

FCC Test Report

(Class II Permissive Change)

Product Name	Intel® Wireless-AC 9461
Model No	9461D2W
FCC ID.	PD99461D2

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

Date of Receipt	Sep. 21, 2017
Issue Date	Jan. 24, 2018
Report No.	1790287R-RFUSP25V00
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.

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.

Test Report

Issue Date: Jan. 24, 2018

Report No.: 1790287R-RFUSP25V00



Product Name	Intel® Wireless-AC 9461
Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA
Manufacturer	Intel Mobile Communications
Model No.	9461D2W
FCC ID.	PD99461D2
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	AC110/60Hz
Trade Name	Intel
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2016 ANSI C63.4: 2014, ANSI C63.10: 2013 KDB 558074 D01 DTS Meas Guidance v04
Test Result	Complied

Documented By :

Jinn Chen

(Senior Adm. Specialist / Jinn Chen)

Tested By :

Bill Lin

(Engineer / Bill Lin)

Approved By :



(Director / Vincent Lin)

TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION	4
1.1. EUT Description.....	4
1.2. Operational Description	6
1.3. Tested System Details.....	7
1.4. Configuration of Tested System	7
1.5. EUT Exercise Software	7
1.6. Test Facility	8
1.7. List of Test Item and Equipment	9
2. Peak Power Output	10
2.1. Test Setup	10
2.2. Limits	10
2.3. Test Procedure	10
2.4. Uncertainty	10
2.5. Test Result of Peak Power Output.....	11
3. Radiated Emission.....	15
3.1. Test Setup	15
3.2. Limits	16
3.3. Test Procedure	17
3.4. Uncertainty	18
3.5. Test Result of Radiated Emission.....	19
4. Band Edge	43
4.1. Test Setup	43
4.2. Limits	44
4.3. Test Procedure	44
4.4. Uncertainty	45
4.5. Test Result of Band Edge	46
5. Duty Cycle.....	78
5.1. Test Setup	78
5.2. Test Procedure	78
5.3. Uncertainty	78
5.4. Test Result of Duty Cycle.....	79
6. EMI Reduction Method During Compliance Testing	82
Attachment 1: EUT Test Photographs	
Attachment 2: EUT Detailed Photographs	

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wireless-AC 9461
Trade Name	Intel
Model No.	9461D2W
FCC ID.	PD99461D2
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Channel separation	802.11b/g/n: 5 MHz
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	Dipole Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WIESON Technologies co ., ltd	GY121HT0321-003-H (External)	Dipole	2.89dBi for 2.4 GHz

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

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

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

802.11n-40MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
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		

Note:

1. The EUT is a Intel® Wireless-AC 9461 with a built-in 2.4GHz WLAN and Bluetooth 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. 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 and 802.11n(40M-BW) is 15Mbps)
4. 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.
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: PD99461D2, originally granted on 10/06/2017.

The major change filed under this application is:

Change #1:

Addition of new dipole type antenna is different from originally antenna type.

Manufacturer. WIESON, Part no. GY121HT0321-003-H (External)

Change #2:

Reduce the Output Power through firmware and SAR measurement were evaluated.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

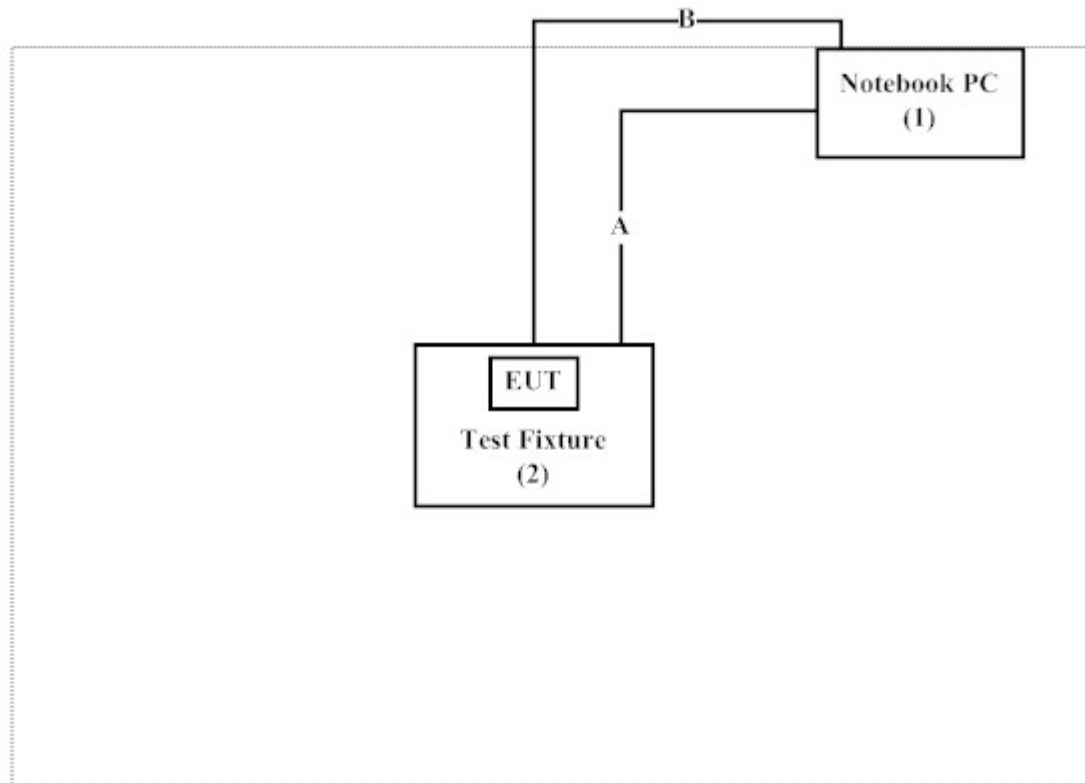
1.3. Tested System Details

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	P62G	9TSGJC2	Non-Shielded, 1.8m
2	Test Fixture	Intel	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	USB Cable	Shielded, 1.8m
B	Single Cable	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 software “DRTU (Ver 10.1742.0-06126)” 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 DEKRA Testing and Certification Co., Ltd. Web Site:

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en

Site Description: Accredited by TAF
Accredited Number: 3023

Site Name: DEKRA Testing and Certification Co., Ltd.
Site Address: No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan.
TEL: 886-2-2602-7968 / FAX : 866-2-2602-3286
E-Mail : info.tw@dekra.com

FCC Accreditation Number: TW3023

1.7. List of Test Item and Equipment

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103464	2017.01.24	2018.01.23
X	Power Meter	Anritsu	ML2496A	1548003	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531024	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531025	2017.12.11	2018.12.10
	Bluetooth Tester	R&S	CBT	101238	2018.01.18	2019.01.17

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 Conduction Test System V8.0.110

For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	TESEQ	HLA6121	37133	2016.03.18	2018.03.17
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2017.02.13	2018.02.12
X	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
X	Horn Antenna	Com-Power	AH-840	101087	2017.05.24	2018.05.23
X	Pre-Amplifier	EMCI	EMC001330	980316	2017.05.16	2018.05.15
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2017.05.17	2018.05.16
X	Filter	MICRO TRONICS	BRM50702	G251	2017.08.30	2018.08.29
	Filter	MICRO TRONICS	BRM50716	G188	2017.08.30	2018.08.29
X	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
X	Spectrum Analyzer	R&S	FSV40	101148	2018.01.11	2019.01.10
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2017.05.25	2018.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2017.08.11	2018.08.10

Note:

1. Loop Antenna is calibrated every two year, the other 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. Peak Power Output

2.1. Test Setup



2.2. Limits

The maximum peak power shall be less 1 Watt.

2.3. Test Procedure

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 9.1.3 PKPM1 Peak power meter method.

2.4. Uncertainty

± 0.86 dB

2.5. Test Result of Peak Power Output

Product : Intel® Wireless-AC 9461
 Test Item : Peak Power Output Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)
 Test Date : 2018/01/17

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	17.9	--	--	--	20.34	<30dBm	Pass
07	2442	21.07	20.89	20.76	20.63	22.66	<30dBm	Pass
11	2462	17.12	--	--	--	19.42	<30dBm	Pass
12	2467	16.59	--	--	--	18.73	<30dBm	Pass
13	2472	15.19	--	--	--	17.68	<30dBm	Pass

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

Product : Intel® Wireless-AC 9461
 Test Item : Peak Power Output Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)
 Test Date : 2018/01/17

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	16.91	--	--	--	--	--	--	--	21.28	<30dBm	Pass
07	2442	19.02	18.87	18.71	18.64	18.52	18.43	18.31	18.25	22.37	<30dBm	Pass
11	2462	16.77	--	--	--	--	--	--	--	21.23	<30dBm	Pass
12	2467	13.68	--	--	--	--	--	--	--	18.17	<30dBm	Pass
13	2472	-4.49	--	--	--	--	--	--	--	1.09	<30dBm	Pass

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

Product : Intel® Wireless-AC 9461
 Test Item : Peak Power Output Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
 Test Date : 2018/01/17

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	7.2		
		Measurement Level (dBm)										
01	2412	16.83	--	--	--	--	--	--	--	21.58	<30dBm	Pass
07	2442	19.17	19.05	18.89	18.76	18.65	18.54	18.44	18.32	22.56	<30dBm	Pass
11	2462	16.52	--	--	--	--	--	--	--	21.28	<30dBm	Pass
12	2467	13.75	--	--	--	--	--	--	--	18.52	<30dBm	Pass
13	2472	-6.09	--	--	--	--	--	--	--	0.22	<30dBm	Pass

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

Product : Intel® Wireless-AC 9461
 Test Item : Peak Power Output Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)
 Test Date : 2018/01/17

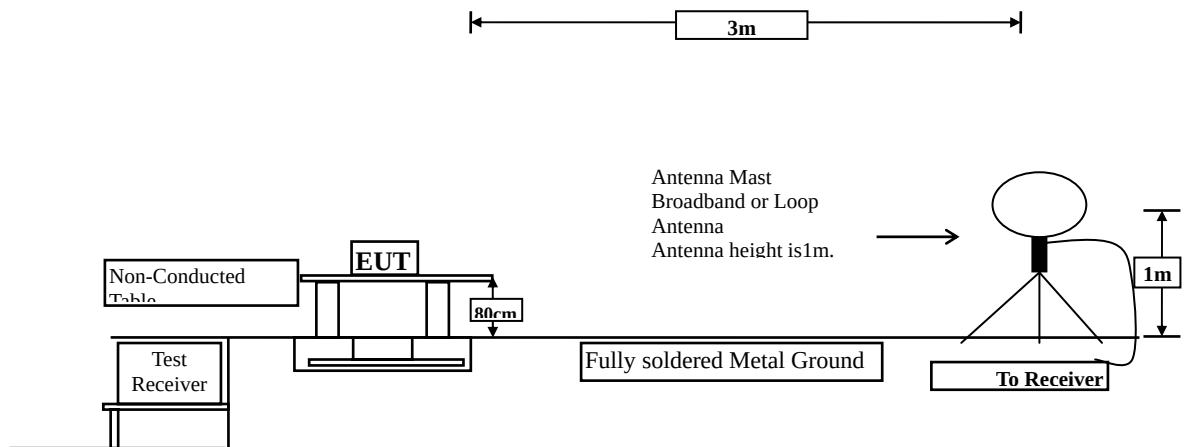
Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150			
		Measurement Level (dBm)										
03	2422	13.93	--	--	--	--	--	--	--	19.09	<30dBm	Pass
07	2442	15.78	15.63	15.51	15.42	15.33	15.23	15.12	15.04	21.02	<30dBm	Pass
09	2452	14.46	--	--	--	--	--	--	--	19.6	<30dBm	Pass
10	2457	11.37	--	--	--	--	--	--	--	17.97	<30dBm	Pass
11	2462	3.78	--	--	--	--	--	--	--	9.9	<30dBm	Pass

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

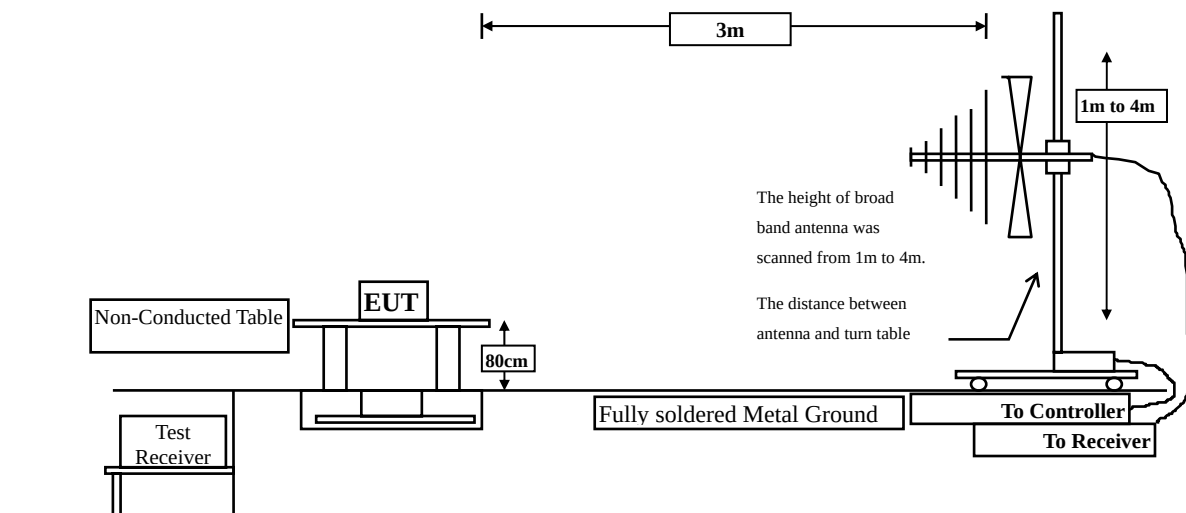
3. Radiated Emission

3.1. Test Setup

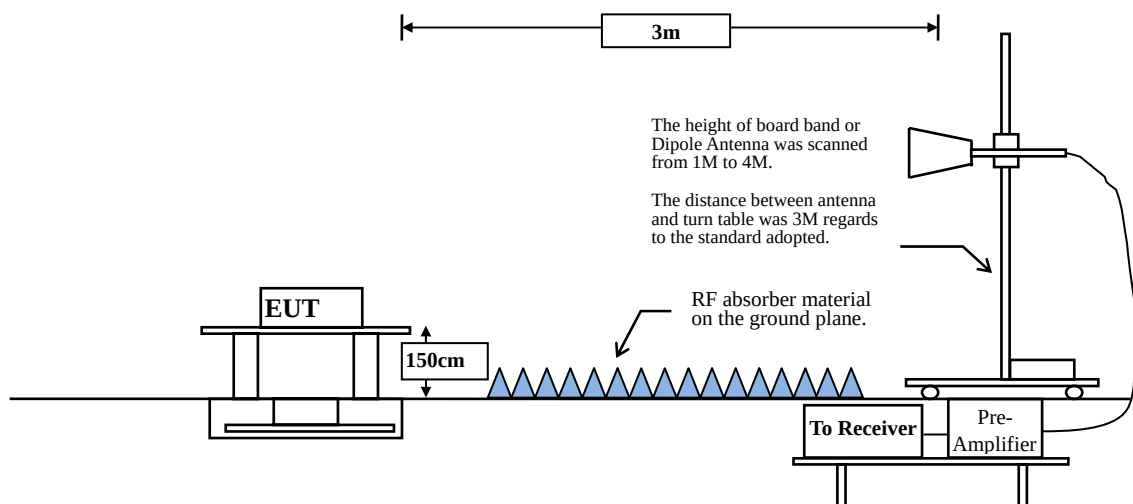
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



3.2. Limits

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

3.3. 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 measurement frequency range from 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 558074 section 12.2.4. Peak power measurement procedure

RBW = as specified in Table 1.

VBW $\geq 3 \times$ RBW.

Table 1 —RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to KDB 558074 section 12.2.5. Average power measurement procedure

RBW = 1MHz.

VBW = 10Hz, when duty cycle $\geq 98 \%$

VBW $\geq 1/T$, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

2.4GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11b	98.84	12.3188	81	10
802.11g	98.61	2.0580	486	10
802.11n20	99.61	37.0580	27	10
802.11n40	98.80	17.8261	56	10

Note: Duty Cycle Refer to Section 5

3.4. Uncertainty

Horizontal :

30-300MHz: $\pm 4.08\text{dB}$; 300M-1GHz: $\pm 3.86\text{dB}$; 1-18GHz: $\pm 3.77\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$ °

Vertical :

30-300MHz: $\pm 4.81\text{dB}$; 300M-1GHz: $\pm 3.87\text{dB}$; 1-18GHz: $\pm 3.83\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$ °

3.5. Test Result of Radiated Emission

Product : Intel® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4824.000	-2.866	51.360	48.494	-25.506	74.000
7236.000	0.381	46.310	46.691	-27.309	74.000
9648.000	2.391	43.000	45.391	-28.609	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4824.000	-2.866	56.860	53.994	-20.006	74.000
7236.000	2.220	47.060	49.280	-4.720	74.000
9648.000	2.220	43.100	45.320	-8.680	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2442 MHz)
 Test Date : 2018/01/18

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
Peak Detector:					
4884.000	-2.815	52.000	49.185	-24.815	74.000
7326.000	0.464	50.550	51.014	-22.986	74.000
9768.000	2.622	44.100	46.722	-27.278	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4884.000	-2.815	56.640	53.825	-20.175	74.000
7326.000	0.464	51.100	51.564	-22.436	74.000
9768.000	2.622	44.470	47.092	-26.908	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4924.000	-2.796	48.630	45.834	-28.166	74.000
7386.000	0.489	47.130	47.619	-26.381	74.000
9848.000	2.729	42.760	45.490	-28.510	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4924.000	-2.796	53.570	50.774	-23.226	74.000
7386.000	0.489	49.000	49.489	-24.511	74.000
9848.000	2.729	43.050	45.780	-28.220	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2467 MHz)
 Test Date : 2018/01/18

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:					
4934.000	-2.799	48.800	46.001	-27.999	74.000
7401.000	0.489	46.900	47.389	-26.611	74.000
9868.000	2.768	43.440	46.207	-27.793	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4934.000	-2.799	53.290	50.491	-23.509	74.000
7401.000	0.489	49.110	49.599	-24.401	74.000
9868.000	2.768	43.200	45.967	-28.033	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2472 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4944.000	-2.793	47.740	44.947	-29.053	74.000
7416.000	0.496	47.000	47.497	-26.503	74.000
9888.000	2.822	44.040	46.863	-27.137	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4944.000	-2.793	52.000	49.207	-24.793	74.000
7416.000	0.496	48.060	48.557	-25.443	74.000
9888.000	2.822	43.700	46.523	-27.477	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
 Test Date : 2018/01/18

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
Peak Detector:					
4824.000	-2.866	47.400	44.534	-29.466	74.000
7236.000	0.381	46.000	46.381	-27.619	74.000
9648.000	2.391	42.860	45.251	-28.749	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4824.000	-2.866	52.890	50.024	-23.976	74.000
7236.000	0.381	45.860	46.241	-27.759	74.000
9648.000	2.391	43.140	45.531	-28.469	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2442 MHz)
 Test Date : 2018/01/18

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:					
4884.000	-2.815	47.840	45.025	-28.975	74.000
7326.000	0.464	48.850	49.314	-24.686	74.000
9768.000	2.622	44.300	46.922	-27.078	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4884.000	-2.815	53.760	50.945	-23.055	74.000
7326.000	0.464	51.740	52.204	-21.796	74.000
9768.000	2.622	43.690	46.312	-27.688	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4924.000	-2.796	46.800	44.004	-29.996	74.000
7386.000	0.489	47.680	48.169	-25.831	74.000
9848.000	2.729	43.150	45.880	-28.120	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4924.000	-2.796	50.970	48.174	-25.826	74.000
7386.000	0.489	50.590	51.079	-22.921	74.000
9848.000	2.729	43.360	46.090	-27.910	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2467 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4934.000	-2.799	45.530	42.731	-31.269	74.000
7401.000	0.489	44.900	45.389	-28.611	74.000
9868.000	2.768	43.410	46.177	-27.823	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4934.000	-2.799	49.400	46.601	-27.399	74.000
7401.000	0.489	48.230	48.719	-25.281	74.000
9868.000	2.768	43.340	46.107	-27.893	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2472 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4944.000	-2.793	45.270	42.477	-31.523	74.000
7416.000	0.496	44.330	44.827	-29.173	74.000
9888.000	2.822	43.550	46.373	-27.627	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4944.000	-2.793	45.390	42.597	-31.403	74.000
7416.000	0.496	44.660	45.157	-28.843	74.000
9888.000	2.822	43.890	46.713	-27.287	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)
 Test Date : 2018/01/18

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
Peak Detector:					
4824.000	-2.866	48.920	46.054	-27.946	74.000
7236.000	0.381	44.940	45.321	-28.679	74.000
9648.000	2.391	43.560	45.951	-28.049	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4824.000	-2.866	53.790	50.924	-23.076	74.000
7236.000	0.381	45.250	45.631	-28.369	74.000
9648.000	2.391	42.730	45.121	-28.879	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2442 MHz)
 Test Date : 2018/01/18

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:					
4884.000	-2.815	49.050	46.235	-27.765	74.000
7326.000	0.464	49.510	49.974	-24.026	74.000
9768.000	2.622	44.050	46.672	-27.328	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4884.000	-2.815	53.530	50.715	-23.285	74.000
7326.000	0.464	52.540	53.004	-20.996	74.000
9768.000	2.622	43.680	46.302	-27.698	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4924.000	-2.796	46.350	43.554	-30.446	74.000
7386.000	0.489	47.420	47.909	-26.091	74.000
9848.000	2.729	43.270	46.000	-28.000	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4924.000	-2.796	51.110	48.314	-25.686	74.000
7386.000	0.489	50.830	51.319	-22.681	74.000
9848.000	2.729	43.040	45.770	-28.230	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2467 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4934.000	-2.799	45.440	42.641	-31.359	74.000
7401.000	0.489	44.950	45.439	-28.561	74.000
9868.000	2.768	43.900	46.667	-27.333	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4934.000	-2.799	48.780	45.981	-28.019	74.000
7401.000	0.489	48.760	49.249	-24.751	74.000
9868.000	2.768	43.340	46.107	-27.893	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2472 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4944.000	-2.793	45.560	42.767	-31.233	74.000
7416.000	0.496	44.250	44.747	-29.253	74.000
9888.000	2.822	43.730	46.553	-27.447	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4944.000	-2.793	45.340	42.547	-31.453	74.000
7416.000	0.496	44.180	44.677	-29.323	74.000
9888.000	2.822	43.880	46.703	-27.297	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)
 Test Date : 2018/01/18

