

FCC Test Report

(Class II Permissive Change)

Product Name	Intel® Wireless-AC 9560
Model No.	9560NGW
FCC ID.	2AKHF9560NG

Applicant	TONGFANG HONGKONG (SUZHOU) LIMITED
Address	No. 10 Plant, Jianwu Phase III, Western Zone, Suzhou Industrial Park, Suzhou City, Jiangsu Province, 215000 China

Date of Receipt	Sep. 24, 2019
Issued Date	Nov. 15, 2019
Report No.	1990351R-RFUSP11V00
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: Nov. 15, 2019

Report No.: 1990351R-RFUSP11V00



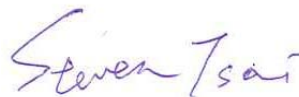
Product Name	Intel® Wireless-AC 9560
Applicant	TONGFANG HONGKONG (SUZHOU) LIMITED
Address	No. 10 Plant, Jianwu Phase III, Western Zone, Suzhou Industrial Park, Suzhou City, Jiangsu Province, 215000 China
Manufacturer	INTEL CORPORATION SAS
Model No.	9560NGW
FCC ID.	2AKHF9560NG
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	DC 3.3V (Power by Test Platform)
Trade Name	Intel
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By :



(Senior Adm. Specialist / Joanne Lin)

Tested By :



(Senior Engineer / Steven Tsai)

Approved By :



(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wireless-AC 9560
Trade Name	Intel
Model No.	9560NGW
FCC ID.	2AKHF9560NG
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	PIFA Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
Test Platform	Product name: Notebook PC Brand: TONGFANG Model number: GK5CP5Y;GK5CP6Y;GK5CP0Y;GK5CP7Y;GK5CR0Y
Power Adapter	MFR: Chicony, M/N: A17-230P1A Input: AC 100-240V, 50-60Hz, 3.5A Output: DC 19.5V, 11.8A Cable Out: Non-shielded, 1.1m with two ferrite core bonded.

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Auden	ANTRG5Y119-1801(Main) ANTRG5Y119-1802(Aux)	PIFA Antenna	5.45dBi for 2.4GHz

Note: The antenna of EUT conforms 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 an Intel® Wireless-AC 9560 with built-in WLAN (802.11a/b/g/n/ac) with 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 of transmitter 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. The test mode is based on the Bluetooth technology, while testing 1Mbps, 2Mbps and 3Mbps, the worst case is 1Mbps and 3Mbps, and only worse case data is recorded in this report.
5. This is to request a Class II permissive change for FCC ID: 2AKHF9560NG, originally granted on 03/16/2018.

The major change filed under this application is:

Change #1: Additional Chassis is added, Product name: Notebook PC, Brand: TONGFANG,

Model number: GK5CP5Y;GK5CP6Y;GK5CP0Y;GK5CP7Y;GK5CR0Y.

All models are listed as below:

Brand	Model No.	GPU (NVIDIA)	Difference
TONGFANG	GK5CP5Y	N18P-G0	All models are electrically identical and different model names are used to distinguish between different GPU specifications.
	GK5CP6Y	N18E-G0	
	GK5CR0Y	N18E-G1	
	GK5CP0Y	N18E-G1	
	GK5CP7Y	N18E-G2	

#2: Reduce the Output Power through firmware, and SAR measurement were evaluated.

(Only reduce Wi-Fi Output Power, Bluetooth Output Power haven't changes).

#3: Addition an antenna, the antenna type is same, the antenna gain is higher than the original application.

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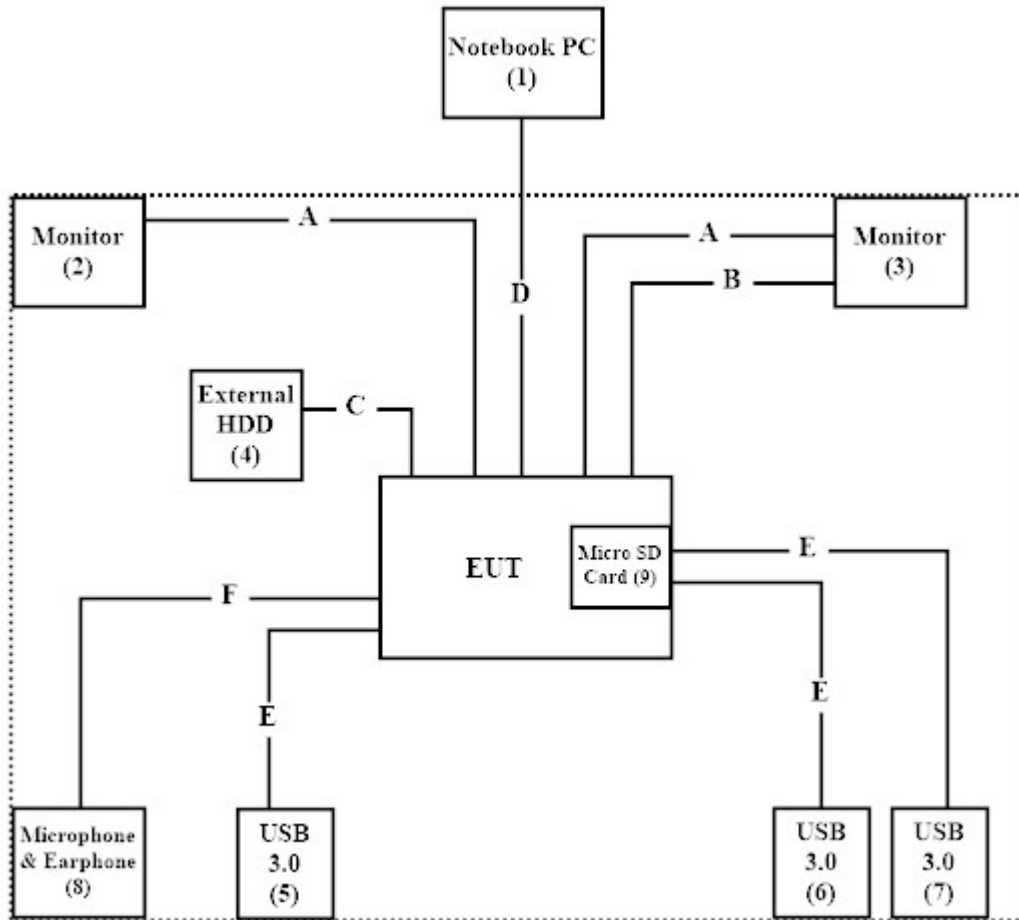
1.3. Tested System Details

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	P62G	CY9FJC2	Non-Shielded, 1.8m
2 Monitor	DELL	P2314H	CN-0G9D5T-74445-620-295S-A01	Non-Shielded, 1.8m
3 Monitor	DELL	S2817Qt	CN-0GD45P-74445-6CR-002M-A01	Non-Shielded, 1.8m
4 External HDD	SanDisk	SabDisk Extreme 900	N/A	N/A
5 USB 3.0	Transcend	TS1TSJ25M3	D468623809	N/A
6 USB 3.0	Transcend	TS1TSJ25M3	D468623808	N/A
7 USB 3.0	Transcend	TS1TSJ25M3	D468623807	N/A
8 Microphone & Earphone	Lenovo	P830	N/A	N/A
9 Micro SD Card	Transcend	8GB	N/A	N/A

Signal Cable Type	Signal cable Description
A Display Cable	Shielded, 1.8m, two PCS.
B HDMI Cable	Shielded, 1.8m
C USB Cable	Shielded, 0.5m
D LAN Cable	Non-shielded, 3m
E USB Cable	Shielded, 0.4m, three PCS.
F Microphone & Earphone Cable	Non-shielded, 2m

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 11.1923.0-09721” 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

USA : FCC Registration Number: TW0023

Canada : IC Registration Number: 4075A

Site Description : Accredited by TAF
: Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd.
Address : No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan, R.O.C.
Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
Email address : info.tw@dekra.com
Website : <http://www.dekra.com.tw>

1.7. List of Test Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	101601	2019.05.13	2020.05.12
X	Two-Line V-Network	R&S	ENV216	101306	2019.03.11	2020.03.10
X	Two-Line V-Network	R&S	ENV216	101307	2019.04.03	2020.04.02
X	Coaxial Cable	Quietek	RG400_BNC	RF001	2019.05.24	2020.05.23

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 System V2.1.113.

For Conducted measurements /ASR2

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103466	2018.12.22	2019.12.21
X	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2019.06.27	2020.06.26
X	Power Sensor	KEYSIGHT	N1923A	MY59240002	2019.06.27	2020.06.26
X	Power Sensor	KEYSIGHT	N1923A	MY59240003	2019.06.27	2020.06.26
	Bluetooth Tester	R&S	CBT	101238	2019.01.21	2020.01.20

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 : DEKRA Conduction Test System V9.0.5.

For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	AMETEK	HLA6121	49611	2019.02.22	2020.02.21
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2019.04.23	2020.04.22
X	Horn Antenna	ETS-Lindgren	3117	00203800	2018.12.11	2019.12.10
X	Horn Antenna	Com-Power	AH-840	101087	2019.05.30	2020.05.29
X	Pre-Amplifier	EMCI	EMC001330	980316	2019.06.14	2020.06.13
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2019.06.13	2020.06.12
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2019.06.24	2020.06.23
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2019.05.28	2020.05.27
X	Filter	MICRO TRONICS	BRM50702	G251	2019.09.03	2020.09.02
	Filter	MICRO TRONICS	BRM50716	G188	2019.09.03	2020.09.02
X	EMI Test Receiver	R&S	ESR7	101602	2018.12.17	2019.12.16
X	Spectrum Analyzer	R&S	FSV40	101148	2019.02.20	2020.02.19
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2019.05.25	2020.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2019.05.28	2020.05.27

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 System V2.1.113.

1.8. Uncertainty

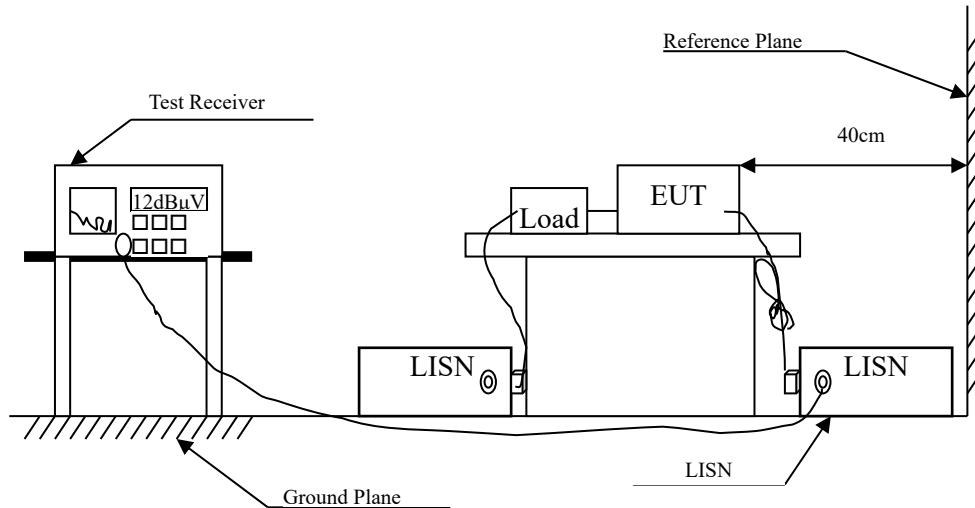
Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dB μ V) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and Peripherals are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

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

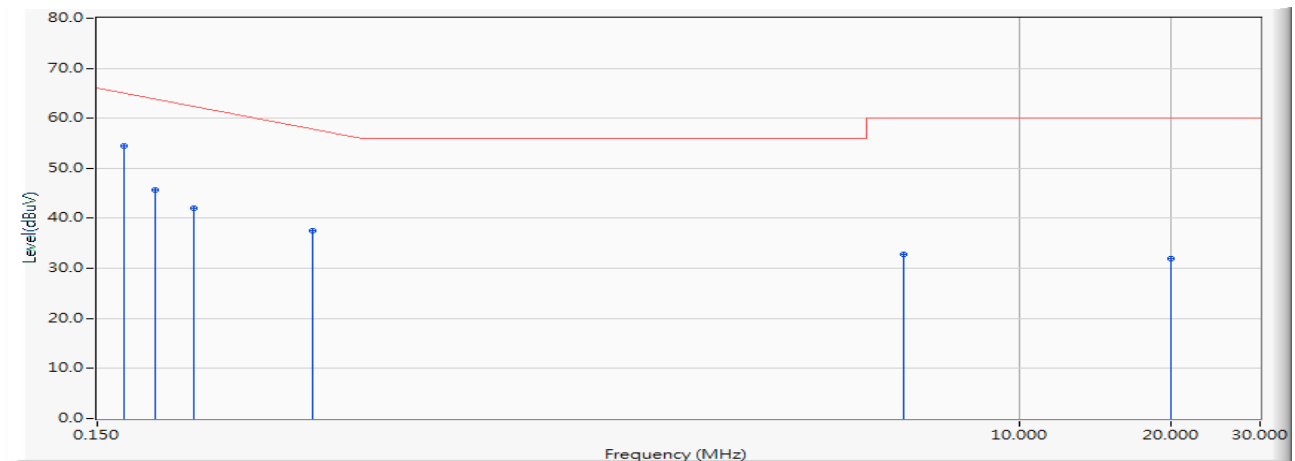
The EUT setup and the test procedure are according to ANSI C63.4, 2014 to comply with the requirements of FCC 47CFR Subpart C.

