

FCC Test Report (Class II Permissive Change)

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

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

Date of Receipt	Sep. 21, 2017
Issued Date	Jan. 25, 2018
Report No.	1790287R-RFUSP30V00
Report Version	V1.0





The test results relate only to the samples tested.

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

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Test Report

Issued Date: Jan. 25, 2018

Report No.: 1790287R-RFUSP30V00



Product Name	Intel® Wireless-AC 9461					
Applicant	Intel Mobile Communications					
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA					
Manufacturer	Intel Mobile Communications					
Model No.	9461D2W					
FCC ID.	PD99461D2					
EUT Rated Voltage	DC 3.3V					
EUT Test Voltage	AC110/60Hz					
Trade Name	Intel					
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2016					
	ANSI C63.4: 2014, ANSI C63.10: 2013					
	789033 D02 General UNII Test Procedures New Rules v02					
Test Result	Complied					

Documented By	:	Jinn Chen
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Tested By	:	Bill Lin
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Approved By	oved By :	Hun 3
		(Director / Vincent Lin)



TABLE OF CONTENTS

	Descr	ription	Page
1.	GEN	FERAL INFORMATION	4
	1.1.	EUT Description	4
	1.2.	Operational Description	7
	1.3.	Tested System Datails	8
	1.4.	Configuration of tested System	8
	1.5.	EUT Exercise Software	8
	1.6.	Test Facility	9
	1.7.	List of Test Equipment	10
2.	Max	imun conducted output power	11
	2.1.	Test Setup	11
	2.2.	Limits	12
	2.3.	Test Procedure	13
	2.4.	Uncertainty	13
	2.5.	Test Result of Maximum conducted output power	14
3.	Radi	ated Emission	40
	3.1.	Test Setup	40
	3.2.	Limits	41
	3.3.	Test Procedure	42
	3.4.	Uncertainty	43
	3.5.	Test Result of Radiated Emission	44
4.	Band	d Edge	103
	4.1.	Test Setup	103
	4.2.	Limits	104
	4.3.	Test Procedure	104
	4.4.	Uncertainty	105
	4.5.	Test Result of Band Edge	106
5.	Duty	Cycle	151
	5.1.	Test Setup	151
	5.2.	Test Procedure	151
	5.3.	Uncertainty	151
	5.4.	Test Result of Duty Cycle	152
6.	EMI	Reduction Method During Compliance Testing	156
Attac	hment 1:	EUT Test Photographs	

Attachment 2: EUT Detailed Photographs



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wireless-AC 9461
Trade Name	Intel
FCC ID.	PD99461D2
Model No.	9461D2W
Frequency Range	802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz, 5745-5825MHz
	802.11n-40MHz: 5190-5310, 5510-5670MHz, 5755-5795MHz
	802.11ac-20MHz: 5720, 802.11ac-40MHz: 5710
	802.11ac-80MHz: 5210-5290MHz, 5530-5690MHz, 5775MHz
Number of Channels	802.11a/n-20MHz: 24; 802.11n-40MHz: 11
	802.11ac-20MHz: 1, 802.11ac-40MHz: 1, 802.11ac-80MHz: 6
Data Rate	802.11a: 6 - 54Mbps
	802.11n: up to 150Mbps
	802.11ac-80MHz: up to 433.3MHz
Channel Control	Auto
Type of Modulation	802.11a/n/ac: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna type	Dipole Antenna
Antenna Gain	Refer to the table "Antenna List"

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WIESON Technologies	GY121HT0321-003-H	Dipole	2.92 dBi for 5.15~5.25GHz
	co., ltd	(External)		3.19 dBi for 5.25~5.35GHz
				4.41 dBi for 5.47~5.725GHz
				4.22 dBi for 5.725~5.850GHz

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

2. Only the higher gain antenna was tested and recorded in this report



802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 036:	5180 MHz	Channel 040:	5200 MHz	Channel 044:	5220 MHz	Channel 048:	5240 MHz
Channel 052:	5260 MHz	Channel 056:	5280 MHz	Channel 060:	5300 MHz	Channel 064:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz	Channel 149:	5745 MHz
Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz	Channel 165:	5825 MHz

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 038:	5190 MHz	Channel 046:	5230 MHz	Channel 054:	5270 MHz	Channel 062:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 118:	5590 MHz	Channel 126:	5630 MHz
Channel 134:	5670 MHz	Channel 151:	5755 MHz	Channel 159:	5795 MHz		

802.11ac-20MHz Center Working Frequency of Each Channel:

Channel Frequency
Channel 144: 5720 MHz

802.11ac-40MHz Center Working Frequency of Each Channel:

Channel Frequency
Channel 142: 5710 MHz

802.11ac-80MHz Center Working Frequency of Each Channel:

Channel Frequency Channel Frequency Channel Frequency Channel Frequency Channel O42: 5210 MHz Channel O58: 5290 MHz Channel 106: 5530 MHz Channel 122: 5610 MHz

Channel 138: 5690 MHz Channel 155: 5775 MHz



Note:

- 1. This device is a Intel® Wireless-AC 9461 with a built-in 802.11a/b/g/n WLAN transceiver.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test
- 3. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report.
- 4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
- 5. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
- 6. This is to request a Class II permissive change for FCC ID: PD99461D2, originally granted on 10/06/2017..

The major change filed under this application is:

Change #1:

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

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

Change #2:

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

Test Mode	Mode 1: Transmit (802.11a-6Mbps)
	Mode 2: Transmit (802.11n-20BW 7.2Mbps)
	Mode 3: Transmit (802.11n-40BW 15Mbps)
	Mode 4: Transmit (802.11ac-20BW-7.2Mbps)
	Mode 5: Transmit (802.11ac-40BW-15Mbps)
	Mode 6: Transmit (802.11ac-80BW-32.5Mbps)



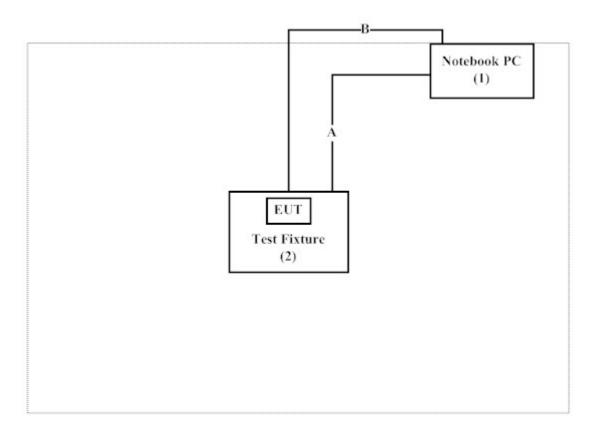
1.3. Tested System Datails

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	P62G	9TSGJC2	Non-Shielded, 1.8m
2	Test Fixture	Intel	N/A	N/A	N/A

Signa	al Cable Type	Signal cable Description
A	USB Cable	Shielded, 1.8m
В	Single Cable	Non-Shielded, 1.0m

1.4. Configuration of tested System



1.5. EUT Exercise Software

- 1. Setup the EUT as shown in Section 1.4.
- 2. Execute software "DRTU (Ver 10.1742.0-06126)" on the EUT.
- 3. Configure the test mode, the test channel, and the data rate.
- 4. Press "OK" to start the continuous Transmit.
- 5. Verify that the EUT works properly.



1.6. Test Facility

Ambient conditions in the laboratory:

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

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

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

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

Site Description: Accredited by TAF

Accredited Number: 3023

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FCC Accreditation Number: TW3023



1.7. List of Test Equipment

For Conducted measurements /ASR4

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

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version: QuieTek Conduction Test System V8.0.110

For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	TESEQ	HLA6121	37133	2016.03.18	2018.03.17
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2017.02.13	2018.02.12
X	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
X	Horn Antenna	Com-Power	AH-840	101087	2017.05.24	2018.05.23
X	Pre-Amplifier	EMCI	EMC001330	980316	2017.05.16	2018.05.15
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2017.05.17	2018.05.16
	Filter	MICRO TRONICS	BRM50702	G251	2017.08.30	2018.08.29
X	Filter	MICRO TRONICS	BRM50716	G188	2017.08.30	2018.08.29
X	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
X	Spectrum Analyzer	R&S	FSV40	101149	2018.01.11	2019.01.10
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2017.05.25	2018.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2017.08.11	2018.08.10

Note:

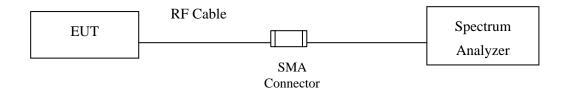
- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version: QuieTek EMI 2.0 V2.1.113



2. Maximun conducted output power

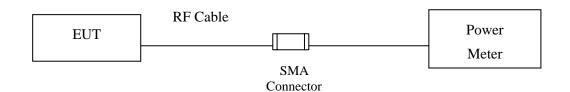
2.1. Test Setup

99% Occupied Bandwidth

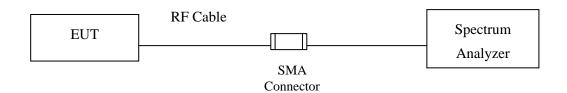


Conduction Power Measurement

Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac)





2.2. Limits

For the band 5.15-5.25 GHz,

- (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
- (iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 99% emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

2.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW ≤40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)

Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

2.4. Uncertainty

Power Meter: ±0.95dB

Spectrum Analyzer: ±1.30dB



2.5. Test Result of Maximum conducted output power

Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power Test Mode : Mode 1: Transmit (802.11a-6Mbps)

Test Date : 2018/01/16

Cab	le loss=1dB			Maximu	m condu	cted outp	out power	r	
					Data Rat	e (Mbps))		
Channel No.	Frequency (MHz)	6	9	12	18	24	36	48	54
				Meas	surement	Level (d	dBm)		
36	5180	16.14		-					
44	5220	16.5	16.41	16.33	16.24	16.10	16.02	15.96	15.85
48	5240	16.34		-					
52	5260	21.04		-					
60	5300	20.7	20.62	20.53	20.41	20.33	20.28	20.14	20.07
64	5320	15.79		-					
100	5500	18.63		-					
116	5580	20.95	20.83	20.71	20.62	20.54	20.43	20.32	20.25
140	5700	18.77							
149	5745	21.11							
157	5785	21.25	21.14	21.07	20.88	20.76	20.65	20.54	20.43
165	5825	20.91							

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

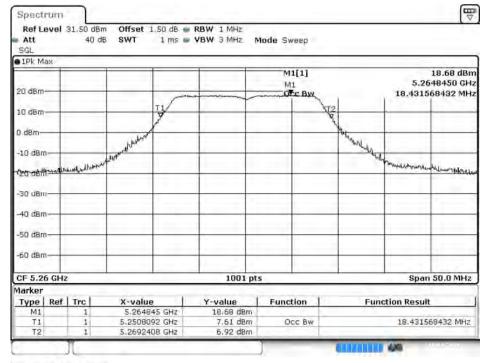
Channel No	Frequency Range	99% Bandwidth	Output Power	Output Power Limit			
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)		
36	5180		16.14	24			
44	5220	-	16.5	24			
48	5240	-	16.34	24			
52	5260	18.432	21.04	24	23.66		
60	5300	18.332	20.7	24	23.63		
64	5320	18.282	15.79	24	23.62		
100	5500	18.382	18.63	24	23.64		
116	5580	18.382	20.95	24	23.64		
140	5700	18.332	18.77	24	23.63		
149	5745	-	21.11	30			
157	5785		21.25	30			
165	5825		20.91	30			

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

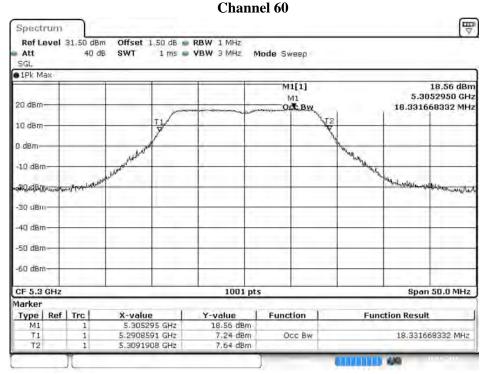


99% Occupied Bandwidth:

Channel 52

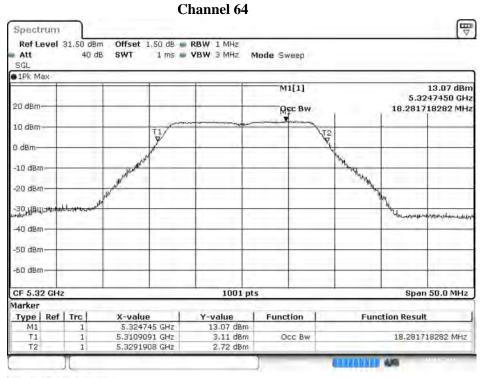


Date: 16.JAN.2018 15:18:21

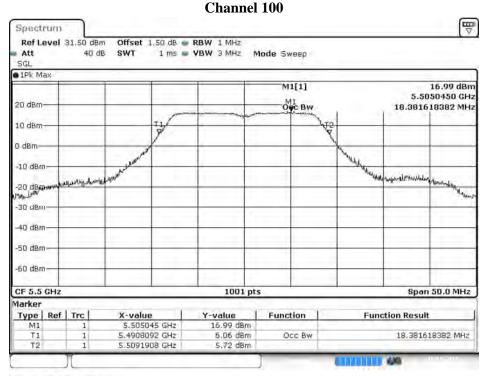


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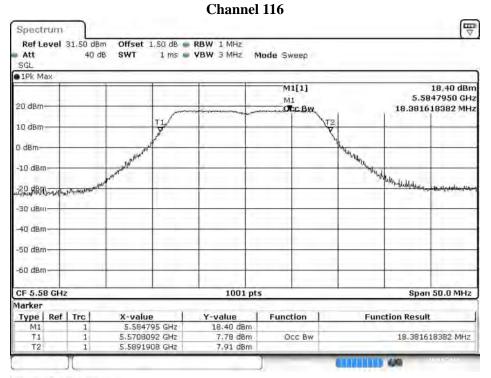


Date: 16 JAN 2018 15:20:03

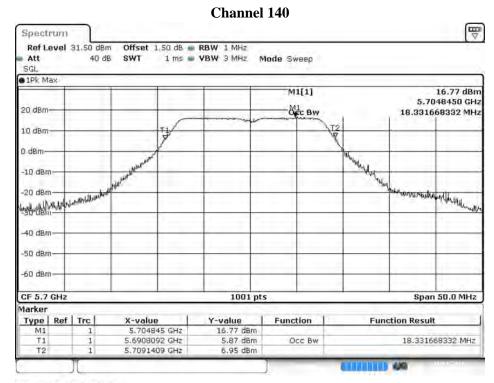


Date: 16.JAN.2018 15:22:06





Date: 16 JAN 2018 15:23:41



Date: 16 JAN 2018 15:24:36



Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps)

Test Date : 2018/01/16

Cab	le loss=1dB			Maximuı	m condu	cted outp	ut power	r		
]	Data Rat	e (Mbps))			
Channel No.	Frequency (MHz)	7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	
		Measurement Level (dBm)								
36	5180	16.17								
44	5220	16.34	16.22	16.13	16.05	15.93	15.84	15.72	15.61	
48	5240	16.73								
52	5260	21.07								
60	5300	20.72	20.63	20.55	20.42	20.31	20.25	20.19	20.04	
64	5320	15.95		1					-	
100	5500	18.17								
116	5580	20.9	20.82	20.71	20.62	20.55	20.46	20.37	20.21	
140	5700	18.75		1						
149	5745	20.98		1					1	
157	5785	21.13	21.07	20.89	20.77	20.62	20.51	20.43	20.35	
165	5825	20.94								

Note: Maximum conducted output power Value = Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

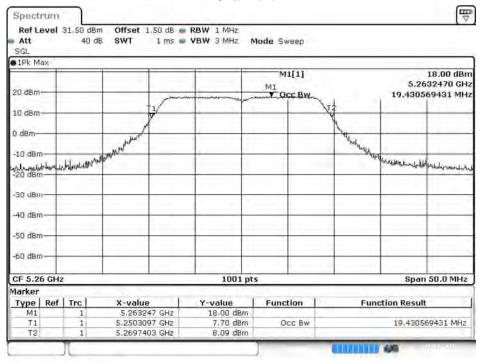
remaining to manuful output		1				
Channel No	Frequency Range	99% Bandwidth	Output Power	Output Power Limit		
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)	
36	5180		16.17	24		
44	5220		16.34	24		
48	5240		16.73	24		
52	5260	19.431	21.07	24	23.88	
60	5300	19.331	20.72	24	23.86	
64	5320	19.281	15.95	24	23.85	
100	5500	19.331	18.17	24	23.86	
116	5580	19.331	20.9	24	23.86	
140	5700	19.331	18.75	24	23.86	
149	5745		20.98	30		
157	5785		21.13	30		
165	5825		20.94	30		

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

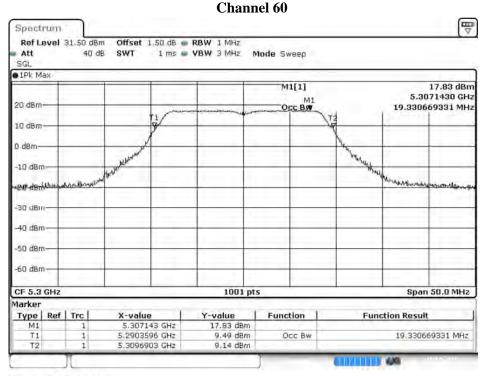


99% Occupied Bandwidth:

Channel 52

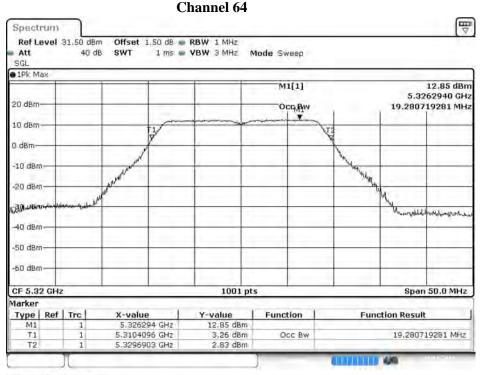


Date: 16.JAN 2018 15:30:37

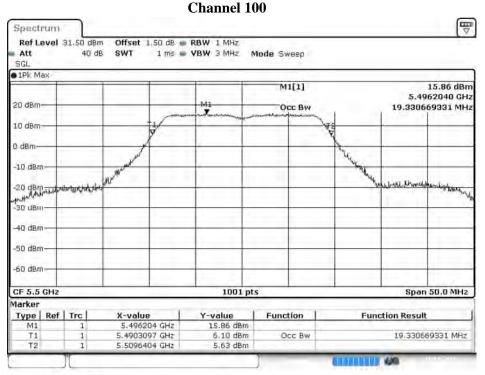


Date: 16.JAN.2018 15:31.44



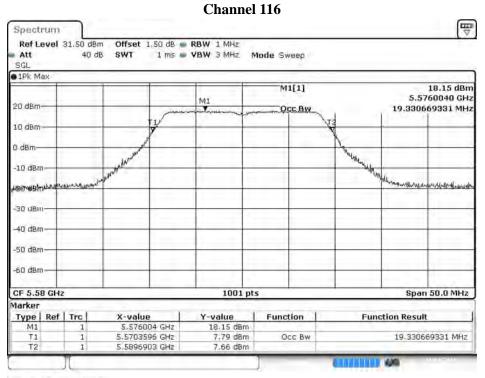


Date: 16 JAN 2018 15:33:03

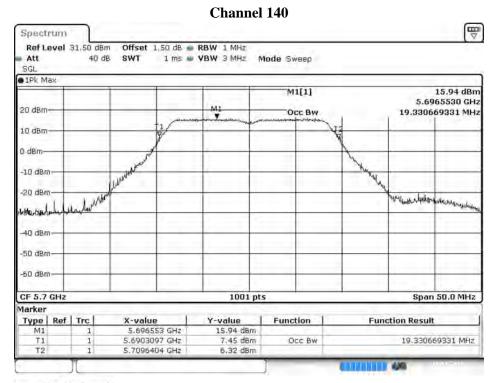


Date: 16.JAN.2018 15:33:57





Date: 16 JAN 2018 15:34:46



Date: 16 JAN 2018 15:36:20



Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps)

Test Date : 2018/01/16

Cab	le loss=1dB	Maximum conducted output power								
		Data Rate (Mbps)								
Channel No.	Frequency (MHz)	15	30	45	60	90	120	135	150	
		Measurement Level (dBm)								
38	5190	16.91								
46	5230	17.11	17.02	16.87	16.74	16.62	16.53	16.42	16.33	
54	5270	19.75								
62	5310	15.35	15.26	15.15	15.03	14.91	14.83	14.75	14.63	
102	5510	17.31								
110	5550	20.56	20.42	20.35	20.27	20.15	20.06	19.89	19.76	
134	5670	18.91								
151	5755	21.11								
159	5795	21.34	21.22	21.15	21.07	20.86	20.75	20.64	20.53	

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

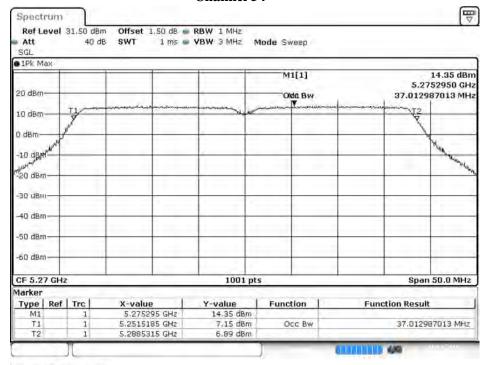
Channel No	Frequency Range	99% Bandwidth	Output Power	Output Po	wer Limit	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)	
38	5190		16.91	24		
46	5230		17.11	24		
54	5270	37.013	19.75	24	26.68	
62	5310	37.063	15.35	24	26.69	
102	5510	37.063	17.31	24	26.69	
110	5550	37.163	20.56	24	26.70	
134	5670	37.063	18.91	24	26.69	
151	5755		21.11	30		
159	5795		21.34	30		

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



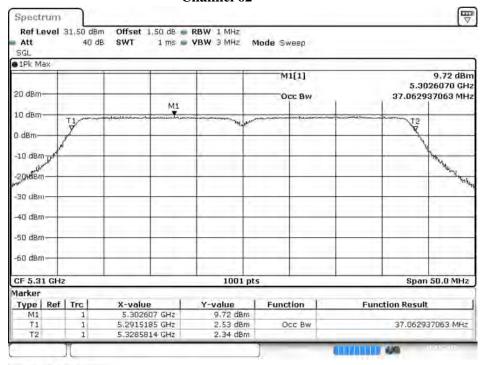
99% Occupied Bandwidth:

Channel 54



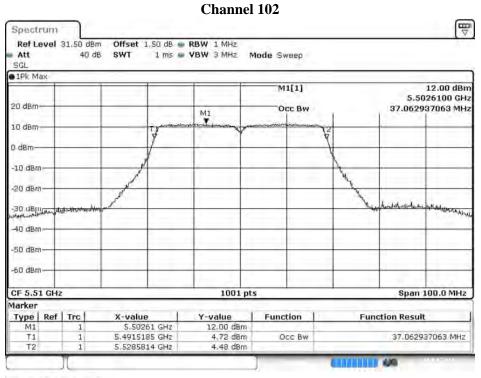
Date: 16.JAN.2018 15:38:54

Channel 62

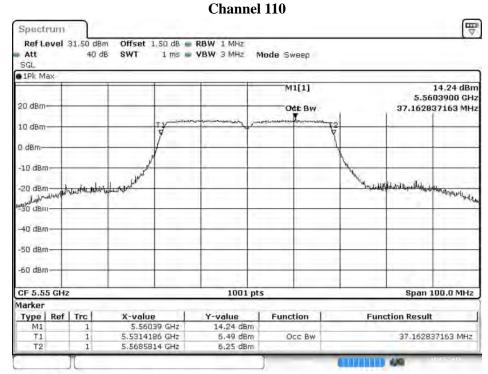


Date: 16.JAN.2018 15:39:57



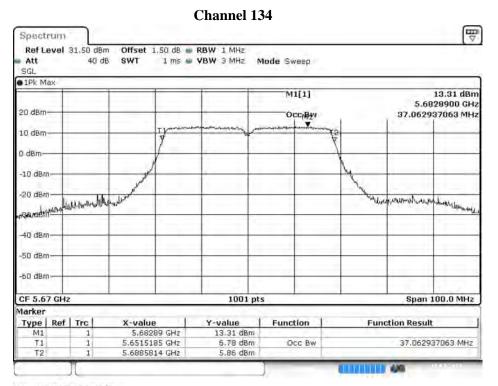


Date: 16.JAN.2018 15:40:45



Date: 16 JAN 2018 15:41:49





Date: 16 JAN 2018 15:42:33



Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power

Test Mode : Mode 4: Transmit (802.11ac-20BW-7.2Mbps)

Test Date : 2018/01/16

Cable loss=1dB		Maximum conducted output power								
	Frequency (MHz)	Data Rate (Mbps)								
Channel No.		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8
		Measurement Level (dBm)								
144 (Band3)	5720	19.22	19.24	19.13	19.05	18.89	18.76	18.62	18.54	18.43
144 (Band4)	5720	13.85	13.77	13.65	13.54	13.49	13.37	13.25	13.18	13.06

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

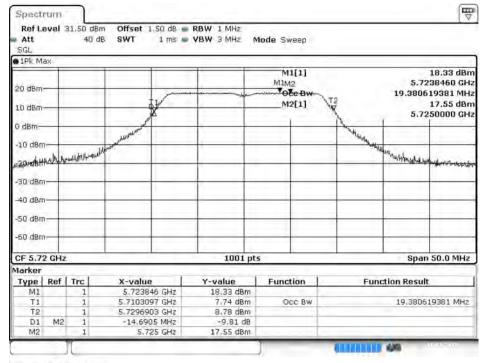
Channel No	Frequency Range	99% Bandwidth	Output Power	Output Power Limit		Result	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)		
144(Band3)	5720	14.69	19.220	24	22.67	Pass	
144(Band4)	5720		13.850	30		Pass	

Note: Power Output Value = Reading value on Spectrum Analyzer + cable loss



99% Occupied Bandwidth:

Channel 144

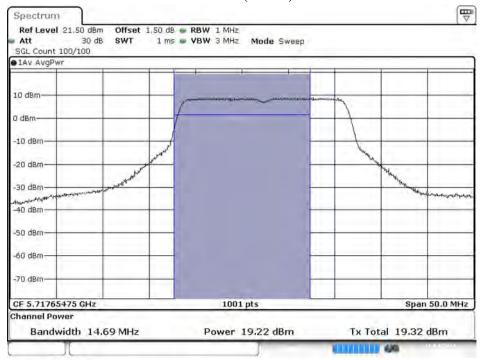


Date: 16 JAN 2018 18:43:34



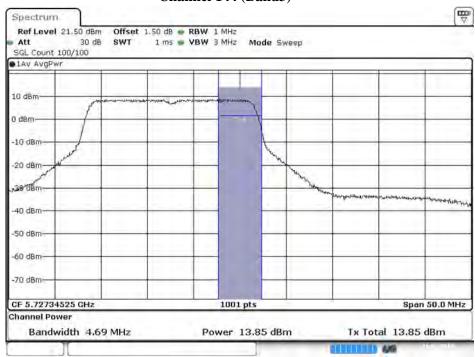
Maximum conducted output power:

Channel 144 (Band3)



Date: 16.JAN 2018 18:43:57

Channel 144 (Band3)



Date: 16.JAN.2018 18.44:19



Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power

Test Mode : Mode 5: Transmit (802.11ac-40BW-15Mbps)

Test Date : 2018/01/16

Cable loss=1dB		Maximum conducted output power									
Channel No	Frequency		Data Rate (Mbps)								
	(MHz)	VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9
142(Band3)	5710	20.2	19.94	19.83	19.75	19.62	19.54	19.43	19.33	19.27	19.15
142(Band4)	5710	9.82	10.06	9.94	9.85	9.72	9.61	9.53	9.47	9.32	9.21

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

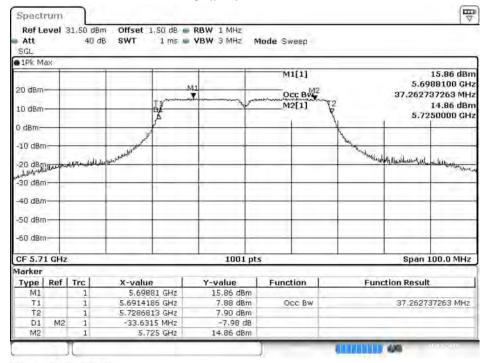
Channel No	Frequency 99% Range Bandwidt		Output Power	Out	Result	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)	
142(Band3)	5710	33.63	20.200	24	26.27	Pass
142(Band4)	5710		9.820	30		Pass

Note: Power Output Value = Reading value on Spectrum Analyzer + cable loss



99% Occupied Bandwidth:

Channel 142

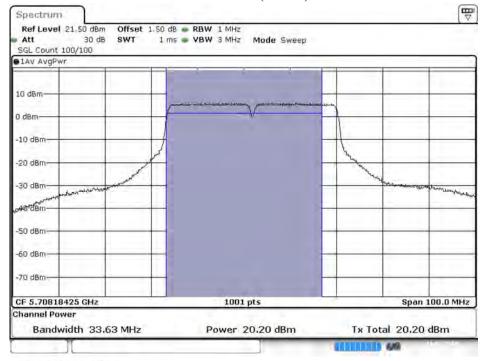


Date: 16 JAN 2018 19:27:20



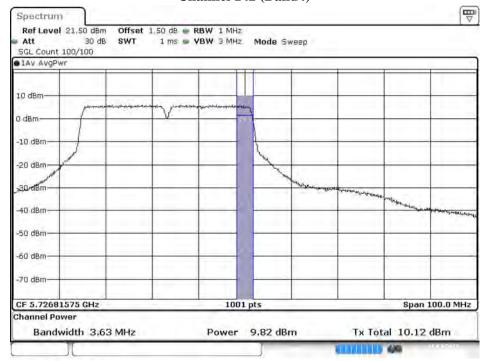
Maximum conducted output power:

Channel 142 (Band3)



Date: 16.JAN.2018 19:27:42

Channel 142 (Band4)



Date: 16.JAN.2018 19:28:05



Product : Intel® Wireless-AC 9461

Test Item : Maximum conducted output power

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps)

Test Date : 2018/01/16

Cable loss=1dB		Maximum conducted output power									
CI IN	Frequency		Data Rate (Mbps)								
Channel No	(MHz)	VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9
42	5210	17.26	17.17	17.06	16.91	16.82	16.73	16.64	16.52	16.41	16.32
58	5290	14.41	14.32	14.27	14.15	14.02	13.90	13.82	13.74	13.61	13.54
106	5530	18	-					-		-	
122	5610	19.75	19.63	19.52	19.44	19.32	19.27	19.15	19.06	18.91	18.84
138(Band3)	5690	20.28									
138(Band4)	5690	2.99	-					-		-	
155	5775	18.46	18.35	18.23	18.11	18.02	17.89	17.74	17.62	17.54	17.43

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

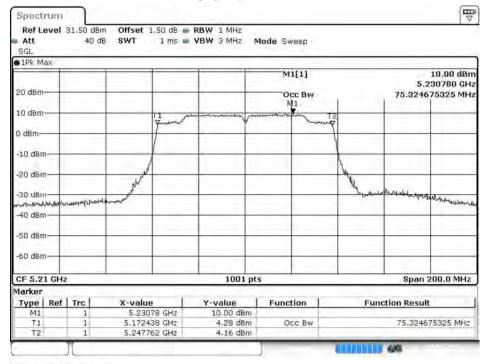
Channel No	Frequency Range	99% Bandwidth	Output Power	Outp	ut Power Limit	Result	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)		
42	5210		17.260	24		Pass	
58	5290	75.32	14.410	24	29.77	Pass	
106	5530	75.32	18.000	24	29.77	Pass	
122	5610	75.12	19.750	24	29.76	Pass	
138(Band3)	5690	72.66	20.280	24	29.61	Pass	
138(Band4)	5690		2.990	30		Pass	
155	5775		18.460	30		Pass	

Note: Power Output Value = Reading value on Spectrum Analyzer + cable loss



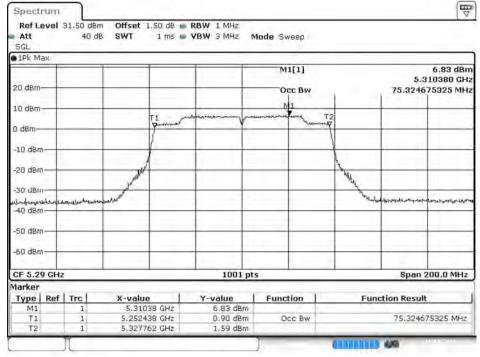
99% Occupied Bandwidth:

Channel 42



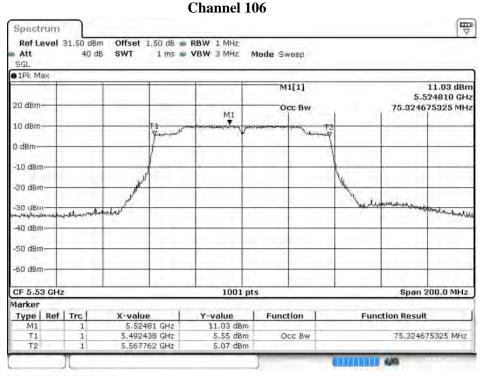
Date: 16.JAN.2018 19:07:02

Channel 58

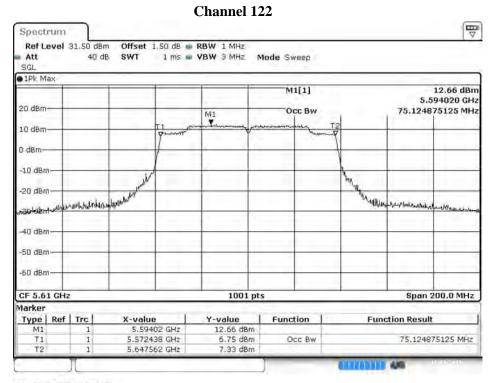


Date: 16 JAN 2018 18:48:39



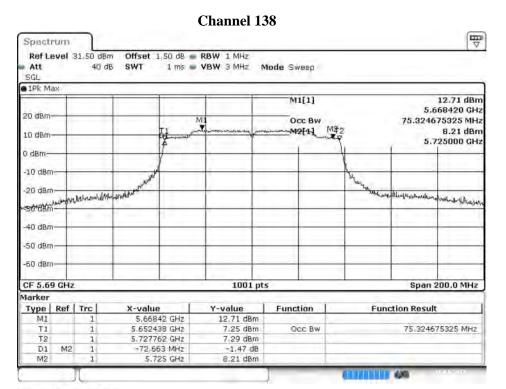


Date: 16.JAN.2018 18:49:52

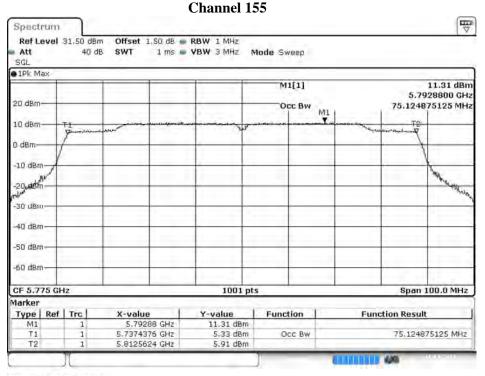


Date: 16 JAN 2018 18:51:00





Date: 16 JAN 2018 19:28:58

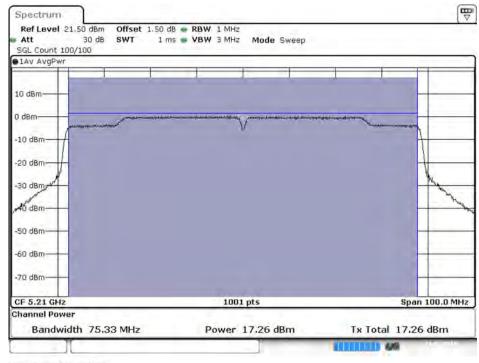


Date: 16 JAN 2018 18:54:05



Maximum conducted output power:

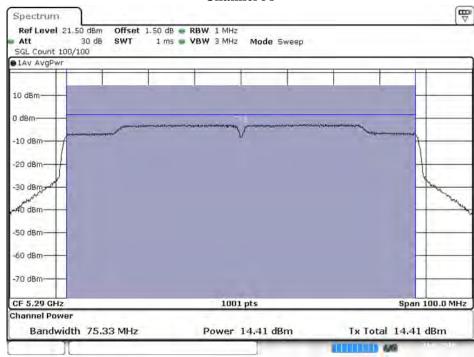
Channel 42



Date: 16 JAN 2018 19:07:24

Maximum conducted output power:

Channel 58

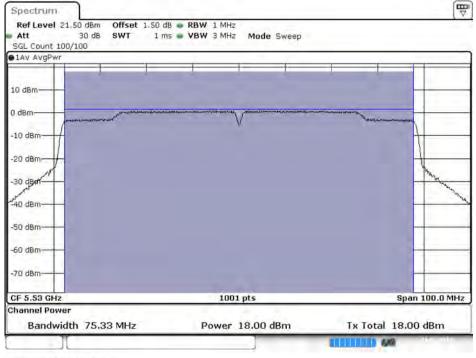


Date: 16.JAN.2018 18.49.02



Maximum conducted output power:

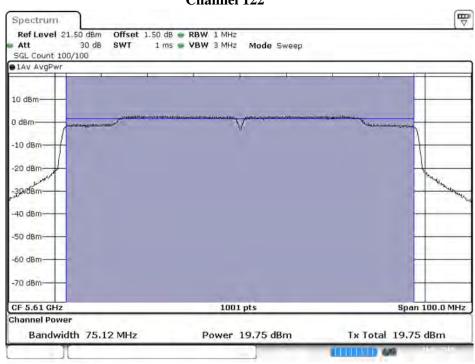
Channel 106



Date: 16.JAN.2018 18:50 15

Maximum conducted output power:

Channel 122

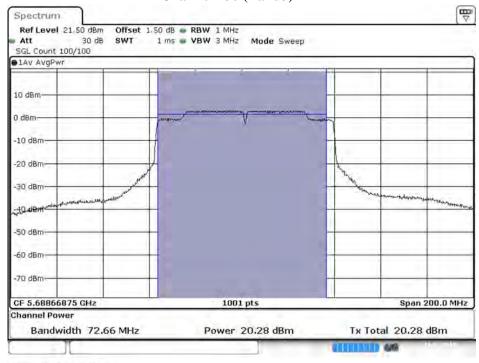


Date: 16 JAN 2018 18:51 23



Maximum conducted output power:

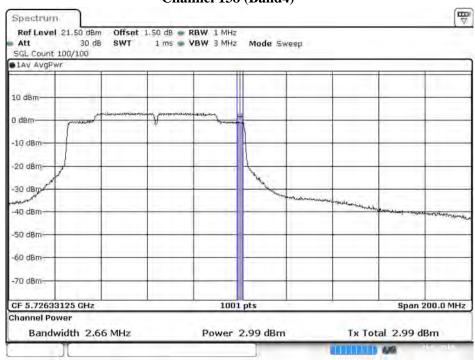
Channel 138 (Band3)



Date: 16.JAN.2018 19:29:20

Maximum conducted output power:

Channel 138 (Band4)

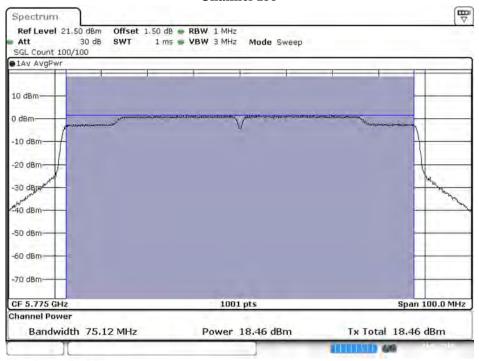


Date: 16.JAN.2018 19:29:43



Maximum conducted output power:

Channel 155



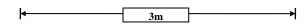
Date: 16.JAN.2018 18:54:27

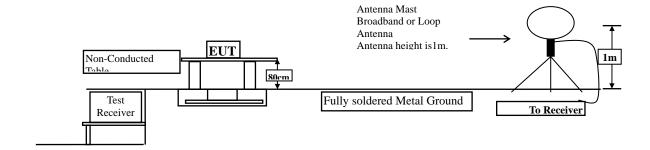


3. Radiated Emission

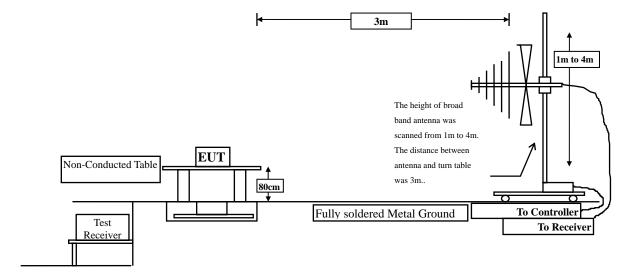
3.1. Test Setup

Radiated Emission Under 30MHz

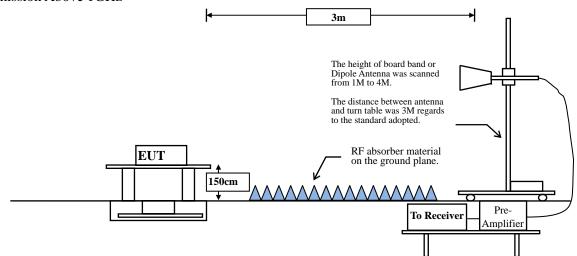




Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Page: 40 of 156



3.2. 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(a) Limits						
Frequency MHz	Field strength	Measurement distance				
2.222	(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: E field strength $(dB\mu V/m) = 20 \log E$ field strength (uV/m)



3.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 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.



RBW and **VBW** Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

 $VBW \ge 3MHz$.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

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

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

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

5GHz band	Duty Cycle	T	1/T	VBW
	(%)	(ms)	(Hz)	(Hz)
802.11a	98.61	2.0507	488	10
802.11n20	99.61	37.0290	27	10
802.11n40	99.20	17.8986	56	10
802.11ac20	99.36	49.4200	20	10
802.11ac40	98.79	23.7681	42	10
802.11ac80	98.70	10.9855	91	10

Note: Duty Cycle Refer to Section 5

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: $\pm 4.81dB$; 300M-1GHz: $\pm 3.87dB$; 1-18GHz: $\pm 3.83dB$; 18-40GHz: $\pm 3.98dB$



3.5. Test Result of Radiated Emission

Product : Intel® Wireless-AC 9461

Test Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10360.000	3.504	43.550	47.055	-26.945	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10360.000	3.504	43.710	47.215	-26.785	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5220MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10440.000	3.544	43.270	46.814	-27.186	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10440.000	3.544	43.420	46.964	-27.036	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5240MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10480.000	3.639	43.340	46.980	-27.020	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10480.000	3.639	43.920	47.560	-26.440	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5260MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10520.000	47.246	43.440	47.110	-26.890	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10520.000	3.670	43.930	47.600	-26.400	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5300MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10600.000	3.746	43.740	47.486	-26.514	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10600.000	3.746	43.510	47.256	-26.744	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.



Test Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10640.000	3.806	44.200	48.006	-25.994	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
10640.000	3.806	43.990	47.796	-26.204	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11000.000	4.343	42.650	46.993	-27.007	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11000.000	4.343	42.480	46.823	-27.177	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5580MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11160.000	4.723	43.410	48.133	-25.867	74.000
Average Detector:					
Detector:					54.000
 \$74! 1					34.000
Vertical					
Peak Detector:					
11160.000	4.723	43.580	48.303	-25.697	74.000
A 210 220 220					
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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5700MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11400.000	5.312	42.210	47.521	-26.479	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11400.000	5.312	43.020	48.331	-25.669	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5745MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal Peak Detector:					
11490.000	5.544	40.860	46.404	-27.596	74.000
Average Detector:					
					54.000
Vertical Peak Detector:					
11490.000	5.544	41.450	46.994	-27.006	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5785MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11570.000	5.749	41.720	47.470	-26.530	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11570.000	5.749	41.670	47.420	-26.580	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5825MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11650.000	5.938	41.880	47.818	-26.182	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11650.000	5.938	43.410	49.348	-24.652	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5180MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10360.000	3.504	43.330	46.835	-27.165	74.000
Average Detector:					7.000
					54.000
Vertical					
Peak Detector:					
10360.000	3.504	43.770	47.275	-26.725	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5220MHz)

Test Date : 2017/12/25

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10440.000	3.544	42.910	46.454	-27.546	74.000
Average Detector:					54.000
Vertical Peak Detector: 10440.000	3.544	42.850	46.394	-27.606	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5240MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10480.000	3.639	43.660	47.300	-26.700	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
10480.000	3.639	43.160	46.800	-27.200	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5260MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10520.000	3.670	43.370	47.040	-26.960	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
10520.000	3.670	43.320	46.990	-27.010	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5300MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10600.000	3.746	43.410	47.156	-26.844	74.000
Average Detector:					54.000
Vertical Peak Detector: 10600.000	3.746	42.690	46.436	-27.564	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5320MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10640.000	3.806	44.600	48.406	-25.594	74.000
Average Detector: 					54.000
Vertical					
Peak Detector:					
10640.000	3.806	43.870	47.676	-26.324	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5500MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11000.000	4.343	43.100	47.443	-26.557	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11000.000	4.343	42.640	46.983	-27.017	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5580MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11160.000	4.723	43.630	48.353	-25.647	74.000
Average Detector: 					54.000
Vertical Peak Detector: 11160.000	4.723	43.610	48.333	-25.667	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5700MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11400.000	5.312	42.130	47.441	-26.559	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11400.000	5.312	42.530	47.841	-26.159	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5745MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11490.000	5.544	41.240	46.784	-27.216	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11490.000	5.544	42.170	47.714	-26.286	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5785MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11570.000	5.749	42.980	48.730	-25.270	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11570.000	5.749	42.880	48.630	-25.370	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5825MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11650.000	5.938	41.640	47.578	-26.422	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11650.000	5.938	43.680	49.618	-24.382	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10380.000	3.511	42.420	45.931	-28.069	74.000
Average Detector:					54,000
					54.000
Vertical					
Peak Detector:					
10380.000	3.511	42.770	46.281	-27.719	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5230MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	dBμV/m
Horizontal					
Peak Detector:					
10460.000	3.575	43.720	47.295	-26.705	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
10460.000	3.575	43.980	47.555	-26.445	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5270MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10540.000	3.706	43.160	46.866	-27.134	74.000
Average Detector:					54.000
					34.000
Vertical					
Peak Detector:					
10540.000	3.706	43.310	47.016	-26.984	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5310MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10620.000	3.790	43.520	47.310	-26.690	74.000
Average Detector:					T. 1.000
					54.000
Vertical					
Peak Detector:					
10620.000	3.790	43.030	46.820	-27.180	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11020.000	4.380	41.920	46.300	-27.700	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11020.000	4.380	42.240	46.620	-27.380	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5550MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11100.000	4.575	43.440	48.015	-25.985	74.000
Average Detector:					54,000
					54.000
Vertical					
Peak Detector:					
11100.000	4.575	43.360	47.935	-26.065	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5670MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11340.000	5.165	42.410	47.575	-26.425	74.000
Average Detector:					54.000
					31.000
Vertical					
Peak Detector:					
11340.000	5.165	42.840	48.005	-25.995	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11510.000	5.597	41.390	46.987	-27.013	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11510.000	5.597	42.210	47.807	-26.193	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5795MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11590.000	5.785	41.670	47.455	-26.545	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11590.000	5.785	42.040	47.825	-26.175	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 4: Transmit (802.11ac-20BW-7.2Mbps) (5720MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11440.000	5.410	42.590	48.000	-26.000	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11440.000	5.410	42.870	48.280	-25.720	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 5: Transmit (802.11ac-40BW-15Mbps) (5710MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11420.000	5.389	41.660	47.049	-26.951	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
11420.000	5.389	42.860	48.249	-25.751	74.000
Average Detector:					71.000
					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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5210MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10420.000	3.508	43.020	46.529	-27.471	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
10420.000	3.508	43.400	46.909	-27.091	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5290MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10580.000	3.711	43.450	47.161	-26.839	74.000
Average Detector:					
					54.000
Vertical					
Peak Detector:					
10580.000	3.711	43.210	46.921	-27.079	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5530MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11060.000	4.474	41.730	46.204	-27.796	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11060.000	4.474	43.300	47.774	-26.226	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5610MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11220.000	4.869	43.500	48.369	-25.631	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11220.000	4.869	42.900	47.769	-26.231	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5690MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11380.000	5.265	42.490	47.755	-26.245	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11380.000	5.265	41.700	46.965	-27.035	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 Item : Harmonic Radiated Emission Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5775MHz)

Test Date : 2017/12/26

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11550.000	5.705	42.120	47.825	-26.175	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
11550.000	5.705	41.600	47.305	-26.695	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 (802.11a-6Mbps) (5220MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m \\$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
177.440	-11.857	39.064	27.207	-16.293	43.500
312.270	-9.626	37.561	27.935	-18.065	46.000
395.690	-7.462	36.457	28.995	-17.005	46.000
597.450	-3.130	36.498	33.368	-12.632	46.000
800.180	-0.323	35.894	35.571	-10.429	46.000
937.920	1.308	30.407	31.715	-14.285	46.000
Vertical					
Peak Detector					
131.850	-11.768	40.692	28.924	-14.576	43.500
311.300	-9.647	34.222	24.575	-21.425	46.000
409.270	-7.127	33.071	25.944	-20.056	46.000
597.450	-3.130	37.638	34.508	-11.492	46.000
800.180	-0.323	33.377	33.054	-12.946	46.000
964.110	1.659	29.213	30.872	-23.128	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.



Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
172.590	-11.208	39.382	28.174	-15.326	43.500
312.270	-9.626	37.202	27.576	-18.424	46.000
465.530	-5.900	31.541	25.641	-20.359	46.000
599.390	-3.082	34.913	31.831	-14.169	46.000
800.180	-0.323	34.584	34.261	-11.739	46.000
937.920	1.308	30.923	32.231	-13.769	46.000
Vertical					
Peak Detector					
131.850	-11.768	39.175	27.407	-16.093	43.500
311.300	-9.647	36.853	27.206	-18.794	46.000
404.420	-7.240	34.277	27.037	-18.963	46.000
599.390	-3.082	37.416	34.334	-11.666	46.000
800.180	-0.323	33.067	32.744	-13.256	46.000
947.620	1.405	29.184	30.589	-15.411	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 1: Transmit (802.11a-6Mbps) (5580MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
180.350	-12.239	41.006	28.767	-14.733	43.500
312.270	-9.626	38.247	28.621	-17.379	46.000
395.690	-7.462	37.569	30.107	-15.893	46.000
599.390	-3.082	34.755	31.673	-14.327	46.000
800.180	-0.323	34.964	34.641	-11.359	46.000
949.560	1.427	30.880	32.307	-13.693	46.000
Vertical					
Peak Detector					
131.850	-11.768	40.709	28.941	-14.559	43.500
296.750	-9.973	33.484	23.511	-22.489	46.000
390.840	-7.597	35.450	27.853	-18.147	46.000
597.450	-3.130	37.549	34.419	-11.581	46.000
796.300	-0.368	33.573	33.205	-12.795	46.000
996.120	2.163	29.721	31.884	-22.116	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.



Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5785MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
171.620	-11.078	40.550	29.472	-14.028	43.500
312.270	-9.626	39.262	29.636	-16.364	46.000
455.830	-6.067	31.832	25.765	-20.235	46.000
600.360	-3.066	34.913	31.847	-14.153	46.000
800.180	-0.323	35.037	34.714	-11.286	46.000
962.170	1.628	28.971	30.599	-23.401	54.000
Vertical					
Peak Detector					
131.850	-11.768	40.814	29.046	-14.454	43.500
312.270	-9.626	36.671	27.045	-18.955	46.000
408.300	-7.150	33.810	26.660	-19.340	46.000
599.390	-3.082	37.266	34.184	-11.816	46.000
796.300	-0.368	34.270	33.902	-12.098	46.000
964.110	1.659	29.914	31.573	-22.427	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.



Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5220MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
177.440	-11.857	40.851	28.994	-14.506	43.500
312.270	-9.626	37.973	28.347	-17.653	46.000
463.590	-5.933	31.967	26.034	-19.966	46.000
597.450	-3.130	35.552	32.422	-13.578	46.000
797.270	-0.357	36.279	35.922	-10.078	46.000
937.920	1.308	31.278	32.586	-13.414	46.000
Vertical					
Peak Detector					
177.440	-11.857	45.117	33.260	-10.240	43.500
312.270	-9.626	36.160	26.534	-19.466	46.000
462.620	-5.949	32.329	26.380	-19.620	46.000
597.450	-3.130	36.869	33.739	-12.261	46.000
800.180	-0.323	34.053	33.730	-12.270	46.000
939.860	1.330	29.580	30.910	-15.090	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 (802.11n-20BW 7.2Mbps) (5320MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
179.380	-12.116	40.159	28.043	-15.457	43.500
312.270	-9.626	38.416	28.790	-17.210	46.000
459.710	-6.000	30.517	24.517	-21.483	46.000
600.360	-3.066	36.106	33.040	-12.960	46.000
800.180	-0.323	35.016	34.693	-11.307	46.000
937.920	1.308	30.183	31.491	-14.509	46.000
Vertical					
Peak Detector					
131.850	-11.768	40.306	28.538	-14.962	43.500
312.270	-9.626	35.919	26.293	-19.707	46.000
466.500	-5.883	32.578	26.695	-19.305	46.000
600.360	-3.066	38.019	34.953	-11.047	46.000
800.180	-0.323	35.159	34.836	-11.164	46.000
966.050	1.687	28.923	30.610	-23.390	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.



Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5580MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
174.530	-11.467	40.510	29.043	-14.457	43.500
312.270	-9.626	39.159	29.533	-16.467	46.000
446.130	-6.271	30.826	24.555	-21.445	46.000
600.360	-3.066	35.661	32.595	-13.405	46.000
800.180	-0.323	34.765	34.442	-11.558	46.000
937.920	1.308	29.917	31.225	-14.775	46.000
Vertical					
Peak Detector					
131.850	-11.768	40.326	28.558	-14.942	43.500
312.270	-9.626	35.939	26.313	-19.687	46.000
455.830	-6.067	32.030	25.963	-20.037	46.000
600.360	-3.066	37.537	34.471	-11.529	46.000
797.270	-0.357	33.606	33.249	-12.751	46.000
970.900	1.760	29.809	31.569	-22.431	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.



Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5785MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	39.717	27.949	-15.551	43.500
312.270	-9.626	37.867	28.241	-17.759	46.000
458.740	-6.016	31.283	25.267	-20.733	46.000
597.450	-3.130	35.202	32.072	-13.928	46.000
797.270	-0.357	35.186	34.829	-11.171	46.000
937.920	1.308	30.620	31.928	-14.072	46.000
Vertical					
Peak Detector					
131.850	-11.768	41.629	29.861	-13.639	43.500
311.300	-9.647	36.624	26.977	-19.023	46.000
477.170	-5.702	37.416	31.714	-14.286	46.000
600.360	-3.066	37.932	34.866	-11.134	46.000
800.180	-0.323	33.965	33.642	-12.358	46.000
963.140	1.644	29.723	31.367	-22.633	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.



Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5230MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	39.886	28.118	-15.382	43.500
312.270	-9.626	39.608	29.982	-16.018	46.000
450.010	-6.169	31.323	25.154	-20.846	46.000
597.450	-3.130	35.970	32.840	-13.160	46.000
800.180	-0.323	35.345	35.022	-10.978	46.000
937.920	1.308	31.282	32.590	-13.410	46.000
Vertical					
Peak Detector					
141.550	-10.916	42.265	31.349	-12.151	43.500
312.270	-9.626	36.631	27.005	-18.995	46.000
480.080	-5.653	33.628	27.975	-18.025	46.000
600.360	-3.066	37.578	34.512	-11.488	46.000
800.180	-0.323	34.879	34.556	-11.444	46.000
952.470	1.470	29.177	30.647	-15.353	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 (802.11n-40BW 15Mbps) (5310MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
177.440	-11.857	38.785	26.928	-16.572	43.500
312.270	-9.626	38.653	29.027	-16.973	46.000
464.560	-5.916	31.731	25.815	-20.185	46.000
597.450	-3.130	35.582	32.452	-13.548	46.000
796.300	-0.368	34.845	34.477	-11.523	46.000
937.920	1.308	31.452	32.760	-13.240	46.000
Vertical					
Peak Detector					
131.850	-11.768	40.973	29.205	-14.295	43.500
311.300	-9.647	36.285	26.638	-19.362	46.000
465.530	-5.900	30.939	25.039	-20.961	46.000
600.360	-3.066	35.806	32.740	-13.260	46.000
800.180	-0.323	33.081	32.758	-13.242	46.000
980.600	1.912	28.952	30.864	-23.136	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.



Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5550MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
178.410	-11.987	45.962	33.975	-9.525	43.500
312.270	-9.626	38.205	28.579	-17.421	46.000
449.040	-6.192	30.790	24.598	-21.402	46.000
597.450	-3.130	35.355	32.225	-13.775	46.000
797.270	-0.357	34.666	34.309	-11.691	46.000
937.920	1.308	31.316	32.624	-13.376	46.000
Vertical					
Peak Detector					
98.870	-16.032	47.970	31.938	-11.562	43.500
312.270	-9.626	36.282	26.656	-19.344	46.000
466.500	-5.883	32.419	26.536	-19.464	46.000
600.360	-3.066	37.873	34.807	-11.193	46.000
800.180	-0.323	34.175	33.852	-12.148	46.000
955.380	1.514	30.158	31.672	-14.328	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 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m \\$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	38.356	26.588	-16.912	43.500
263.770	-11.200	43.130	31.930	-14.070	46.000
395.690	-7.462	34.395	26.933	-19.067	46.000
597.450	-3.130	35.755	32.625	-13.375	46.000
796.300	-0.368	35.047	34.679	-11.321	46.000
937.920	1.308	32.305	33.613	-12.387	46.000
Vertical					
Peak Detector					
142.520	-10.880	38.671	27.791	-15.709	43.500
312.270	-9.626	36.844	27.218	-18.782	46.000
462.620	-5.949	32.017	26.068	-19.932	46.000
600.360	-3.066	37.761	34.695	-11.305	46.000
800.180	-0.323	35.193	34.870	-11.130	46.000
951.500	1.455	29.579	31.034	-14.966	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 4: Transmit (802.11ac-20BW-7.2Mbps) (5720MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	37.912	26.144	-17.356	43.500
263.770	-11.200	40.083	28.883	-17.117	46.000
395.690	-7.462	37.779	30.317	-15.683	46.000
600.360	-3.066	36.932	33.866	-12.134	46.000
797.270	-0.357	34.621	34.264	-11.736	46.000
937.920	1.308	30.201	31.509	-14.491	46.000
Vertical					
Peak Detector					
143.490	-10.846	38.688	27.842	-15.658	43.500
312.270	-9.626	36.490	26.864	-19.136	46.000
480.080	-5.653	36.944	31.291	-14.709	46.000
600.360	-3.066	36.298	33.232	-12.768	46.000
800.180	-0.323	34.537	34.214	-11.786	46.000
950.530	1.440	29.083	30.523	-15.477	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 5: Transmit (802.11ac-40BW-15Mbps) (5710MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
170.650	-10.949	40.940	29.991	-13.509	43.500
312.270	-9.626	39.290	29.664	-16.336	46.000
455.830	-6.067	32.371	26.304	-19.696	46.000
599.390	-3.082	35.616	32.534	-13.466	46.000
800.180	-0.323	35.565	35.242	-10.758	46.000
937.920	1.308	32.635	33.943	-12.057	46.000
Vertical					
Peak Detector					
142.520	-10.880	40.257	29.377	-14.123	43.500
312.270	-9.626	38.032	28.406	-17.594	46.000
488.810	-5.495	37.950	32.455	-13.545	46.000
597.450	-3.130	37.349	34.219	-11.781	46.000
796.300	-0.368	35.423	35.055	-10.945	46.000
967.020	1.701	29.595	31.296	-22.704	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.



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5210MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	39.934	28.166	-15.334	43.500
263.770	-11.200	39.099	27.899	-18.101	46.000
395.690	-7.462	37.088	29.626	-16.374	46.000
597.450	-3.130	35.675	32.545	-13.455	46.000
800.180	-0.323	34.691	34.368	-11.632	46.000
937.920	1.308	31.724	33.032	-12.968	46.000
Vertical					
Peak Detector					
171.620	-11.078	40.965	29.887	-13.613	43.500
312.270	-9.626	36.298	26.672	-19.328	46.000
457.770	-6.033	31.923	25.890	-20.110	46.000
600.360	-3.066	36.413	33.347	-12.653	46.000
800.180	-0.323	33.414	33.091	-12.909	46.000
960.230	1.599	28.396	29.995	-24.005	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.



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5290MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
193.930	-13.404	44.219	30.815	-12.685	43.500
395.690	-7.462	35.129	27.667	-18.333	46.000
498.510	-5.330	29.371	24.041	-21.959	46.000
597.450	-3.130	35.338	32.208	-13.792	46.000
800.180	-0.323	35.479	35.156	-10.844	46.000
937.920	1.308	31.167	32.475	-13.525	46.000
Vertical					
Peak Detector					
141.550	-10.916	40.090	29.174	-14.326	43.500
312.270	-9.626	36.349	26.723	-19.277	46.000
468.440	-5.851	32.096	26.245	-19.755	46.000
599.390	-3.082	37.338	34.256	-11.744	46.000
796.300	-0.368	34.392	34.024	-11.976	46.000
967.020	1.701	28.719	30.420	-23.580	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.



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5530MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
174.530	-11.467	36.734	25.267	-18.233	43.500
312.270	-9.626	38.160	28.534	-17.466	46.000
455.830	-6.067	31.630	25.563	-20.437	46.000
600.360	-3.066	35.495	32.429	-13.571	46.000
796.300	-0.368	34.688	34.320	-11.680	46.000
951.500	1.455	29.531	30.986	-15.014	46.000
Vertical					
Peak Detector					
111.480	-13.947	42.438	28.491	-15.009	43.500
239.520	-11.895	35.348	23.453	-22.547	46.000
397.630	-7.408	34.594	27.186	-18.814	46.000
599.390	-3.082	36.122	33.040	-12.960	46.000
800.180	-0.323	33.953	33.630	-12.370	46.000
961.200	1.614	29.933	31.547	-22.453	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.



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5775MHz)

Test Date : 2018/01/05

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
131.850	-11.768	38.628	26.860	-16.640	43.500
312.270	-9.626	38.255	28.629	-17.371	46.000
462.620	-5.949	31.934	25.985	-20.015	46.000
600.360	-3.066	36.386	33.320	-12.680	46.000
796.300	-0.368	35.096	34.728	-11.272	46.000
960.230	1.599	29.476	31.075	-22.925	54.000
Vertical					
Peak Detector					
171.620	-11.078	40.383	29.305	-14.195	43.500
312.270	-9.626	36.186	26.560	-19.440	46.000
398.600	-7.380	33.693	26.313	-19.687	46.000
599.390	-3.082	37.249	34.167	-11.833	46.000
800.180	-0.323	33.652	33.329	-12.671	46.000
955.380	1.514	28.418	29.932	-16.068	46.000

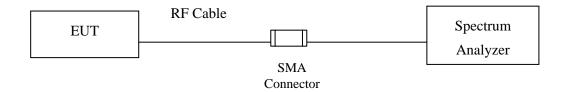
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 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.



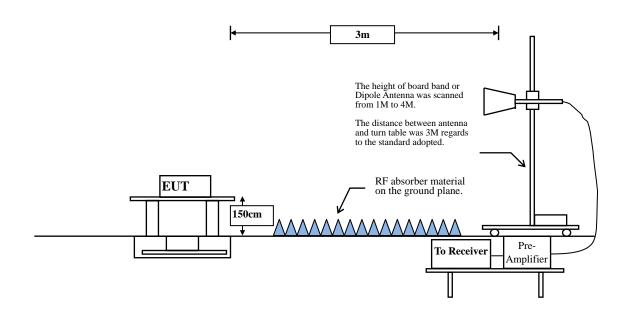
4. Band Edge

4.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:





4.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

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 $(dB\mu V) = 20 \log RF \text{ Voltage } (uV)$
 - 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.

4.3. **Test Procedure**

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 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 below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.



RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

 $VBW \ge 3MHz$.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

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

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

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

5GHz band	Duty Cycle	T	1/T	VBW
	(%)	(ms)	(Hz)	(Hz)
802.11a	98.61	2.0507	488	10
802.11n20	99.61	37.0290	27	10
802.11n40	99.20	17.8986	56	10
802.11ac20	99.36	49.4200	20	10
802.11ac40	98.79	23.7681	42	10
802.11ac80	98.70	10.9855	91	10

Note: Duty Cycle Refer to Section 5

4.4. Uncertainty

Conducted: ±1.23dB

Radiated:

Horizontal polarization: 1-18GHz: ±3.77dB

Vertical polarization: 1-18GHz: ±3.83dB



4.5. Test Result of Band Edge

Product : Intel® Wireless-AC 9461

Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Horizontal):

CI 1N	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5137.391	18.291	38.384	56.675	74.00	54.00	Pass
36 (Peak)	5150.000	18.335	35.230	53.564	74.00	54.00	Pass
36 (Peak)	5175.362	18.390	84.033	102.422			
36 (Average)	5150.000	18.335	19.460	37.794	74.00	54.00	Pass
36 (Average)	5172.899	18.383	72.463	90.845			

Figure Channel 36:

Horizontal (Peak)

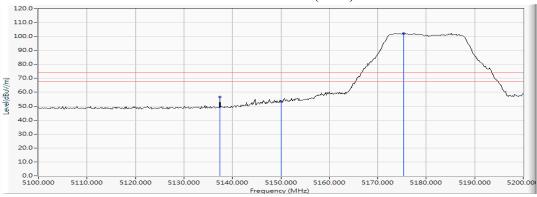
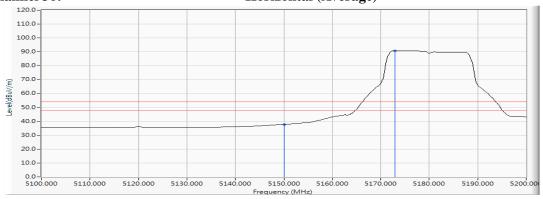


Figure Channel 36:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

Test Date : 2018/01/11

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
	/	(/				/	_
36 (Peak)	5149.130	18.331	36.424	54.755	74.00	54.00	Pass
36 (Peak)	5150.000	18.335	35.983	54.317	74.00	54.00	Pass
36 (Peak)	5186.087	18.420	88.889	107.309	1	1	
36 (Average)	5150.000	18.335	21.172	39.506	74.00	54.00	Pass
36 (Average)	5186.522	18.421	77.129	95.550		-	

Figure Channel 36:

Vertical (Peak)

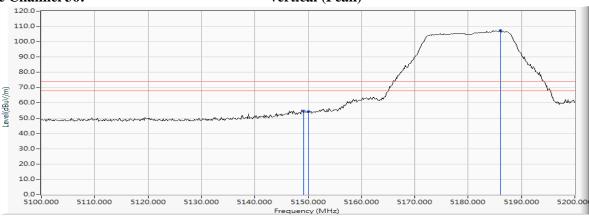
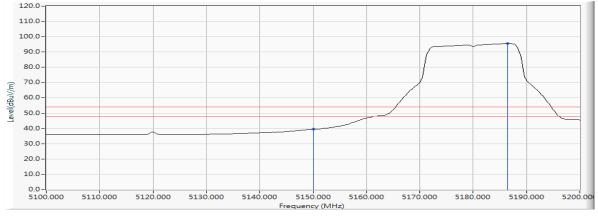


Figure Channel 36:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Horizontal):