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:					
4844.000	-2.852	45.530	42.678	-31.322	74.000
7266.000	0.426	45.320	45.746	-28.254	74.000
9688.000	2.479	42.800	45.279	-28.721	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4844.000	-2.852	48.000	45.148	-28.852	74.000
7266.000	0.426	45.780	46.206	-27.794	74.000
9688.000	2.479	43.440	45.919	-28.081	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2442 MHz)
 Test Date : 2018/01/18

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:					
4884.000	-2.815	46.080	43.265	-30.735	74.000
7326.000	0.464	46.430	46.894	-27.106	74.000
9768.000	2.622	44.090	46.712	-27.288	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4884.000	-2.815	50.000	47.185	-26.815	74.000
7326.000	0.464	48.090	48.554	-25.446	74.000
9768.000	2.622	44.540	47.162	-26.838	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)
 Test Date : 2018/01/18

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4904.000	-2.828	45.520	42.692	-31.308	74.000
7356.000	0.473	44.070	44.542	-29.458	74.000
9808.000	2.719	43.620	46.340	-27.660	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4904.000	-2.828	48.790	45.962	-28.038	74.000
7356.000	0.473	46.470	46.942	-27.058	74.000
9808.000	2.719	43.380	46.100	-27.900	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2457 MHz)
 Test Date : 2018/01/18

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
Peak Detector:					
4914.000	-2.803	45.600	42.797	-31.203	74.000
7371.000	0.480	44.000	44.481	-29.519	74.000
9828.000	2.766	43.280	46.046	-27.954	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4914.000	-2.803	45.840	43.037	-30.963	74.000
7371.000	0.480	44.690	45.171	-28.829	74.000
9828.000	2.766	43.060	45.826	-28.174	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2462 MHz)
 Test Date : 2018/01/18

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
Peak Detector:					
4924.000	-2.796	45.700	42.904	-31.096	74.000
7386.000	0.489	44.160	44.649	-29.351	74.000
9848.000	2.729	43.330	46.060	-27.940	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
4924.000	-2.796	45.940	43.144	-30.856	74.000
7386.000	0.489	44.000	44.489	-29.511	74.000
9848.000	2.729	43.080	45.810	-28.190	74.000
Average Detector:					
--	--	--	--	--	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® Wireless-AC 9461
 Test Item : General Radiated Emission Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2442 MHz)
 Test Date : 2018/01/04

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
176.470	-11.727	41.266	29.539	-13.961	43.500
312.270	-9.626	38.748	29.122	-16.878	46.000
440.310	-6.405	40.045	33.640	-12.360	46.000
597.450	-3.130	35.383	32.253	-13.747	46.000
800.180	-0.323	36.068	35.745	-10.255	46.000
937.920	1.308	31.004	32.312	-13.688	46.000
Vertical					
191.990	-13.377	41.640	28.263	-15.237	43.500
311.300	-9.647	34.094	24.447	-21.553	46.000
471.350	-5.801	32.090	26.289	-19.711	46.000
600.360	-3.066	38.021	34.955	-11.045	46.000
800.180	-0.323	33.967	33.644	-12.356	46.000
982.540	1.942	28.915	30.857	-23.143	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 : Intel® Wireless-AC 9461
 Test Item : General Radiated Emission Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2442 MHz)
 Test Date : 2018/01/04

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
178.410	-11.987	40.299	28.312	-15.188	43.500
312.270	-9.626	38.989	29.363	-16.637	46.000
455.830	-6.067	32.998	26.931	-19.069	46.000
599.390	-3.082	34.928	31.846	-14.154	46.000
800.180	-0.323	35.097	34.774	-11.226	46.000
990.300	2.066	28.857	30.923	-23.077	54.000
Vertical					
175.500	-11.596	42.596	31.000	-12.500	43.500
312.270	-9.626	36.029	26.403	-19.597	46.000
466.500	-5.883	32.425	26.542	-19.458	46.000
600.360	-3.066	38.272	35.206	-10.794	46.000
796.300	-0.368	34.488	34.120	-11.880	46.000
993.210	2.109	29.132	31.241	-22.759	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 : Intel® Wireless-AC 9461
 Test Item : General Radiated Emission Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2442 MHz)
 Test Date : 2018/01/04

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
176.470	-11.727	39.347	27.620	-15.880	43.500
312.270	-9.626	41.439	31.813	-14.187	46.000
464.560	-5.916	30.664	24.748	-21.252	46.000
597.450	-3.130	36.939	33.809	-12.191	46.000
800.180	-0.323	36.060	35.737	-10.263	46.000
989.330	2.052	29.905	31.957	-22.043	54.000
Vertical					
191.990	-13.377	43.457	30.080	-13.420	43.500
312.270	-9.626	36.067	26.441	-19.559	46.000
489.780	-5.479	37.111	31.632	-14.368	46.000
597.450	-3.130	38.650	35.520	-10.480	46.000
800.180	-0.323	33.780	33.457	-12.543	46.000
970.900	1.760	29.209	30.969	-23.031	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 : Intel® Wireless-AC 9461
 Test Item : General Radiated Emission Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2442 MHz)
 Test Date : 2018/01/04

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
176.470	-11.727	40.603	28.876	-14.624	43.500
312.270	-9.626	38.659	29.033	-16.967	46.000
468.440	-5.851	31.179	25.328	-20.672	46.000
600.360	-3.066	35.486	32.420	-13.580	46.000
800.180	-0.323	35.499	35.176	-10.824	46.000
937.920	1.308	30.723	32.031	-13.969	46.000
Vertical					
191.990	-13.377	42.456	29.079	-14.421	43.500
311.300	-9.647	35.565	25.918	-20.082	46.000
399.570	-7.353	35.286	27.933	-18.067	46.000
600.360	-3.066	37.805	34.739	-11.261	46.000
800.180	-0.323	34.157	33.834	-12.166	46.000
987.390	2.023	30.010	32.033	-21.967	54.000

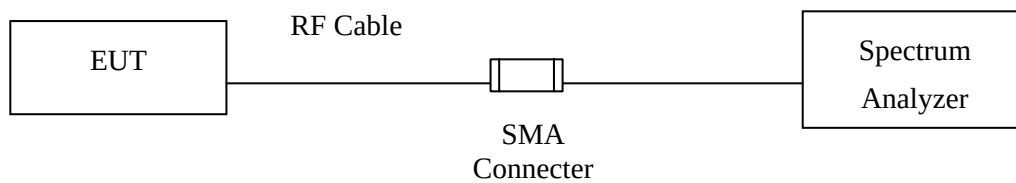
Note:

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.

4. Band Edge

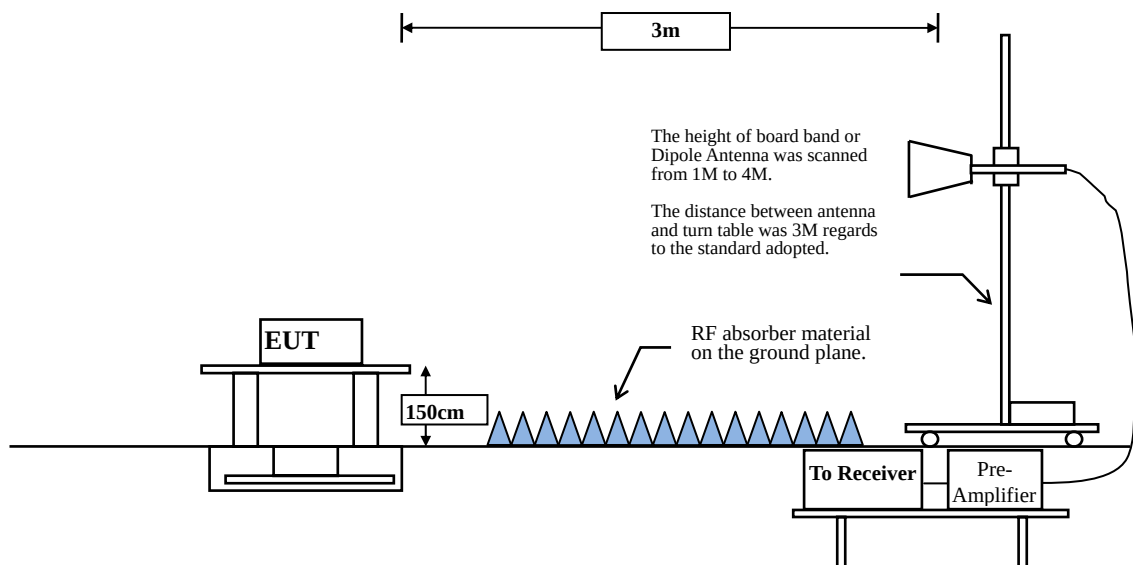
4.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:

Above 1GHz



4.2. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

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.

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.

RBW and VBW Parameter setting:

According to KDB 558074 section 12.2.4. Peak power measurement procedure

RBW = as specified in Table 1.

$VBW \geq 3 \times RBW$.

Table 1 —RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to KDB 558074 section 12.2.5. Average power measurement procedure

RBW = 1MHz.

VBW = 10Hz, when duty cycle $\geq 98 \%$

$VBW \geq 1/T$, when duty cycle $< 98 \%$

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

2.4GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11b	98.84	12.3188	81	10
802.11g	98.61	2.0580	486	10
802.11n20	99.61	37.0580	27	10
802.11n40	98.80	17.8261	56	10

Note: Duty Cycle Refer to Section 5

4.4. Uncertainty

Conducted: $\pm 1.23\text{dB}$

Radiated:

Horizontal polarization : 1-18GHz: $\pm 3.77\text{dB}$

Vertical polarization : 1-18GHz : $\pm 3.83\text{dB}$

4.5. Test Result of Band Edge

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
 Test Date : 2018/01/15

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)	2386.667	12.139	39.875	52.014	74.00	54.00	Pass
01 (Peak)	2390.000	12.148	37.554	49.702	74.00	54.00	Pass
01 (Peak)	2399.130	12.174	40.433	52.606	--	--	--
01 (Peak)	2400.000	12.176	38.032	50.208	--	--	--
01 (Peak)	2413.043	12.206	87.872	100.078	--	--	--
01 (Average)	2386.087	12.137	28.229	40.366	74.00	54.00	Pass
01 (Average)	2390.000	12.148	26.567	38.715	74.00	54.00	Pass
01 (Average)	2398.841	12.173	28.043	40.216	--	--	--
01 (Average)	2400.000	12.176	26.713	38.889	--	--	--
01 (Average)	2412.754	12.205	84.371	96.576	--	--	--

Figure Channel 01:

Horizontal (Peak)

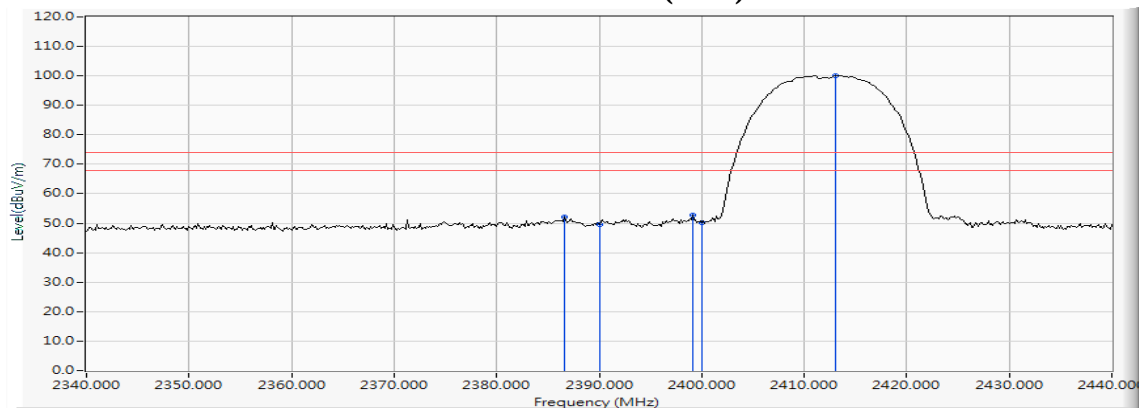
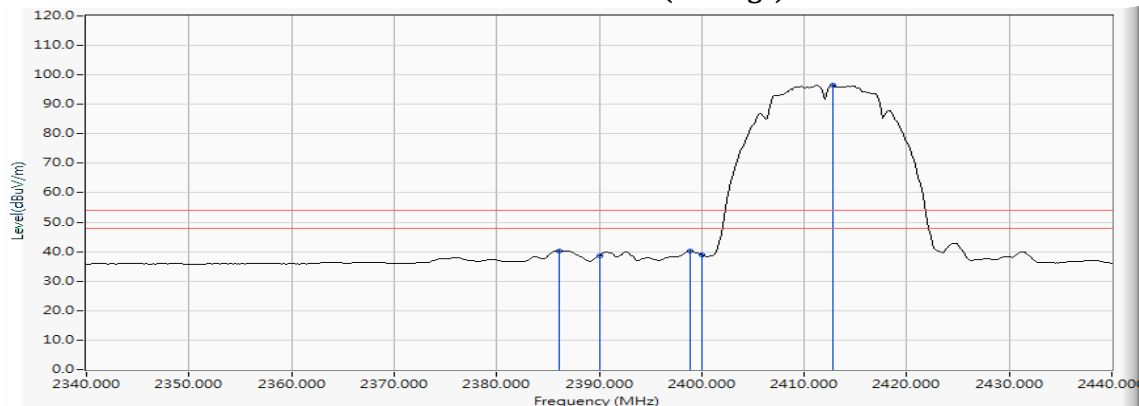


Figure Channel 01:

Horizontal (Average)

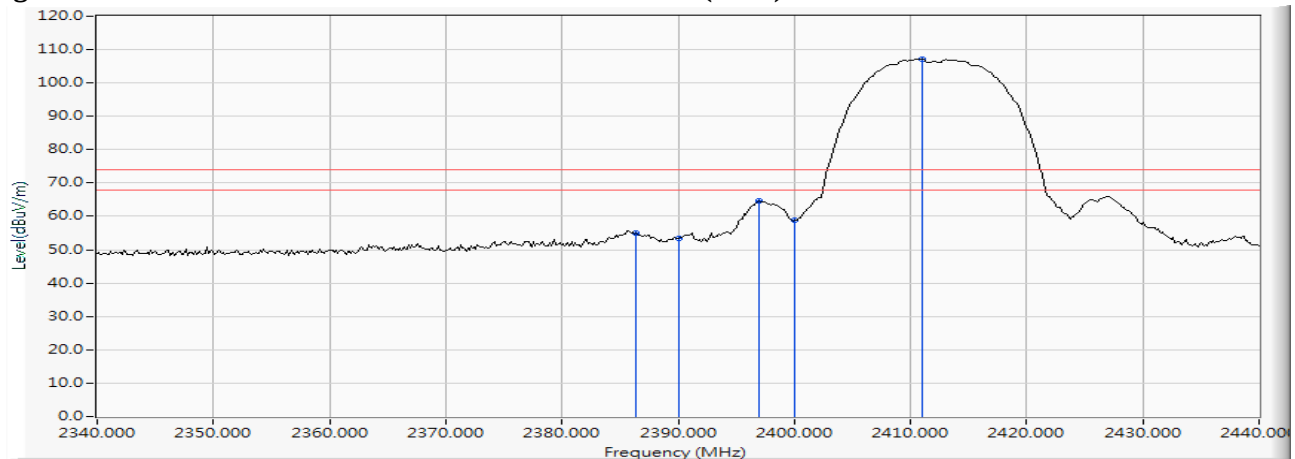
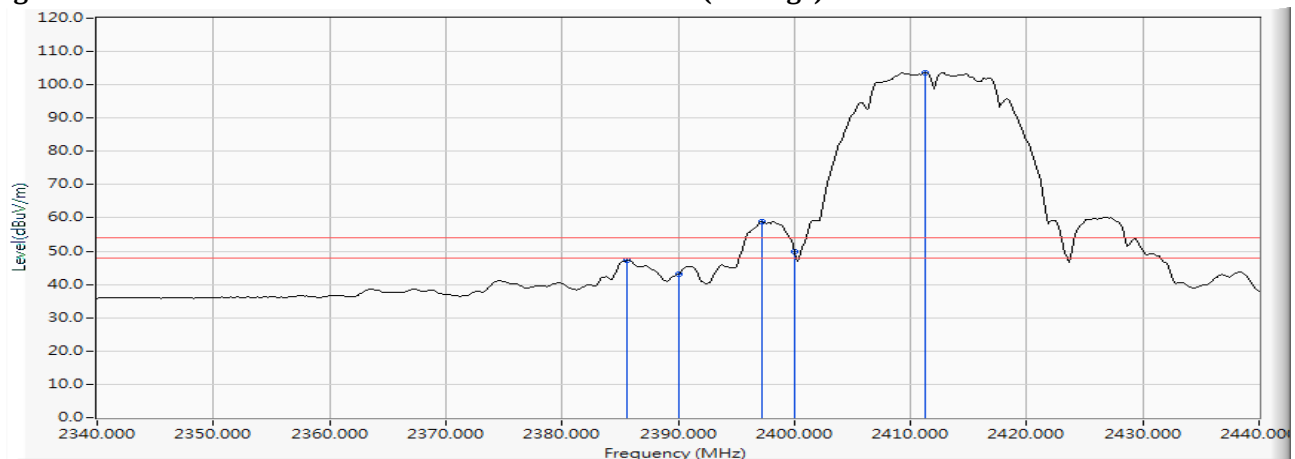


- Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
 4. “ * ”, means this data is the worst emission level.
 5. Measurement Level = Reading Level + Correct Factor.
 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
 Test Date : 2018/01/15

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)	2386.377	12.138	42.751	54.889	74.00	54.00	Pass
01 (Peak)	2390.000	12.148	41.320	53.468	74.00	54.00	Pass
01 (Peak)	2396.957	12.167	52.537	64.704	--	--	--
01 (Peak)	2400.000	12.176	46.690	58.866	--	--	--
01 (Peak)	2411.014	12.201	94.925	107.126	--	--	--
01 (Average)	2385.652	12.136	35.084	47.220	74.00	54.00	Pass
01 (Average)	2390.000	12.148	30.879	43.027	74.00	54.00	Pass
01 (Average)	2397.246	12.168	46.646	58.814	--	--	--
01 (Average)	2400.000	12.176	37.826	50.002	--	--	--
01 (Average)	2411.304	12.201	91.536	103.738	--	--	--

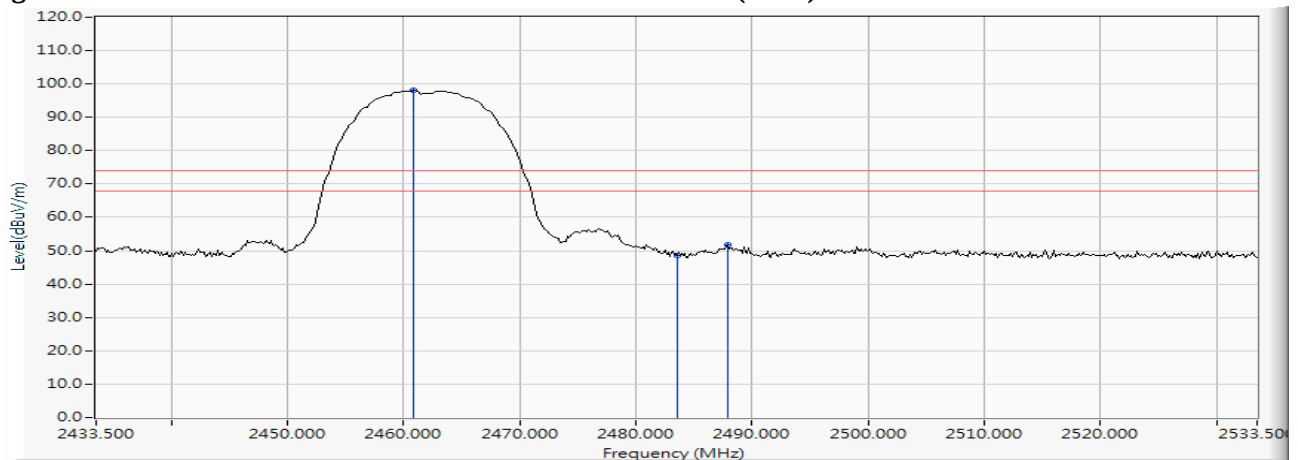
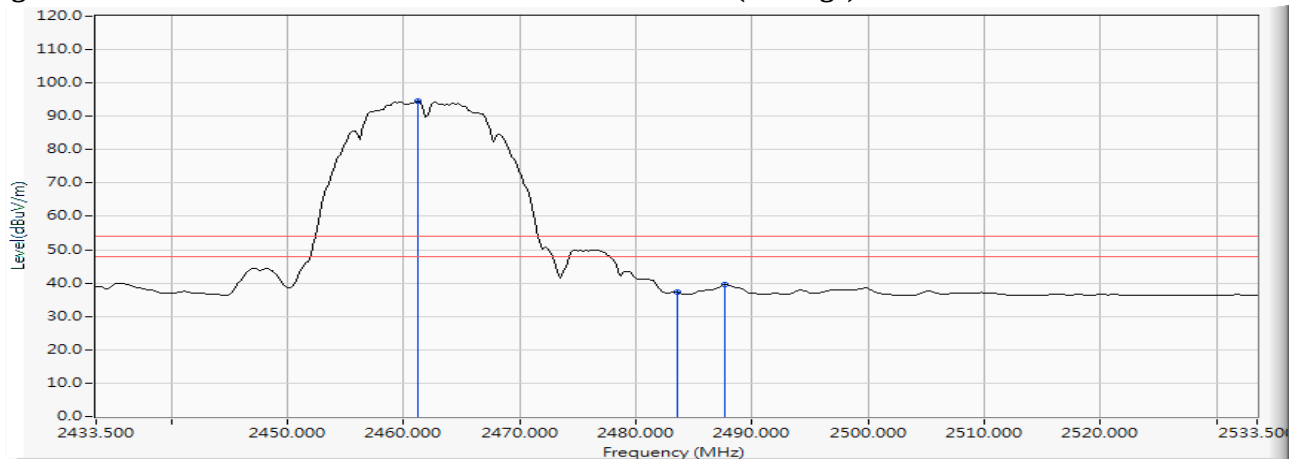
Figure Channel 01:
Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
 Test Date : 2018/01/15

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)	2460.891	12.337	85.668	98.006	--	--	--
11 (Peak)	2483.500	12.403	36.266	48.669	74.00	54.00	Pass
11 (Peak)	2487.848	12.415	39.539	51.954	74.00	54.00	Pass
11 (Average)	2461.181	12.339	82.176	94.515	--	--	--
11 (Average)	2483.500	12.403	24.758	37.161	74.00	54.00	Pass
11 (Average)	2487.703	12.414	27.090	39.504	74.00	54.00	Pass