2.4. Uncertainty

$\pm 2.35\text{dB}$

2.5. Test Result of Conducted Emission

Product : Intel® Wireless-AC 9560
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/23

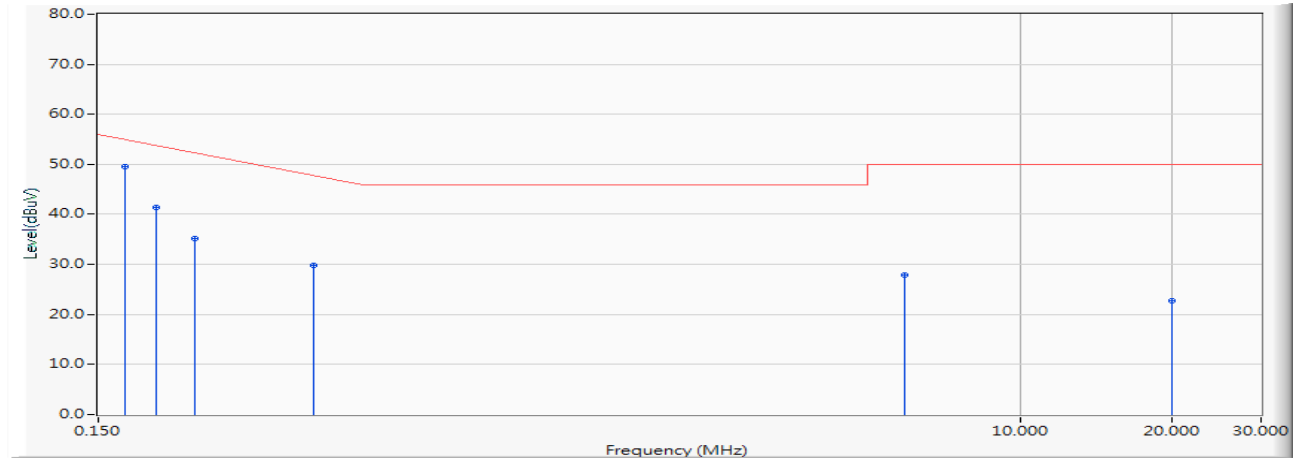


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV)	Margin (dB)	Limit (dBμV)	Detector Type
1	*	0.170	9.636	44.947	54.583	-10.846	65.429	QUASIPeAK
2		0.195	9.630	35.971	45.601	-19.113	64.714	QUASIPeAK
3		0.233	9.638	32.319	41.957	-21.672	63.629	QUASIPeAK
4		0.400	9.644	27.952	37.596	-21.261	58.857	QUASIPeAK
5		5.899	9.800	23.063	32.863	-27.137	60.000	QUASIPeAK
6		19.930	9.970	22.000	31.970	-28.030	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Intel® Wireless-AC 9560
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/23

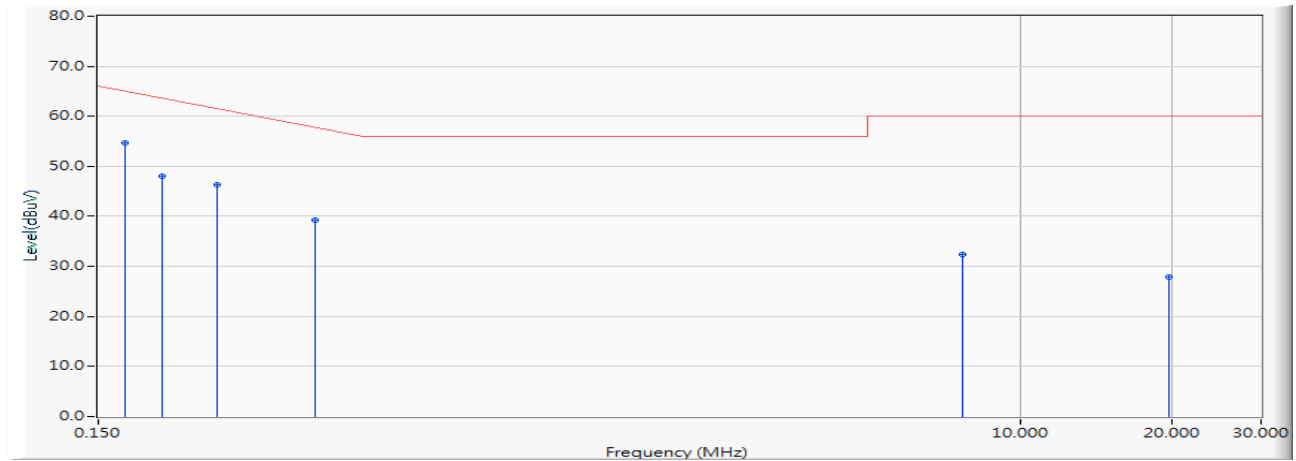


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV)	Margin (dB)	Limit (dBμV)	Detector Type
1	*	0.170	9.636	39.914	49.551	-5.878	55.429	AVERAGE
2		0.195	9.630	31.781	41.411	-13.303	54.714	AVERAGE
3		0.233	9.638	25.486	35.124	-18.505	53.629	AVERAGE
4		0.400	9.644	20.089	29.733	-19.124	48.857	AVERAGE
5		5.899	9.800	18.123	27.923	-22.077	50.000	AVERAGE
6		19.930	9.970	12.717	22.687	-27.313	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Intel® Wireless-AC 9560
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/23

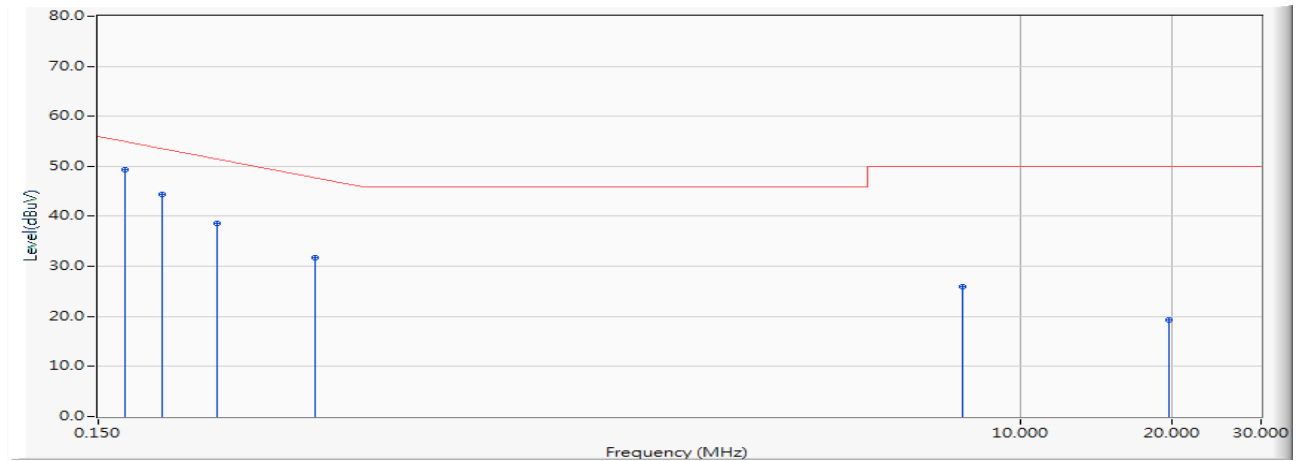


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV)	Margin (dB)	Limit (dBμV)	Detector Type
1	*	0.170	9.650	45.054	54.704	-10.725	65.429	QUASIPeAK
2		0.200	9.650	38.292	47.942	-16.629	64.571	QUASIPeAK
3		0.258	9.660	36.761	46.421	-16.493	62.914	QUASIPeAK
4		0.402	9.654	29.535	39.189	-19.611	58.800	QUASIPeAK
5		7.692	9.850	22.617	32.467	-27.533	60.000	QUASIPeAK
6		19.705	10.050	17.765	27.815	-32.185	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Intel® Wireless-AC 9560
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/23

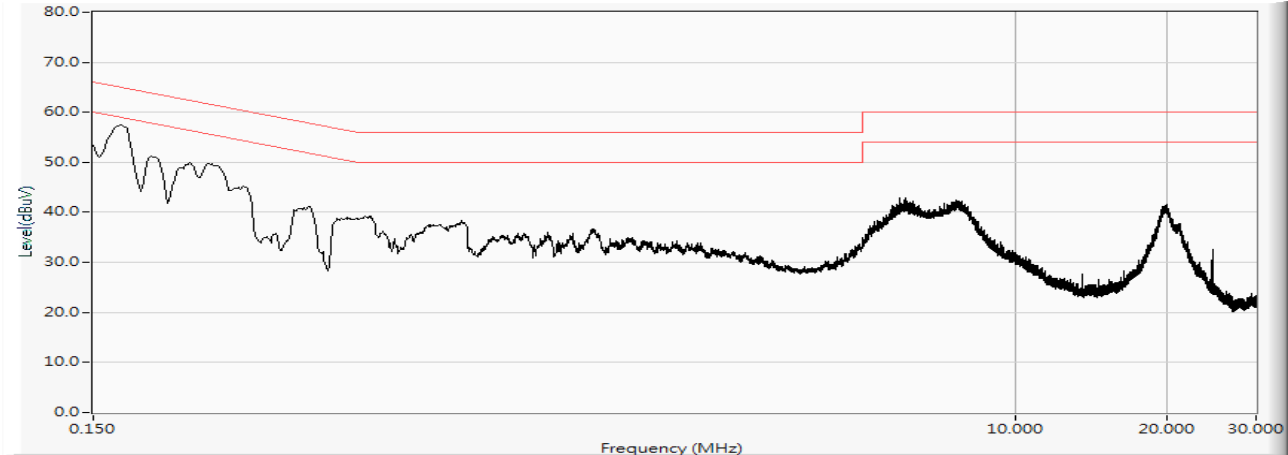


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV)	Margin (dB)	Limit (dBμV)	Detector Type
1	*	0.170	9.650	39.782	49.432	-5.997	55.429	AVERAGE
2		0.200	9.650	34.694	44.344	-10.227	54.571	AVERAGE
3		0.258	9.660	28.853	38.513	-14.401	52.914	AVERAGE
4		0.402	9.654	22.031	31.685	-17.115	48.800	AVERAGE
5		7.692	9.850	16.208	26.058	-23.942	50.000	AVERAGE
6		19.705	10.050	9.337	19.387	-30.613	50.000	AVERAGE

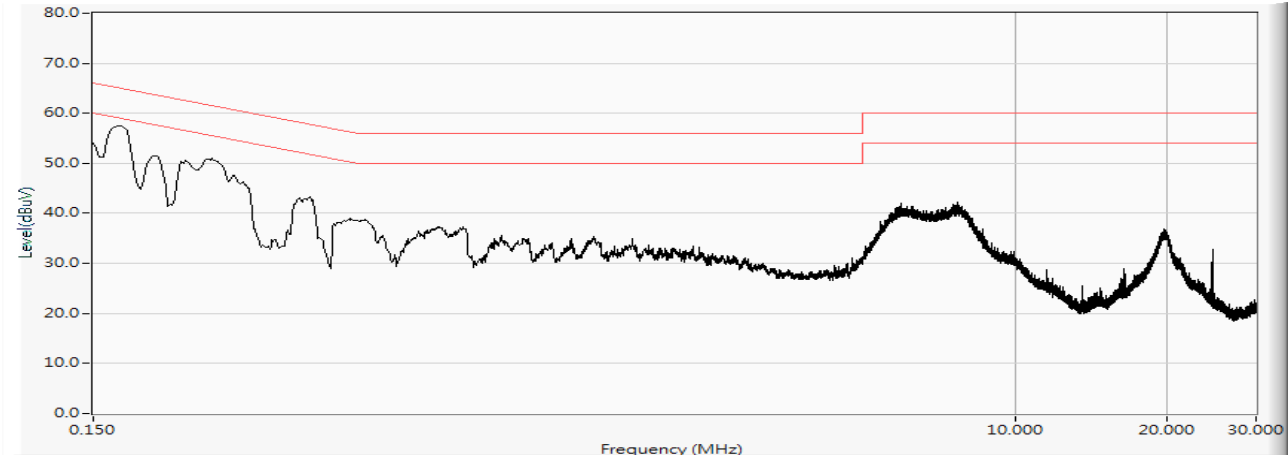
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Line 1

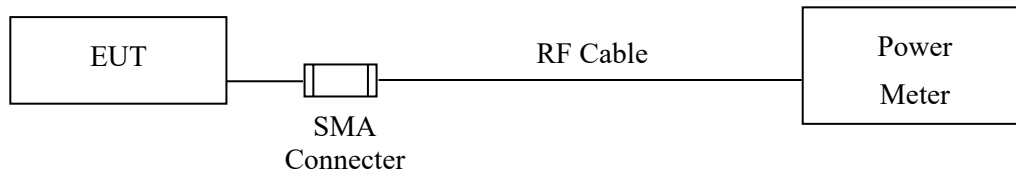


Line 2



3. Peak Power Output

3.1. Test Setup



3.2. Limit

The maximum peak power shall be less 1Watt.

