

FCC Test Report

(Class II Permissive Change)

Product Name	Intel® Wireless-AC 9461
Model No.	9461NGW
FCC ID.	PD99461NG

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

Date of Receipt	Sep. 21, 2017
Issued Date	Jan. 25, 2018
Report No.	1790286R-RFUSP23V00
Report Version	V1.0



The test results relate only to the samples tested.

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

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Test Report

Issued Date: Jan. 25, 2018

Report No.: 1790286R-RFUSP23V00



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.	9461NGW
FCC ID.	PD99461NG
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	DC 3.3V
Trade Name	Intel
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2016 ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By :



(Senior Adm. Specialist / Joanne Lin)

Tested By :



(Assistant Engineer / Steven Tsai)

Approved By :



(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wireless-AC 9461
Trade Name	Intel
Model No.	9461NGW
FCC ID.	PD99461NG
Frequency Range	2402-2480MHz
Channel Number	79
Type of Modulation	GFSK(1Mbps) / π / 4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	Dipole Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”

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.

Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

Note:

1. The EUT is a Intel® Wireless-AC 9461 with built-in WLAN(802.11a/b/g/n/ac) and Bluetooth (5.0 and V3.0+HS, V2.1+EDR) transceiver, this report for Bluetooth V3.0+HS, V2.1+EDR.
2. These tests were conducted on a sample for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. This is to request a Class II permissive change for FCC ID: PD99461NG, originally granted on 09/29/2017.

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 - 1Mbps Mode 2: Transmit - 2Mbps Mode 3: Transmit - 3Mbps
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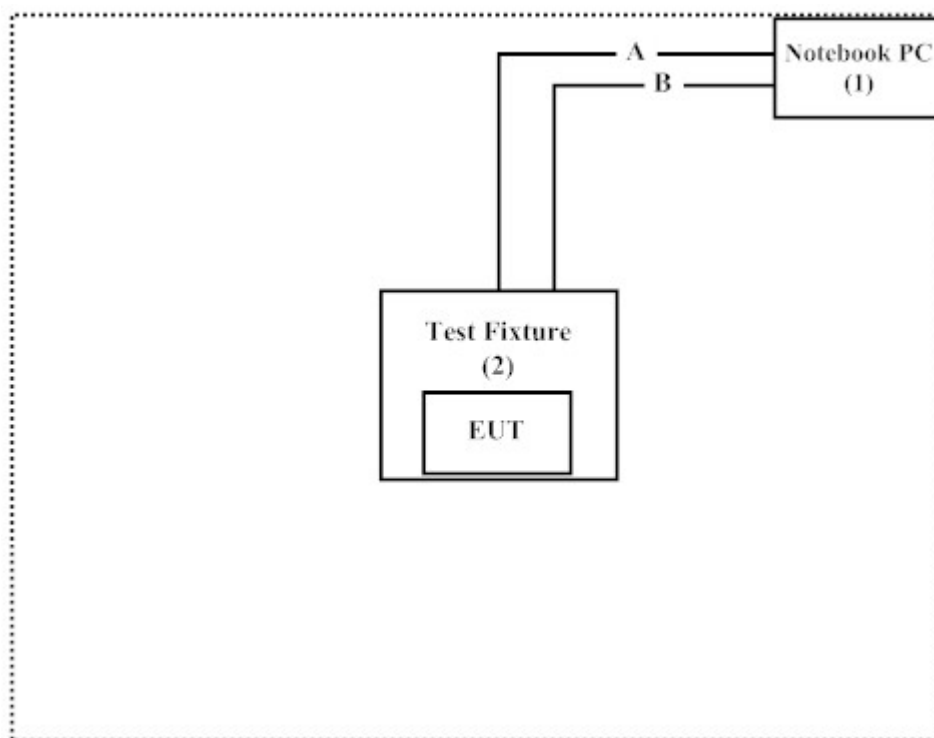
1.3. Tested System Details

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	E5470	N/A
2	Test Fixture	N/A	N/A	N/A

Signal Cable Type	Signal cable Description
A	Signal Cable
B	USB Cable

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 10.1742.0-06126" on the Notebook PC.
- (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 Equipment

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103466	2017.12.19	2018.12.18
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

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

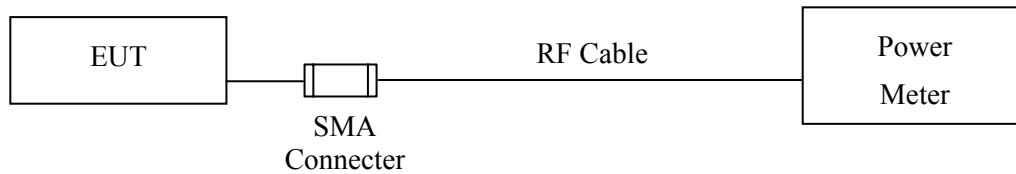
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	TESEQ	HLA6121	37133	2016.03.18	2018.03.17
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2017.02.13	2018.02.12
X	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
X	Horn Antenna	Com-Power	AH-840	101087	2017.05.24	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	101147	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. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek EMI 2.0 V2.1.113

2. Peak Power Output

2.1. Test Setup



2.2. Limit

The maximum peak power shall be less 1Watt.

2.3. Test Procedure

The EUT was setup to ANSI C63.4, 2014; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

2.4. Uncertainty

± 0.86 dB

2.5. Test Result of Peak Power Output

Product : Intel® Wireless-AC 9461
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2018/01/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	11.68	1 Watt= 30 dBm	Pass
Channel 39	2441.00	11.73	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.69	1 Watt= 30 dBm	Pass

Product : Intel® Wireless-AC 9461
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2018/01/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	11.16	1 Watt= 30 dBm	Pass
Channel 39	2441.00	11.29	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.23	1 Watt= 30 dBm	Pass

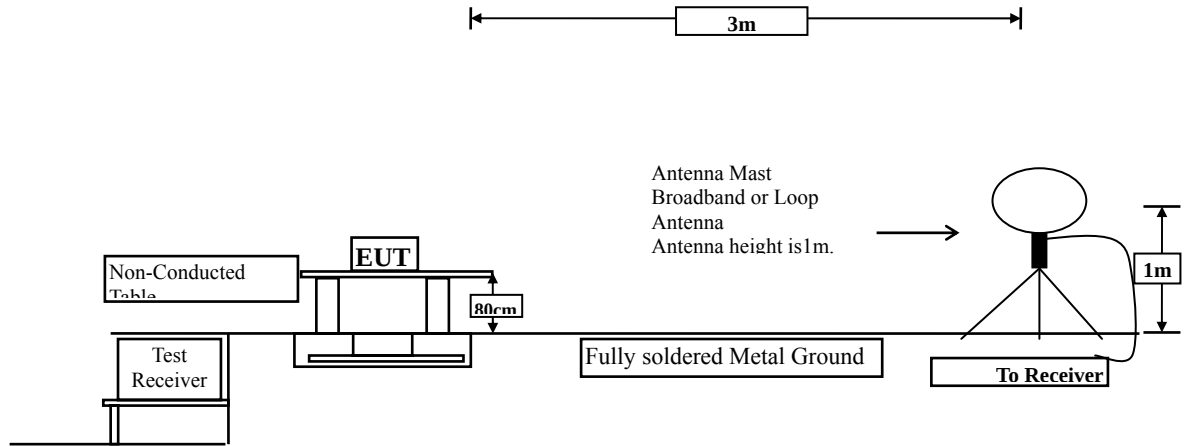
Product : Intel® Wireless-AC 9461
Test Item : Peak Power Output
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2018/01/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	11.24	1 Watt= 30 dBm	Pass
Channel 39	2441.00	11.39	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.35	1 Watt= 30 dBm	Pass

