FCC Test Report

(Class II Permissive Change)

Product Name	Intel® Dual Band Wireless-AC 3165
Model No	3165NGW
FCC ID.	PD93165NG, PD93165NGU

*FCC ID: PD93165NG (for OEM factory install)

*FCC ID: PD93165NGU (for User Installation w/bios lock feature.)

Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA

Date of Receipt	Apr. 14, 2015
Issue Date	May. 15, 2015
Report No.	1540304R-RFUSP04V00
Report Version	V1.0

Testing Laboratory
3023

Test Report

Issue Date: May. 15, 2015
Report No.: 1540304R-RFUSP04V00

Product Name	Intel® Dual Band Wireless-AC 3165
Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA
Manufacturer	Intel Mobile Communications
Model No.	3165NGW
FCC ID.	PD93165NG, PD93165NGU
EUT Rated Voltage	DC 3.3V (via Mini-PCI Express slot)
EUT Test Voltage	AC 120V/60Hz
Trade Name	Intel
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2013 ANSI C63.4: 2009, ANSI C63.10: 2009 KDB 558074 D01 DTS Meas Guidance v03r02
Test Result	Complied

Documented By : Leven Huang

(Senior Adm. Specialist / Leven Huang)

Tested By : Andy Lin

(Engineer / Andy Lin)

Approved By :

(Director / Vincent Lin)

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Dual Band Wireless-AC 3165
Trade Name	Intel
Model No.	3165NGW
FCC ID.	PD93165NG, PD93165NGU
Frequency Range	802.11b/g/n-20MHz: 2412-2462MHz, 802.11n-40MHz: 2422-2452MHz 802.11a/n-20MHz: 5745-5825MHz, 802.11n-40MHz: 5755-5795MHz 802.11ac-80MHz: 5775 MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 5, n-40MHz: 2 802.11ac-80MHz: 1
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 150Mbps 802.11ac-80MHz: up to 433.3MHz
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40MHz: 40MHz, 802.11ac-80MHz: 80MHz
Type of Modulation	802.11b:DSSS, DBPSK, DQPSK, CCK 802.11a/g/n: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna Type	Dipole/PIFA Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Contain Module	Intel / 3165NGW

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ACON	ACC6M-200000 (HP: 814177-001) (Tx1/Rx1) ACC6M-200000 (HP: 814177-001) (Tx2/ Rx2)	Dipole	2.8dBi for 2.4GHz 2.83dBi For 5725-5850GHz
2	INPAQ	DAM-A8-H-M1-290-02-24 (HP: 814177-001) (Tx1/Rx1) DAM-A8-H-M1-290-02-24 (HP: 814177-001) (Tx2/ Rx2)	Dipole	2.37dBi for 2.4GHz 1.23dBi For 5725-5850GHz
3	ACON	ADM6Y-200000 (HP: 814176-001) (Tx1/Rx1) ADM6Y-200000 (HP: 814176-001) (Tx2/ Rx2)	PIFA	-0.03dBi for 2.4GHz -1.88dBi For 5725-5850GHz
4	INPAQ	WA-M-LBLB-04-012 (main) (HP: 814176-001) (Tx1/Rx1) WA-M-LBLB-04-012 (aux) (HP: 814176-001) (Tx/ Rx2)	PIFA	0.99dBi for 2.4GHz 2.38dBi For 5725-5850GHz
5	WIESON Technologies co ., ltd	GY121HT0321-003-H (External) (WIFI)	Dipole	2.89dBi for 2.4GHz 4.22dBi For 5725-5850GHz
6	LinkingCorporation	13-130-002404/ T-543-9291078-1(Tx1/Rx1) 13-130-002403 / T-543-9291078-2(Tx2/ Rx2)	PIFA	0.4dBi for 2.4GHz -0.05dBi For 5725-5850GHz

Note:

1. The antenna of EUT is conform to FCC 15.203
2. Only the higher gain antenna was tested and recorded in this report.

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

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

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

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

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 3:	2422 MHz	Channel 4:	2427 MHz	Channel 5:	2432 MHz	Channel 6:	2437 MHz
Channel 7:	2442 MHz	Channel 8:	2447 MHz	Channel 9:	2452 MHz		

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

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

802.11ac-80MHz Carrier Frequency of Each Channel:

Channel	Frequency
Channel 155:	5775 MHz

Note:

1. This device is an Intel® Dual Band Wireless-AC 3165, Contains functions and so on WLAN、Bluetooth , This report for WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps、802.11n(20M-BW) is 7.2Mbps、802.11n(40M-BW) is 15Mbps、802.11ac(20M-BW) is 7.2Mbps、802.11ac(40M-BW) is 15Mbps and 802.11ac(80M-BW) is 32.5Mbps).).
4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
5. This is to request a Class II permissive change for FCC ID: PD93165NG (originally granted on 01/23/2015) and PD93165NGU (originally granted on 01/26/2015).
   The major change filed under this application is:
   Change #1: This change is to request approval for a dipole type antenna **Wieson Technologies** part number **GY121HT0321-003-H**. This dipole antenna will be restricted to mobile category or desktop host systems.

Test Mode:	Mode 1: Transmit - 802.11b 1Mbps
	Mode 2: Transmit - 802.11g 6Mbps
	Mode 3: Transmit - 802.11a 6Mbps
	Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)
	Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)
	Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)
	Mode 8: Transmit - 802.11ac-80BW_32.5Mbps(5G Band)

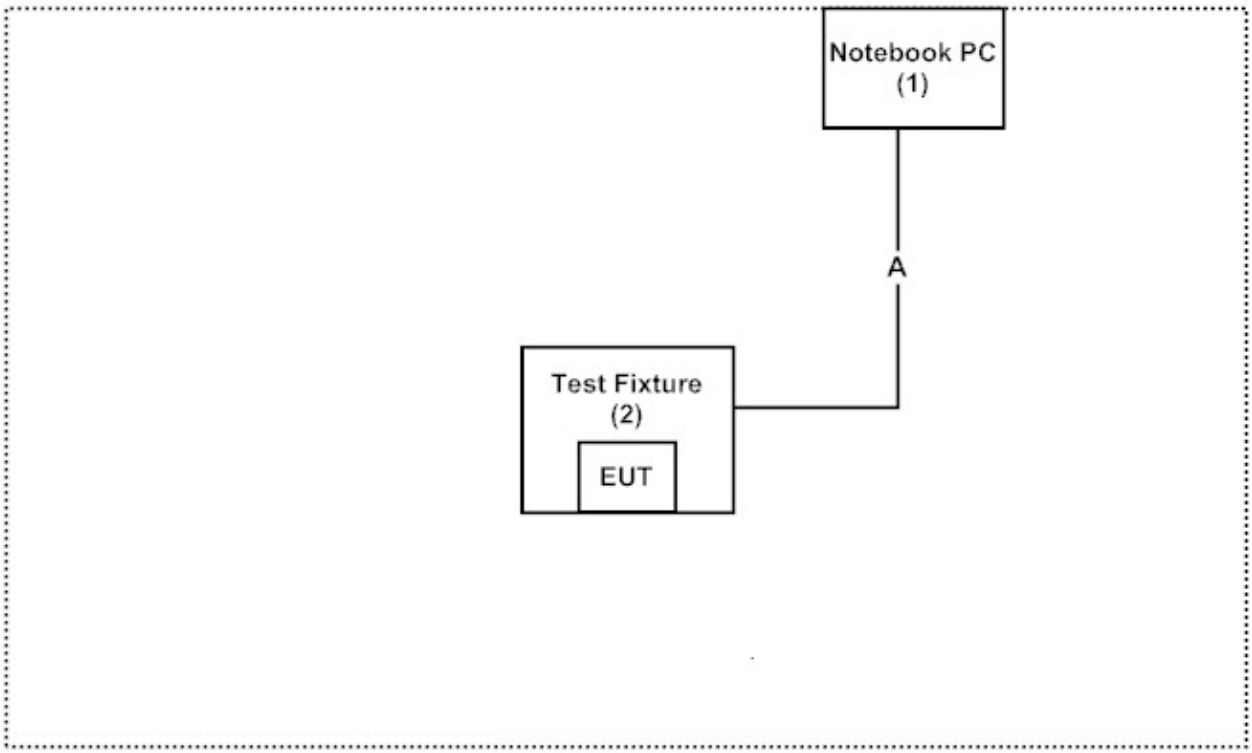
1.3. Tested System Details

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	N/A	N/A	Non-Shielded, 1.8m
2	Test Fixture	Intel	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	Test Fixture Line	Non-Shielded, 1.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4
(2) Execute ”DRTU Ver 1.7.0-1084” program on the Notebook PC.
(3) Configure the test mode, the test channel, and the data rate.
(4) Start transmits continually.
(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/

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

Site Name: Quietek Corporation
Site Address: No.5-22, Ruishukeng Linkou Dist., New Taipei City
24451, Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Maximum Power Output

2.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Power Meter	Anritsu	ML2495A/6K00003357	May, 2015
	Power Sensor	Anritsu	MA2411B/0738448	Jun., 2014
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

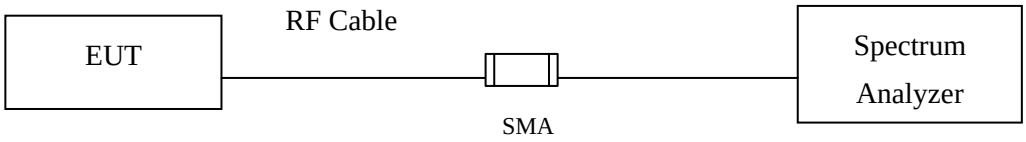
Note:

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

2.2. Test Setup

Average Power For different Data Rate (Mbps)

Peak Power Measurement



2.3. Limits

The maximum peak power shall be less 1 Watt.

2.4. 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 section 9.1.2 PKPM1 Peak power meter method.

