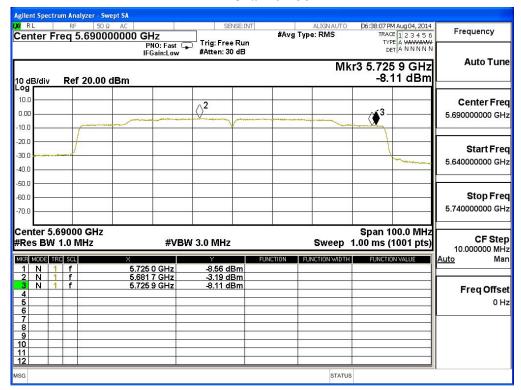
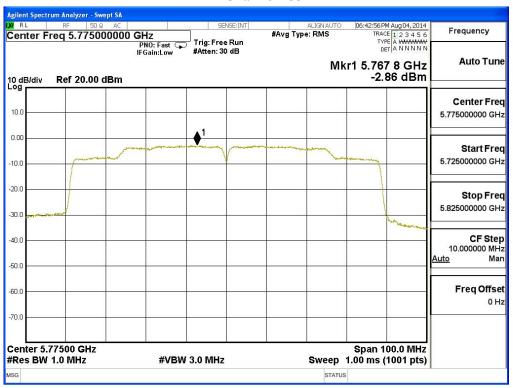


#### Channel 138



#### **Channel 155**





## 5. Peak Excursion

## 5.1. Test Equipment

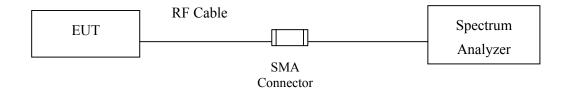
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

### 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

### **Conduction Power Measurement**



### 5.3. Limits

The ratio of the peak excursion of the modulation envelope (measured suing a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.



### **5.4.** 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.

- Step 1: Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.
- Step 2: Find the maximum of the peak-max-hold spectrum.

(Set RBW = 1 MHz, VBW  $\geq$  3 MHz, Detector = peak, Trace mode = max-hold, Allow the sweeps to continue until the trace stabilizes, Use the peak search function to find the peak of the spectrum.)

- Step 3: Use the procedure found under KDB-789033 F) to measure the PPSD.
- Step 4: Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

# 5.5. Uncertainty

± 1.27 dB



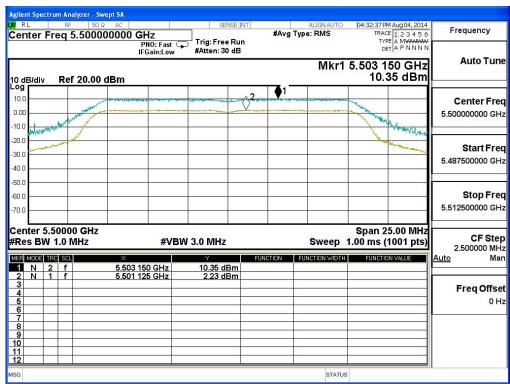
Test Result of Peak Excursion

Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS

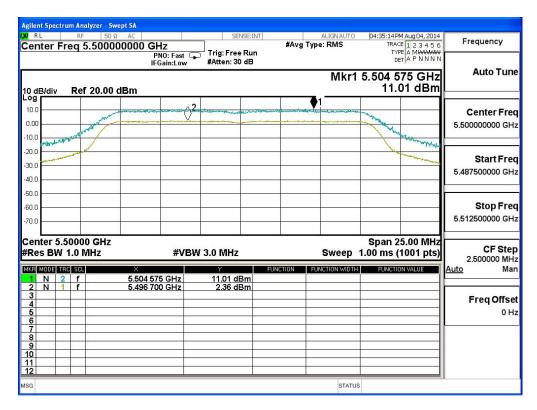
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

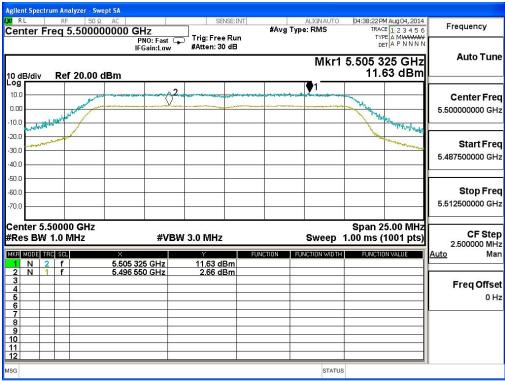
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dB)	Required Limit (dB)	Result
	(MITZ)	(wiops)	(ub)	(ub)	
	5500	6	8.120	<13	Pass
100		12	8.650	<13	Pass
100		24	8.970	<13	Pass
		54	9.540	<13	Pass

