

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. 83 Wu Lane, Suzhou Industrial Park, 215000 Suzhou City,
	Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA

Date of Receipt	Aug. 06, 2018
Issued Date	Sep. 06, 2018
Report No.	1880077R-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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Report No.: 1880077R-RFUSP11V00



Test Report

Issued Date: Sep. 06, 2018

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Product Name	Intel® Wireless-AC 9560		
Applicant	TONGFANG HONGKONG (SUZHOU) LIMITED		
Address	NO. 83 Wu Lane, Suzhou Industrial Park, 215000 Suzhou City, Jiangsu		
	Province, PEOPLE'S REPUBLIC OF CHINA		
Manufacturer	Intel Mobile Communications		
Model No.	9560NGW		
FCC ID.	2AKHF9560NG		
EUT Rated Voltage	AC 100-240V / 50-60Hz		
EUT Test Voltage	AC 120V / 60Hz		
Trade Name	Intel		
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2017		
	ANSI C63.4: 2014, ANSI C63.10: 2013		
Test Result	Complied		

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TABLE OF CONTENTS

Des	scription	Page
1.	GENERAL INFORMATION	4
1.1.	EUT Description	4
1.2.	Operational Description	7
1.3.	Tested System Details	
1.4.	Configuration of Tested System	9
1.5.	EUT Exercise Software	9
1.6.	Test Facility	10
1.7.	List of Test Equipment	11
2.	PEAK POWER OUTPUT	12
2.1.	Test Setup	12
2.2.	Limit	
2.3.	Test Procedure	12
2.4.	Uncertainty	
2.5.	Test Result of Peak Power Output	
3.	RADIATED EMISSION	16
3.1.	Test Setup	16
3.2.	Limits	17
3.3.	Test Procedure	18
3.4.	Uncertainty	18
3.5.	Test Result of Radiated Emission	
4.	BAND EDGE	31
4.1.	Test Setup	31
4.2.	Limit	31
4.3.	Test Procedure	
4.4.	Uncertainty	
4.5.	Test Result of Band Edge	33
5.	EMI REDUCTION METHOD DURING COMPLIANCE TESTING	45

Attachment 1: EUT Test Photographs
Attachment 2: EUT Detailed Photographs



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	Slot Antenna	
Channel Control	Auto	
Antenna Gain	Refer to the table "Antenna List"	
Test Platform	Product name: Notebook PC, Brand: TONGFANG, Model number: GK7CN6S	
Adapter	MFR: Chicony, M/N: A15-180P1A	
	Input: AC 100-240V, 50-60Hz, 2.5A	
	Output: DC 19.5V, 9.23A	
	Cable Out: Non-Shielded, 1.7m with two ferrite cores	

Antenna List

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	WGT	GK7CN6S	Slot Antenna	4.57dBi 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
					1 2		
Channel 00:		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. 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: GK7CN6S.
 - #2: Reduce the Output Power through firmware, and SAR measurement were evaluated.
 - #3: Addition an antenna, the antenna type is different from the original application and the antenna gain is higher than the original application.

Test Mode	Mode 1: Transmit - 1Mbps
	Mode 2: Transmit - 2Mbps
	Mode 3: Transmit - 3Mbps



1.3. Tested System Details

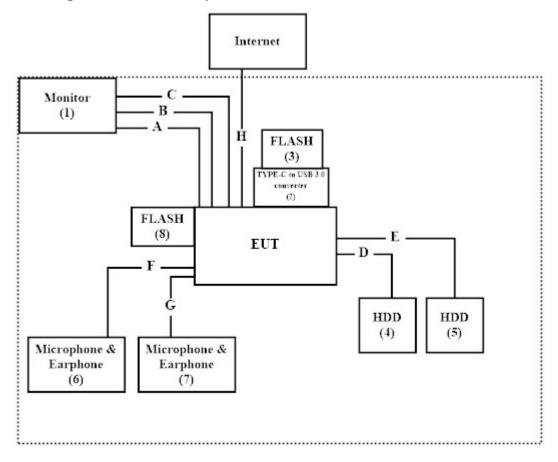
The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Prod	uct	Manufacturer	Model No.	Serial No.	Power Cord
1	Monitor	DELL	U2415	CN-01RMGX-74261 -63H-09UL-A02	Non-Shielded, 1.8m
2	TYPE-C to USB 3.0 converter	Hawk	N/A	N/A	N/A
3	FLASH	Transcend	USB 3.0	N/A	N/A
4	HDD	WD	WDBUZG0010BBK -PESN	WXR1AC5F5J73	N/A
5	HDD	WD	WDBUZG0010BBK -PESN	WX11A166S2Y3	N/A
6	Microphone & Earphone	Verbatim	N/A	N/A	N/A
7	Microphone & Earphone	Verbatim	N/A	N/A	N/A
8	FLASH	Kingston	DT100G3/8GB	N/A	N/A