3.3. Test Procedure

Tested according to FHSS test procedure of KDB 558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

3.4. Uncertainty

± 0.86 dB

3.5. Test Result of Peak Power Output

Product : Intel® Wireless-AC 9560
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2019/10/23

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	10.55	1 Watt= 30 dBm	Pass
Channel 39	2441.00	10.94	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.46	1 Watt= 30 dBm	Pass

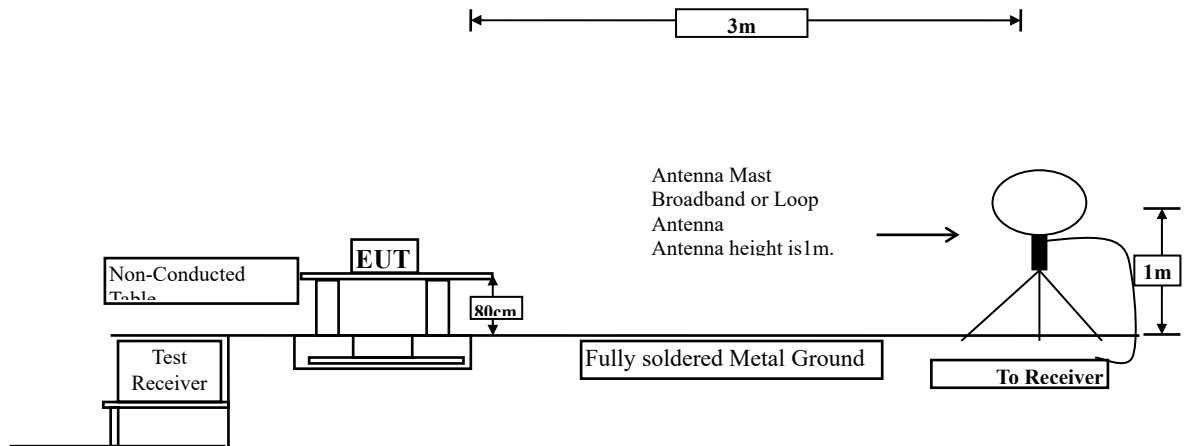
Product : Intel® Wireless-AC 9560
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit - 3Mbps
Test Date : 2019/10/23

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	10.18	1 Watt= 30 dBm	Pass
Channel 39	2441.00	10.57	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.09	1 Watt= 30 dBm	Pass

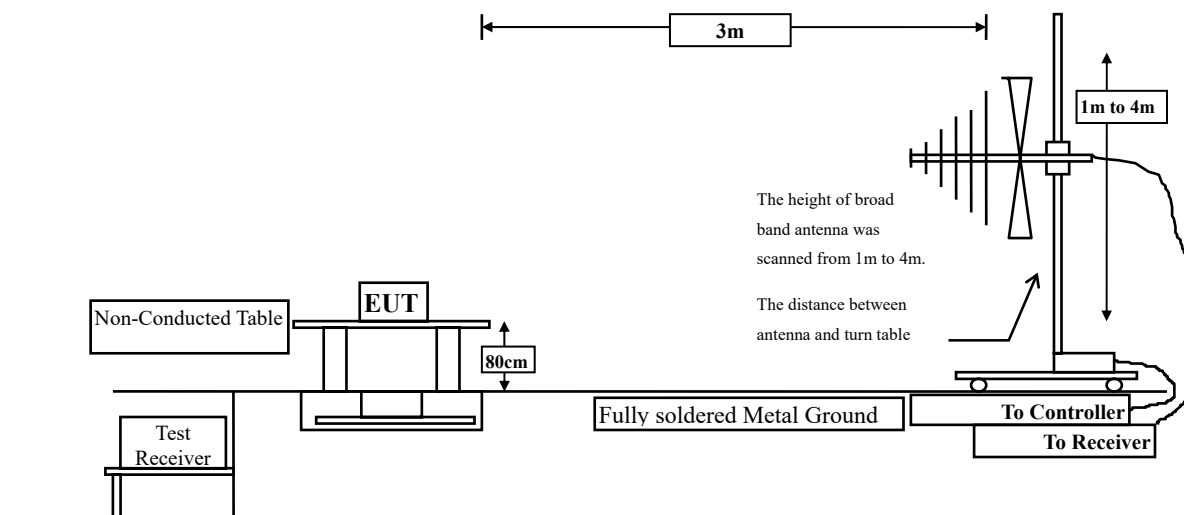
4. Radiated Emission

4.1. Test Setup

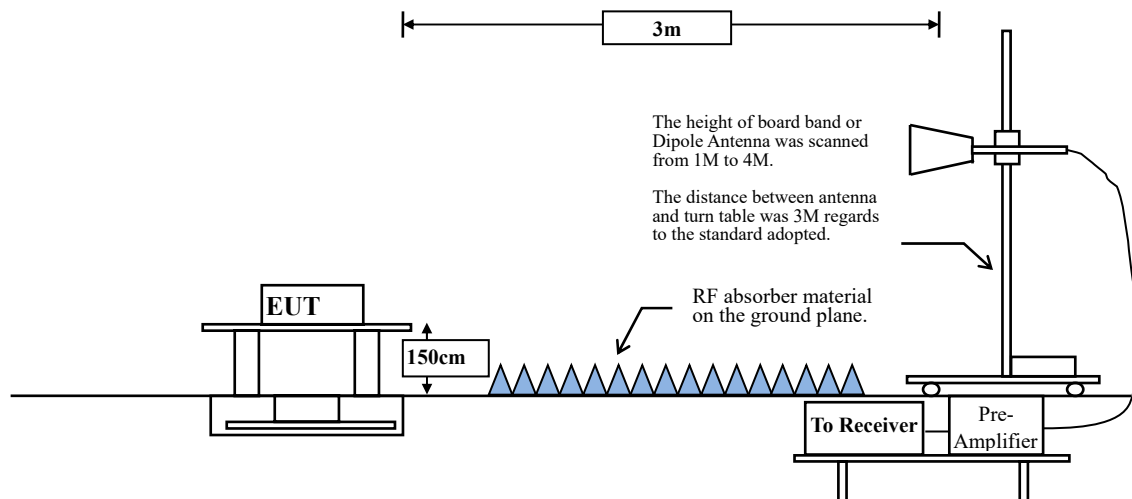
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. 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.

4.3. 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.

4.4. 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: $\pm 3.98\text{dB}$

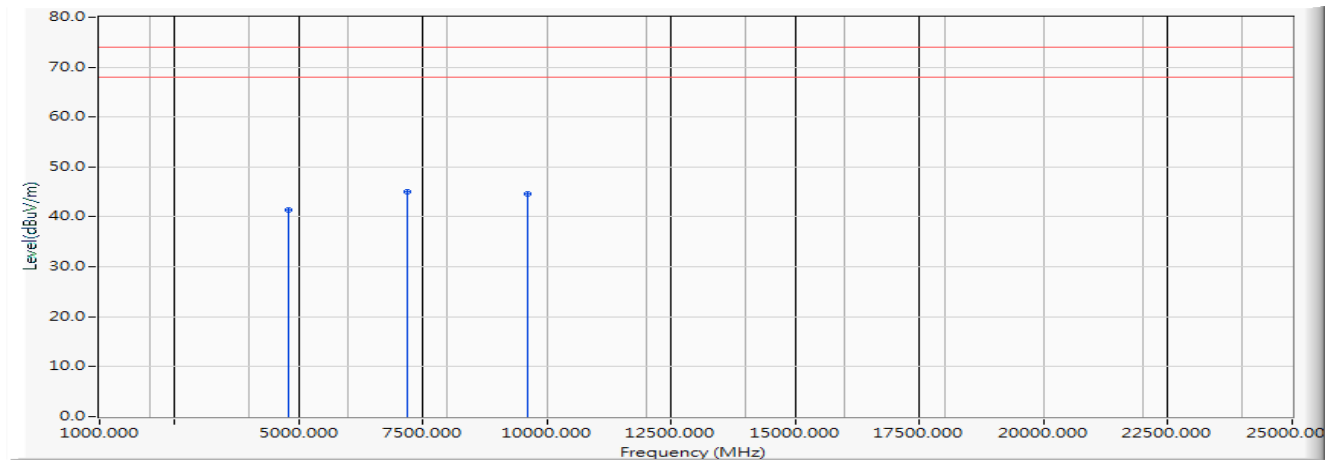
Vertical polarization :

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

4.5. Test Result of Radiated Emission

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4804.000	-6.081	47.470	41.389	-32.611	74.000	PEAK
2	*	7206.000	-3.033	48.030	44.997	-29.003	74.000	PEAK
3		9608.000	-0.774	45.480	44.707	-29.293	74.000	PEAK

Note:

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

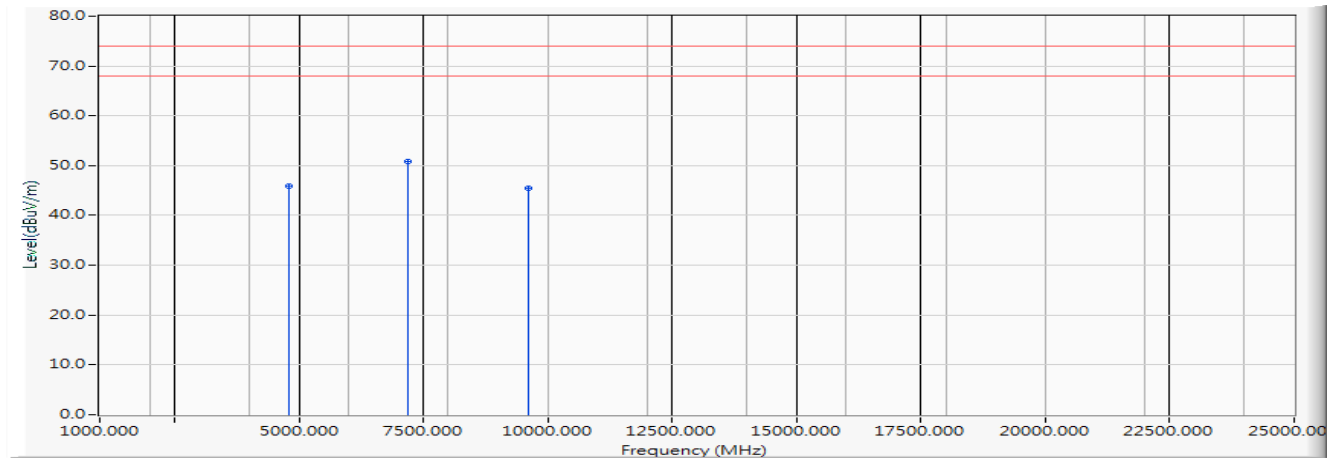
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
--	--	--	--	--	74.000	54.000

Average Detector:

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4804.000	-6.081	51.970	45.889	-28.111	74.000	PEAK
2	*	7206.000	-3.033	53.940	50.907	-23.093	74.000	PEAK
3		9608.000	-0.774	46.290	45.517	-28.483	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
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Average Detector:

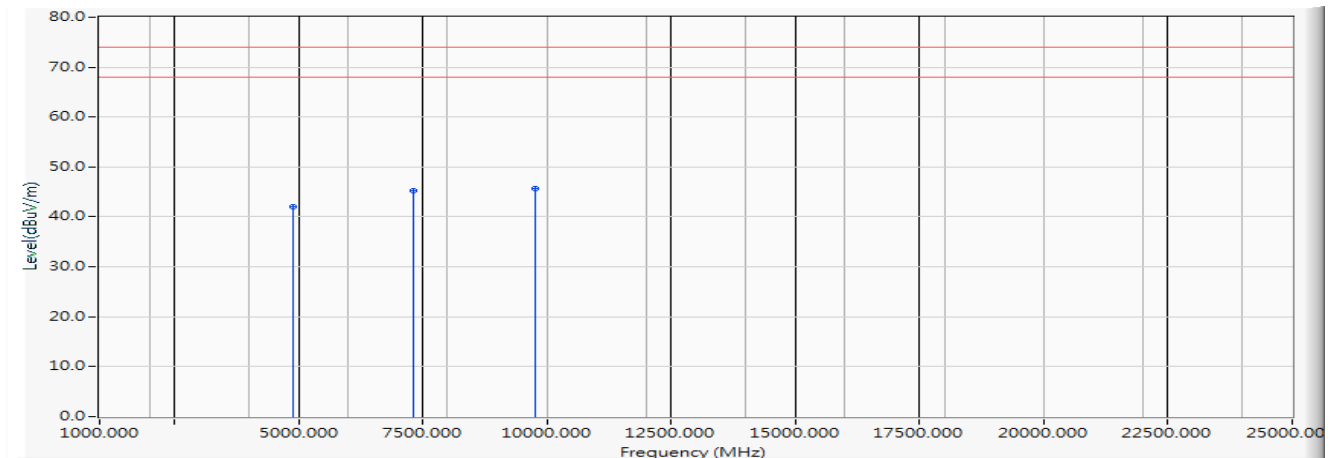
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4882.000	-6.042	48.150	42.108	-31.892	74.000	PEAK
2		7323.000	-2.954	48.210	45.256	-28.744	74.000	PEAK
3	*	9764.000	-0.487	46.170	45.683	-28.317	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

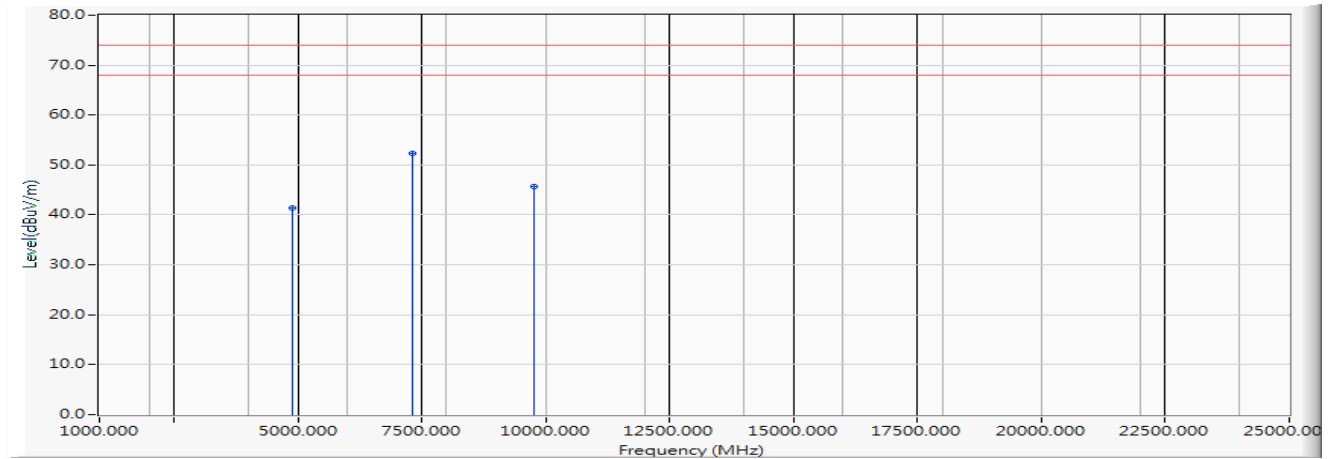
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
---	---	---	---	---	74.000	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4882.000	-6.042	47.540	41.498	-32.502	74.000	PEAK
2	*	7323.000	-2.954	55.370	52.416	-21.584	74.000	PEAK
3		9764.000	-0.487	46.180	45.693	-28.307	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

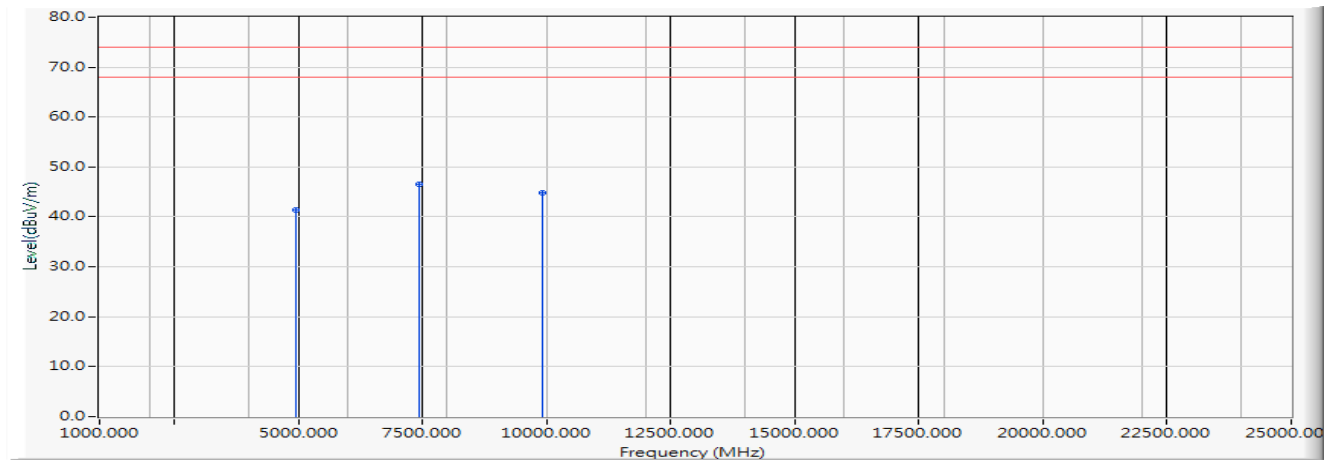
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
--	--	--	--	--	74.000	54.000

Average Detector:**Note:**

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4960.000	-6.041	47.420	41.379	-32.621	74.000	PEAK
2	*	7440.000	-2.805	49.250	46.445	-27.555	74.000	PEAK
3		9920.000	-0.260	45.000	44.740	-29.260	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

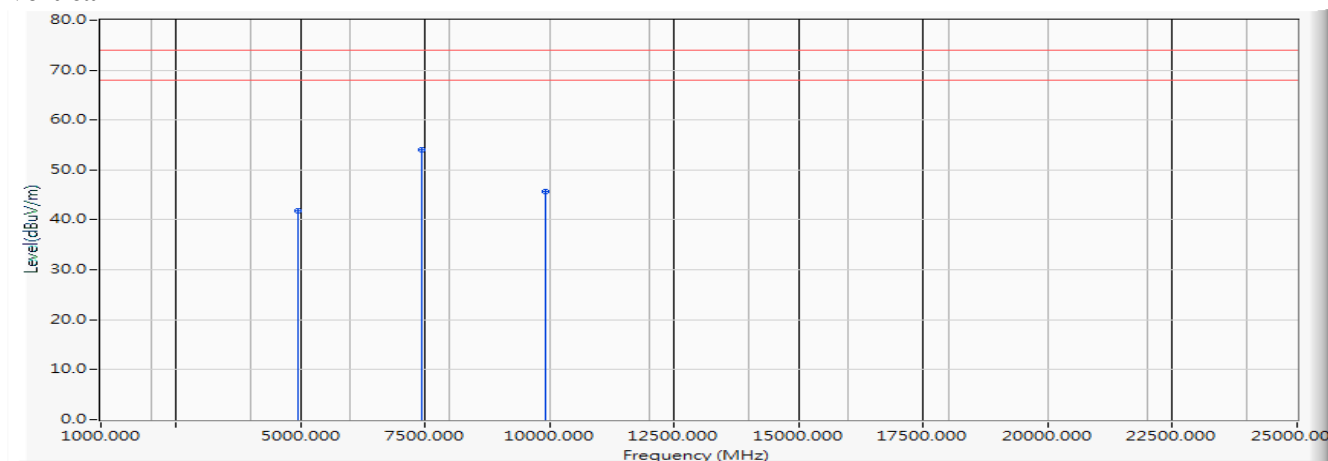
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
---	---	---	---	---	74.000	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4960.000	-6.041	47.800	41.759	-32.241	74.000	PEAK
2	*	7440.000	-2.805	56.750	53.945	-20.055	74.000	PEAK
3		9920.000	-0.260	45.870	45.610	-28.390	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Frequency	Peak	Duty Cycle	Average	Margin	Peak	Average
MHz	Measurement	Factor	Measurement		Limit	Limit
	dBμV/m	dB	dBμV/m	dB	dBμV/m	dBμV/m

Average Detector:

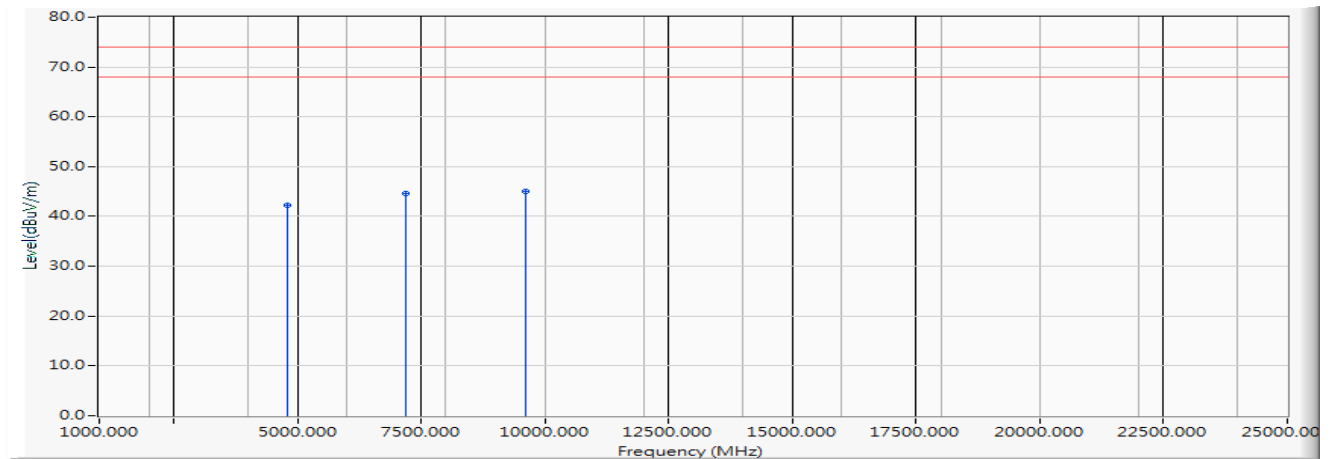
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2402MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4804.000	-6.081	48.430	42.349	-31.651	74.000	PEAK
2		7206.000	-3.033	47.650	44.617	-29.383	74.000	PEAK
3	*	9608.000	-0.774	45.850	45.077	-28.923	74.000	PEAK

Note:

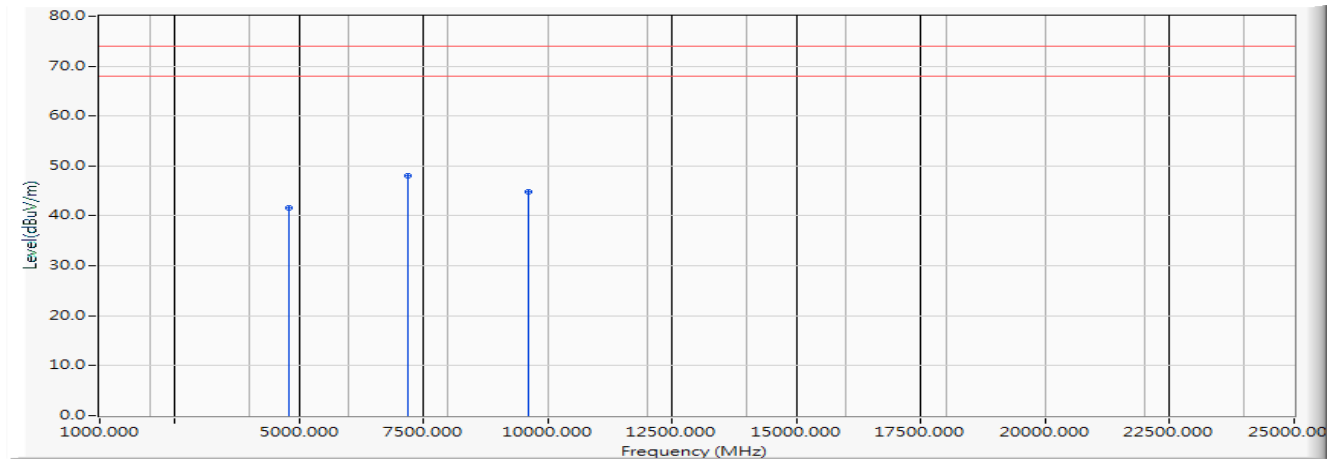
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.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

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2402MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4804.000	-6.081	47.630	41.549	-32.451	74.000	PEAK
2	*	7206.000	-3.033	51.040	48.007	-25.993	74.000	PEAK
3		9608.000	-0.774	45.650	44.877	-29.123	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

