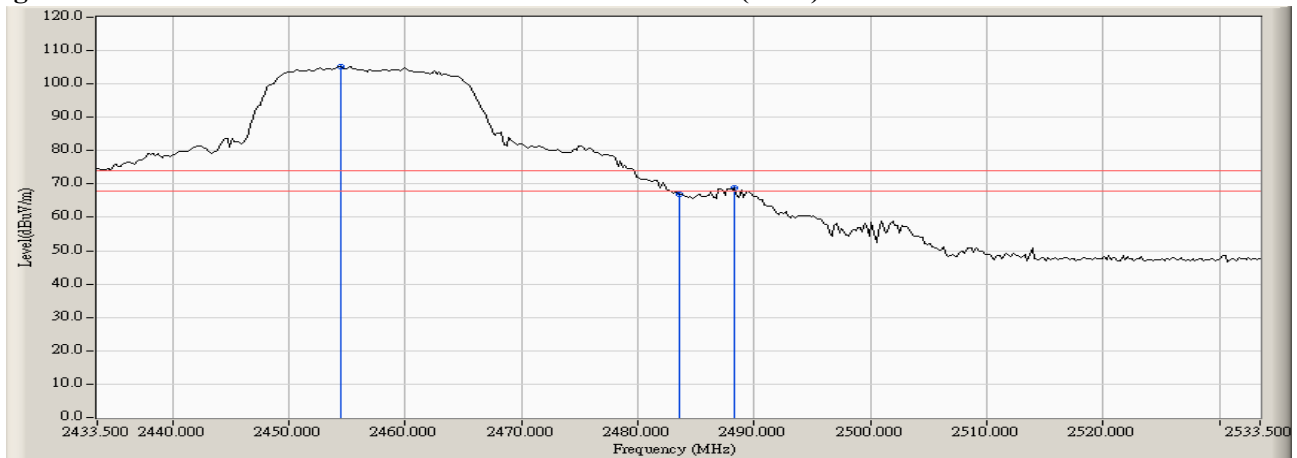
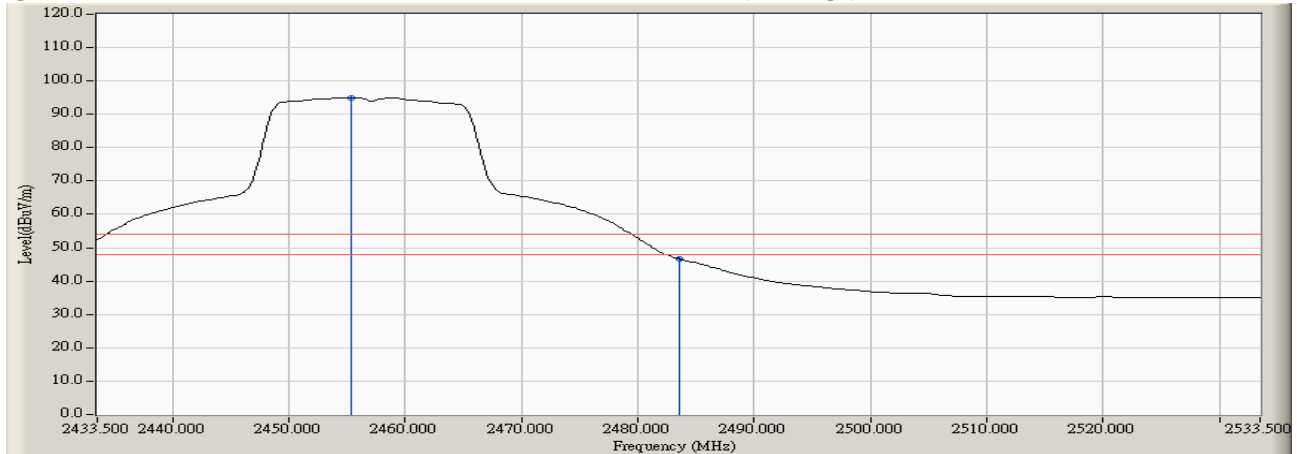


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2455.100	-0.270	100.873	100.602	--	--	--
01 (Peak)	2483.500	-0.174	63.138	62.964	74.00	54.00	Pass
01 (Peak)	2488.500	-0.163	64.574	64.411	74.00	54.00	Pass
01 (Average)	2459.100	-0.258	89.653	89.395	--	--	--
01 (Average)	2483.500	-0.174	42.271	42.097	74.00	54.00	Pass

Figure Channel 01: VERTICAL (Peak)