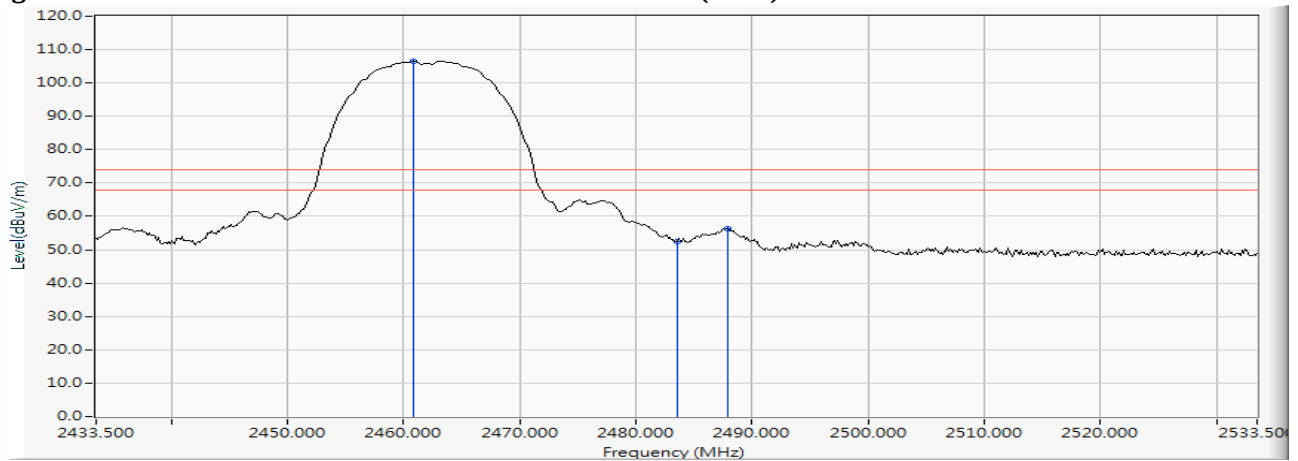
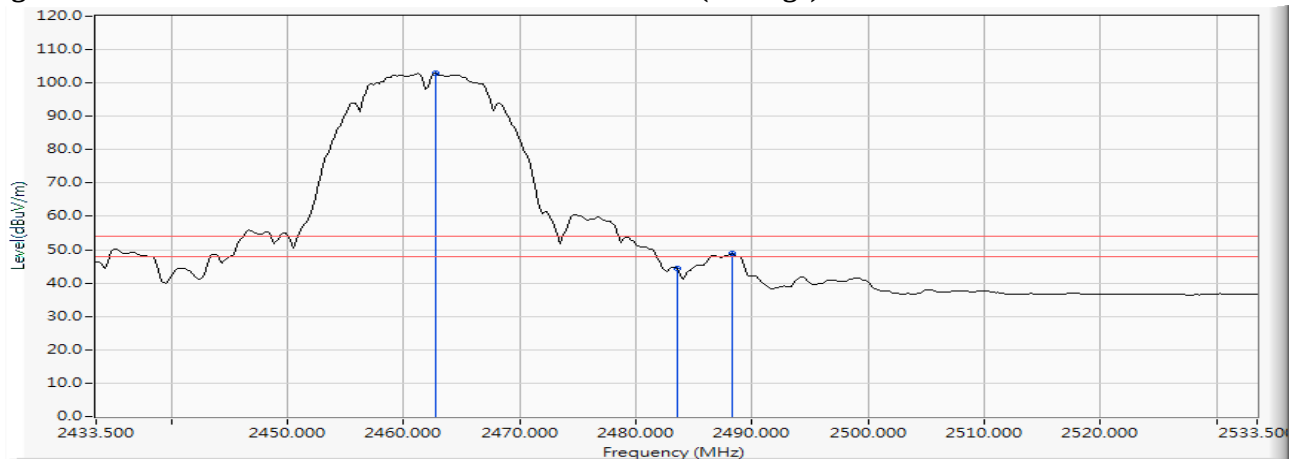
Figure Channel 11: Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
 Test Date : 2018/01/15

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)	2460.891	12.337	94.098	106.436	--	--	--
11 (Peak)	2483.500	12.403	39.973	52.376	74.00	54.00	Pass
11 (Peak)	2487.848	12.415	44.000	56.415	74.00	54.00	Pass
11 (Average)	2462.775	12.344	90.505	102.849	--	--	--
11 (Average)	2483.500	12.403	31.911	44.314	74.00	54.00	Pass
11 (Average)	2488.283	12.416	36.357	48.773	74.00	54.00	Pass

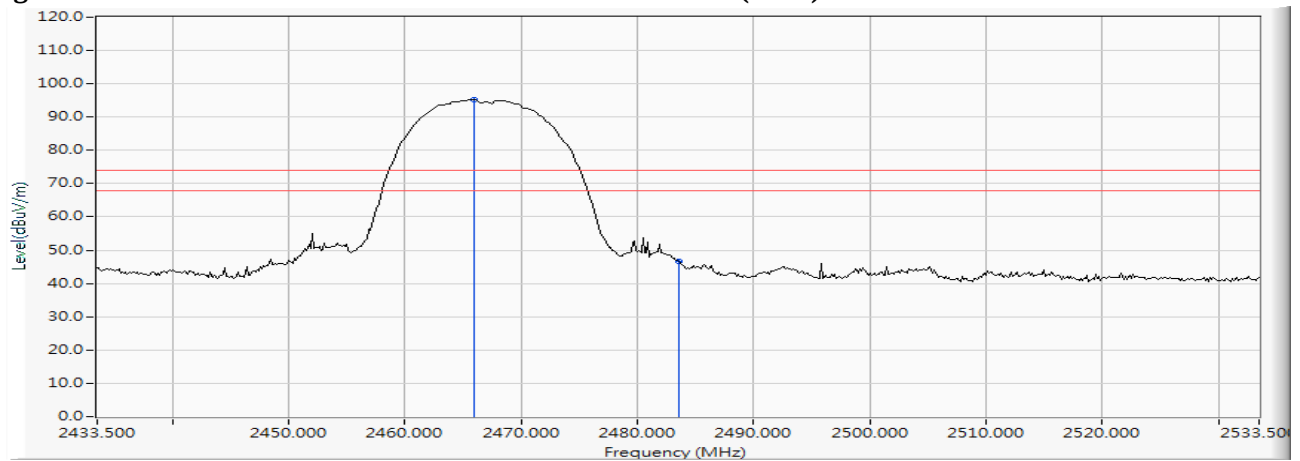
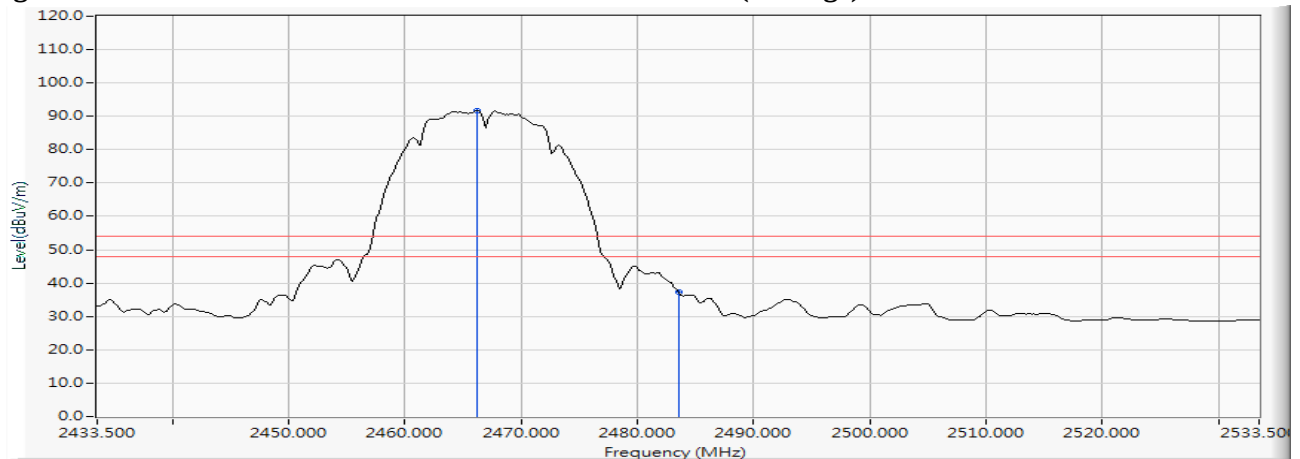
Figure Channel 11: Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2467MHz)
 Test Date : 2018/01/15

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
12 (Peak)	2465.964	12.353	82.817	95.170	--	--	--
12 (Peak)	2483.500	12.403	34.111	46.514	74.00	54.00	Pass
12 (Average)	2466.254	12.353	79.279	91.632	--	--	--
12 (Average)	2483.500	12.403	24.996	37.399	74.00	54.00	Pass

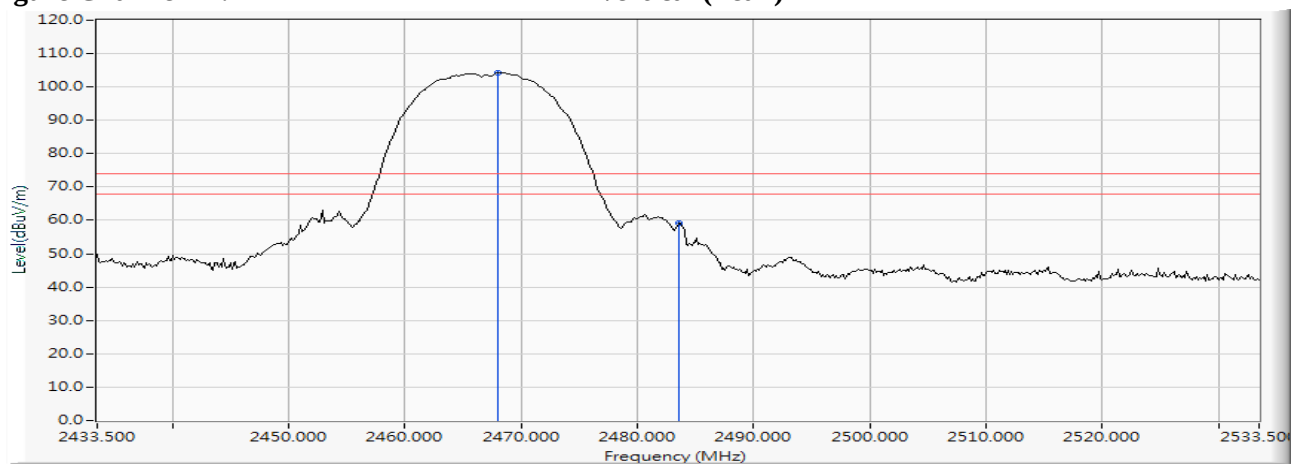
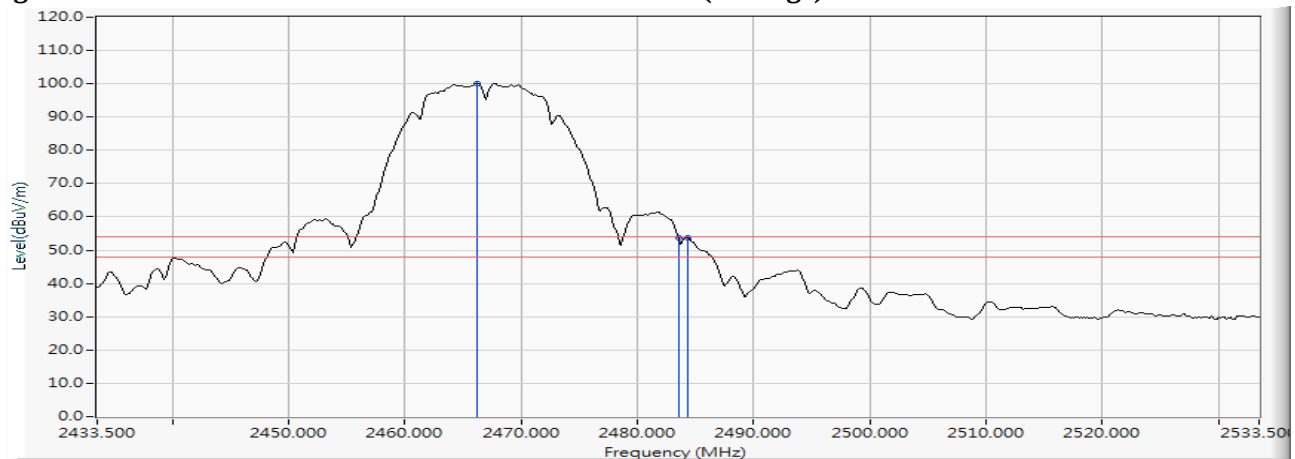
Figure Channel 12: Horizontal (Peak)

Figure Channel 12: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2467MHz)
 Test Date : 2018/01/15

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
12 (Peak)	2467.993	12.357	91.861	104.219	--	--	--
12 (Peak)	2483.500	12.403	46.918	59.321	74.00	54.00	Pass
12 (Average)	2466.254	12.353	87.726	100.079	--	--	--
12 (Average)	2483.500	12.403	41.172	53.575	74.00	54.00	Pass
12 (Average)	2484.370	12.405	41.328	53.733	74.00	54.00	Pass

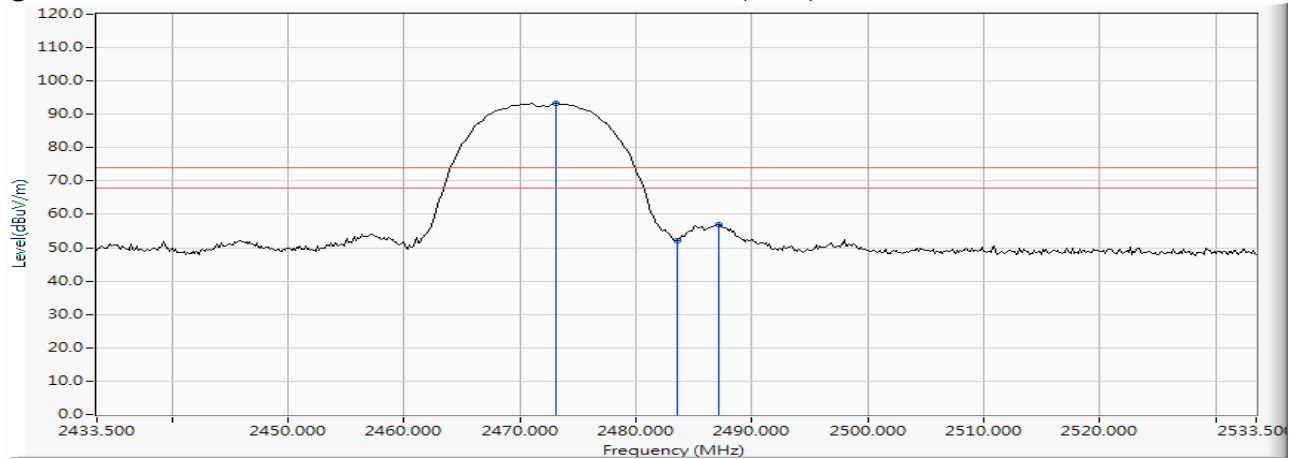
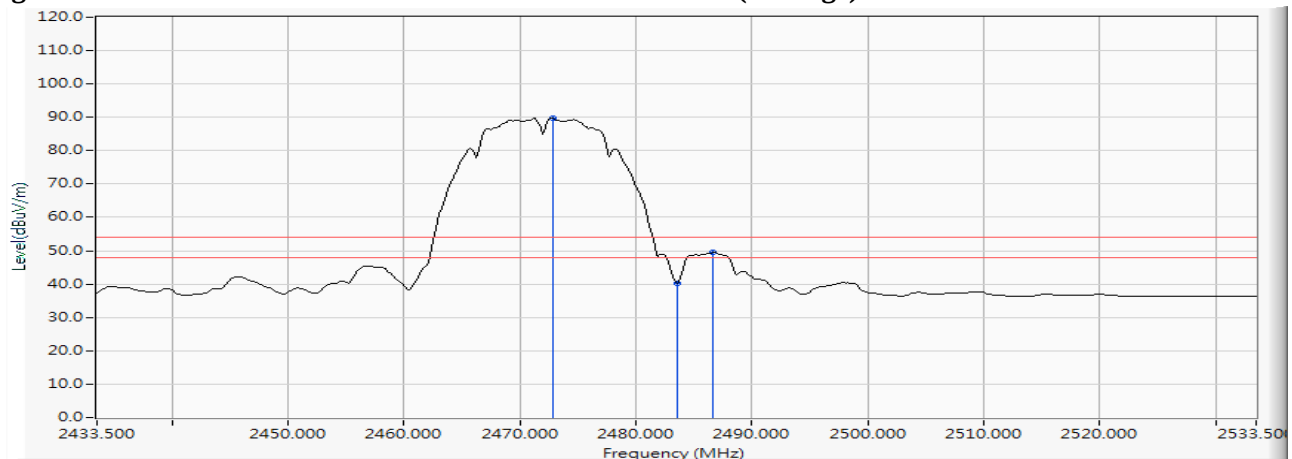
Figure Channel 12:
Vertical (Peak)

Figure Channel 12:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2473.065	12.373	80.832	93.205	--	--	--
13 (Peak)	2483.500	12.403	39.826	52.229	74.00	54.00	Pass
13 (Peak)	2487.123	12.413	44.468	56.881	74.00	54.00	Pass
13 (Average)	2472.775	12.372	77.298	89.670	--	--	--
13 (Average)	2483.500	12.403	27.949	40.352	74.00	54.00	Pass
13 (Average)	2486.688	12.411	37.078	49.489	74.00	54.00	Pass

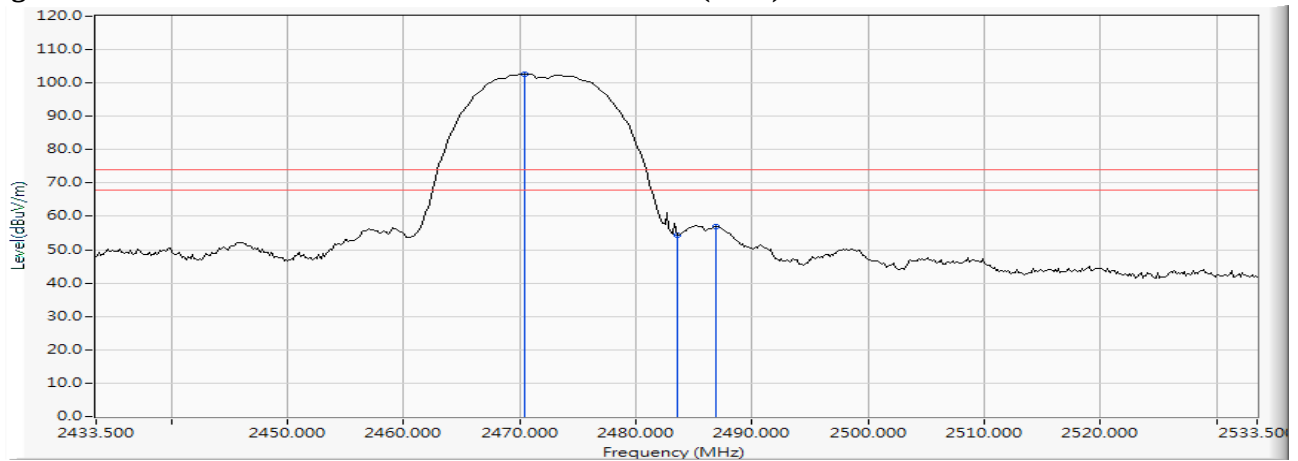
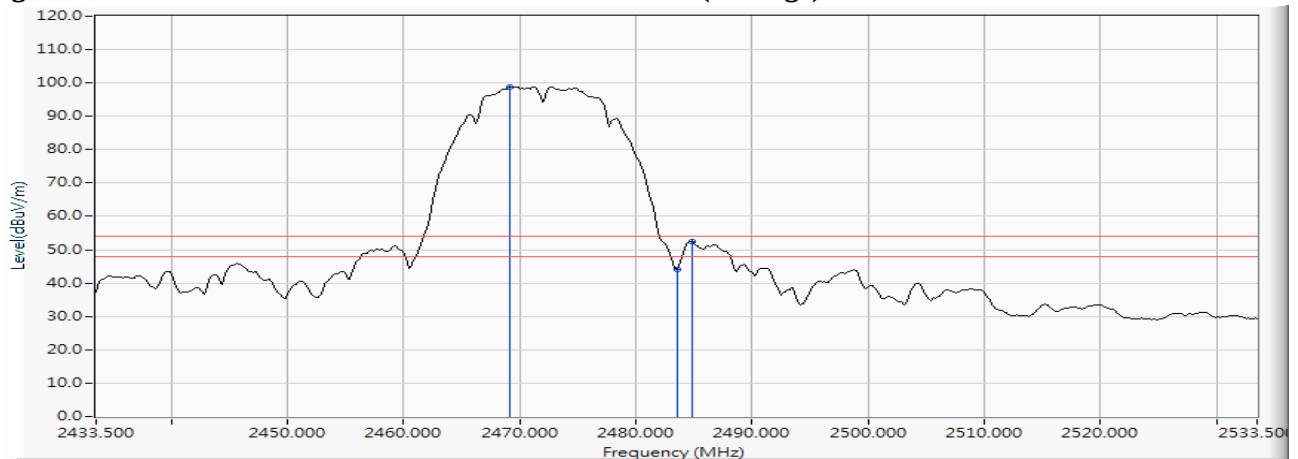
Figure Channel 13:
Horizontal (Peak)

Figure Channel 13:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2470.457	12.365	90.216	102.581	--	--	--
13 (Peak)	2483.500	12.403	42.032	54.435	74.00	54.00	Pass
13 (Peak)	2486.833	12.412	44.527	56.939	74.00	54.00	Pass
13 (Average)	2469.152	12.362	86.558	98.920	--	--	--
13 (Average)	2483.500	12.403	31.522	43.925	74.00	54.00	Pass
13 (Average)	2484.804	12.406	40.110	52.516	74.00	54.00	Pass