2.5. Uncertainty

± 1.27 dB

2.6. Test Result of Maximum Power Output

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	16.22	--	--	--	<30dBm	Pass
06	2437	17.2	17.12	17.08	17.01	<30dBm	Pass
11	2462	16.63	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2		
		Measurement Level (dBm)									
01	2412	13.87	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	17.15	17.08	17.01	16.94	16.87	16.8	16.73	16.66	<30dBm	Pass
11	2462	12.26	--	--	--	--	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	15.38	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	15.77	15.65	15.59	15.53	15.45	15.37	15.29	15.21	<30dBm	Pass
165	5825	15.37	--	--	--	--	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2		
		Measurement Level (dBm)									
01	2412	13.96	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	17.33	17.24	17.15	17.06	16.97	16.88	16.79	16.7	<30dBm	Pass
11	2462	12.28	--	--	--	--	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		15	30	45	60	90	120	135	150		
		Measurement Level (dBm)									
01	2422	13.26	--	--	--	--	--	--	--	<30dBm	Pass
04	2437	17.28	17.17	17.06	16.95	16.84	16.73	16.62	16.51	<30dBm	Pass
07	2452	12.48	--	--	--	--	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2		
		Measurement Level (dBm)									
149	5745	15.49	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	15.45	15.39	15.33	15.27	15.21	15.15	15.09	15.03	<30dBm	Pass
165	5825	15.39	--	--	--	--	--	--	--	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Required Limit	Result
		15	30	45	60	90	120	135	150		
		Measurement Level (dBm)									
151	5755	16.32	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	16.23	16.17	16.11	16.05	15.99	15.93	15.87	15.81	<30dBm	Pass

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Maximum Output Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW_32.5Mbps(5G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)										Required Limit	Result
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9		
		Measurement Level (dBm)											
155	5775	16.53	16.44	16.35	16.26	16.17	16.08	15.99	15.9	15.81	15.72	<30dBm	Pass

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

3. Radiated Emission

3.1. Test Equipment

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

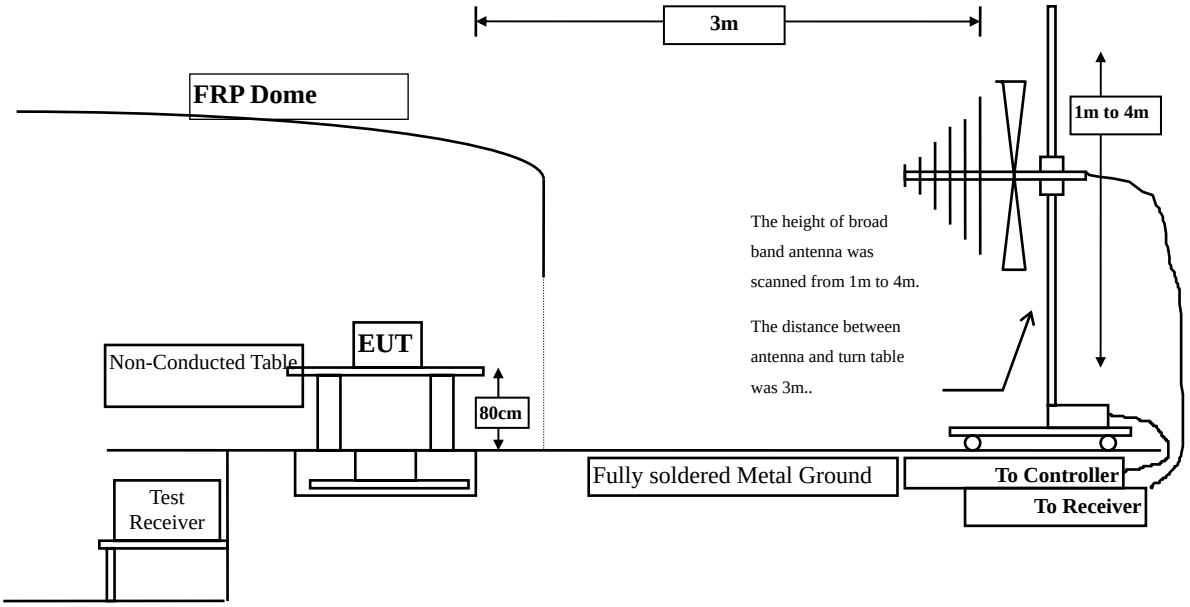
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2014
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2015
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2015
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct, 2014
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar, 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan, 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug, 2014
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan, 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul, 2014
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul, 2014

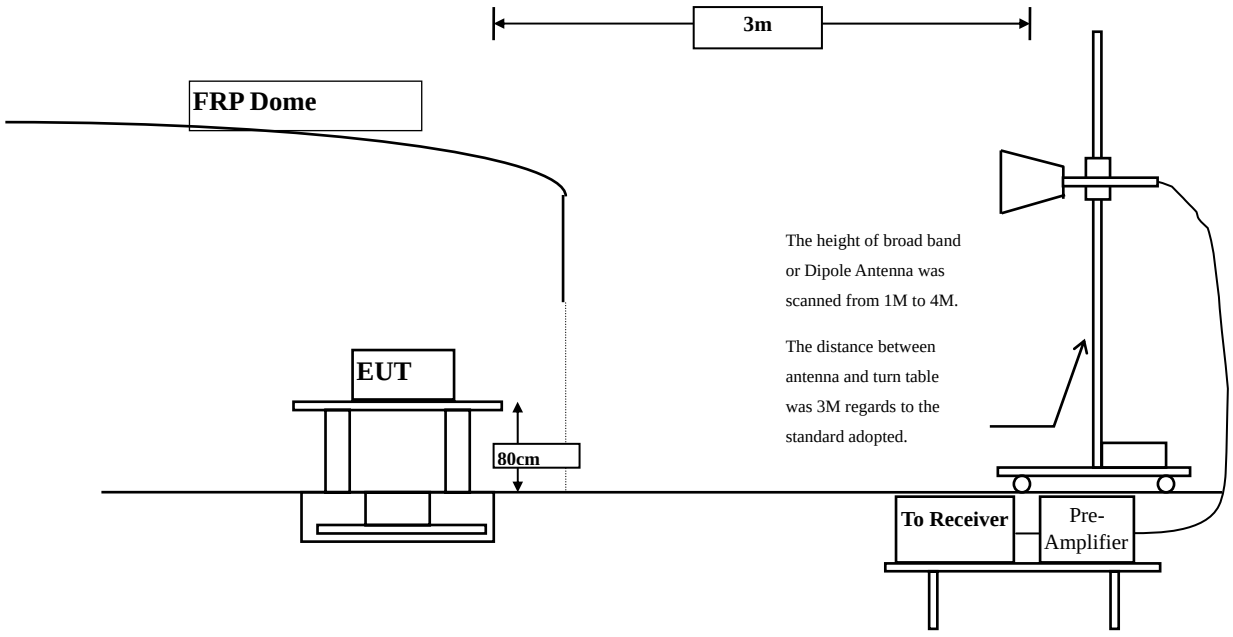
Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with “X” are used to measure the final test results.

3.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



3.3. 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 (dBuV/m) = 20 log E field strength (uV/m)

3.4. Test Procedure

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 0.8 meter above ground.
The turn table is rotated 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2009 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 form 9kHz - 10th Harmonic of fundamental was investigated.

3.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

3.6. Test Result of Radiated Emission

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	42.370	45.631	-28.369	74.000
7236.000	11.406	39.700	51.106	-22.894	74.000
9648.000	13.536	37.010	50.546	-23.454	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	37.210	43.631	-30.369	74.000
7236.000	11.495	37.440	48.935	-25.065	74.000
9648.000	13.807	35.530	49.336	-24.664	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	41.140	44.177	-29.823	74.000
7311.000	11.795	39.040	50.834	-23.166	74.000
9748.000	12.635	38.150	50.785	-23.215	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	44.730	50.541	-23.459	74.000
7311.000	12.630	41.370	53.999	-20.001	74.000
9748.000	13.126	36.810	49.936	-24.064	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	41.690	44.547	-29.453	74.000
7386.000	12.127	37.390	49.518	-24.482	74.000
9848.000	12.852	37.640	50.493	-23.507	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	45.060	50.580	-23.420	74.000
7386.000	13.254	39.190	52.444	-21.556	74.000
9848.000	13.367	37.010	50.377	-23.623	74.000
Average					
Detector:					
--					

Note:
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. 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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	37.550	40.811	-33.189	74.000
7236.000	10.650	37.350	48.000	-26.000	74.000
9648.000	13.337	37.800	51.136	-22.864	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	37.880	44.301	-29.699	74.000
7236.000	11.495	39.110	50.605	-23.395	74.000
9648.000	13.807	36.990	50.796	-23.204	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	42.530	45.567	-28.433	74.000
7311.000	11.795	38.440	50.234	-23.766	74.000
9748.000	12.635	36.770	49.405	-24.595	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	41.220	47.031	-26.969	74.000
7311.000	12.630	41.130	53.759	-20.241	74.000
9748.000	13.126	36.370	49.496	-24.504	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	41.180	44.037	-29.963	74.000
7386.000	12.127	36.440	48.568	-25.432	74.000
9848.000	12.852	36.650	49.503	-24.497	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	40.110	45.630	-28.370	74.000
7386.000	13.254	38.880	52.134	-21.866	74.000
9848.000	13.367	36.550	49.917	-24.083	74.000
Average					
Detector:					
--					

Note:

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11490.000	17.106	35.740	52.847	-21.153	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11490.000	18.034	37.660	55.695	-18.305	74.000
Average Detector:					
11490.000	18.034	23.040	41.075	-12.925	54.000

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11570.000	16.809	35.300	52.109	-21.891	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11570.000	17.698	34.940	52.638	-21.362	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11650.000	16.158	35.000	51.158	-22.842	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11650.000	17.274	35.230	52.505	-21.495	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.270	41.531	-32.469	74.000
7236.000	10.650	37.540	48.190	-25.810	74.000
9648.000	13.337	36.670	50.006	-23.994	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	38.110	44.531	-29.469	74.000
7236.000	11.495	38.940	50.435	-23.565	74.000
9648.000	13.807	37.020	50.826	-23.174	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4874.000	3.038	43.490	46.527	-27.473	74.000
7311.000	11.795	38.210	50.004	-23.996	74.000
9748.000	12.635	36.430	49.065	-24.935	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	5.812	41.480	47.291	-26.709	74.000
7311.000	12.630	40.970	53.599	-20.401	74.000
9748.000	13.126	37.010	50.136	-23.864	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4924.000	2.858	37.950	40.807	-33.193	74.000
7386.000	12.127	35.590	47.718	-26.282	74.000
9848.000	12.852	36.870	49.723	-24.277	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4924.000	5.521	38.690	44.210	-29.790	74.000
7386.000	13.254	36.990	50.244	-23.756	74.000
9848.000	13.367	37.380	50.747	-23.253	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.171	37.690	40.861	-33.139	74.000
7266.000	11.162	37.110	48.272	-25.728	74.000
9688.000	12.964	36.990	49.955	-24.045	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	6.178	38.100	44.278	-29.722	74.000
7266.000	11.982	36.890	48.872	-25.128	74.000
9688.000	13.507	36.880	50.388	-23.612	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	38.290	41.327	-32.673	74.000
7311.000	11.795	36.190	47.984	-26.016	74.000
9748.000	12.635	36.960	49.595	-24.405	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	38.440	44.251	-29.749	74.000
7311.000	12.630	37.620	50.249	-23.751	74.000
9748.000	13.126	37.010	50.136	-23.864	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4904.000	2.914	37.800	40.715	-33.285	74.000
7356.000	11.995	35.400	47.394	-26.606	74.000
9808.000	12.475	37.190	49.665	-24.335	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4904.000	5.530	38.160	43.691	-30.309	74.000
7356.000	13.005	35.680	48.684	-25.316	74.000
9808.000	12.901	37.050	49.951	-24.049	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5745MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11490.000	17.106	35.160	52.267	-21.733	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11490.000	18.034	37.760	55.795	-18.205	74.000
Average					
Detector:					
11490.000	18.034	23.600	41.635	-12.365	54.000

Note:

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

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11570.000	16.809	35.190	51.999	-22.001	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11570.000	17.698	36.280	53.978	-20.022	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	16.158	35.010	51.168	-22.832	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11650.000	17.274	36.580	53.855	-20.145	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	17.124	36.130	53.254	-20.746	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11510.000	18.081	35.810	53.891	-20.109	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11590.000	16.701	35.470	52.170	-21.830	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11590.000	17.567	36.390	53.956	-20.044	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 : Intel® Dual Band Wireless-AC 3165
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW_32.5Mbps(5G Band) (5775MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11550.000	16.914	35.060	51.974	-22.026	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11550.000	17.826	35.850	53.675	-20.325	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
330.700	-4.492	44.339	39.847	-6.153	46.000
480.080	-0.329	37.630	37.301	-8.699	46.000
528.580	1.848	37.348	39.196	-6.804	46.000
604.240	4.770	24.582	29.352	-16.648	46.000
720.640	3.511	29.794	33.305	-12.695	46.000
918.520	6.396	29.900	36.296	-9.704	46.000
Vertical					
119.240	-3.541	37.522	33.981	-9.519	43.500
293.840	-7.738	41.263	33.526	-12.474	46.000
480.080	-4.359	36.869	32.510	-13.490	46.000
528.580	-0.462	34.707	34.245	-11.755	46.000
790.480	2.913	27.258	30.170	-15.830	46.000
924.340	5.550	32.731	38.281	-7.719	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
142.520	-10.427	41.964	31.537	-11.963	43.500
324.880	-4.491	40.068	35.577	-10.423	46.000
454.860	-0.779	41.365	40.585	-5.415	46.000
528.580	1.848	36.999	38.847	-7.153	46.000
722.580	3.496	34.423	37.919	-8.081	46.000
883.600	6.146	25.644	31.789	-14.211	46.000
Vertical					
94.020	-3.539	35.406	31.866	-11.634	43.500
231.760	-8.848	42.793	33.945	-12.055	46.000
394.720	-4.024	43.887	39.863	-6.137	46.000
528.580	-0.462	33.492	33.030	-12.970	46.000
666.320	-1.809	36.541	34.733	-11.267	46.000
792.420	2.889	37.181	40.070	-5.930	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
134.760	-7.473	45.851	38.378	-5.122	43.500
462.620	3.589	37.276	40.865	-5.135	46.000
598.420	3.524	35.198	38.722	-7.278	46.000
666.320	1.879	36.476	38.355	-7.645	46.000
800.180	6.417	33.109	39.526	-6.474	46.000
957.320	6.615	29.553	36.168	-9.832	46.000
Vertical					
111.480	-3.439	41.499	38.061	-5.439	43.500
299.660	-4.061	42.259	38.198	-7.802	46.000
666.320	-0.951	38.277	37.326	-8.674	46.000
796.300	2.639	35.926	38.565	-7.435	46.000
897.180	0.937	36.630	37.567	-8.433	46.000
957.320	3.015	31.693	34.708	-11.292	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
127.000	-10.017	41.439	31.422	-12.078	43.500
191.020	-10.040	40.249	30.209	-13.291	43.500
324.880	-4.491	38.660	34.169	-11.831	46.000
435.460	-1.920	35.055	33.135	-12.865	46.000
584.840	3.391	26.276	29.667	-16.333	46.000
724.520	3.485	32.611	36.096	-9.904	46.000
Vertical					
167.740	-8.239	40.974	32.735	-10.765	43.500
264.740	-7.681	46.257	38.576	-7.424	46.000
462.620	-3.838	36.014	32.176	-13.824	46.000
528.580	-0.462	33.818	33.356	-12.644	46.000
666.320	-1.809	36.662	34.854	-11.146	46.000
903.000	2.966	29.905	32.871	-13.129	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
167.740	-10.799	41.157	30.358	-13.142	43.500
342.340	-3.272	41.238	37.966	-8.034	46.000
439.340	-2.009	36.532	34.523	-11.477	46.000
577.080	3.169	30.693	33.862	-12.138	46.000
666.320	2.031	33.267	35.299	-10.701	46.000
924.340	6.240	32.678	38.918	-7.082	46.000
Vertical					
167.740	-8.239	40.543	32.304	-11.196	43.500
295.780	-7.455	39.626	32.171	-13.829	46.000
410.240	-6.616	40.004	33.388	-12.612	46.000
528.580	-0.462	35.535	35.073	-10.927	46.000
697.360	1.311	35.453	36.764	-9.236	46.000
924.340	5.550	30.832	36.382	-9.618	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
134.760	-7.473	45.210	37.737	-5.763	43.500
365.620	0.382	42.174	42.556	-3.444	46.000
536.340	3.239	37.783	41.022	-4.978	46.000
800.180	6.417	31.655	38.072	-7.928	46.000
833.160	6.616	33.366	39.982	-6.018	46.000
955.380	6.596	30.199	36.795	-9.205	46.000
Vertical					
111.480	-3.439	40.500	37.062	-6.438	43.500
299.660	-4.061	41.931	37.870	-8.130	46.000
359.800	-1.316	37.850	36.534	-9.466	46.000
598.420	1.114	33.735	34.849	-11.151	46.000
796.300	2.639	34.991	37.630	-8.370	46.000
957.320	3.015	32.241	35.256	-10.744	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
134.760	-7.473	45.597	38.124	-5.376	43.500
359.800	-0.226	41.537	41.311	-4.689	46.000
460.680	4.030	35.894	39.924	-6.076	46.000
600.360	3.472	36.160	39.632	-6.368	46.000
854.500	7.380	32.122	39.502	-6.498	46.000
930.160	7.530	30.408	37.938	-8.062	46.000
Vertical					
111.480	-3.439	41.112	37.674	-5.826	43.500
299.660	-4.061	42.357	38.296	-7.704	46.000
600.360	1.302	33.112	34.414	-11.586	46.000
664.380	-0.978	38.036	37.058	-8.942	46.000
796.300	2.639	35.199	37.838	-8.162	46.000
901.060	1.858	35.042	36.900	-9.100	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 : Intel® Dual Band Wireless-AC 3165
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW_32.5Mbps(5G Band) (5775MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
309.360	-3.740	40.208	36.468	-9.532	46.000
400.540	-2.276	36.097	33.821	-12.179	46.000
499.480	0.048	32.258	32.306	-13.694	46.000
600.360	3.977	27.098	31.075	-14.925	46.000
668.260	2.016	30.454	32.470	-13.530	46.000
798.240	5.148	26.122	31.270	-14.730	46.000
Vertical					
109.540	-0.418	32.944	32.526	-10.974	43.500
212.360	-7.981	39.360	31.379	-12.121	43.500
332.640	-4.914	36.304	31.390	-14.610	46.000
499.480	-0.852	32.115	31.263	-14.737	46.000
623.640	-2.631	29.711	27.080	-18.920	46.000
868.080	0.641	33.224	33.865	-12.135	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.

4. Band Edge

4.1. Test Equipment

RF Radiated Measurement:

The following test equipments are used during the band edge tests:

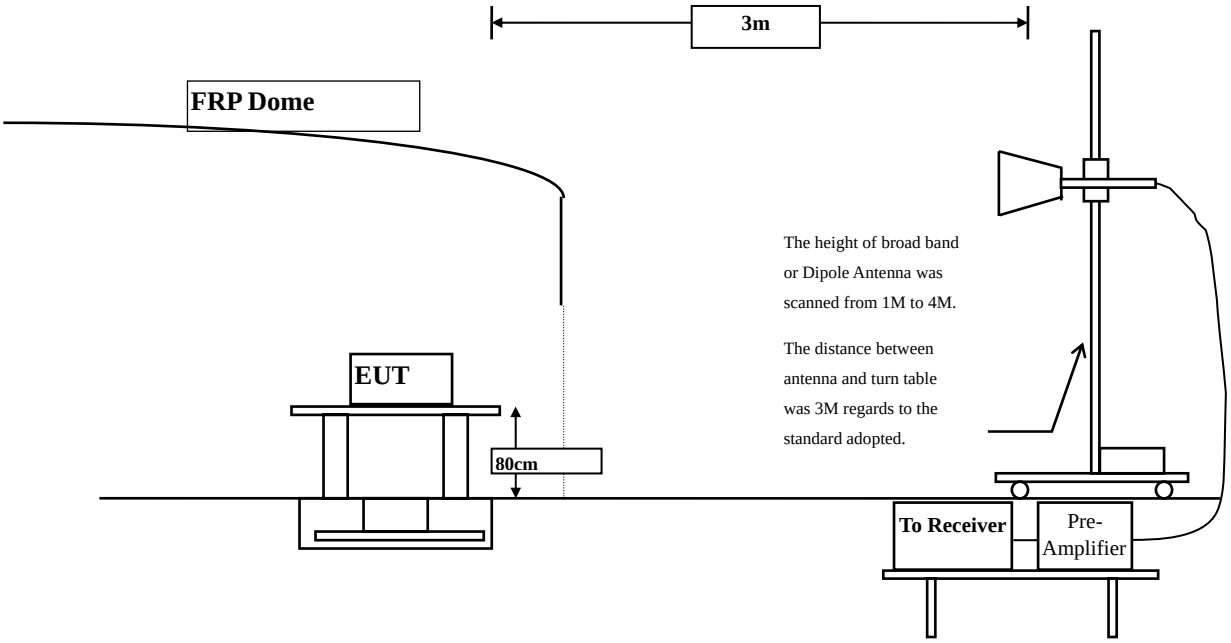
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2015
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2015
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct, 2014
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar, 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan, 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug, 2014
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan, 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul, 2014
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul, 2014

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

4.2. Test Setup

RF Radiated Measurement:



4.3. 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.

4.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 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 0.8 meter above ground.
The turn table is rotated 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned 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 C63.10:2009. on radiated measuremen

4.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

4.6. Test Result of Band Edge

Product : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	24.262	55.771	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	25.725	57.286	--	--	--
01 (Peak)	2413.400	31.649	68.971	100.620	--	--	--
01 (Average)	2390.000	31.509	13.090	44.599	74.00	54.00	Pass
01 (Average)	2400.000	31.561	14.879	46.440	--	--	--
01 (Average)	2411.400	31.634	64.867	96.501	--	--	--

Figure Channel 01: Horizontal (Peak)

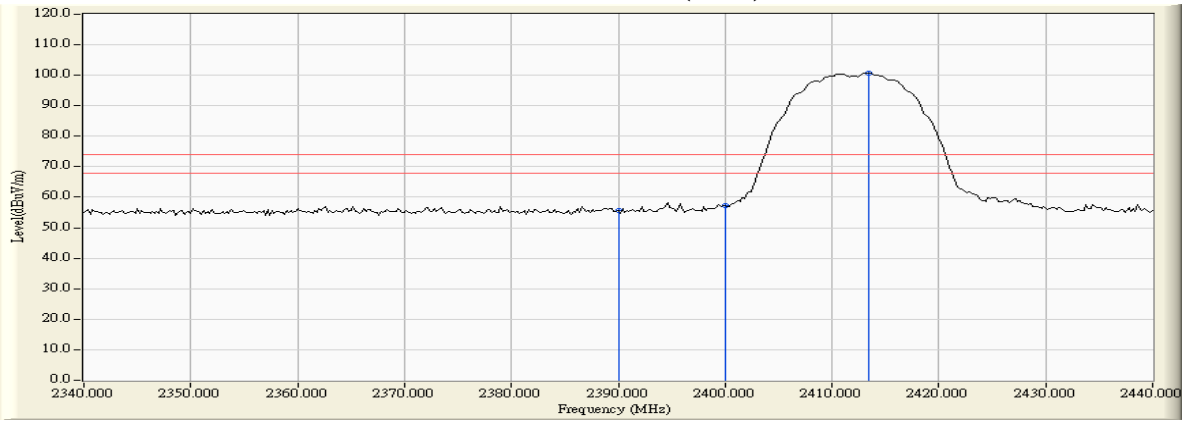
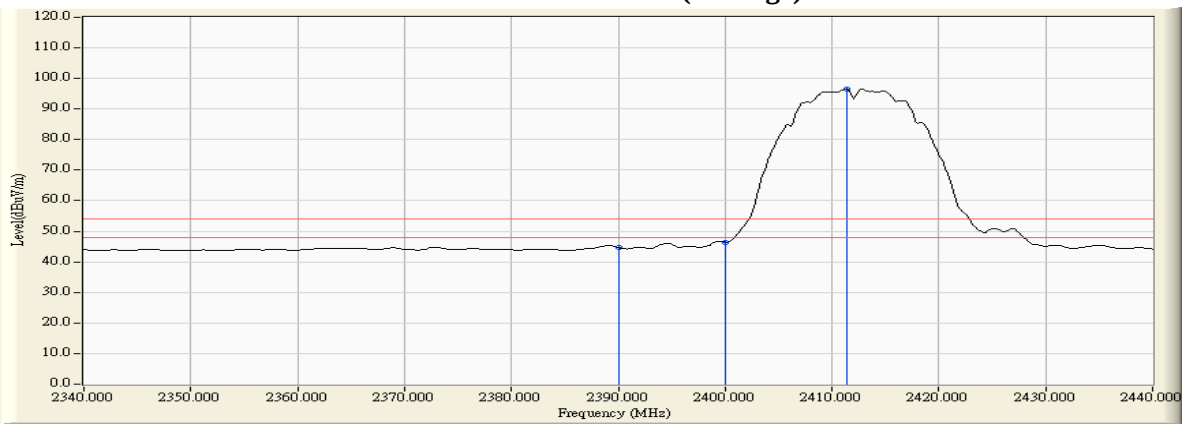


Figure Channel 01: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2388.400	30.923	26.855	57.778	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	25.001	55.916	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	29.396	60.308	--	--	--
01 (Peak)	2413.000	30.956	75.759	106.715	--	--	--
01 (Average)	2389.000	30.920	17.017	47.937	74.00	54.00	Pass
01 (Average)	2390.000	30.915	15.254	46.169	74.00	54.00	Pass
01 (Average)	2400.000	30.912	18.400	49.312	--	--	--
01 (Average)	2411.400	30.945	71.579	102.524	--	--	--

Figure Channel 01: Vertical (Peak)

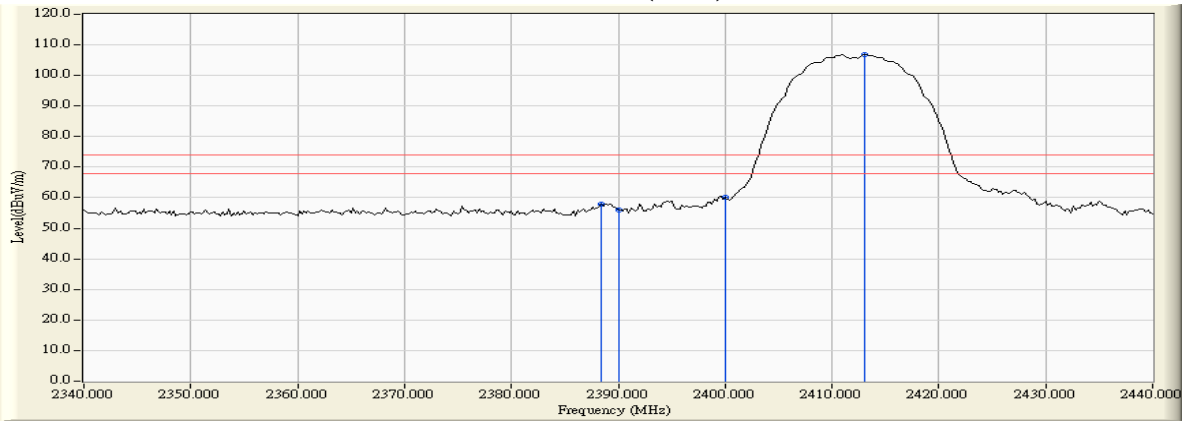
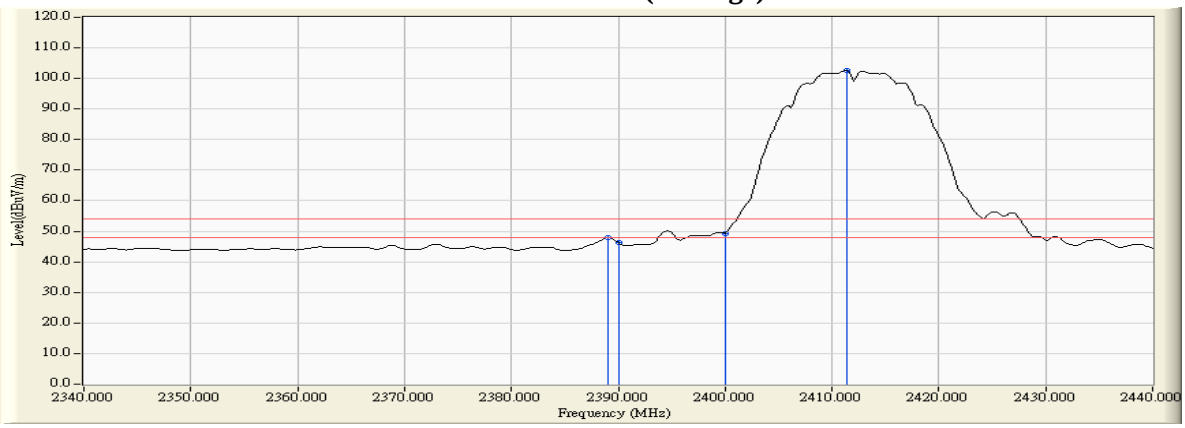


Figure Channel 01: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2460.500	32.008	70.152	102.160	--	--	--
11 (Peak)	2483.500	32.182	27.322	59.504	74.00	54.00	Pass
11 (Peak)	2487.700	32.213	28.899	61.113	74.00	54.00	Pass
11 (Average)	2461.300	32.014	66.015	98.029	--	--	--
11 (Average)	2483.500	32.182	20.793	52.975	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

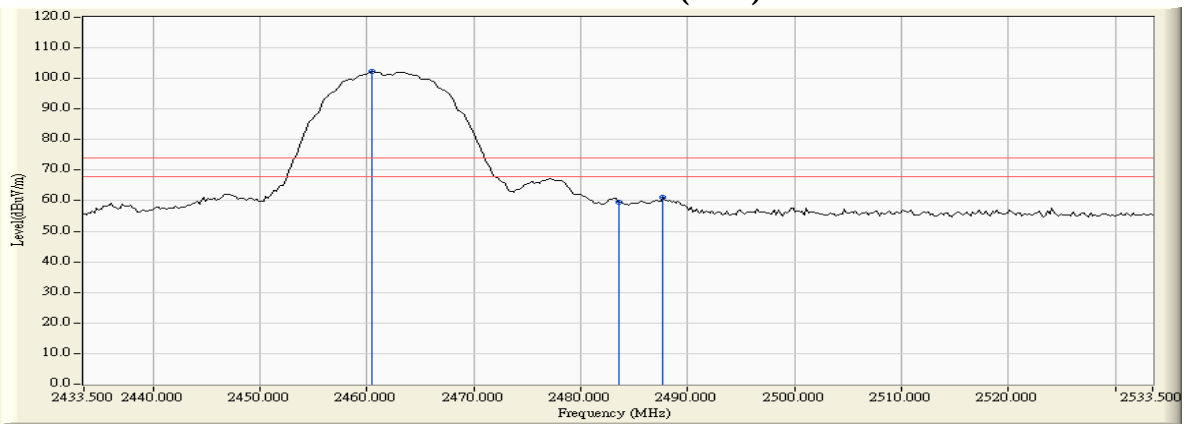
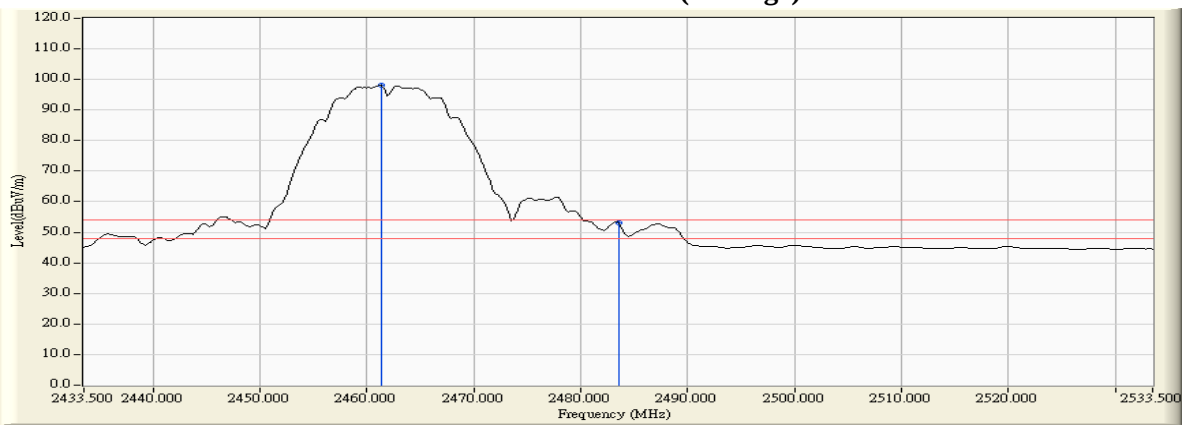


Figure Channel 11: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2460.900	31.283	75.766	107.049	--	--	--
11 (Peak)	2483.500	31.435	30.057	61.492	74.00	54.00	Pass
11 (Average)	2461.100	31.285	70.498	101.782	--	--	--
11 (Average)	2483.500	31.435	20.645	52.080	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

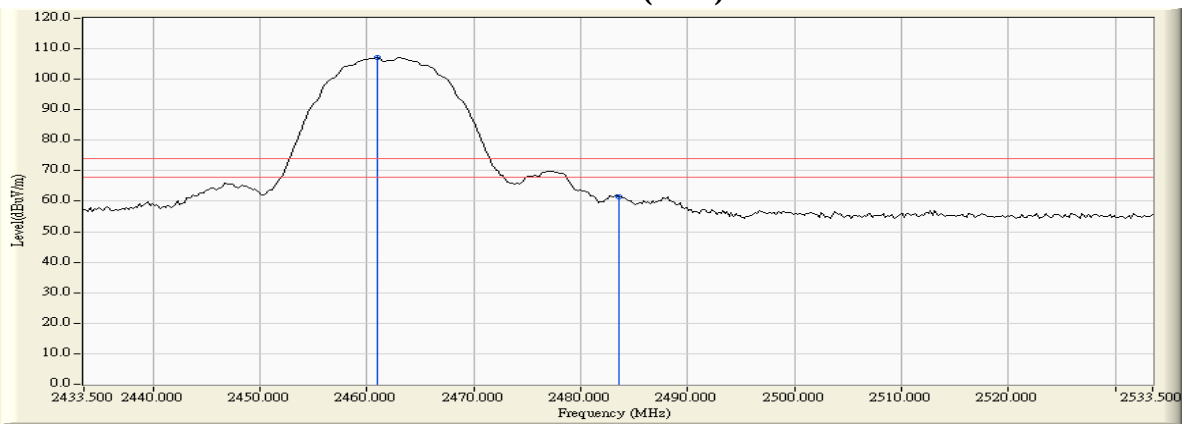


Figure Channel 11: Vertical (Average)

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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	25.276	56.785	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	47.452	79.013	--	--	--
01 (Peak)	2416.600	31.674	69.727	101.400	--	--	--
01(Average)	2390.000	31.509	13.747	45.256	74.00	54.00	Pass
01(Average)	2400.000	31.561	26.284	57.845	--	--	--
01(Average)	2416.200	31.671	59.052	90.722	--	--	--

Figure Channel 01: Horizontal (Peak)

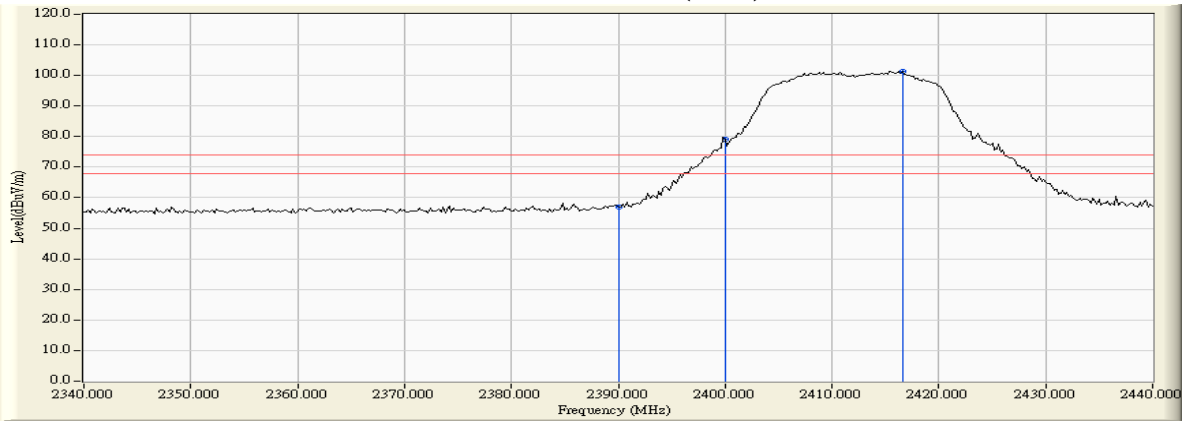
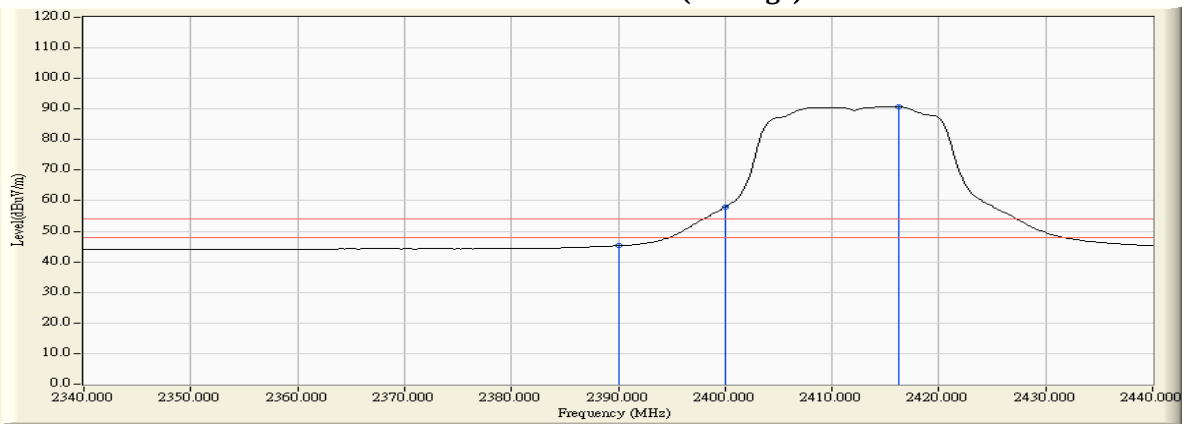


Figure Channel 01: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2388.000	30.925	29.447	60.372	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	27.586	58.501	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	50.948	81.860	--	--	--
01 (Peak)	2416.600	30.981	76.018	106.999	--	--	--
01 (Average)	2390.000	30.915	15.878	46.793	74.00	54.00	Pass
01 (Average)	2400.000	30.912	31.715	62.627	--	--	--
01 (Average)	2415.800	30.975	65.269	96.244	--	--	--

Figure Channel 01: Vertical (Peak)

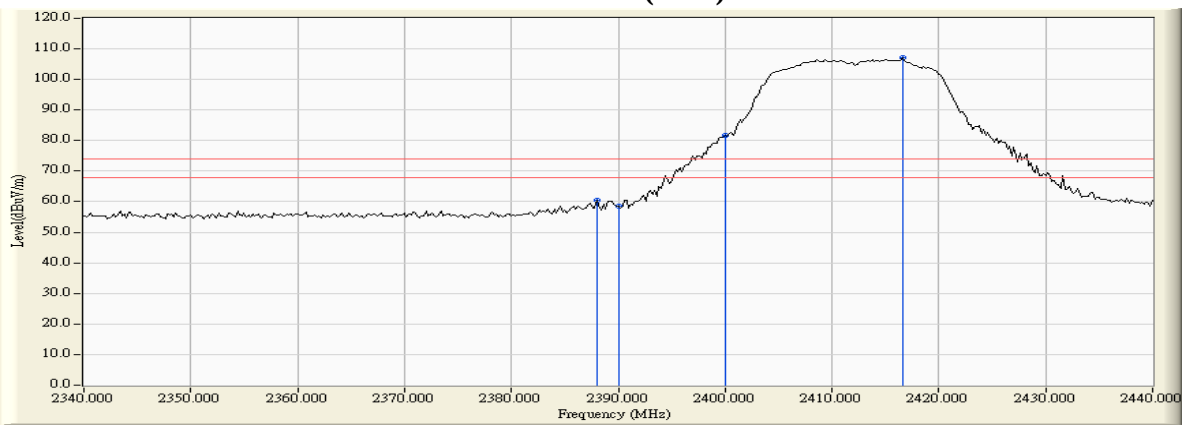
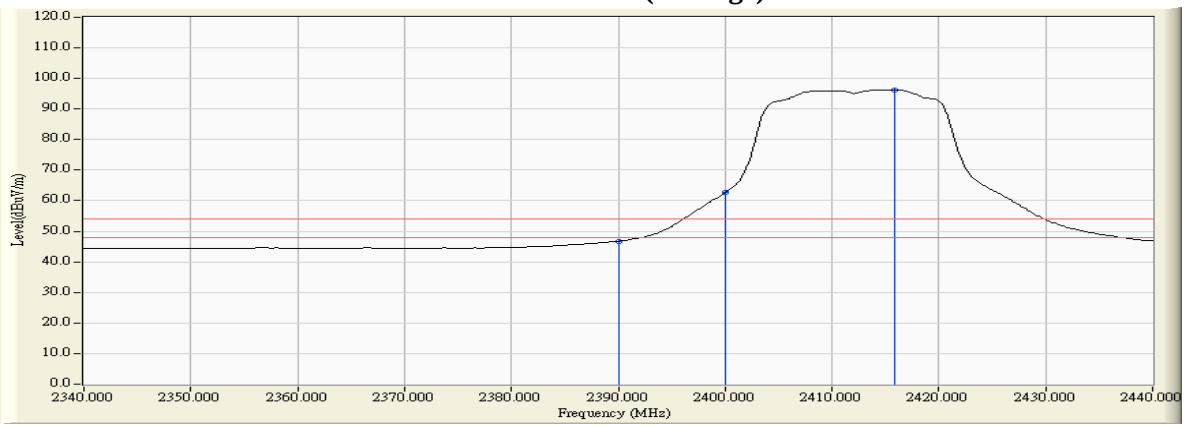


Figure Channel 01: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2460.100	32.005	69.293	101.298	--	--	--
11 (Peak)	2483.500	32.182	30.513	62.695	74.00	54.00	Pass
11 (Average)	2465.500	32.046	58.868	90.914	--	--	--
11 (Average)	2483.500	32.182	17.042	49.224	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

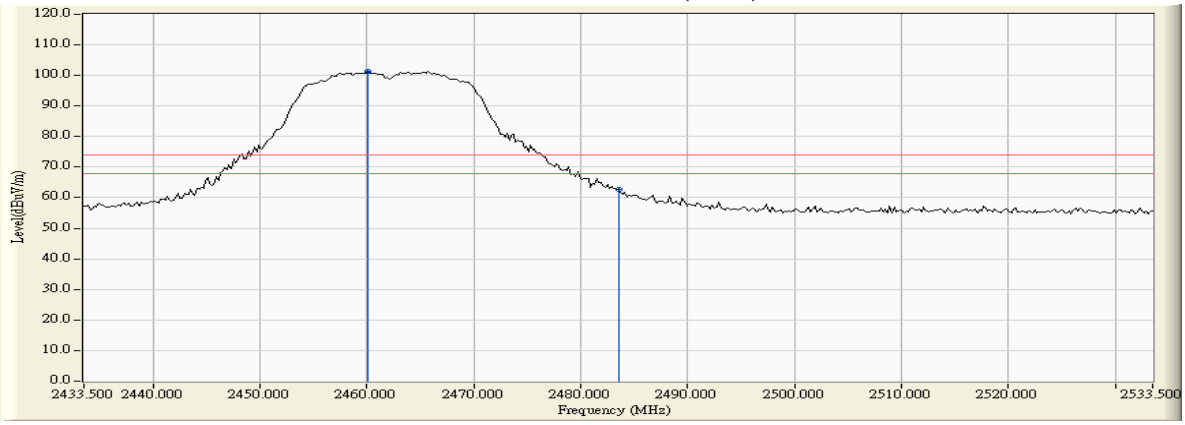
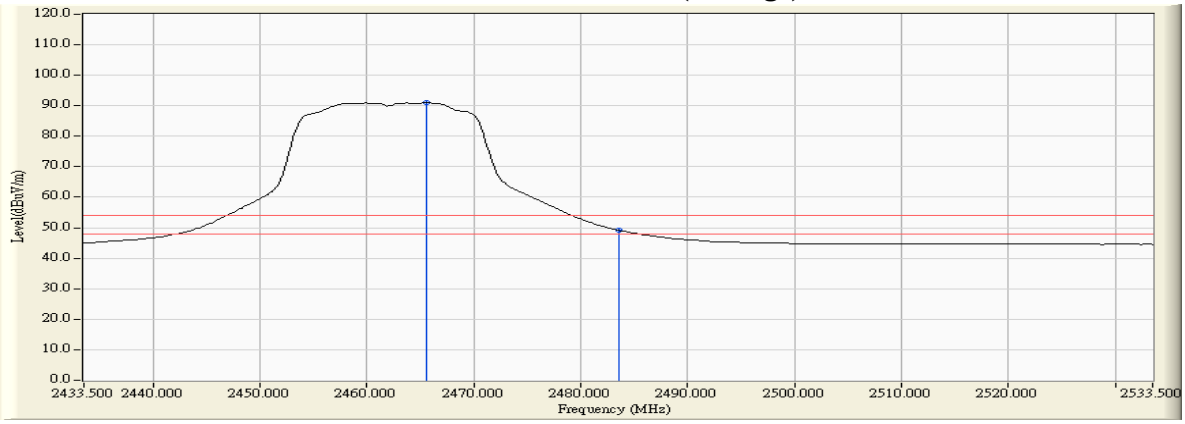


Figure Channel 11: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2459.500	31.273	74.344	105.617	--	--	--
11 (Peak)	2483.500	31.435	33.629	65.064	74.00	54.00	Pass
11 (Average)	2459.100	31.271	63.816	95.087	--	--	--
11 (Average)	2483.500	31.435	20.330	51.765	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