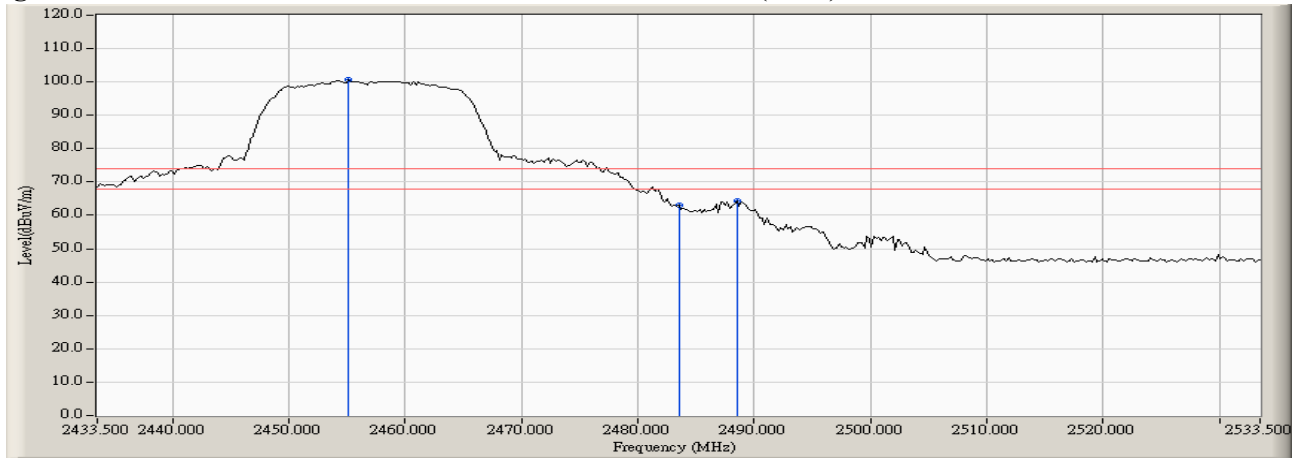
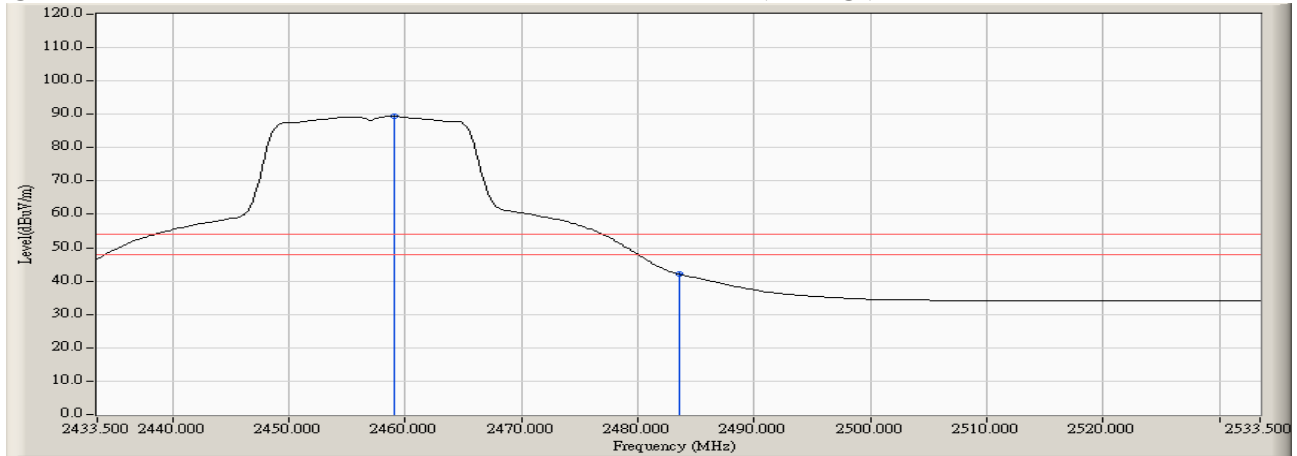


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2465.239	-0.233	91.578	91.344	--	--	--
11 (Peak)	2483.500	-0.174	53.675	53.501	74.00	54.00	Pass
11 (Average)	2463.935	-0.240	80.933	80.694	--	--	--
11 (Average)	2483.500	-0.174	33.866	33.692	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

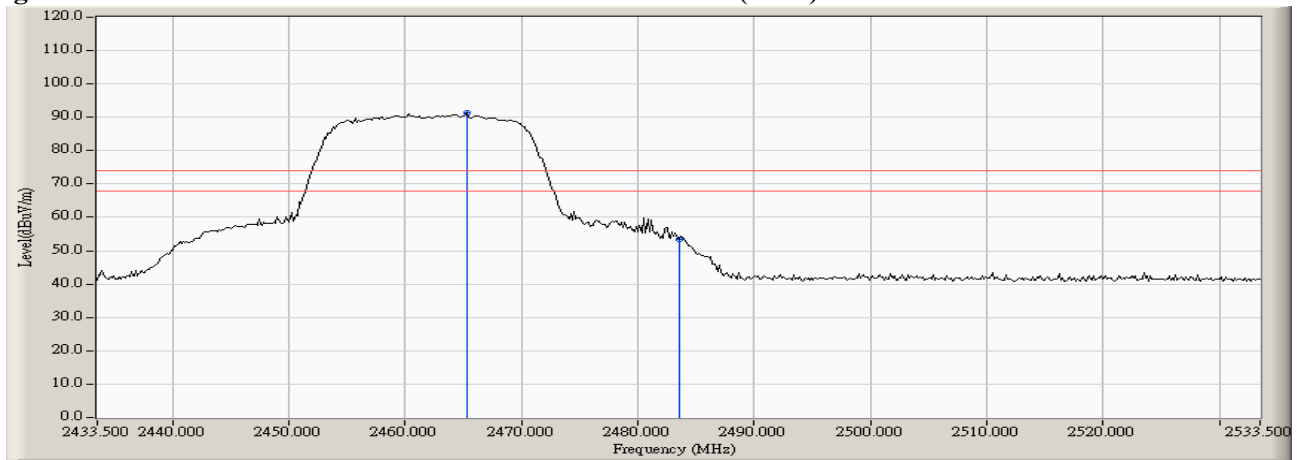
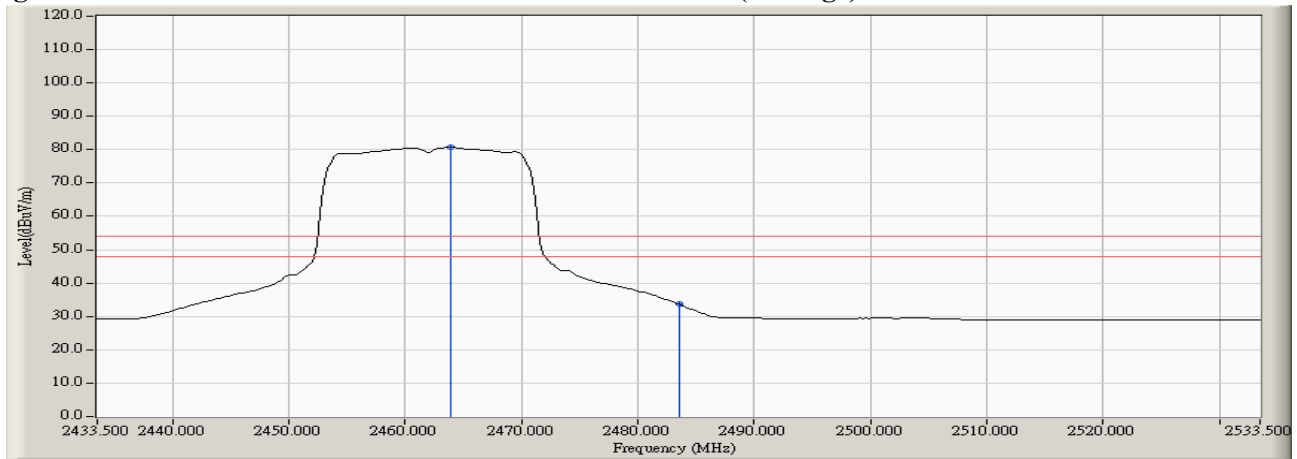