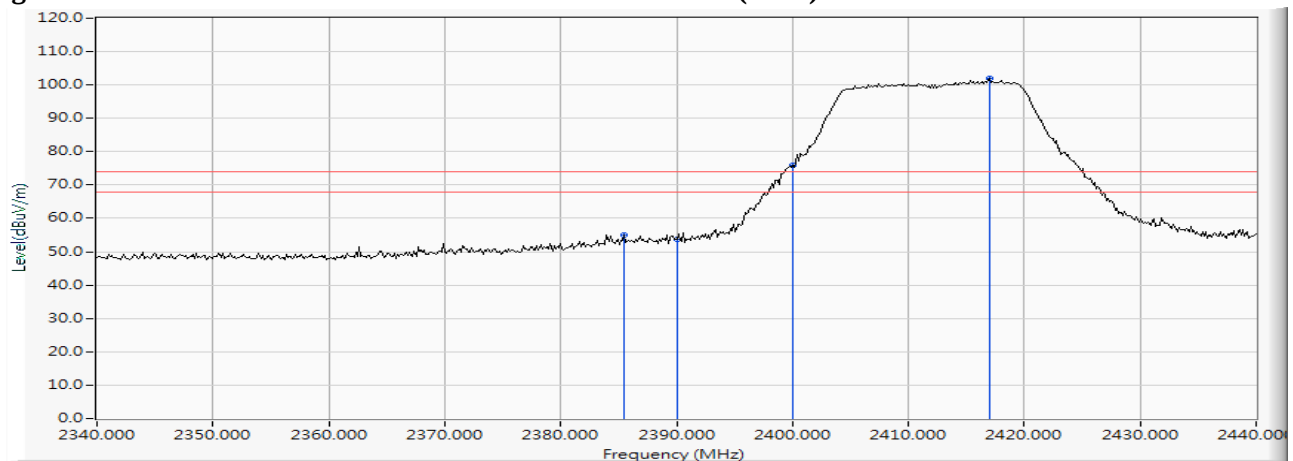
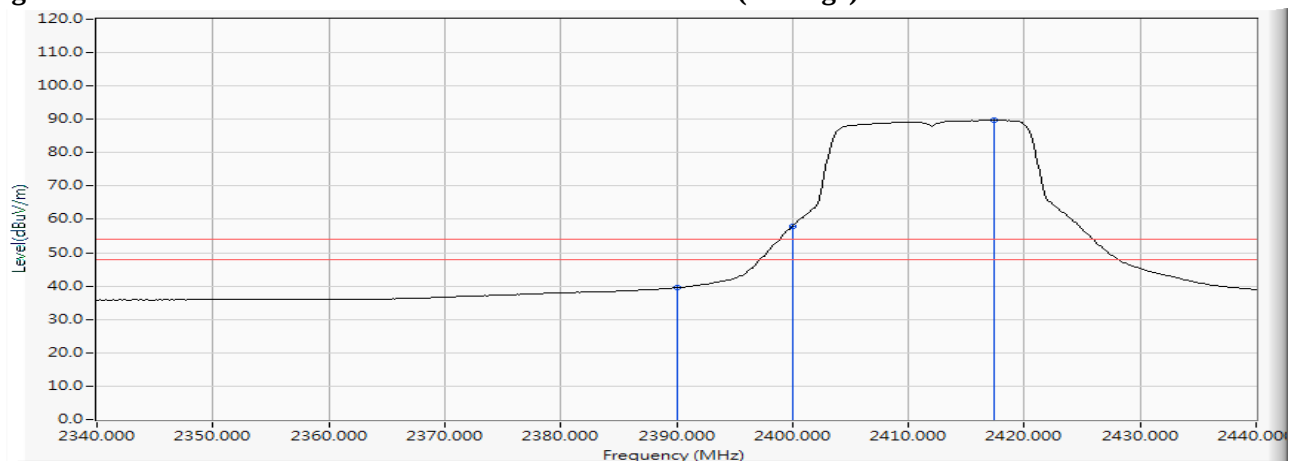
Figure Channel 13:
Vertical (Peak)

Figure Channel 13:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
 Test Date : 2018/01/15

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)	2385.507	12.136	42.904	55.039	74.00	54.00	Pass
01 (Peak)	2390.000	12.148	41.590	53.738	74.00	54.00	Pass
01 (Peak)	2400.000	12.176	63.773	75.949	--	--	--
01 (Peak)	2416.957	12.214	89.736	101.951	--	--	--
01(Average)	2390.000	12.148	27.361	39.509	74.00	54.00	Pass
01(Average)	2400.000	12.176	45.784	57.960	--	--	--
01(Average)	2417.391	12.216	77.516	89.732	--	--	--

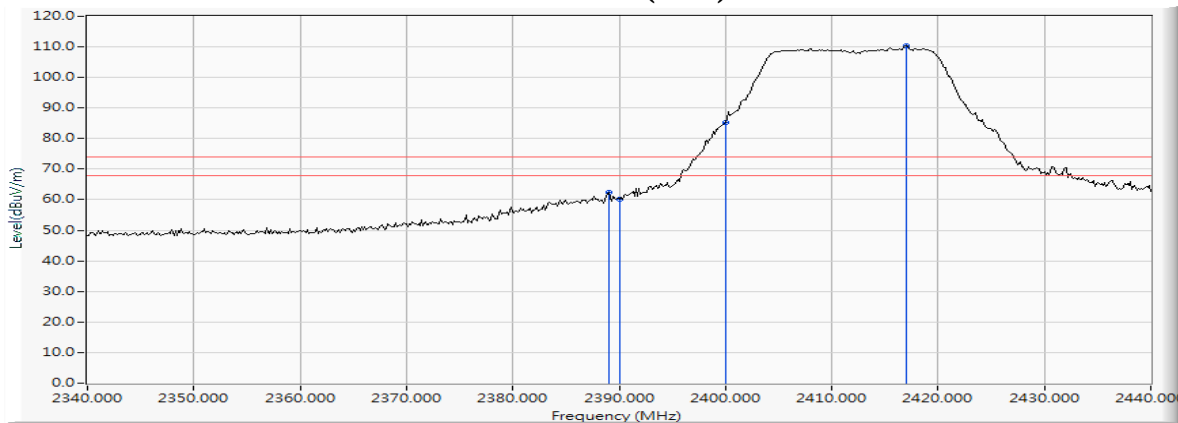
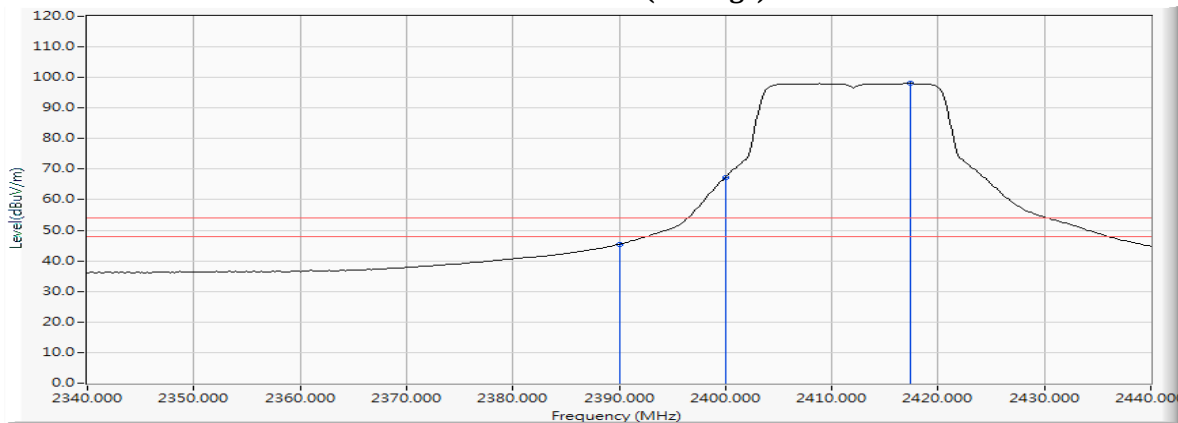
Figure Channel 01:
Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
 Test Date : 2018/01/15

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)	2388.986	12.145	50.110	62.255	74.00	54.00	Pass
01 (Peak)	2390.000	12.148	47.986	60.134	74.00	54.00	Pass
01 (Peak)	2400.000	12.176	73.156	85.332	--	--	--
01 (Peak)	2416.957	12.214	98.242	110.457	--	--	--
01 (Average)	2390.000	12.148	33.230	45.378	74.00	54.00	Pass
01 (Average)	2400.000	12.176	55.195	67.371	--	--	--
01 (Average)	2417.391	12.216	85.774	97.990	--	--	--

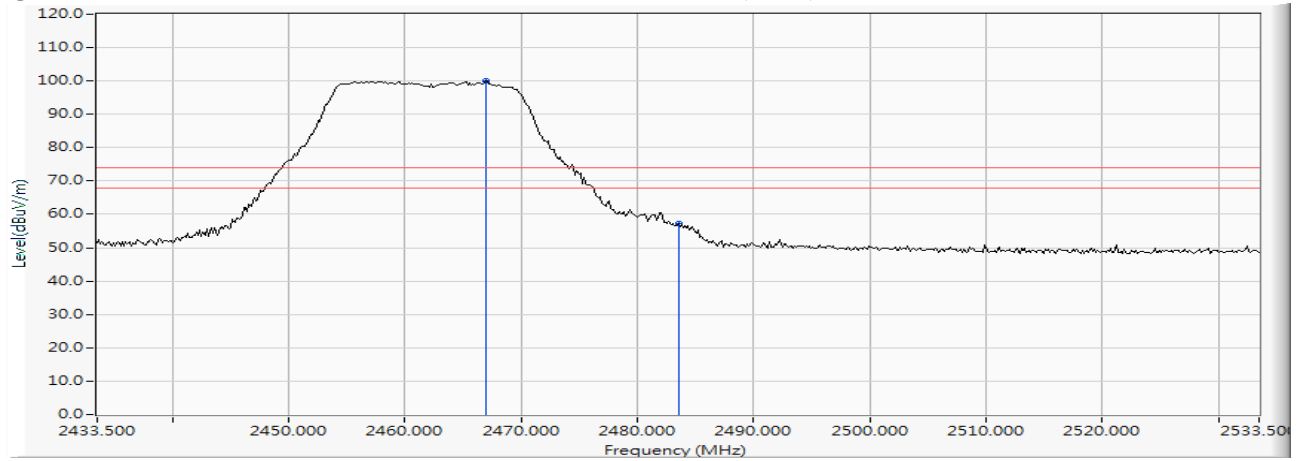
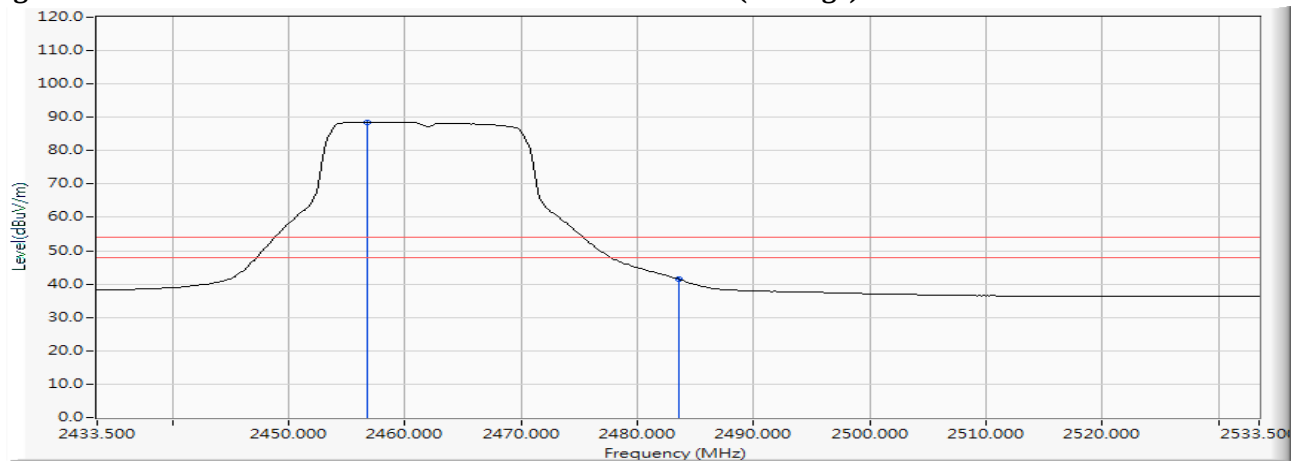
Figure Channel 01:
Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
 Test Date : 2018/01/15

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)	2466.978	12.355	87.712	100.067	--	--	--
11 (Peak)	2483.500	12.403	44.702	57.105	74.00	54.00	Pass
11 (Average)	2456.688	12.327	76.278	88.605	--	--	--
11 (Average)	2483.500	12.403	29.115	41.518	74.00	54.00	Pass

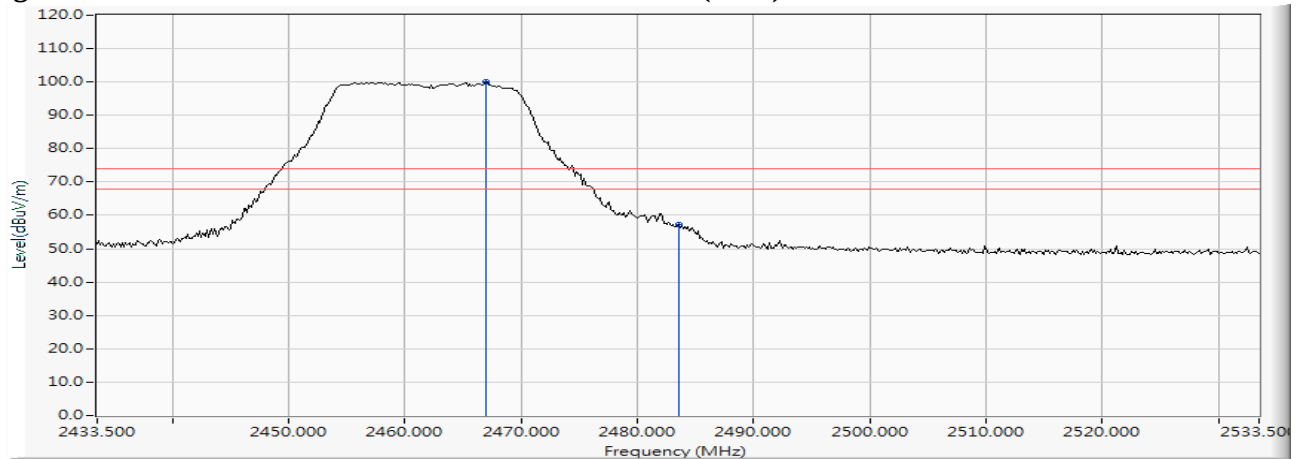
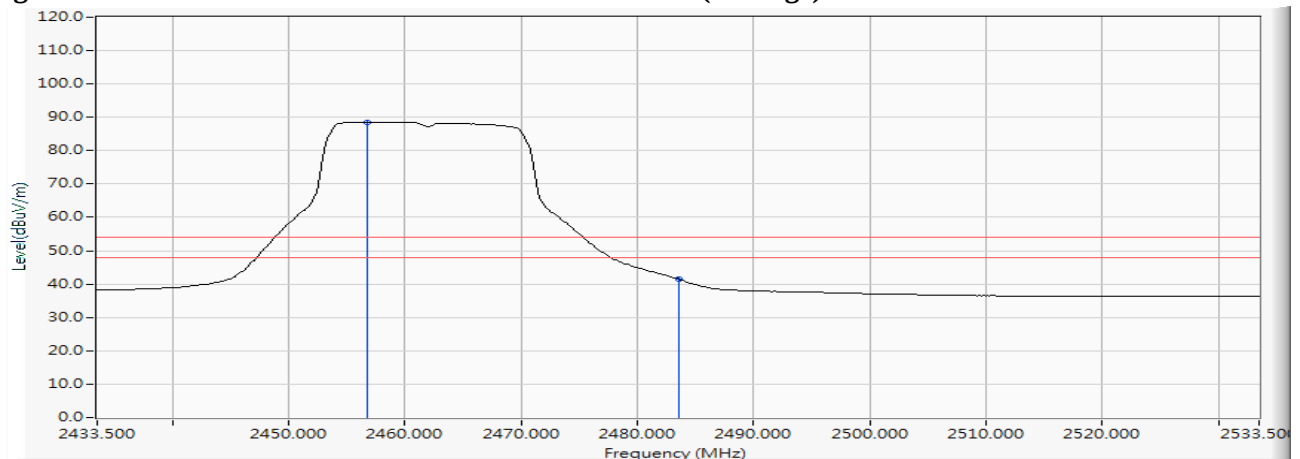
Figure Channel 11: Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
 Test Date : 2018/01/15

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)	2466.978	12.355	87.712	100.067	--	--	--
11 (Peak)	2483.500	12.403	44.702	57.105	74.00	54.00	Pass
11 (Average)	2456.688	12.327	76.278	88.605	--	--	--
11 (Average)	2483.500	12.403	29.115	41.518	74.00	54.00	Pass

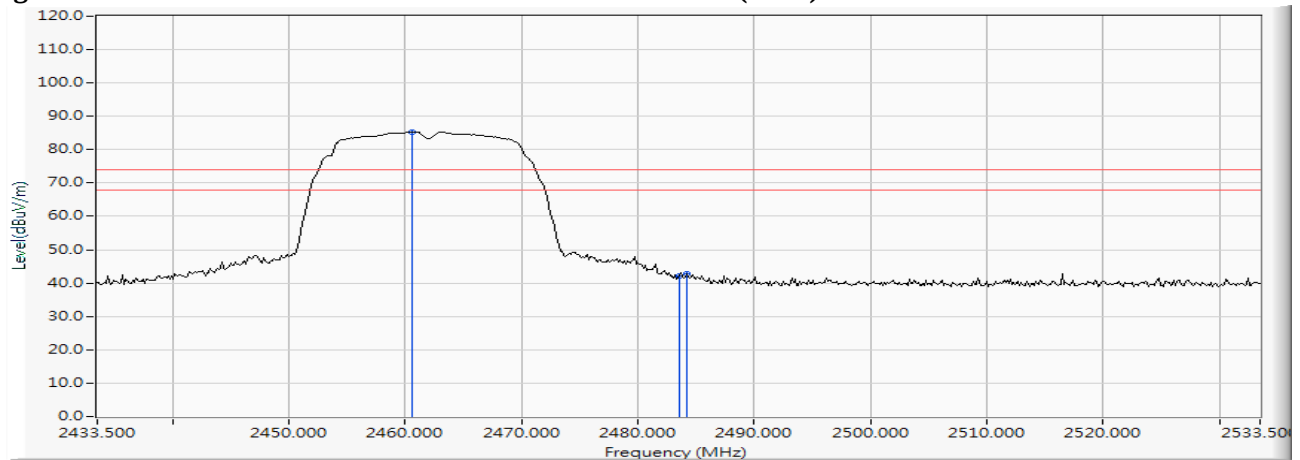
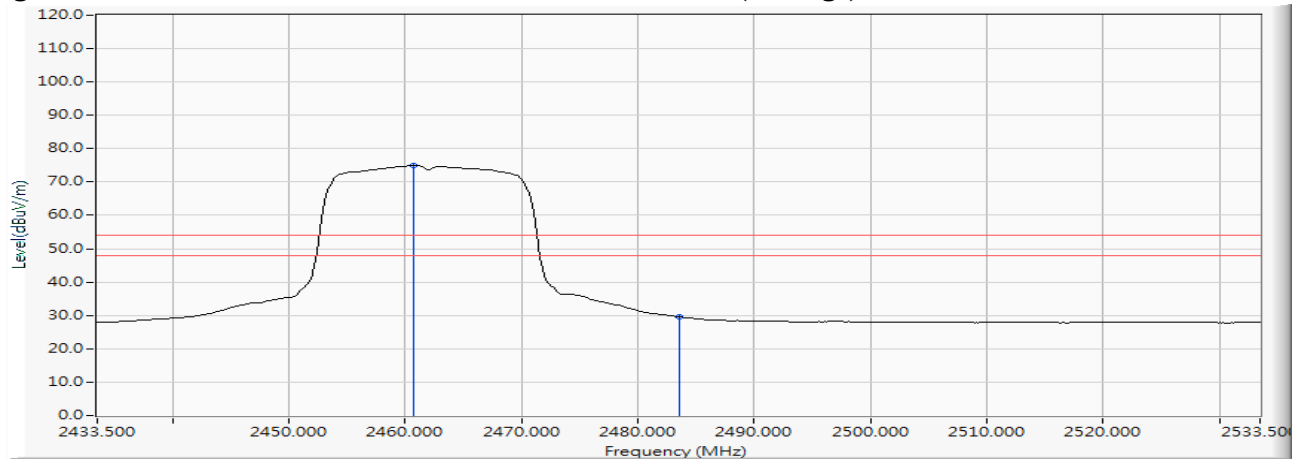
Figure Channel 11: Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2467MHz)
 Test Date : 2018/01/15

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)	2460.601	11.739	73.623	85.362	--	--	--
11 (Peak)	2483.500	11.800	30.244	42.044	74.00	54.00	Pass
11 (Peak)	2484.225	11.801	30.967	42.768	74.00	54.00	Pass
11 (Average)	2460.746	11.739	63.200	74.939	--	--	--
11 (Average)	2483.500	11.800	17.804	29.604	74.00	54.00	Pass