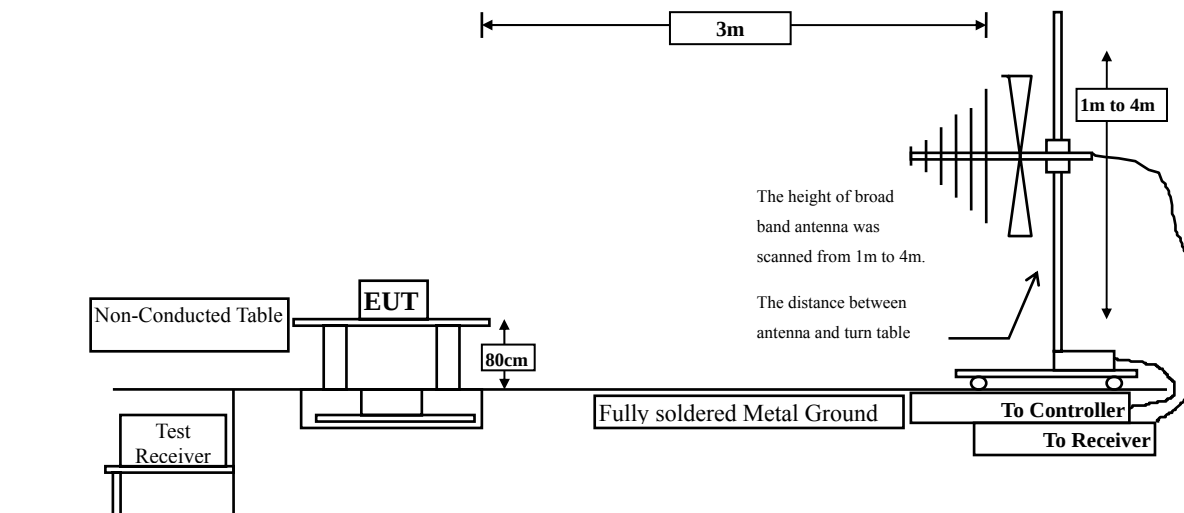
3. Radiated Emission

3.1. Test Setup

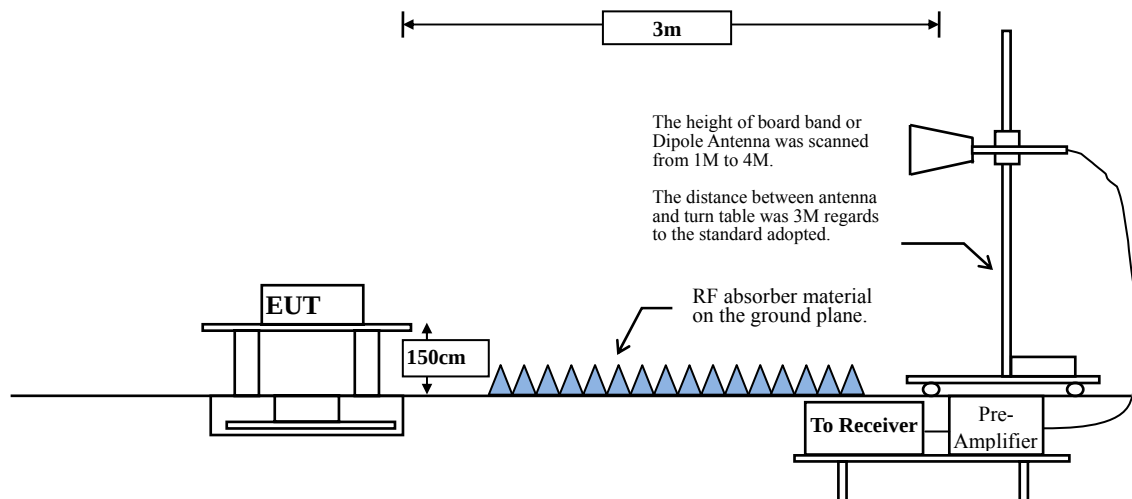
Radiated Emission Under 30MHz



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 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.

3.4. Uncertainty

Horizontal polarization :

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 polarization :

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
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2017/12/13

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:					
4804.000	-2.875	46.720	43.846	-30.154	74.000
7206.000	0.384	45.200	45.584	-28.416	74.000
9608.000	2.338	49.640	51.978	-22.022	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4804.000	-2.875	49.570	46.696	-27.304	74.000
7206.000	0.384	46.770	47.154	-26.846	74.000
9608.000	2.338	53.670	56.008	-17.992	74.000
Average					
Detector:					
9608.000	2.338	44.210	46.548	-7.452	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
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2017/12/13

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:					
4882.000	-2.812	46.610	43.798	-30.202	74.000
7323.000	0.464	44.700	45.164	-28.836	74.000
9764.000	2.615	45.970	48.584	-25.416	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4882.000	-2.812	48.110	45.298	-28.702	74.000
7323.000	0.464	46.880	47.344	-26.656	74.000
9764.000	2.615	54.320	56.934	-17.066	74.000
Average					
Detector:					
9764.000	2.615	44.720	47.334	-6.666	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
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2017/12/13

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:					
4960.000	-2.791	45.730	42.939	-31.061	74.000
7440.000	0.499	44.150	44.649	-29.351	74.000
9920.000	2.917	48.910	51.827	-22.173	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4960.000	-2.791	46.180	43.389	-30.611	74.000
7440.000	0.499	45.120	45.619	-28.381	74.000
9920.000	2.917	53.410	56.327	-17.673	74.000
Average					
Detector:					
9920.000	2.917	43.620	46.537	-7.463	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
 Test Mode : Mode 2: Transmit - 2Mbps (2402MHz)
 Test Date : 2017/12/13

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4804.000	-2.875	48.360	45.486	-28.514	74.000
7206.000	0.384	44.670	45.054	-28.946	74.000
9608.000	2.338	48.520	50.858	-23.142	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4804.000	-2.875	49.170	46.296	-27.704	74.000
7206.000	0.384	45.040	45.424	-28.576	74.000
9608.000	2.338	50.340	52.678	-21.322	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
 Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
 Test Date : 2017/12/14

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:					
4882.000	-2.812	46.970	44.158	-29.842	74.000
7323.000	0.464	44.880	45.344	-28.656	74.000
9764.000	2.615	49.040	51.654	-22.346	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4882.000	-2.812	49.210	46.398	-27.602	74.000
7323.000	0.464	45.710	46.174	-27.826	74.000
9764.000	2.615	49.590	52.204	-21.796	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
 Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)
 Test Date : 2017/12/14

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:					
4960.000	-2.791	47.010	44.219	-29.781	74.000
7440.000	0.499	45.080	45.579	-28.421	74.000
9920.000	2.917	47.020	49.937	-24.063	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4960.000	-2.791	47.570	44.779	-29.221	74.000
7440.000	0.499	44.360	44.859	-29.141	74.000
9920.000	2.917	47.360	50.277	-23.723	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
 Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
 Test Date : 2017/12/14

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4804.000	-2.875	48.320	45.446	-28.554	74.000
7206.000	0.384	44.750	45.134	-28.866	74.000
9608.000	2.338	48.610	50.948	-23.052	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4804.000	-2.875	50.110	47.236	-26.764	74.000
7206.000	0.384	44.680	45.064	-28.936	74.000
9608.000	2.338	49.550	51.888	-22.112	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
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2017/12/14

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
Peak Detector:					
4882.000	-2.812	46.840	44.028	-29.972	74.000
7323.000	0.464	45.720	46.184	-27.816	74.000
9764.000	2.615	49.070	51.684	-22.316	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4882.000	-2.812	48.220	45.408	-28.592	74.000
7323.000	0.464	44.750	45.214	-28.786	74.000
9764.000	2.615	49.670	52.284	-21.716	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
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2017/12/14

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:					
4960.000	-2.791	46.920	44.129	-29.871	74.000
7440.000	0.499	44.670	45.169	-28.831	74.000
9920.000	2.917	47.410	50.327	-23.673	74.000
Average					
Detector:					
--					54.000
Vertical					
Peak Detector:					
4960.000	-2.791	48.030	45.239	-28.761	74.000
7440.000	0.499	44.680	45.179	-28.821	74.000
9920.000	2.917	47.380	50.297	-23.703	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
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2017/12/15

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
169.174	-10.826	39.678	28.852	-14.648	43.500
284.449	-10.248	35.771	25.523	-20.477	46.000
385.667	-7.743	35.501	27.758	-18.242	46.000
575.449	-3.656	33.611	29.954	-16.046	46.000
846.768	0.269	28.893	29.163	-16.837	46.000
952.203	1.465	30.168	31.634	-14.366	46.000
Vertical					
146.681	-10.722	34.406	23.684	-19.816	43.500
226.812	-12.572	36.782	24.210	-21.790	46.000
398.319	-7.389	34.003	26.615	-19.385	46.000
541.710	-4.442	30.636	26.193	-19.807	46.000
797.565	-0.353	32.396	32.042	-13.958	46.000
997.188	2.178	30.562	32.741	-21.259	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
 Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
 Test Date : 2017/12/15

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
171.986	-11.127	34.933	23.806	-19.694	43.500
283.043	-10.279	35.299	25.019	-20.981	46.000
419.406	-6.889	31.299	24.410	-21.590	46.000
575.449	-3.656	31.252	27.595	-18.405	46.000
720.246	-1.335	29.550	28.216	-17.784	46.000
895.971	0.882	31.297	32.178	-13.822	46.000
Vertical					
171.986	-11.127	34.307	23.180	-20.320	43.500
311.159	-9.650	34.615	24.965	-21.035	46.000
498.130	-5.337	35.419	30.082	-15.918	46.000
633.087	-2.782	29.794	27.013	-18.987	46.000
797.565	-0.353	30.599	30.245	-15.755	46.000
977.507	1.867	30.013	31.880	-22.120	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
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2017/12/15