Figure Channel 11: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2459.297	-0.257	92.390	92.133	--	--	--
11 (Peak)	2483.500	-0.174	53.496	53.322	74.00	54.00	Pass
11 (Average)	2460.022	-0.253	82.062	81.808	--	--	--
11 (Average)	2483.500	-0.174	33.376	33.202	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

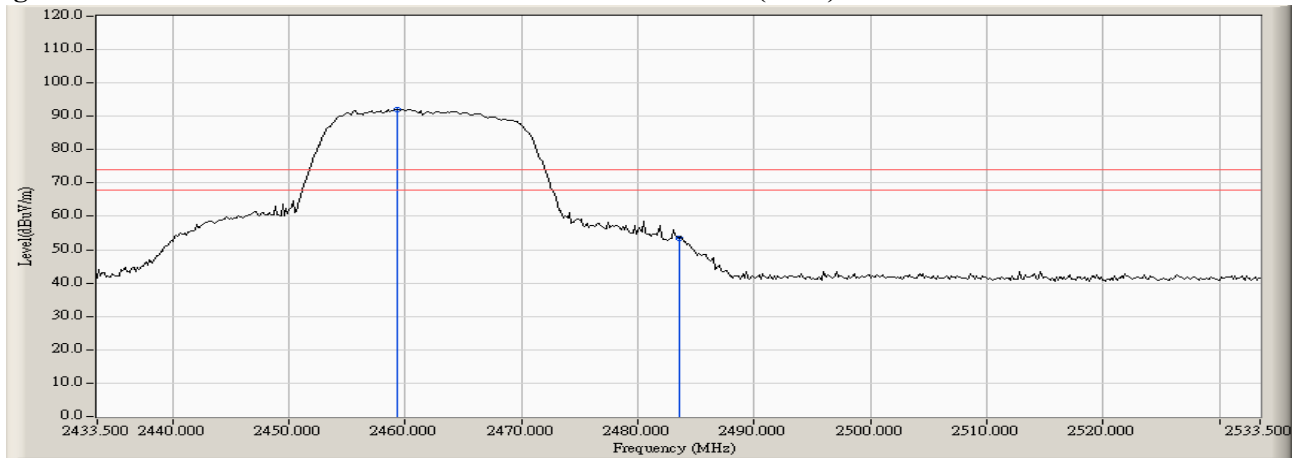
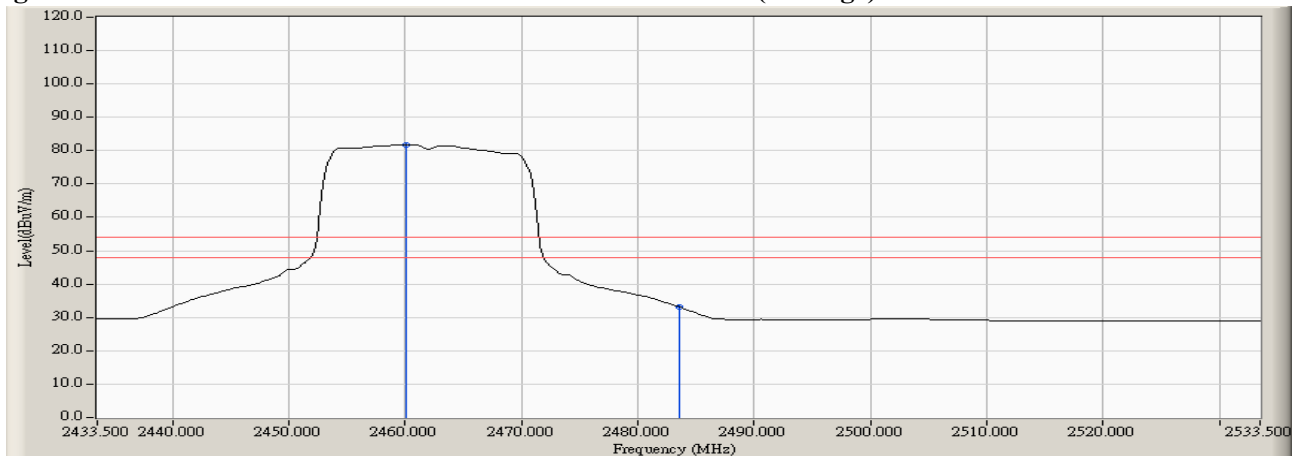


Figure Channel 11: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.420	-0.469	58.520	58.051	74.00	54.00	Pass
01 (Peak)	2390.000	-0.467	56.936	56.469	74.00	54.00	Pass
01 (Peak)	2399.710	-0.434	66.958	66.524	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	64.223	63.790	--	--	--
01 (Peak)	2410.580	-0.382	94.020	93.638	--	--	--
01 (Average)	2390.000	-0.467	38.252	37.785	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	48.085	47.652	--	--	--
01 (Average)	2410.580	-0.382	83.993	83.611	--	--	--

Figure Channel 01: Horizontal (Peak)

