

FCC Test Report

(Class II Permissive Change)

Product Name	IP COMMUNICATION TERMINAL
Model No	IP100H
FCC ID	AFJ357600

Applicant	ICOM Incorporated
Address	1-1-32 Kamiminami, Hirano-ku, Osaka, 547-0003

Date of Receipt	Dec. 26, 2013
Issued Date	Oct. 08, 2015
Report No.	1590006R-RFUSP05V00
Report Version	V1.0



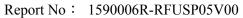


The test results relate only to the samples tested.

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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Product Name	IP COMMUNICATION TERMINAL			
Applicant	ICOM Incorporated			
Address	1-1-32 Kamiminami, Hirano-ku, Osaka, 547-0003			
Manufacturer	ICOM Incorporated			
Model No.	IP100H			
FCC ID.	AFJ357600			
EUT Rated Voltage	DC 7.4V by battery			
EUT Test Voltage	AC 120V/60Hz			
Trade Name	ICOM			
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2014			
	ANSI C63.4: 2003, ANSI C63.10: 2009			
	789033 D02 General UNII Test Procedures New Rules v01			
Test Result	Complied			

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Tested By	:	Jack Heu
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Approved By	:	Alm 3
		(Director / Vincent Lin)



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



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	IP COMMUNICATION TERMINAL		
Trade Name	ICOM		
FCC ID.	AFJ357600		
Model No.	IP100H		
Ене сили от Рама	802.11a/n-20MHz: 5180-5240MHz, 5260-5320MHz, 5500-5700MHz		
Frequency Range	802.11n-40MHz: 5190-5230MHz, 5270-5310MHz, 5510-5670MHz		
Number of Channels	802.11a/n-20MHz: 16, n-40MHz: 7		
Data Rate	802.11a/g: 6-54Mbps, 802.11n: up to 150Mbps		
Channel Control	Auto		
Type of Modulation	802.11a/n:OFDM, BPSK, QPSK, 16QAM, 64QAM		
Antenna Type	Monopole / Dipole Antenna		
Antenna Gain	Refer to the table "Antenna List"		
Contain Module	TAIYO / WYSBMVGX4		

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain	Remark
1	Exceltek	N/A	Dipole	2.0 dBi for 5.15~5.25GHz	External Antenna
				2.0 dBi for 5.25~5.35GHz	
				2.0 dBi for 5.47~5.725GHz	
2	TAIYO YUDEN	AH 104N2450D1	Monopole	2.4 dBi for 5.15~5.25GHz	Internal Antenna
				2.4 dBi for 5.25~5.35GHz	
				2.4 dBi for 5.47~5.725GHz	

Note: The antenna of EUT is conform to FCC 15.203



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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 54:	5270 MHz	Channel 62:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 134:	5670 MHz		

Note:

- 1. This device is an IP COMMUNICATION TERMINAL with a built-in 2.4GHz and 5GHz Band WLAN transceiver this report for 5Ghz Band.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 3. The radiation measurements are performed in X, Y, Z axis positioning. 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. (802.11a is 6Mbps, 802.11n-20BW is 7.2Mbps and 802.11n-40BW are 15Mbps)
- 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: AFJ357600**, originally granted on **04/23/2014**.

The differences are listed as below:

Change # 1: Original grant compliance band 1 \cdot band 2a and band 2c is following old rule of UNII requirements, this C2PC is following new rule of UNII requirements.

Change # 2: All other hardware is identical with original granted.

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



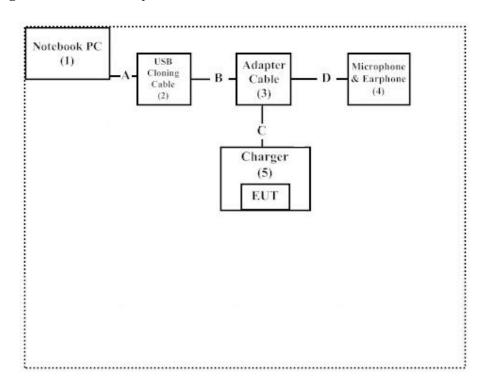
1.3. Tested System Datails

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	PPT	N/A	Non-Shielded, 1.8m
2	USB Cloning Cable	iCOM	OPC-478UC	N/A	N/A
3	Adapter Cable	iCOM	OPC-2144	N/A	N/A
4	Microphone & Earphone	iCOM	HS-99	N/A	N/A
5	Charger	iCOM	BC-202	N/A	N/A

Signal Cable Type		Signal cable Description
Α	Mini USB to USB Cable	Non-Shielded, 1.5m, with one ferrite core bonded.
В	USB Cloning Cable	Non-Shielded, 0.6m
С	Adapter Cable	Non-Shielded, 0.225m
D	Microphone & Earphone Cable	Non-Shielded, 1.2m

1.4. Configuration of tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute program "MFG Tool V1.0.0.0" on the Notebook PC.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Start transmits continually.
- (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

QuieTek Corporation's Web Site: http://www.quietek.com/chinese/about/certificates.aspx?bval=5

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: http://www.quietek.com/

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Federal Communications Commission

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FCC Accreditation Number: TW1014



2. Conducted Emission

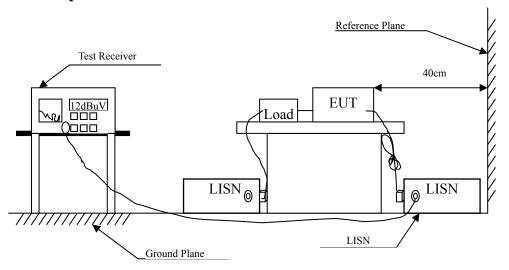
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2015	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2015	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2015	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2015	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2015	
	No.1 Shielded Room				

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.

2.2. Test Setup





2.3. Limits

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

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

2.4. Test Procedure

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

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10, 2009 on conducted measurement.

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

The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

2.5. Uncertainty

± 2.26 dB



2.6. Test Result of Conducted Emission

Product : IP COMMUNICATION TERMINAL

Test Item : Conducted Emission Test

Power Line : Line 1

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 1					_
Quasi-Peak					
0.189	9.558	36.550	46.108	-18.778	64.886
0.259	9.581	29.900	39.481	-23.405	62.886
0.388	9.587	25.280	34.867	-24.333	59.200
0.615	9.598	16.400	25.998	-30.002	56.000
5.373	9.770	17.830	27.600	-32.400	60.000
14.521	10.140	23.310	33.450	-26.550	60.000
Average					
0.189	9.558	18.880	28.438	-26.448	54.886
0.259	9.581	13.770	23.351	-29.535	52.886
0.388	9.587	20.190	29.777	-19.423	49.200
0.615	9.598	9.680	19.278	-26.722	46.000
5.373	9.770	11.890	21.660	-28.340	50.000
14.521	10.140	19.880	30.020	-19.980	50.000

Note:

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^{1.} All Reading Levels are Quasi-Peak and average value.

^{2. &}quot;means the worst emission level.

^{3.} Measurement Level = Reading Level + Correct Factor



Test Item : Conducted Emission Test

Power Line : Line 2

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.177	9.588	36.550	46.138	-19.091	65.229
0.209	9.589	28.280	37.869	-26.445	64.314
0.287	9.603	21.770	31.373	-30.713	62.086
0.361	9.599	20.280	29.879	-30.092	59.971
5.240	9.800	24.080	33.880	-26.120	60.000
14.713	10.213	24.830	35.043	-24.957	60.000
Average					
0.177	9.588	9.770	19.358	-35.871	55.229
0.209	9.589	18.820	28.409	-25.905	54.314
0.287	9.603	3.070	12.673	-39.413	52.086
0.361	9.599	15.660	25.259	-24.712	49.971
5.240	9.800	17.240	27.040	-22.960	50.000
14.713	10.213	21.670	31.883	-18.117	50.000

Note:

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

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Test Item : Conducted Emission Test

Power Line : Line 1

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V$	dB	dΒμV
LINE 1					
Quasi-Peak					
0.185	9.739	43.890	53.629	-11.371	65.000
0.236	9.740	34.540	44.280	-19.263	63.543
0.298	9.743	28.000	37.743	-24.028	61.771
0.396	9.748	26.080	35.828	-23.143	58.971
0.670	9.760	19.650	29.410	-26.590	56.000
5.341	9.880	24.460	34.340	-25.660	60.000
Average					
0.185	9.739	27.500	37.239	-17.761	55.000
0.236	9.740	17.800	27.540	-26.003	53.543
0.298	9.743	11.260	21.003	-30.768	51.771
0.396	9.748	8.710	18.458	-30.513	48.971
0.670	9.760	6.750	16.510	-29.490	46.000
5.341	9.880	15.270	25.150	-24.850	50.000

Note:

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

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Test Item : Conducted Emission Test

Power Line : Line 2

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V$	dB	dΒμV
LINE 2					
Quasi-Peak					
0.177	9.748	45.200	54.948	-10.281	65.229
0.228	9.750	35.990	45.740	-18.031	63.771
0.291	9.749	30.710	40.459	-21.512	61.971
0.423	9.749	25.300	35.049	-23.151	58.200
0.580	9.756	22.820	32.576	-23.424	56.000
1.806	9.832	18.570	28.402	-27.598	56.000
Average					
0.177	9.748	29.420	39.168	-16.061	55.229
0.228	9.750	19.120	28.870	-24.901	53.771
0.291	9.749	15.640	25.389	-26.582	51.971
0.423	9.749	10.690	20.439	-27.761	48.200
0.580	9.756	11.210	20.966	-25.034	46.000
1.806	9.832	6.250	16.082	-29.918	46.000

Note:

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

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Test Item : Conducted Emission Test

Power Line : Line 1

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V$	dB	dΒμV
LINE 1					
Quasi-Peak					
0.166	9.745	44.220	53.965	-11.578	65.543
0.197	9.739	31.050	40.789	-23.868	64.657
0.287	9.743	28.430	38.173	-23.913	62.086
0.404	9.748	27.330	37.078	-21.665	58.743
0.759	9.764	22.960	32.724	-23.276	56.000
5.681	9.880	22.120	32.000	-28.000	60.000
Average					
0.166	9.745	27.450	37.195	-18.348	55.543
0.197	9.739	9.090	18.829	-35.828	54.657
0.287	9.743	11.660	21.403	-30.683	52.086
0.404	9.748	13.200	22.948	-25.795	48.743
0.759	9.764	13.690	23.454	-22.546	46.000
5.681	9.880	13.130	23.010	-26.990	50.000

Note:

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

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Test Item : Conducted Emission Test

Power Line : Line 2

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V$	dB	dΒμV
LINE 2					_
Quasi-Peak					
0.177	9.748	41.080	50.828	-14.401	65.229
0.236	9.750	30.450	40.200	-23.343	63.543
0.314	9.744	28.660	38.404	-22.910	61.314
0.439	9.750	27.930	37.680	-20.063	57.743
0.681	9.761	24.260	34.021	-21.979	56.000
1.900	9.836	17.240	27.076	-28.924	56.000
Average					
0.177	9.748	22.650	32.398	-22.831	55.229
0.236	9.750	9.450	19.200	-34.343	53.543
0.314	9.744	15.560	25.304	-26.010	51.314
0.439	9.750	16.000	25.750	-21.993	47.743
0.681	9.761	15.520	25.281	-20.719	46.000
1.900	9.836	5.990	15.826	-30.174	46.000

Note:

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

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3. Maximun conducted output power

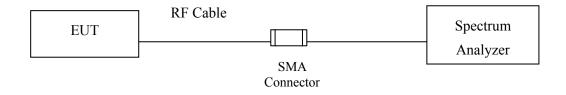
3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2015
X	Power Sensor	Anritsu	MA2411B/0738448	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015
Note	e:			

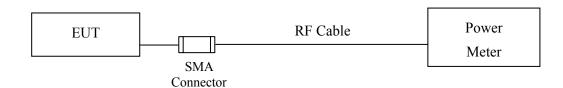
- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

26dBc Occupied Bandwidth



Conduction Power Measurement



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3.3. Limits

- (1) 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-to-point 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.
- (2) 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 26 dB 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.
- (3) 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

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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.

3.4. 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 D01 section F) procedure is used for measurements.

3.5. Uncertainty

± 1.27 dB



3.6. Test Result of Maximum conducted output power

Product : IP COMMUNICATION TERMINAL
Test Item : Maximum conducted output power

Test Site : No.3 OATS

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

Cable	e loss=1dB	Maximum conducted output power			wer					
		Data Rate (Mbps)								
Channel No.	Frequency (MHz)	6	9	12	18	24	36	48	54	Required Limit
		Measurement Level (dBm)								
36	5180	9.54								<24dBm
44	5220	9.68	9.5	9.44	9.38	9.33	9.27	9.21	9.19	<24dBm
48	5240	9.51								<24dBm
52	5260	9.62								<24dBm
60	5300	10.03	9.88	9.71	9.65	9.51	9.4	9.35	9.29	<24dBm
64	5320	9.88								<24dBm
100	5500	9.45								<24dBm
116	5580	8.65	8.57	8.45	8.32	8.21	8.19	8.11	8.09	<24dBm
140	5700	8.81								<24dBm

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

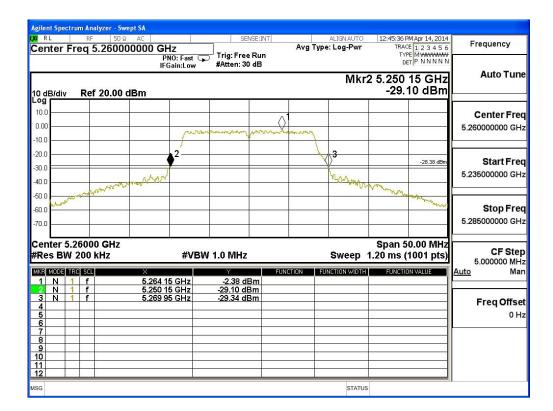
Maximum conducted output power Measurement:

Channel Number	Frequency	26dB Bandwidth	Output Power	Output Power Limit	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)
36	5180		9.54	24	
44	5220		9.68	24	
48	5240		9.51	24	
52	5260	19.80	9.62	24	23.97
60	5300	19.75	10.03	24	23.96
64	5320	19.90	9.88	24	23.99
100	5500	20.00	9.45	24	24.01
116	5580	19.85	8.65	24	23.98
140	5700	19.65	8.81	24	23.93

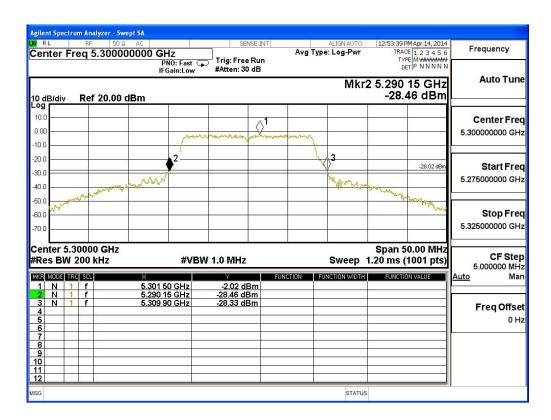
Note: Power Output Value = Reading value on average power meter + cable loss