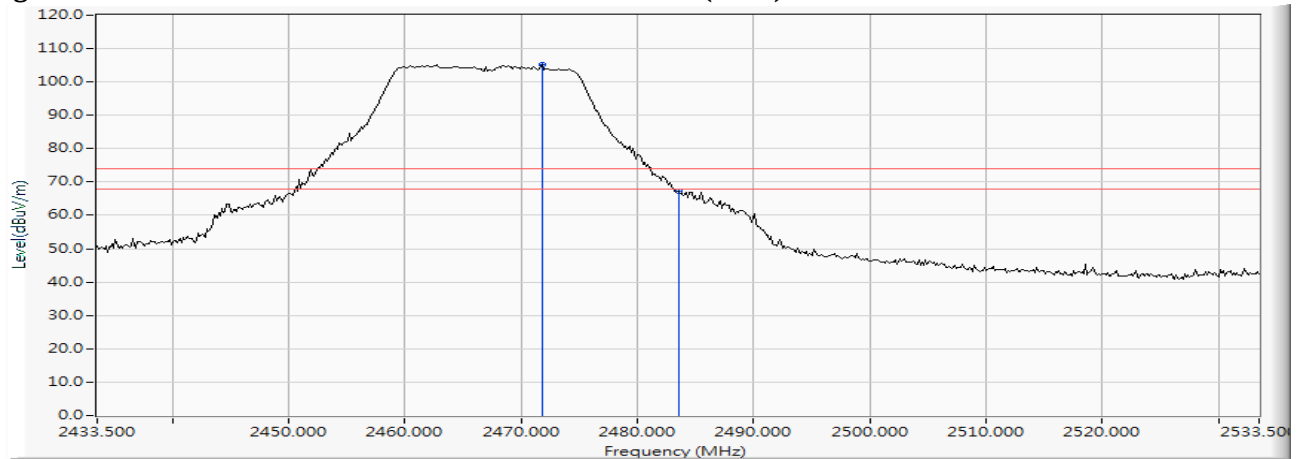
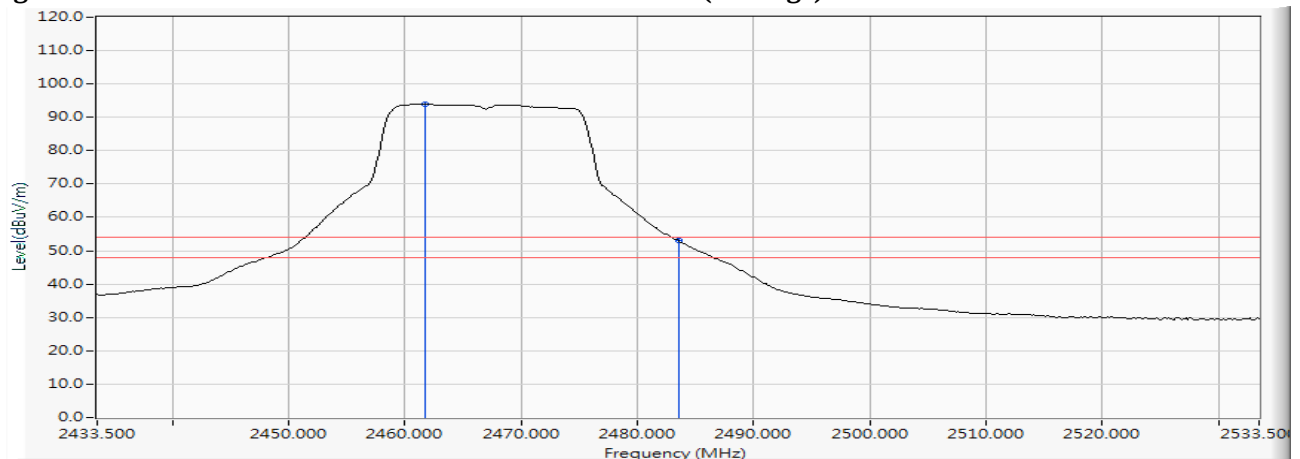
Figure Channel 11:**Horizontal (Peak)****Figure Channel 11:****Horizontal (Average)**

- 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2467MHz)
 Test Date : 2018/01/15

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
12 (Peak)	2471.761	12.370	92.882	105.251	--	--	--
12 (Peak)	2483.500	12.403	54.858	67.261	74.00	54.00	Pass
12 (Average)	2461.761	12.341	81.567	93.908	--	--	--
12 (Average)	2483.500	12.403	40.612	53.015	74.00	54.00	Pass

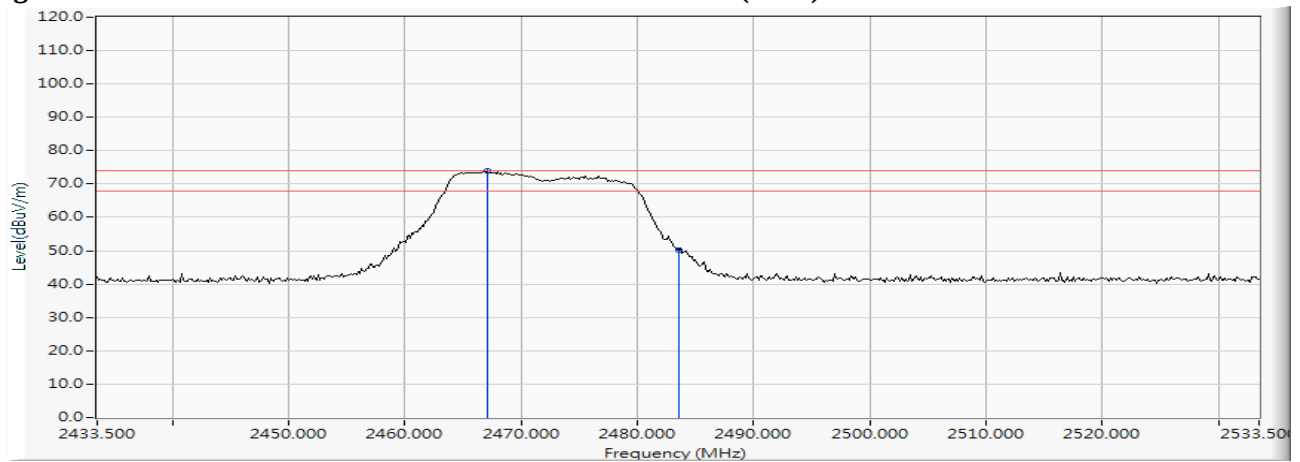
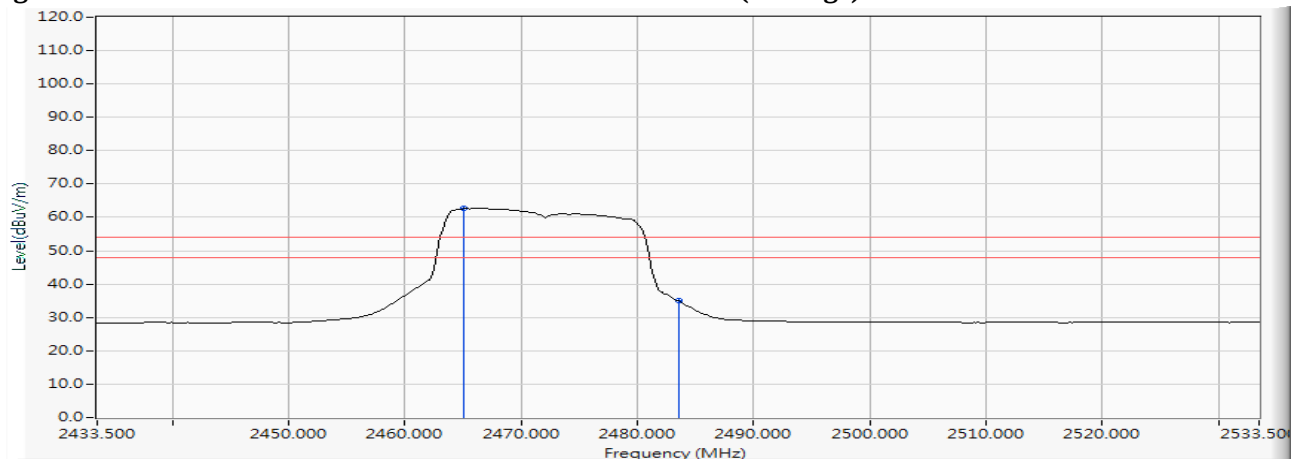
Figure Channel 12:
Vertical (Peak)

Figure Channel 12:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2467.123	12.355	61.666	74.022	--	--	--
13 (Peak)	2483.500	12.403	37.891	50.294	74.00	54.00	Pass
13 (Average)	2465.094	12.350	50.309	62.659	--	--	--
13 (Average)	2483.500	12.403	22.564	34.967	74.00	54.00	Pass

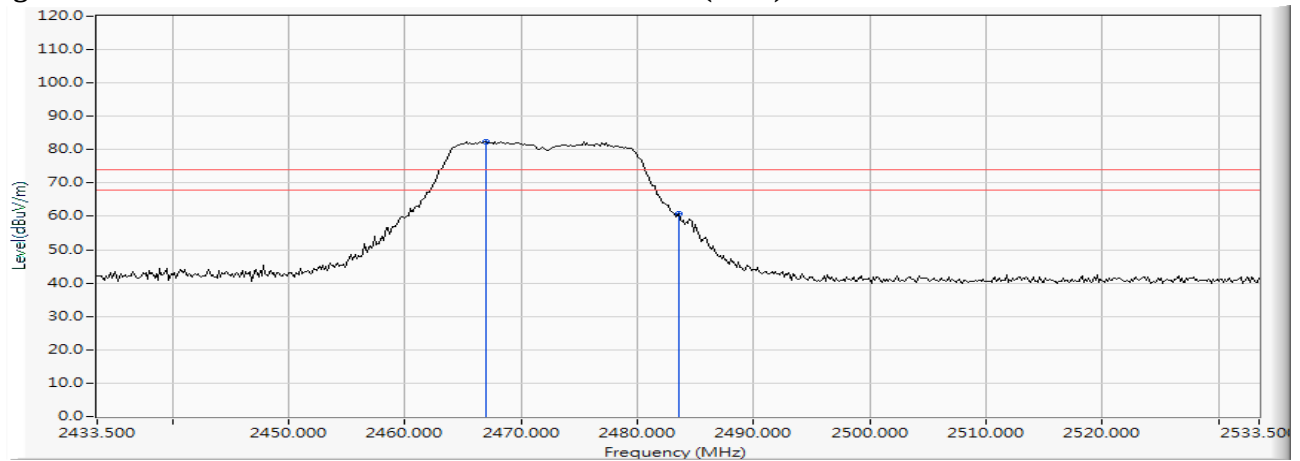
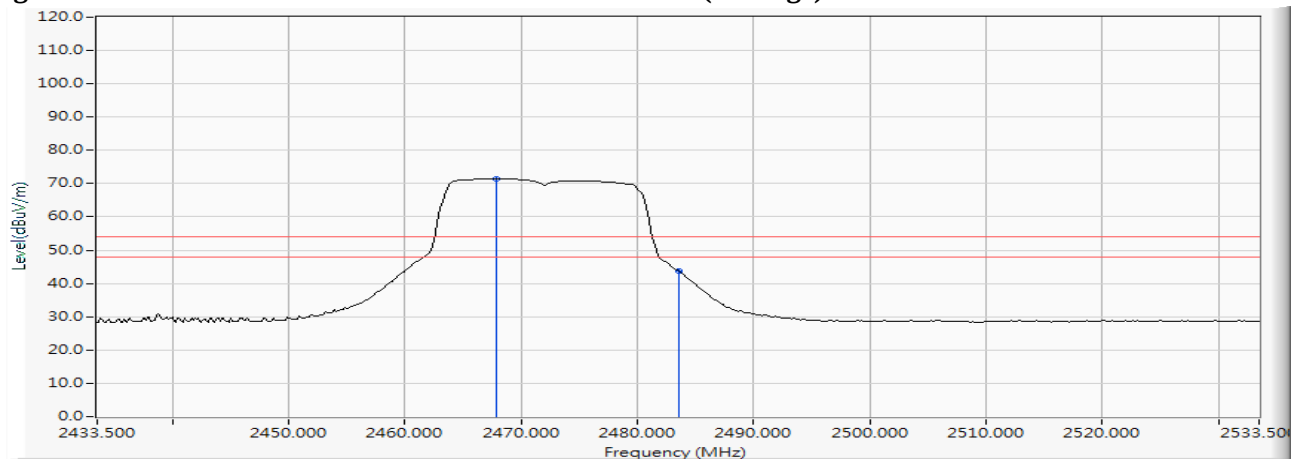
Figure Channel 13: Horizontal (Peak)

Figure Channel 13: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2466.978	12.355	70.080	82.435	--	--	--
13 (Peak)	2483.500	12.403	48.329	60.732	74.00	54.00	Pass
13 (Average)	2467.848	12.357	59.101	71.459	--	--	--
13 (Average)	2483.500	12.403	31.357	43.760	74.00	54.00	Pass

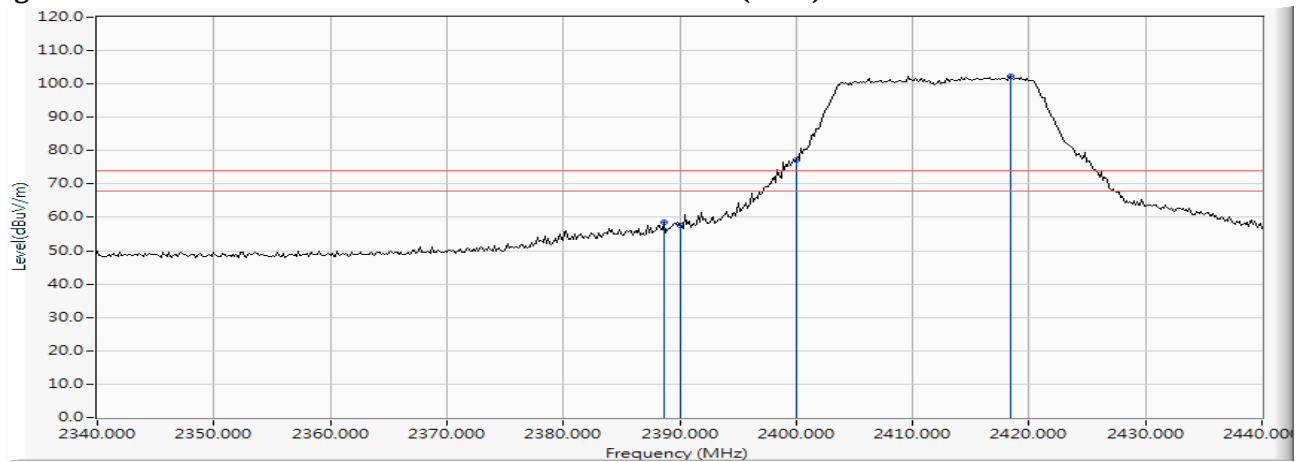
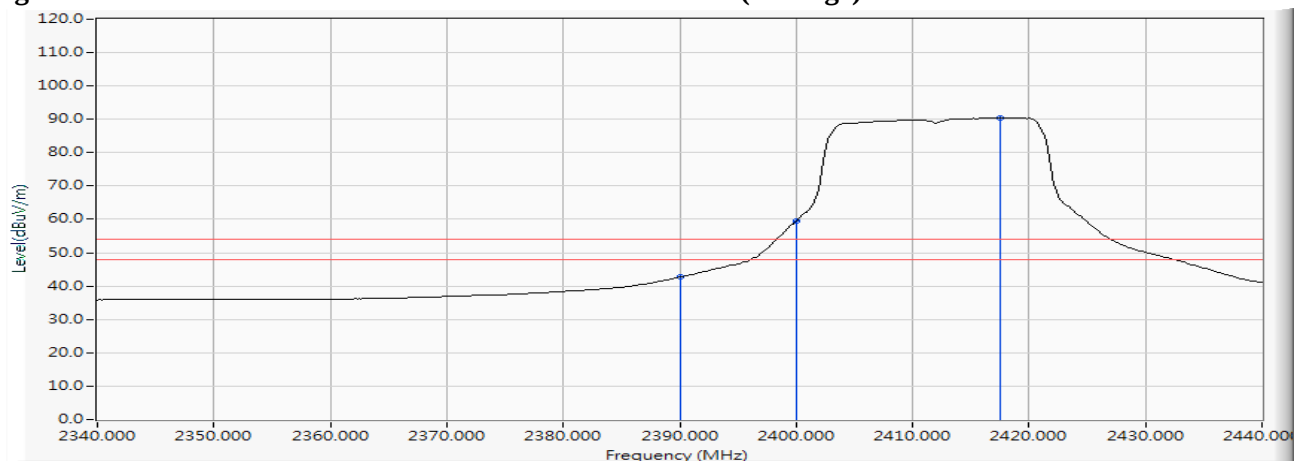
Figure Channel 13: Vertical (Peak)

Figure Channel 13: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)
 Test Date : 2018/01/15

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)	2388.696	12.145	46.250	58.394	74.00	54.00	Pass
01 (Peak)	2390.000	12.148	45.441	57.589	74.00	54.00	Pass
01 (Peak)	2400.000	12.176	65.071	77.247	--	--	--
01 (Peak)	2418.406	12.218	90.160	102.378	--	--	--
01 (Average)	2390.000	12.148	30.481	42.629	74.00	54.00	Pass
01 (Average)	2400.000	12.176	47.421	59.597	--	--	--
01 (Average)	2417.536	12.217	78.276	90.492	--	--	--

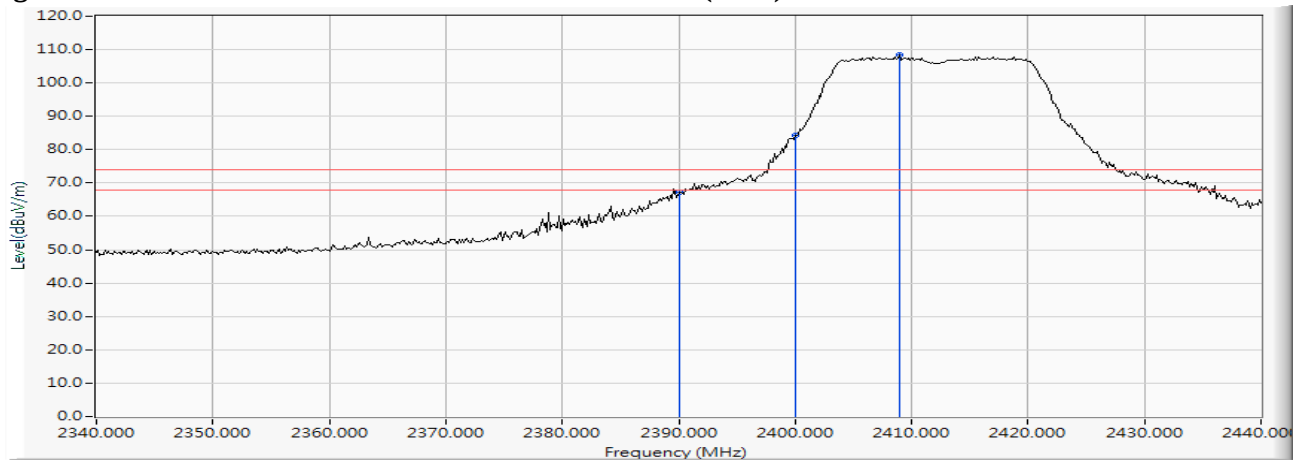
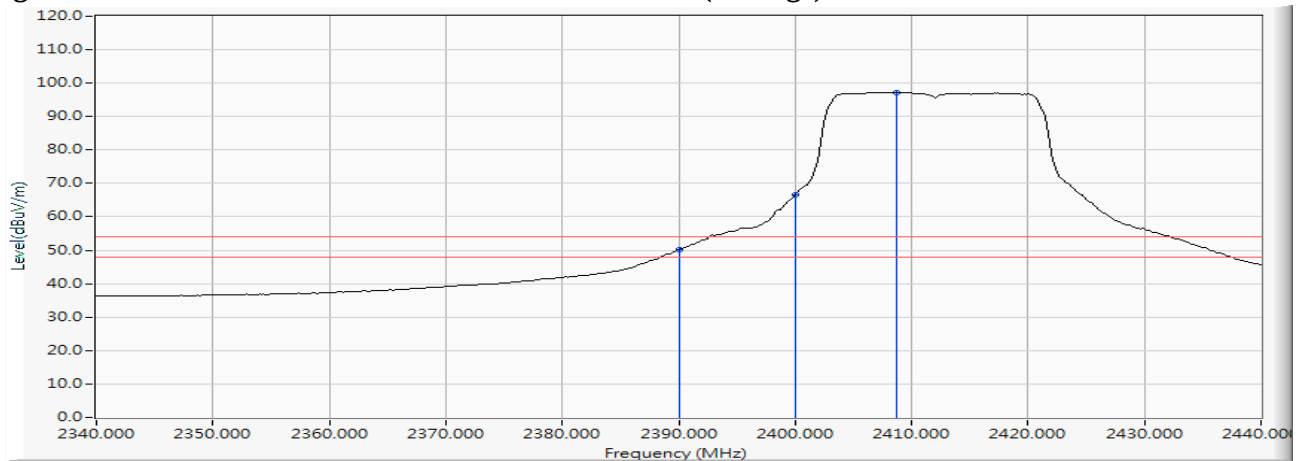
Figure Channel 01:
Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)
 Test Date : 2018/01/15

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)	2390.000	12.148	55.035	67.183	74.00	54.00	Pass
01 (Peak)	2400.000	12.176	72.117	84.293	--	--	--
01 (Peak)	2408.986	12.197	96.072	108.269	--	--	--
01 (Average)	2390.000	12.148	37.910	50.058	74.00	54.00	Pass
01 (Average)	2400.000	12.176	54.475	66.651	--	--	--
01 (Average)	2408.696	12.196	85.002	97.198	--	--	--

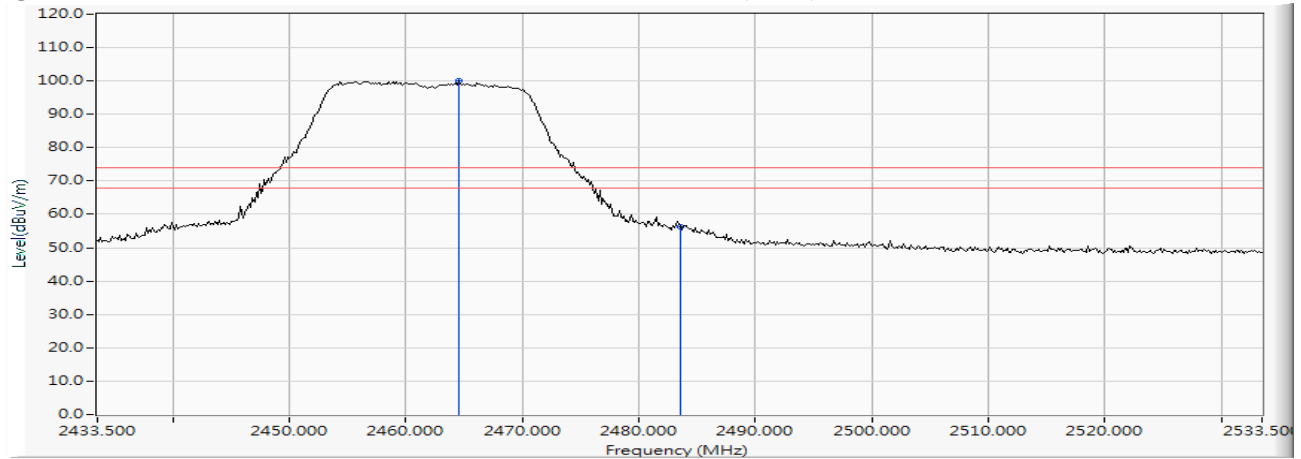
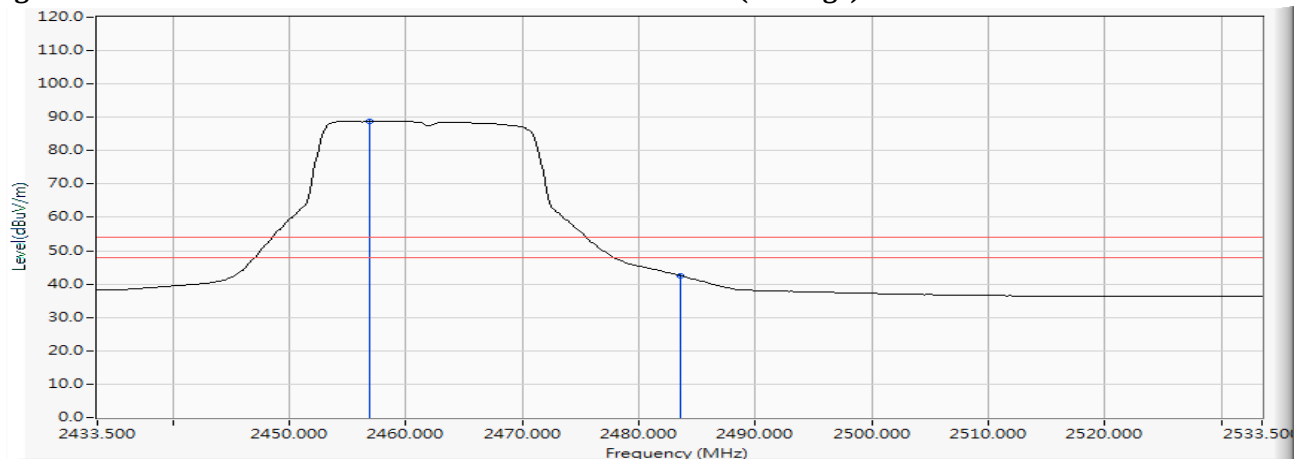
Figure Channel 01:
Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)
 Test Date : 2018/01/15