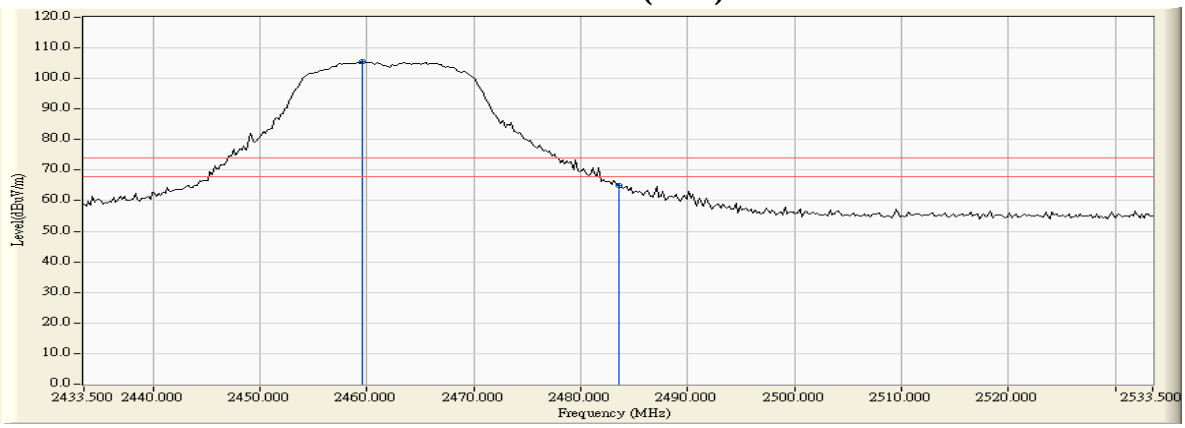
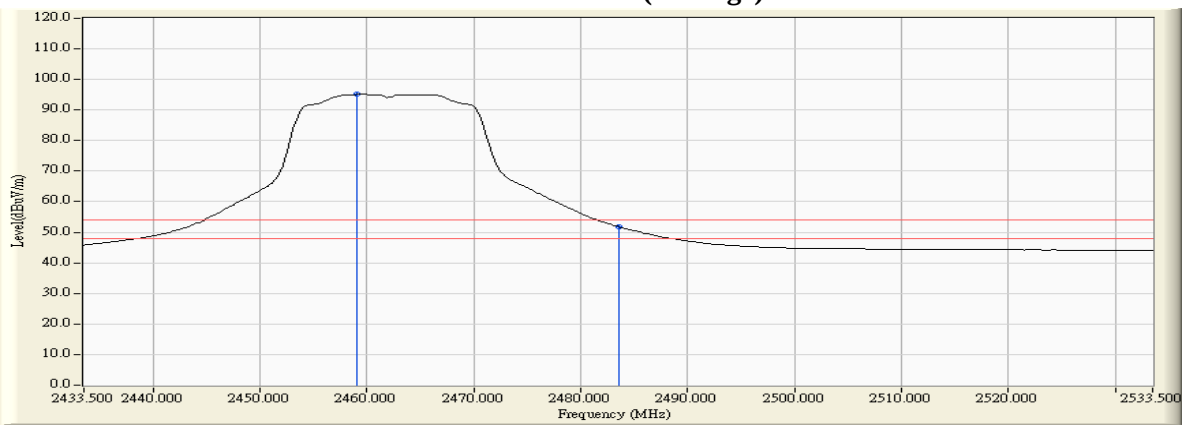


Figure Channel 11: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	25.398	56.907	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	46.162	77.723	--	--	--
01 (Peak)	2414.400	31.657	69.455	101.112	--	--	--
01 (Average)	2390.000	31.509	13.933	45.442	74.00	54.00	Pass
01 (Average)	2400.000	31.561	26.856	58.417	--	--	--
01 (Average)	2415.600	31.665	59.043	90.709	--	--	--

Figure Channel 01: Horizontal (Peak)

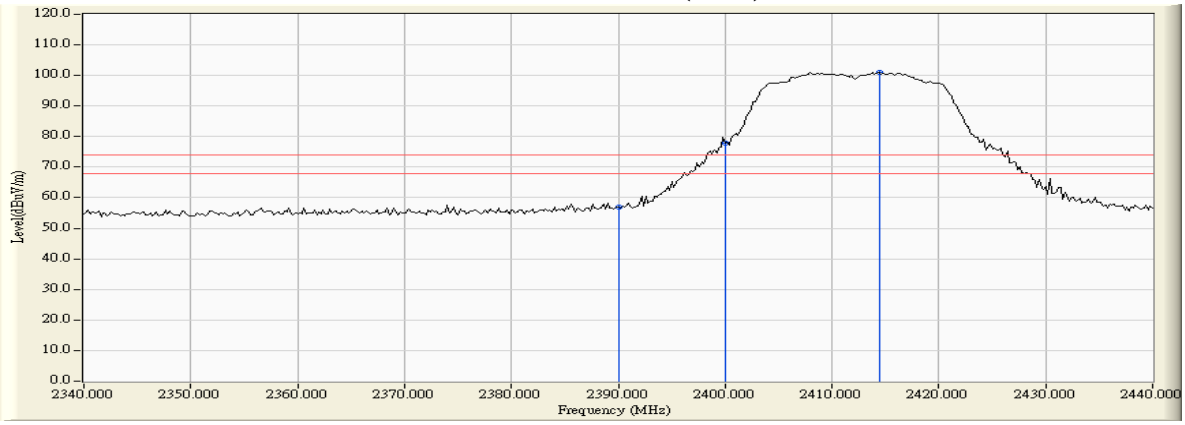
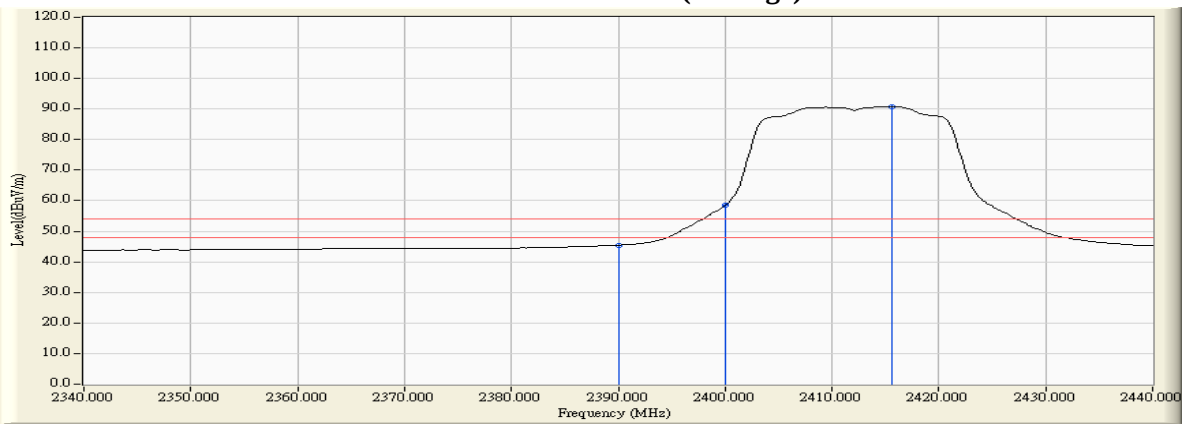


Figure Channel 01: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2384.400	30.941	30.568	61.509	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	28.721	59.636	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	52.213	83.125	--	--	--
01 (Peak)	2416.600	30.981	75.302	106.283	--	--	--
01 (Average)	2390.000	30.915	16.357	47.272	74.00	54.00	Pass
01 (Average)	2400.000	30.912	32.051	62.963	--	--	--
01 (Average)	2416.000	30.977	64.909	95.885	--	--	--

Figure Channel 01: Vertical (Peak)

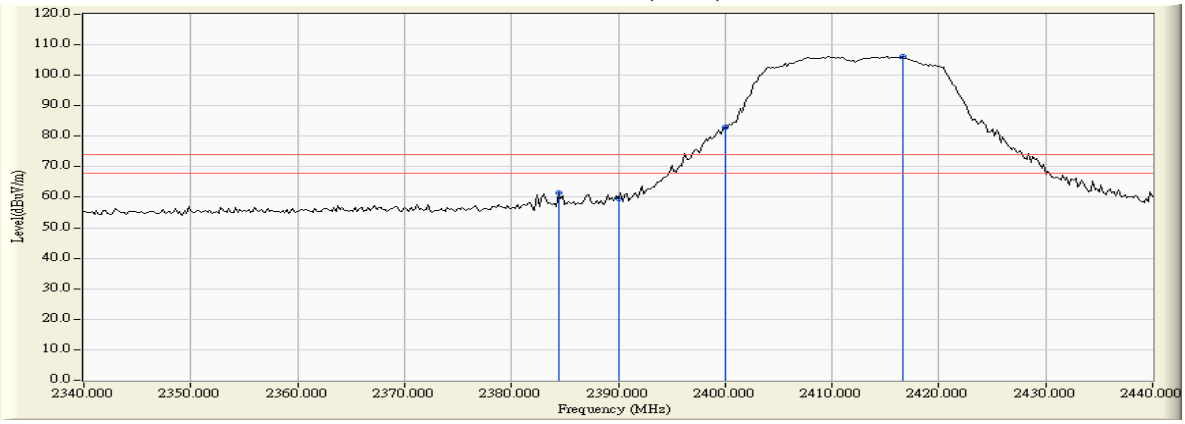
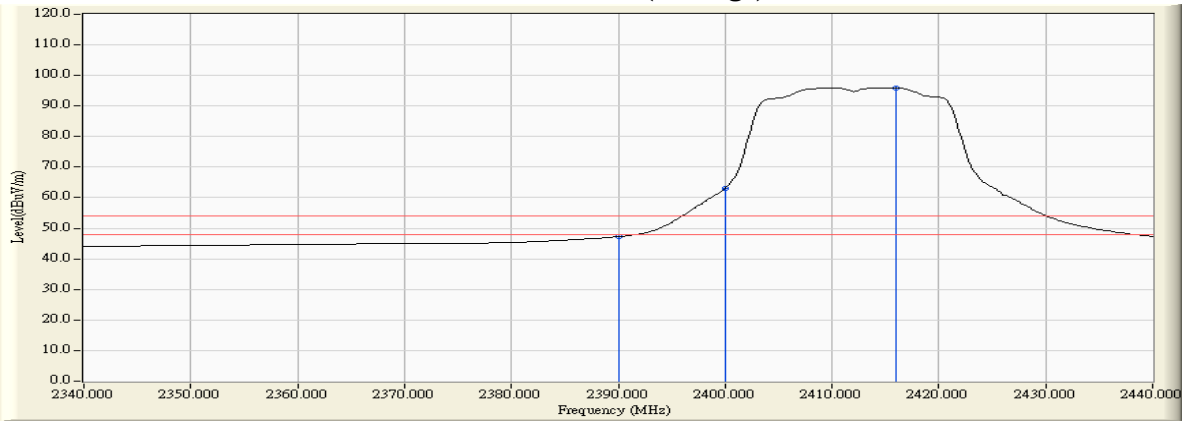


Figure Channel 01: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.300	32.029	69.334	101.363	--	--	--
11 (Peak)	2483.500	32.182	30.187	62.369	74.00	54.00	Pass
11 (Peak)	2483.900	32.185	31.771	63.956	74.00	54.00	Pass
11 (Average)	2460.300	32.006	59.047	91.054	--	--	--
11 (Average)	2483.500	32.182	18.050	50.232	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