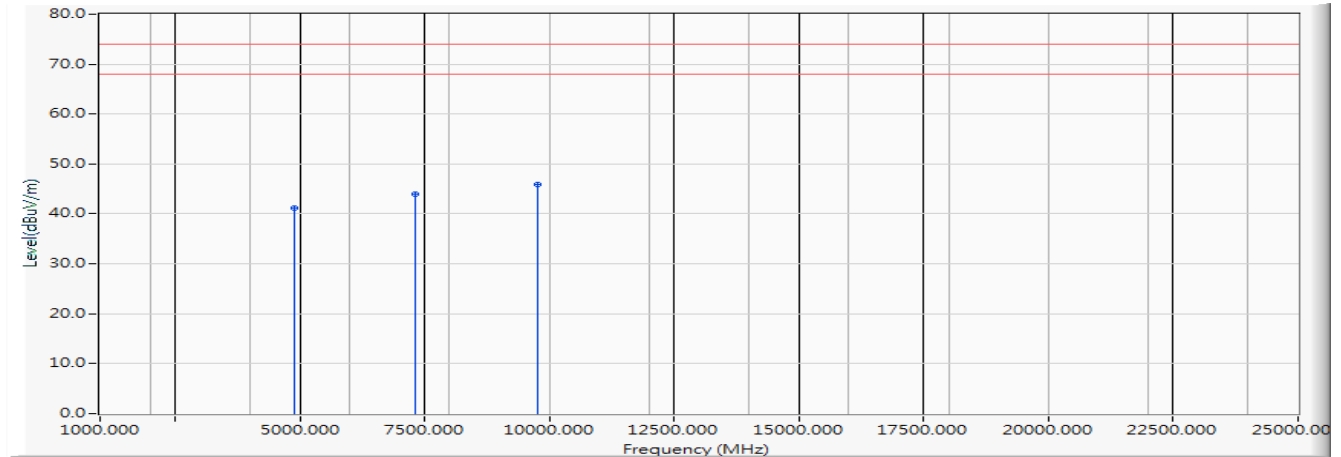
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4882.000	-6.042	47.320	41.278	-32.722	74.000	PEAK
2		7323.000	-2.954	46.940	43.986	-30.014	74.000	PEAK
3	*	9764.000	-0.487	46.320	45.833	-28.167	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
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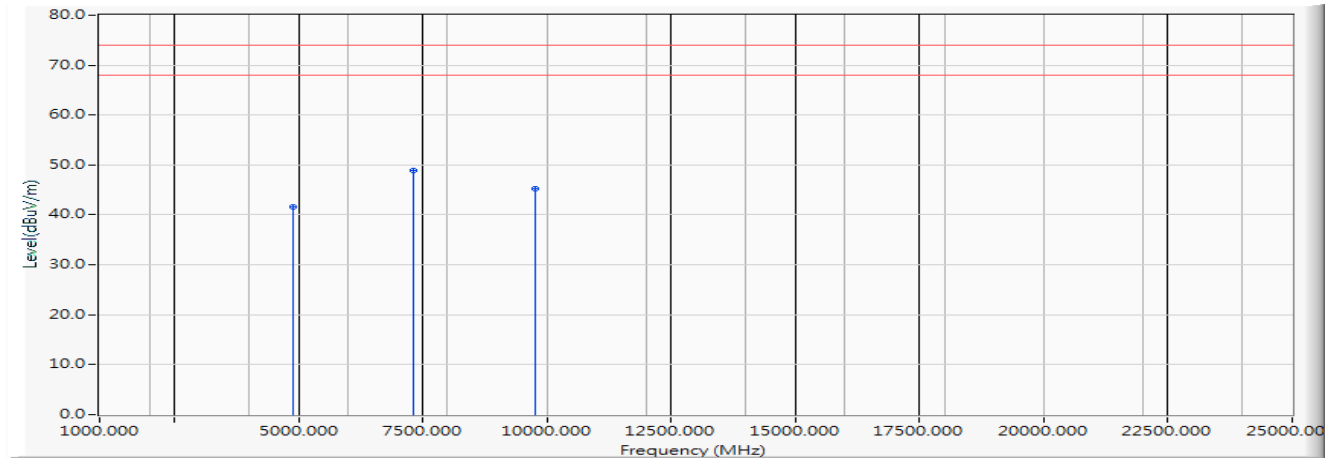
Average Detector:

--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4882.000	-6.042	47.660	41.618	-32.382	74.000	PEAK
2	*	7323.000	-2.954	51.840	48.886	-25.114	74.000	PEAK
3		9764.000	-0.487	45.700	45.213	-28.787	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
------------------	-------------------------------	----------------------------	----------------------------------	--------------	-------------------------	----------------------------

Average Detector:

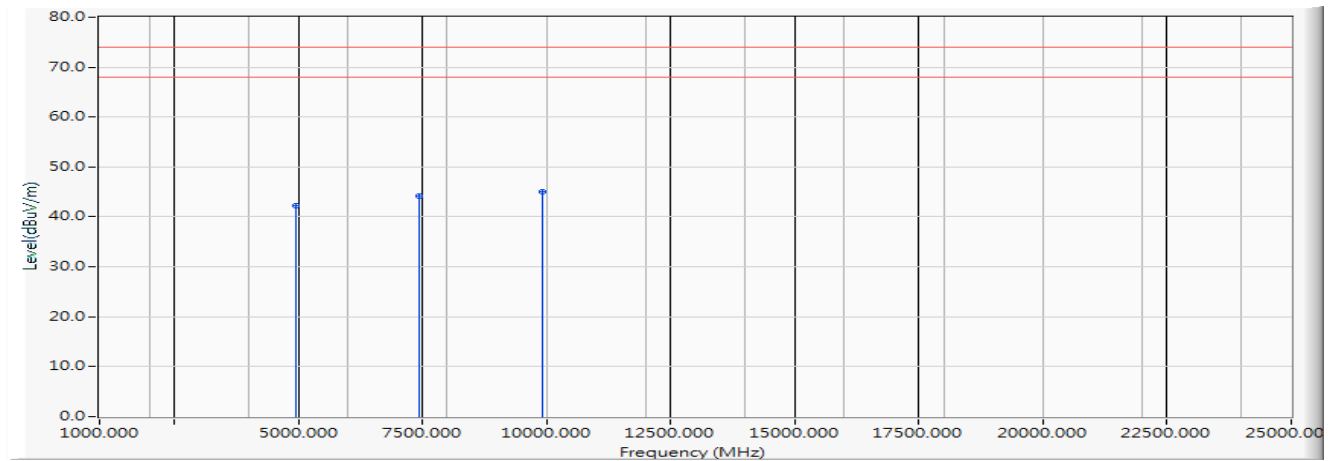
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2480MHz)
 Test Date : 2019/10/22

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4960.000	-6.041	48.340	42.299	-31.701	74.000	PEAK
2		7440.000	-2.805	46.940	44.135	-29.865	74.000	PEAK
3	*	9920.000	-0.260	45.390	45.130	-28.870	74.000	PEAK

Note:

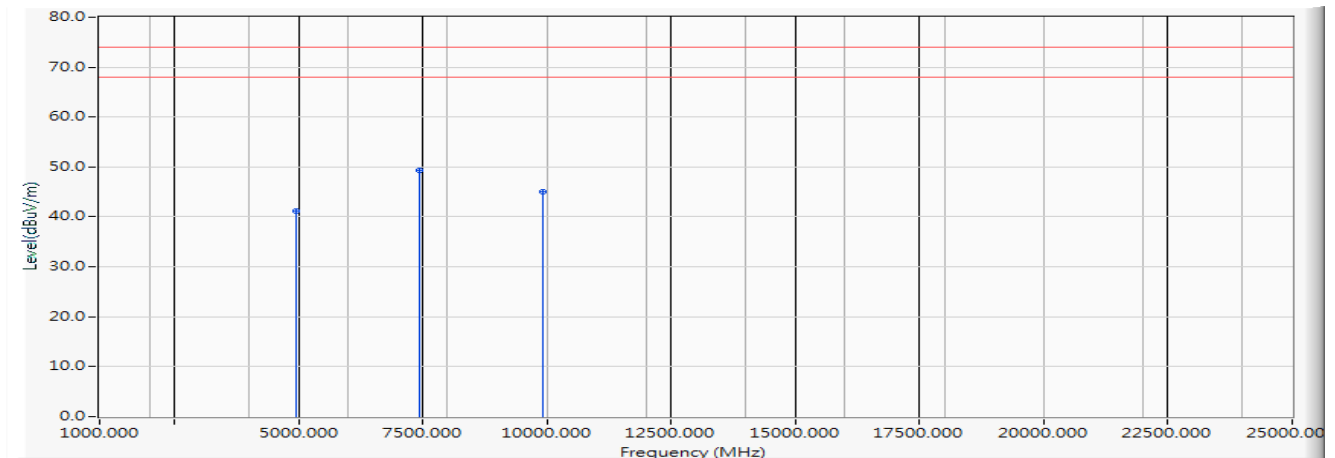
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.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

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2480MHz)
 Test Date : 2019/10/22

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		4960.000	-6.041	47.160	41.119	-32.881	74.000	PEAK
2	*	7440.000	-2.805	52.160	49.355	-24.645	74.000	PEAK
3		9920.000	-0.260	45.380	45.120	-28.880	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
5. The average measurement was not performed when the peak measured data under the limit of average detection.
6. The emission levels of other frequencies are very lower than the limit and not show in test report.

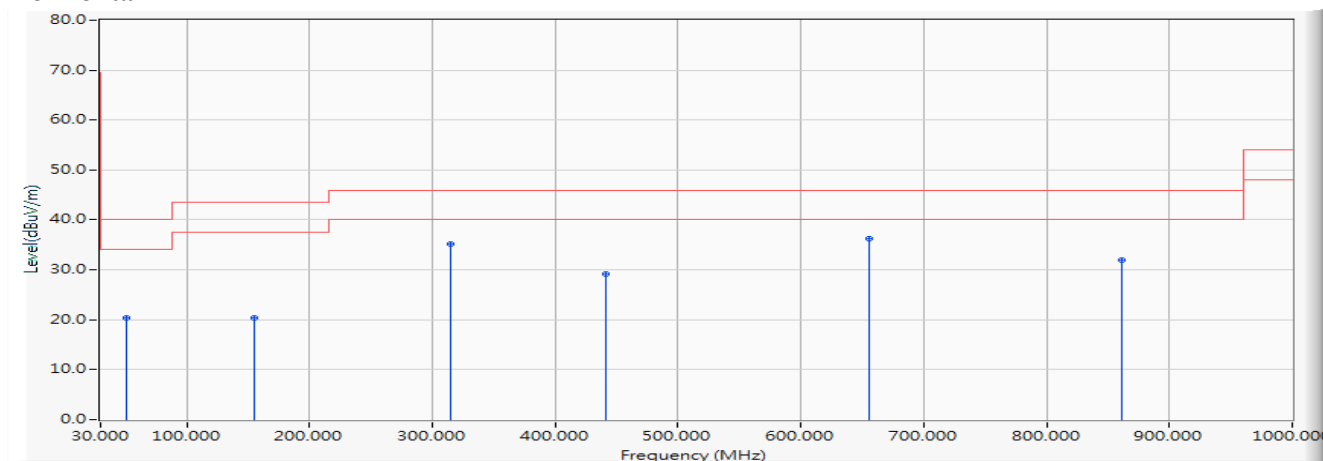
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
--	--	--	--	--	74.000	54.000

Average Detector:**Note:**

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : General Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2019/10/24