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
167.768	-10.766	35.723	24.957	-18.543	43.500
318.188	-9.492	36.393	26.901	-19.099	46.000
575.449	-3.656	32.304	28.647	-17.353	46.000
701.971	-1.620	27.739	26.118	-19.882	46.000
796.159	-0.369	30.426	30.056	-15.944	46.000
971.884	1.773	29.048	30.822	-23.178	54.000
Vertical					
167.768	-10.766	35.275	24.509	-18.991	43.500
311.159	-9.650	34.953	25.303	-20.697	46.000
432.058	-6.595	37.163	30.568	-15.432	46.000
624.652	-2.848	32.521	29.673	-16.327	46.000
800.377	-0.321	29.986	29.666	-16.334	46.000
988.754	2.043	29.439	31.482	-22.518	54.000

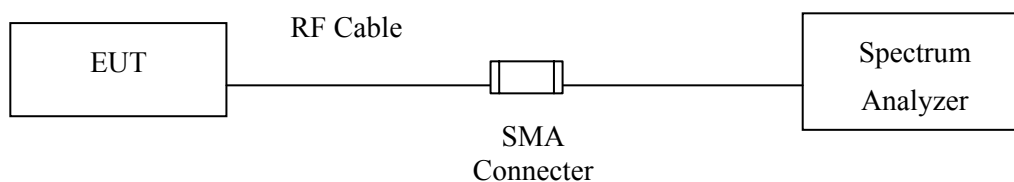
Note:

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.

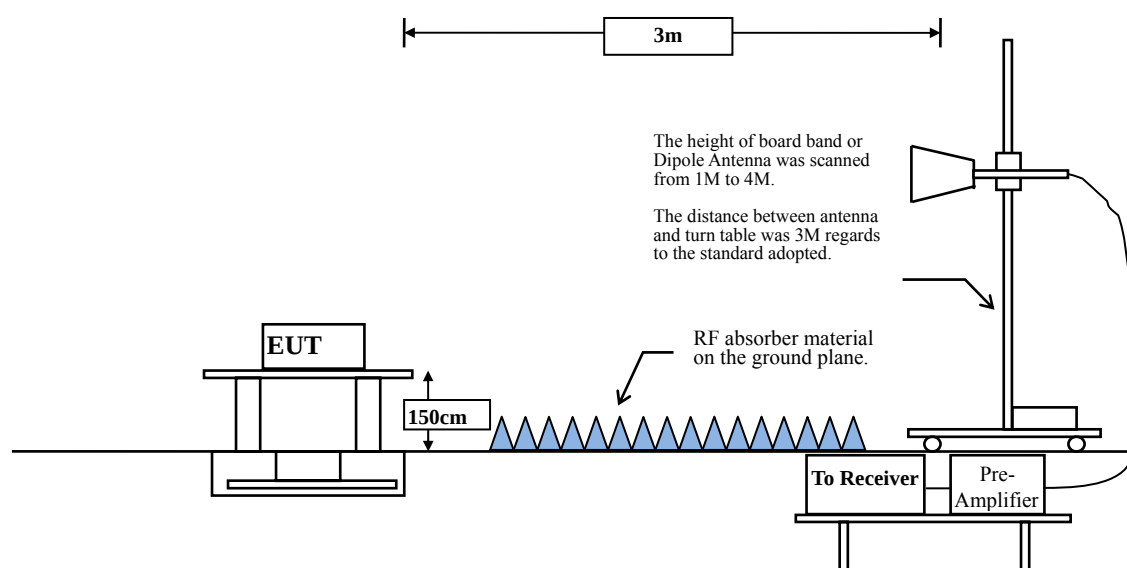
4. Band Edge

4.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



4.2. Limit

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 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

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

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
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2017/12/13

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
00 (Peak)	2363.768	12.073	38.299	50.372	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	35.639	47.787	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	57.861	70.037	--	--	Pass
00 (Peak)	2402.029	12.182	90.417	102.598	--	--	--
00 (Average)	2363.478	12.073	25.541	37.614	74.00	54.00	Pass
00 (Average)	2390.000	12.148	23.631	35.779	74.00	54.00	Pass
00 (Average)	2400.000	12.176	40.983	53.159	--	--	Pass
00 (Average)	2402.029	12.182	76.062	88.243	--	--	--

Figure Channel 00:

Horizontal (Peak)

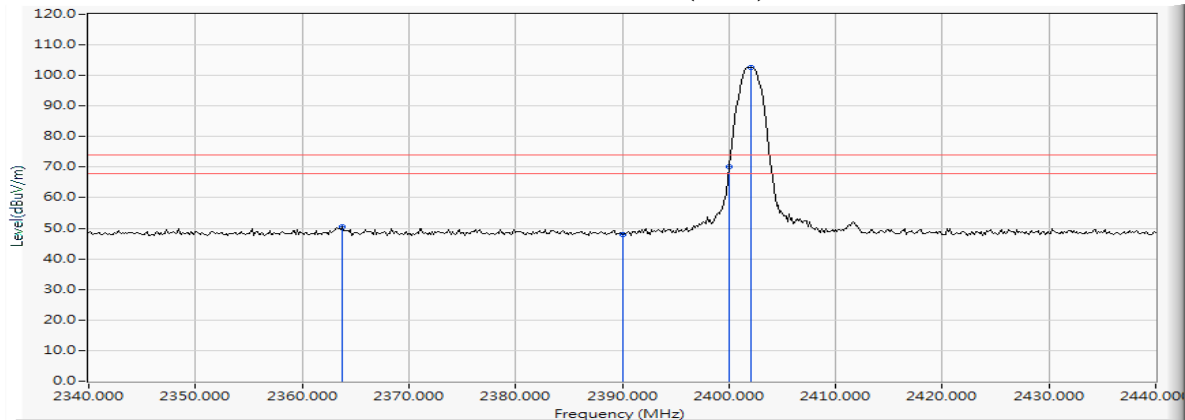
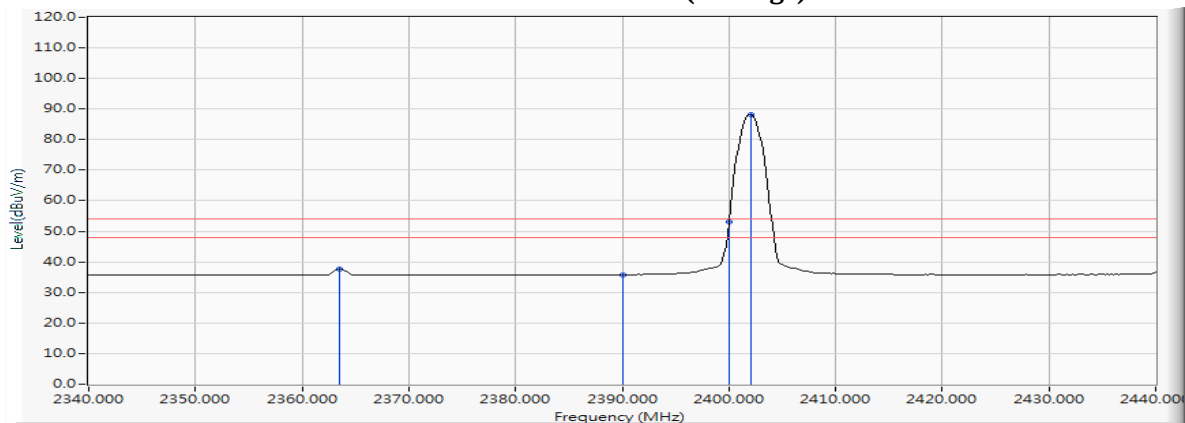


Figure Channel 00:

Horizontal (Average)