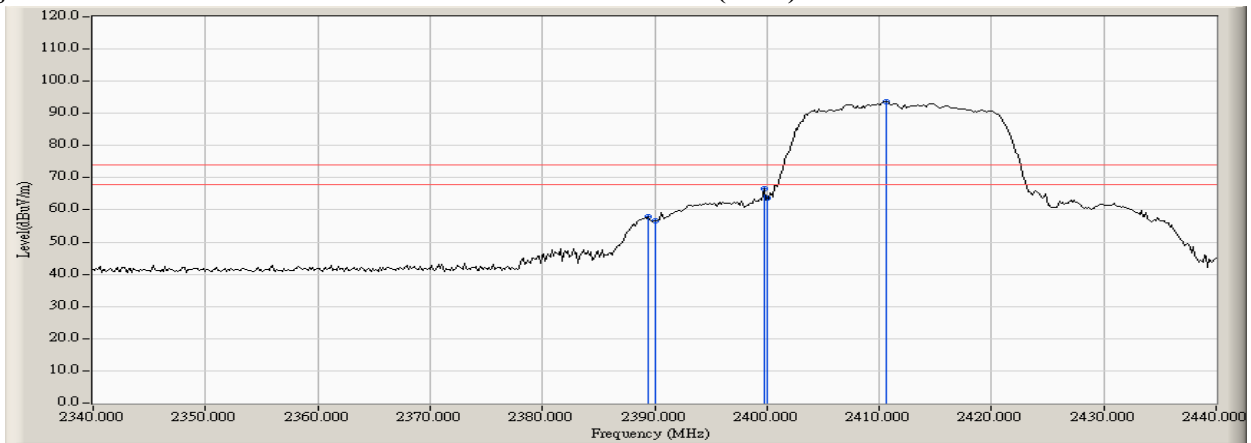
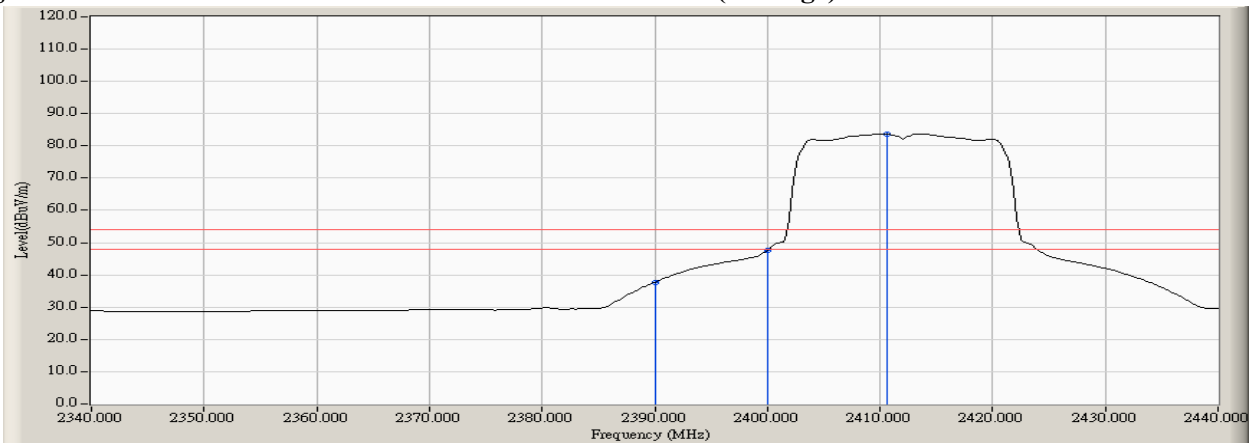


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.565	-0.469	61.396	60.927	74.00	54.00	Pass
01 (Peak)	2390.000	-0.467	60.160	59.693	74.00	54.00	Pass
01 (Peak)	2399.855	-0.434	67.831	67.398	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	66.086	65.653	--	--	--
01 (Peak)	2410.580	-0.382	95.621	95.239	--	--	--
01 (Average)	2390.000	-0.467	38.355	37.888	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	48.116	47.683	--	--	--
01 (Average)	2414.058	-0.366	84.703	84.337	--	--	--

Figure Channel 01: VERTICAL (Peak)

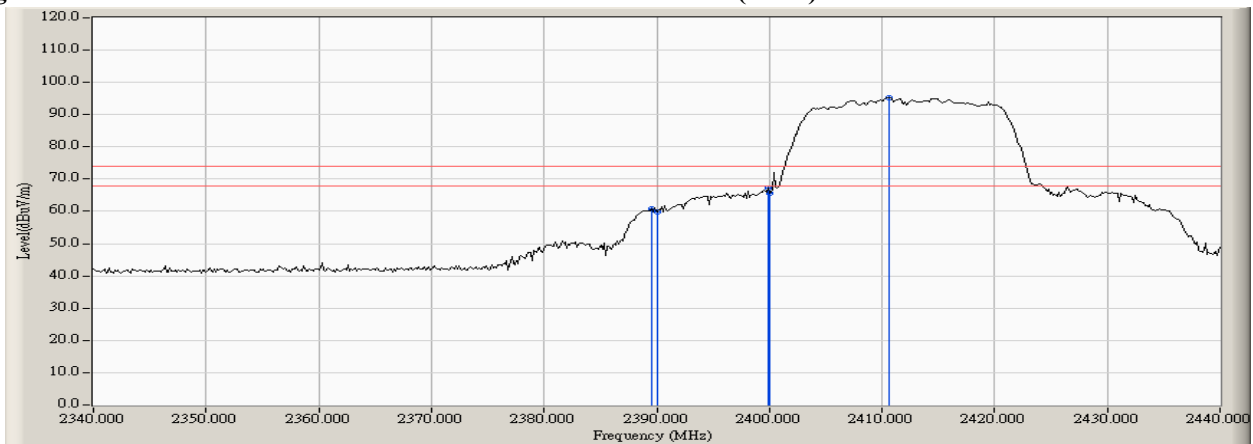
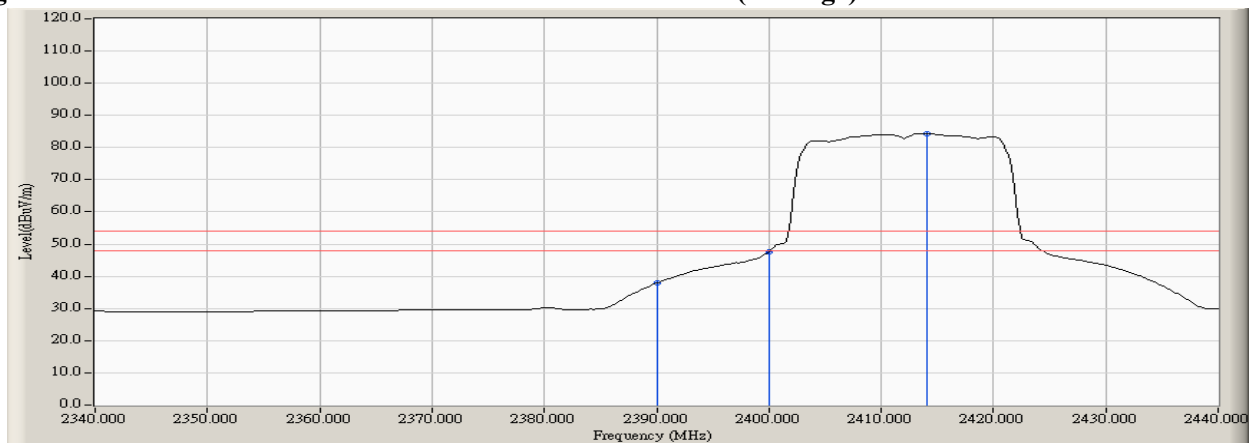