Horizontal



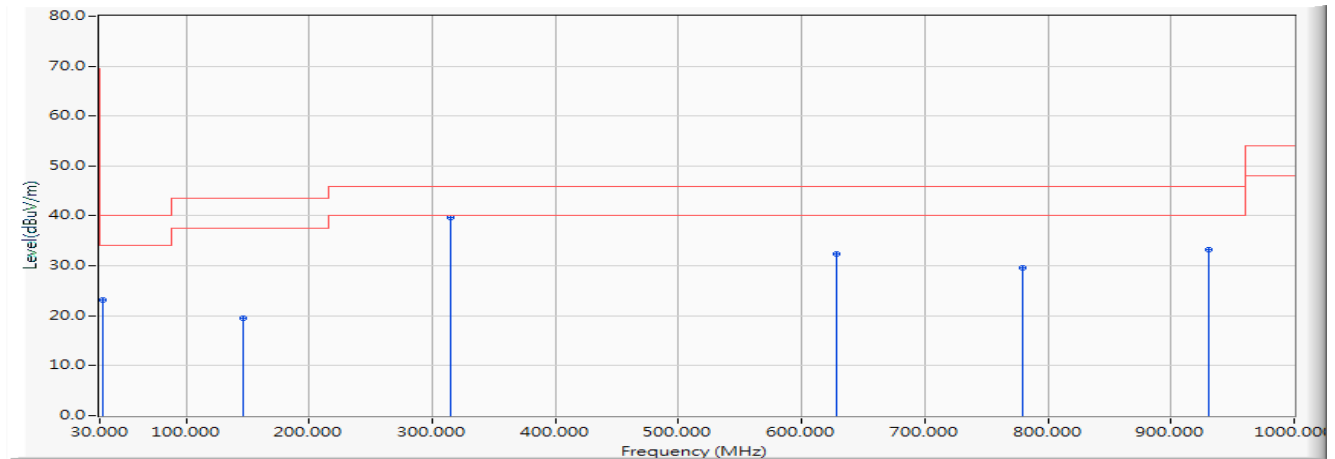
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		51.087	-11.048	31.363	20.315	-19.685	40.000	QUASIPeAK
2		155.116	-10.950	31.226	20.276	-23.224	43.500	QUASIPeAK
3		315.377	-9.978	45.045	35.068	-10.932	46.000	QUASIPeAK
4		441.899	-6.997	36.204	29.206	-16.794	46.000	QUASIPeAK
5	*	655.580	-3.619	39.869	36.250	-9.750	46.000	QUASIPeAK
6		860.826	-0.729	32.620	31.891	-14.109	46.000	QUASIPeAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Intel® Wireless-AC 9560
 Test Item : General Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2019/10/24

Vertical



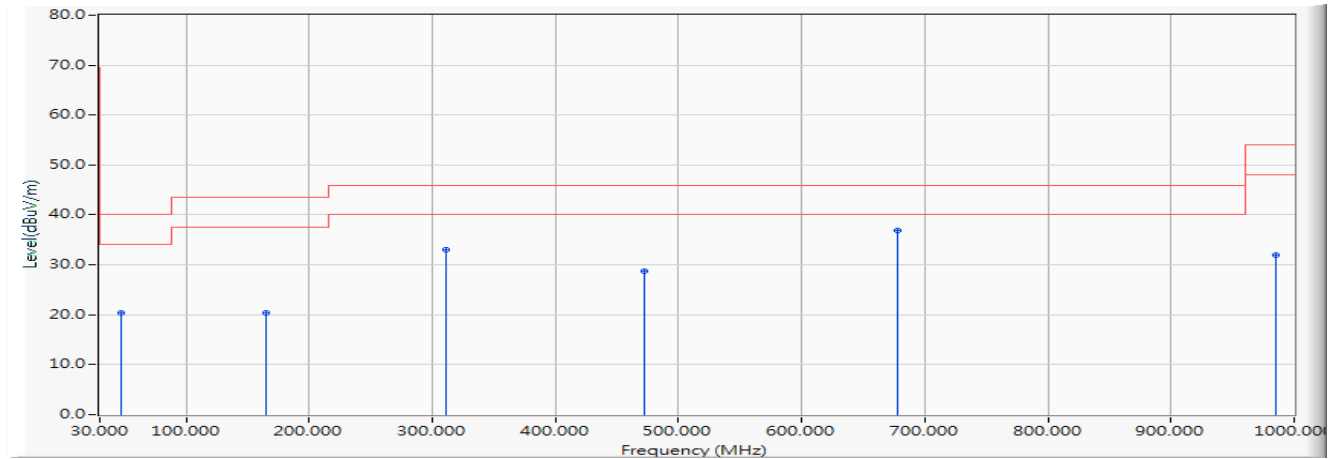
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		32.812	-12.011	35.112	23.101	-16.899	40.000	QUASIPeAK
2		146.681	-11.197	30.729	19.533	-23.967	43.500	QUASIPeAK
3	*	315.377	-9.978	49.561	39.584	-6.416	46.000	QUASIPeAK
4		628.870	-3.827	36.245	32.418	-13.582	46.000	QUASIPeAK
5		779.290	-1.813	31.343	29.529	-16.471	46.000	QUASIPeAK
6		931.116	0.143	33.010	33.153	-12.847	46.000	QUASIPeAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Intel® Wireless-AC 9560
 Test Item : General Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/24

Horizontal



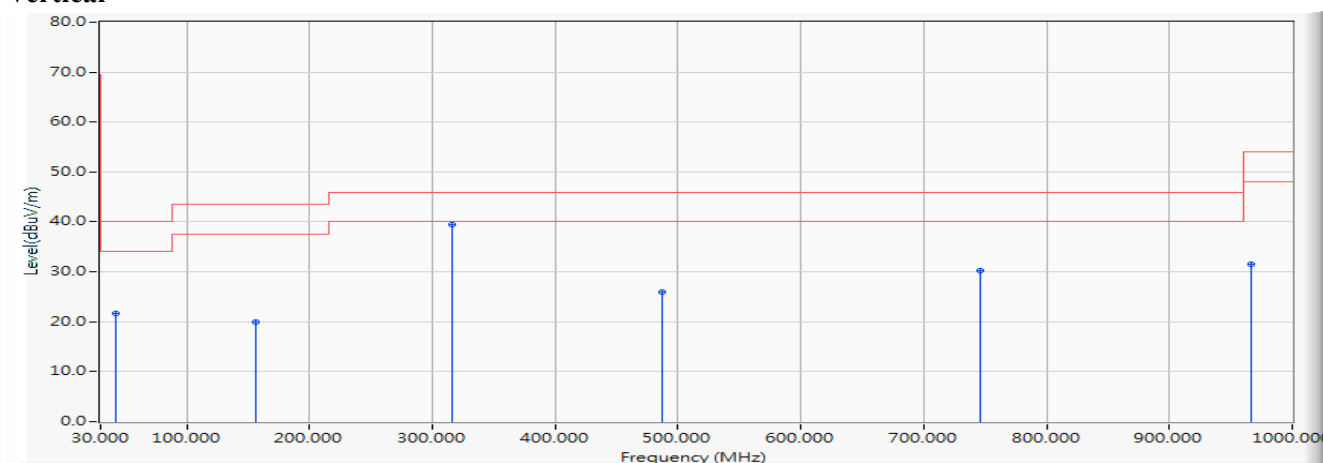
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		46.870	-10.852	31.219	20.366	-19.634	40.000	QUASIPeAK
2		164.957	-11.002	31.347	20.345	-23.155	43.500	QUASIPeAK
3		311.159	-10.076	43.087	33.011	-12.989	46.000	QUASIPeAK
4		472.826	-6.411	35.240	28.830	-17.170	46.000	QUASIPeAK
5	*	678.072	-3.300	40.108	36.808	-9.192	46.000	QUASIPeAK
6		984.536	0.807	31.082	31.888	-22.112	54.000	QUASIPeAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Intel® Wireless-AC 9560
 Test Item : General Radiated Emission
 Test Mode : Mode 2: Transmit - 3Mbps (2441MHz)
 Test Date : 2019/10/24

Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		42.652	-10.961	32.728	21.766	-18.234	40.000	QUASIPeAK
2		156.522	-10.916	30.915	20.000	-23.500	43.500	QUASIPeAK
3	*	316.783	-9.944	49.460	39.516	-6.484	46.000	QUASIPeAK
4		486.884	-6.174	32.061	25.887	-20.113	46.000	QUASIPeAK
5		745.551	-2.108	32.251	30.142	-15.858	46.000	QUASIPeAK
6		966.261	0.566	30.949	31.516	-22.484	54.000	QUASIPeAK

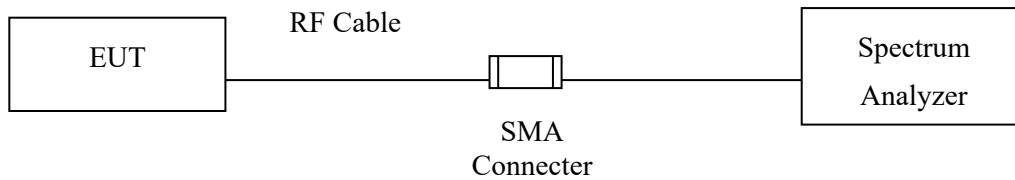
Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

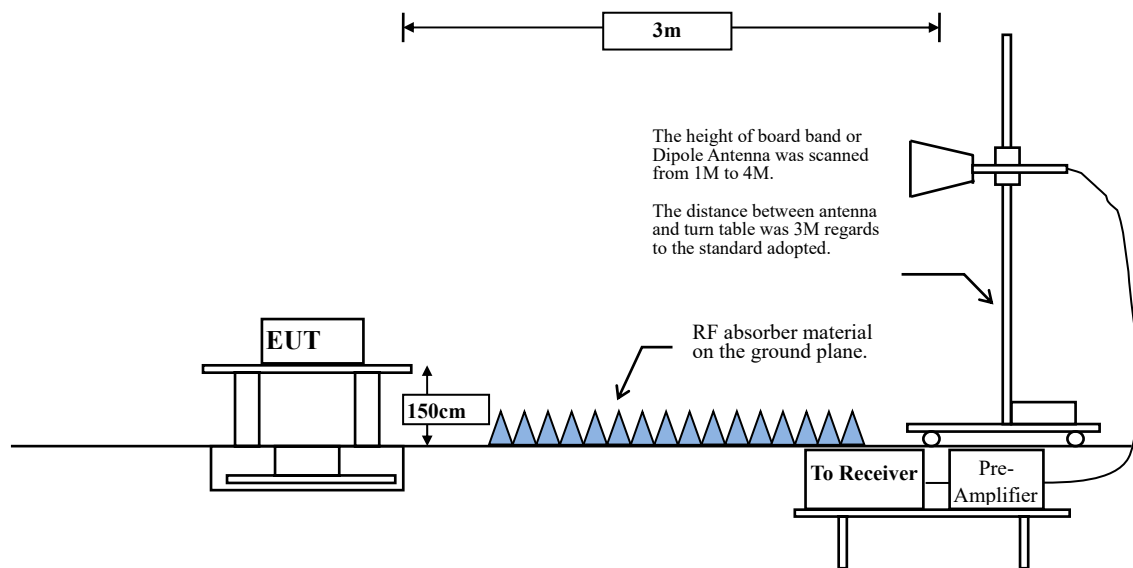
5. Band Edge

5.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



5.2. 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)).

5.3. 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.

5.4. Uncertainty

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

Radiated:

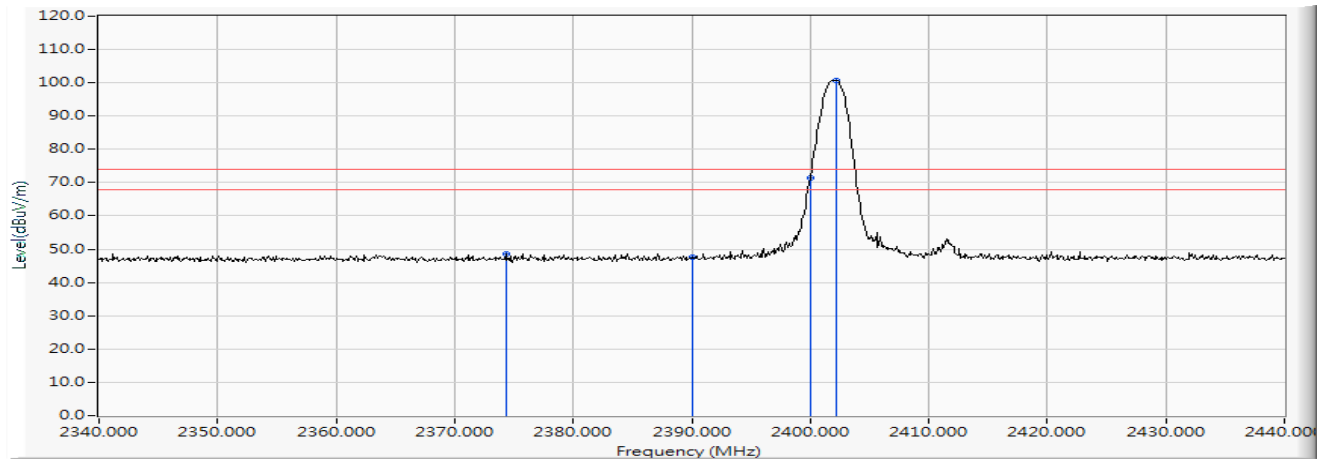
Horizontal polarization : 1-18GHz: $\pm 3.77\text{dB}$

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

5.5. Test Result of Band Edge

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2019/10/17

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		2374.300	10.198	38.506	48.704	-25.296	74.000	PEAK
2		2390.000	10.262	37.314	47.576	-26.424	74.000	PEAK
3		2400.000	10.304	61.140	71.443	--	--	PEAK
4	*	2402.200	10.312	90.308	100.621	--	--	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