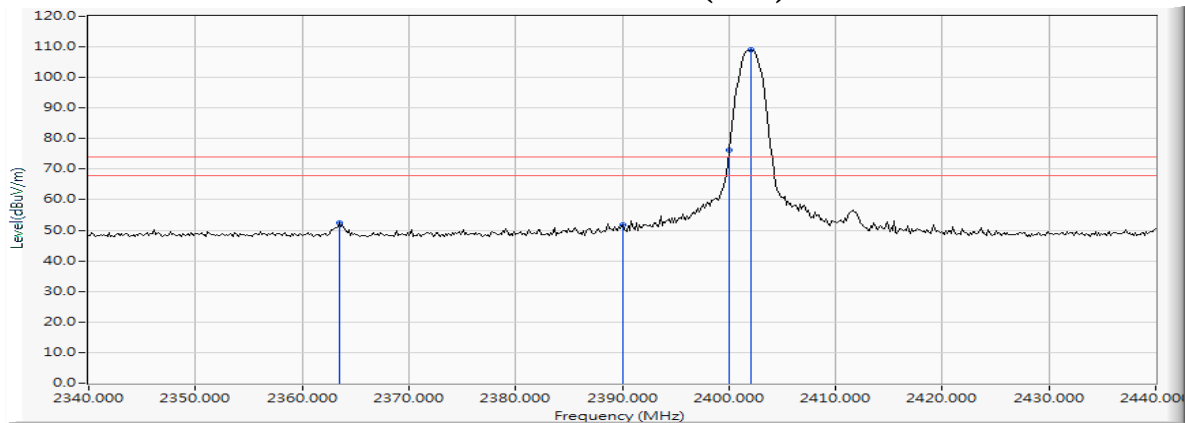
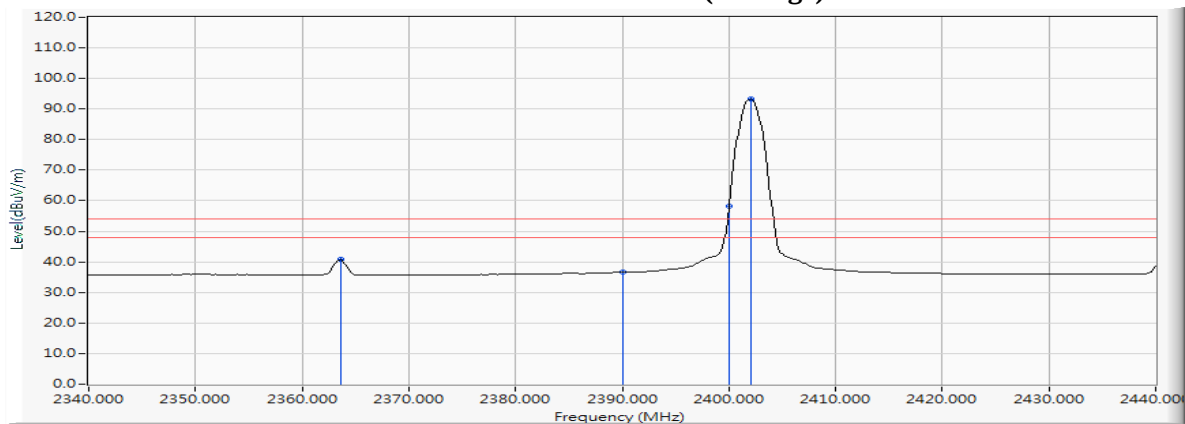
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
00 (Peak)	2363.478	12.073	40.285	52.358	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	39.723	51.871	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	63.921	76.097	--	--	Pass
00 (Peak)	2402.029	12.182	96.729	108.910	--	--	--
00 (Average)	2363.623	12.073	28.634	40.707	74.00	54.00	Pass
00 (Average)	2390.000	12.148	24.408	36.556	74.00	54.00	Pass
00 (Average)	2400.000	12.176	45.960	58.136	--	--	Pass
00 (Average)	2402.029	12.182	80.991	93.172	--	--	--

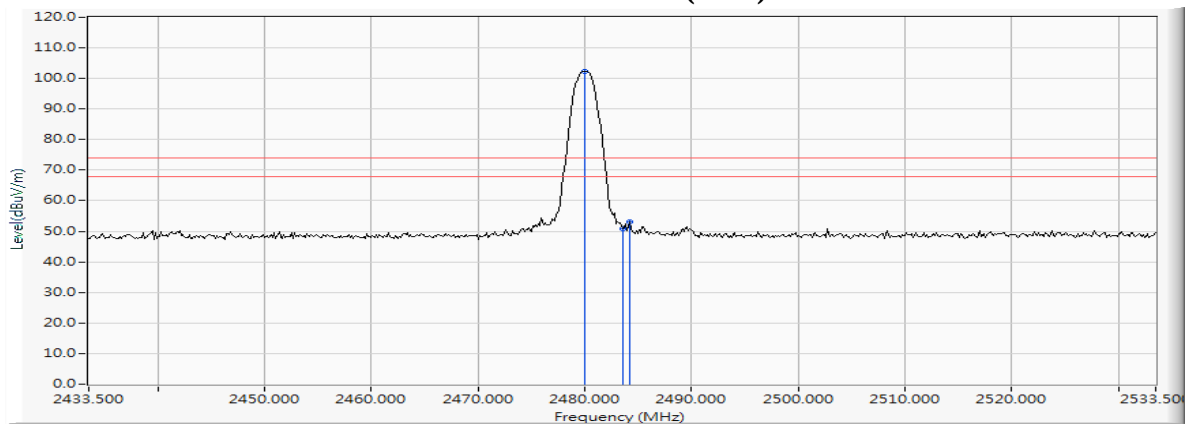
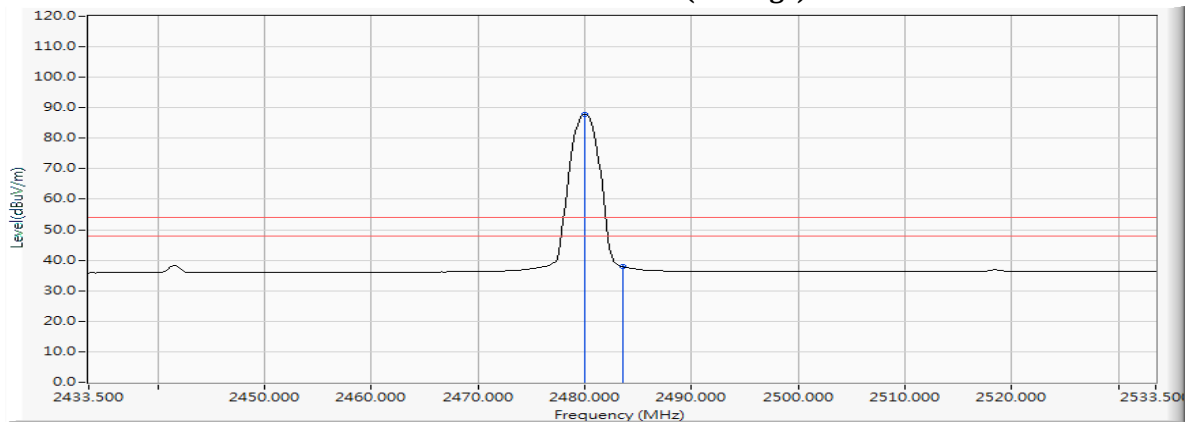
Figure Channel 00:
VERTICAL (Peak)

Figure Channel 00:
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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2017/12/13

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
78 (Peak)	2480.022	12.393	89.885	102.278	--	--	--
78 (Peak)	2483.500	12.403	38.449	50.852	74.00	54.00	Pass
78 (Peak)	2484.225	12.404	40.527	52.932	74.00	54.00	Pass
78 (Average)	2480.022	12.393	75.556	87.949	--	--	--
78 (Average)	2483.500	12.403	25.532	37.935	74.00	54.00	Pass