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2417MHz)
 Test Date : 2016/10/26

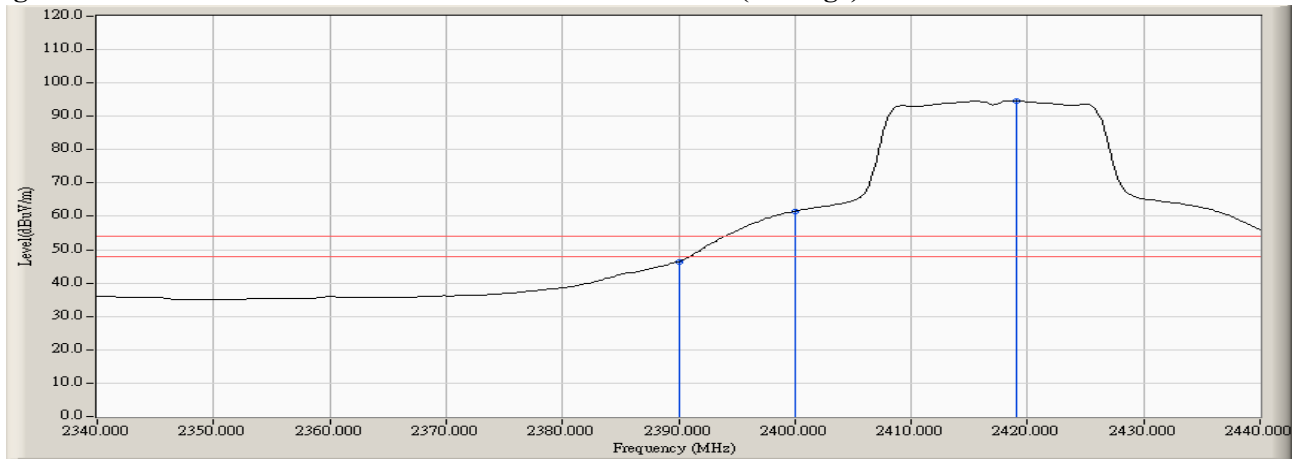
RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	72.283	71.816	74.00	54.00	Pass
01 (Peak)	2400.000	-0.432	80.352	79.919	--	--	--
01 (Peak)	2415.800	-0.358	105.473	105.115	--	--	--
01 (Average)	2390.000	-0.467	46.858	46.391	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	61.979	61.546	--	--	--
01 (Average)	2419.000	-0.344	94.943	94.599	--	--	--

Figure Channel 01: Horizontal (Peak)



Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2417MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-0.467	70.605	70.138	74.00	54.00	Pass
01 (Peak)	2397.600	-0.441	77.750	77.309	--	--	--
01 (Peak)	2400.000	-0.432	76.094	75.661	--	--	--
01 (Peak)	2416.800	-0.354	103.279	102.925	--	--	--
01 (Average)	2390.000	-0.467	46.314	45.847	74.00	54.00	Pass
01 (Average)	2400.000	-0.432	59.584	59.151	--	--	--
01 (Average)	2419.000	-0.344	92.642	92.298	--	--	--

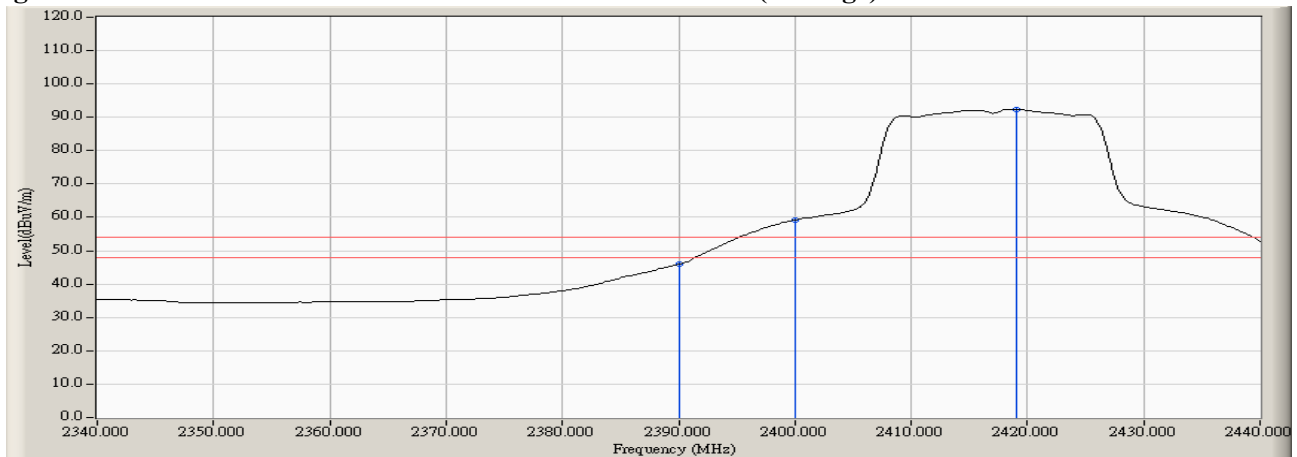
Figure Channel 01:

VERTICAL (Peak)



Figure Channel 01:

VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2456.900	-0.266	105.500	105.234	--	--	--
01 (Peak)	2483.500	-0.174	68.720	68.546	74.00	54.00	Pass
01 (Peak)	2484.500	-0.172	69.435	69.263	74.00	54.00	Pass
01 (Average)	2458.900	-0.258	94.884	94.626	--	--	--
01 (Average)	2483.500	-0.174	47.490	47.316	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

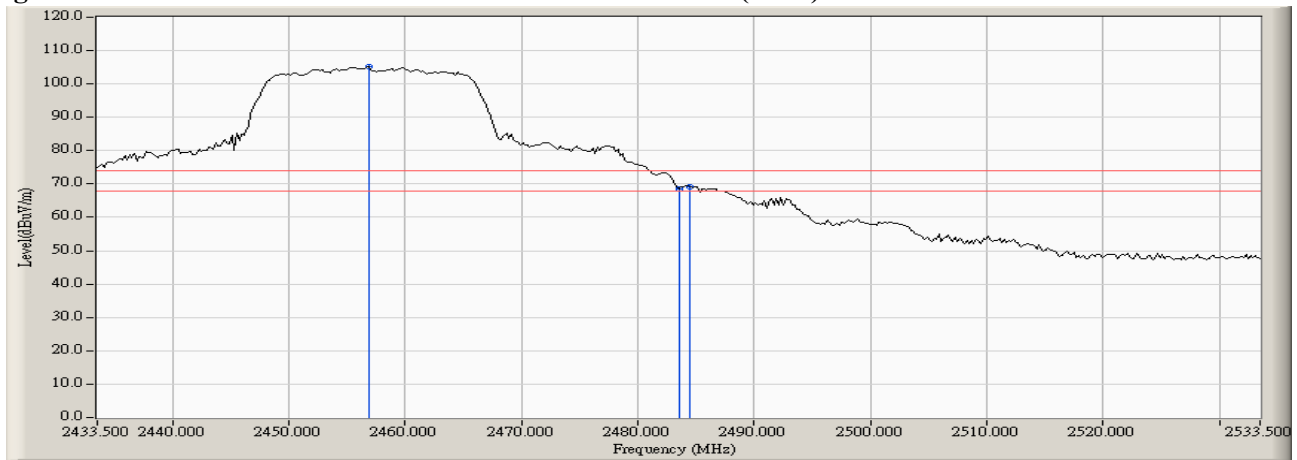
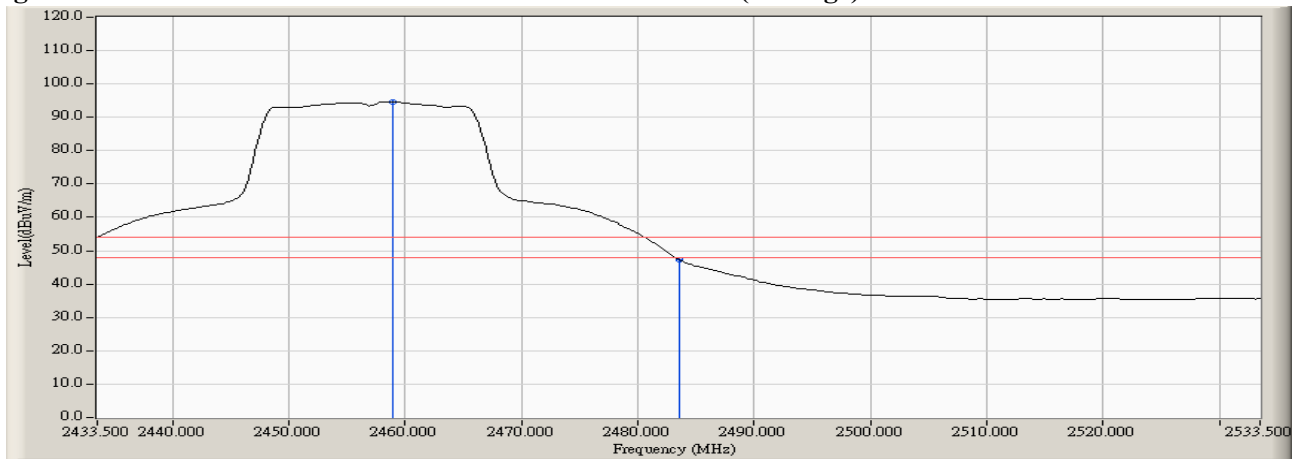


Figure Channel 01: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2457MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2456.700	-0.267	101.214	100.947	--	--	--
01 (Peak)	2483.500	-0.174	65.070	64.896	74.00	54.00	Pass
01 (Average)	2455.500	-0.269	90.386	90.116	--	--	--
01 (Average)	2483.500	-0.174	41.713	41.539	74.00	54.00	Pass

Figure Channel 01: VERTICAL (Peak)