26dBc Occupied Bandwidth: Channel 52



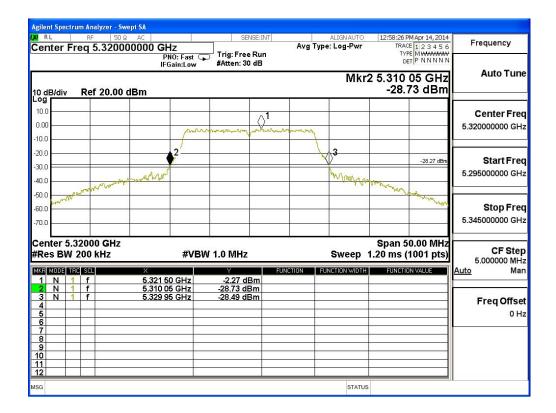
Channel 60



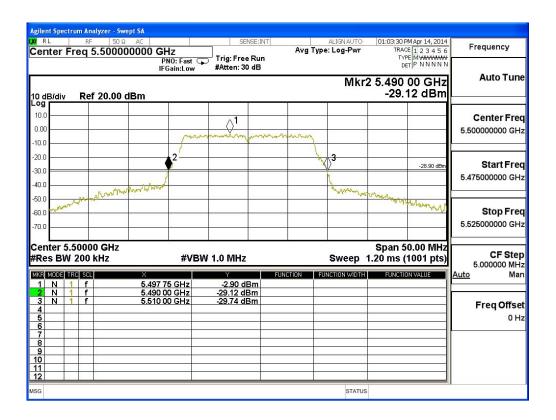
Page: 22 of 176



Channel 64

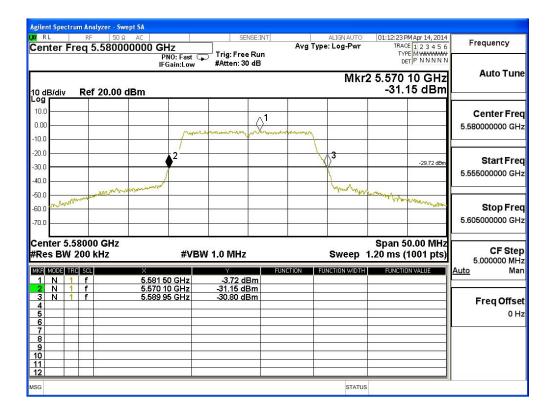


Channel 100

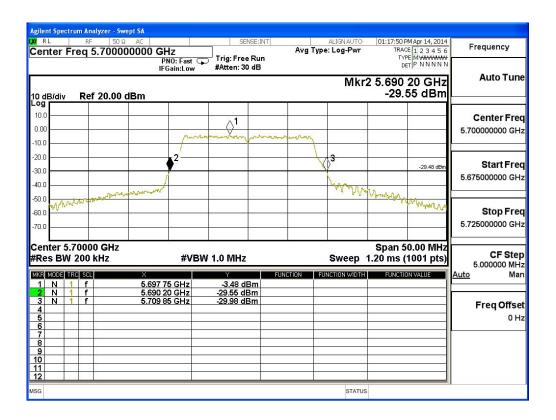




Channel 116



Channel 140





Product : IP COMMUNICATION TERMINAL
Test Item : Maximum conducted output power

Test Site : No.3 OATS

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

Cable	e loss=1dB	Maximum conducted output power			ower					
			Data Rate (Mbps)							
Channel No.	Frequency (MHz)	7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	Required Limit
				Measurement Level (dBm)						
36	5180	8.16								<24dBm
44	5220	8.35	8.27	8.22	8.18	8.14	8.08	8.02	7.98	<24dBm
48	5240	8.80			1					<24dBm
52	5260	8.91			1					<24dBm
60	5300	9.32	9.28	9.21	9.17	9.11	9.08	9.05	8.99	<24dBm
64	5320	9.25								<24dBm
100	5500	8.29								<24dBm
116	5580	8.01	7.95	7.84	7.65	7.54	7.41	7.39	7.22	<24dBm
140	5700	8.79								<24dBm

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

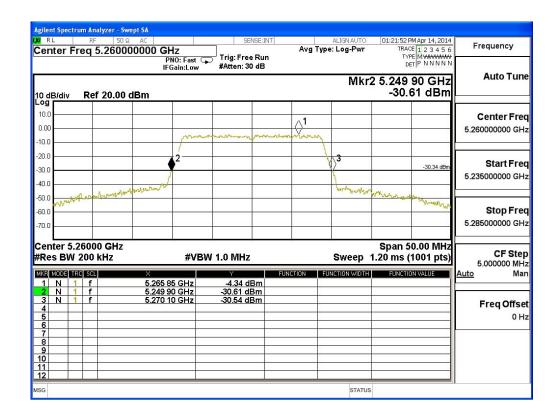
Maximum conducted output power Measurement:

Channel Number	Frequency	26dB Bandwidth	Output Power	Output	Power Limit
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)
36	5180		8.16	24	
44	5220		8.35	24	
48	5240		8.80	24	
52	5260	20.20	8.91	24	24.05
60	5300	20.20	9.32	24	24.05
64	5320	20.20	9.25	24	24.05
100	5500	20.15	8.29	24	24.04
116	5580	20.30	8.01	24	24.07
140	5700	20.15	8.79	24	24.04

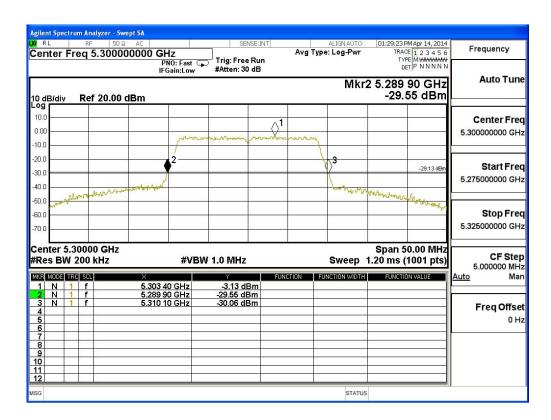
Note: Power Output Value =Reading value on average power meter + cable loss



26dBc Occupied Bandwidth: Channel 52



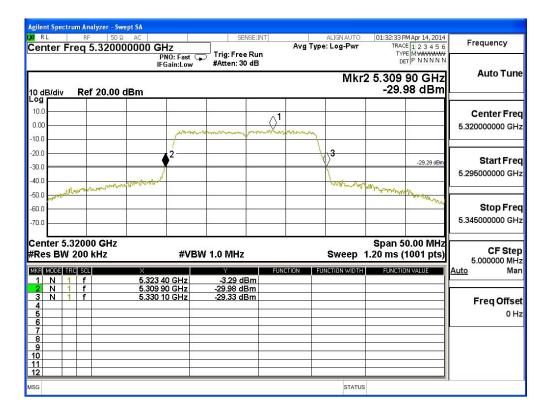
Channel 60



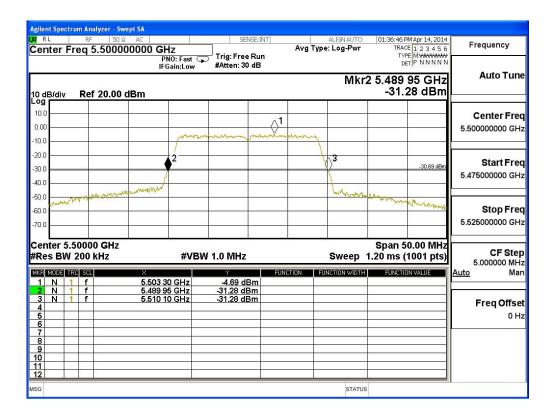
Page: 26 of 176



Channel 64



Channel 100



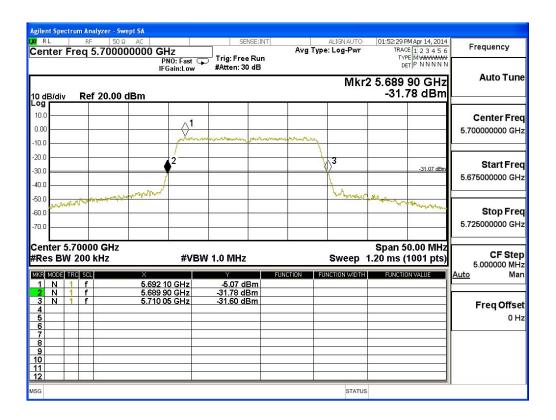
Page: 27 of 176



Channel 116



Channel 140



Page: 28 of 176



Product : IP COMMUNICATION TERMINAL
Test Item : Maximum conducted output power

Test Site : No.3 OATS

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

Cable	Cable loss=1dB Maximum condu			Cable loss=1dB Maximum conducted output power						
			Data Rate (Mbps)							
Channel No.	Frequency (MHz)	15	30	45	60	90	120	135	150	Required Limit
		Measurement Level (dBm)								
38	5190	8.42	8.31	8.25	8.19	8.15	8.11	8.08	8.01	<24dBm
46	5230	8.56								<24dBm
54	5270	8.91	8.88	8.81	8.75	8.70	8.64	8.59	8.55	<24dBm
62	5310	9.25								<24dBm
102	5510	8.35								<24dBm
110	5550	8.16	8.05	7.94	7.88	7.81	7.77	7.75	7.7	<24dBm
134	5670	7.32								<24dBm

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

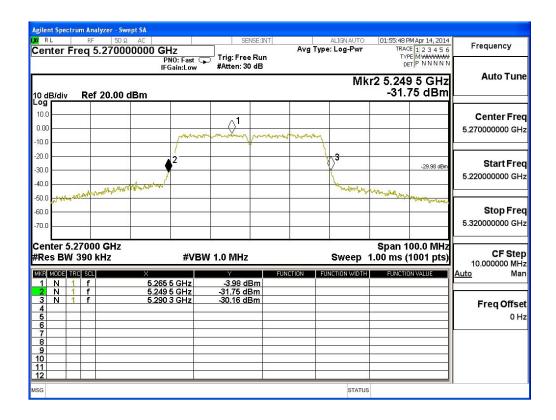
Maximum conducted output power Measurement:

Channel Number	Frequency	26dB Bandwidth	Output Power	Output Power Limit	
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)
38	5190		8.42	24	
46	5230		8.56	24	
54	5270	40.8	8.91	24	27.11
62	5310	40.6	9.25	24	27.09
102	5510	40.7	8.35	24	27.10
110	5550	41.1	8.16	24	27.14
134	5670	40.8	7.32	24	27.11

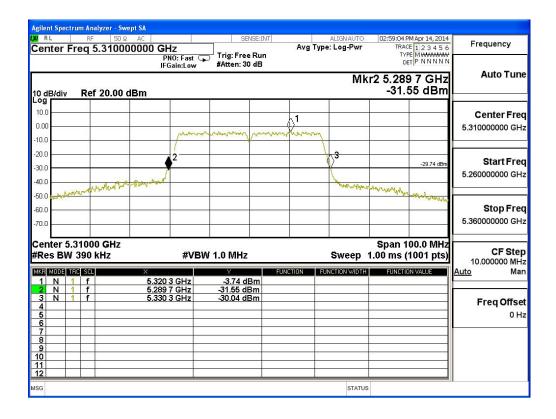
Note: Power Output Value = Reading value on average power meter + cable loss



26dBc Occupied Bandwidth: Channel 54



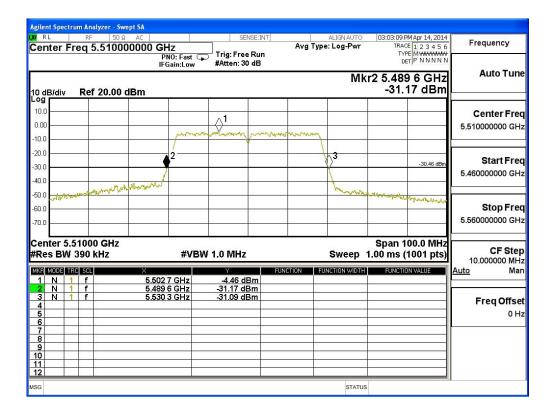
Channel 62



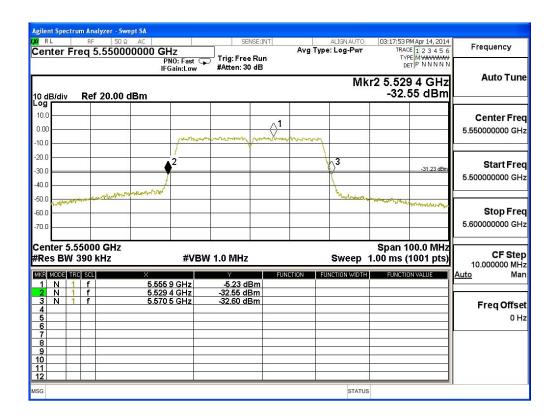
Page: 30 of 176



Channel 102

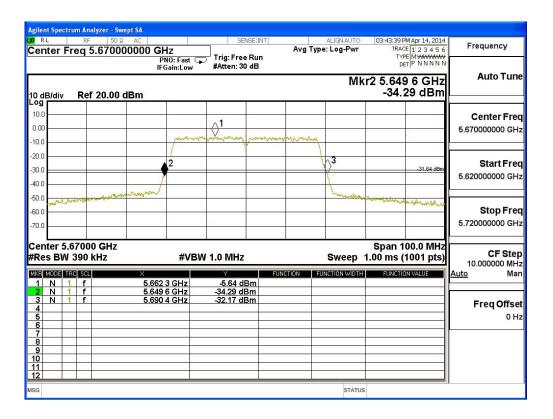


Channel 110





Channel 134





4. Peak Power Spectral Density

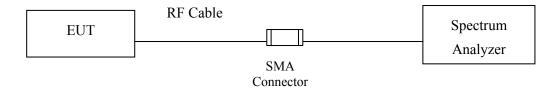
4.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2015
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup



4.3. Limits

- (1) 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 power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
 - (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density 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 or maximum power spectral density. 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 and maximum power spectral density 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 power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+

- (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density 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.

4.4. Test Procedure

The EUT was setup to ANSI C63.10, 2009; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log (500 \text{ kHz}/100 \text{ kHz}) = 6.98 \text{ dB}$.

4.5. Uncertainty

± 1.27 dB



4.6. Test Result of Peak Power Spectral Density

Product : IP COMMUNICATION TERMINAL

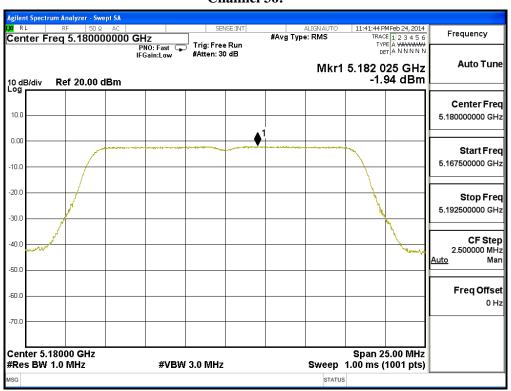
Test Item : Peak Power Spectral Density

Test Site : No.3 OATS

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

Channel Number	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	-1.940	<11	Pass
44	5220	-2.240	<11	Pass
48	5240	-1.760	<11	Pass
52	5260	-3.140	<11	Pass
60	5300	-2.530	<11	Pass
64	5320	-2.840	<11	Pass
100	5500	-3.810	<11	Pass
116	5580	-4.120	<11	Pass
140	5700	-4.420	<11	Pass

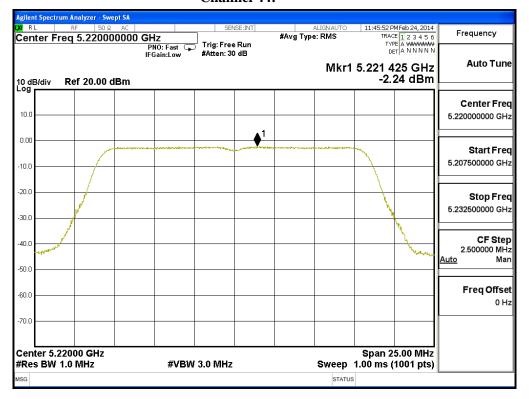
Channel 36:



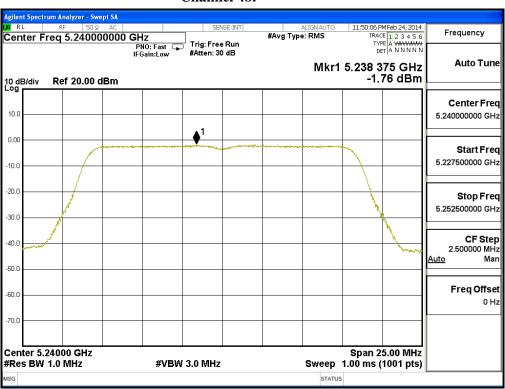
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Channel 44:

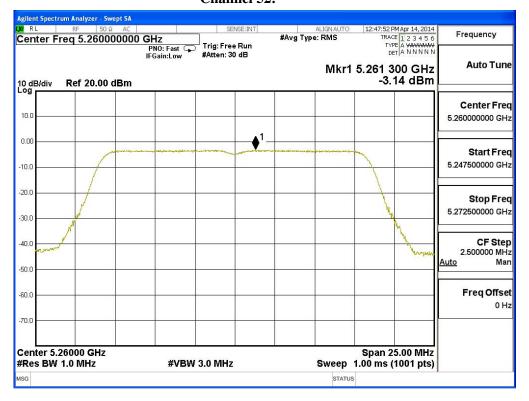


Channel 48:

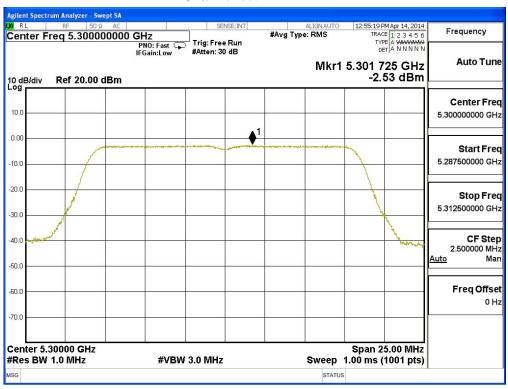




Channel 52:

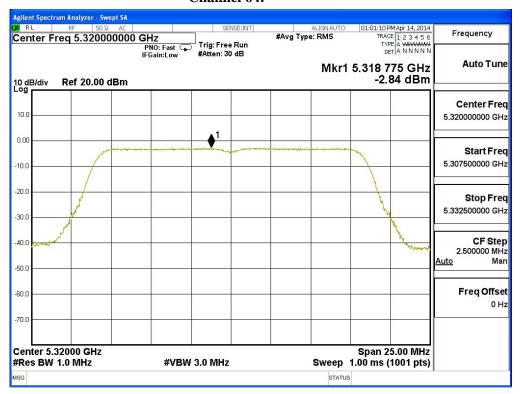


Channel 60:





Channel 64:

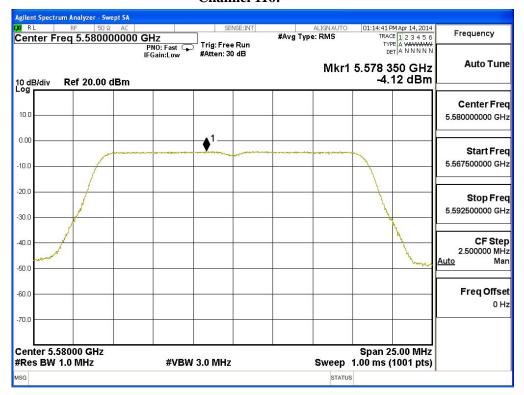


Channel 100:

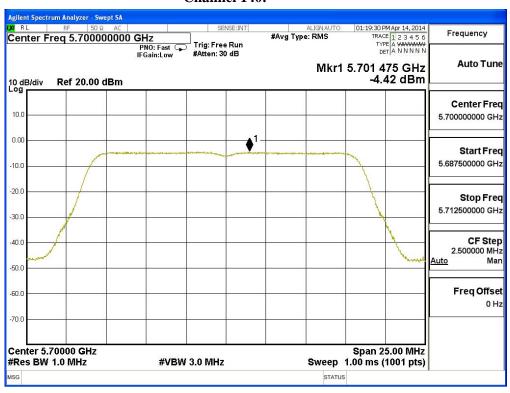




Channel 116:



Channel 140:





Product : IP COMMUNICATION TERMINAL

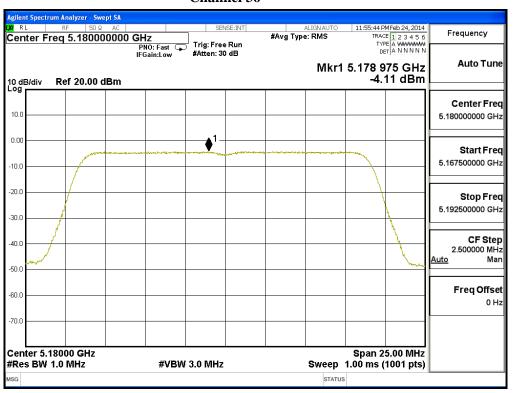
Test Item : Peak Power Spectral Density

Test Site : No.3 OATS

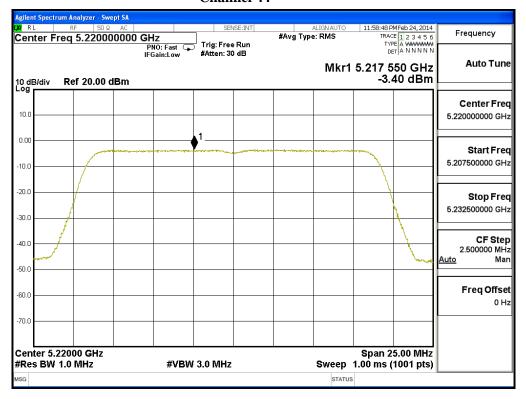
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps)

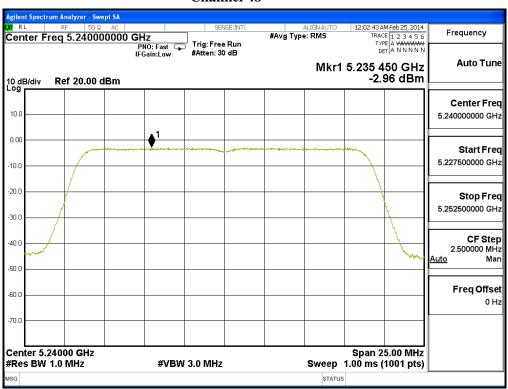
Channel Number	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	-4.110	<11	Pass
44	5220	-3.400	<11	Pass
48	5240	-2.960	<11	Pass
52	5260	-4.550	<11	Pass
60	5300	-3.750	<11	Pass
64	5320	-3.790	<11	Pass
100	5500	-5.310	<11	Pass
116	5580	-5.440	<11	Pass
140	5700	-5.690	<11	Pass

Channel 36

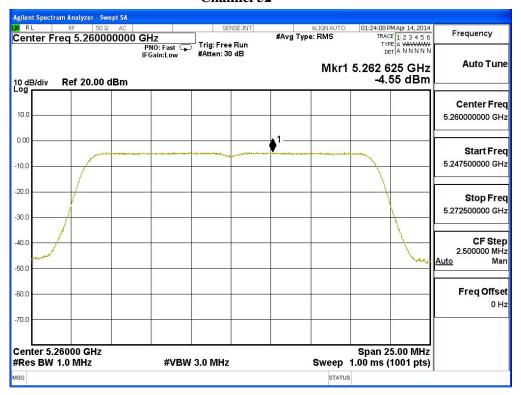


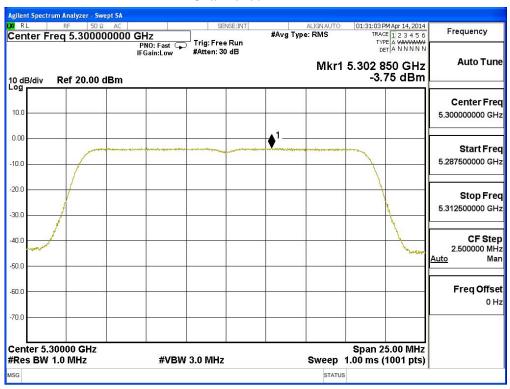




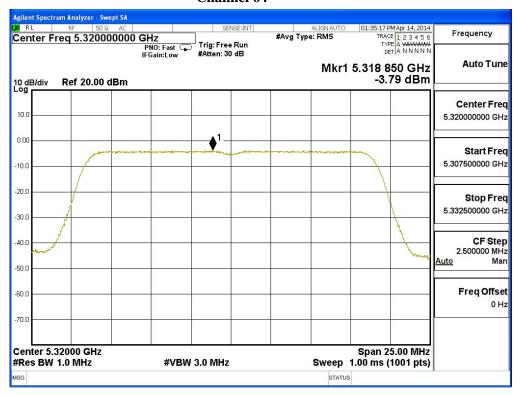


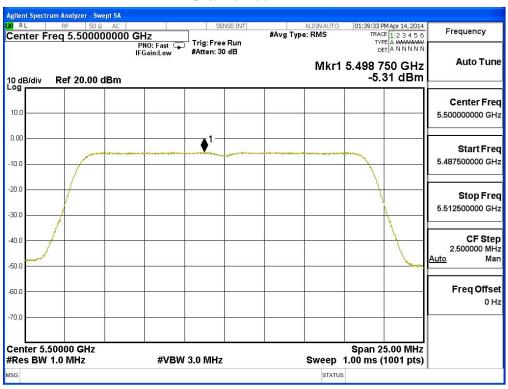




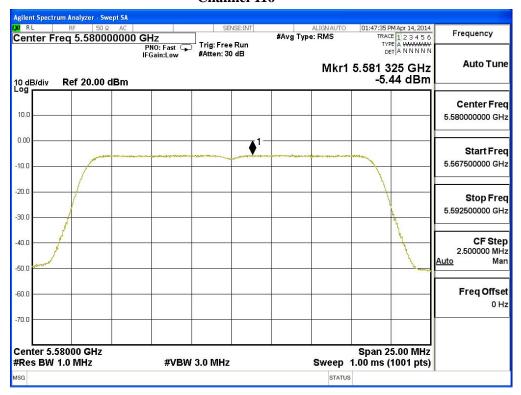


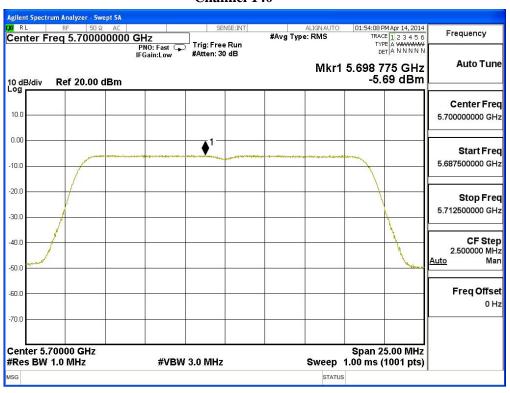














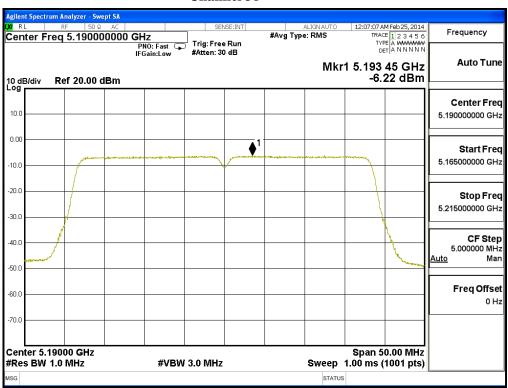
Product : IP COMMUNICATION TERMINAL

Test Item : Peak Power Spectral Density

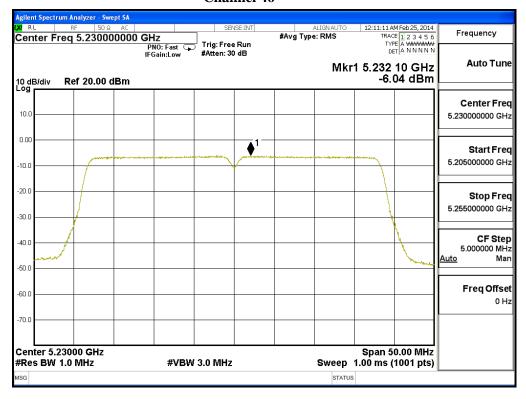
Test Site : No.3 OATS

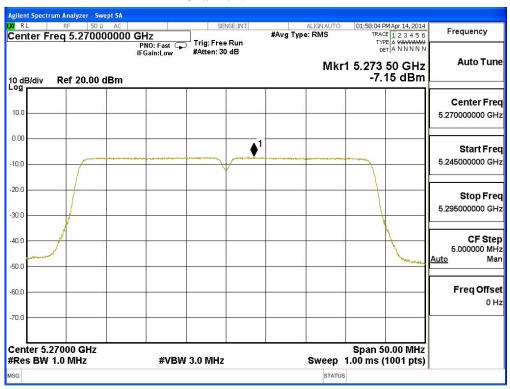
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps)

Channel Number	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
38	5190	-6.220	<11	Pass
46	5230	-6.040	<11	Pass
54	5270	-7.150	<11	Pass
62	5310	-6.950	<11	Pass
102	5510	-7.780	<11	Pass
110	5550	-8.510	<11	Pass
134	5670	-8.620	<11	Pass

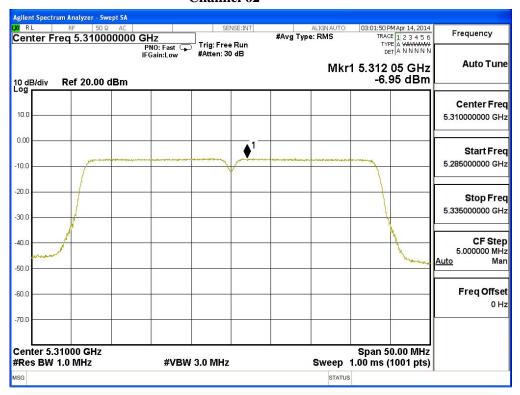


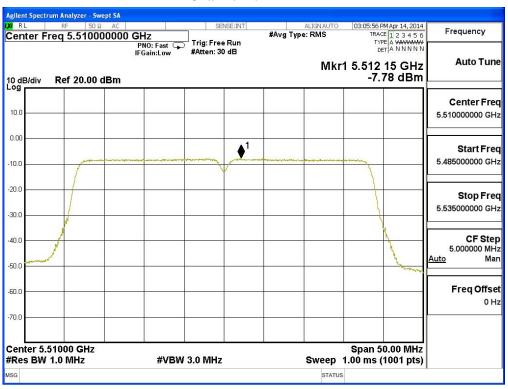




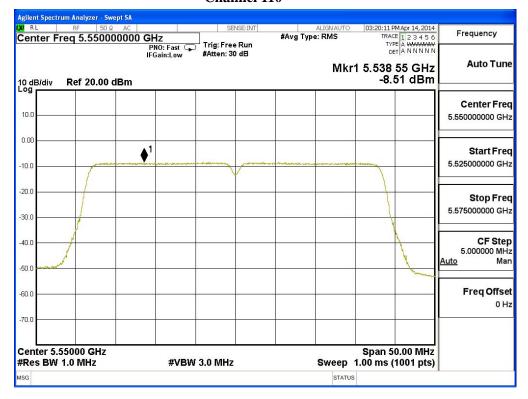
















5. Radiated Emission

5.1. Test Equipment

The following test equipments are used during the radiated emission test:

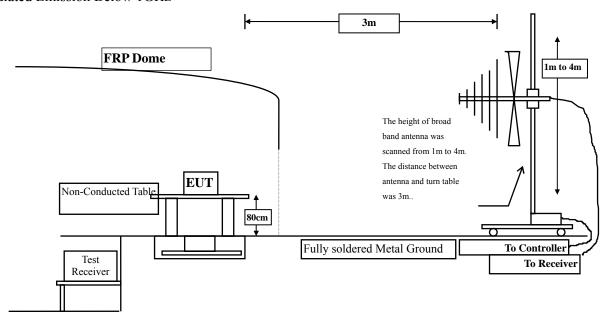
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3	X	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2015
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2015
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2015
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2015
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2015
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2015
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

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

5.2. Test Setup

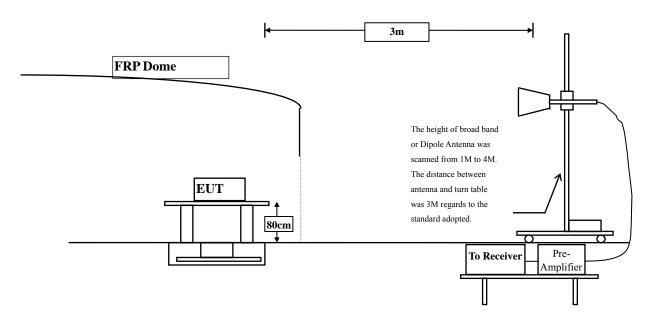
Radiated Emission Below 1GHz



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Radiated Emission Above 1GHz



5.3. 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 (microvolts/meter)	Measurement distance (meter)				
0.009-0.490	2400/F(kHz)	300				
0.490-1.705	24000/F(kHz)	30				
1.705-30	30	30				
30-88	100	40				
88-216	150	43.5				
216-960	200	46				
Above 960	500	54				

Remarks: E field strength $(dBuV/m) = 20 \log E$ field strength (uV/m)



5.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

The EUT is placed on a turn table which is 0.8 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 from 1 meter to 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 C63.10:2009 on radiated measurement.

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

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

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

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

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

5.5. Uncertainty

- ± 3.8 dB below 1GHz
- ± 3.9 dB above 1GHz

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5.6. Test Result of Radiated Emission

Product : IP COMMUNICATION TERMINAL
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.930	44.270	57.200	-16.800	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	12.930	29.270	42.200	-11.800	54.000
Vertical					
Peak Detector:					
10360.000	13.724	42.650	56.374	-17.626	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	13.724	28.120	41.844	-12.156	54.000
Note:					

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.322	46.950	60.272	-13.728	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.322	31.380	44.702	-9.298	54.000
Vertical					
Peak Detector:					
10440.000	14.245	42.550	56.795	-17.205	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	14.245	29.490	43.735	-10.265	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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
				-	
Peak Detector:					
10480.000	13.693	46.160	59.854	-14.146	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	13.693	31.130	44.824	-9.176	54.000
Vertical					
Peak Detector:					
10480.000	14.620	44.210	58.831	-15.169	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	14.620	30.990	45.611	-8.389	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 Site : No.3 OATS

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

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	14.015	46.490	60.505	-13.495	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.015	31.760	45.775	-8.225	54.000
Vertical					
Peak Detector:					
10520.000	14.818	41.290	56.108	-17.892	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.818	26.640	41.458	-12.542	54.000
Mata.					