Figure Channel 78: Horizontal (Peak)**Figure Channel 78: Horizontal (Average)**

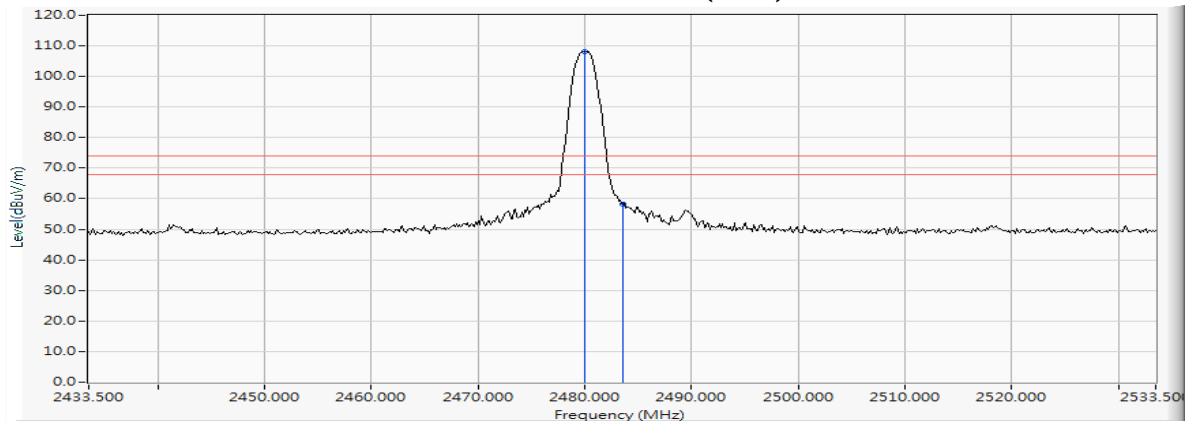
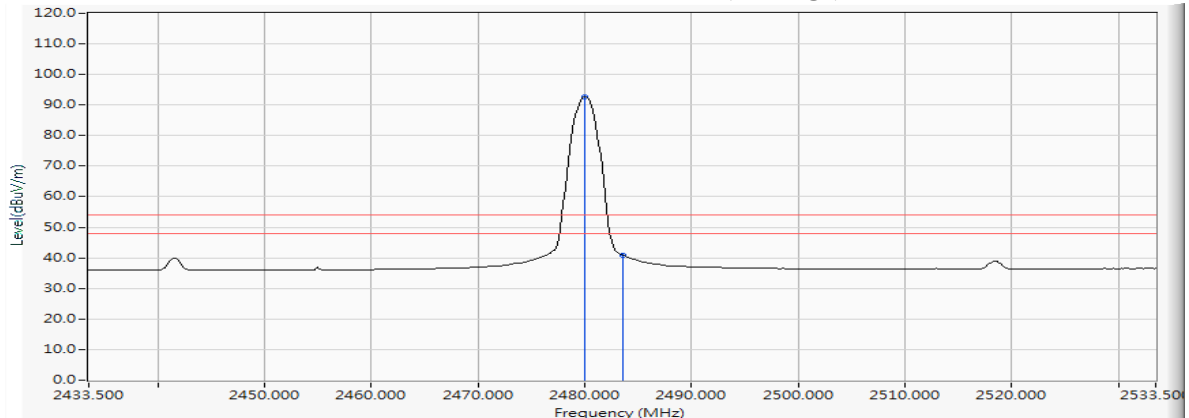
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
78 (Peak)	2480.022	12.393	95.842	108.235	--	--	--
78 (Peak)	2483.500	12.403	45.821	58.224	74.00	54.00	Pass
78 (Average)	2480.022	12.393	80.300	92.693	--	--	--
78 (Average)	2483.500	12.403	28.423	40.826	74.00	54.00	Pass

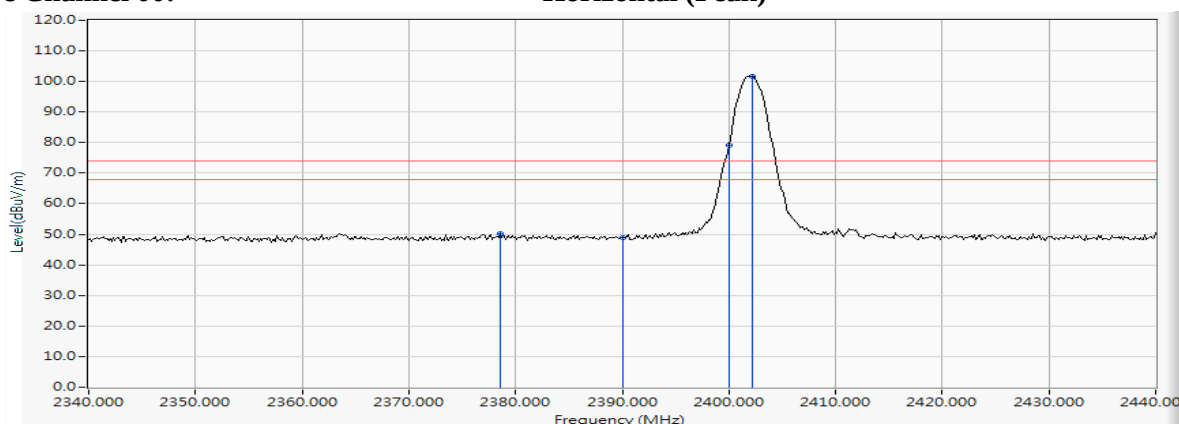
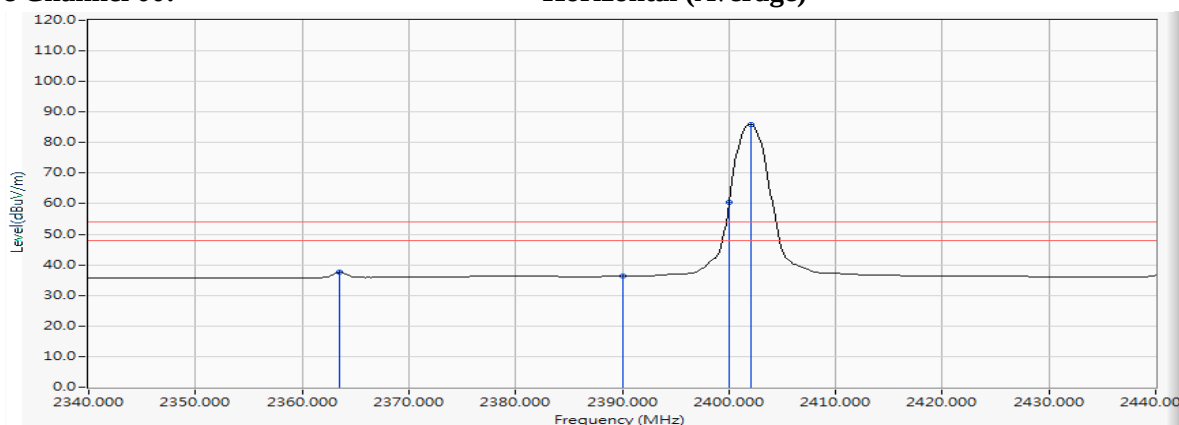
Figure Channel 78:
VERTICAL (Peak)

Figure Channel 78:
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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 2Mbps (2402MHz)
 Test Date : 2017/12/13

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
00 (Peak)	2378.551	12.115	38.064	50.179	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	36.632	48.780	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	66.952	79.128	--	--	Pass
00 (Peak)	2402.174	12.182	89.508	101.690	--	--	--
00 (Average)	2363.478	12.073	25.470	37.543	74.00	54.00	Pass
00 (Average)	2390.000	12.148	24.247	36.395	74.00	54.00	Pass
00 (Average)	2400.000	12.176	48.388	60.564	--	--	Pass
00 (Average)	2402.029	12.182	73.849	86.030	--	--	--

Figure Channel 00:
Horizontal (Peak)

Figure Channel 00:
Horizontal (Average)


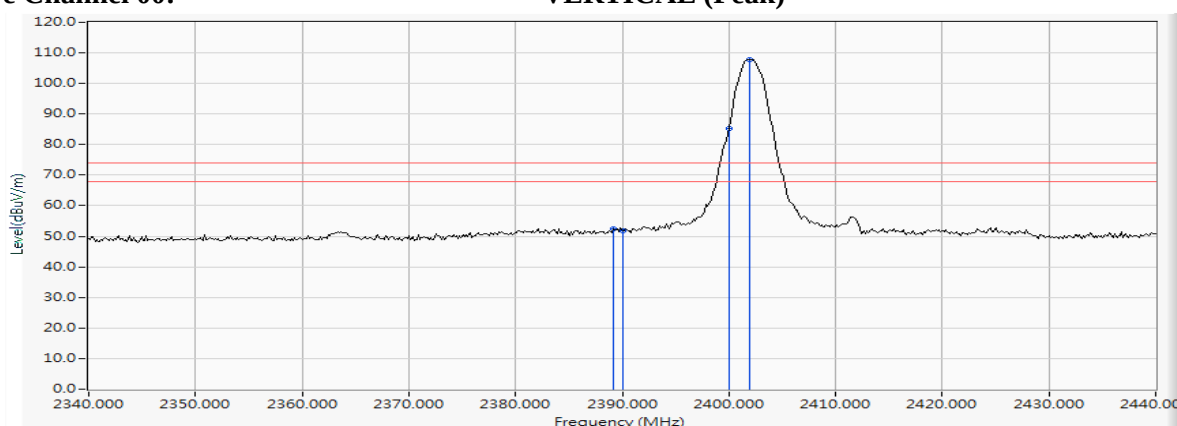
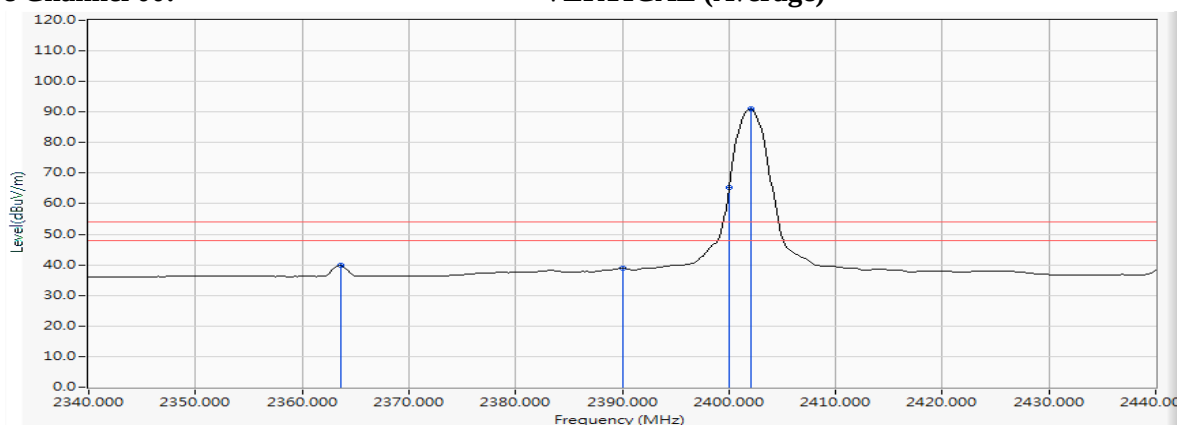
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 2Mbps (2402MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
00 (Peak)	2389.130	12.146	40.208	52.354	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	39.763	51.911	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	73.143	85.319	--	--	Pass
00 (Peak)	2401.884	12.182	95.668	107.849	--	--	--
00 (Average)	2363.623	12.073	27.763	39.836	74.00	54.00	Pass
00 (Average)	2390.000	12.148	26.782	38.930	74.00	54.00	Pass
00 (Average)	2400.000	12.176	53.139	65.315	--	--	Pass
00 (Average)	2402.029	12.182	78.742	90.923	--	--	--