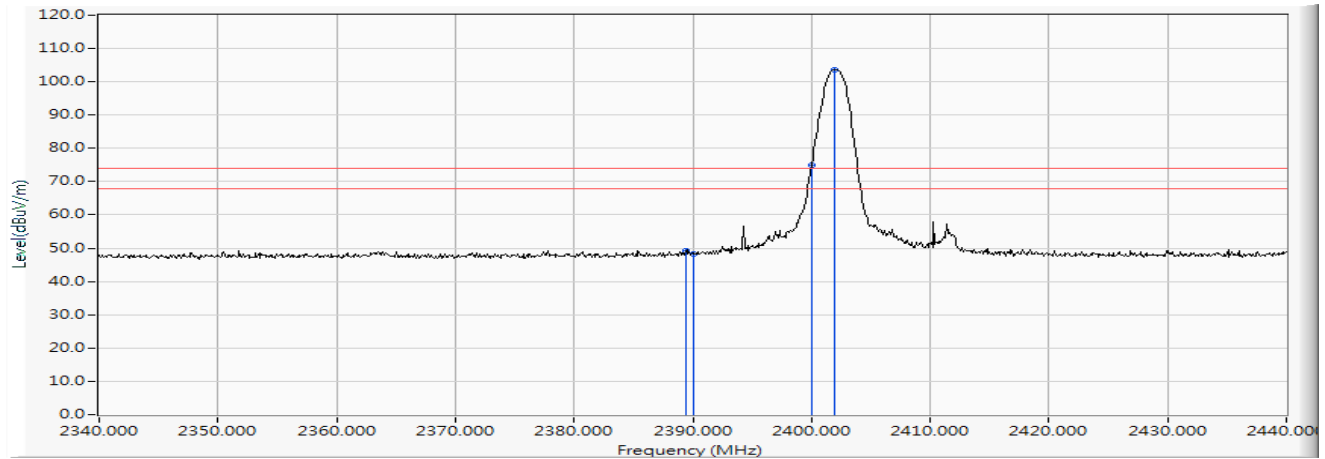
Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
00 (Average)	2374.300	48.704	-24.779	23.925	-30.075	54.000	Pass
00 (Average)	2390.000	47.576	-24.779	22.797	-31.203	54.000	Pass
00 (Average)	2400.000	71.443	-24.779	46.664	--	--	Pass
00 (Average)	2402.200	100.621	-24.779	75.842	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2019/10/17

Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		2389.400	10.260	39.092	49.352	-24.648	74.000	PEAK
2		2390.000	10.262	37.899	48.161	-25.839	74.000	PEAK
3		2400.000	10.304	64.698	75.001	--	--	PEAK
4	*	2402.000	10.311	93.166	103.478	--	--	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

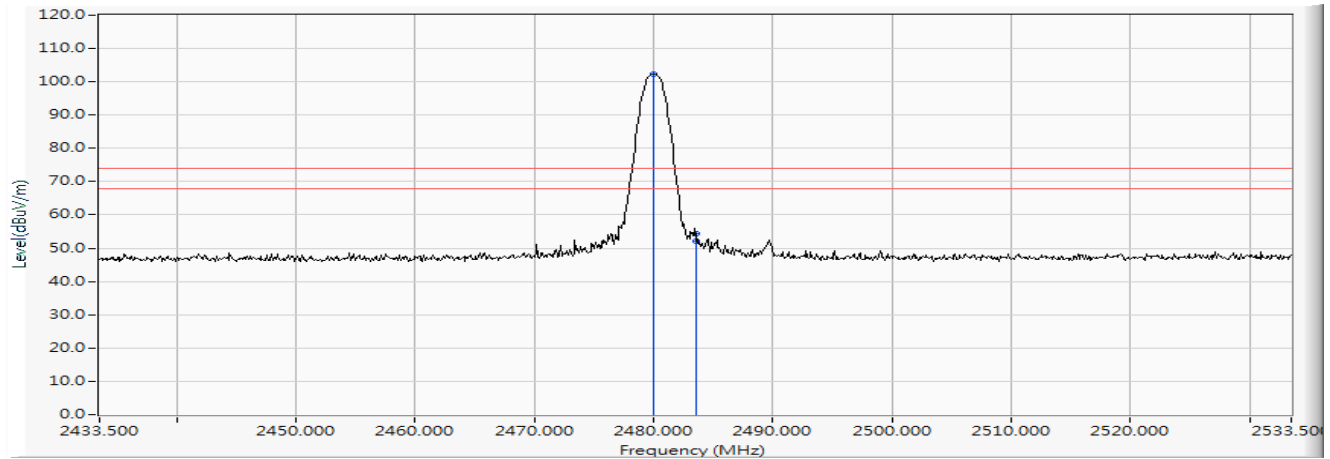
Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
00 (Average)	2389.400	49.352	-24.779	24.573	-29.427	54.000	Pass
00 (Average)	2390.000	48.161	-24.779	23.382	-30.618	54.000	Pass
00 (Average)	2400.000	75.001	-24.779	50.222	--	--	Pass
00 (Average)	2402.000	103.478	-24.779	78.699	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2019/10/17

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	*	2480.000	10.628	91.627	102.255	--	--	PEAK
2		2483.500	10.640	41.630	52.271	-21.729	74.000	PEAK
3		2483.600	10.642	43.624	54.266	-19.734	74.000	PEAK

Note:

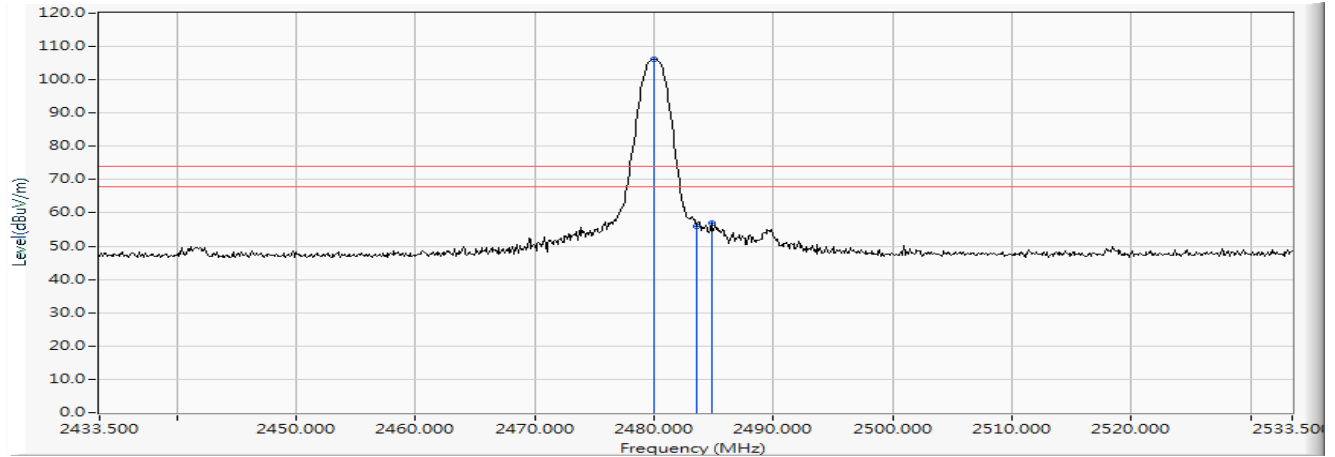
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
78 (Average)	2480.000	102.255	-24.779	77.476	--	--	Pass
78 (Average)	2483.500	52.271	-24.779	27.492	-26.508	54.000	Pass
78 (Average)	2483.600	54.266	-24.779	29.487	-24.513	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2019/10/17

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	*	2480.000	10.628	95.491	106.119	--	--	PEAK
2		2483.500	10.640	45.337	55.978	-18.022	74.000	PEAK
3		2484.800	10.646	46.305	56.951	-17.049	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

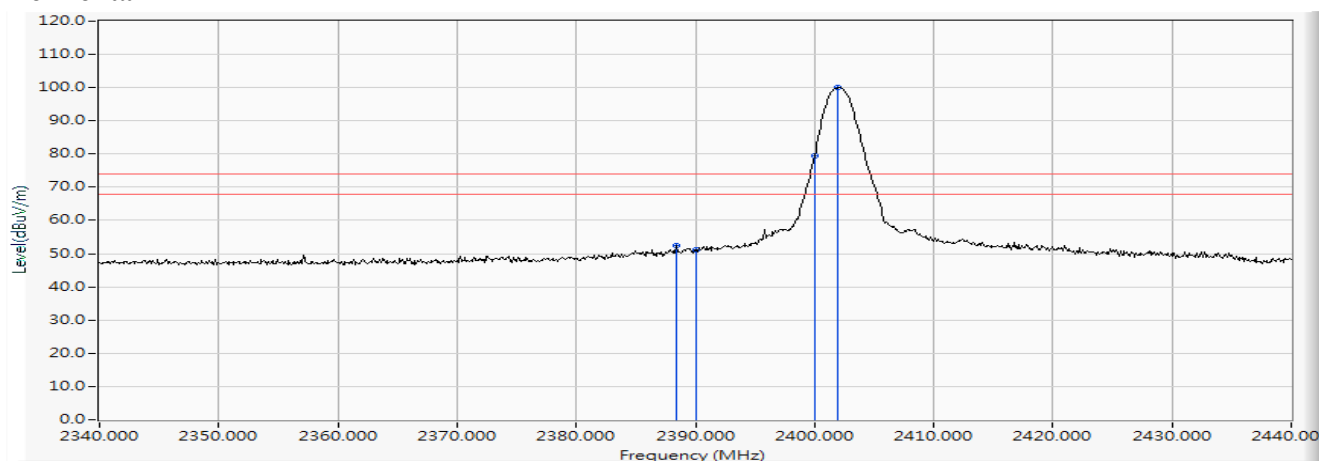
Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
78 (Average)	2480.000	106.119	-24.779	81.340	--	--	Pass
78 (Average)	2483.500	55.978	-24.779	31.199	-22.801	54.000	Pass
78 (Average)	2484.800	56.951	-24.779	32.172	-21.828	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 3Mbps (2402MHz)
 Test Date : 2019/10/17

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		2388.400	10.256	42.047	52.302	-21.698	74.000	PEAK
2		2390.000	10.262	40.799	51.061	-22.939	74.000	PEAK
3		2400.000	10.304	69.049	79.352	--	--	PEAK
4	*	2402.000	10.311	89.652	99.964	--	--	PEAK

Note:

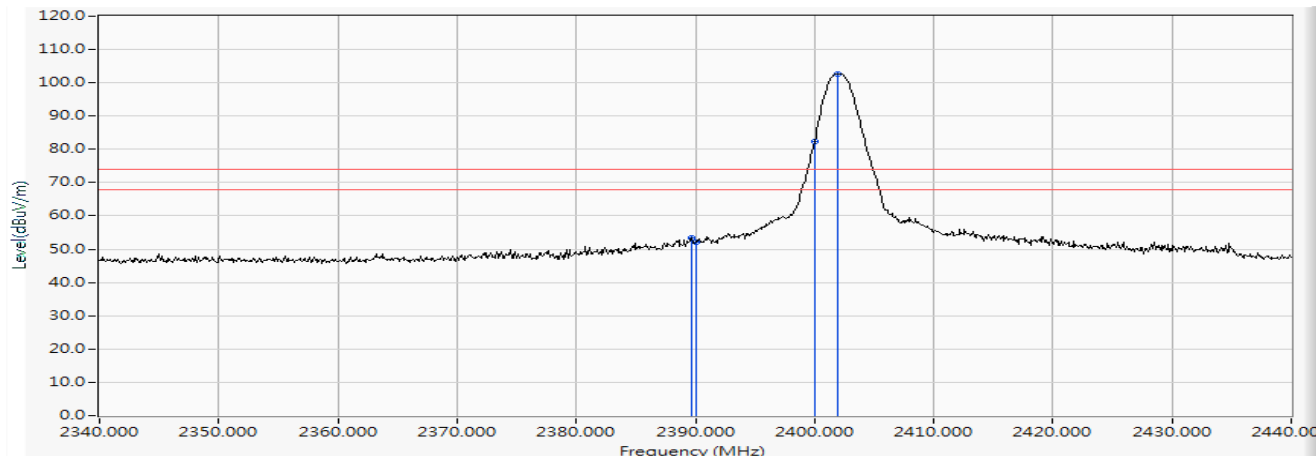
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
00 (Average)	2388.400	52.302	-24.779	27.523	-26.477	54.000	Pass
00 (Average)	2390.000	51.061	-24.779	26.282	-27.718	54.000	Pass
00 (Average)	2400.000	79.352	-24.779	54.573	--	--	Pass
00 (Average)	2402.000	99.964	-24.779	75.185	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 3Mbps (2402MHz)
 Test Date : 2019/10/17

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1		2389.700	10.261	43.195	53.456	-20.544	74.000	PEAK
2		2390.000	10.262	41.747	52.009	-21.991	74.000	PEAK
3		2400.000	10.304	72.133	82.436	--	--	PEAK
4	*	2402.000	10.311	92.438	102.750	--	--	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