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)	2464.514	12.349	87.660	100.009	--	--	--
11 (Peak)	2483.500	12.403	43.932	56.335	74.00	54.00	Pass
11 (Average)	2456.833	12.327	76.613	88.940	--	--	--
11 (Average)	2483.500	12.403	30.190	42.593	74.00	54.00	Pass

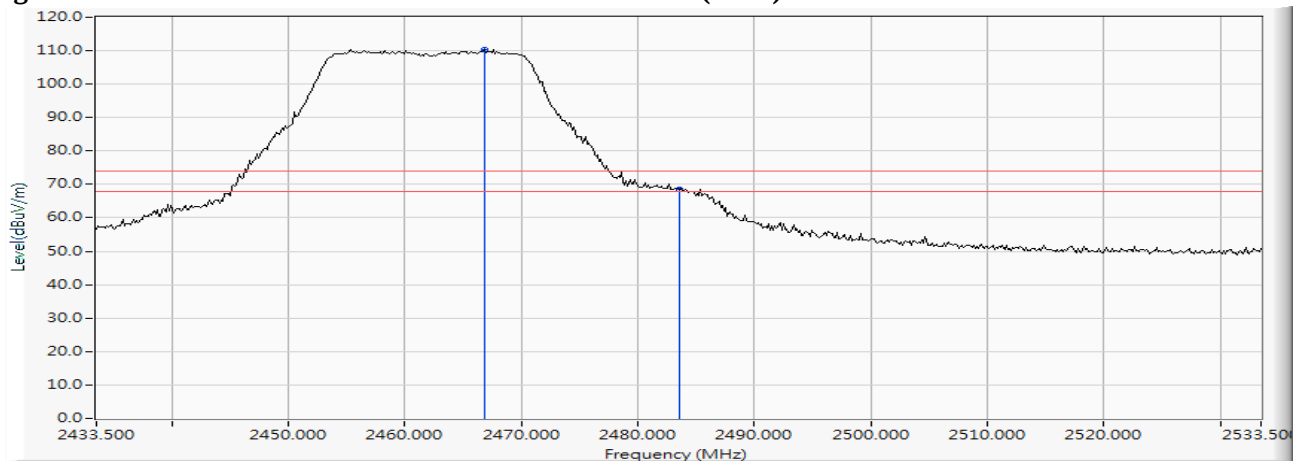
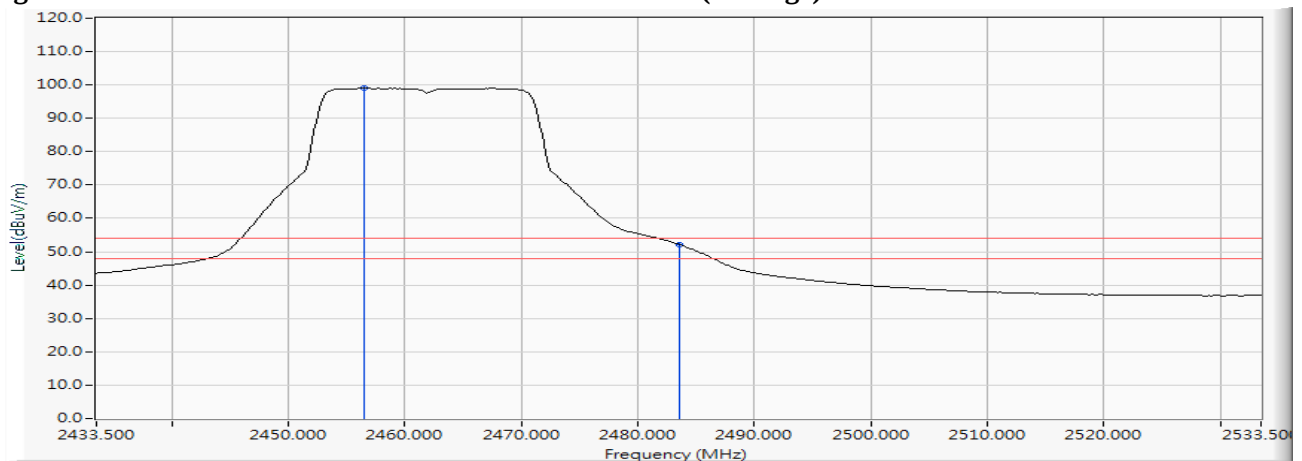
Figure Channel 11:
Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)
 Test Date : 2018/01/15

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)	2466.833	12.355	97.997	110.352	--	--	--
11 (Peak)	2483.500	12.403	56.076	68.479	74.00	54.00	Pass
11 (Average)	2456.543	12.326	86.668	98.994	--	--	--
11 (Average)	2483.500	12.403	39.803	52.206	74.00	54.00	Pass

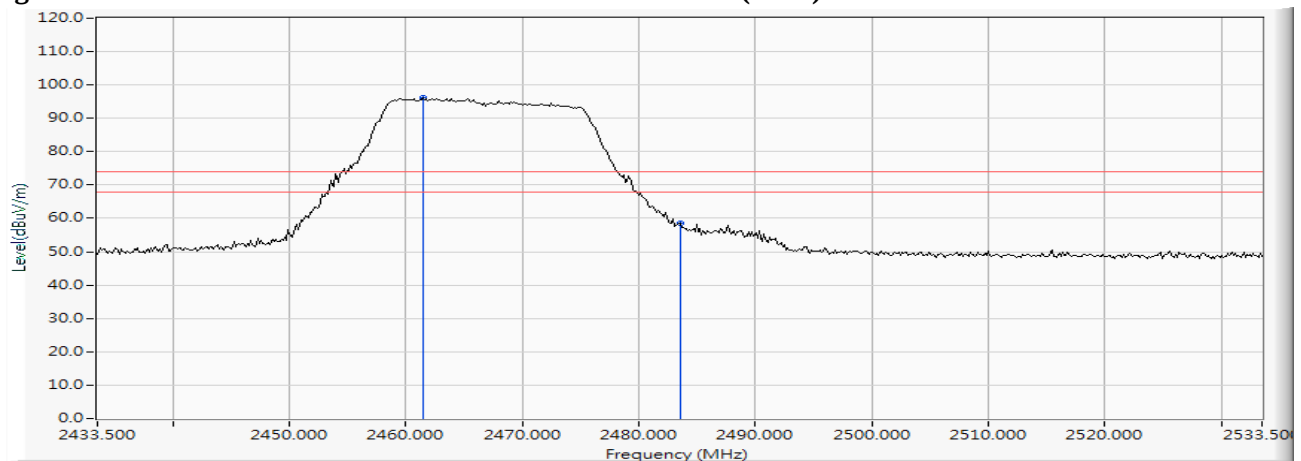
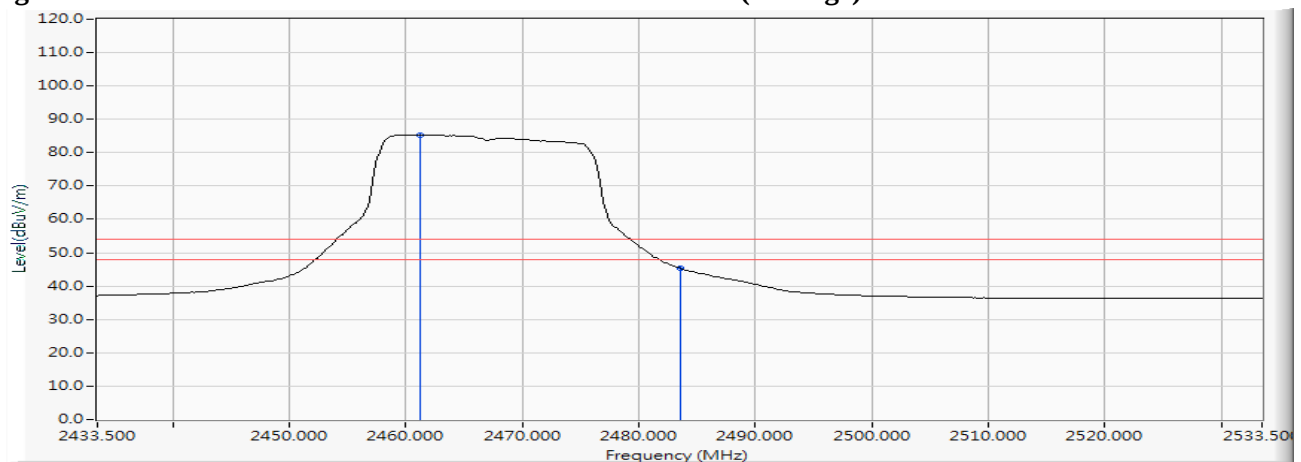
Figure Channel 11: Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2467MHz)
 Test Date : 2018/01/15

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
12 (Peak)	2461.471	12.340	83.973	96.313	--	--	--
12 (Peak)	2483.500	12.403	46.109	58.512	74.00	54.00	Pass
12 (Average)	2461.181	12.339	72.971	85.310	--	--	--
12 (Average)	2483.500	12.403	32.953	45.356	74.00	54.00	Pass

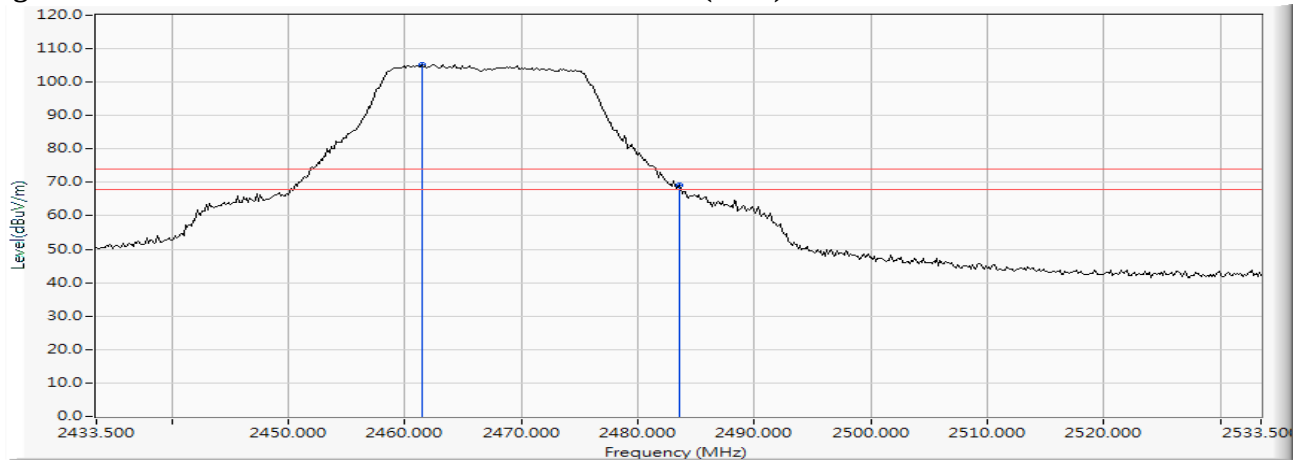
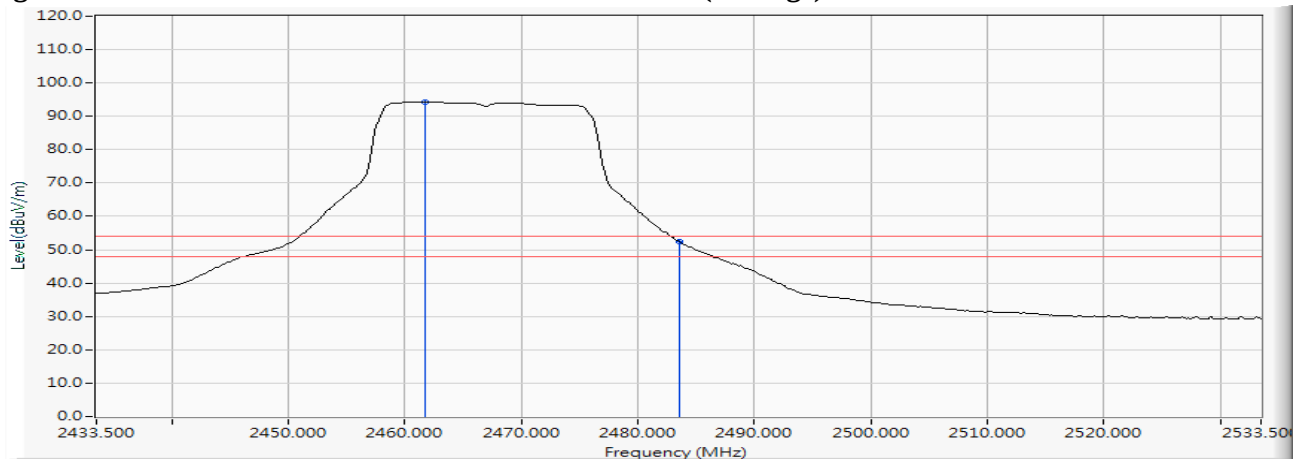
Figure Channel 12: Horizontal (Peak)

Figure Channel 12: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2467MHz)
 Test Date : 2018/01/15

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
12 (Peak)	2461.471	12.340	93.021	105.361	--	--	--
12 (Peak)	2483.500	12.403	56.818	69.221	74.00	54.00	Pass
12 (Average)	2461.761	12.341	82.016	94.357	--	--	--
12 (Average)	2483.500	12.403	40.007	52.410	74.00	54.00	Pass

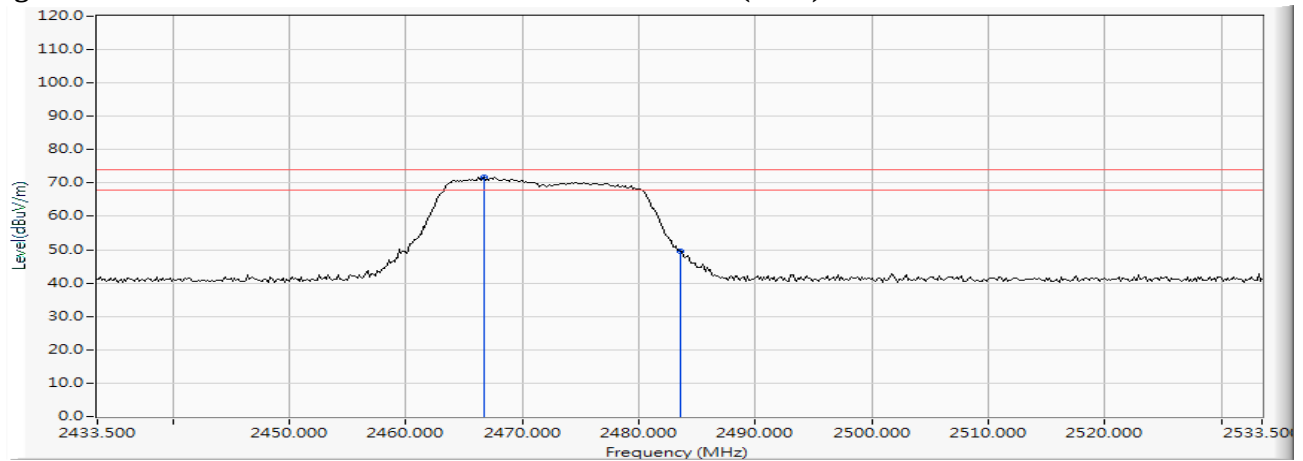
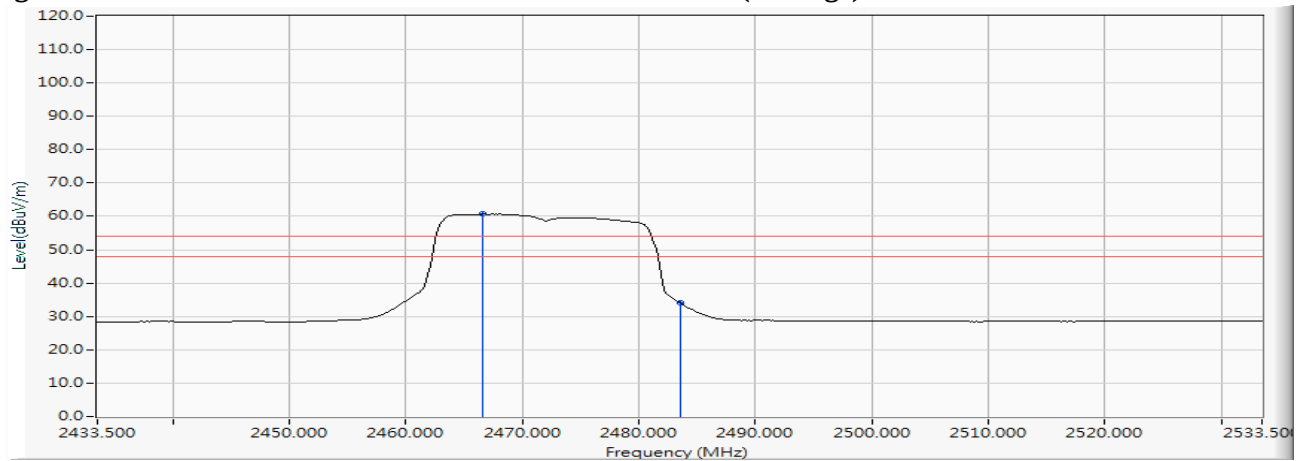
Figure Channel 12:
Vertical (Peak)

Figure Channel 12:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2466.688	12.355	59.452	71.807	--	--	--
13 (Peak)	2483.500	12.403	37.262	49.665	74.00	54.00	Pass
13 (Average)	2466.543	12.354	48.333	60.687	--	--	--
13 (Average)	2483.500	12.403	21.657	34.060	74.00	54.00	Pass

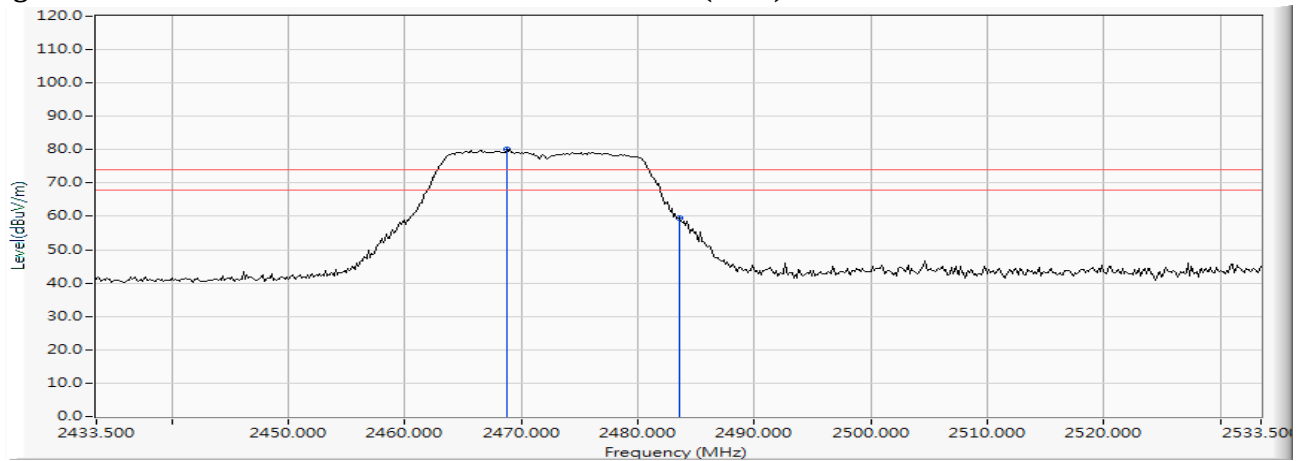
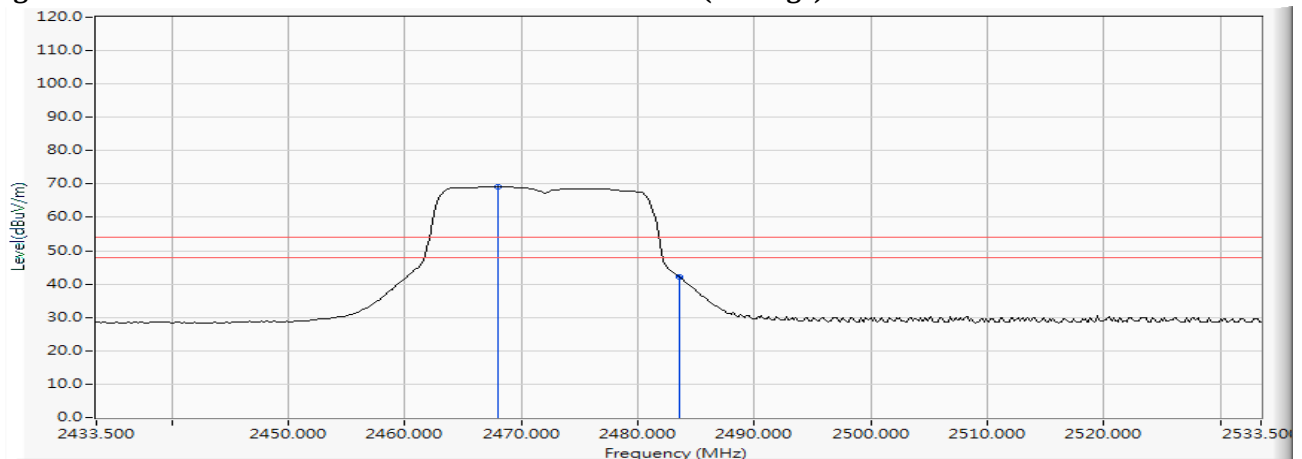
Figure Channel 13: Horizontal (Peak)

Figure Channel 13: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2472MHz)
 Test Date : 2018/01/15