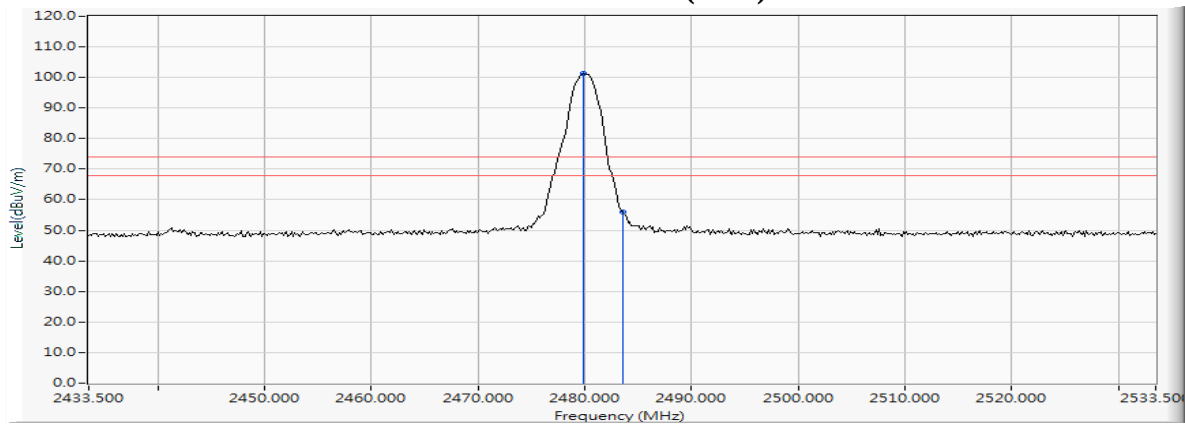
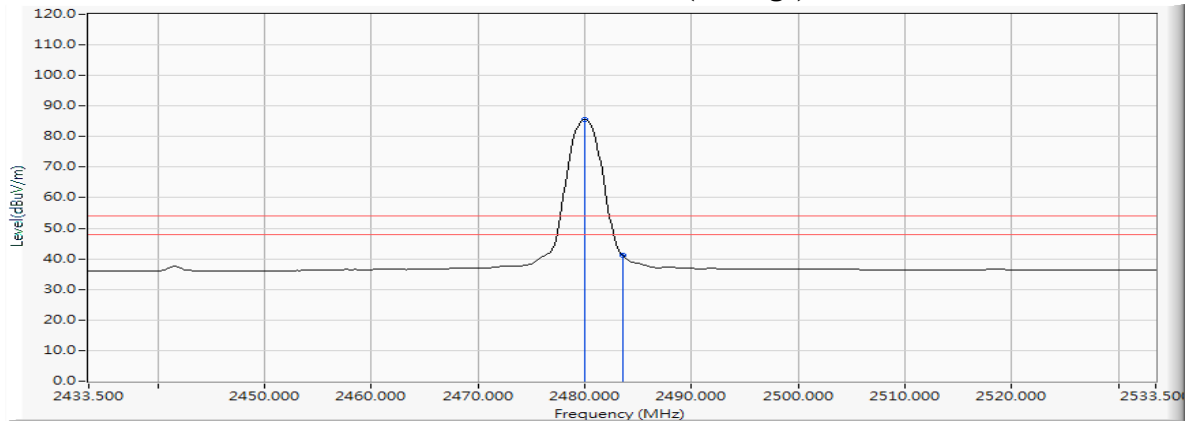
Figure Channel 00:**VERTICAL (Peak)****Figure Channel 00:****VERTICAL (Average)****Note:**

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)
 Test Date : 2017/12/13

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
78 (Peak)	2479.877	12.393	88.805	101.198	--	--	--
78 (Peak)	2483.500	12.403	43.706	56.109	74.00	54.00	Pass
78 (Average)	2480.022	12.393	73.198	85.591	--	--	--
78 (Average)	2483.500	12.403	28.811	41.214	74.00	54.00	Pass

Figure Channel 00:
Horizontal (Peak)

Figure Channel 00:
Horizontal (Average)


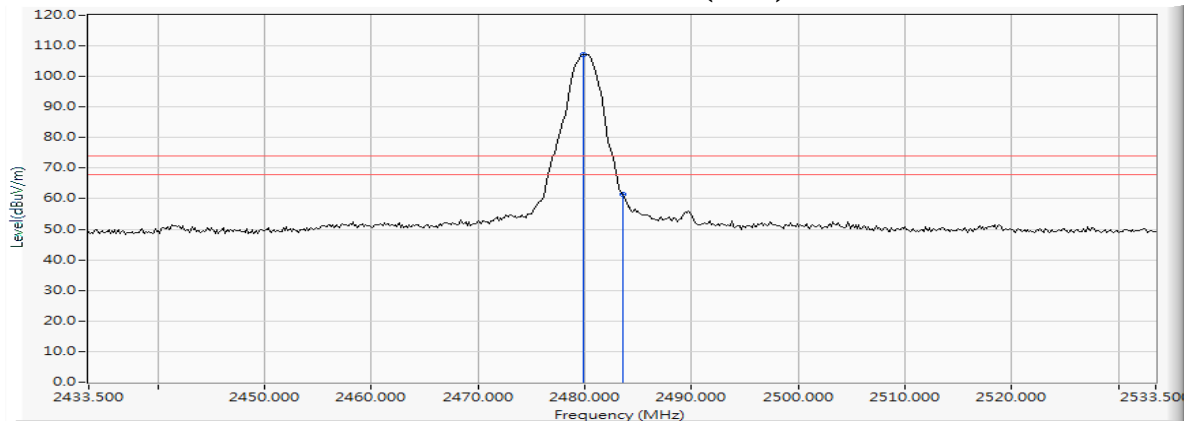
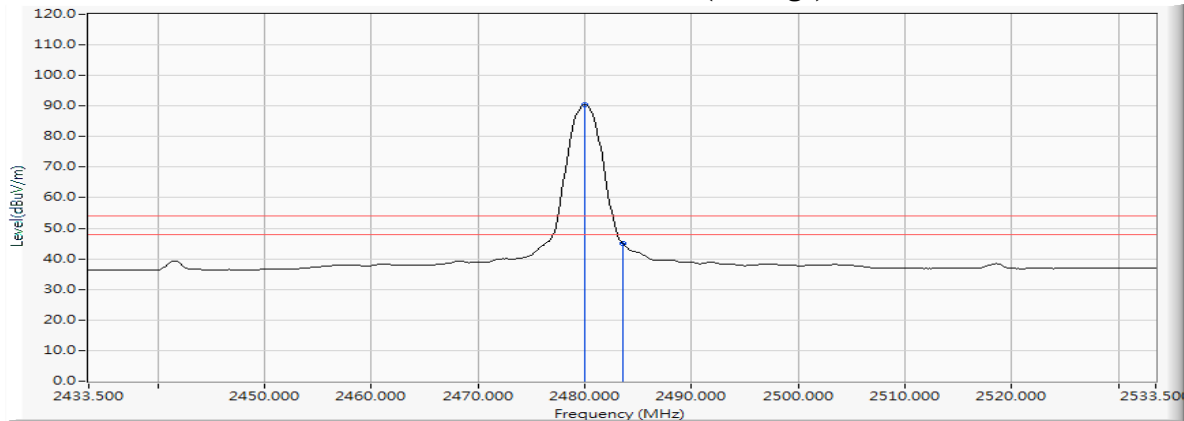
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
78 (Peak)	2479.877	12.393	94.690	107.083	--	--	--
78 (Peak)	2483.500	12.403	49.199	61.602	74.00	54.00	Pass
78 (Average)	2480.022	12.393	78.015	90.408	--	--	--
78 (Average)	2483.500	12.403	32.735	45.138	74.00	54.00	Pass