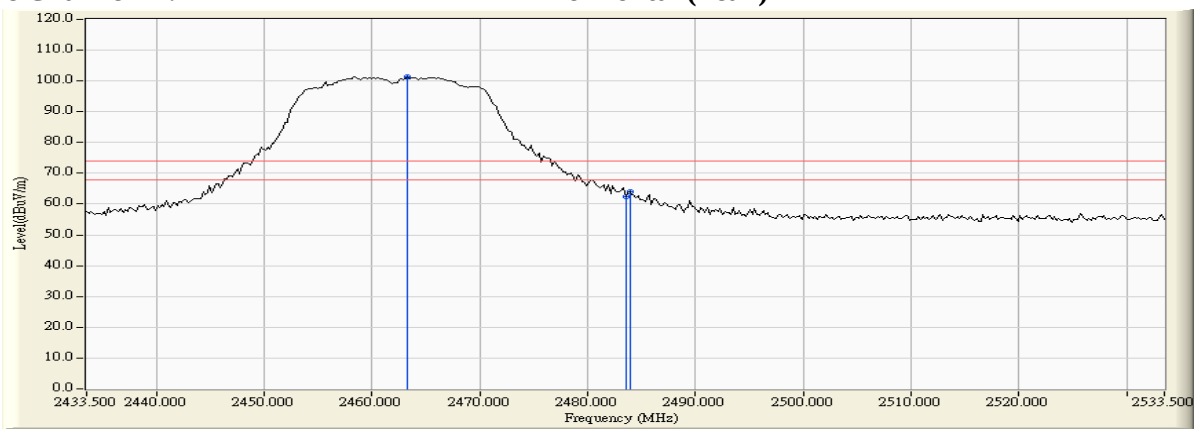
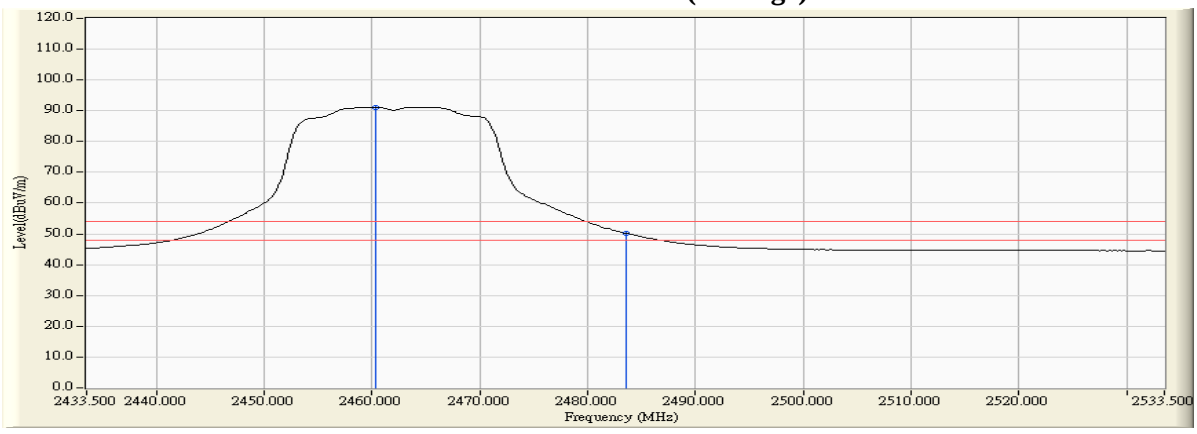


Figure Channel 11: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.500	31.300	72.793	104.093	--	--	--
11 (Peak)	2483.500	31.435	35.369	66.804	74.00	54.00	Pass
11 (Average)	2459.100	31.271	62.521	93.792	--	--	--
11 (Average)	2483.500	31.435	19.683	51.118	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

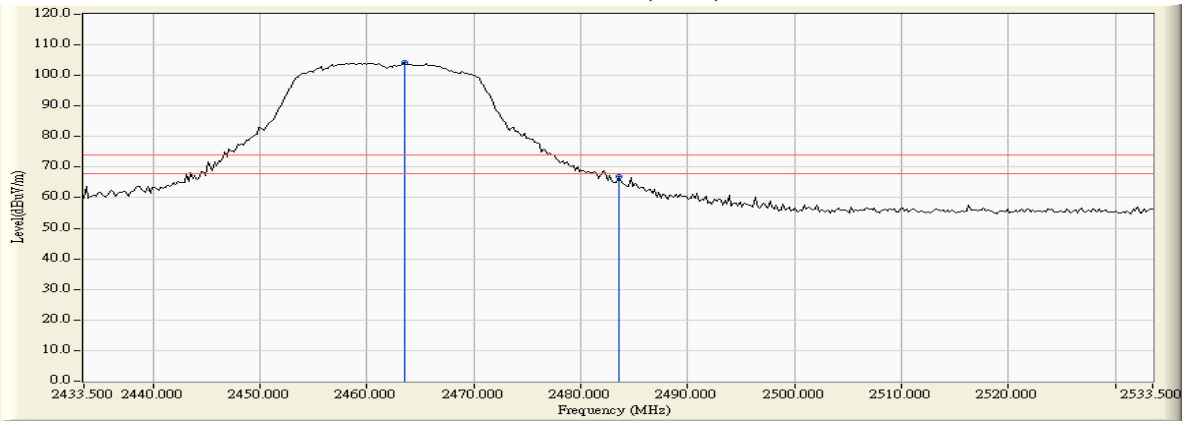
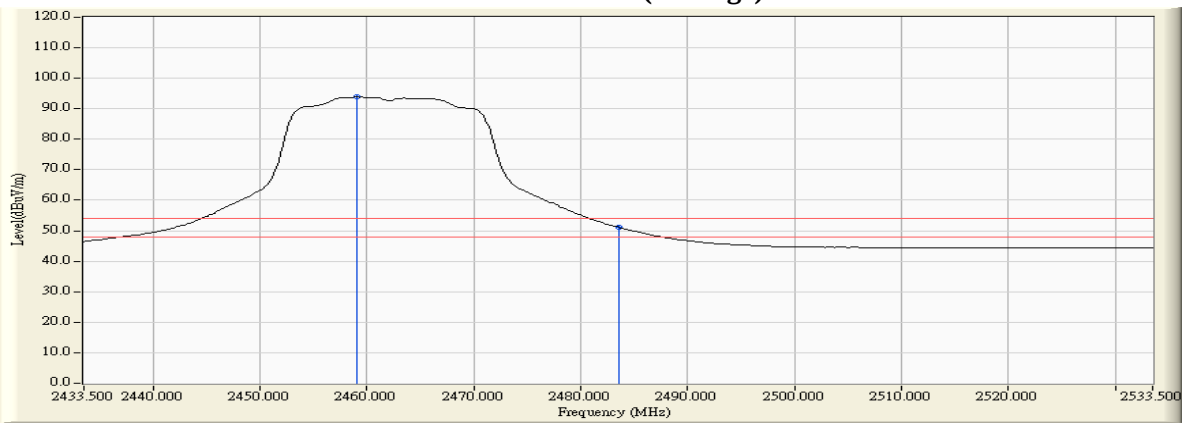


Figure Channel 11: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
03 (Peak)	2390.000	31.509	25.695	57.204	74.00	54.00	Pass
03 (Peak)	2400.000	31.561	38.937	70.498	--	--	--
03 (Peak)	2417.600	31.681	65.063	96.744	--	--	--
03 (Average)	2390.000	31.509	14.269	45.778	74.00	54.00	Pass
03 (Average)	2400.000	31.561	24.681	56.242	--	--	--
03 (Average)	2419.200	31.694	54.100	85.793	--	--	--

Figure Channel 03: Horizontal (Peak)

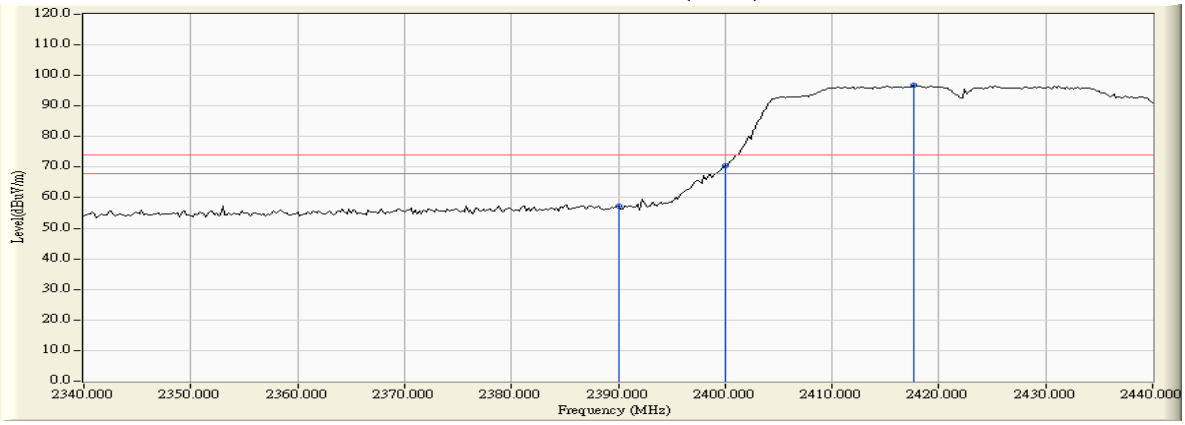
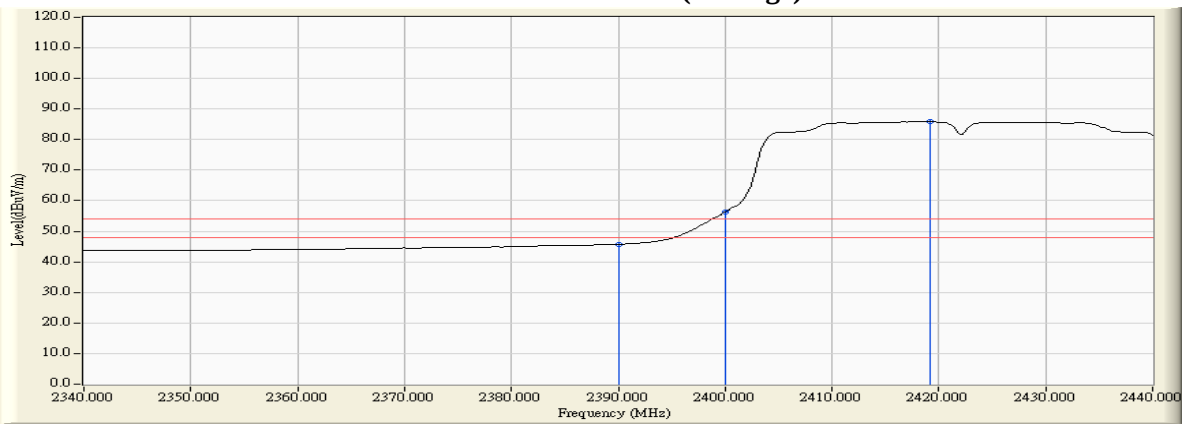


Figure Channel 03: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
03 (Peak)	2388.200	30.924	29.517	60.441	74.00	54.00	Pass
03 (Peak)	2390.000	30.915	27.338	58.253	74.00	54.00	Pass
03 (Peak)	2400.000	30.912	43.649	74.561	--	--	--
03 (Peak)	2424.800	31.036	72.145	103.181	--	--	--
03 (Average)	2390.000	30.915	16.770	47.685	74.00	54.00	Pass
03 (Average)	2400.000	30.912	30.032	60.944	--	--	--
03 (Average)	2427.000	31.050	60.527	91.578	--	--	--

Figure Channel 03: Vertical (Peak)

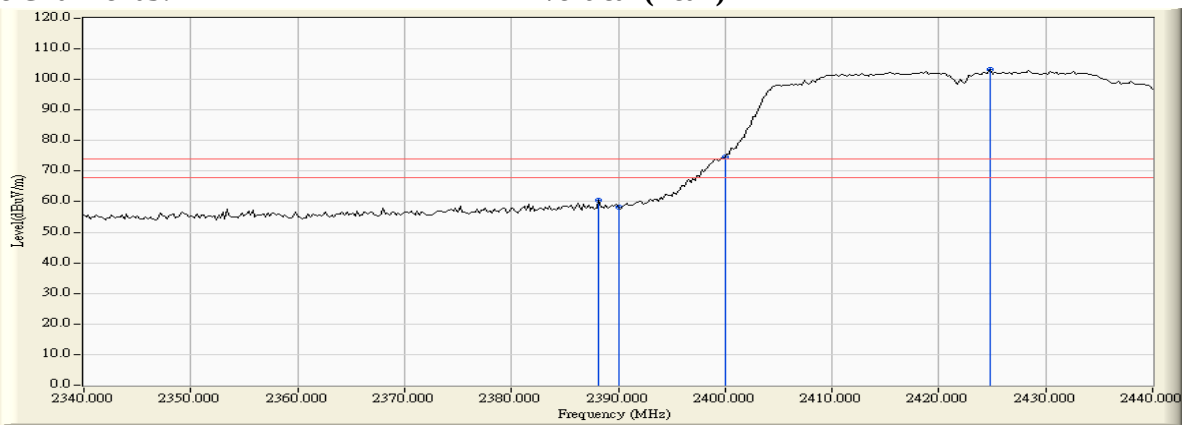
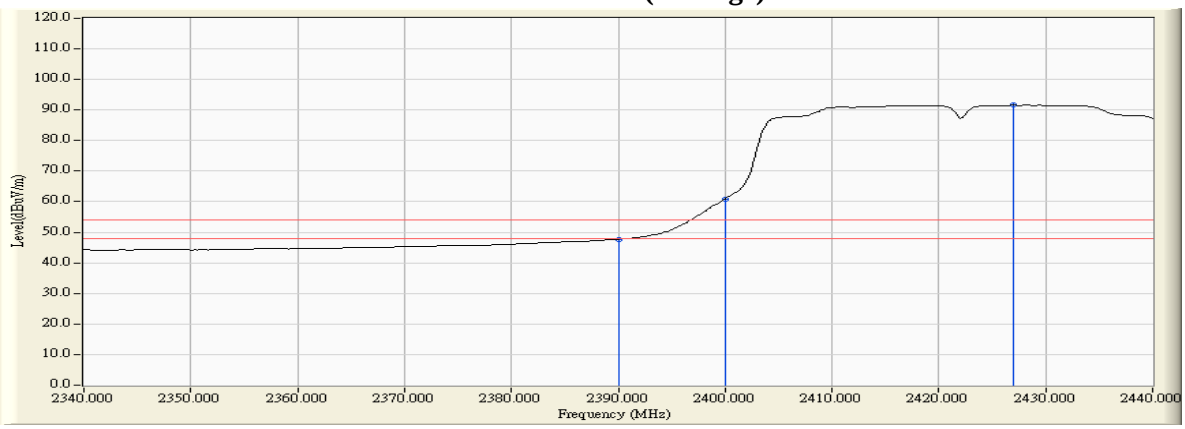


Figure Channel 03: Vertical (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452Mhz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
09 (Peak)	2462.300	32.022	66.510	98.532	--	--	--
09 (Peak)	2483.500	32.182	34.274	66.456	74.00	54.00	Pass
09 (Average)	2460.700	32.010	53.711	85.721	--	--	--
09 (Average)	2483.500	32.182	19.102	51.284	74.00	54.00	Pass

Figure Channel 09: Horizontal (Peak)

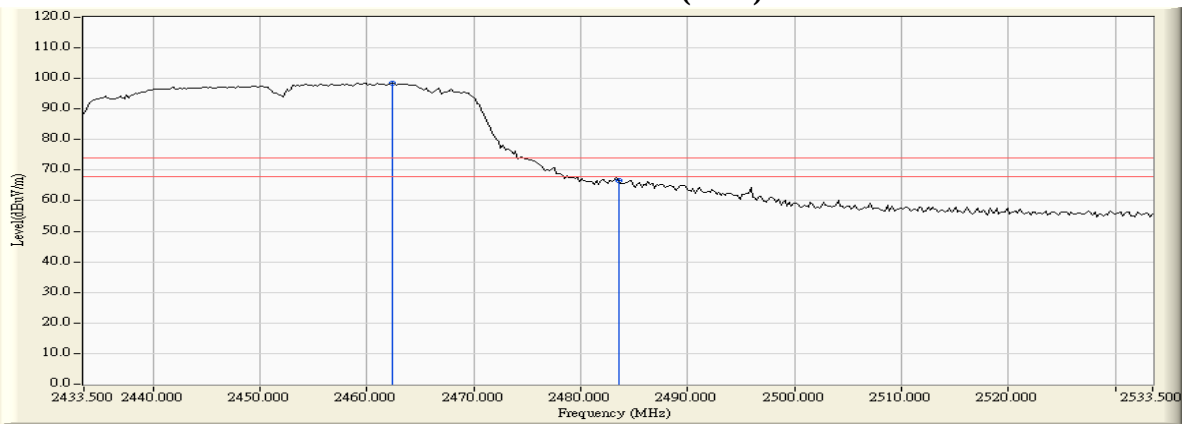
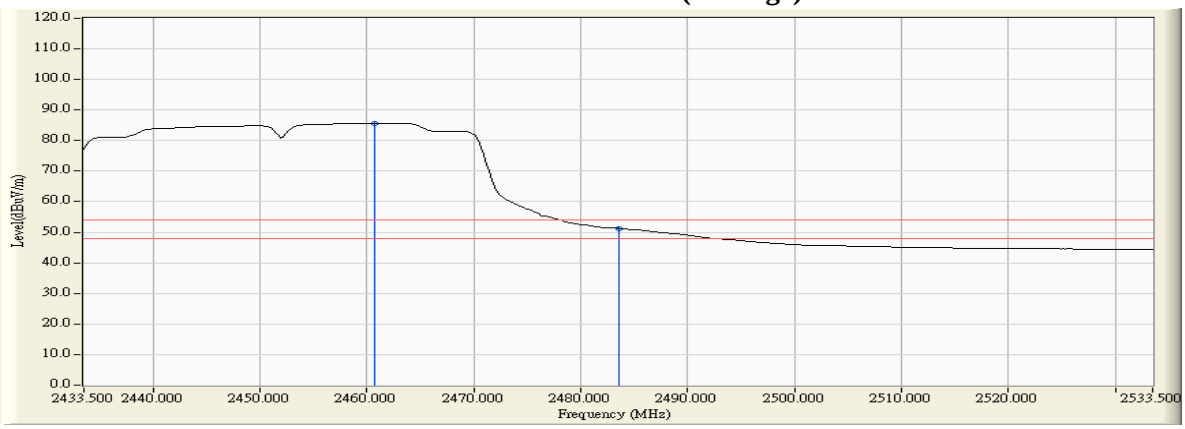


Figure Channel 09: Horizontal (Average)



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 : Intel® Dual Band Wireless-AC 3165
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452Mhz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
09 (Peak)	2454.500	31.238	68.403	99.642	--	--	--
09 (Peak)	2483.500	31.435	33.472	64.907	74.00	54.00	Pass
09 (Average)	2458.100	31.263	57.927	89.191	--	--	--
09 (Average)	2483.500	31.435	21.792	53.227	74.00	54.00	Pass

Figure Channel 09: Vertical (Peak)

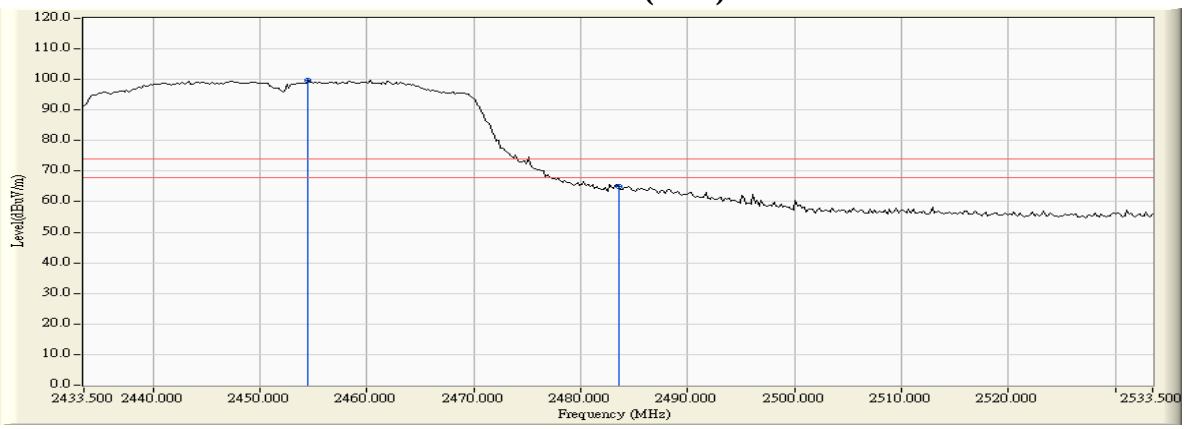
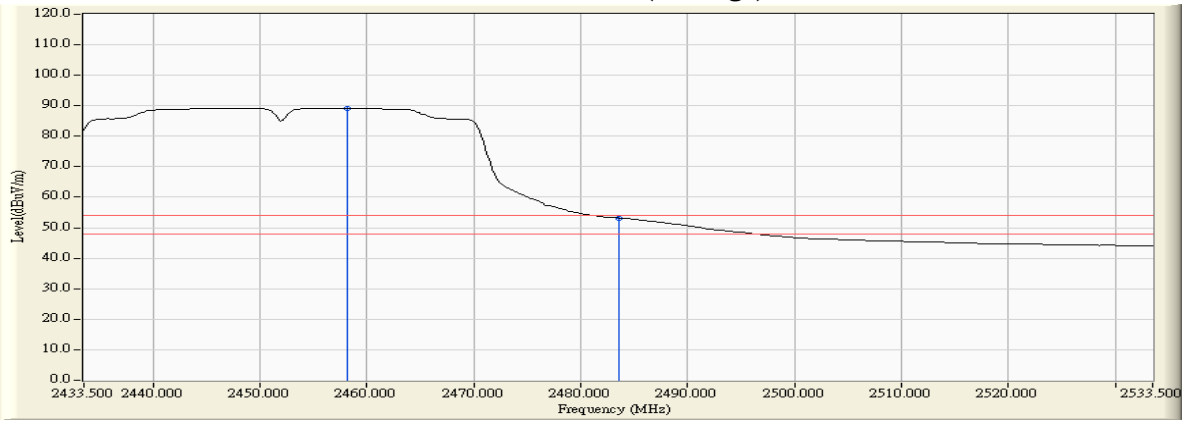


Figure Channel 09: Vertical (Average)



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.

5. During Compliance Testing

No modification was made during testing.