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
13 (Peak)	2468.717	12.360	67.837	80.197	--	--	--
13 (Peak)	2483.500	12.403	47.163	59.566	74.00	54.00	Pass
13 (Average)	2467.993	12.357	56.749	69.107	--	--	--
13 (Average)	2483.500	12.403	29.823	42.226	74.00	54.00	Pass

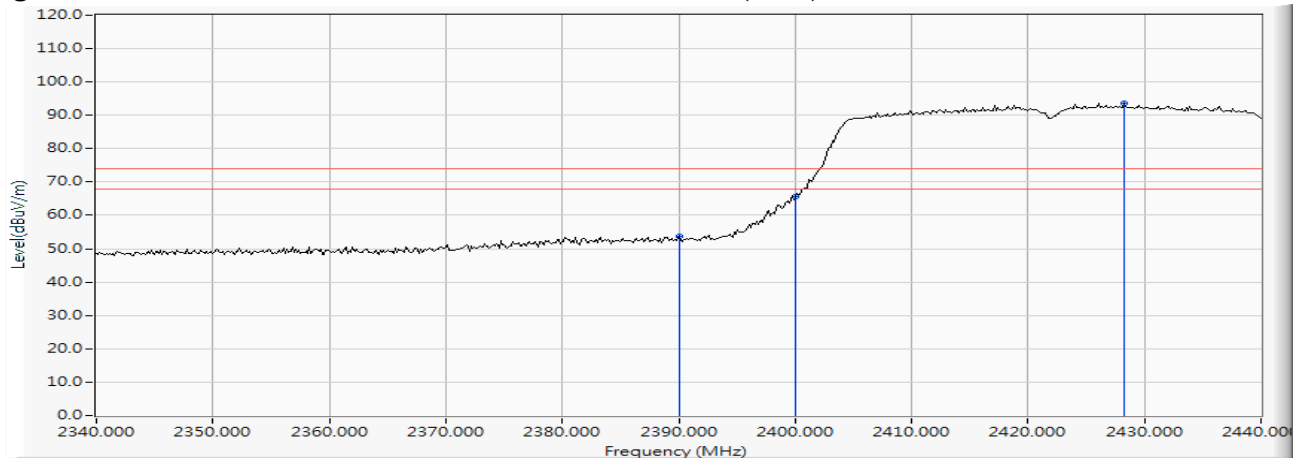
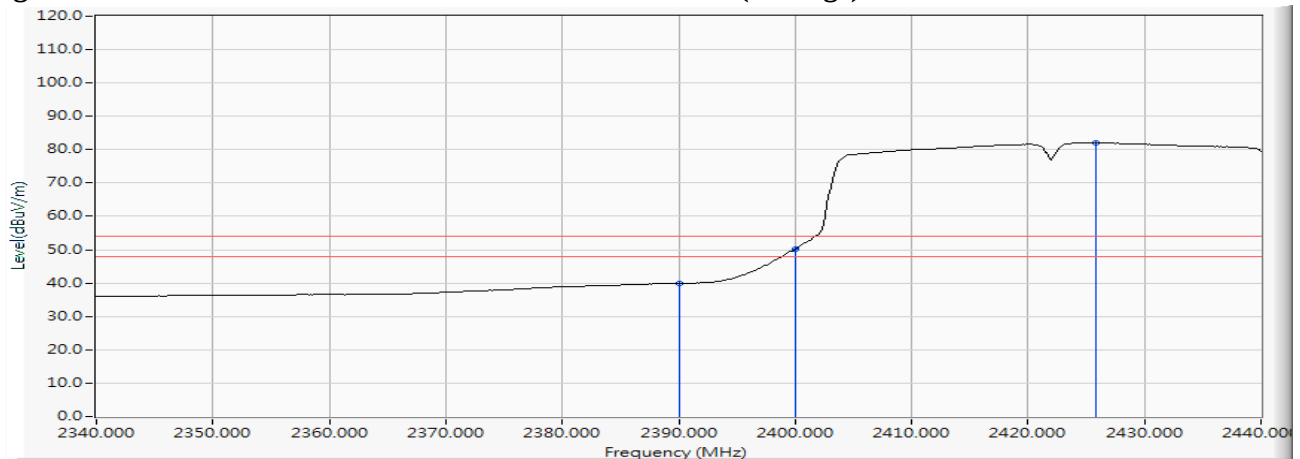
Figure Channel 13:
Vertical (Peak)

Figure Channel 13:
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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)
 Test Date : 2018/01/15

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	12.148	41.505	53.653	74.00	54.00	Pass
03 (Peak)	2400.000	12.176	53.371	65.547	--	--	--
03 (Peak)	2428.261	12.245	81.412	93.658	--	--	--
03 (Average)	2390.000	12.148	27.704	39.852	74.00	54.00	Pass
03 (Average)	2400.000	12.176	38.151	50.327	--	--	--
03 (Average)	2425.797	12.238	69.794	82.033	--	--	--

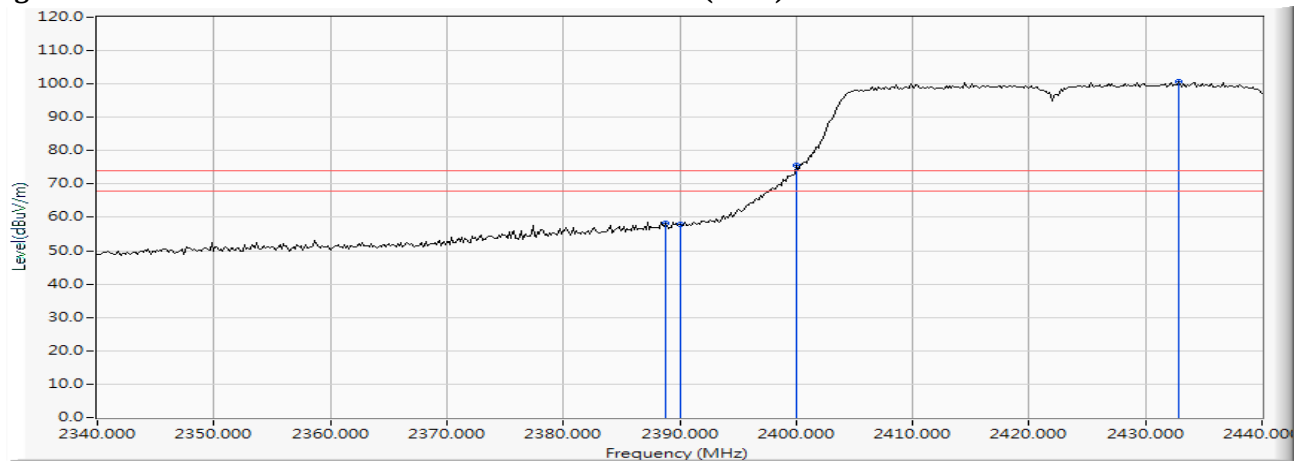
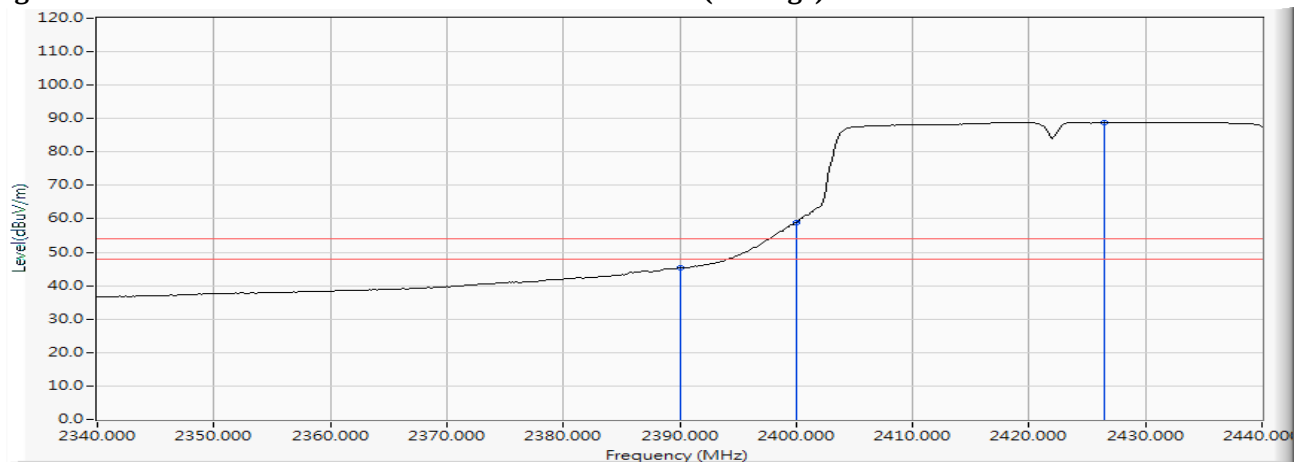
Figure Channel 03:
Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)
 Test Date : 2018/01/15

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)	2388.841	12.145	46.126	58.271	74.00	54.00	Pass
03 (Peak)	2390.000	12.148	45.740	57.888	74.00	54.00	Pass
03 (Peak)	2400.000	12.176	63.337	75.513	--	--	--
03 (Peak)	2432.899	12.258	88.313	100.572	--	--	--
03 (Average)	2390.000	12.148	33.103	45.251	74.00	54.00	Pass
03 (Average)	2400.000	12.176	46.855	59.031	--	--	--
03 (Average)	2426.522	12.241	76.655	88.896	--	--	--

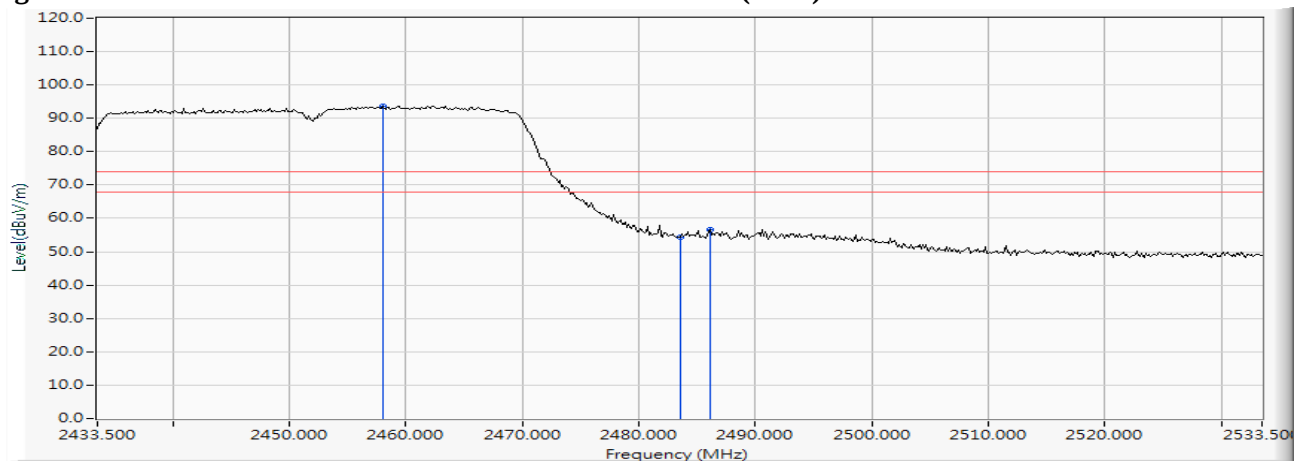
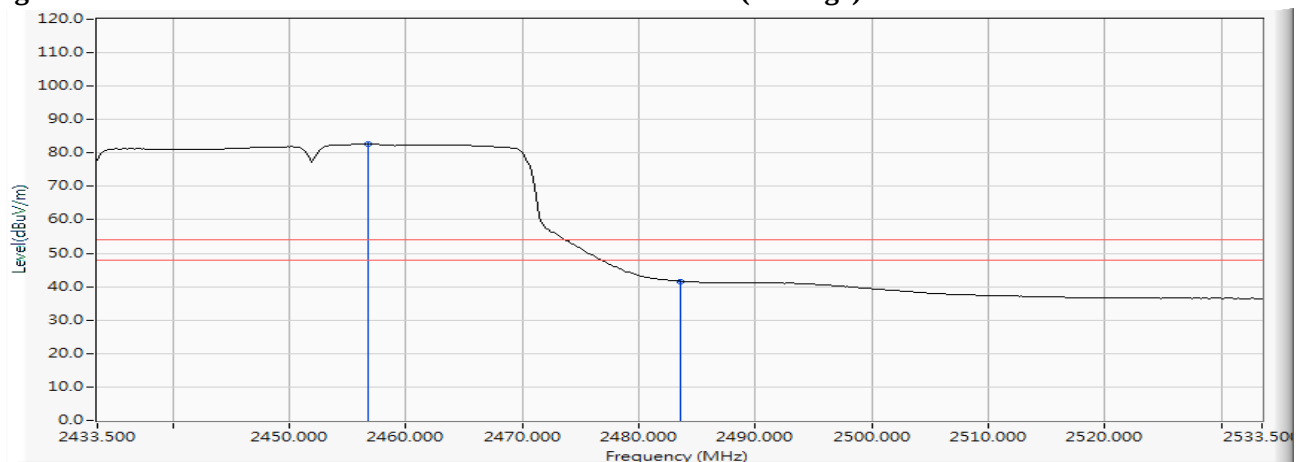
Figure Channel 03:
Vertical (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)
 Test Date : 2018/01/15

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)	2457.993	12.330	81.351	93.681	--	--	--
09 (Peak)	2483.500	12.403	42.043	54.446	74.00	54.00	Pass
09 (Peak)	2486.109	12.411	44.078	56.488	74.00	54.00	Pass
09 (Average)	2456.688	12.327	70.274	82.601	--	--	--
09 (Average)	2483.500	12.403	29.236	41.639	74.00	54.00	Pass

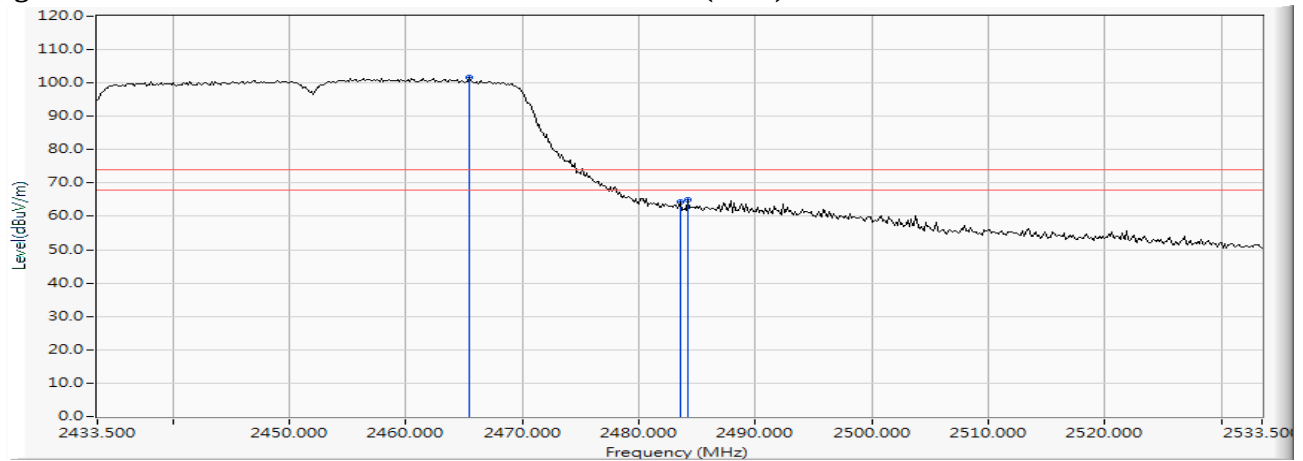
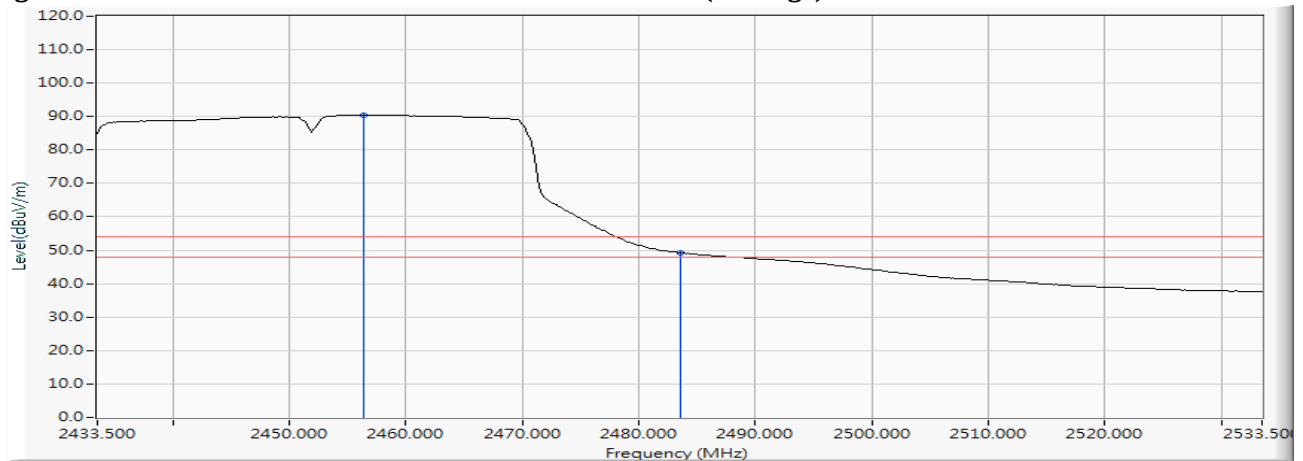
Figure Channel 09:
Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)
 Test Date : 2018/01/15

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)	2465.384	12.351	89.159	101.510	--	--	--
09 (Peak)	2483.500	12.403	51.931	64.334	74.00	54.00	Pass
09 (Peak)	2484.225	12.404	52.561	64.966	74.00	54.00	Pass
09 (Average)	2456.399	12.325	78.101	90.427	--	--	--
09 (Average)	2483.500	12.403	36.908	49.311	74.00	54.00	Pass

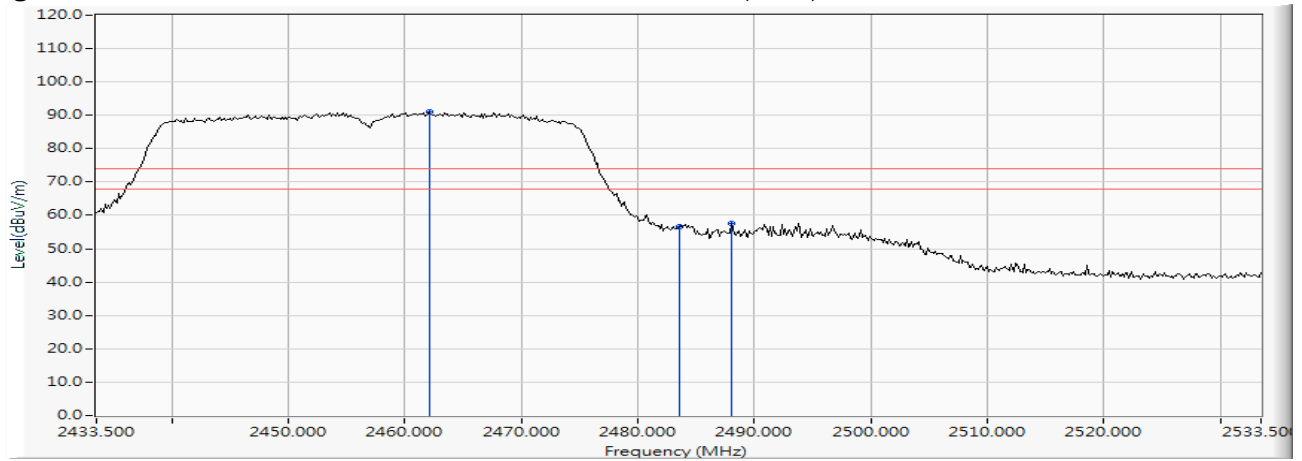
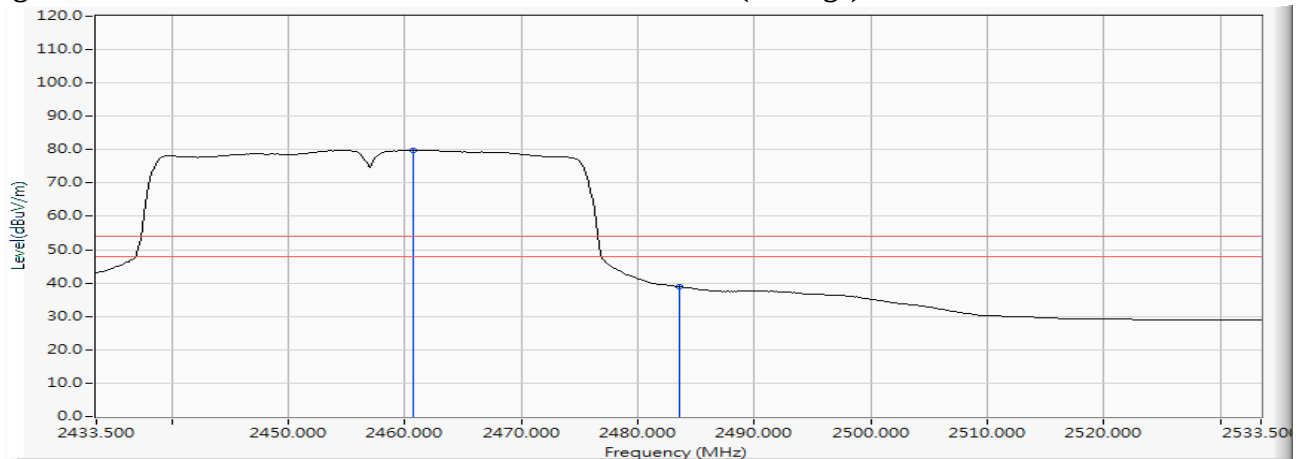
Figure Channel 09:
Vertical (Peak)

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.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2457MHz)
 Test Date : 2018/01/15

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
10 (Peak)	2462.051	12.342	78.659	91.001	--	--	--
10 (Peak)	2483.500	12.403	44.075	56.478	74.00	54.00	Pass
10 (Peak)	2487.993	12.415	45.243	57.658	74.00	54.00	Pass
10 (Average)	2460.746	12.337	67.549	79.887	--	--	--
10 (Average)	2483.500	12.403	26.542	38.945	74.00	54.00	Pass