Figure Channel 78: VERTICAL (Peak)**Figure Channel 78: VERTICAL (Average)**

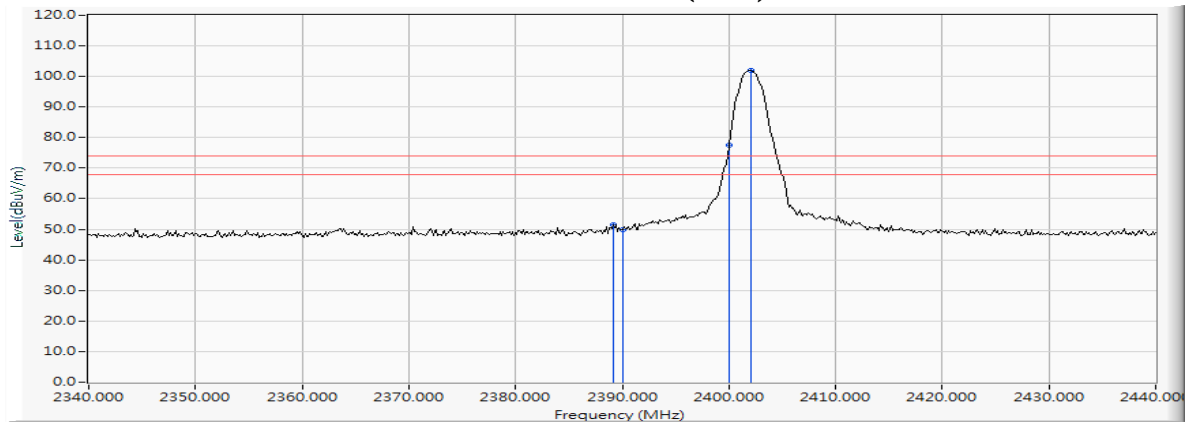
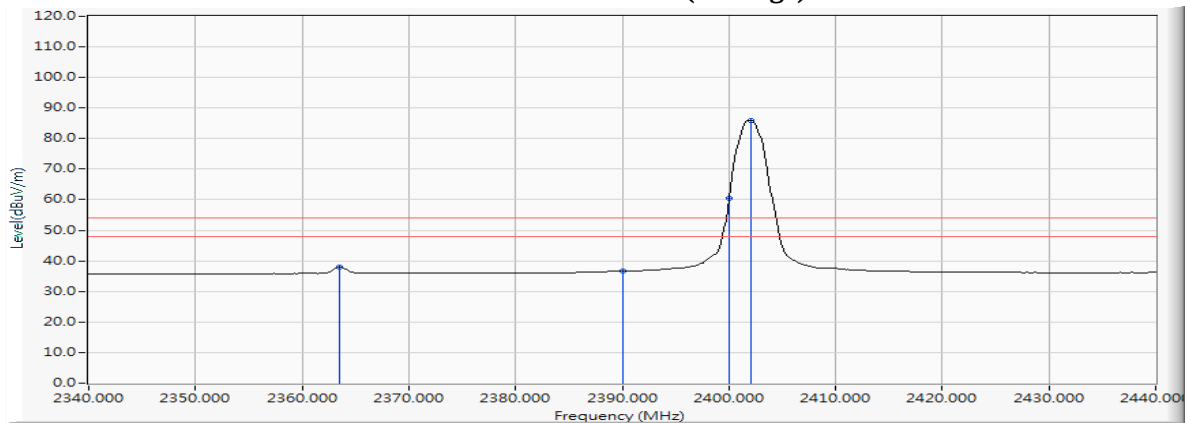
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
 Test Date : 2017/12/13

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
00 (Peak)	2389.130	12.146	39.351	51.497	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	37.827	49.975	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	65.234	77.410	--	--	Pass
00 (Peak)	2402.029	12.182	89.737	101.918	--	--	--
00 (Average)	2363.478	12.073	25.829	37.902	74.00	54.00	Pass
00 (Average)	2390.000	12.148	24.466	36.614	74.00	54.00	Pass
00 (Average)	2400.000	12.176	48.228	60.404	--	--	Pass
00 (Average)	2402.029	12.182	73.835	86.016	--	--	--

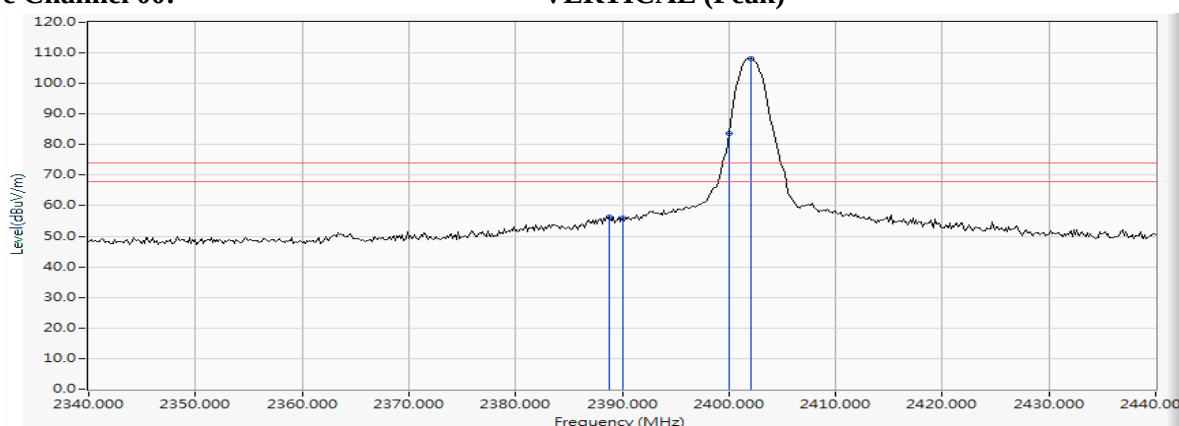
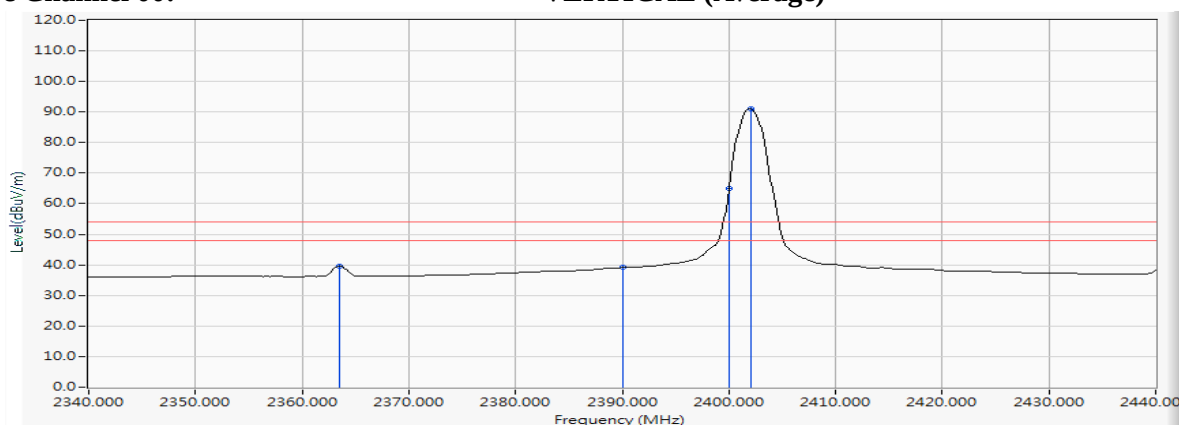
Figure Channel 00:**Horizontal (Peak)****Figure Channel 00:****Horizontal (Average)****Note:**