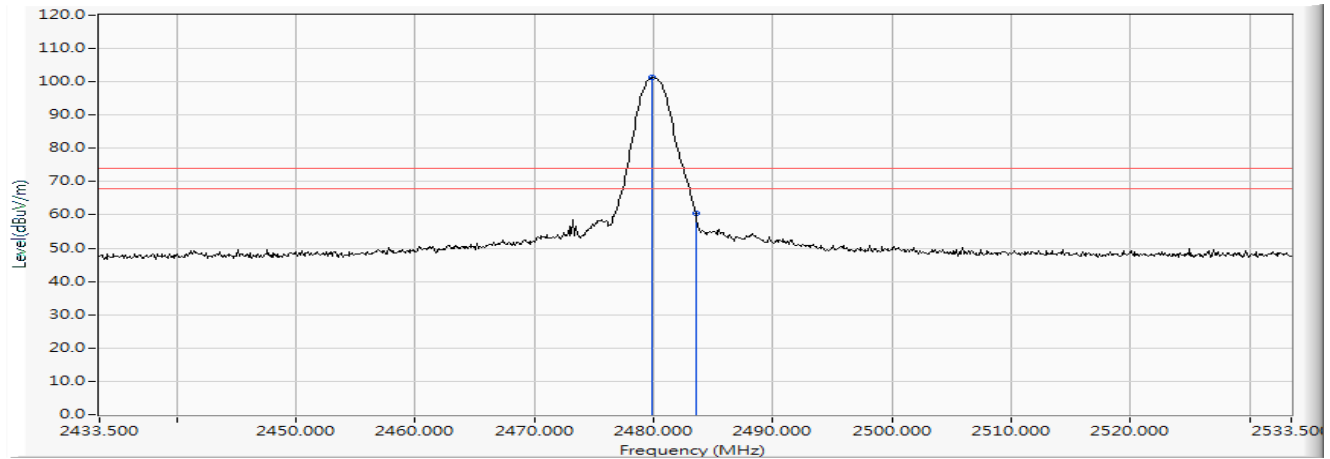
Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
00 (Average)	2389.700	53.456	-24.779	28.677	-25.323	54.000	Pass
00 (Average)	2390.000	52.009	-24.779	27.230	-26.770	54.000	Pass
00 (Average)	2400.000	82.436	-24.779	57.657	--	--	Pass
00 (Average)	2402.000	102.750	-24.779	77.971	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 3Mbps (2480MHz)
 Test Date : 2019/10/17

Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	*	2479.900	10.628	90.573	101.200	--	--	PEAK
2		2483.500	10.640	49.922	60.563	-13.437	74.000	PEAK

Note:

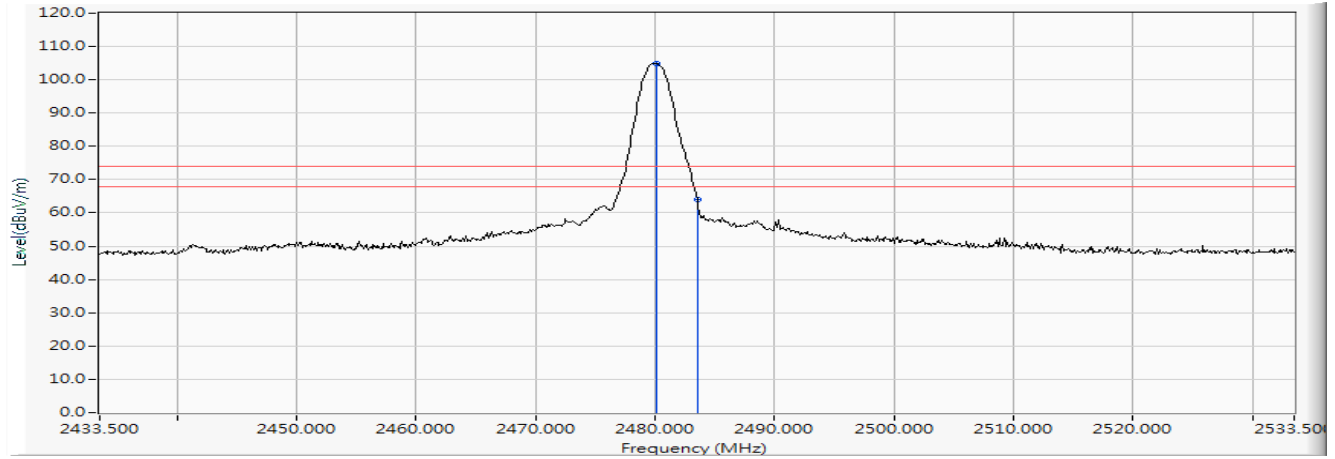
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
78 (Average)	2479.900	101.200	-24.779	76.421	--	--	Pass
78 (Average)	2483.500	60.563	-24.779	35.784	-18.216	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

Product : Intel® Wireless-AC 9560
 Test Item : Band Edge
 Test Mode : Mode 2: Transmit - 3Mbps (2480MHz)
 Test Date : 2019/10/17

Vertical

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	*	2480.100	10.628	94.366	104.994	--	--	PEAK
2		2483.500	10.640	53.425	64.066	-9.934	74.000	PEAK

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. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

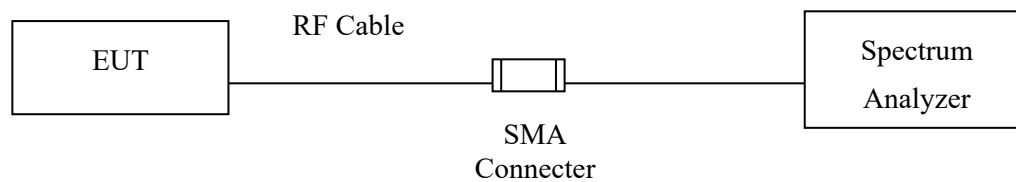
Channel No.	Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
78 (Average)	2480.100	104.994	-24.779	80.215	--	--	Pass
78 (Average)	2483.500	64.066	-24.779	39.287	-14.713	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 6.

6. Duty Cycle

6.1. Test Setup

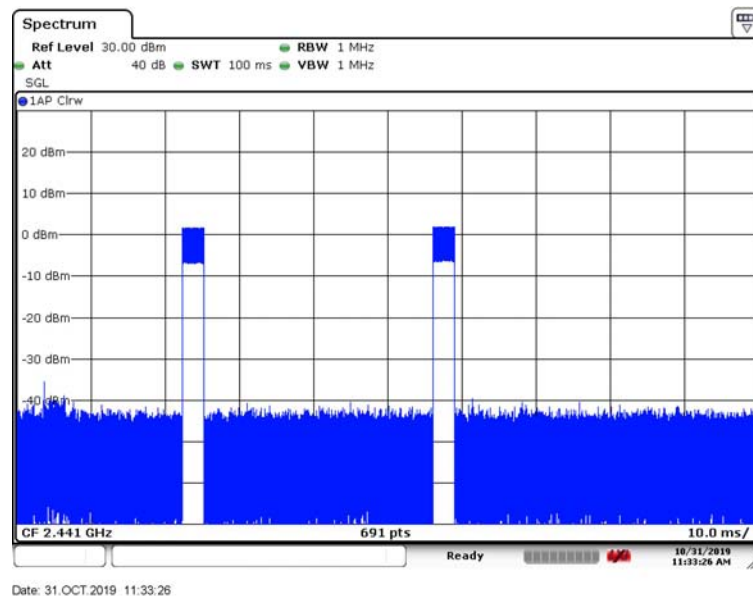
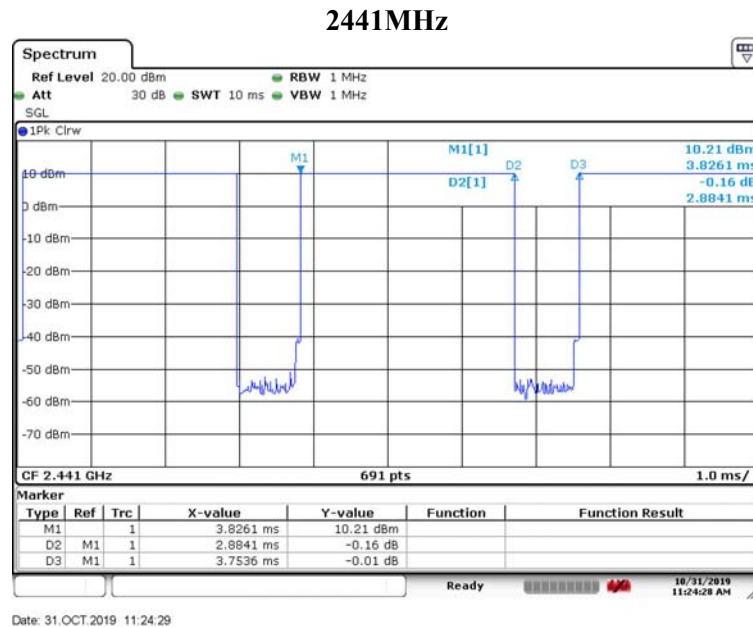


6.2. Uncertainty

$\pm 2.31\text{ms}$

6.3. Test Result of Duty Cycle

Product : Intel® Wireless-AC 9560
 Test Item : Duty Cycle Data
 Test Mode : Mode 1: Transmit - 1Mbps



Time on of 100ms= 2.884ms*2= 5.768ms

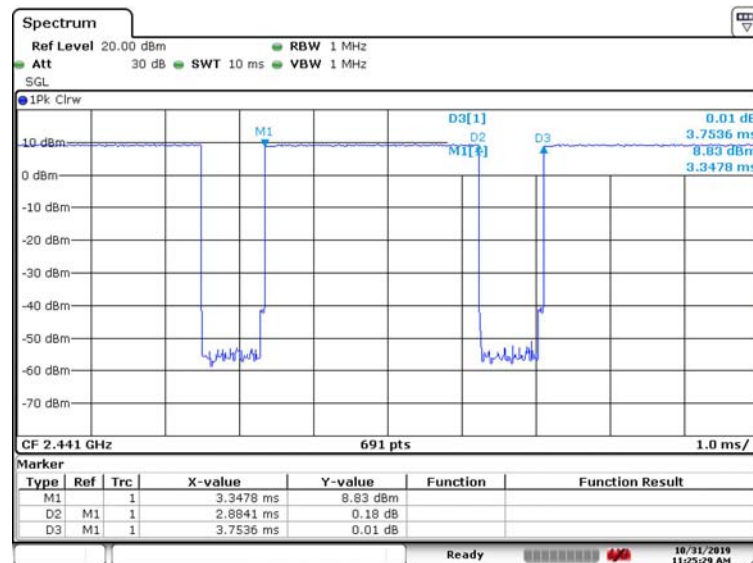
Duty Cycle= 5.768ms / 100ms= 0.05768

Duty Cycle correction factor= 20 LOG 0.05768= -24.779 dB

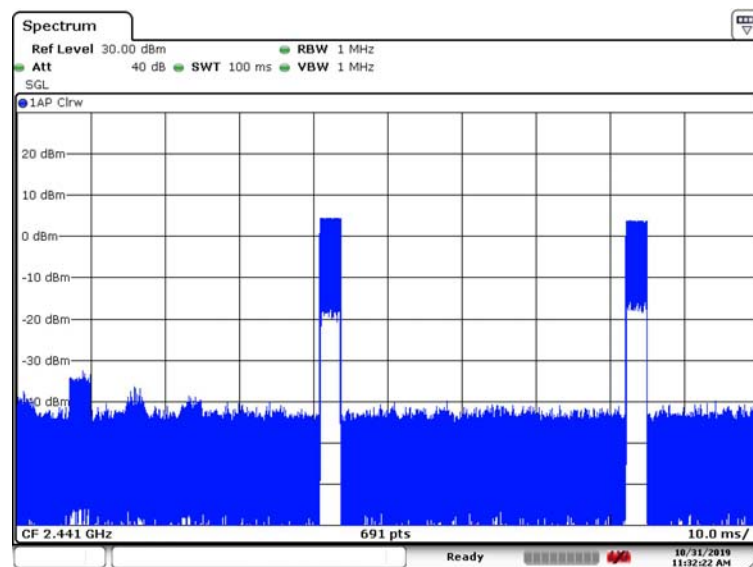
Duty Cycle correction factor	-24.779	dB
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Product : Intel® Wireless-AC 9560
 Test Item : Duty Cycle Data
 Test Mode : Mode 2: Transmit - 3Mbps

2441MHz



Date: 31.OCT.2019 11:25:30



Date: 31.OCT.2019 11:32:23

Time on of 100ms= 2.884ms*2= 5.768ms

Duty Cycle= 5.768ms / 100ms= 0.05768

Duty Cycle correction factor= 20 LOG 0.05768= -24.779 dB

Duty Cycle correction factor	-24.779	dB
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7. EMI Reduction Method During Compliance Testing

No modification was made during testing.