Channel No.	•		~	Emission Level		_	Result
Chamici 140.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
64 (Peak)	5324.928	18.755	84.366	103.120	-		
64 (Peak)	5350.000	18.833	33.449	52.282	74.00	54.00	Pass
64 (Peak)	5350.725	18.834	35.234	54.068	74.00	54.00	Pass
64 (Average)	5322.754	18.749	72.242	90.991	-		
64 (Average)	5350.000	18.833	19.592	38.425	74.00	54.00	Pass

Figure Channel 64:

Horizontal (Peak)

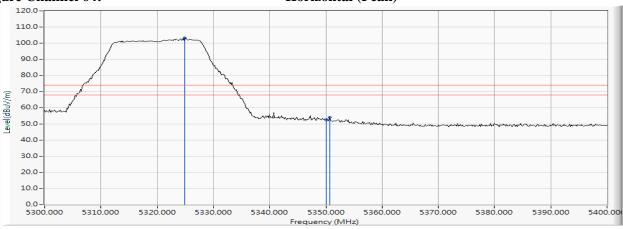
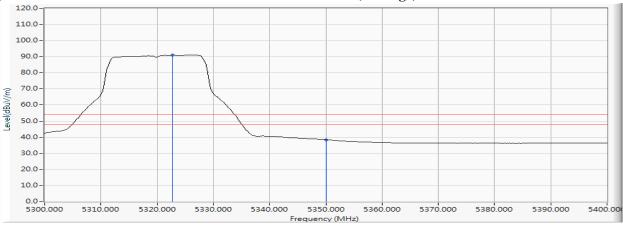


Figure Channel 64:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
64 (Peak)	5325.362	18.755	88.051	106.806			
64 (Peak)	5350.000	18.833	34.708	53.541	74.00	54.00	Pass
64 (Peak)	5351.014	18.834	37.952	56.786	74.00	54.00	Pass
64 (Average)	5326.812	18.759	76.029	94.788			
64 (Average)	5350.000	18.833	21.754	40.587	74.00	54.00	Pass

Figure Channel 64:

Vertical (Peak)

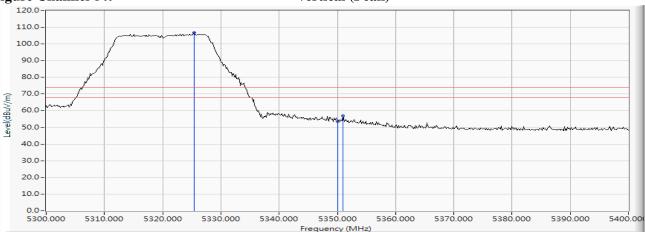
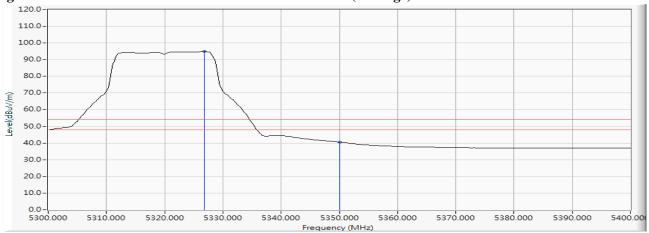


Figure Channel 64:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

Test Date : 2018/01/15

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
100 (Peak)	5449.565	19.065	41.393	60.457	74.00	54.00	Pass
100 (Peak)	5460.000	19.097	39.535	58.632	74.00	54.00	Pass
100 (Peak)	5505.072	19.195	85.684	104.879			-
100 (Average)	5460.000	19.097	26.898	45.995	74.00	54.00	Pass
100 (Average)	5505.507	19.196	73.490	92.685			

Figure Channel 100:

Horizontal (Peak)

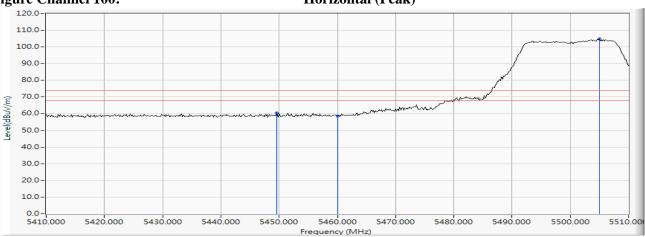
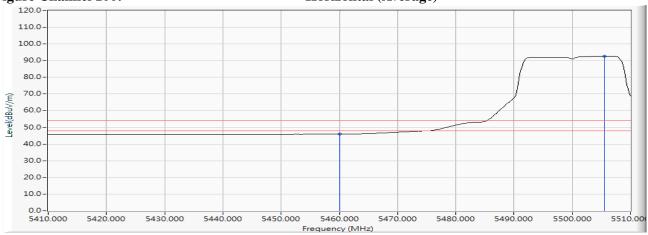


Figure Channel 100:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

Test Date : 2018/01/15

RF Radiated Measurement (Vertical):

CI 1N	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
100 (Peak)	5460.000	19.097	40.319	59.416	74.00	54.00	Pass
100 (Peak)	5504.928	19.196	89.454	108.649			
100 (Average)	5460.000	19.097	27.247	46.344	74.00	54.00	Pass
100 (Average)	5493.333	19.187	77.702	96.890			

Figure Channel 100:

Vertical (Peak)

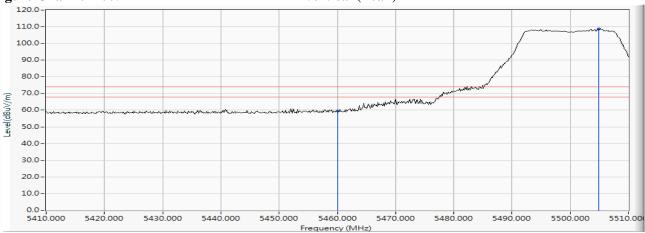
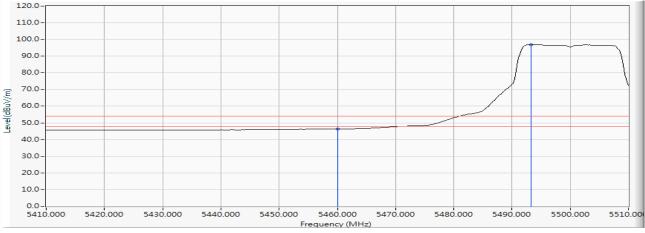


Figure Channel 100:

Vertical (Average)



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

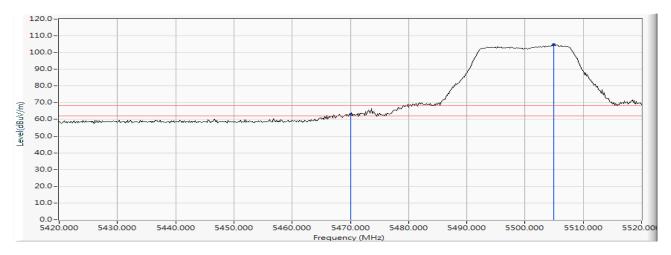


Test Item : Band Edge Data

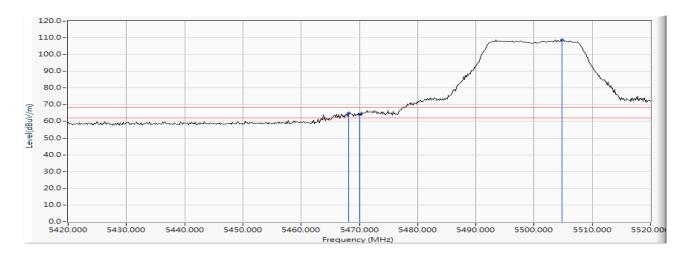
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

Test Date : 2018/01/15

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5470.000	19.110	43.788	62.898	-5.322	68.220	Pass
Horizontal	5504.928	19.196	85.541	104.736			



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5468.116	19.108	45.814	64.922	-3.298	68.220	Pass
Vertical	5470.000	19.110	44.859	63.969	-4.251	68.220	Pass
Vertical	5504.783	19.196	89.704	108.899			



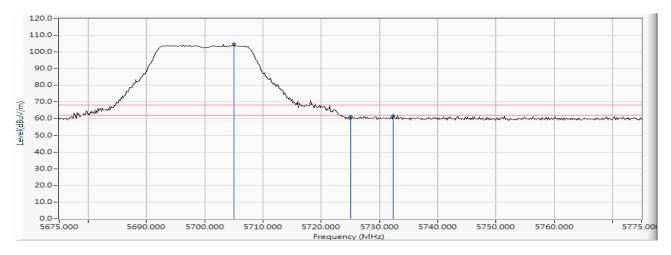


Test Item : Band Edge Data

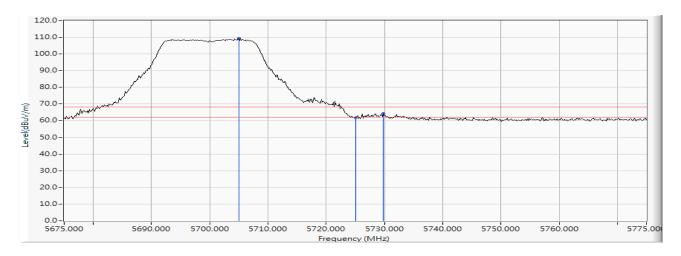
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5700MHz)

Test Date : 2018/01/15

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5705.000	19.671	85.074	104.745			
Horizontal	5725.000	19.725	41.307	61.032	-7.188	68.220	Pass
Horizontal	5732.391	19.740	42.079	61.819	-6.401	68.220	Pass



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5705.000	19.671	89.687	109.358	-		
Vertical	5725.000	19.725	42.199	61.924	-6.296	68.220	Pass
Vertical	5729.783	19.736	44.613	64.348	-3.872	68.220	Pass



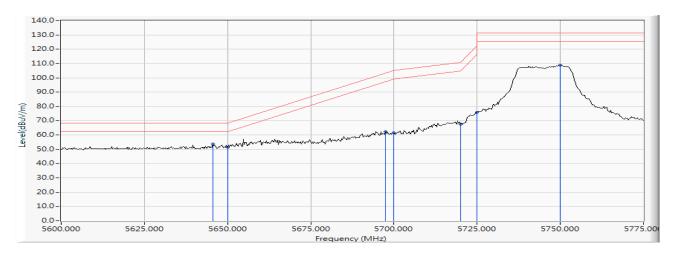


Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5745MHz)

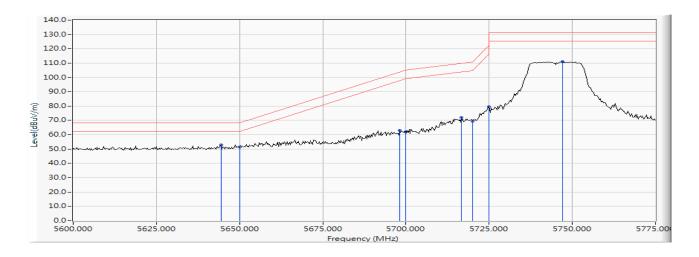
Test Date : 2018/01/15

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	$\begin{array}{c} Limit\\ (dB\mu V/m) \end{array}$	Result
Horizontal	5645.652	19.526	34.003	53.528	-14.692	68.220	Pass
Horizontal	5650.000	19.535	31.857	51.393	-16.827	68.220	Pass
Horizontal	5697.391	19.653	42.573	62.226	-41.044	103.270	Pass
Horizontal	5700.000	19.659	41.732	61.391	-43.809	105.200	Pass
Horizontal	5720.000	19.711	47.801	67.512	-43.288	110.800	Pass
Horizontal	5725.000	19.725	56.221	75.946	-46.254	122.200	Pass
Horizontal	5749.891	19.773	89.228	109.001			





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5644.384	19.522	33.310	52.832	-15.388	68.220	Pass
Vertical	5650.000	19.535	31.858	51.394	-16.826	68.220	Pass
Vertical	5698.152	19.655	43.310	62.964	-40.869	103.833	Pass
Vertical	5700.000	19.659	42.296	61.955	-43.245	105.200	Pass
Vertical	5716.667	19.701	52.212	71.914	-37.953	109.867	Pass
Vertical	5720.000	19.711	49.823	69.534	-41.266	110.800	Pass
Vertical	5725.000	19.725	59.679	79.404	-42.796	122.200	Pass
Vertical	5747.101	19.767	91.387	111.154			



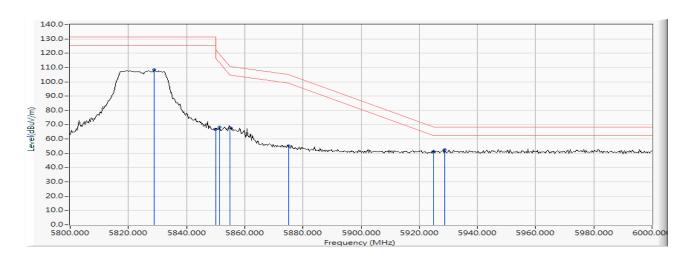


Test Item : Band Edge Data

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5825MHz)

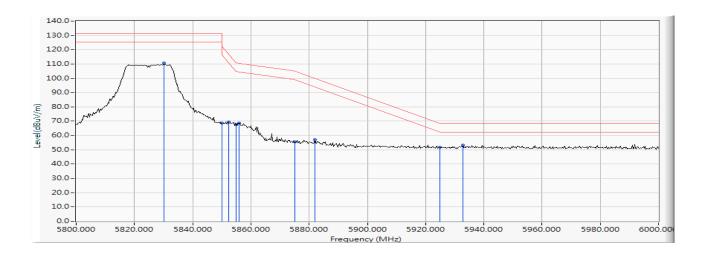
Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5828.986	19.950	88.427	108.378			
Horizontal	5850.000	19.992	46.998	66.990	-55.210	122.200	Pass
Horizontal	5851.304	19.994	48.423	68.418	-50.809	119.227	Pass
Horizontal	5855.000	20.003	47.923	67.925	-42.875	110.800	Pass
Horizontal	5875.000	20.048	35.149	55.196	-50.004	105.200	Pass
Horizontal	5925.000	20.181	31.329	51.511	-16.709	68.220	Pass
Horizontal	5928.696	20.190	32.300	52.490	-15.730	68.220	Pass





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5830.145	19.954	90.832	110.786			
Vertical	5850.000	19.992	48.625	68.617	-53.583	122.200	Pass
Vertical	5852.464	19.997	49.417	69.414	-47.168	116.582	Pass
Vertical	5855.000	20.003	47.571	67.573	-43.227	110.800	Pass
Vertical	5855.942	20.004	48.572	68.576	-41.960	110.536	Pass
Vertical	5875.000	20.048	35.364	55.411	-49.789	105.200	Pass
Vertical	5882.029	20.065	37.043	57.107	-42.894	100.001	Pass
Vertical	5925.000	20.181	31.573	51.755	-16.465	68.220	Pass
Vertical	5932.754	20.199	32.995	53.194	-15.026	68.220	Pass





Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5180MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamier 140.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
36 (Peak)	5147.536	18.326	35.939	54.265	74.00	54.00	Pass
36 (Peak)	5150.000	18.335	33.679	52.013	74.00	54.00	Pass
36 (Peak)	5175.942	18.390	83.556	101.947			
36 (Average)	5150.000	18.335	21.271	39.605	74.00	54.00	Pass
36 (Average)	5172.899	18.383	72.834	91.216			

Figure Channel 36:

Horizontal (Peak)

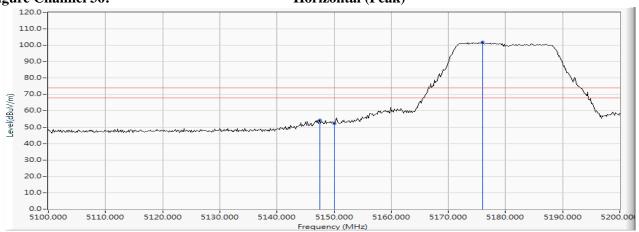
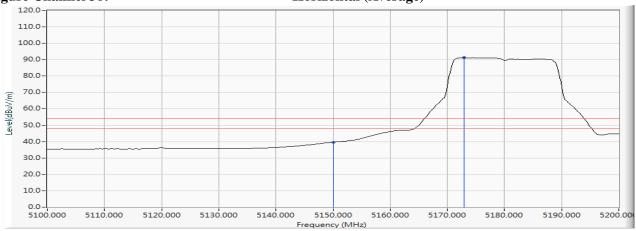


Figure Channel 36:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5180MHz)

Test Date : 2018/01/12

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
36 (Peak)	5150.000	18.335	38.640	56.974	74.00	54.00	Pass
36 (Peak)	5185.217	18.417	88.268	106.685			
36 (Average)	5150.000	18.335	23.791	42.125	74.00	54.00	Pass
36 (Average)	5185.797	18.419	77.797	96.216			

Figure Channel 36:

Vertical (Peak)

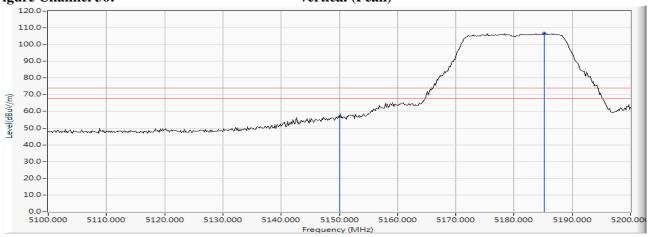
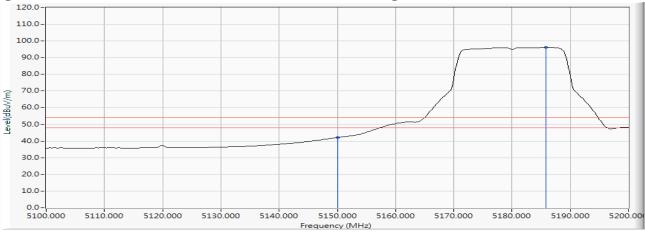


Figure Channel 36:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5320MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
64 (Peak)	5316.522	(/	82.612	101.347	(uDu v/III)	(uDu v/III)	
64 (Peak)	5350.000	18.833	34.715	53.548	74.00	54.00	Pass
64 (Peak)	5351.014		35.361	54.195	74.00	54.00	Pass
64 (Average)	5321.159	18.746	71.589	90.335			
64 (Average)	5350.000	18.833	20.084	38.917	74.00	54.00	Pass

Figure Channel 64:

Horizontal (Peak)

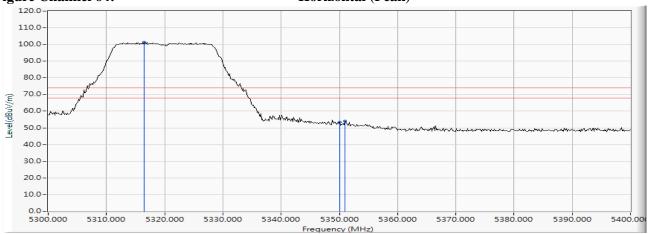
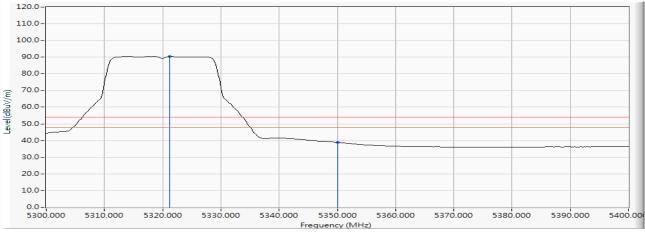


Figure Channel 64:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5320MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
64 (Peak)	5321.739	18.747	86.639	105.386			
64 (Peak)	5350.000	18.833	35.929	54.762	74.00	54.00	Pass
64 (Peak)	5352.899	18.837	37.498	56.334	74.00	54.00	Pass
64 (Average)	5321.159	18.746	75.990	94.736			
64 (Average)	5350.000	18.833	22.714	41.547	74.00	54.00	Pass

Figure Channel 64:

Vertical (Peak)

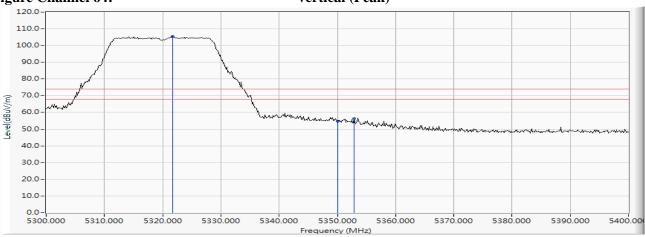
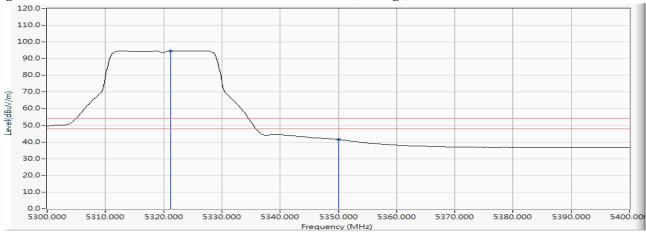


Figure Channel 64:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5500MHz)

Test Date : 2018/01/15

RF Radiated Measurement (Horizontal):

CI IN	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
100 (Peak)	5444.783	19.045	41.607	60.652	74.00	54.00	Pass
100 (Peak)	5460.000	19.097	39.559	58.656	74.00	54.00	Pass
100 (Peak)	5502.754	19.195	84.034	103.229			
100 (Average)	5460.000	19.097	26.922	46.019	74.00	54.00	Pass
100 (Average)	5506.957	19.196	73.449	92.645			

Figure Channel 100:

Horizontal (Peak)

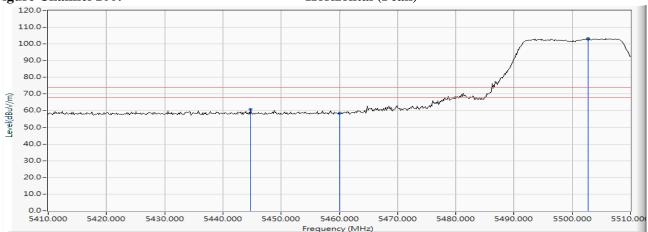
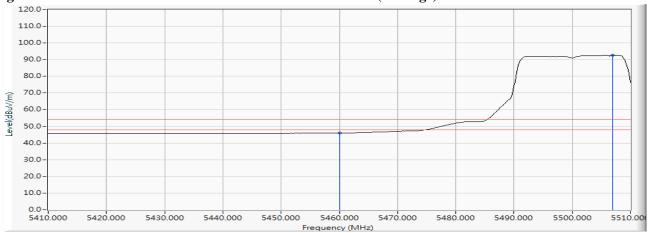


Figure Channel 100:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5500MHz)

Test Date : 2018/01/15

RF Radiated Measurement (Vertical):

Chanal Na	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
100 (Peak)	5456.377	19.091	40.802	59.893	74.00	54.00	Pass
100 (Peak)	5460.000	19.097	40.596	59.693	74.00	54.00	Pass
100 (Peak)	5492.899	19.188	88.984	108.171			
100 (Average)	5460.000	19.097	27.220	46.317	74.00	54.00	Pass
100 (Average)	5492.899	19.188	77.874	97.061			

Figure Channel 100:

Vertical (Peak)

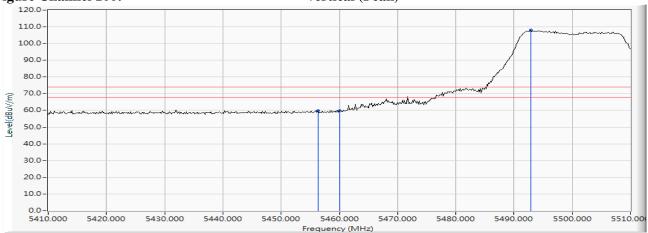
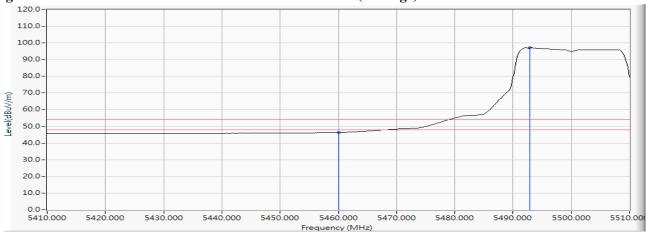


Figure Channel 100:

Vertical (Average)



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

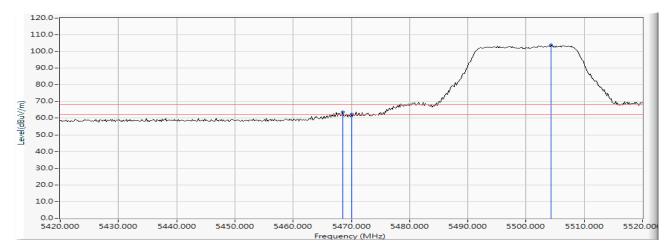


Test Item : Band Edge Data

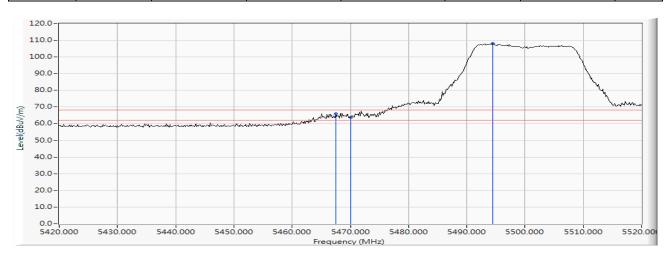
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5500MHz)

Test Date : 2018/01/15

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5468.551	19.109	44.715	63.823	-4.397	68.220	Pass
Horizontal	5470.000	19.110	43.197	62.307	-5.913	68.220	Pass
Horizontal	5504.348	19.194	84.562	103.757			



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5467.536	19.107	46.895	66.002	-2.218	68.220	Pass
Vertical	5470.000	19.110	44.743	63.853	-4.367	68.220	Pass
Vertical	5494.493	19.188	88.844	108.033			



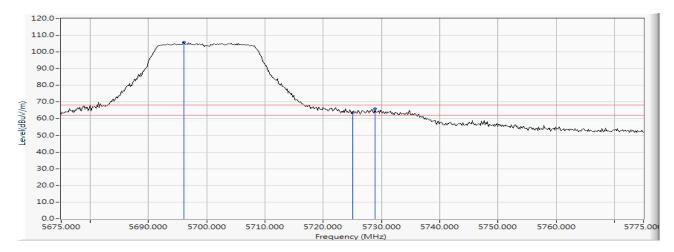


Test Item : Band Edge Data

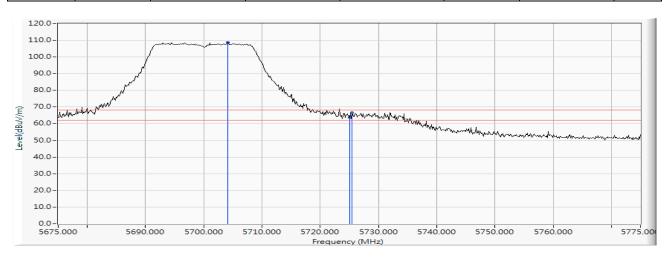
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5700MHz)

Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5696.014	19.650	86.226	105.876			
Horizontal	5725.000	19.725	43.862	63.587	-4.633	68.220	Pass
Horizontal	5728.913	19.734	46.154	65.888	-2.332	68.220	Pass



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5704.130	19.669	89.131	108.800			
Vertical	5725.000	19.725	44.074	63.799	-4.421	68.220	Pass
Vertical	5725.435	19.726	46.818	66.544	-1.676	68.220	Pass



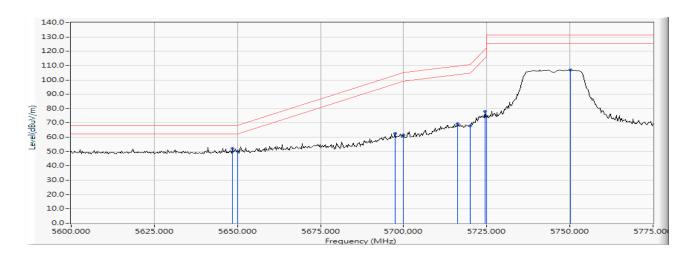


Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5745MHz)

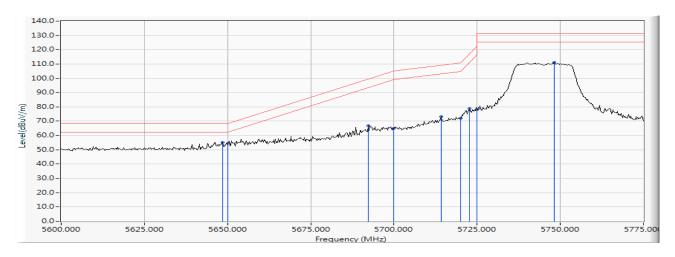
Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5648.442	19.532	32.681	52.213	-16.007	68.220	Pass
Horizontal	5650.000	19.535	30.648	50.184	-18.036	68.220	Pass
Horizontal	5697.391	19.653	42.845	62.498	-40.772	103.270	Pass
Horizontal	5700.000	19.659	41.850	61.509	-43.691	105.200	Pass
Horizontal	5716.159	19.700	49.810	69.510	-40.215	109.725	Pass
Horizontal	5720.000	19.711	48.331	68.042	-42.758	110.800	Pass
Horizontal	5724.529	19.724	58.364	78.088	-43.038	121.126	Pass
Horizontal	5725.000	19.725	54.448	74.173	-48.027	122.200	Pass
Horizontal	5750.145	19.773	87.225	106.999			





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5648.442	19.532	35.594	55.126	-13.094	68.220	Pass
Vertical	5650.000	19.535	34.703	54.239	-13.981	68.220	Pass
Vertical	5692.319	19.641	47.032	66.673	-32.846	99.519	Pass
Vertical	5700.000	19.659	45.097	64.756	-40.444	105.200	Pass
Vertical	5714.130	19.694	53.397	73.092	-36.064	109.156	Pass
Vertical	5720.000	19.711	52.406	72.117	-38.683	110.800	Pass
Vertical	5722.754	19.719	59.084	78.803	-38.276	117.079	Pass
Vertical	5725.000	19.725	58.344	78.069	-44.131	122.200	Pass
Vertical	5748.116	19.769	91.180	110.949			



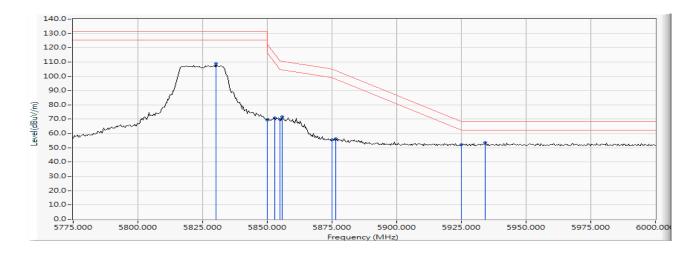


Test Item : Band Edge Data

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5825MHz)

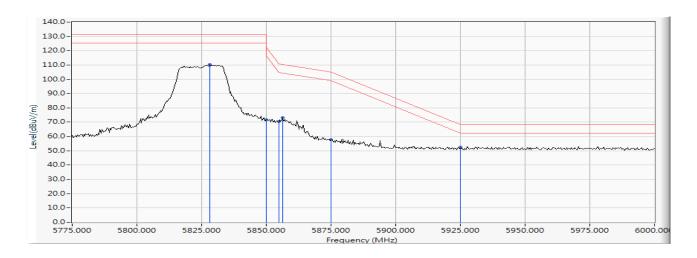
Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5830.109	19.953	88.754	108.708			
Horizontal	5850.000	19.992	49.594	69.586	-52.614	122.200	Pass
Horizontal	5852.935	19.997	50.835	70.833	-44.675	115.508	Pass
Horizontal	5855.000	20.003	49.950	69.952	-40.848	110.800	Pass
Horizontal	5855.870	20.004	51.658	71.662	-38.894	110.556	Pass
Horizontal	5875.000	20.048	35.623	55.670	-49.530	105.200	Pass
Horizontal	5876.413	20.051	36.143	56.194	-47.961	104.155	Pass
Horizontal	5925.000	20.181	31.838	52.020	-16.200	68.220	Pass
Horizontal	5934.130	20.203	33.489	53.691	-14.529	68.220	Pass





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5828.152	19.948	90.249	110.197			
Vertical	5850.000	19.992	51.521	71.513	-50.687	122.200	Pass
Vertical	5855.000	20.003	50.512	70.514	-40.286	110.800	Pass
Vertical	5856.196	20.004	53.357	73.362	-37.103	110.465	Pass
Vertical	5875.000	20.048	37.817	57.864	-47.336	105.200	Pass
Vertical	5925.000	20.181	32.534	52.716	-15.504	68.220	Pass





Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Test Date : 2018/01/12

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
38 (Peak)	5149.275	18.331	35.014	53.346	74.00	54.00	Pass
38 (Peak)	5150.000	18.335	33.226	51.560	74.00	54.00	Pass
38 (Peak)	5184.348	18.415	80.351	98.766			1
38 (Average)	5150.000	18.335	21.126	39.460	74.00	54.00	Pass
38 (Average)	5199.855	18.439	69.393	87.832			

Figure Channel 38:

Horizontal (Peak)

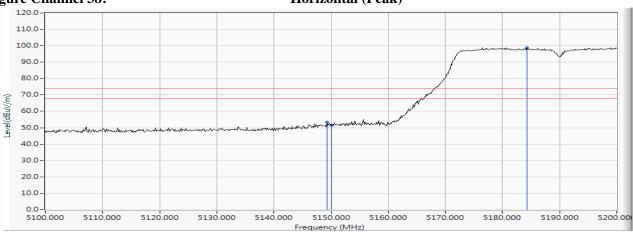
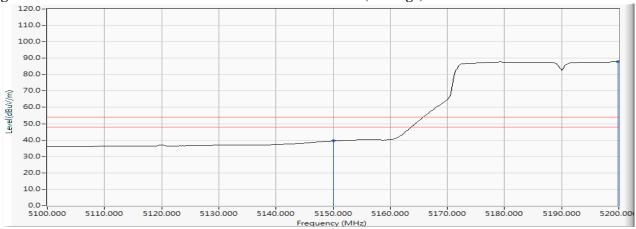


Figure Channel 38:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Vertical):

CI 1N	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
38 (Peak)	5150.000	18.335	36.469	54.803	74.00	54.00	Pass
38 (Peak)	5182.464	18.409	85.522	103.931			
38 (Average)	5150.000	18.335	22.905	41.239	74.00	54.00	Pass
38 (Average)	5185.797	18.419	74.450	92.869			

Figure Channel 38:

Vertical (Peak)

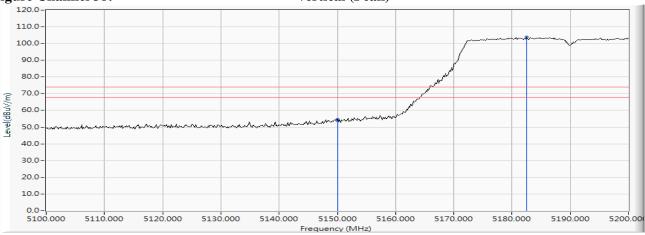
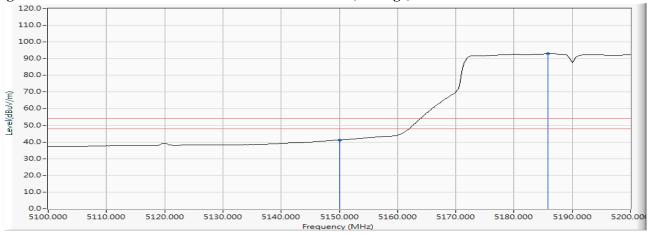


Figure Channel 38:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5310MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Horizontal):

Channel No.	1		0	Emission Level			Result
Chamici 140.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
62 (Peak)	5322.464	18.749	79.847	98.596	1		
62 (Peak)	5350.000	18.833	36.824	55.657	74.00	54.00	Pass
62 (Peak)	5351.739	18.836	37.778	56.613	74.00	54.00	Pass
62 (Average)	5320.435	18.744	67.768	86.512			
62 (Average)	5350.000	18.833	22.443	41.276	74.00	54.00	Pass

Figure Channel 62:

Horizontal (Peak)

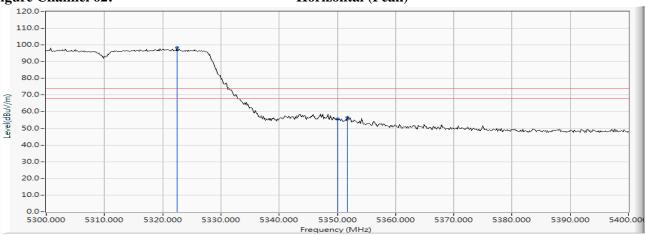
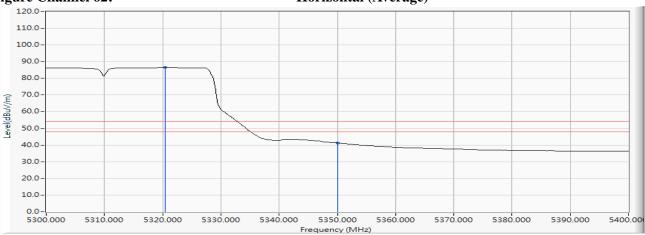


Figure Channel 62:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5310MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
62 (Peak)	5303.333	18.705	84.744	103.449			
62 (Peak)	5350.000	18.833	44.751	63.584	74.00	54.00	Pass
62 (Average)	5300.290	18.697	73.196	91.894			
62 (Average)	5350.000	18.833	27.333	46.166	74.00	54.00	Pass

Figure Channel 62:

Vertical (Peak)

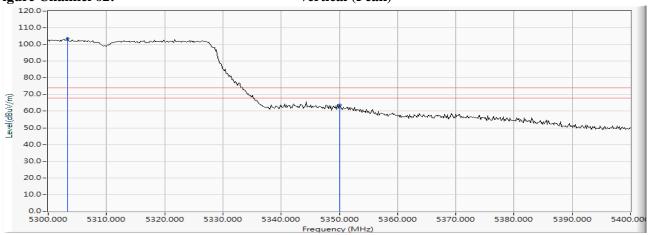
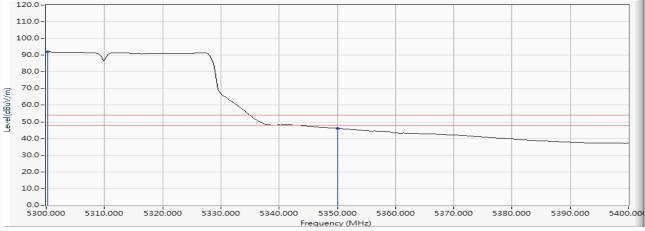


Figure Channel 62:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Horizontal):

Chanal Na	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
102 (Peak)	5456.957	19.093	36.383	55.476	74.00	54.00	Pass
102 (Peak)	5460.000	19.097	34.382	53.479	74.00	54.00	Pass
102 (Peak)	5502.754	19.195	82.398	101.593	-		
102 (Average)	5460.000	19.097	20.407	39.504	74.00	54.00	Pass
102 (Average)	5506.812	19.195	70.624	89.820			

Figure Channel 102:

Horizontal (Peak)

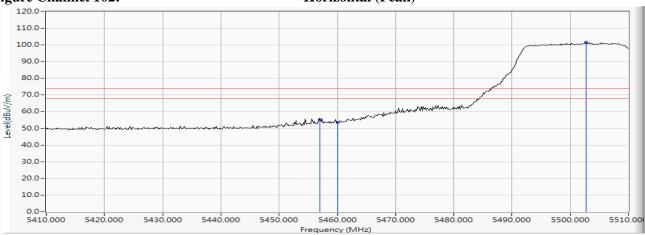
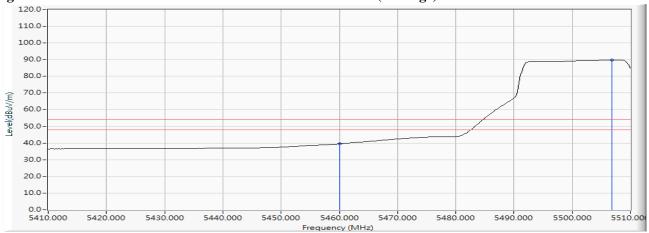


Figure Channel 102:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Test Date : 2018/01/12

RF Radiated Measurement (Vertical):

CI IN	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
102 (Peak)	5456.957	19.093	40.690	59.783	74.00	54.00	Pass
102 (Peak)	5460.000	19.097	37.436	56.533	74.00	54.00	Pass
102 (Peak)	5507.826	19.196	85.790	104.987			
102 (Average)	5460.000	19.097	23.542	42.639	74.00	54.00	Pass
102 (Average)	5507.391	19.197	74.472	93.668			

Figure Channel 102:

Vertical (Peak)

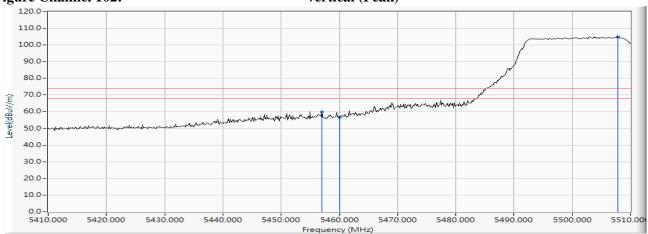
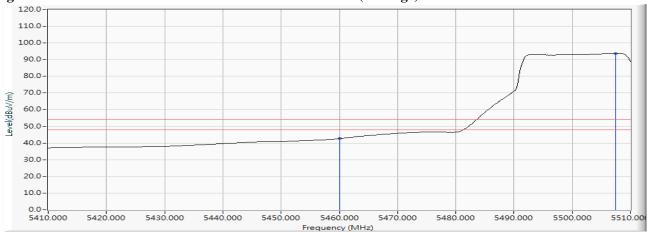


Figure Channel 102:

Vertical (Average)



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

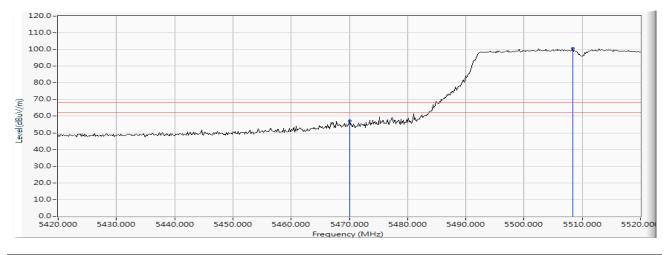


Test Item : Band Edge Data

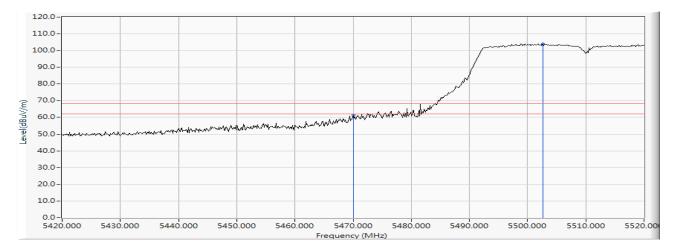
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5470.000	19.110	38.043	57.153	-11.067	68.220	Pass
Horizontal	5508.406	19.197	81.474	100.671			



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	$\begin{array}{c} Limit\\ (dB\mu V/m) \end{array}$	Result
Vertical	5470.000	19.110	42.335	61.445	-6.775	68.220	Pass
Vertical	5502.609	19.195	84.820	104.015			



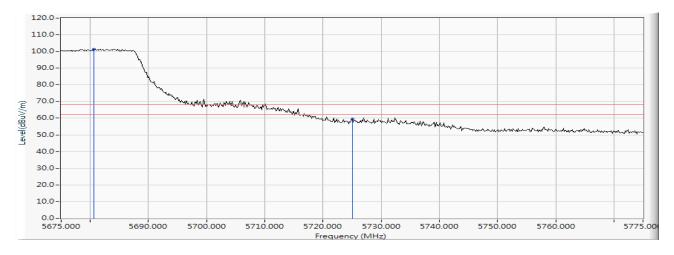


Test Item : Band Edge Data

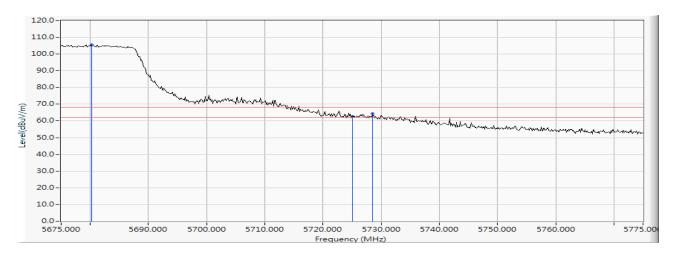
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5670MHz)

Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5680.652	19.604	81.836	101.440			
Horizontal	5725.000	19.725	39.663	59.388	-8.832	68.220	Pass



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5680.217	19.603	85.946	105.549			
Vertical	5725.000	19.725	43.114	62.839	-5.381	68.220	Pass
Vertical	5728.478	19.733	44.547	64.280	-3.940	68.220	Pass



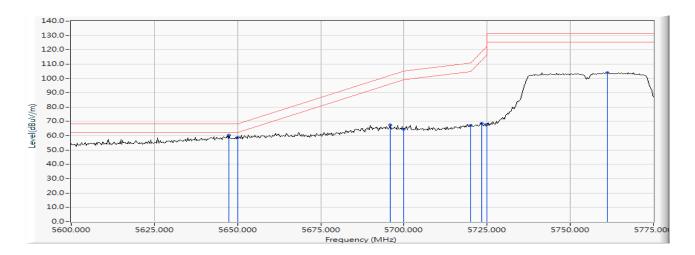


Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

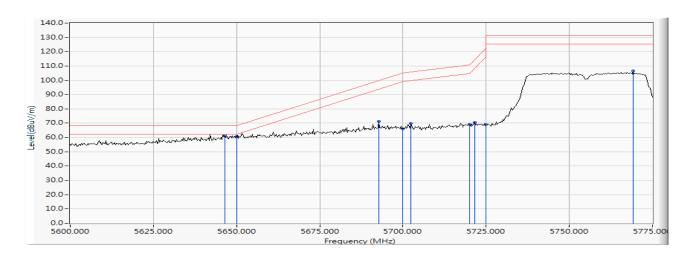
Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5647.428	19.530	40.990	60.520	-7.700	68.220	Pass
Horizontal	5650.000	19.535	39.222	58.758	-9.462	68.220	Pass
Horizontal	5695.870	19.650	48.095	67.744	-34.401	102.145	Pass
Horizontal	5700.000	19.659	44.959	64.618	-40.582	105.200	Pass
Horizontal	5720.000	19.711	47.343	67.054	-43.746	110.800	Pass
Horizontal	5723.261	19.720	48.857	68.577	-49.658	118.235	Pass
Horizontal	5725.000	19.725	48.033	67.758	-54.442	122.200	Pass
Horizontal	5761.051	19.798	84.249	104.047			





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5646.413	19.527	42.161	61.688	-6.532	68.220	Pass
Vertical	5650.000	19.535	41.406	60.942	-7.278	68.220	Pass
Vertical	5692.826	19.642	51.583	71.225	-28.669	99.894	Pass
Vertical	5700.000	19.659	46.461	66.120	-39.080	105.200	Pass
Vertical	5702.464	19.665	50.226	69.891	-35.999	105.890	Pass
Vertical	5720.000	19.711	49.172	68.883	-41.917	110.800	Pass
Vertical	5721.486	19.715	50.885	70.600	-43.588	114.188	Pass
Vertical	5725.000	19.725	49.301	69.026	-53.174	122.200	Pass
Vertical	5769.167	19.813	86.659	106.472			



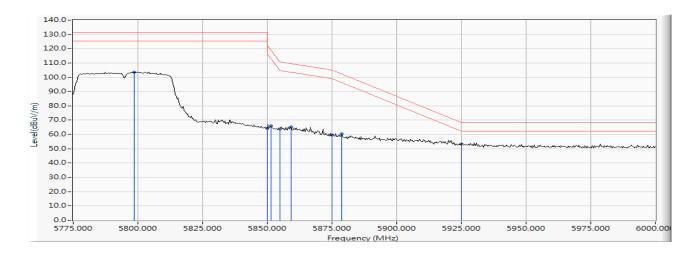


Test Item : Band Edge Data

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5795MHz)

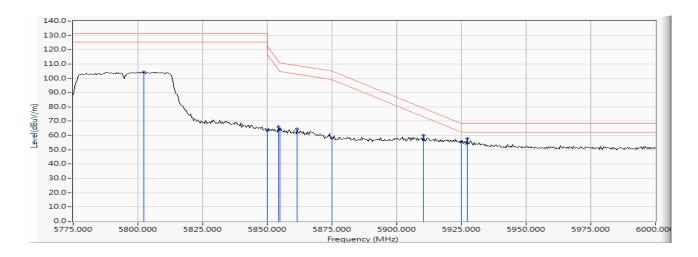
Test Date : 2018/01/12

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5798.478	19.893	83.785	103.678			
Horizontal	5850.000	19.992	44.079	64.071	-58.129	122.200	Pass
Horizontal	5851.304	19.994	46.090	66.085	-53.142	119.227	Pass
Horizontal	5855.000	20.003	43.867	63.869	-46.931	110.800	Pass
Horizontal	5859.130	20.012	45.462	65.473	-44.171	109.644	Pass
Horizontal	5875.000	20.048	39.756	59.803	-45.397	105.200	Pass
Horizontal	5878.696	20.057	40.406	60.462	-42.004	102.466	Pass
Horizontal	5925.000	20.181	33.251	53.433	-14.787	68.220	Pass





	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5802.391	19.898	84.470	104.368			
Vertical	5850.000	19.992	43.267	63.259	-58.941	122.200	Pass
Vertical	5854.239	20.000	46.131	66.131	-46.404	112.535	Pass
Vertical	5855.000	20.003	44.105	64.107	-46.693	110.800	Pass
Vertical	5861.413	20.016	44.526	64.542	-44.462	109.004	Pass
Vertical	5875.000	20.048	38.100	58.147	-47.053	105.200	Pass
Vertical	5910.326	20.133	39.940	60.073	-19.000	79.073	Pass
Vertical	5925.000	20.181	35.488	55.670	-12.550	68.220	Pass
Vertical	5927.283	20.188	37.631	57.818	-10.402	68.220	Pass





Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5210MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Horizontal):

CI IN	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
42 (Peak)	5150.000	18.335	41.473	59.807	74.00	54.00	Pass
42 (Peak)	5198.986	18.438	80.932	99.370			
42 (Average)	5150.000	18.335	25.314	43.648	74.00	54.00	Pass
42 (Average)	5199.855	18.439	68.612	87.051			

Figure Channel 42:

Horizontal (Peak)

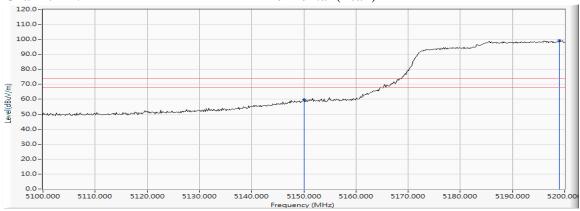
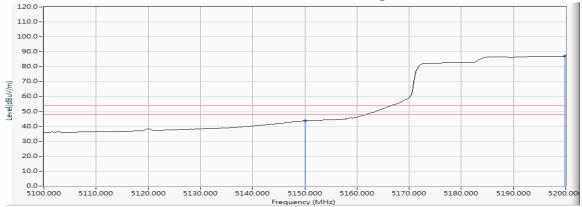


Figure Channel 42:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5210MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Vertical):