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
00 (Peak)	2388.841	12.145	44.265	56.410	74.00	54.00	Pass
00 (Peak)	2390.000	12.148	43.948	56.096	74.00	54.00	Pass
00 (Peak)	2400.000	12.176	71.344	83.520	--	--	Pass
00 (Peak)	2402.029	12.182	95.907	108.088	--	--	--
00 (Average)	2363.478	12.073	27.547	39.620	74.00	54.00	Pass
00 (Average)	2390.000	12.148	26.968	39.116	74.00	54.00	Pass
00 (Average)	2400.000	12.176	52.841	65.017	--	--	Pass
00 (Average)	2402.029	12.182	78.781	90.962	--	--	--

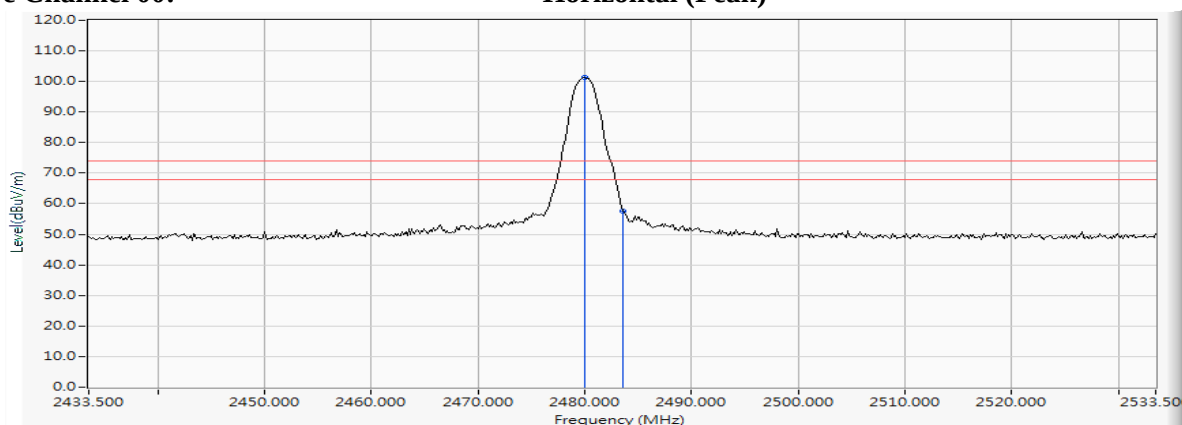
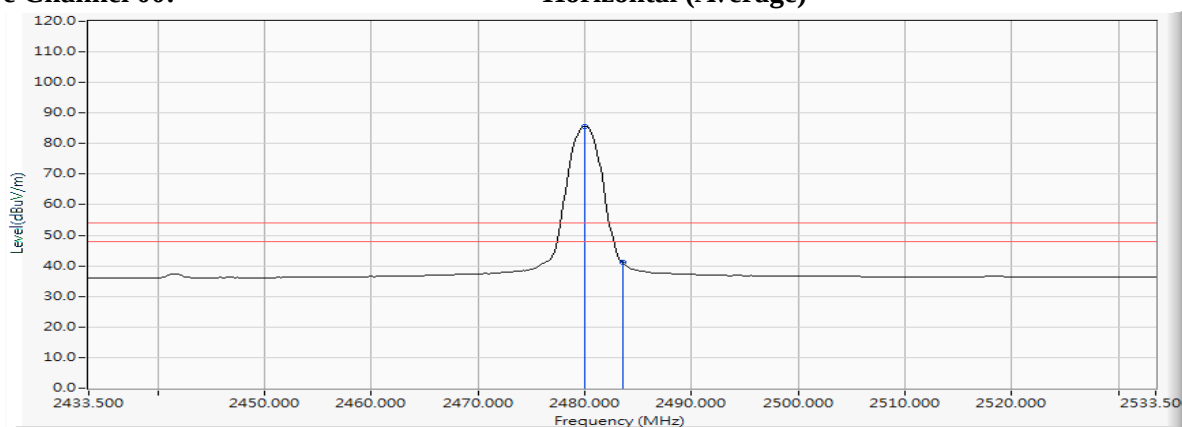
Figure Channel 00:**VERTICAL (Peak)****Figure Channel 00:****VERTICAL (Average)****Note:**

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2017/12/13

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
78 (Peak)	2480.022	12.393	88.899	101.292	--	--	--
78 (Peak)	2483.500	12.403	45.246	57.649	74.00	54.00	Pass
78 (Average)	2480.022	12.393	73.097	85.490	--	--	--
78 (Average)	2483.500	12.403	28.730	41.133	74.00	54.00	Pass

Figure Channel 00:
Horizontal (Peak)

Figure Channel 00:
Horizontal (Average)


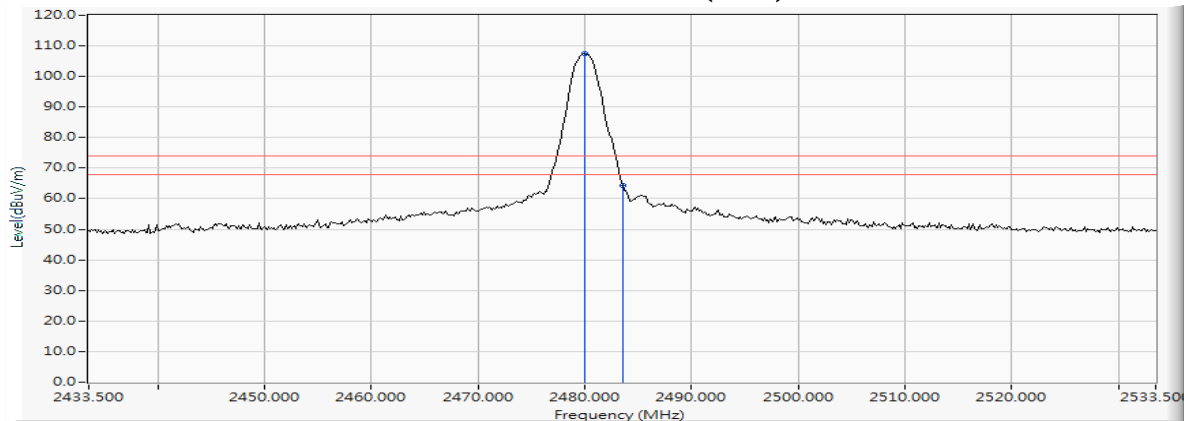
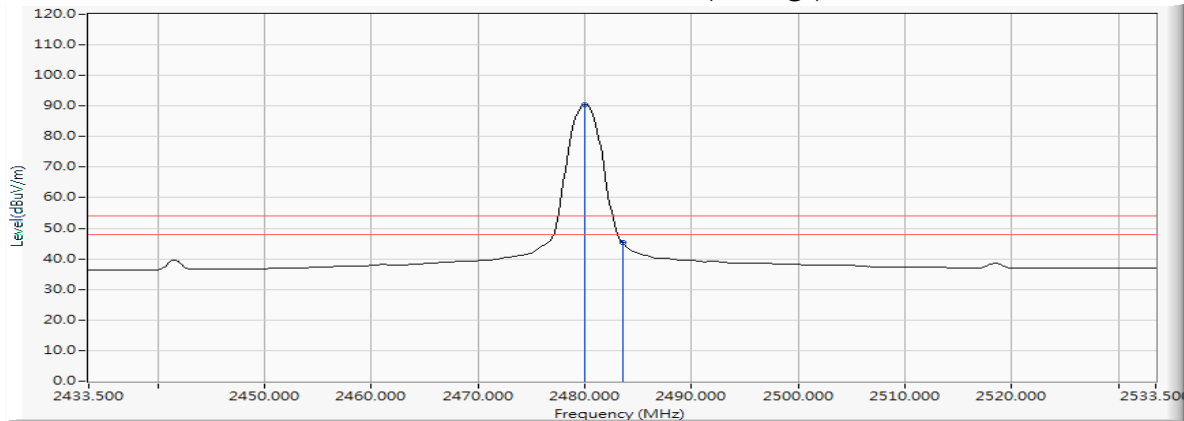
Note:

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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Intel® Wireless-AC 9461
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2017/12/13

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
78 (Peak)	2480.022	12.393	94.958	107.351	--	--	--
78 (Peak)	2483.500	12.403	51.858	64.261	74.00	54.00	Pass
78 (Average)	2480.022	12.393	77.938	90.331	--	--	--
78 (Average)	2483.500	12.403	32.904	45.307	74.00	54.00	Pass

Figure Channel 78: VERTICAL (Peak)**Figure Channel 78: 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 + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

5. EMI Reduction Method During Compliance Testing

No modification was made during testing.