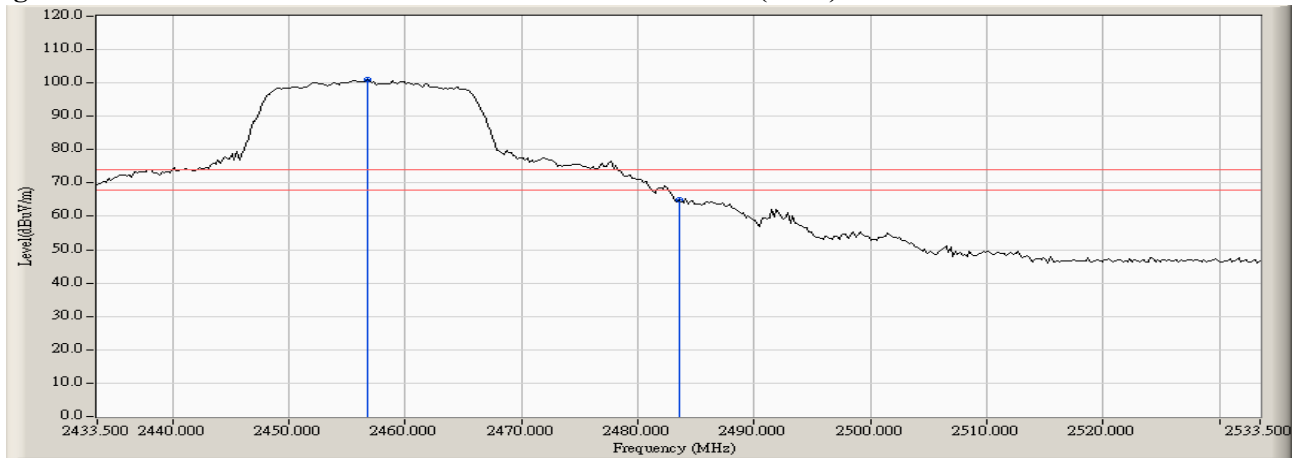
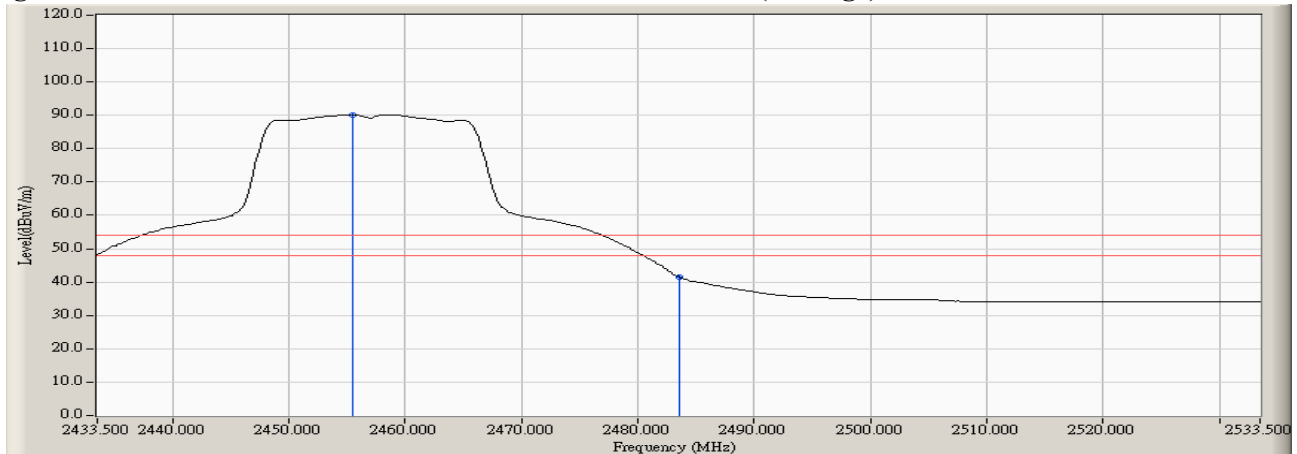


Figure Channel 01: VERTICAL (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2460.457	-0.252	90.909	90.657	--	--	--
11 (Peak)	2483.500	-0.174	55.114	54.940	74.00	54.00	Pass
11 (Average)	2463.065	-0.242	79.964	79.722	--	--	--
11 (Average)	2483.500	-0.174	34.879	34.705	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

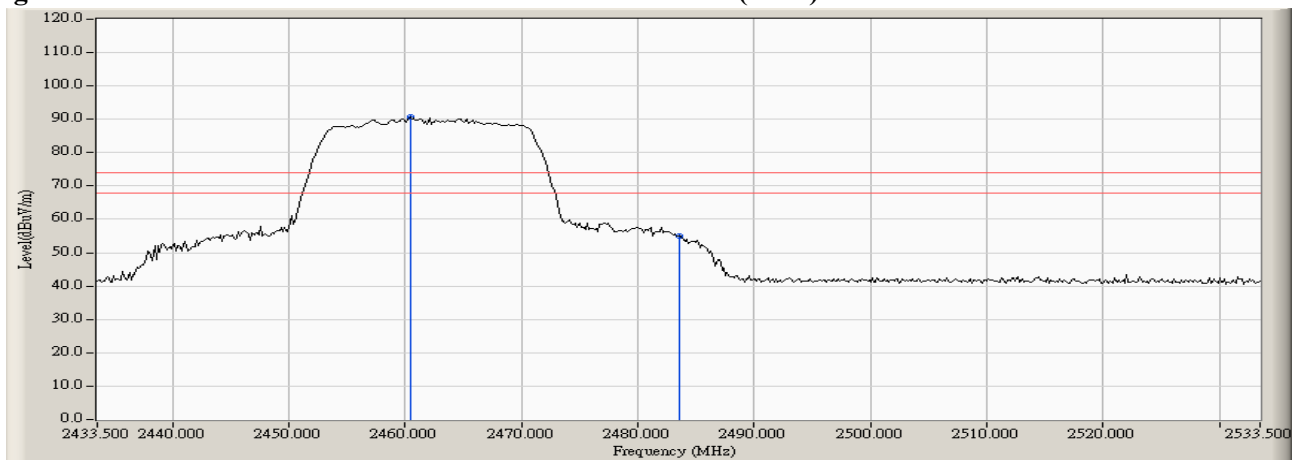
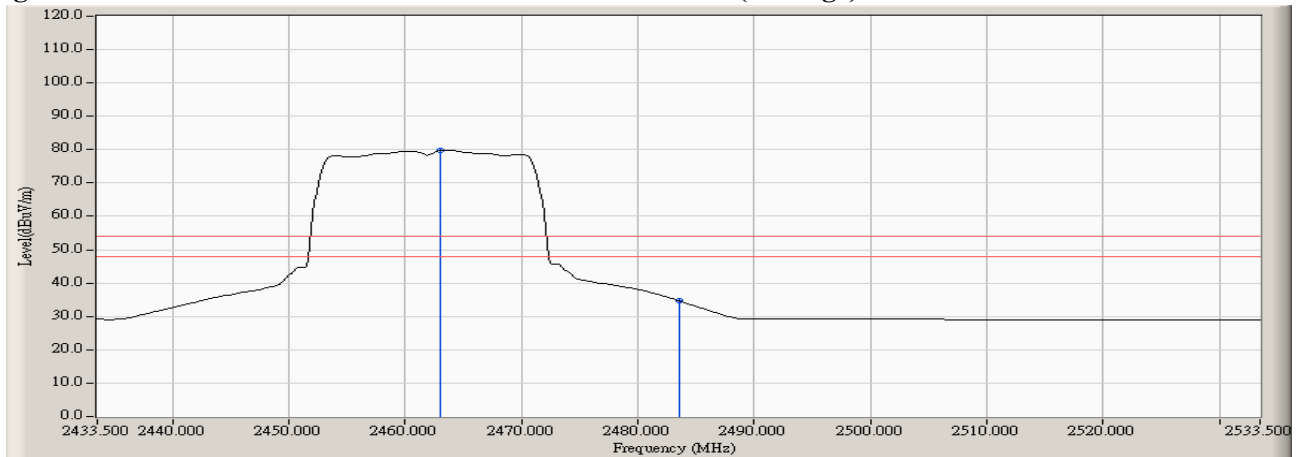