Sign	al Cable Type	Signal cable Description
A	HDMI Cable	Shielded, 1.8m
В	DP Cable	Shielded, 1.8m
C	DP Cable	Shielded, 1.8m
D	USB Cable	Shielded, 0.5m
E	USB Cable	Shielded, 0.8m
F	Audio Cable	Non-shielded, 1.2m
G	Audio Cable	Non-shielded, 1.2m
Н	LAN Cable	Non-shielded, 3m



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 10.1748.0-06430" 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

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FCC Accreditation Number: TW0023



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	103464	2018.01.23	2019.01.22
X	Power Meter	Anritsu	ML2496A	1548003	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531024	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531025	2017.12.11	2018.12.10
	Bluetooth Tester	R&S	CBT	101238	2018.01.18	2019.01.17

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version: DEKRA Conduction Test System V9.0.1

For Radiated measurements /ACB1

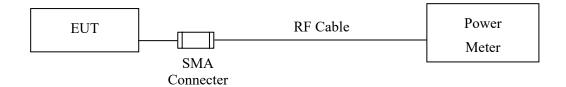
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	AMETEK	HLA6121	49611	2018.01.26	2019.01.25
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2018.04.02	2019.04.01
X	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
X	Horn Antenna	Com-Power	AH-840	101087	2018.06.01	2019.05.31
X	Pre-Amplifier	EMCI	EMC001330	980316	2018.06.01	2019.05.31
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2018.06.04	2019.06.03
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2018.06.04	2019.06.03
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2018.05.16	2019.05.15
X	Filter	MICRO TRONICS	BRM50702	G249	2018.08.20	2019.08.19
	Filter	MICRO TRONICS	BRM50716	G187	2018.08.20	2019.08.19
X	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
X	Spectrum Analyzer	R&S	FSV40	101148	2018.02.08	2019.02.07
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2018.05.25	2019.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2018.05.16	2019.05.15

- 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 9560

Test Item : Peak Power Output

Test Mode : Mode 1: Transmit - 1Mbps

Test Date : 2018/08/31

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	9.02	1 Watt= 30 dBm	Pass
Channel 39	2441.00	9.75	1 Watt= 30 dBm	Pass
Channel 78	2480.00	9.55	1 Watt= 30 dBm	Pass



Test Item : Peak Power Output

Test Mode : Mode 2: Transmit - 2Mbps

Test Date : 2018/08/31

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	5.85	1 Watt= 30 dBm	Pass
Channel 39	2441.00	5.69	1 Watt= 30 dBm	Pass
Channel 78	2480.00	5.91	1 Watt= 30 dBm	Pass



Test Item : Peak Power Output

Test Mode : Mode 3: Transmit - 3Mbps

Test Date : 2018/08/31

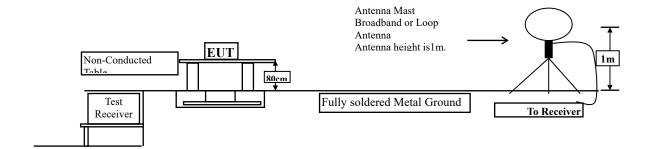
Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	5.82	1 Watt= 30 dBm	Pass
Channel 39	2441.00	5.91	1 Watt= 30 dBm	Pass
Channel 78	2480.00	5.93	1 Watt= 30 dBm	Pass



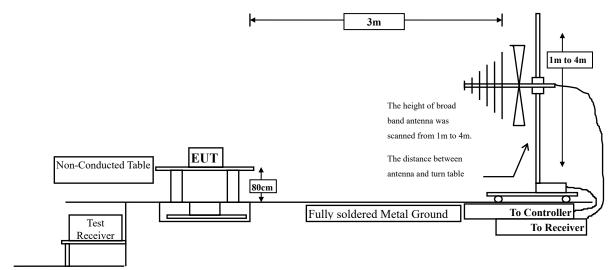
3. Radiated Emission

3.1. Test Setup

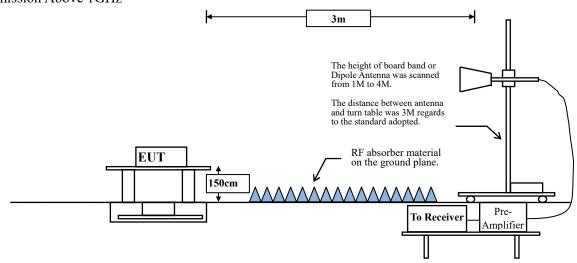
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Page: 16 of 45



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	Measurement distance				
IVITIZ	(microvolts/meter)	(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 $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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 form 9kHz - 10th Harmonic of fundamental was investigated.

3.4. Uncertainty

Horizontal polarization:

30-300MHz: ±4.08dB; 300M-1GHz: ±3.86dB; 1-18GHz: ±3.77dB; 18-40GHz: ±3.98dB

Vertical polarization:

30-300MHz: ±4.81dB; 300M-1GHz: ±3.87dB; 1-18GHz: ±3.83dB; 18-40GHz: ±3.98dB



3.5. Test Result of Radiated Emission

Product : Intel® Wireless-AC 9560
Test Item : Harmonic Radiated Emission

Test Mode : Mode 1: Transmit - 1Mbps(2402MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
4804.000	-6.081	48.840	42.759	-31.241	74.000
7206.000	-3.033	47.710	44.677	-29.323	74.000
9608.000	-0.774	45.980	45.207	-28.793	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	-6.081	48.570	42.489	-31.511	74.000
7206.000	-3.033	52.200	49.167	-24.833	74.000
9608.000	-0.774	46.190	45.417	-28.583	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 1: Transmit - 1Mbps(2441MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4882.000	-6.042	48.520	42.478	-31.522	74.000
7323.000	-2.954	48.300	45.346	-28.654	74.000
9764.000	-0.487	46.210	45.723	-28.277	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-6.042	48.310	42.268	-31.732	74.000
7323.000	-2.954	53.730	50.776	-23.224	74.000
9764.000	-0.487	46.560	46.073	-27.927	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 1: Transmit - 1Mbps(2480MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4960.000	-6.041	48.580	42.539	-31.461	74.000
7440.000	-2.805	48.260	45.455	-28.545	74.000
9920.000	-0.260	46.220	45.960	-28.040	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-6.041	48.730	42.689	-31.311	74.000
7440.000	-2.805	54.450	51.645	-22.355	74.000
9920.000	-0.260	46.310	46.050	-27.950	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 2: Transmit - 2Mbps(2402MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
4804.000	-6.081	48.190	42.109	-31.891	74.000
7206.000	-3.033	47.090	44.057	-29.943	74.000
9608.000	-0.774	46.020	45.247	-28.753	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	-6.081	48.520	42.439	-31.561	74.000
7206.000	-3.033	49.130	46.097	-27.903	74.000
9608.000	-0.774	46.110	45.337	-28.663	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4882.000	-6.042	48.290	42.248	-31.752	74.000
7323.000	-2.954	47.260	44.306	-29.694	74.000
9764.000	-0.487	46.010	45.523	-28.477	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-6.042	47.650	41.608	-32.392	74.000
7323.000	-2.954	48.830	45.876	-28.124	74.000
9764.000	-0.487	46.110	45.623	-28.377	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 2: Transmit - 2Mbps (2480MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4960.000	-6.041	48.810	42.769	-31.231	74.000
7440.000	-2.805	47.410	44.605	-29.395	74.000
9920.000	-0.260	45.170	44.910	-29.090	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-6.041	48.370	42.329	-31.671	74.000
7440.000	-2.805	48.950	46.145	-27.855	74.000
9920.000	-0.260	46.220	45.960	-28.040	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 3: Transmit - 3Mbps(2402MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
4804.000	-6.081	48.260	42.179	-31.821	74.000
7206.000	-3.033	46.690	43.657	-30.343	74.000
9608.000	-0.774	46.030	45.257	-28.743	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	-6.081	48.540	42.459	-31.541	74.000
7206.000	-3.033	49.400	46.367	-27.633	74.000
9608.000	-0.774	46.010	45.237	-28.763	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4882.000	-6.042	48.680	42.638	-31.362	74.000
7323.000	-2.954	46.490	43.536	-30.464	74.000
9764.000	-0.487	46.020	45.533	-28.467	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-6.042	48.270	42.228	-31.772	74.000
7323.000	-2.954	48.730	45.776	-28.224	74.000
9764.000	-0.487	46.110	45.623	-28.377	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)

Test Date : 2018/08/30

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
4960.000	-6.041	48.230	42.189	-31.811	74.000
7440.000	-2.805	47.030	44.225	-29.775	74.000
9920.000	-0.260	46.030	45.770	-28.230	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-6.041	48.550	42.509	-31.491	74.000
7440.000	-2.805	49.190	46.385	-27.615	74.000
9920.000	-0.260	46.110	45.850	-28.150	74.000
Average					
Detector:					
					54.000

- 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.



Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)

Test Date : 2018/08/28

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
41.246	-10.826	40.711	29.885	-10.115	40.000
108.725	-14.117	36.114	21.998	-21.502	43.500
167.768	-10.551	40.540	29.989	-13.511	43.500
215.565	-12.635	40.211	27.576	-15.924	43.500
263.362	-10.993	42.878	31.885	-14.115	46.000
349.116	-8.557	40.062	31.505	-14.495	46.000
Vertical					
39.841	-10.908	41.946	31.039	-8.961	40.000
101.696	-15.366	38.933	23.567	-19.933	43.500
167.768	-10.551	34.013	23.462	-20.038	43.500
215.565	-12.635	42.468	29.833	-13.667	43.500
263.362	-10.993	37.614	26.621	-19.379	46.000
361.768	-8.204	40.876	32.672	-13.328	46.000

- 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.



Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)

Test Date : 2018/08/28

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
39.841	-10.908	38.049	27.142	-12.858	40.000
167.768	-10.551	40.945	30.394	-13.106	43.500
215.565	-12.635	40.877	28.242	-15.258	43.500
263.362	-10.993	42.472	31.479	-14.521	46.000
280.232	-10.112	41.196	31.084	-14.916	46.000
342.087	-8.711	39.166	30.455	-15.545	46.000
Vertical					
41.246	-10.826	41.728	30.902	-9.098	40.000
60.928	-11.785	39.875	28.090	-11.910	40.000
215.565	-12.635	42.315	29.680	-13.820	43.500
263.362	-10.993	38.570	27.577	-18.423	46.000
299.913	-9.662	38.625	28.963	-17.037	46.000
380.043	-7.679	40.063	32.384	-13.616	46.000

- 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.



Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)

Test Date : 2018/08/28

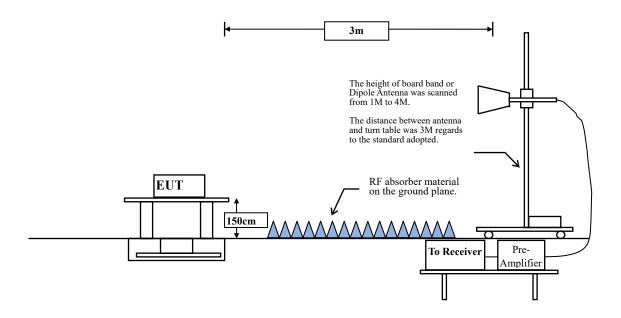
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
48.275	-10.637	35.022	24.385	-15.615	40.000
167.768	-10.551	39.684	29.133	-14.367	43.500
215.565	-12.635	40.168	27.533	-15.967	43.500
263.362	-10.993	42.022	31.029	-14.971	46.000
349.116	-8.557	39.996	31.439	-14.561	46.000
373.014	-7.881	36.900	29.019	-16.981	46.000
Vertical					
41.246	-10.826	38.333	27.507	-12.493	40.000
58.116	-11.444	35.996	24.551	-15.449	40.000
215.565	-12.635	42.400	29.765	-13.735	43.500
349.116	-8.557	38.598	30.041	-15.959	46.000
374.420	-7.835	39.562	31.727	-14.273	46.000
436.275	-6.243	35.333	29.090	-16.910	46.000

- 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



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

Horizontal polarization: 1-18GHz: ±3.77dB Vertical polarization: 1-18GHz: ±3.83dB



4.5. **Test Result of Band Edge**

Intel® Wireless-AC 9560 Product

Test Item Band Edge

Test Mode Mode 1: Transmit - 1Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
00 (Peak)	2388.551	12.179	37.580	49.759	74.00	54.00	Pass
00 (Peak)	2390.000	12.186	35.923	48.109	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	60.423	72.659			Pass
00 (Peak)	2402.029	12.246	91.030	103.275			
00 (Average)	2363.768	12.131	24.656	36.787	74.00	54.00	Pass
00 (Average)	2390.000	12.186	23.852	36.038	74.00	54.00	Pass
00 (Average)	2400.000	12.235	41.424	53.660			Pass
00 (Average)	2402.029	12.246	76.431	88.676			

Figure Channel 00:

Horizontal (Peak)

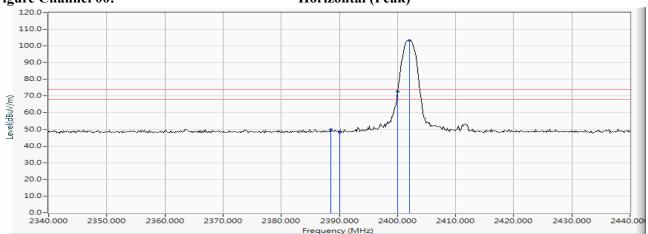
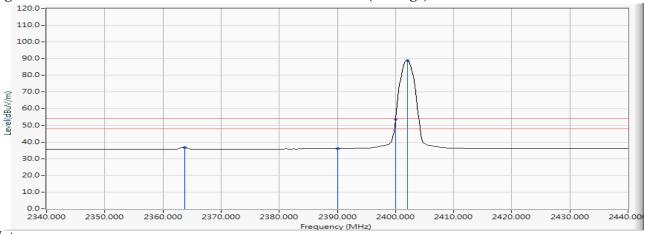


Figure Channel 00:

Horizontal (Average)



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



Intel® Wireless-AC 9560 Product

Test Item Band Edge

Test Mode Mode 1: Transmit - 1Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency		_	Emission Level		_	Result
Chamier 110.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	resure
00 (Peak)	2388.986	12.181	39.206	51.387	74.00	54.00	Pass
00 (Peak)	2390.000	12.186	37.149	49.335	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	66.200	78.436			Pass
00 (Peak)	2402.029	12.246	96.852	109.097			1
00 (Average)	2363.768	12.131	27.312	39.443	74.00	54.00	Pass
00 (Average)	2390.000	12.186	24.474	36.660	74.00	54.00	Pass
00 (Average)	2400.000	12.235	46.007	58.243			Pass
00 (Average)	2402.029	12.246	81.089	93.334			

Figure Channel 00:

VERTICAL (Peak)

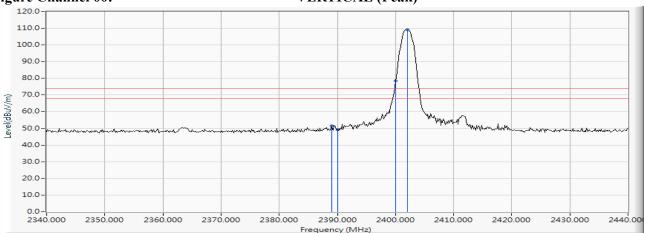
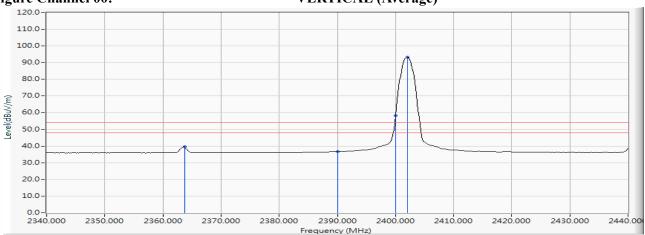


Figure Channel 00:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "*", means this data is the mission level.
- 2. 3.
- 4.
- Measurement Level = Reading Level + Correction Factor.
- The average measurement was not performed when the peak measured data is under the limit of average detection.



Test Item Band Edge

Test Mode Mode 1: Transmit - 1Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

Channel No.			•	Emission Level		•	Result
Chamier 10.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	
78 (Peak)	2479.877	12.431	90.085	102.517		-	
78 (Peak)	2483.500	12.433	37.775	50.208	74.00	54.00	Pass
78 (Peak)	2489.442	12.436	41.716	54.152	74.00	54.00	Pass
78 (Average)	2480.022	12.431	75.770	88.202		-	
78 (Average)	2483.500	12.433	25.800	38.233	74.00	54.00	Pass

Figure Channel 78:

Horizontal (Peak)

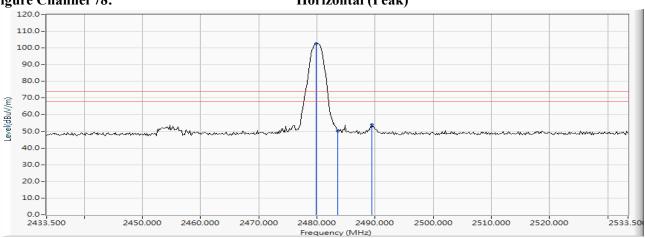
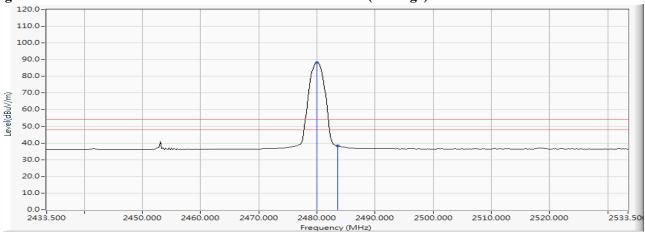


Figure Channel 78:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. 3.
- Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. "*", means this data is the worst emission level.
- 4.
- Measurement Level = Reading Level + Correction Factor.

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



Intel® Wireless-AC 9560 Product

Test Item Band Edge

Test Mode Mode 1: Transmit - 1Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2480.022	12.431	96.683	109.115			
78 (Peak)	2483.500	12.433	48.081	60.514	74.00	54.00	Pass
78 (Average)	2480.022	12.431	81.000	93.432			
78 (Average)	2483.500	12.433	29.245	41.678	74.00	54.00	Pass

Figure Channel 78:

VERTICAL (Peak)

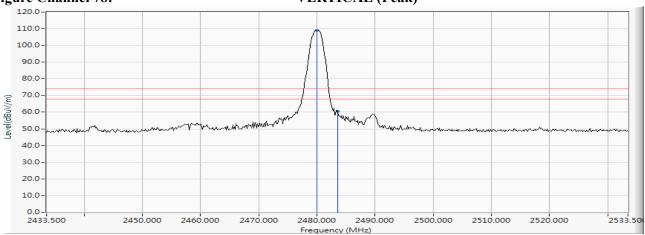
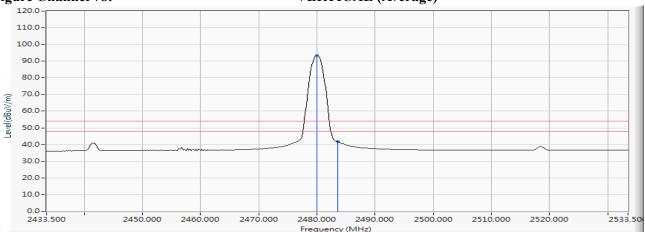


Figure Channel 78:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "*", means this data is the worst emission level
- ', means this data is the worst emission level.
- Measurement Level = Reading Level + Correction Factor.
- The average measurement was not performed when the peak measured data is under the limit of average detection.



Test Item Band Edge

Test Mode Mode 2: Transmit - 2Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

		· · · · · · · · · · · · · · · · · · ·					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Chainei No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
00 (Peak)	2387.391	12.174	38.296	50.469	74.00	54.00	Pass
00 (Peak)	2390.000	12.186	37.296	49.482	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	68.688	80.924			Pass
00 (Peak)	2402.174	12.246	89.867	102.113			
00 (Average)	2390.000	12.186	24.750	36.936	74.00	54.00	Pass
00 (Average)	2400.000	12.235	49.408	61.644			Pass
00 (Average)	2402.029	12.246	74.212	86.457			

Figure Channel 00:

Horizontal (Peak)

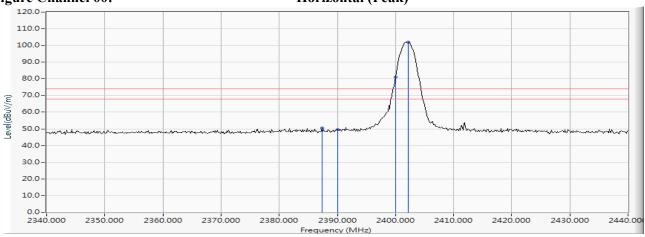
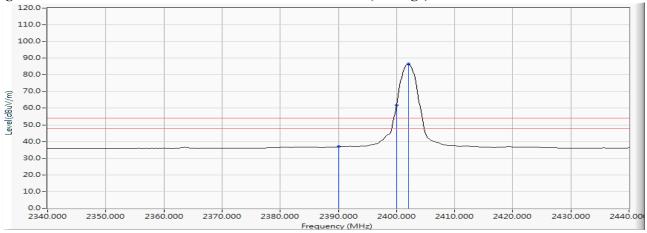


Figure Channel 00:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "*", means this data is the worst in level.

 Magnetic and I avel. = Reading I evel. + Correction Factor. 1.
- 2.
- 4.
- Measurement Level = Reading Level + Correction Factor.
- The average measurement was not performed when the peak measured data is under the limit of average detection.



Test Item Band Edge

Test Mode Mode 2: Transmit - 2Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

		•	,				
Channel No.	Frequency		_	Emission Level		•	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	
00 (Peak)	2382.609	12.156	40.623	52.779	74.00	54.00	Pass
00 (Peak)	2390.000	12.186	38.842	51.028	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	74.845	87.081	1	1	Pass
00 (Peak)	2402.174	12.246	95.885	108.131			
00 (Average)	2363.333	12.129	26.772	38.902	74.00	54.00	Pass
00 (Average)	2390.000	12.186	26.956	39.142	74.00	54.00	Pass
00 (Average)	2400.000	12.235	54.173	66.409	-	-	Pass
00 (Average)	2402.029	12.246	78.996	91.241			

Figure Channel 00:

VERTICAL (Peak)

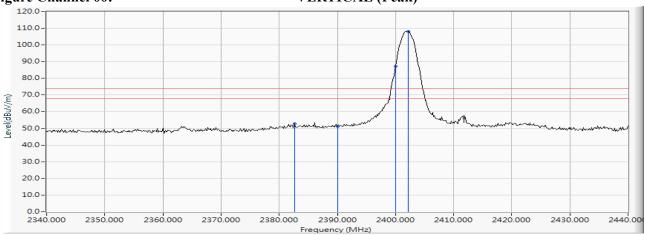
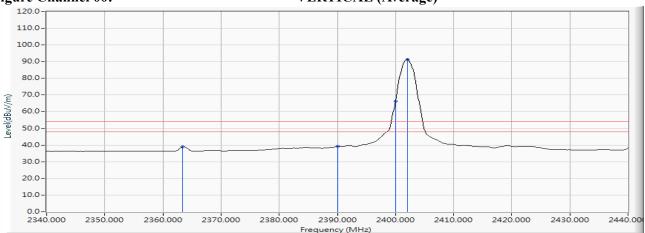


Figure Channel 00:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. "*", means this data is the worst emission level.
- 2. 3.

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



Test Item Band Edge

Test Mode Mode 2: Transmit - 2Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Dogult.
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result Pass
78 (Peak)	2480.022	12.431	88.913	101.345			
78 (Peak)	2483.500	12.433	42.398	54.831	74.00	54.00	Pass
78 (Average)	2480.022	12.431	73.403	85.835			
78 (Average)	2483.500	12.433	28.387	40.820	74.00	54.00	Pass

Figure Channel 00:

Horizontal (Peak)

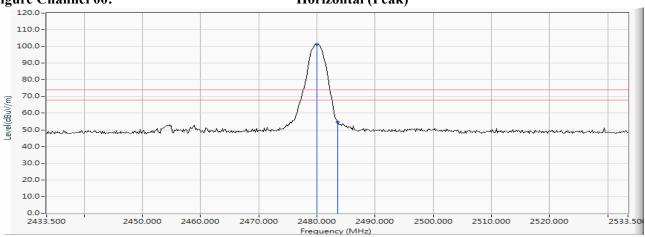
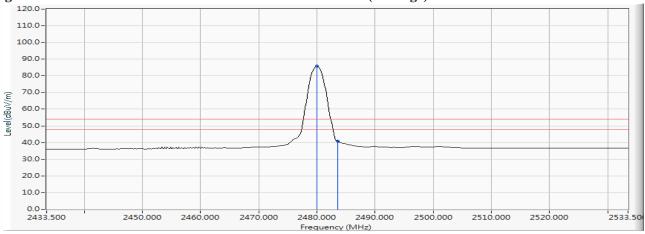


Figure Channel 00:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "*", means this data is the work emission level. 1.
- 2. 3.

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



Test Item Band Edge

Test Mode Mode 2: Transmit - 2Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBμV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2479.877	12.431	95.160	107.592			
78 (Peak)	2483.500	12.433	48.106	60.539	74.00	54.00	Pass
78 (Average)	2480.022	12.431	78.351	90.783			
78 (Average)	2483.500	12.433	32.395	44.828	74.00	54.00	Pass

Figure Channel 78:

VERTICAL (Peak)

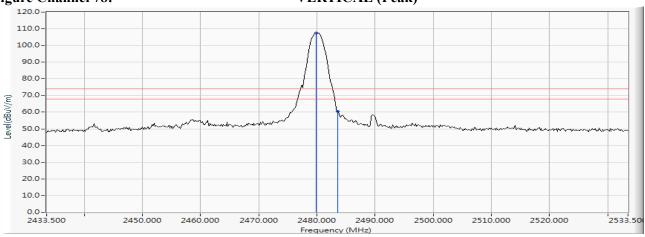
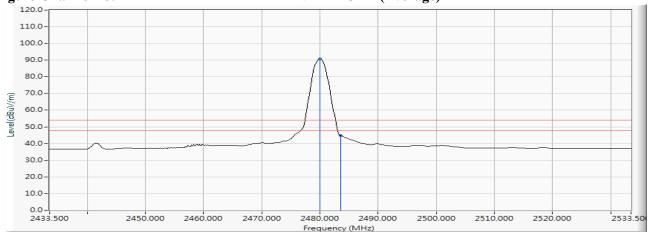


Figure Channel 78:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "**", means this data is the worst emission level 1.

- 2. 3. 4. 5. "*", means this data is the worst emission level.

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



Test Item Band Edge

Test Mode Mode 3: Transmit - 3Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBµV/m)	Result
00 (Peak)	2390.000	12.186	39.348	51.534	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	69.060	81.296			Pass
00 (Peak)	2402.029	12.246	90.177	102.422			
00 (Average)	2390.000	12.186	25.023	37.209	74.00	54.00	Pass
00 (Average)	2400.000	12.235	49.445	61.681			Pass
00 (Average)	2402.029	12.246	74.225	86.470			

Figure Channel 00:

Horizontal (Peak)

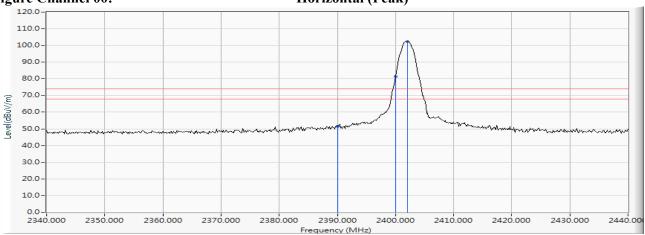
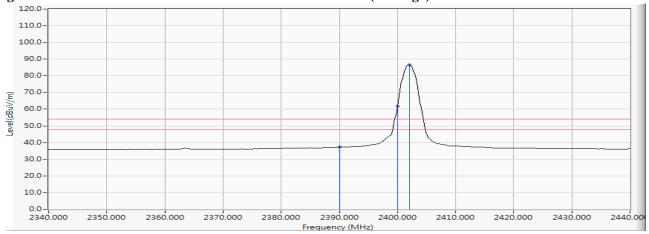


Figure Channel 00:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. "*", means this data is the worst emission level.
- 2. 3. 4.

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



Test Item Band Edge

Test Mode Mode 3: Transmit - 3Mbps (2402MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBμV/m)	Result
00 (Peak)	2389.855	12.185	44.593	56.778	74.00	54.00	Pass
00 (Peak)	2390.000	12.186	43.289	55.475	74.00	54.00	Pass
00 (Peak)	2400.000	12.235	75.252	87.488			Pass
00 (Peak)	2402.029	12.246	96.133	108.378			
00 (Average)	2363.768	12.131	26.736	38.867	74.00	54.00	Pass
00 (Average)	2390.000	12.186	27.363	39.549	74.00	54.00	Pass
00 (Average)	2400.000	12.235	54.159	66.395			Pass
00 (Average)	2402.029	12.246	78.973	91.218			

Figure Channel 00:

VERTICAL (Peak)

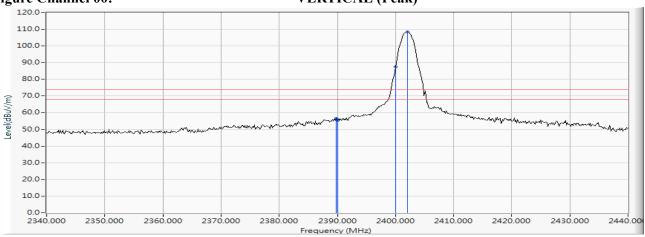
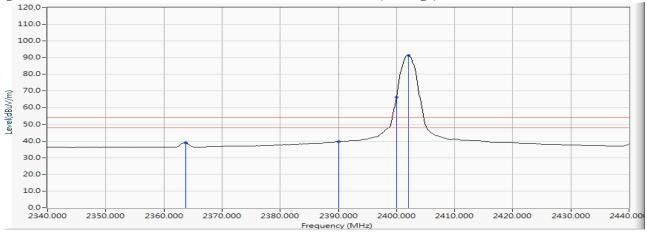


Figure Channel 00:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. "*", means this data is the worst emission level.
- 2. 3.

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



Test Item Band Edge

Test Mode Mode 3: Transmit - 3Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Arerage Limit (dBμV/m)	Result
78 (Peak)	2480.022	12.431	89.149	101.581			
78 (Peak)	2483.500	12.433	44.127	56.560	74.00	54.00	Pass
78 (Average)	2480.022	12.431	73.374	85.806			
78 (Average)	2483.500	12.433	28.912	41.345	74.00	54.00	Pass

Figure Channel 00:

Horizontal (Peak)

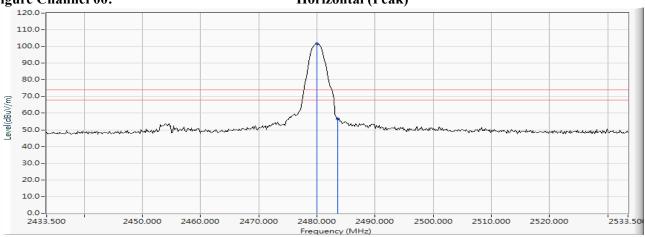
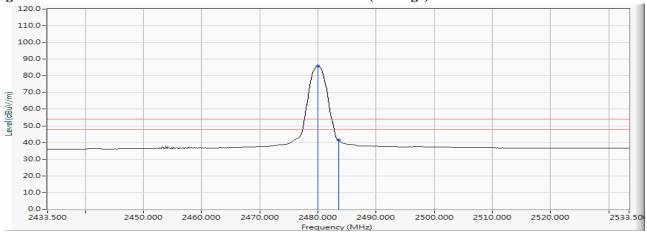


Figure Channel 00:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "*", means this data is the work emission level. 1.
- 2. 3.

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



Test Item Band Edge

Test Mode Mode 3: Transmit - 3Mbps (2480MHz)

Test Date 2018/08/20

RF Radiated Measurement (VERTICAL):

Channel No.			•	Emission Level		•	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	TCSUIT
78 (Peak)	2480.022	12.431	95.444	107.876			
78 (Peak)	2483.500	12.433	54.104	66.537	74.00	54.00	Pass
78 (Average)	2480.022	12.431	78.413	90.845	-		
78 (Average)	2483.500	12.433	33.448	45.881	74.00	54.00	Pass

Figure Channel 78:

VERTICAL (Peak)

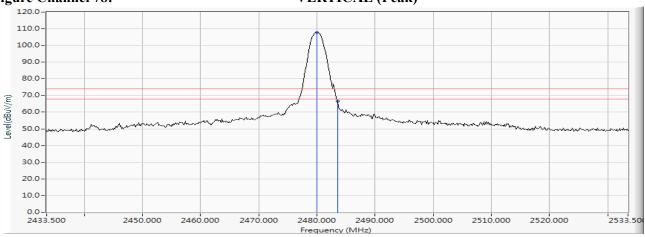
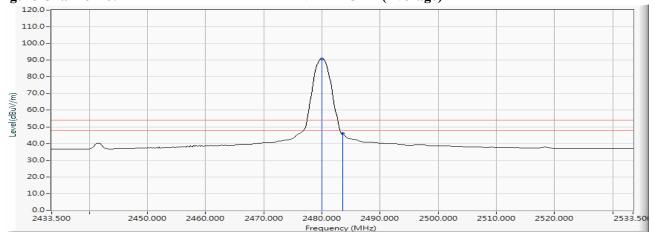


Figure Channel 78:

VERTICAL (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

 Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

 "**", means this data is the worst emission level 1.
- 2. 3. 4. 5.
- "*", means this data is the worst emission level.

 Measurement Level = Reading Level + Correction Factor.
- 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.