- 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 Site : No.3 OATS

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

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	14.550	47.180	61.729	-12.271	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
10600.000	14.550	33.320	47.869	-6.131	54.000
Vertical					
Peak Detector:					
10600.000	14.881	39.480	54.361	-19.639	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
10600.000	14.881	25.660	40.541	-13.459	54.000
Moto:					

- 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 Site : No.3 OATS

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

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	14.690	47.610	62.300	-11.700	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
10640.000	14.690	33.970	48.660	-5.340	54.000
Vertical					
Peak Detector:					
10640.000	15.083	40.560	55.643	-18.357	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
10640.000	15.083	25.500	40.583	-13.417	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 Site : No.3 OATS

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

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	16.399	43.400	59.799	-14.201	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
11000.000	16.399	28.660	45.059	-8.941	54.000
Vertical					
Peak Detector:					
11000.000	17.132	41.810	58.942	-15.058	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
11000.000	17.132	26.470	43.602	-10.398	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 Site : No.3 OATS

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

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	16.664	44.480	61.145	-12.855	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
11160.000	16.664	29.730	46.395	-7.605	54.000
Vertical					
Peak Detector:					
11160.000	17.643	39.260	56.903	-17.097	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	17.643	24.910	42.553	-11.447	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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11400.000	16.530	44.700	61.231	-12.769	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
11400.000	16.530	30.360	46.891	-7.109	54.000
Vertical					
Peak Detector:					
11400.000	17.138	36.030	53.168	-20.832	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Antenna)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.930	43.020	55.950	-18.050	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	12.930	28.450	41.380	-12.620	54.000
Vertical					
Peak Detector:					
10360.000	13.724	43.020	56.744	-17.256	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	13.724	27.840	41.564	-12.436	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 Site : No.3 OATS

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

Antenna)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					_
Peak Detector:					
10440.000	13.322	45.130	58.452	-15.548	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.322	31.460	44.782	-9.218	54.000
Vertical					
Peak Detector:					
10440.000	14.245	42.990	57.235	3.235	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average Detector:					
10440.000	14.245	29.660	43.905	-10.095	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 Site : No.3 OATS

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

Antenna)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10480.000	13.693	45.460	59.154	-14.846	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average Detector:					
10480.000	13.693	31.420	45.114	-8.886	54.000
Vertical					
Peak Detector:					
10480.000	14.620	43.210	57.831	-16.169	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	14.620	31.140	45.761	-8.239	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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
Var				tr.	1D 11/
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
10520.000	14.015	45.780	59.795	-14.205	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average Detector:					
10520.000	14.015	30.450	44.465	-9.535	54.000
Vertical					
Peak Detector:					
10520.000	14.818	42.590	57.408	-16.592	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000 Average	*	*	*	*	74.000
Detector:					
10520.000	14.818	26.800	41.618	-12.382	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 Site : No.3 OATS

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

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:					
10600.000	14.550	46.040	60.589	-13.411	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
10600.000	14.550	31.490	46.039	-7.961	54.000
Vertical					
Peak Detector:					
10600.000	14.881	43.060	57.941	-16.059	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
10600.000	14.881	27.130	42.011	-11.989	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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dB _µ V	dBμV/m	dB	dBμV/m
Horizontal		<u> </u>			•
Peak Detector:					
10640.000	14.690	45.810	60.500	-13.500	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
10640.000	14.690	30.740	45.430	-8.570	54.000
Vertical					
Peak Detector:					
10640.000	15.083	43.430	58.513	-15.487	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
10640.000	15.083	28.520	43.603	-10.397	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 Site : No.3 OATS

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

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	16.399	43.520	59.919	-14.081	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
11000.000	16.399	28.080	44.479	-9.521	54.000
Vertical					
Peak Detector:					
11000.000	17.132	40.730	57.862	-16.138	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
11000.000	17.132	25.740	42.872	-11.128	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.



Test Site : No.3 OATS

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

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:					
11160.000	16.664	43.900	60.565	-13.435	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	16.664	28.100	44.765	-9.235	54.000
Vertical					
Peak Detector:					
11160.000	17.643	37.740	55.383	-18.617	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
11160.000	17.643	23.750	41.393	-12.607	54.000
NT /					

- 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 Site : No.3 OATS

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

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:					
11400.000	16.530	42.790	59.321	-14.679	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
11400.000	16.530	27.210	43.741	-10.259	54.000
Vertical					
Peak Detector:					
11400.000	17.138	35.210	52.348	-21.652	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
	uь	ибиу	UDU V/III	ЦĎ	ubu v/III
Horizontal					
Peak Detector:					
10380.000	12.939	41.480	54.419	-19.581	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					
10380.000	12.939	26.870	39.809	-14.191	54.000
Vertical					
Peak Detector:					
10380.000	13.796	40.890	54.686	-19.314	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					
10380.000	13.796	25.220	39.016	-14.984	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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					_
Peak Detector:					
10460.000	13.508	42.140	55.648	-18.352	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
Detector:					
10460.000	13.508	27.550	41.058	-12.942	54.000
Vertical					
Peak Detector:					
10460.000	14.433	41.200	55.633	-18.367	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
Detector:					
10460.000	14.433	27.230	41.663	-12.337	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 Site : No.3 OATS

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

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	14.151	41.930	56.080	-17.920	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
10540.000	14.151	28.170	42.320	-11.680	54.000
Vertical					
Peak Detector:					
10540.000	14.829	36.580	51.408	-22.592	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dΒμV	dBμV/m	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10620.000	14.623	43.310	57.933	-16.067	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
10620.000	14.623	30.630	45.253	-8.747	54.000
Vertical					
Peak Detector:					
10620.000	14.970	36.250	51.220	-22.780	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

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:					
11020.000	16.474	40.670	57.143	-16.857	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
11020.000	16.474	27.250	43.723	-10.277	54.000
Vertical					
Peak Detector:					
11020.000	17.224	38.080	55.304	-18.696	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
11020.000	17.224	25.350	42.574	-11.426	54.000
NT-4					

- 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 Site : No.3 OATS

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

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	16.681	39.490	56.171	-17.829	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					
11100.000	16.681	26.760	43.441	-10.559	54.000
Vertical					
Peak Detector:					
11100.000	17.523	35.010	52.533	-21.467	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

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	16.408	39.220	55.627	-18.373	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
11340.000	16.408	26.560	42.967	-11.033	54.000
Vertical					
Peak Detector:					
11340.000	17.167	35.860	53.027	-20.973	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.930	37.150	50.080	-23.920	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10360.000	13.724	36.260	49.984	-24.016	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.322	37.150	50.472	-23.528	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10440.000	14.245	36.590	50.835	-23.165	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10480.000	13.693	36.590	50.284	-23.716	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10480.000	14.620	37.050	51.671	-22.329	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

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	14.015	45.090	59.105	-14.895	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.015	31.820	45.835	-8.165	54.000
Vertical					
Peak Detector:					
10520.000	14.818	43.140	57.958	-16.042	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.818	28.650	43.468	-10.532	54.000
3.7					

- 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 Site : No.3 OATS

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

Correct	Reading	Measurement	Margin	Limit
Factor	Level	Level		
dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
14.550	48.610	63.159	-10.841	74.000
*	*	*	*	74.000
*	*	*	*	74.000
*	*	*	*	74.000
14.550	34.000	48.549	-5.451	54.000
14.881	45.470	60.351	-13.649	74.000
*	*	*	*	74.000
*	*	*	*	74.000
*	*	*	*	74.000
14.881	30.830	45.711	-8.289	54.000
	Factor dB 14.550 * * 14.550 14.881 * *	Factor Level dB	Factor dB Level dBμV Level dBμV/m 14.550 48.610 63.159 * * * * * * * * * 14.550 34.000 48.549 14.881 45.470 60.351 * * * * * * * * * * * * * * * * * * * * * * * *	Factor dB Level dBμV Level dBμV/m dB 14.550 48.610 63.159 -10.841 * * * * * * * * * * * * 14.550 34.000 48.549 -5.451 14.881 45.470 60.351 -13.649 * * * * * * * * * * * * * * * * * * * *

- 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 Site : No.3 OATS

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

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	14.690	48.130	62.820	-11.180	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
10640.000	14.690	33.680	48.370	-5.630	54.000
Vertical					
Peak Detector:					
10640.000	15.083	46.120	61.203	-12.797	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
10640.000	15.083	31.500	46.583	-7.417	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 Site : No.3 OATS

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

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	16.399	45.990	62.389	-11.611	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
11000.000	16.399	30.920	47.319	-6.681	54.000
Vertical					
Peak Detector:					
11000.000	17.132	41.930	59.062	-14.938	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
11000.000	17.132	27.960	45.092	-8.908	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 Site : No.3 OATS

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

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	16.664	45.780	62.445	-11.555	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
11160.000	16.664	32.180	48.845	-5.155	54.000
Vertical					
Peak Detector:					
11160.000	17.643	40.700	58.343	-15.657	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	17.643	26.440	44.083	-9.917	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 Site : No.3 OATS

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

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	16.530	45.220	61.751	-12.249	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
11400.000	16.530	30.870	47.401	-6.599	54.000
Vertical					
Peak Detector:					
11400.000	17.138	41.470	58.608	-15.392	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
11140.000	17.605	27.240	44.845	-9.155	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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.930	37.560	50.490	-23.510	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10360.000	13.724	36.590	50.314	-23.686	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.322	37.150	50.472	-23.528	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10440.000	14.245	36.590	50.835	-23.165	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
1 3	Factor	Level	Level	C	
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10480.000	13.693	37.560	51.254	-22.746	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10480.000	14.620	36.980	51.601	-22.399	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
10520.000	14.015	45.700	59.715	-14.285	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.015	30.550	44.565	-9.435	54.000
Vertical					
Peak Detector:					
10520.000	14.818	42.400	57.218	-16.782	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.818	27.310	42.128	-11.872	54.000
NT 4					

- 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 Site : No.3 OATS

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

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:					
10600.000	14.550	43.800	58.349	-15.651	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
10600.000	14.550	28.780	43.329	-10.671	54.000
Vertical					
Peak Detector:					
10600.000	14.881	44.370	59.251	-14.749	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
10600.000	14.881	29.080	43.961	-10.039	54.000
NT 4					

- 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 Site : No.3 OATS

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

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:					
10640.000	14.690	43.460	58.150	-15.850	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
10640.000	14.690	28.420	43.110	-10.890	54.000
Vertical					
Peak Detector:					
10640.000	15.083	44.120	59.203	-14.797	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
10640.000	15.083	29.500	44.583	-9.417	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 Site : No.3 OATS

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

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:					
11000.000	16.399	43.520	59.919	-14.081	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
11000.000	16.399	28.760	45.159	-8.841	54.000
Vertical					
Peak Detector:					
11000.000	17.132	40.830	57.962	-16.038	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
11000.000	17.132	26.840	43.972	-10.028	54.000
NT-4					

- 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 Site : No.3 OATS

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

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:					
11160.000	16.664	44.890	61.555	-12.445	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	16.664	29.660	46.325	-7.675	54.000
Vertical					
Peak Detector:					
11160.000	17.643	40.310	57.953	-16.047	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	17.643	25.140	42.783	-11.217	54.000
Note:					

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Site : No.3 OATS

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

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	16.530	43.470	60.001	-13.999	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
11400.000	16.530	28.330	44.861	-9.139	54.000
Vertical					
Peak Detector:					
11400.000	17.138	41.590	58.728	-15.272	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
11400.000	17.138	26.160	43.298	-10.702	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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
	цБ	dDu v	dDu v/III	цБ	dDu v/III
Horizontal					
Peak Detector:					
10380.000	12.939	37.160	50.099	-23.901	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10380.000	13.796	37.560	51.356	-22.644	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10460.000	13.508	37.150	50.658	-23.342	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10460.000	14.433	37.230	51.663	-22.337	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

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	14.151	39.730	53.880	-20.120	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
10540.000	14.829	36.970	51.798	-22.202	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dΒμV	dBμV/m	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10620.000	14.623	39.270	53.893	-20.107	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
10620.000	14.970	35.760	50.730	-23.270	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11020.000	16.474	37.320	53.793	-20.207	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
11020.000	17.224	35.290	52.514	-21.486	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					

- 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 Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11100.000	16.681	36.610	53.291	-20.709	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
11100.000	17.523	36.030	53.553	-20.447	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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Test Site : No.3 OATS

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

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	16.408	37.390	53.797	-20.203	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
11340.000	17.167	36.570	53.737	-20.263	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					

- 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 : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
321.000	2.798	38.129	40.927	-5.073	46.000
371.440	3.000	36.379	39.379	-6.621	46.000
507.240	3.306	36.292	39.598	-6.402	46.000
582.900	3.502	31.883	35.385	-10.615	46.000
664.380	3.679	30.272	33.951	-12.049	46.000
831.220	3.928	27.944	31.872	-14.128	46.000
Vertical					
Peak Detector					
588.720	6.938	32.617	39.555	-6.445	46.000
631.400	7.015	33.466	40.481	-5.519	46.000
683.780	7.118	32.383	39.501	-6.499	46.000
749.740	7.300	29.738	37.038	-8.962	46.000
883.600	7.326	29.005	36.330	-9.670	46.000
970.900	7.362	28.081	35.443	-18.557	54.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
390.840	-1.849	40.457	38.608	-7.392	46.000
608.120	4.384	29.809	34.193	-11.807	46.000
720.640	3.511	27.819	31.330	-14.670	46.000
809.880	5.049	27.579	32.628	-13.372	46.000
875.840	5.271	25.616	30.887	-15.113	46.000
961.200	6.450	28.289	34.739	-19.261	54.000
Vertical					
Peak Detector					
140.580	-6.241	40.715	34.474	-9.026	43.500
247.280	-8.042	41.777	33.734	-12.266	46.000
371.440	-2.737	35.686	32.949	-13.051	46.000
507.240	-0.471	36.025	35.554	-10.446	46.000
608.120	-1.576	30.878	29.302	-16.698	46.000
749.740	2.510	33.354	35.864	-10.136	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
109.540	-7.488	37.932	30.444	-13.056	43.500
235.640	-8.540	42.848	34.308	-11.692	46.000
288.020	-4.579	39.684	35.105	-10.895	46.000
462.620	1.172	32.553	33.725	-12.275	46.000
582.900	3.445	30.120	33.565	-12.435	46.000
747.800	3.296	31.251	34.547	-11.453	46.000
Vertical					
Peak Detector					
134.760	-4.648	36.310	31.662	-11.838	43.500
224.000	-8.699	42.052	33.353	-12.647	46.000
332.640	-4.914	43.310	38.396	-7.604	46.000
458.740	-3.887	35.161	31.274	-14.726	46.000
522.760	-0.334	34.336	34.002	-11.998	46.000
747.800	2.166	33.981	36.147	-9.853	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
507.240	3.306	35.653	38.959	-7.041	46.000
590.660	3.522	35.755	39.277	-6.723	46.000
613.940	3.540	33.852	37.392	-8.608	46.000
740.040	3.860	32.243	36.103	-9.897	46.000
819.580	3.876	32.334	36.211	-9.789	46.000
922.400	3.881	33.232	37.113	-8.887	46.000
Vertical					
Peak Detector					
462.620	6.652	34.689	41.341	-4.659	46.000
528.580	6.788	30.104	36.892	-9.108	46.000
604.240	6.960	33.682	40.642	-5.358	46.000
664.380	7.102	30.787	37.889	-8.111	46.000
734.220	7.269	33.326	40.595	-5.405	46.000
877.780	7.329	26.858	34.187	-11.813	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
156.100	-10.461	39.035	28.573	-14.927	43.500
301.600	-3.375	38.551	35.177	-10.823	46.000
406.360	-2.500	33.615	31.115	-14.885	46.000
580.960	3.505	31.695	35.200	-10.800	46.000
608.120	4.384	29.260	33.644	-12.356	46.000
749.740	3.320	34.160	37.480	-8.520	46.000
Vertical					
Peak Detector					
167.740	-8.239	40.081	31.842	-11.658	43.500
237.580	-8.970	46.608	37.638	-8.362	46.000
361.740	-3.129	40.934	37.805	-8.195	46.000
452.920	-6.306	39.269	32.963	-13.037	46.000
608.120	-1.576	31.109	29.533	-16.467	46.000
747.800	2.166	32.886	35.052	-10.948	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
101.780	-7.141	36.069	28.928	-14.572	43.500
173.560	-9.954	33.861	23.908	-19.592	43.500
253.100	-5.387	40.006	34.619	-11.381	46.000
352.040	-2.403	36.795	34.392	-11.608	46.000
507.240	0.759	41.022	41.781	-4.219	46.000
747.800	3.296	33.296	36.592	-9.408	46.000
Vertical					
Peak Detector					
138.640	-5.795	44.122	38.327	-5.173	43.500
270.560	-9.247	39.808	30.561	-15.439	46.000
328.760	-5.099	36.283	31.184	-14.816	46.000
449.040	-7.498	42.766	35.268	-10.732	46.000
515.000	-1.090	34.824	33.734	-12.266	46.000
749.740	2.510	34.047	36.557	-9.443	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
336.520	2.877	36.548	39.425	-6.575	46.000
507.240	3.306	35.799	39.105	-6.895	46.000
600.360	3.534	30.375	33.909	-12.091	46.000
664.380	3.679	30.672	34.351	-11.649	46.000
769.140	3.910	28.285	32.195	-13.805	46.000
914.640	3.880	25.754	29.634	-16.366	46.000
Vertical					
Peak Detector					
334.580	6.289	37.093	43.382	-2.618	46.000
450.980	6.604	36.892	43.497	-2.503	46.000
532.460	6.797	31.740	38.537	-7.463	46.000
666.320	7.101	32.361	39.463	-6.537	46.000
728.400	7.252	27.382	34.634	-11.366	46.000
916.580	7.304	28.016	35.320	-10.680	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
241.460	-6.531	43.071	36.540	-9.460	46.000
394.720	-2.304	35.207	32.903	-13.097	46.000
544.100	3.512	26.355	29.867	-16.133	46.000
608.120	4.384	28.960	33.344	-12.656	46.000
747.800	3.296	34.109	37.405	-8.595	46.000
924.340	6.240	28.285	34.525	-11.475	46.000
Vertical					
Peak Detector					
167.740	-8.239	40.453	32.214	-11.286	43.500
243.400	-8.451	40.993	32.542	-13.458	46.000
336.520	-4.630	40.220	35.590	-10.410	46.000
454.860	-5.499	38.532	33.032	-12.968	46.000
580.960	-5.745	31.973	26.228	-19.772	46.000
687.660	2.444	23.555	25.999	-20.001	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
107.600	-7.058	41.464	34.406	-9.094	43.500
239.520	-6.851	43.021	36.171	-9.829	46.000
386.960	-1.524	36.537	35.013	-10.987	46.000
480.080	-0.329	36.272	35.943	-10.057	46.000
580.960	3.505	31.056	34.561	-11.439	46.000
749.740	3.320	34.174	37.494	-8.506	46.000
Vertical					
Peak Detector					
167.740	-8.239	40.022	31.783	-11.717	43.500
231.760	-8.848	45.960	37.112	-8.888	46.000
334.580	-4.891	42.202	37.311	-8.689	46.000
507.240	-0.471	33.762	33.291	-12.709	46.000
608.120	-1.576	30.489	28.913	-17.087	46.000
749.740	2.510	33.006	35.516	-10.484	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
84.320	-10.564	44.731	34.167	-5.833	40.000
204.600	-11.166	41.351	30.184	-13.316	43.500
288.020	-4.579	39.170	34.591	-11.409	46.000
359.800	-1.680	38.379	36.699	-9.301	46.000
534.400	2.069	32.635	34.704	-11.296	46.000
666.320	2.031	33.708	35.740	-10.260	46.000
Vertical					
Peak Detector					
159.980	-6.185	34.968	28.783	-14.717	43.500
251.160	-7.505	37.041	29.536	-16.464	46.000
474.260	-4.556	36.026	31.469	-14.531	46.000
664.380	-1.918	31.636	29.718	-16.282	46.000
899.120	3.063	26.980	30.043	-15.957	46.000
961.200	7.260	26.229	33.489	-20.511	54.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
249.220	-6.014	43.622	37.608	-8.392	46.000
414.120	-3.242	39.024	35.782	-10.218	46.000
532.460	1.957	30.304	32.261	-13.739	46.000
608.120	4.384	29.618	34.002	-11.998	46.000
749.740	3.320	29.369	32.689	-13.311	46.000
870.020	5.201	31.432	36.633	-9.367	46.000
Vertical					
Peak Detector					
225.940	-8.598	43.105	34.506	-11.494	46.000
319.060	-6.897	40.048	33.151	-12.849	46.000
460.680	-3.221	34.824	31.603	-14.397	46.000
615.880	-1.905	36.912	35.007	-10.993	46.000
749.740	2.510	32.313	34.823	-11.177	46.000
864.200	0.661	31.055	31.716	-14.284	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
156.100	-10.461	42.283	31.821	-11.679	43.500
268.620	-4.942	42.229	37.287	-8.713	46.000
357.860	-2.084	36.924	34.840	-11.160	46.000
501.420	0.105	36.756	36.861	-9.139	46.000
580.960	3.505	30.575	34.080	-11.920	46.000
749.740	3.320	33.433	36.753	-9.247	46.000
Vertical					
Peak Detector					
138.640	-5.795	44.336	38.541	-4.959	43.500
233.700	-9.199	38.571	29.372	-16.628	46.000
365.620	-2.179	30.444	28.265	-17.735	46.000
507.240	-0.471	35.628	35.157	-10.843	46.000
608.120	-1.576	33.300	31.724	-14.276	46.000
749.740	2.510	34.311	36.821	-9.179	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
109.540	-7.488	42.894	35.406	-8.094	43.500
288.020	-4.579	42.321	37.742	-8.258	46.000
449.040	-2.238	31.216	28.978	-17.022	46.000
664.380	2.062	33.018	35.080	-10.920	46.000
796.300	5.161	30.670	35.831	-10.169	46.000
963.140	6.664	31.111	37.775	-16.225	54.000
Vertical					
Peak Detector					
117.300	-3.106	40.567	37.461	-6.039	43.500
270.560	-9.247	46.892	37.645	-8.355	46.000
421.880	-9.024	43.686	34.662	-11.338	46.000
598.420	-2.979	29.951	26.972	-19.028	46.000
817.640	3.272	25.741	29.013	-16.987	46.000
955.380	6.657	26.008	32.665	-13.335	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector					
249.220	-6.014	42.946	36.932	-9.068	46.000
414.120	-3.242	36.597	33.355	-12.645	46.000
538.280	2.320	32.403	34.723	-11.277	46.000
644.980	1.552	26.143	27.695	-18.305	46.000
747.800	3.296	32.267	35.563	-10.437	46.000
809.880	5.049	29.107	34.156	-11.844	46.000
Vertical					
Peak Detector					
202.660	-7.739	41.987	34.248	-9.252	43.500
251.160	-7.505	38.229	30.724	-15.276	46.000
431.580	-9.509	36.941	27.432	-18.568	46.000
507.240	-0.471	35.844	35.373	-10.627	46.000
608.120	-1.576	29.089	27.513	-18.487	46.000
749.740	2.510	32.116	34.626	-11.374	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
297.720	-3.633	38.692	35.060	-10.940	46.000
375.320	-1.209	39.602	38.393	-7.607	46.000
468.440	1.195	35.662	36.857	-9.143	46.000
608.120	4.384	29.571	33.955	-12.045	46.000
794.360	5.181	27.311	32.492	-13.508	46.000
961.200	6.450	29.562	36.012	-17.988	54.000
Vertical					
Peak Detector					
167.740	-8.239	41.445	33.206	-10.294	43.500
249.220	-7.634	36.251	28.617	-17.383	46.000
334.580	-4.891	34.608	29.717	-16.283	46.000
507.240	-0.471	34.330	33.859	-12.141	46.000
749.740	2.510	32.226	34.736	-11.264	46.000
908.820	2.499	33.884	36.383	-9.617	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
152.220	-10.135	43.864	33.729	-9.771	43.500
311.300	-4.026	35.822	31.796	-14.204	46.000
443.220	-2.738	40.080	37.342	-8.658	46.000
600.360	3.977	29.284	33.261	-12.739	46.000
747.800	3.296	31.251	34.547	-11.453	46.000
932.100	6.922	22.691	29.613	-16.387	46.000
Vertical					
Peak Detector					
72.680	-5.622	34.302	28.679	-11.321	40.000
152.220	-6.215	41.258	35.043	-8.457	43.500
326.820	-5.468	34.568	29.101	-16.899	46.000
544.100	-0.688	25.559	24.871	-21.129	46.000
800.180	2.801	28.804	31.605	-14.395	46.000
965.080	7.932	22.608	30.540	-23.460	54.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
130.880	-10.159	46.916	36.757	-6.743	43.500
288.020	-4.579	37.835	33.256	-12.744	46.000
357.860	-2.084	37.723	35.639	-10.361	46.000
460.680	1.589	35.639	37.228	-8.772	46.000
608.120	4.384	31.040	35.424	-10.576	46.000
749.740	3.320	33.346	36.666	-9.334	46.000
Vertical					
Peak Detector					
173.560	-8.444	44.505	36.062	-7.438	43.500
289.960	-8.267	44.834	36.567	-9.433	46.000
412.180	-7.225	40.613	33.388	-12.612	46.000
507.240	-0.471	34.346	33.875	-12.125	46.000
749.740	2.510	33.635	36.145	-9.855	46.000
920.460	5.517	25.105	30.622	-15.378	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Test Item : General Radiated Emission

Test Site : No.3 OATS

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

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					
241.460	-6.531	42.719	36.188	-9.812	46.000
342.340	-3.272	44.810	41.538	-4.462	46.000
450.980	-1.756	39.357	37.602	-8.398	46.000
563.500	1.555	35.322	36.877	-9.123	46.000
712.880	3.569	34.040	37.609	-8.391	46.000
852.560	6.342	30.267	36.609	-9.391	46.000
Vertical					
Peak Detector					
243.400	-8.451	38.691	30.240	-15.760	46.000
507.240	-0.471	35.472	35.001	-10.999	46.000
608.120	-1.576	31.012	29.436	-16.564	46.000
666.320	-1.809	30.933	29.125	-16.875	46.000
749.740	2.510	32.449	34.959	-11.041	46.000
951.500	6.621	28.822	35.443	-10.557	46.000

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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6. Band Edge

6.1. Test Equipment

RF Radiated Measurement:

The following test equipments are used during the band edge tests:

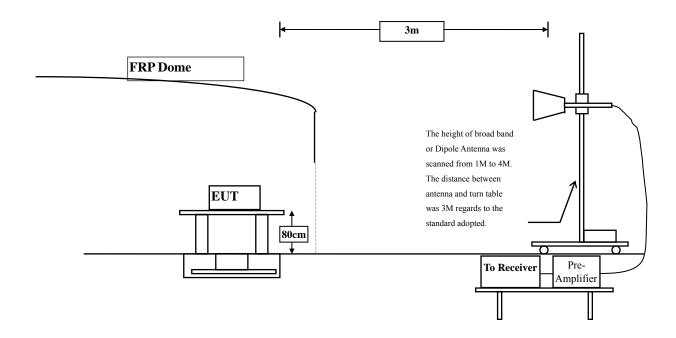
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2015
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2015
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2015
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2015
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2015
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2015
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note:

- 1. All instruments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Radiated Measurement:



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6.3. 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(a) Limits						
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)				
0.009-0.490	2400/F(kHz)	300				
0.490-1.705	24000/F(kHz)	30				
1.705-30	30	30				
30-88	100	3				
88-216	150	3				
216-960	200	3				
Above 960	500	3				

Remarks:

- 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 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

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 C63.10:2009 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, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

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6.5. Uncertainty

 \pm 3.8 dB below 1GHz

 \pm 3.9 dB above 1GHz

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6.6. Test Result of Band Edge

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (Monopole Antenna)

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
36 (Peak)	5150.000	3.340	36.493	39.833	74.00	54.00	Pass
36 (Peak)	5177.600	3.243	93.547	96.790			Pass
36 (Average)	5150.000	3.340	25.234	28.574	74.00	54.00	Pass
36 (Average)	5185.800	3.214	84.586	87.800			Pass

Figure Channel 36:

Horizontal (Peak)

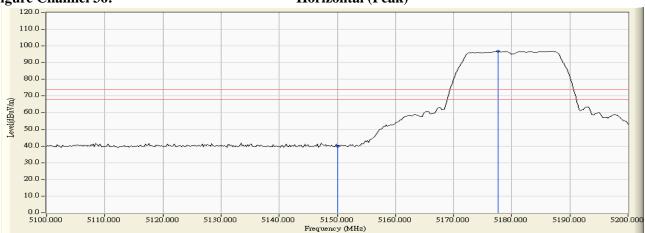
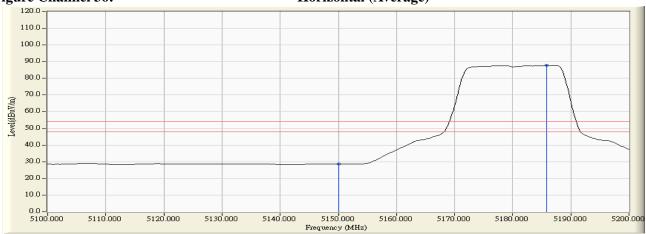


Figure Channel 36:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (Monopole Antenna)

RF Radiated Measurement (Vertical):

Channel No.			•	Emission Level			Result
Chamier 110.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	resure
36 (Peak)	5150.000	5.260	38.282	43.542	74.00	54.00	Pass
36 (Peak)	5177.000	5.335	92.042	97.376	-		Pass
36 (Average)	5150.000	5.260	25.543	30.803	74.00	54.00	Pass
36 (Average)	5177.400	5.336	83.022	88.357			Pass



Vertical (Peak)

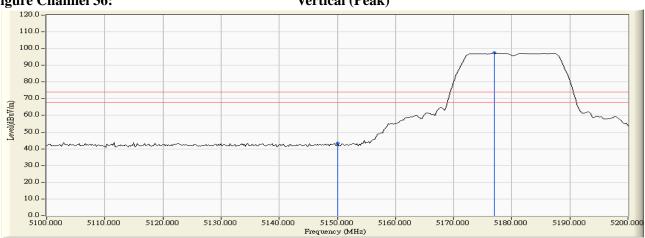
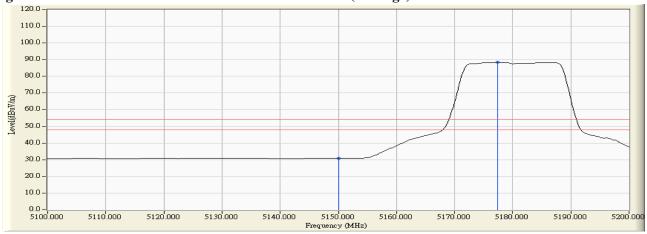


Figure Channel 36:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

		, ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5316.800	3.823	96.505	100.327			Pass
64 (Peak)	5350.000	3.716	42.112	45.829	74.00	54.00	Pass
64 (Average)	5316.600	3.823	87.383	91.206			Pass
64 (Average)	5350.000	3.716	30.813	34.530	74.00	54.00	Pass



Horizontal (Peak)

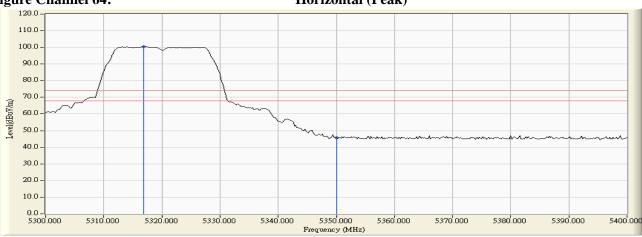
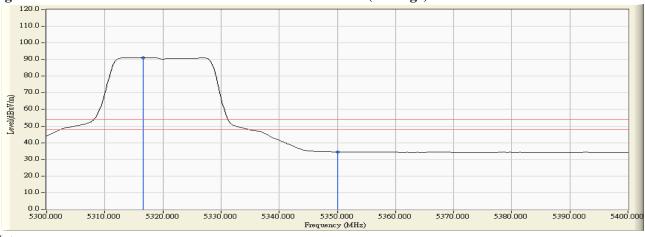


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (Monopole Antenna)

RF Radiated Measurement (Vertical):

		, ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5317.000	5.732	94.750	100.483			Pass
64 (Peak)	5350.000	5.691	43.421	49.113	74.00	54.00	Pass
64 (Average)	5316.800	5.733	84.850	90.583			Pass
64 (Average)	5350.000	5.691	30.452	36.144	74.00	54.00	Pass



Vertical (Peak)

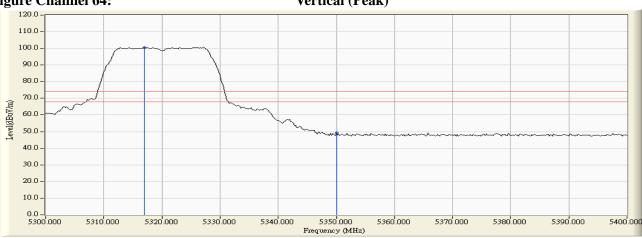
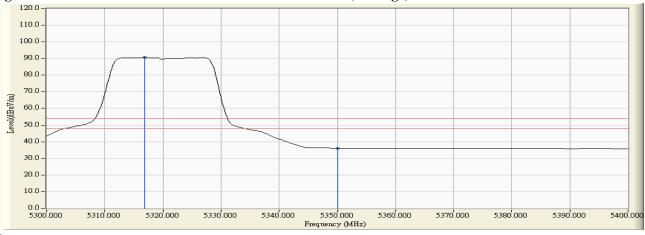


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5459.400	4.347	43.294	47.640	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	41.533	45.887	74.00	54.00	Pass
100 (Peak)	5497.000	4.794	95.958	100.752			Pass
100 (Average)	5460.000	4.354	30.351	34.705	74.00	54.00	Pass
100 (Average)	5498.600	4.805	86.841	91.646			Pass

Figure Channel 100:

Horizontal (Peak)

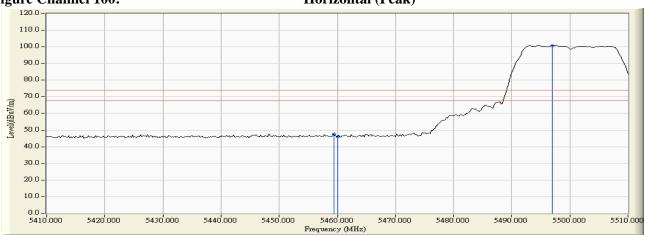
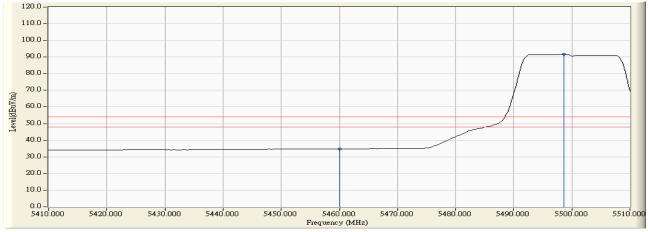


Figure Channel 100:

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 Site No.3 OATS

Test Mode Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
100 (Peak)	5457.400	6.023	42.332	48.354	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	41.172	47.213	74.00	54.00	Pass
100 (Peak)	5497.600	6.267	92.017	98.285			Pass
100 (Average)	5460.000	6.041	29.893	35.934	74.00	54.00	Pass
100 (Average)	5498.400	6.270	82.492	88.762			Pass



Vertical (Peak)

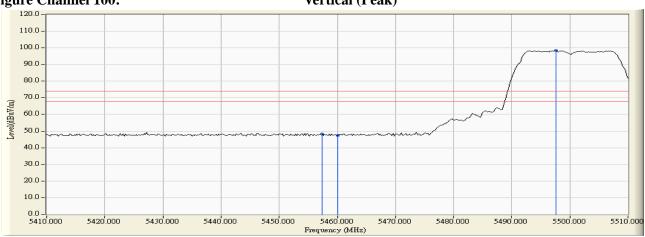
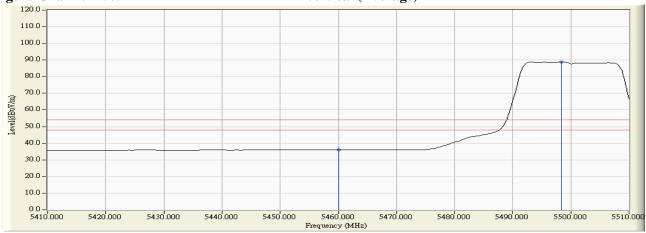


Figure Channel 100:

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.
- "*", means this data is the worst emission level. 4.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.

Report No: 1590006R-RFUSP05V00

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-70.370	-52.036	-25.036	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-70.380	-51.045	-24.045	-27.000	Pass

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Report No: 1590006R-RFUSP05V00

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 140 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.460	-50.811	-23.811	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.130	-49.758	-22.758	-27.000	Pass

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IP COMMUNICATION TERMINAL Product

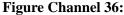
Test Item Band Edge Data Test Site No.3 OATS

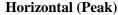
Test Mode Mode 2: Transmit (802.11n-20BW 7.2Mbps) - Channel 36 (Monopole

Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Resuit
36 (Peak)	5150.000	3.340	37.677	41.017	74.00	54.00	Pass
36 (Peak)	5187.400	3.208	93.429	96.637			Pass
36 (Average)	5150.000	3.340	25.340	28.680	74.00	54.00	Pass
36 (Average)	5188.000	3.205	83.847	87.053			Pass





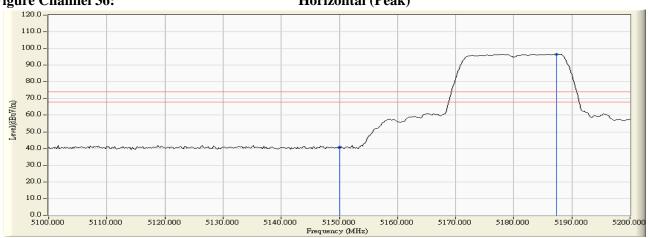


Figure Channel 36:

Horizontal (Average)



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



IP COMMUNICATION TERMINAL Product

Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 2: Transmit (802.11n-20BW 7.2Mbps) - Channel 36 (Monopole

Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Resuit
36 (Peak)	5150.000	5.260	36.797	42.057	74.00	54.00	Pass
36 (Peak)	5178.000	5.335	91.622	96.958			Pass
36 (Average)	5150.000	5.260	25.583	30.843	74.00	54.00	Pass
36 (Average)	5185.600	5.358	82.106	87.463			Pass



Vertical (Peak)

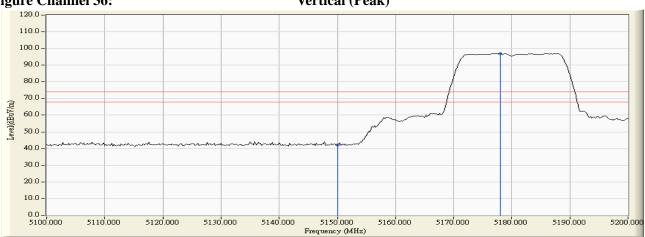
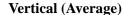


Figure Channel 36:





- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. 3.
- "*", means this data is the worst emission level.
- 5. 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 Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

		, ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5317.200	3.821	96.470	100.291			Pass
64 (Peak)	5350.000	3.716	42.686	46.403	74.00	54.00	Pass
64 (Average)	5316.800	3.823	86.498	90.320			Pass
64 (Average)	5350.000	3.716	30.548	34.265	74.00	54.00	Pass



Horizontal (Peak)

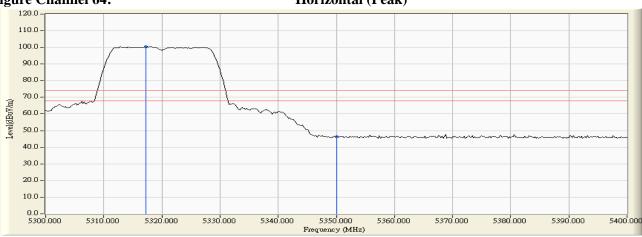
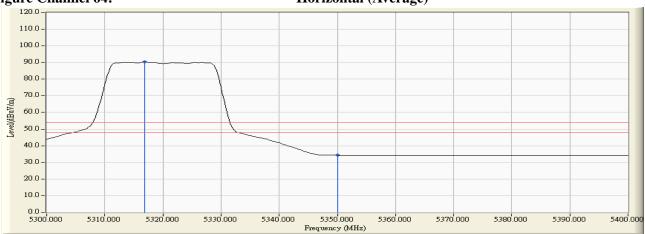


Figure Channel 64:

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.

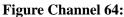


Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (Monopole Antenna)

RF Radiated Measurement (Vertical):

		() .					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chainlei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5318.000	5.732	95.401	101.133			Pass
64 (Peak)	5350.000	5.691	42.287	47.979	74.00	54.00	Pass
64 (Peak)	5355.000	5.685	43.248	48.933	74.00	54.00	Pass
64 (Average)	5316.800	5.733	85.559	91.292			Pass
64 (Average)	5350.000	5.691	30.560	36.252	74.00	54.00	Pass



Vertical (Peak)

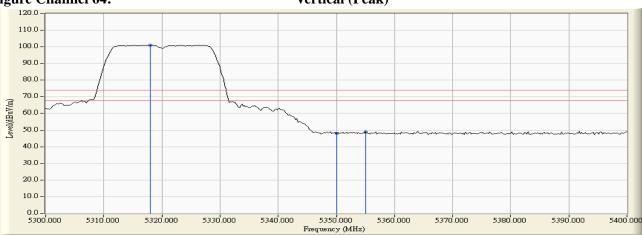
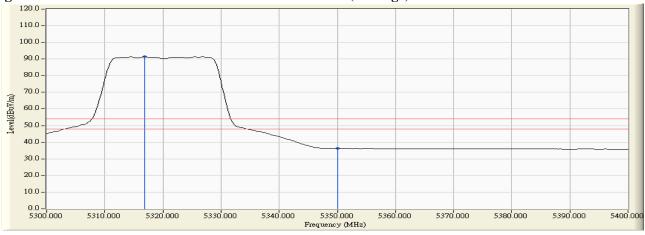


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

		. ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chainlei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5453.200	4.263	43.062	47.325	74.00	54.00	Pass
100 (Peak)	5460.000	34.507	42.053	46.407	74.00	54.00	Pass
100 (Peak)	5498.000	34.936	94.943	99.744			Pass
100 (Average)	5460.000	4.354	30.302	34.656	74.00	54.00	Pass
100 (Average)	5497.200	4.795	85.461	90.256			Pass



Horizontal (Peak)

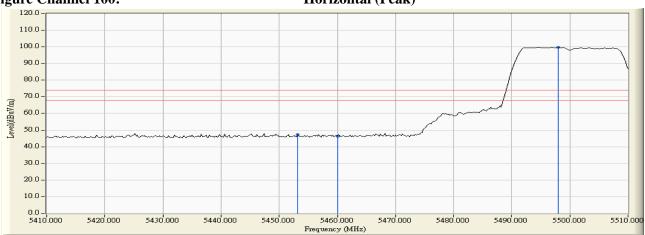
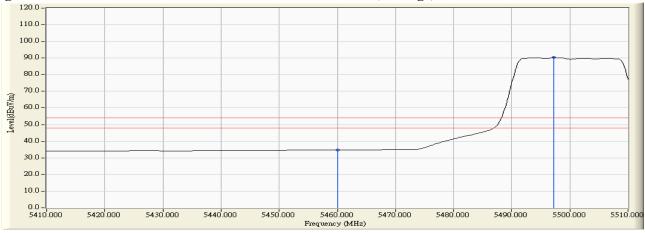


Figure Channel 100:

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 Site No.3 OATS

Test Mode Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
100 (Peak)	5456.200	6.014	42.453	48.467	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	41.737	47.778	74.00	54.00	Pass
100 (Peak)	5493.000	6.253	91.951	98.205	1		Pass
100 (Average)	5460.000	6.041	29.952	35.993	74.00	54.00	Pass
100 (Average)	5497.200	6.267	82.370	88.636			Pass



Vertical (Peak)

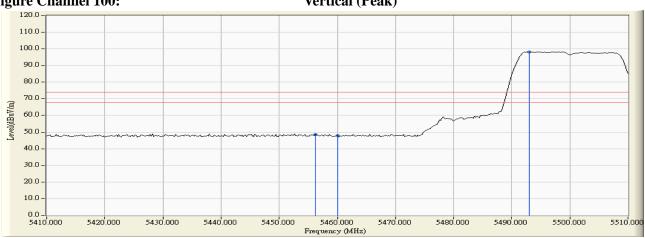
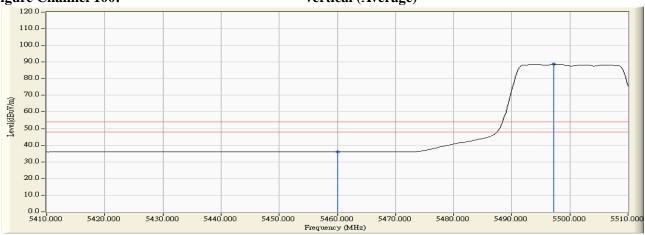


Figure Channel 100:

Vertical (Average)



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

Report No: 1590006R-RFUSP05V00

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-70.300	-51.966	-24.966	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-70.200	-50.865	-23.865	-27.000	Pass

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Report No: 1590006R-RFUSP05V00

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 140 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.360	-50.711	-23.711	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.630	-50.258	-23.258	-27.000	Pass

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Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (Monopole

Antenna)

RF Radiated Measurement (Horizontal):

Channal Na	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5150.000	3.340	48.741	52.081	74.00	54.00	Pass
38 (Peak)	5187.800	3.207	90.558	93.764			Pass
38 (Average)	5150.000	3.340	33.161	36.501	74.00	54.00	Pass
38 (Average)	5188.200	3.204	81.243	84.448			Pass







Figure Channel 38:

Horizontal (Average)



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



IP COMMUNICATION TERMINAL Product

Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (Monopole

Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chaine No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5150.000	5.260	47.822	53.082	74.00	54.00	Pass
38 (Peak)	5187.800	5.363	88.885	94.248			Pass
38 (Average)	5150.000	5.260	32.355	37.615	74.00	54.00	Pass
38 (Average)	5198.400	5.382	79.526	84.908			Pass

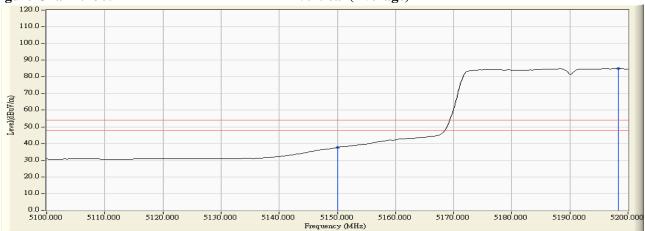


Vertical (Peak)



Figure Channel 38:

Vertical (Average)



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



Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	1 -	Correct Factor	_	Emission Level		_	Result
Chamici No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
62 (Peak)	5307.600	3.853	93.618	97.470			Pass
62 (Peak)	5350.000	3.716	50.097	53.814	74.00	54.00	Pass
62 (Peak)	5354.000	3.703	50.779	54.482	74.00	54.00	Pass
62 (Average)	5313.400	3.834	83.908	87.742			Pass
62 (Average)	5350.000	3.716	35.908	39.625	74.00	54.00	Pass



Horizontal (Peak)

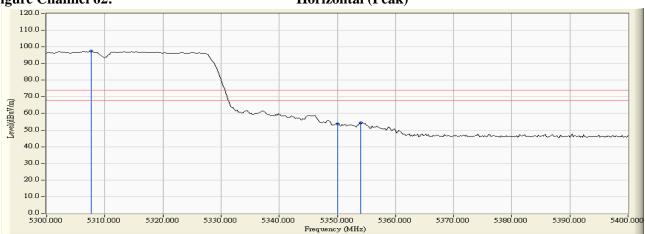
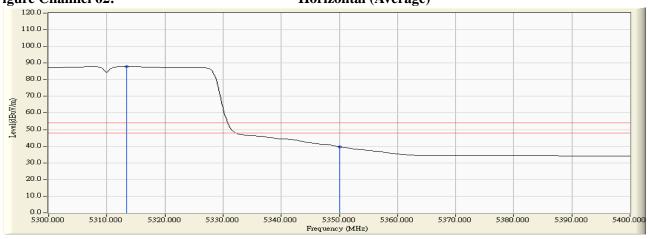


Figure Channel 62:

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 Site No.3 OATS

Test Mode Mode 3: Transmit (802.11n-40BW 15Mbps) - Channel 62 (Monopole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chainlei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
62 (Peak)	5307.600	5.745	91.769	97.514	-		Pass
62 (Peak)	5350.000	5.691	48.731	54.423	74.00	54.00	Pass
62 (Peak)	5353.800	5.686	49.148	54.834	74.00	54.00	Pass
62 (Average)	5315.000	5.736	82.284	88.020			Pass
62 (Average)	5350.000	5.691	35.184	40.876	74.00	54.00	Pass



Vertical (Peak)

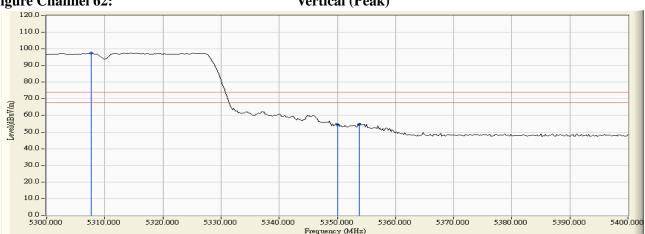
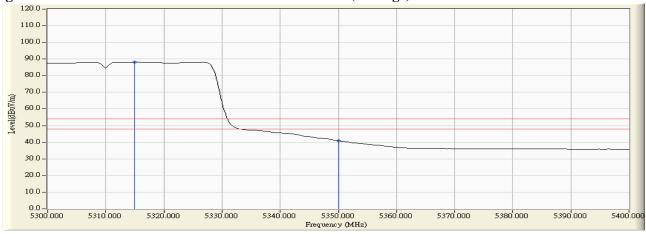


Figure Channel 62:

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.
- Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. 3.
- "*", means this data is the worst emission level. 4.
- Measurement Level = Reading Level + Correct Factor. 5.
- The average measurement was not performed when the peak measured data under the limit of average detection.



Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Monopole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	1	Correct Factor	Reading Level	Emission Level		_	Result
Chamier 140.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	resuit
102 (Peak)	5460.000	4.354	45.269	49.623	74.00	54.00	Pass
102 (Peak)	5508.000	4.824	91.342	96.167	1		Pass
102 (Average)	5460.000	4.354	31.478	35.832	74.00	54.00	Pass
102 (Average)	5494.500	4.777	81.962	86.738			Pass

Figure Channel 102:

Horizontal (Peak)

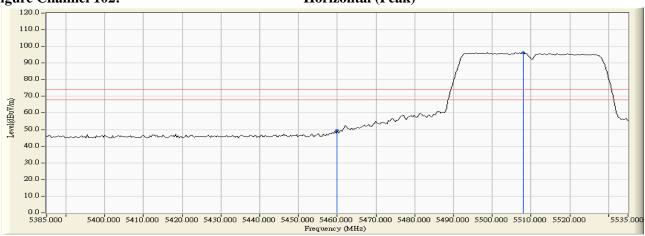
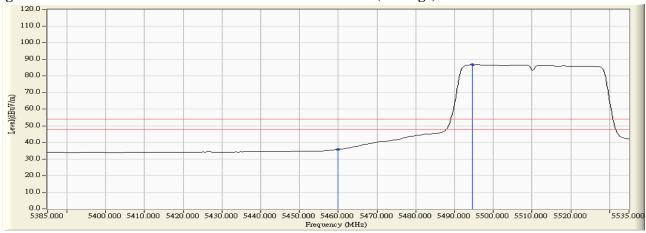


Figure Channel 102:

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 Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Monopole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	
102 (Peak)	5454.900	6.004	43.777	49.782	74.00	54.00	Pass
102 (Peak)	5460.000	6.041	43.096	49.137	74.00	54.00	Pass
102 (Peak)	5494.800	6.259	88.556	94.815			Pass
102 (Average)	5460.000	6.041	30.696	36.737	74.00	54.00	Pass
102 (Average)	5494.500	6.259	79.222	85.480			Pass



Vertical (Peak)

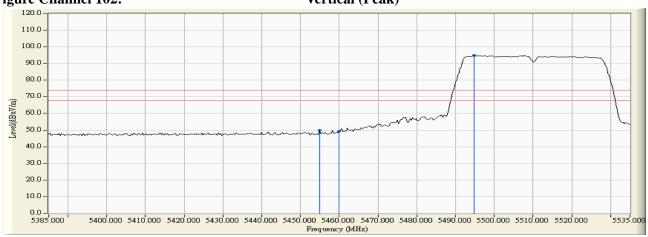


Figure Channel 102:

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.

Report No: 1590006R-RFUSP05V00

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-68.070	-49.736	-22.736	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-69.640	-50.305	-23.305	-27.000	Pass

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Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 134 (Monopole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.140	-50.491	-23.491	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.900	-50.528	-23.528	-27.000	Pass

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IP COMMUNICATION TERMINAL Product

Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

		, ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
36 (Peak)	5148.600	3.345	42.691	46.036	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	41.385	44.725	74.00	54.00	Pass
36 (Peak)	5177.000	3.246	84.255	87.500			Pass
36 (Average)	5150.000	3.340	29.357	32.697	74.00	54.00	Pass
36 (Average)	5176.600	3.246	74.733	77.979			Pass

Figure Channel 36:

Horizontal (Peak)

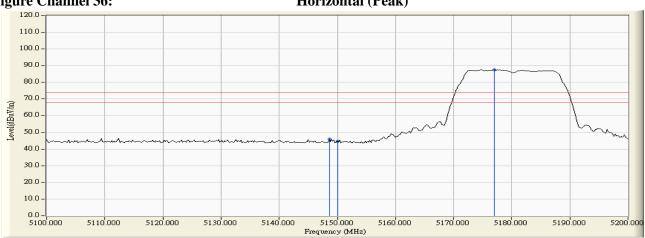
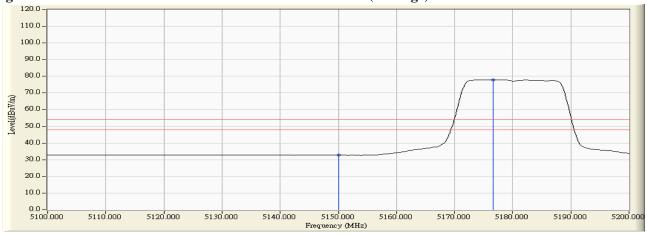


Figure Channel 36:

Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. 1.
- Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. 2.
- Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. 3.
- "*", means this data is the worst emission level.
- 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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
36 (Peak)	5150.000	5.260	42.464	47.724	74.00	54.00	Pass
36 (Peak)	5176.800	5.334	96.005	101.338			Pass
36 (Average)	5150.000	5.260	30.279	35.539	74.00	54.00	Pass
36 (Average)	5186.800	5.360	86.592	91.953			Pass



Vertical (Peak)

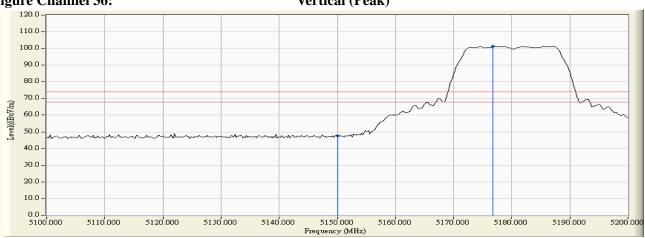


Figure Channel 36:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

		()	•				
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamie No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
64 (Peak)	5316.600	3.823	84.274	88.097			Pass
64 (Peak)	5350.000	3.716	36.034	39.751	74.00	54.00	Pass
64 (Peak)	5353.000	3.707	37.584	41.291	74.00	54.00	Pass
64 (Average)	5317.600	3.820	74.867	78.687			Pass
64 (Average)	5350.000	3.716	24.083	27.800	74.00	54.00	Pass



Horizontal (Peak)

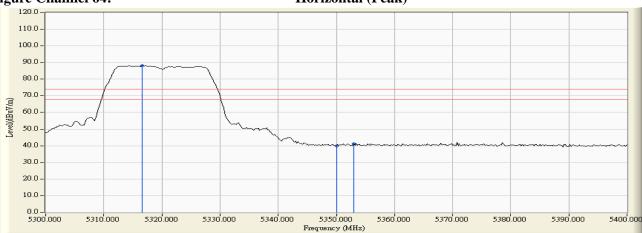
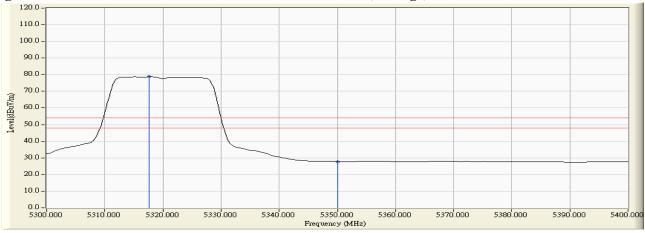


Figure Channel 64:

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.

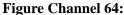


Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.		Correct Factor	Reading Level	Emission Level		~	Result
Chamier 140.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5316.800	5.733	97.287	103.020			Pass
64 (Peak)	5350.000	5.691	43.104	48.796	74.00	54.00	Pass
64 (Average)	5318.200	5.731	88.044	93.775			Pass
64 (Average)	5350.000	5.691	30.843	36.535	74.00	54.00	Pass



Vertical (Peak)

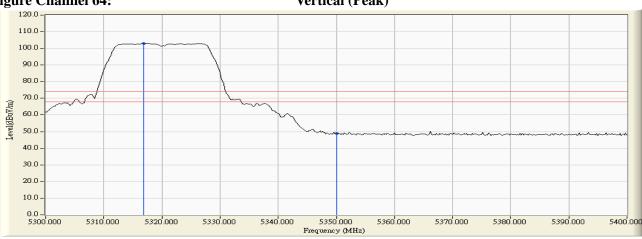
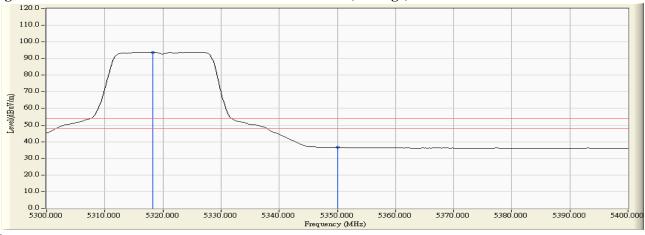


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
100 (Peak)	5459.200	4.343	41.958	46.301	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	41.331	45.685	74.00	54.00	Pass
100 (Peak)	5494.600	4.777	81.999	86.776			Pass
100 (Average)	5460.000	4.354	29.443	33.797	74.00	54.00	Pass
100 (Average)	5498.200	4.801	73.161	77.963			Pass

Figure Channel 100:

Horizontal (Peak)

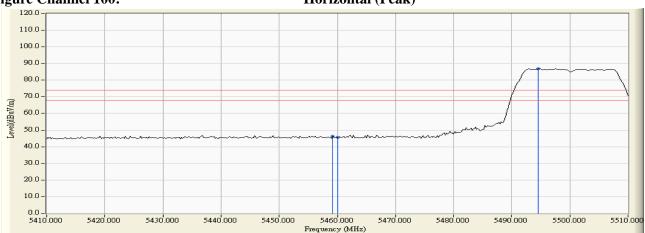
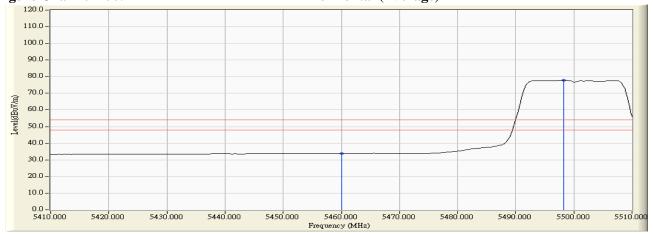


Figure Channel 100:

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.

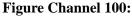


Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
100 (Peak)	5458.400	6.029	42.927	48.957	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	41.392	47.433	74.00	54.00	Pass
100 (Peak)	5494.000	6.256	94.332	100.589	1		Pass
100 (Average)	5460.000	6.041	30.031	36.072	74.00	54.00	Pass
100 (Average)	5498.200	6.269	85.021	91.290			Pass



Vertical (Peak)

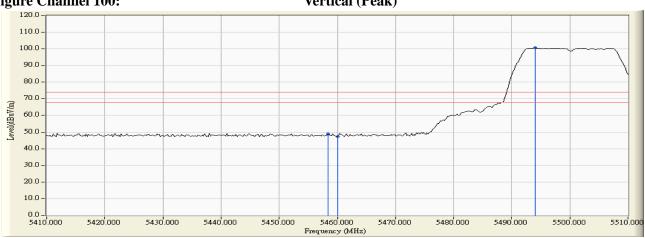
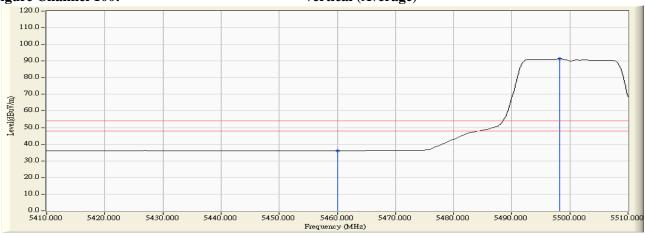


Figure Channel 100:

Vertical (Average)



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

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-70.080	-51.746	-24.746	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-69.720	-50.385	-23.385	-27.000	Pass

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Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 140 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.000	-50.351	-23.351	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.050	-49.678	-22.678	-27.000	Pass

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Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5134.200	3.395	42.694	46.089	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	40.663	44.003	74.00	54.00	Pass
36 (Peak)	5177.000	3.246	83.371	86.616			Pass
36 (Average)	5150.000	3.340	29.315	32.655	74.00	54.00	Pass
36 (Average)	5177.000	3.246	73.790	77.035			Pass



Horizontal (Peak)

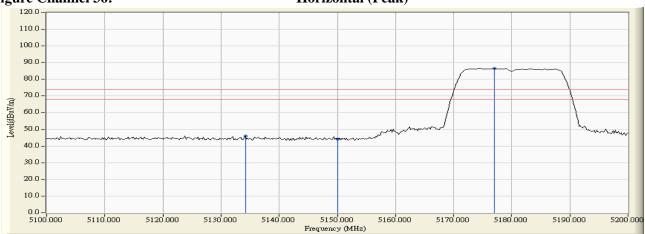
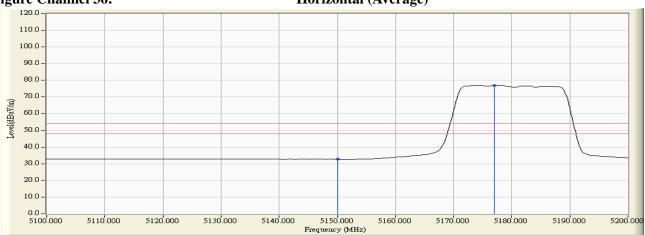


Figure Channel 36:

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 Site No.3 OATS

Test Mode Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36 (Dipole Antenna)

RF Radiated Measurement (Vertical):

		, ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5150.000	5.260	42.746	48.006	74.00	54.00	Pass
36 (Peak)	5177.000	5.335	94.546	99.880			Pass
36 (Average)	5150.000	5.260	30.191	35.451	74.00	54.00	Pass
36 (Average)	5177.000	5.335	85.149	90.483			Pass



Vertical (Peak)

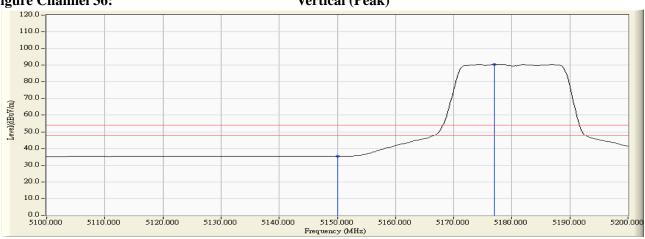


Figure Channel 36:

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



Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5316.600	3.823	83.585	87.408			Pass
64 (Peak)	5350.000	3.716	41.235	44.952	74.00	54.00	Pass
64 (Peak)	5353.800	3.704	42.755	46.459	74.00	54.00	Pass
64 (Average)	5326.800	3.791	74.140	77.931			Pass
64 (Average)	5350.000	3.716	29.580	33.297	74.00	54.00	Pass



Horizontal (Peak)

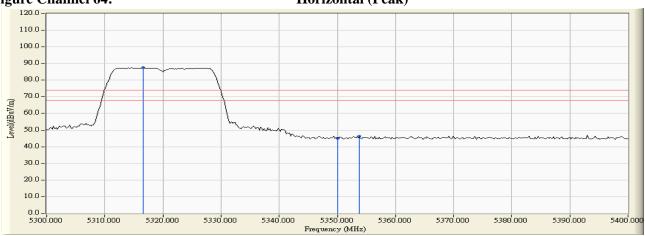
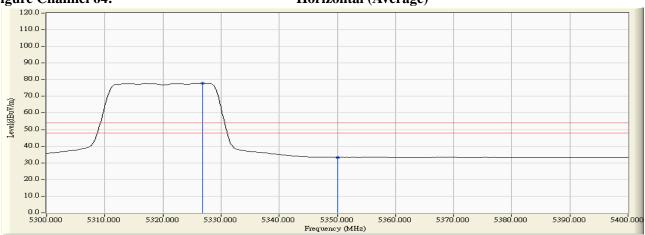


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result			
Chamiei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit			
64 (Peak)	5327.200	5.720	96.833	102.553			Pass			
64 (Peak)	5350.000	5.691	42.478	48.170	74.00	54.00	Pass			
64 (Peak)	5367.800	5.666	44.239	49.905	74.00	54.00	Pass			
64 (Average)	5316.800	5.733	87.326	93.059			Pass			
64 (Average)	5350.000	5.691	30.578	36.270	74.00	54.00	Pass			



Vertical (Peak)

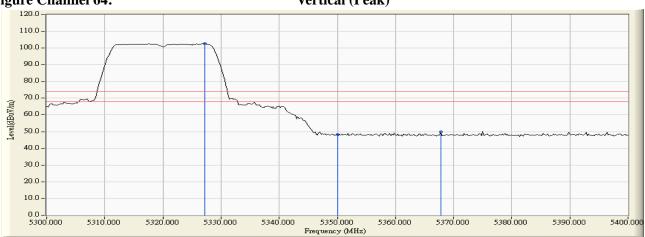
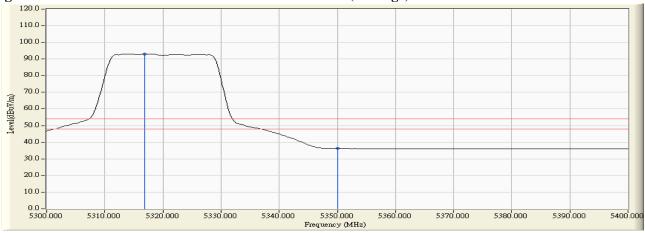


Figure Channel 64:

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 Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

		,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5459.000	4.340	42.453	46.793	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	40.797	45.151	74.00	54.00	Pass
100 (Peak)	5498.000	4.800	83.894	88.695			Pass
100 (Average)	5460.000	4.354	29.467	33.821	74.00	54.00	Pass
100 (Average)	5497.000	4.794	74.105	78.899			Pass



Horizontal (Peak)

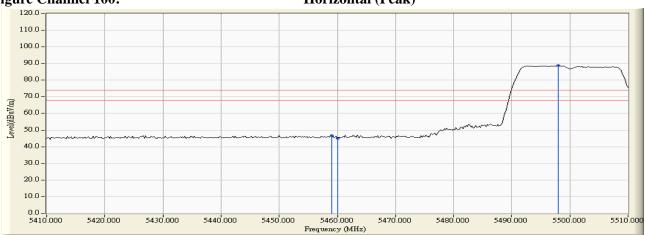
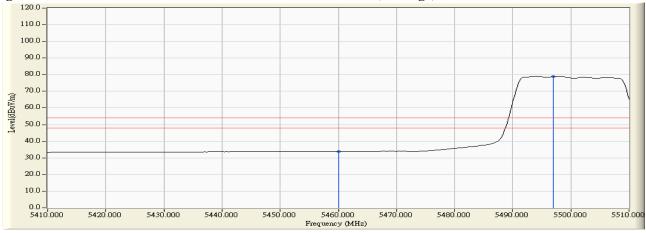


Figure Channel 100:

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.

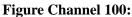


Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement (Vertical):

		() .					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamie No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5459.200	6.035	42.784	48.819	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	41.588	47.629	74.00	54.00	Pass
100 (Peak)	5493.000	6.253	94.107	100.361			Pass
100 (Average)	5460.000	6.041	29.958	35.999	74.00	54.00	Pass
100 (Average)	5497.000	6.266	84.089	90.355			Pass



Vertical (Peak)

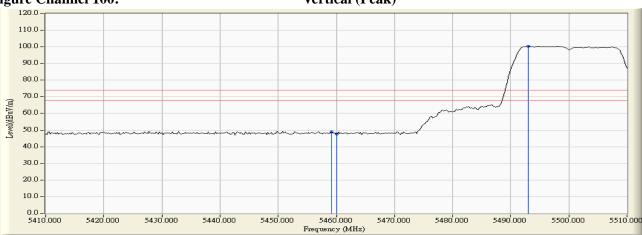
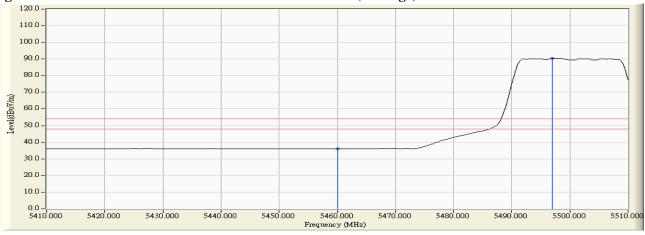


Figure Channel 100:

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.

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-70.300	-51.966	-24.966	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-69.870	-50.535	-23.535	-27.000	Pass

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Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 140 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.450	-50.801	-23.801	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.620	-50.248	-23.248	-27.000	Pass

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Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5129.200	3.412	42.856	46.269	74.00	54.00	Pass
38 (Peak)	5150.000	3.340	41.526	44.866	74.00	54.00	Pass
38 (Peak)	5187.800	3.207	79.032	82.238			Pass
38 (Average)	5150.000	3.340	29.864	33.204	74.00	54.00	Pass
38 (Average)	5188.000	3.205	69.511	72.717			Pass

Figure Channel 38:

Horizontal (Peak)

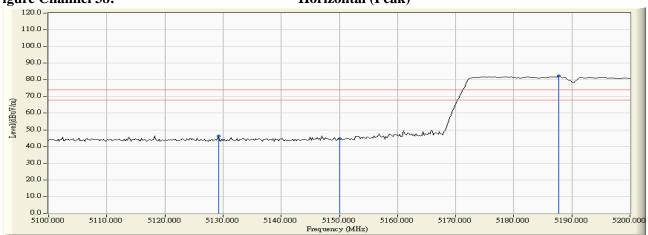
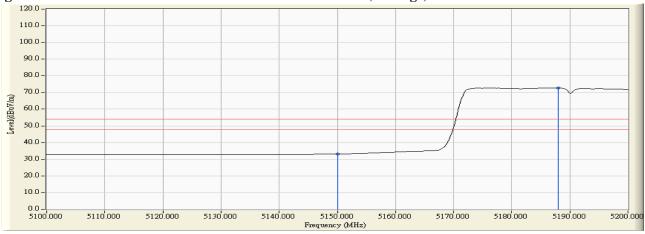


Figure Channel 38:

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.

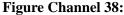


Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5150.000	5.260	49.424	54.684	74.00	54.00	Pass
38 (Peak)	5187.800	5.363	92.657	98.020			Pass
38 (Average)	5150.000	5.260	35.402	40.662	74.00	54.00	Pass
38 (Average)	5187.800	5.363	82.962	88.325			Pass



Vertical (Peak)

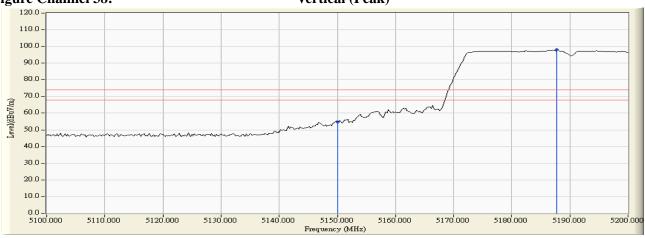
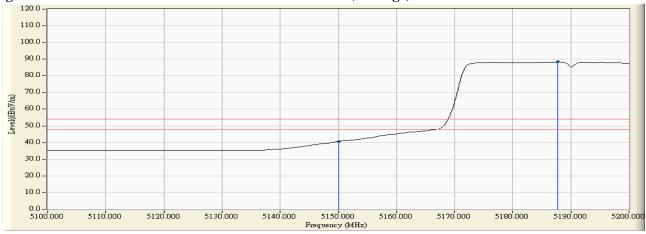


Figure Channel 38:

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 Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Pass Pass Pass Pass Pass
62 (Peak)	5308.000	3.852	80.531	84.382			Pass
62 (Peak)	5350.000	3.716	41.449	45.166	74.00	54.00	Pass
62 (Peak)	5356.800	3.694	43.081	46.775	74.00	54.00	Pass
62 (Average)	5315.000	3.829	70.879	74.707			Pass
62 (Average)	5350.000	3.716	30.334	34.051	74.00	54.00	Pass

Figure Channel 62:

Horizontal (Peak)

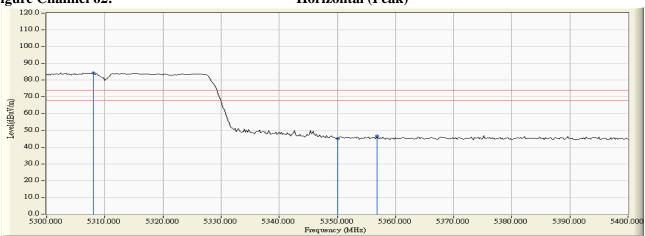
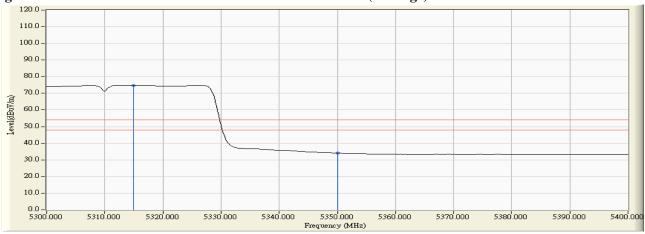


Figure Channel 62:

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 Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	1 -	Correct Factor	_	Emission Level		_	Result
Chamici No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
62 (Peak)	5307.600	5.745	93.624	99.369	-		Pass
62 (Peak)	5350.000	5.691	50.472	56.164	74.00	54.00	Pass
62 (Peak)	5354.400	5.686	51.758	57.444	74.00	54.00	Pass
62 (Average)	5307.000	5.746	84.402	90.148	1		Pass
62 (Average)	5350.000	5.691	37.144	42.836	74.00	54.00	Pass



Vertical (Peak)

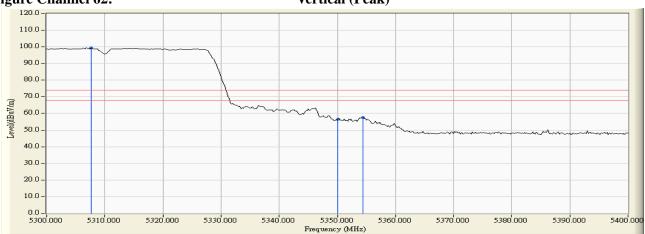
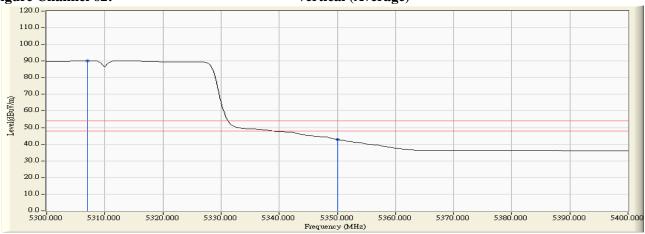


Figure Channel 62:

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 Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamie No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
102 (Peak)	5457.600	4.322	42.304	46.626	74.00	54.00	Pass
102 (Peak)	5460.000	4.354	41.561	45.915	74.00	54.00	Pass
102 (Peak)	5502.300	4.830	80.418	85.248			Pass
102 (Average)	5460.000	4.354	29.524	33.878	74.00	54.00	Pass
102 (Average)	5495.700	4.785	71.088	75.873			Pass

Figure Channel 102:

Horizontal (Peak)

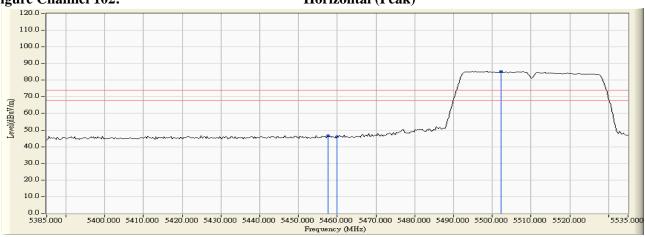
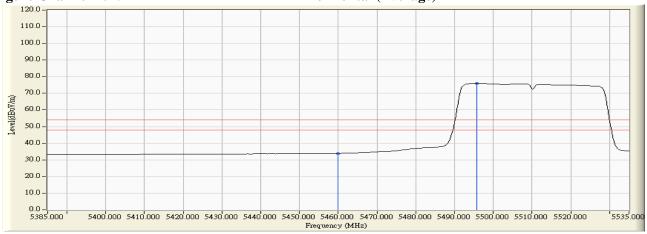


Figure Channel 102:

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 Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamici No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
102 (Peak)	5460.000	6.041	45.930	51.971	74.00	54.00	Pass
102 (Peak)	5507.700	6.273	90.953	97.226			Pass
102 (Average)	5460.000	6.041	31.534	37.575	74.00	54.00	Pass
102 (Average)	5508.300	6.270	81.258	87.527			Pass



Vertical (Peak)

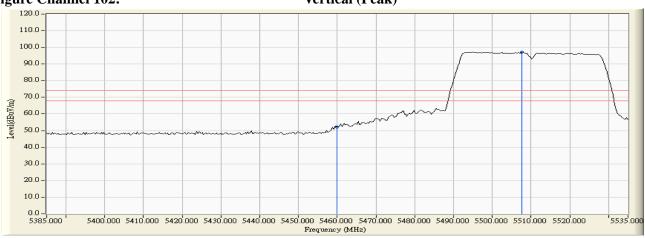


Figure Channel 102:

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.

Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)			Result
Horizontal	5470.000	18.334	-69.930	-51.596	-24.596	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	(1D /)	
Vertical	5470.000	19.335	-69.030	-49.695	-22.695	-27.000	Pass

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Product : IP COMMUNICATION TERMINAL

Test Item : Band Edge Data Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 134 (Dipole Antenna)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.100	-50.451	-23.451	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	~		Result
Vertical	5725.000	19.372	-69.630	-50.258	-23.258	-27.000	Pass

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7. Frequency Stability

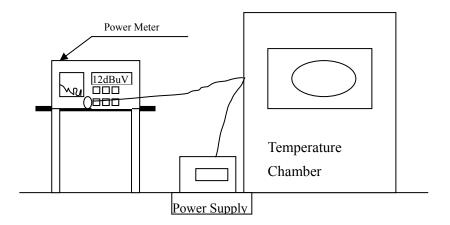
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.	
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2015	
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2015	
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015	

Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limits

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

7.4. Test Procedure

The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.5. Uncertainty

± 150 Hz



7.6. Test Result of Frequency Stability

Product : IP COMMUNICATION TERMINAL

Test Item : Frequency Stability
Test Site : Temperature Chamber

Test Mode : Carrier Wave

Test C	Conditions	Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0073	-0.0073
		38	5190.0000	5190.0093	-0.0093
		44	5220.0000	5220.0096	-0.0096
		46	5230.0000	5230.0081	-0.0081
		48	5240.0000	5240.0098	-0.0098
Tnom (20) °C	Vnom (120)V	52	5260.0000	5260.0083	-0.0083
		60	5300.0000	5300.0062	-0.0062
		64	5320.0000	5320.0073	-0.0073
		100	5500.0000	5500.0074	-0.0074
		116	5580.0000	5580.0094	-0.0094
		140	5700.0000	5700.0077	-0.0077
		36	5180.0000	5180.0060	-0.0060
		38	5190.0000	5190.0098	-0.0098
		44	5220.0000	5220.0097	-0.0097
		46	5230.0000	5230.0086	-0.0086
		48	5240.0000	5240.0097	-0.0097
Tnom (50) °C	Vnom (138)V	52	5260.0000	5260.0078	-0.0078
		60	5300.0000	5300.0060	-0.0060
		64	5320.0000	5320.0069	-0.0069
		100	5500.0000	5500.0071	-0.0071
		116	5580.0000	5580.0093	-0.0093
		140	5700.0000	5700.0074	-0.0074

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Test C	Test Conditions		Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0061	-0.0061
		38	5190.0000	5190.0091	-0.0091
		44	5220.0000	5220.0096	-0.0096
		46	5230.0000	5230.0084	-0.0084
		48	5240.0000	5240.0097	-0.0097
T (50) %	V (102)V	140	5180.0000	5180.0101	-0.0101
Tnom (50) °C	Vnom (102)V	52	5260.0000	5260.0079	-0.0079
		60	5300.0000	5300.0086	-0.0086
		64	5320.0000	5320.0074	-0.0074
		100	5500.0000	5500.0073	-0.0073
		116	5580.0000	5580.0101	-0.0101
		140	5700.0000	5700.0080	-0.0080
		36	5190.0000	5190.0090	-0.0090
		38	5220.0000	5220.0096	-0.0096
		44	5230.0000	5230.0097	-0.0097
		46	5240.0000	5240.0093	-0.0093
		48	5180.0000	5180.0101	-0.0101
Tnom (0) °C	Vnom (138)V	52	5260.0000	5260.0077	-0.0077
		60	5300.0000	5300.0084	-0.0084
		64	5320.0000	5320.0072	-0.0072
		100	5500.0000	5500.0072	-0.0072
		116	5580.0000	5580.0099	-0.0091 -0.0096 -0.0084 -0.0097 -0.0101 -0.0079 -0.0086 -0.0074 -0.0073 -0.0101 -0.0080 -0.0096 -0.0097 -0.0097 -0.0093 -0.0101 -0.0077 -0.0084 -0.0072
		140	5700.0000	5700.0079	-0.0079
		36	5190.0000	5190.0090	-0.0090
		38	5220.0000	5220.0096	-0.0096
		44	5230.0000	5230.0097	-0.0097
		46	5240.0000	5240.0093	-0.0093
		48	5180.0000	5180.0073	-0.0073
Tnom (0) °C	Vnom (102)V	52	5260.0000	5260.0076	-0.0076
		60	5300.0000	5300.0084	-0.0084
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0067	-0.0067
		116	5580.0000	5580.0094	-0.0094
		140	5700.0000	5700.0086	-0.0086

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8. EMI Reduction Method During Compliance Testing

No modification was made during testing.

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