Figure Channel 11: Horizontal (Average)



- Note: 1. All readings 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 : WiFi abgn module
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)
 Test Date : 2016/10/26

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2460.601	-0.251	92.094	91.842	--	--	--
11 (Peak)	2483.500	-0.174	54.365	54.191	74.00	54.00	Pass
11 (Average)	2459.732	-0.256	81.052	80.797	--	--	--
11 (Average)	2483.500	-0.174	34.255	34.081	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

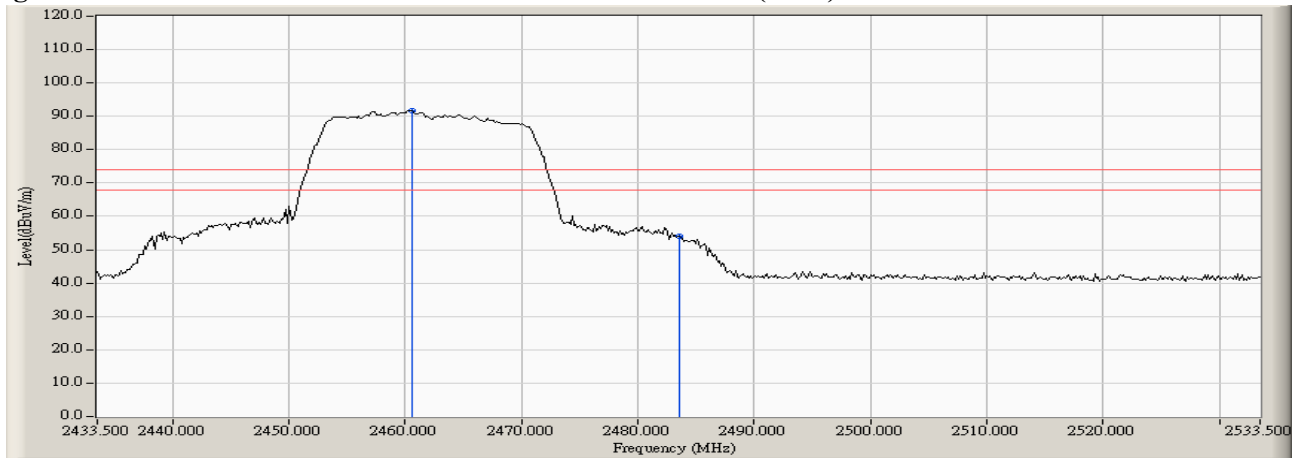
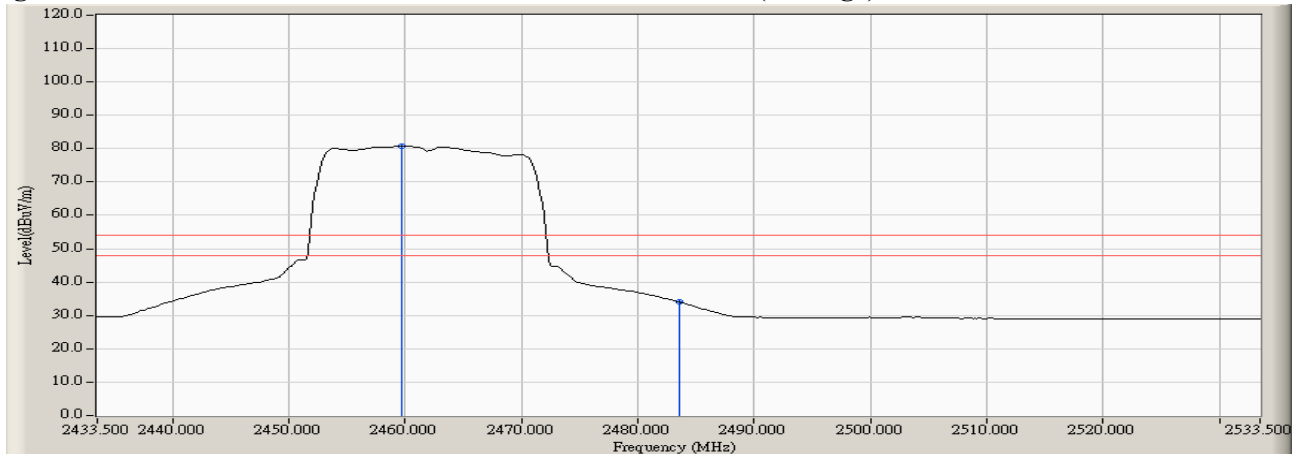


Figure Channel 11: VERTICAL (Average)



- Note: 1. All readings 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.

6. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs