FCC Test Report (Class II Permissive Change)

Product Name	Intel® Wireless-AC 9560
Model No.	9560NGW
FCC ID.	2ANPM9560NG

Applicant	Nexstgo Company Limited
Address	FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER II NO.9
	SHEUNG YUET ROAD KOWLOON BAY, Hong Kong

Date of Receipt	Oct. 24, 2018
Issued Date	Dec. 10, 2018
Report No.	18A0330R-RFUSP12V00-B
Report Version	V1.0
and a line of the second secon	



The test results relate only to the samples tested.

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

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

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



Test Report Issued Date: Dec. 10, 2018				
	DEKRA			
Product Name	Intel® Wireless-AC 9560			
Applicant	Nexstgo Company Limited			
Address	FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER II NO.9 SHEUNG YUET ROAD KOWLOON BAY, Hong Kong			
Manufacturer	Intel Mobile Communications France SAS			
Model No.	9560NGW			
FCC ID.	2ANPM9560NG			
EUT Rated Voltage	DC 3.3V			
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			
Documented By	Anny Chou			
	(Senior Adm. Specialist / Anny Chou)			
Tested By	Yun Che Chen			
	(Assistant Engineer / Yunche Chen)			
Approved By	Hond			
	(Director / Vincent Lin)			



TABLE OF CONTENTS

Descr	iption	Page
1.	GENERAL INFORMATION	
1.1.	EUT Description	
1.2.	Operational Description	6
1.3.	Tested System Details	7
1.4.	Configuration of Tested System	7
1.5.	EUT Exercise Software	8
1.6.	Test Facility	9
1.7.	List of Test Item and Equipment	10
2.	PEAK POWER OUTPUT	11
2.1.	Test Setup	11
2.2.	Limit	11
2.3.	Test Procedure	11
2.4.	Uncertainty	11
2.5.	Test Result of Peak Power Output	12
3.	RADIATED EMISSION	15
3.1.	Test Setup	15
3.2.	Limits	16
3.3.	Test Procedure	17
3.4.	Uncertainty	17
3.5.	Test Result of Radiated Emission	18
4.	BAND EDGE	30
4.1.	Test Setup	30
4.2.	Limit	31
4.3.	Test Procedure	
4.4.	Uncertainty	31
4.5.	Test Result of Band Edge	32
5.	EMI REDUCTION METHOD DURING COMPLIANCE TESTING	44
Attachme	ent 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.	2ANPM9560NG
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS: GFSK(1Mbps) / π/4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	PIFA/SLOT Antenna
Channel Control	Auto
Antenna Gain	Refer to the table "Antenna List"
Test Platform.	Brand Name: Nexstgo, M/N: NZ14N1

Antenna List:

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Jieng Tai International	JT1805YY0311 (Main)	PIFA	-0.88 dBi for 2.4GHz
	Electronic Corp.	JT1805YY1511 (Aux)		
2	Well Green Technology	SNSUPWIPB01 (Main)	SLOT	-0.07 dBi for 2.4GHz
	Co., LTD.	SNSUPWIPB03 (Aux)		

Note : (1)The antenna of EUT is conform to FCC 15.203.

(2) Well Green Technology antenna(No2) was tested and recorded in this report since it represents different Antenna Type.



Center Frequency of Each Channel: (For V3.0+HS, V2.1+EDR)

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 a built-in WLAN
 Bluetooth transceiver, this report for Bluetooth.
- 2. These tests were conducted on a sample for the purpose of demonstrating compliance of Bluetooth 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: 2ANPM9560NG, originally granted on 11/20/2018. The major change filed under this application is:

Change #1: Additional Chassis added, Nexstgo, model number: NZ14N1.

Change #2: Add two new antennas, the antenna type(Slot antenna) of Antenna List (No. 2) is different than the original application, the type(PIFA antenna) of Antenna List (No. 1) is the same as the original application. And the gains of all antennas are lower than the original application.

Test Mode	Mode 1: Transmit - 1Mbps (GFSK)
	Mode 2: Transmit - 2Mbps (4DQPSK)
	Mode 3: Transmit - 3Mbps (8DPSK)

1.2. Operational Description

The EUT is an Intel® Wireless-AC 9560 with built-in with built-in WLAN $\$ Bluetooth transceiver. The number of the channels is 79 in 2402-2480MHz. This device provides three kinds of transmitting speed and modulation, respectively GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps).

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. The transmitter is presented with a continuous data stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its 79 channels and over the minimum number of hopping channels (75 channels).

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted.

The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

1.3. Tested System Details

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

Proc	luct	Manufacturer	Model No.	Serial No.	Power Cord
1	LCD Monitor	ASUS	VS229HA	F4LMQS135395	N/A
2	USB Mouse	Logitech	M-U0026	1245HS0684K8	N/A
3	USB 3.0(1T)	Transcend	TS1TSJ25M3	C13890-3746	N/A
4	Microphone &	Ergotech	E201	N/A	N/A
4	Earphone				
5	Notebook PC	DELL	Latitude 5580	2HRD7H2	N/A

Signal Cable Type		Signal cable Description	
А	HDMI Cable	Non-shielded, 1.6m	
В	Mouse Cable	Non-shielded, 1.7m	
C	USB to LAN Cable	Non-shielded, 0.15m	
D	Earphone Cable	Non-shielded, 1.9m	
E	USB Cable	Non-shielded, 0.2m	

1.4. Configuration of Tested System





1.5. EUT Exercise Software

- (1) Setup the EUT as shown on 1.4
- (2) Execute software "DRTU (Ver 11.1812.0-07258)" on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Start the continuous transmission.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

http://www.dekra.com.tw/chinese/about/certificates.aspx?bval=5

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

Site Description: Accredited by TAF Accredited Number: 3023

Site Name:	DEKRA Testing and Certification Co., Ltd
Site Address:	No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451,
	Taiwan, R.O.C.
	TEL: 886-2-8601-3788 / FAX: 886-2-8601-3789
	E-Mail : <u>info.tw@dekra.com</u>

FCC Accreditation Number: TW3023

1.7. List of Test Item and Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2018/02/12	2019/02/11
X	Spectrum Analyzer	Agilent	N9010A	MY53470892	2018/09/27	2019/09/26
X	Peak Power Analyzer	Keysight	8990B	MY51000410	2018/08/01	2019/07/31
X	Wideband Power Sensor	Keysight	N1923A	MY56080003	2018/07/25	2019/07/24
X	Wideband Power Sensor	Keysight	N1923A	MY56080004	2018/07/25	2019/07/24
	EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19	2019/11/18
	LISN	R&S	ESH3-Z5	836679/017	2018/02/09	2019/02/08
	LISN	R&S	ENV216	100097	2018/02/09	2019/02/08
	Coaxial Cable	DEKRA	RG 400	LC018-RG	2018/06/21	2019/06/20
For F	Radiated measurements	/Site3/CB8		-		
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
X	Spectrum Analyzer	R&S	FSP40	100170	2018/03/12	2019/03/11
	Loop Antenna	Teseq	HLA6121	37133	2017/10/13	2019/10/12
X	Bilog Antenna	Schaffner Chase	CBL6112B	2707	2018/06/24	2019/06/23
X	Coaxial Cable	DEKRA	RG 214	LC003-RG	2018/06/14	2019/06/13
X	Pre-Amplifier	Jet-Power	JPA-10M1G33	17010100033001	2018/06/14	2019/06/13
Х	Horn Antenna	ETS-Lindgren	3117	00135205	2018/05/03	2019/05/02
Х	Horn Antenna	SCHWARZBECK	9120D	576	2018/11/30	2019/11/29
X	Pre-Amplifier	EMCI	EMC012630SE	980210	2018/04/10	2019/04/09
	Horn Antenna	Com-Power	AH-840	101043	2018/01/09	2019/01/08
	Amplifier + Cable	EMCI	EMC184045SE	980370	2018/03/21	2019/03/20
Х	Filter	MICRO-TRONIC	BRM50702	G270	2018/08/06	2019/08/05
	Filter	MICRO-TRONIC	BRM50716	G196	2018/08/06	2019/08/05

DEKRA

Note:

1. All equipments are calibrated every one year.

2. The test instruments marked with "X" are used to measure the final test results.

3. Test Software version :QuieTek EMI 2.0 V2.1.113.

2. Peak Power Output

2.1. Test Setup



2.2. Limit

The maximum peak power shall be less 1Watt.

2.3. Test Procedure

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

2.4. Uncertainty

± 1.19 dB



2.5. Test Result of Peak Power Output

Product	:	Intel® Wireless-AC 9560
Test Item	:	Peak Power Output
Test Site	:	No.3 OATS
Test date	:	2018/11/23
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK)

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	10.43	1 Watt= 30 dBm	Pass
Channel 39	2441.00	10.82	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.47	1 Watt= 30 dBm	Pass



Product	:	Intel® Wireless-AC 9560
Test Item	:	Peak Power Output
Test Site	:	No.3 OATS
Test date	:	2018/11/23
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK)

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	10.11	1 Watt= 30 dBm	Pass
Channel 39	2441.00	10.40	1 Watt= 30 dBm	Pass
Channel 78	2480.00	10.79	1 Watt= 30 dBm	Pass



Intel® Wireless-AC 9560
Peak Power Output
No.3 OATS
2018/11/23
Mode 3: Transmit - 3Mbps (8DPSK)

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	10.18	1 Watt= 30 dBm	Pass
Channel 39	2441.00	10.52	1 Watt= 30 dBm	Pass
Channel 78	2480.00	11.06	1 Watt= 30 dBm	Pass



3. Radiated Emission

3.1. Test Setup





3m







Above 1GHz



3.2. Limits

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits				
Frequency MHz	uV/m @3m	dBµV/m@3m		
30-88	100	40		
88-216	150	43.5		
216-960	200	46		
Above 960	500	54		

Remarks: 1. RF Voltage $(dB\mu V) = 20 \log RF$ Voltage (uV)

- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

3.4. Uncertainty

± 4.08 dB above 1GHz

 \pm 4.22 dB below 1GHz



3.5. Test Result of Radiated Emission

Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.8 CB
Test date	:	2018/11/22
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK)(2402MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4804.000	-9.896	46.400	36.504	-37.496	74.000
7206.000	-5.013	47.030	42.017	-31.983	74.000
9608.000	-1.472	44.520	43.049	-30.951	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	-6.585	49.050	42.465	-31.535	74.000
7206.000	-4.144	45.980	41.836	-32.164	74.000
9608.000	-1.075	43.500	42.426	-31.574	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.8 CB
Test date	:	2018/11/22
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK)(2441MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4882.000	-10.318	47.070	36.752	-37.248	74.000
7323.000	-3.858	45.000	41.142	-32.858	74.000
9764.000	-2.596	43.810	41.214	-32.786	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-7.606	46.320	38.714	-35.286	74.000
7323.000	-2.977	45.500	42.524	-31.476	74.000
9764.000	-2.131	43.020	40.889	-33.111	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.8 CB
Test date	:	2018/11/22
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK)(2480MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
4960.000	-10.666	46.160	35.495	-38.505	74.000
7440.000	-3.631	44.480	40.849	-33.151	74.000
9920.000	-2.397	45.730	43.333	-30.667	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-7.869	46.250	38.382	-35.618	74.000
7440.000	-2.772	44.880	42.108	-31.892	74.000
9920.000	-1.895	45.920	44.025	-29.975	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.



Product	: Intel® Wireless-AC 9560						
Test Item	: Harmonic Radiated Emission						
Test Site	: No.3 OATS						
Test date	: 2018/11	: 2018/11/22					
Test Mode	: Mode 2	Transmit - 2Mbp	os (4DQPSK) (2402M	IHz)			
-	a	D 11			.		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector:							
4804.000	-9.896	46.410	36.514	-37.486	74.000		
7206.000	-5.013	46.320	41.307	-32.693	74.000		
9608.000	-1.472	45.260	43.789	-30.211	74.000		
Average							
Detector:							
					54.000		
Vertical							
Peak Detector:							
4804.000	-6.585	47.160	40.575	-33.425	74.000		
7206.000	-4.144	45.580	41.436	-32.564	74.000		
9608.000	-1.075	43.990	42.916	-31.084	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.3 OATS
Test date	:	2018/11/22
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2441MHz)

Frequency	Correct	Correct Reading Meas		Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
4882.000	-10.318	46.150	35.832	-38.168	74.000
7323.000	-3.858	45.280	41.422	-32.578	74.000
9764.000	-2.596	42.890	40.294	-33.706	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-7.606	46.890	39.284	-34.716	74.000
7323.000	-3.842	46.050	42.208	-31.792	74.000
9764.000	-2.131	43.560	41.429	-32.571	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.3 OATS
Test date	:	2018/11/22
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2480MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
4960.000	-10.666	45.940	35.275	-38.725	74.000
7440.000	-3.631	43.450	39.819	-34.181	74.000
9920.000	-2.397	45.900	43.503	-30.497	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-7.869	45.900	38.032	-35.968	74.000
7440.000	-2.772	44.630	41.858	-32.142	74.000
9920.000	-1.895	45.310	43.415	-30.585	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.



Product	: Intel® Wireless-AC 9560						
Test Item	: Harmon	: Harmonic Radiated Emission					
Test Site	: No.8 CB						
Test date	: 2018/11	/22					
Test Mode	: Mode 3	: Transmit - 3Mbp	os (8DPSK)(2402MH	z)			
T.	a .				.		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector:							
4804.000	-9.896	46.320	36.424	-37.576	74.000		
7206.000	-5.013	45.450	40.437	-33.563	74.000		
9608.000	-1.472	43.500	42.029	-31.971	74.000		
Average							
Detector:							
					54.000		
Vertical							
Peak Detector:							
4804.000	-6.585	46.900	40.315	-33.685	74.000		
7206.000	-4.144	46.680	42.536	-31.464	74.000		
9608.000	-1.075	44.330	43.256	-30.744	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.8 CB
Test date	:	2018/11/22
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
4882.000	-10.318	46.230	35.912	-38.088	74.000
7323.000	-3.858	45.990	42.132	-31.868	74.000
9764.000	-2.596	43.490	40.894	-33.106	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4882.000	-7.606	46.540	38.934	-35.066	74.000
7323.000	-2.977	45.330	42.354	-31.646	74.000
9764.000	-2.131	43.460	41.329	-32.671	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Harmonic Radiated Emission
Test Site	:	No.8 CB
Test date	:	2018/11/22
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2480MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
4960.000	-10.666	45.890	35.225	-38.775	74.000
7440.000	-3.631	43.440	39.809	-34.191	74.000
9920.000	-2.397	45.710	43.313	-30.687	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-7.869	45.650	37.782	-36.218	74.000
7440.000	-2.772	43.880	41.108	-32.892	74.000
9920.000	-1.895	44.650	42.755	-31.245	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test date	:	2018/11/28
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK) (2441MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
104.690	-17.076	55.230	38.154	-5.346	43.500
238.550	-16.491	57.826	41.335	-4.665	46.000
455.830	-7.401	45.854	38.453	-7.547	46.000
551.860	-6.157	43.589	37.432	-8.568	46.000
792.420	-3.664	40.647	36.983	-9.017	46.000
961.200	-3.242	45.112	41.870	-12.130	54.000
Vertical					
104.690	-14.056	51.375	37.319	-6.181	43.500
263.770	-14.234	49.047	34.813	-11.187	46.000
455.830	-13.141	44.207	31.066	-14.934	46.000
504.330	-9.526	48.892	39.366	-6.634	46.000
696.390	-8.718	39.837	31.119	-14.881	46.000
792.420	-7.374	40.469	33.095	-12.905	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test date	:	2018/11/28
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2441MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
104.690	-17.076	53.225	36.149	-7.351	43.500
274.440	-15.666	50.915	35.249	-10.751	46.000
455.830	-7.401	43.688	36.287	-9.713	46.000
500.450	-7.429	43.312	35.883	-10.117	46.000
792.420	-3.664	39.539	35.875	-10.125	46.000
959.260	-3.413	38.352	34.939	-11.061	46.000
Vertical					
167.740	-13.748	51.524	37.776	-5.724	43.500
250.190	-14.175	52.425	38.250	-7.750	46.000
455.830	-13.141	45.826	32.685	-13.315	46.000
504.330	-9.526	51.404	41.878	-4.122	46.000
696.390	-8.718	39.671	30.953	-15.047	46.000
960.230	-6.863	50.842	43.979	-10.021	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.



Product	:	Intel® Wireless-AC 9560
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test date	:	2018/11/28
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2441MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
106.630	-16.840	52.612	35.772	-7.728	43.500
239.520	-16.108	54.641	38.533	-7.467	46.000
455.830	-7.401	43.562	36.161	-9.839	46.000
504.330	-7.456	48.517	41.061	-4.939	46.000
792.420	-3.664	39.157	35.493	-10.507	46.000
959.260	-3.413	37.747	34.334	-11.666	46.000
Vertical					
167.740	-13.748	51.867	38.119	-5.381	43.500
250.190	-14.175	52.880	38.705	-7.295	46.000
455.830	-13.141	46.088	32.947	-13.053	46.000
504.330	-9.526	51.316	41.790	-4.210	46.000
792.420	-7.374	40.692	33.318	-12.682	46.000
960.230	-6.863	50.958	44.095	-9.905	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



4. Band Edge

4.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:

Above 1GHz



4.2. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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 a radiated measurement. 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

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz



4.5. **Test Result of Band Edge**

Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK) (2402MHz)

RF Radiated Measurement (Horizontal):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesun
00 (Peak)	2390.000	6.474	39.864	46.339	74.000	54.000	Pass
00 (Peak)	2400.000	6.528	52.498	59.026			
00 (Peak)	2402.029	6.540	86.881	93.421			
00 (Average)	2390.000	6.474	22.421	28.896	74.000	54.000	Pass
00 (Average)	2400.000	6.528	33.139	39.667			
00 (Average)	2402.029	6.540	72.811	79.351			

Figure Channel 00:



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. 1.
- 2. 3.
- 4.
- 5. Measurement Level = Reading Level + Correction Factor.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK) (2402MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
00 (Peak)	2390.000	5.880	39.389	45.270	74.000	54.000	Pass
00 (Peak)	2400.000	5.879	55.215	61.094			
00 (Peak)	2402.029	5.884	89.616	95.500			
00 (Average)	2363.768	5.988	23.837	29.825	74.000	54.000	Pass
00 (Average)	2390.000	5.880	22.623	28.504	74.000	54.000	Pass
00 (Average)	2400.000	5.879	35.012	40.891			
00 (Average)	2402.029	5.884	74.676	80.560			

Figure Channel 00:



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. 1. 2. 3.

- 4.
- Measurement Level = Reading Level + Correction Factor. 5.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK) (2480MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
78 (Peak)	2480.022	7.086	86.851	93.936			
78 (Peak)	2483.500	7.110	40.053	47.163	74.000	54.000	Pass
78 (Peak)	2489.587	7.154	42.531	49.684	74.000	54.000	Pass
78 (Average)	2480.022	7.086	73.124	80.209			
78 (Average)	2483.500	7.110	23.930	31.040	74.000	54.000	Pass

Figure Channel 78:

Horizontal (Peak)





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



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 1: Transmit - 1Mbps (GFSK) (2480MHz)

RF Radiated Measurement (VERTICAL):

Channel Ma	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
78 (Peak)	2479.877	6.341	90.074	96.415			
78 (Peak)	2483.500	6.363	41.317	47.680	74.000	54.000	Pass
78 (Peak)	2489.732	6.403	45.326	51.728	74.000	54.000	Pass
78 (Average)	2480.022	6.342	73.682	80.024			
78 (Average)	2483.500	6.363	25.187	31.550	74.000	54.000	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. Measurement Level = Reading Level + Correction Factor.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.3 OATS
Test date	:	2018/11/20
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2402MHz)
Test Site Test date Test Mode	: : :	No.3 OATS 2018/11/20 Mode 2: Transmit - 2Mbps (4DQPSK) (2402M

RF Radiated Measurement (Horizontal):

Channel Ma	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
00 (Peak)	2390.000	6.474	39.546	46.021	74.000	54.000	Pass
00 (Peak)	2400.000	6.528	62.601	69.129			
00 (Peak)	2401.884	6.540	85.681	92.221			
00 (Average)	2390.000	6.474	23.153	29.628	74.000	54.000	Pass
00 (Average)	2400.000	6.528	43.732	50.260			
00 (Average)	2402.029	6.540	70.833	77.373			

Figure Channel 00:

Horizontal (Peak)





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. Measurement Level = Reading Level + Correction Factor. The average measurement was not performed when the peak measured data is under the limit of 1.
- 2. 3. 4. 5. 6.

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



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.3 OATS
Test date	:	2018/11/20
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2402MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
00 (Peak)	2390.000	5.880	40.018	45.899	74.000	54.000	Pass
00 (Peak)	2400.000	5.879	65.539	71.418			
00 (Peak)	2402.174	5.884	88.522	94.406			
00 (Average)	2390.000	5.880	23.814	29.695	74.000	54.000	Pass
00 (Average)	2400.000	5.879	45.688	51.567			
00 (Average)	2402.029	5.884	72.436	78.320			

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. 1.
- 2. 3.
- 4.
- Measurement Level = Reading Level + Correction Factor. 5.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.3 OATS
Test date	:	2018/11/20
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2480MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
78 (Peak)	2479.877	7.085	85.781	92.865			
78 (Peak)	2483.500	7.110	49.933	57.043	74.000	54.000	Pass
78 (Average)	2480.022	7.086	71.350	78.435			
78 (Average)	2483.500	7.110	28.453	35.563	74.000	54.000	Pass

Figure Channel 78:

Horizontal (Peak)



Figure Channel 78: Horizontal (Average) 120.0 110.0 100.0 90.0 80.0 70.0 Level(dBuV/m) 60.0 50.0 40.0 30.0 20.0 10.0 0.0-2433.500 2450.000 2460.000 2470.000 2490.000 2500.000 2510.000 2520.000 2533.50 2480.000 Frequency (MHz)

- 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.
- Measurement Level = Reading Level + Correction Factor. 5.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.3 OATS
Test date	:	2018/11/20
Test Mode	:	Mode 2: Transmit - 2Mbps (4DQPSK) (2480MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
78 (Peak)	2480.167	6.343	89.192	95.534			
78 (Peak)	2483.500	6.363	52.094	58.457	74.000	54.000	Pass
78 (Average)	2479.877	6.341	73.607	79.948			
78 (Average)	2483.500	6.363	30.532	36.895	74.000	54.000	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. Measurement Level = Reading Level + Correction Factor.
- 1. 2. 3. 4. 5. 6.

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



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2402MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
00 (Peak)	2390.000	6.474	40.252	46.727	74.000	54.000	Pass
00 (Peak)	2400.000	6.528	63.337	69.865			
00 (Peak)	2402.029	6.540	85.802	92.342			
00 (Average)	2390.000	6.474	23.275	29.750	74.000	54.000	Pass
00 (Average)	2400.000	6.528	43.610	50.138			
00 (Average)	2401.884	6.540	71.331	77.871			





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. 1.
- 2. 3. 4.

- 5. Measurement Level = Reading Level + Correction Factor.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2402MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
00 (Peak)	2390.000	5.880	40.199	46.080	74.000	54.000	Pass
00 (Peak)	2400.000	5.879	65.745	71.624			
00 (Peak)	2402.029	5.884	88.603	94.487			
00 (Average)	2390.000	5.880	24.000	29.881	74.000	54.000	Pass
00 (Average)	2400.000	5.879	45.734	51.613			
00 (Average)	2401.884	5.884	72.933	78.817			

Figure Channel 00:

Vertical (Peak)



Figure Channel 00:

Vertical (Average)



- 1.
- 2. 3.

- 4. 5.
- 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. Measurement Level = Reading Level + Correction Factor. The average measurement was not performed when the peak measured data is under the limit of average detection 6. average detection.



Product	:	Intel® Wireless-AC 9560
Test Item	:	Band Edge
Test Site	:	No.8 CB
Test date	:	2018/11/20
Test Mode	:	Mode 3: Transmit - 3Mbps (8DPSK) (2480MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
78 (Peak)	2479.877	7.085	85.795	92.879			
78 (Peak)	2483.500	7.110	46.089	53.199	74.000	54.000	Pass
78 (Average)	2479.877	7.085	70.275	77.359			
78 (Average)	2483.500	7.110	28.270	35.380	74.000	54.000	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. 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.

- Measurement Level = Reading Level + Correction Factor. 5.
- The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



:	Intel® Wireless-AC 9560
:	Band Edge
:	No.8 CB
:	2018/11/20
:	Mode 3: Transmit - 3Mbps (8DPSK) (2480MHz)
	: : : :

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
78 (Peak)	2480.022	6.342	88.884	95.226			
78 (Peak)	2483.500	6.363	48.538	54.901	74.000	54.000	Pass
78 (Average)	2479.877	6.341	72.211	78.552			
78 (Average)	2483.500	6.363	30.385	36.748	74.000	54.000	Pass

Figure Channel 78:

Vertical (Peak)





- All readings above 1GHz are performed with peak and/or average measurements as necessary. 1.
- 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. 5.
- Measurement Level = Reading Level + Correction Factor. The average measurement was not performed when the peak measured data is under the limit of 6. average detection.



5. EMI Reduction Method During Compliance Testing

No modification was made during testing.