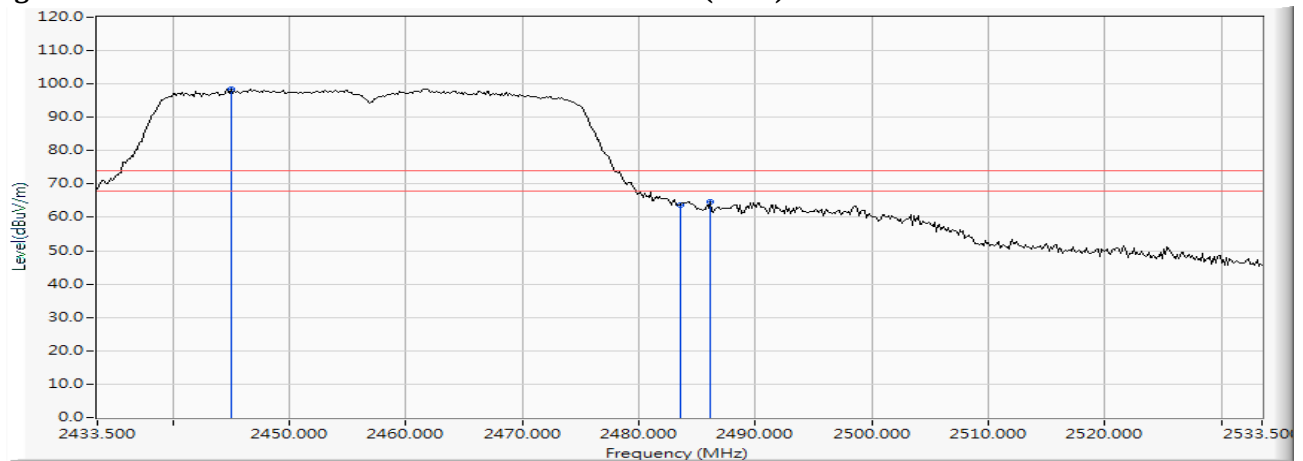
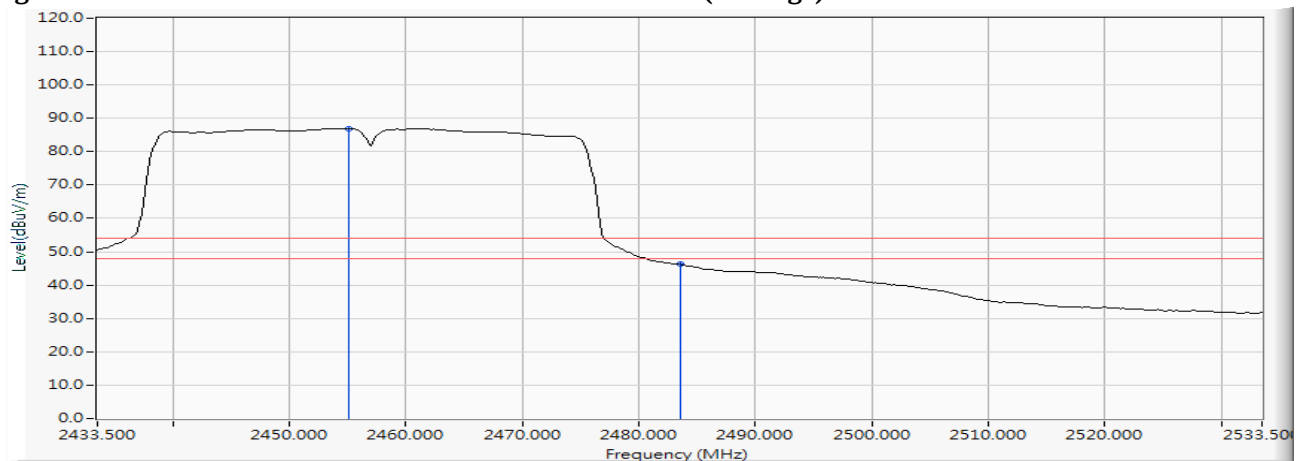
Figure Channel 10: Horizontal (Peak)

Figure Channel 10: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2457MHz)
 Test Date : 2018/01/15

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
10 (Peak)	2444.949	12.293	86.248	98.541	--	--	--
10 (Peak)	2483.500	12.403	51.443	63.846	74.00	54.00	Pass
10 (Peak)	2486.109	12.411	52.322	64.732	74.00	54.00	Pass
10 (Average)	2455.094	12.322	74.643	86.965	--	--	--
10 (Average)	2483.500	12.403	33.886	46.289	74.00	54.00	Pass

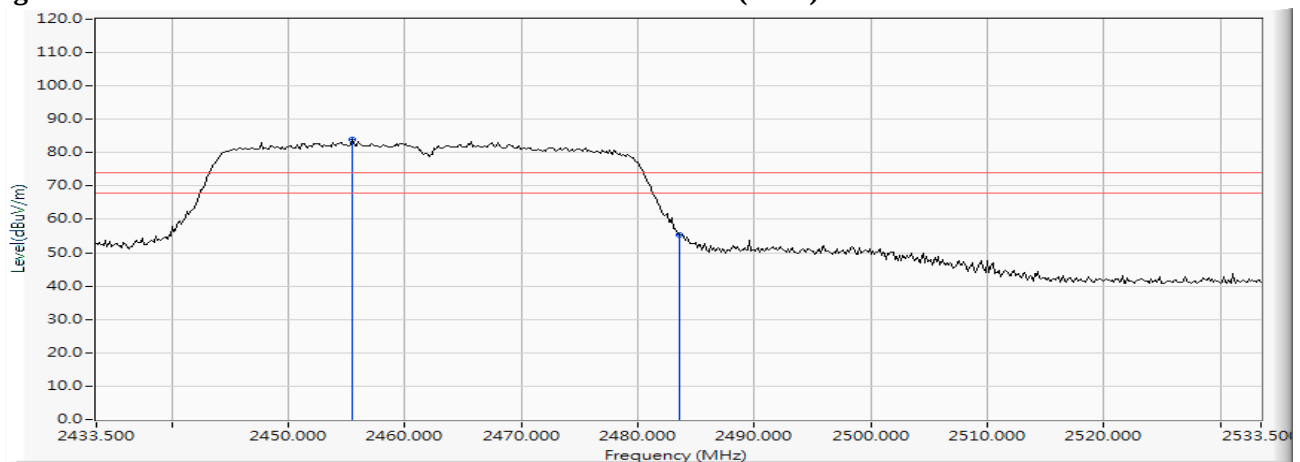
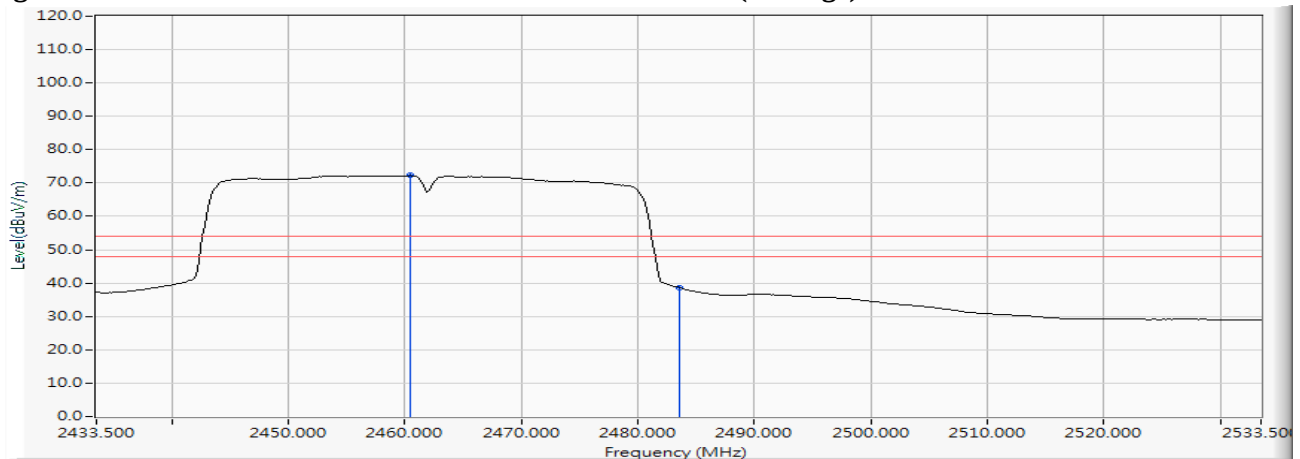
Figure Channel 10: Vertical (Peak)

Figure Channel 10: 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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2462MHz)
 Test Date : 2018/01/15

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)	2455.529	12.324	71.708	84.031	--	--	--
11 (Peak)	2483.500	12.403	43.079	55.482	74.00	54.00	Pass
11 (Average)	2460.457	12.337	59.898	72.235	--	--	--
11 (Average)	2483.500	12.403	26.320	38.723	74.00	54.00	Pass

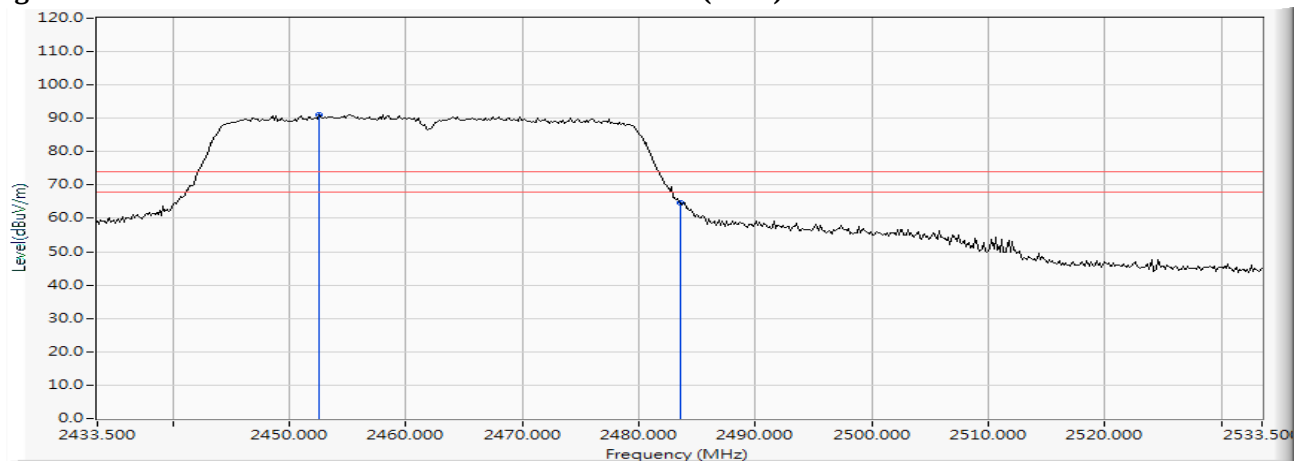
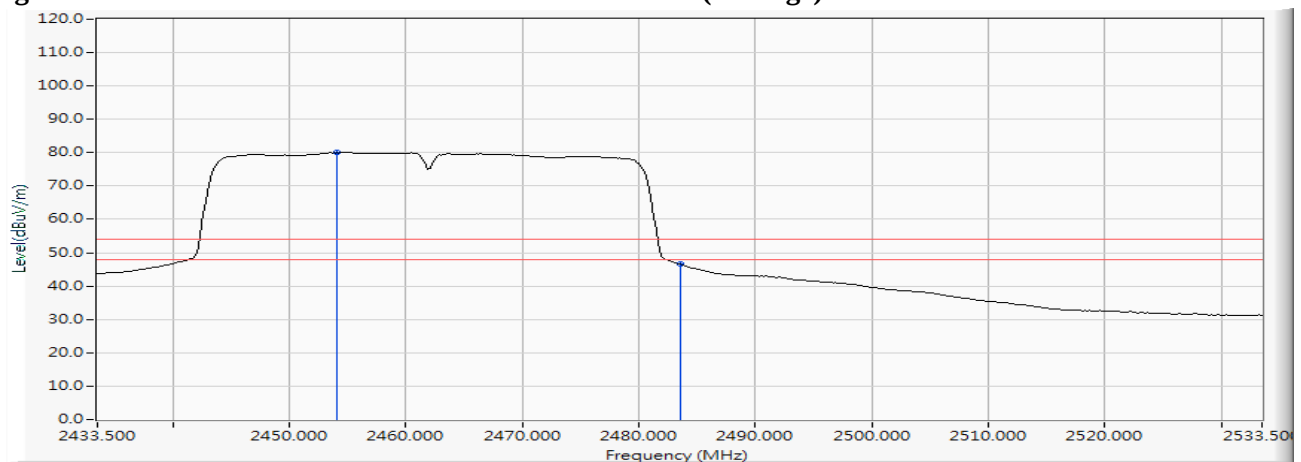
Figure Channel 11: Horizontal (Peak)

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® Wireless-AC 9461
 Test Item : Band Edge Data
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2462MHz)
 Test Date : 2018/01/15

RF Radiated Measurement (Vertical):

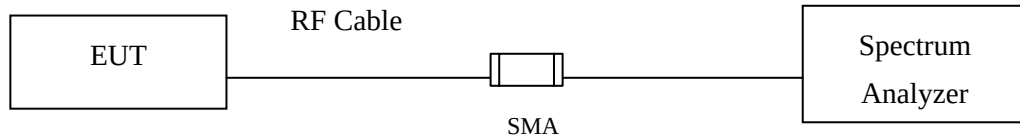
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2452.486	12.315	78.860	91.175	--	--	--
11 (Peak)	2483.500	12.403	52.409	64.812	74.00	54.00	Pass
11 (Average)	2454.080	12.319	67.742	80.061	--	--	--
11 (Average)	2483.500	12.403	34.198	46.601	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.

5. Duty Cycle

5.1. Test Setup



5.2. Test Procedure

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

5.3. Uncertainty

$\pm 2.31\text{msec}$

5.4. Test Result of Duty Cycle

Product : Intel® Wireless-AC 9461
Test Item : Duty Cycle
Test Mode : Transmit

Duty Cycle Formula:

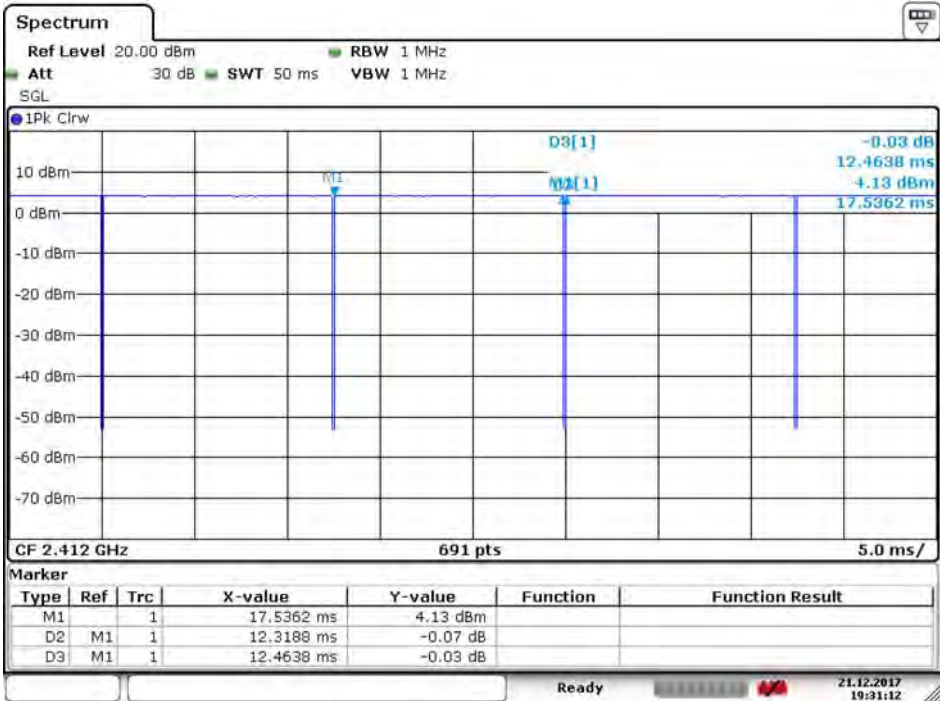
$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$

$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$

Results:

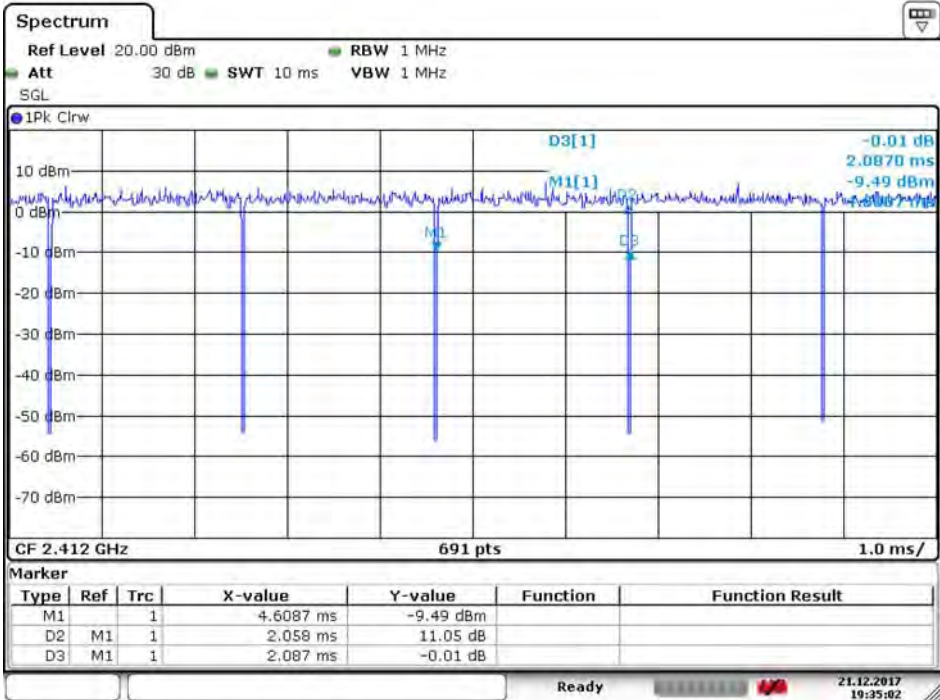
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	12.3188	12.4638	98.84	0.05
802.11g	2.0580	2.0870	98.61	0.06
802.11n20	37.0580	37.2029	99.61	0.02
802.11n40	17.8261	18.0435	98.80	0.05

802.11b



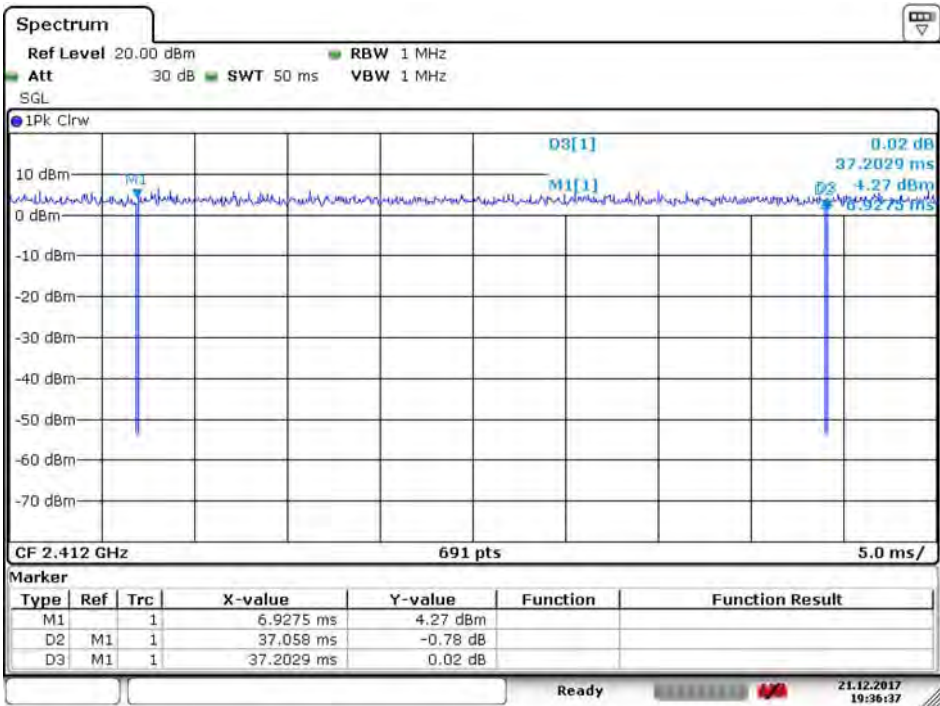
Date: 21.DEC.2017 19:31:12

802.11g



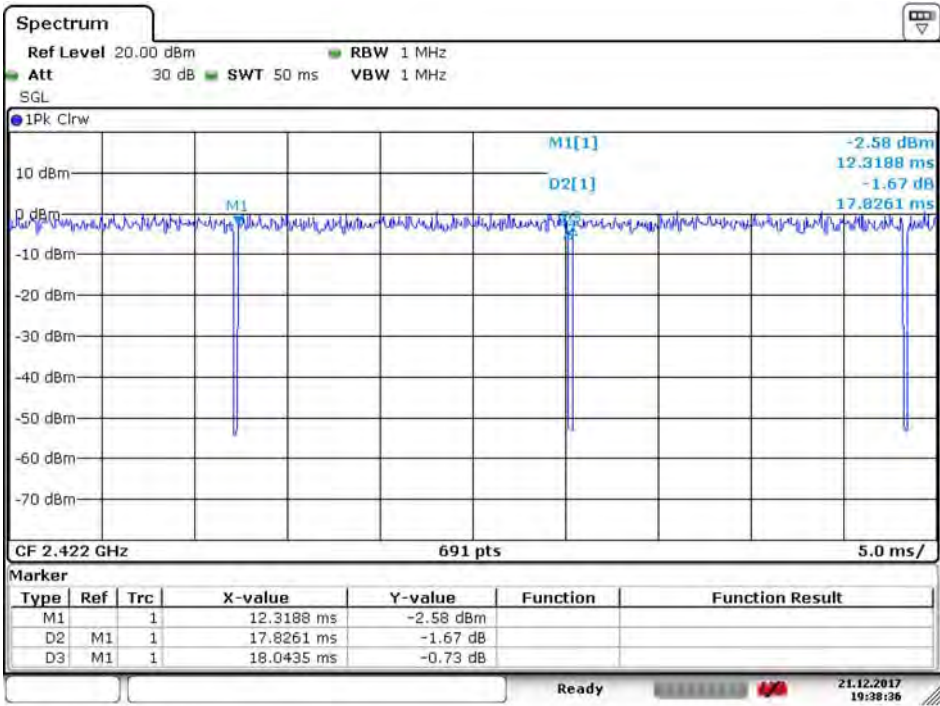
Date: 21.DEC.2017 19:35:02

802.11n20



Date: 21.DEC.2017 19:36:38

802.11n40



Date: 21.DEC.2017 19:38:36

6. EMI Reduction Method During Compliance Testing

No modification was made during testing.