Channal No	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Recult
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
42 (Peak)	5148.406	18.328	44.422	62.751	74.00	54.00	Pass
42 (Peak)	5150.000	18.335	44.278	62.612	74.00	54.00	Pass
42 (Peak)	5196.232	18.434	84.893	103.327			
42 (Average)	5150.000	18.335	28.814	47.148	74.00	54.00	Pass
42 (Average)	5194.638	18.433	72.700	91.132			

Figure Channel 42:

Vertical (Peak)

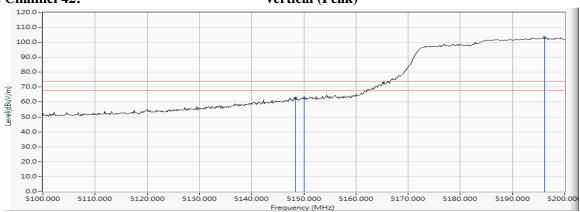
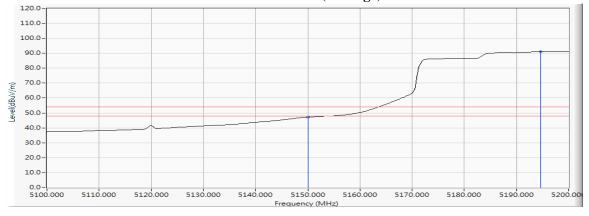


Figure Channel 42:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5290MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Horizontal):

CI IN	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Resuit
58 (Peak)	5300.580	18.699	75.719	94.417			
58 (Peak)	5350.000	18.833	32.804	51.637	74.00	54.00	Pass
58 (Peak)	5354.783	18.839	33.370	52.209	74.00	54.00	Pass
58 (Average)	5300.145	18.697	63.835	82.532			
58 (Average)	5350.000	18.833	19.604	38.437	74.00	54.00	Pass

Figure Channel 58:

Horizontal (Peak)

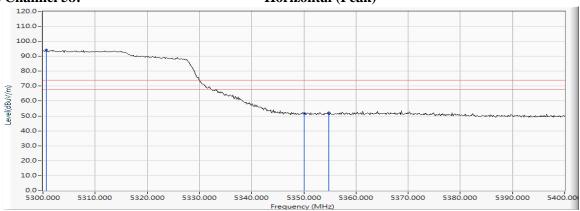
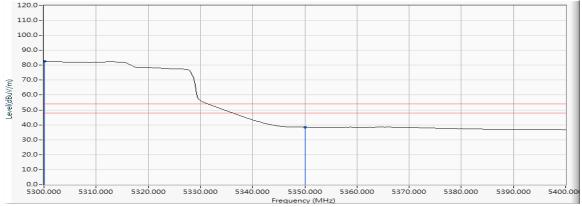


Figure Channel 58:

Horizontal (Average)



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



Test Item Band Edge Data

Test Mode Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5290MHz)

Test Date 2018/01/11

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
58 (Peak)	5312.754	18.727	80.699	99.426			
58 (Peak)	5350.000	18.833	37.751	56.584	74.00	54.00	Pass
58 (Peak)	5355.507	18.840	38.797	57.637	74.00	54.00	Pass
58 (Average)	5305.217	18.709	68.550	87.259			
58 (Average)	5350.000	18.833	24.415	43.248	74.00	54.00	Pass

Figure Channel 58:

Vertical (Peak)

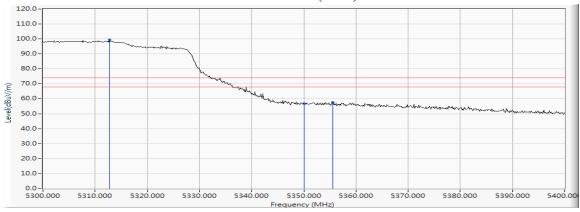
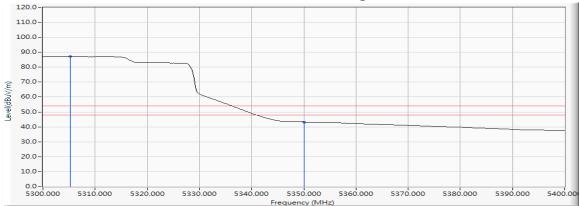


Figure Channel 58:

Vertical (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5530MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Horizontal):

CI IN	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
106 (Peak)	5453.913	19.081	36.869	55.950	74.00	54.00	Pass
106 (Peak)	5460.000	19.097	34.310	53.407	74.00	54.00	Pass
106 (Peak)	5506.957	19.196	77.214	96.410			
106 (Average)	5453.478	19.079	21.277	40.356	74.00	54.00	Pass
106 (Average)	5460.000	19.097	20.686	39.783	74.00	54.00	Pass
106 (Average)	5506.087	19.195	65.742	84.938			

Figure Channel 106:

Horizontal (Peak)

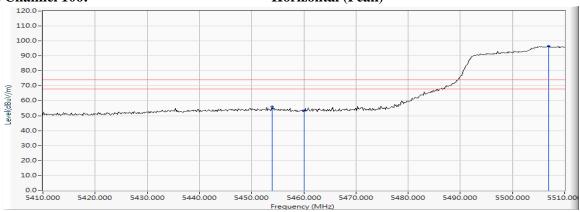
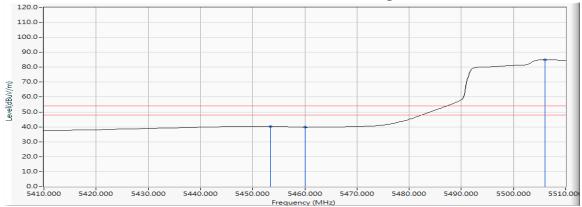


Figure Channel 106:

Horizontal (Average)



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



Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5530MHz)

Test Date : 2018/01/11

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
106 (Peak)	5454.783	19.085	40.236	59.321	74.00	54.00	Pass
106 (Peak)	5460.000	19.097	39.149	58.246	74.00	54.00	Pass
106 (Peak)	5505.362	19.195	79.893	99.088			
106 (Average)	5460.000	19.097	24.770	43.867	74.00	54.00	Pass
106 (Average)	5510.000	19.198	68.180	87.378			

Figure Channel 106:

Vertical (Peak)

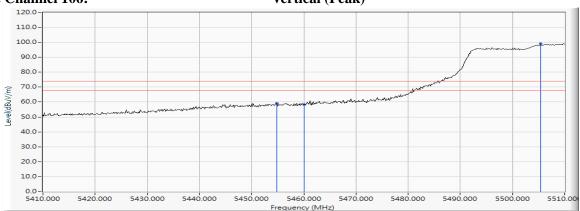
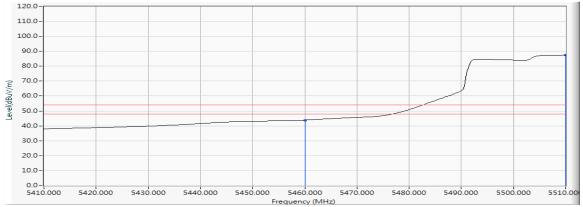


Figure Channel 106:

Vertical (Average)



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

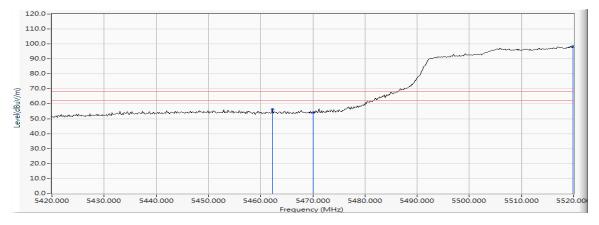


Test Item : Band Edge Data

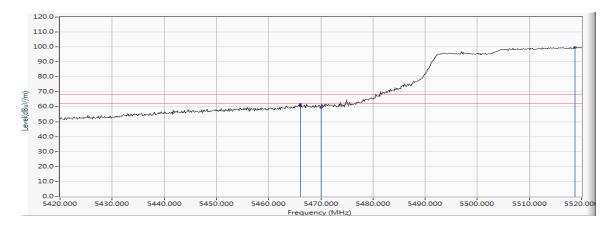
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5530MHz)

Test Date : 2018/01/11

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5462.319	19.100	37.270	56.370	-11.850	68.220	Pass
Horizontal	5470.000	19.110	34.957	54.067	-14.153	68.220	Pass
Horizontal	5519.855	19.233	79.171	98.405			



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5466.087	19.105	42.546	61.651	-6.569	68.220	Pass
Vertical	5470.000	19.110	40.401	59.511	-8.709	68.220	Pass
Vertical	5518.696	19.229	80.483	99.712			



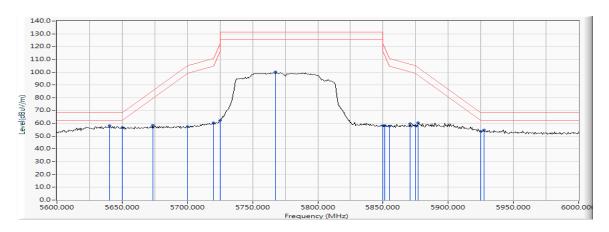


Test Item : Band Edge Data

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5775MHz)

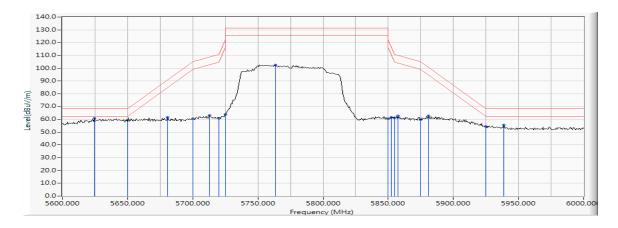
Test Date : 2018/01/11

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5640.580	19.514	38.750	58.264	-9.956	68.220	Pass
Horizontal	5650.000	19.535	36.963	56.499	-11.721	68.220	Pass
Horizontal	5673.623	19.581	38.941	58.522	-27.170	85.692	Pass
Horizontal	5700.000	19.659	37.733	57.392	-47.808	105.200	Pass
Horizontal	5720.000	19.711	40.747	60.458	-50.342	110.800	Pass
Horizontal	5725.000	19.725	42.409	62.134	-60.066	122.200	Pass
Horizontal	5767.536	19.810	80.531	100.341			
Horizontal	5850.000	19.992	38.180	58.172	-64.028	122.200	Pass
Horizontal	5851.594	19.995	38.233	58.228	-60.338	118.566	Pass
Horizontal	5855.000	20.003	37.889	57.891	-52.909	110.800	Pass
Horizontal	5870.725	20.037	39.461	59.498	-46.899	106.397	Pass
Horizontal	5875.000	20.048	38.276	58.323	-46.877	105.200	Pass
Horizontal	5877.101	20.053	40.231	60.283	-43.363	103.646	Pass
Horizontal	5925.000	20.181	33.443	53.625	-14.595	68.220	Pass
Horizontal	5927.536	20.188	34.756	54.944	-13.276	68.220	Pass





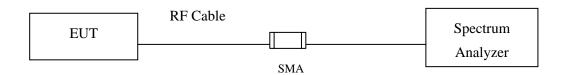
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5624.348	19.476	41.158	60.635	-7.585	68.220	Pass
Vertical	5650.000	19.535	39.797	59.333	-8.887	68.220	Pass
Vertical	5680.580	19.604	42.013	61.617	-29.220	90.837	Pass
Vertical	5700.000	19.659	40.775	60.434	-44.766	105.200	Pass
Vertical	5713.043	19.692	43.298	62.990	-45.862	108.852	Pass
Vertical	5720.000	19.711	40.925	60.636	-50.164	110.800	Pass
Vertical	5725.000	19.725	44.201	63.926	-58.274	122.200	Pass
Vertical	5763.478	19.803	82.850	102.653			
Vertical	5850.000	19.992	40.511	60.503	-61.697	122.200	Pass
Vertical	5852.174	19.996	41.739	61.735	-55.508	117.243	Pass
Vertical	5855.000	20.003	41.068	61.070	-49.730	110.800	Pass
Vertical	5857.391	20.008	42.596	62.603	-47.528	110.131	Pass
Vertical	5875.000	20.048	39.639	59.686	-45.514	105.200	Pass
Vertical	5881.159	20.062	42.640	62.702	-37.943	100.645	Pass
Vertical	5925.000	20.181	34.276	54.458	-13.762	68.220	Pass
Vertical	5938.551	20.212	35.312	55.524	-12.696	68.220	Pass





5. Duty Cycle

5.1. Test Setup



5.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

5.3. Uncertainty

± 2.31msec



5.4. Test Result of Duty Cycle

Product : Intel® Wireless-AC 9461

Test Item : Duty Cycle Test Mode : Transmit

Duty Cycle Formula:

 $Duty \ Cycle = Ton \ / \ (Ton + Toff)$

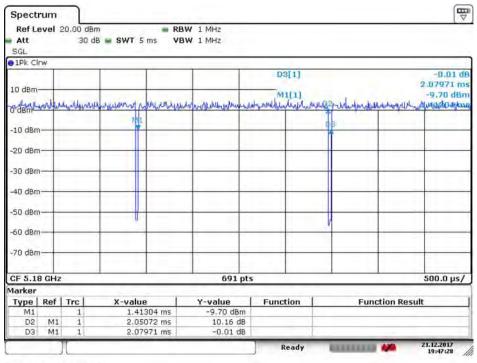
Duty Factor = 10 Log (1/Duty Cycle)

Results:

5GHz band	Ton	Ton + Toff	Duty Cycle	Duty Factor
	(ms)	(ms)	(%)	(dB)
802.11a	2.0507	2.0797	98.61	0.06
802.11n20	37.0290	37.1739	99.61	0.02
802.11n40	17.8986	18.0435	99.20	0.04
802.11ac20	49.4200	49.7400	99.36	0.03
802.11ac40	23.7681	24.0580	98.79	0.05
802.11ac80	10.9855	11.1304	98.70	0.06

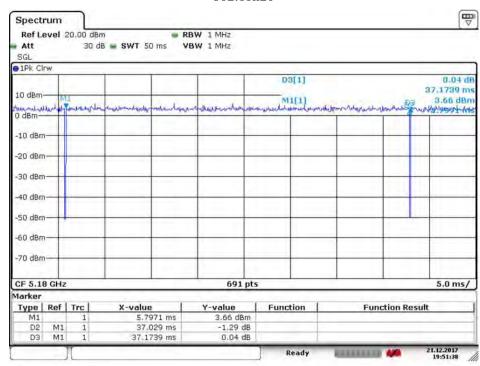






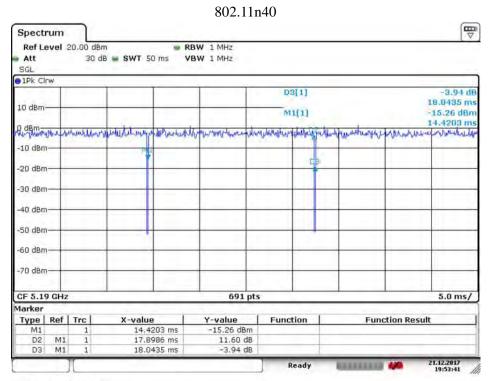
Date: 21.DEC.2017 19:47:29

802.11n20

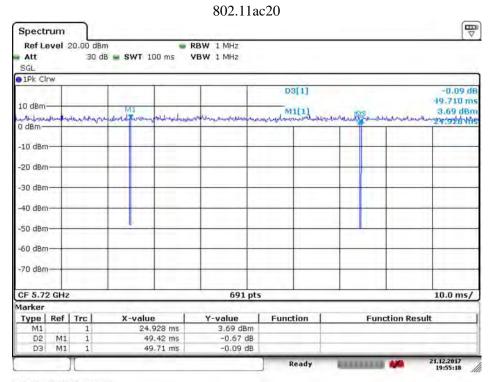


Date: 21.DEC.2017 19:51:38



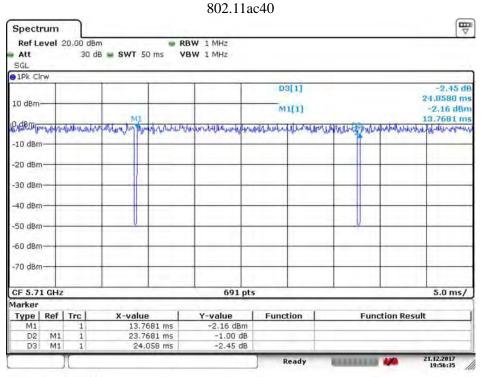


Date: 21 DEC.2017 19:53:41

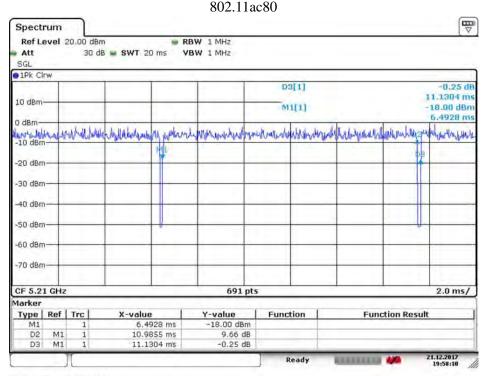


Date: 21.DEC.2017 19:55:18





Date: 21.DEC.2017 19:56:35



Date: 21 DEC.2017 19:58:10



6. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Page: 156 of 156