### Channel 100:

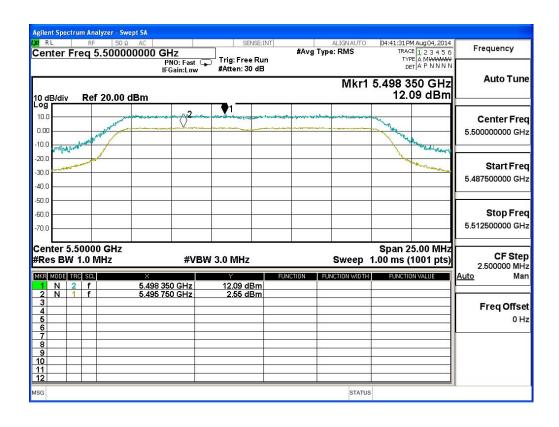












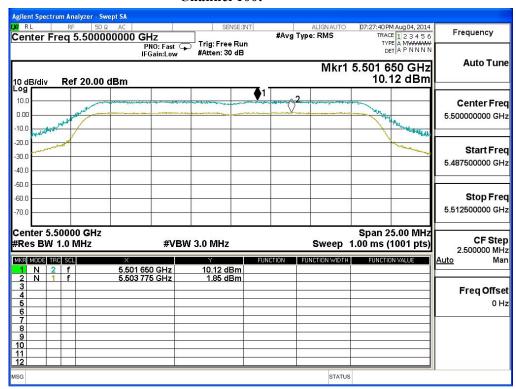


Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS

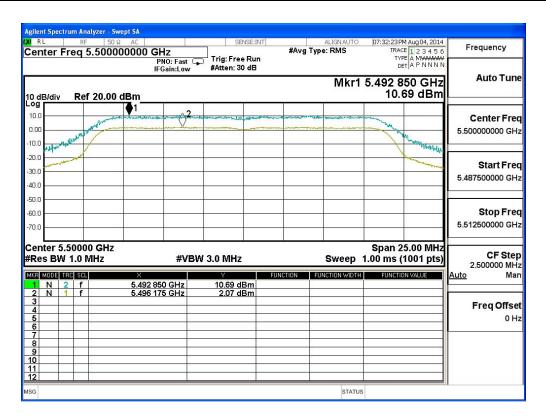
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps)

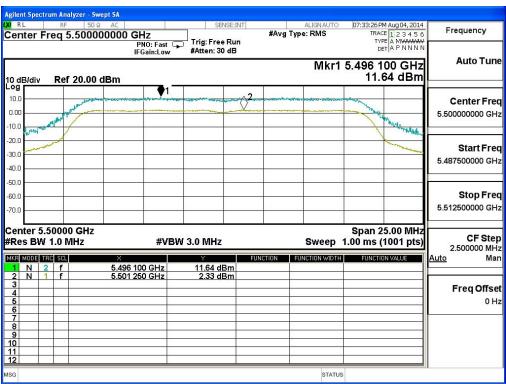
Channel No.	Frequency	Data Rate	Measurement Level	Required Limit	P ogult
	(MHz)	(Mbps)	(dB)	(dB)	Result
	5500	MCS (0)	8.270	<13	Pass
100		MCS (2)	8.620	<13	Pass
100		MCS (4)	9.310	<13	Pass
		MCS (7)	9.740	<13	Pass

### Channel 100:

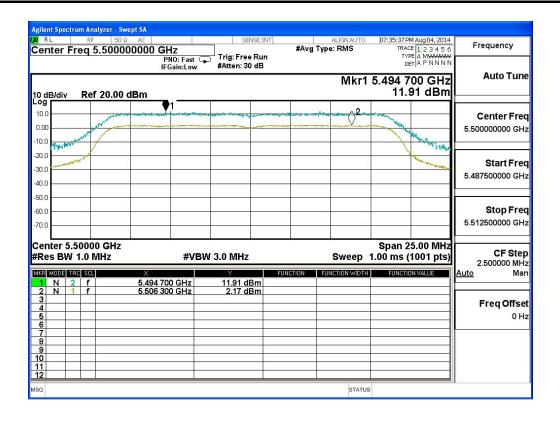












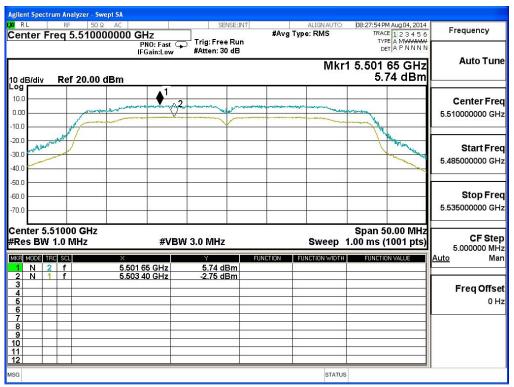


Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS

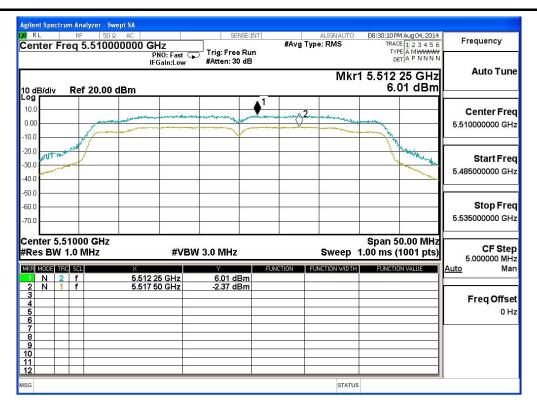
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps)

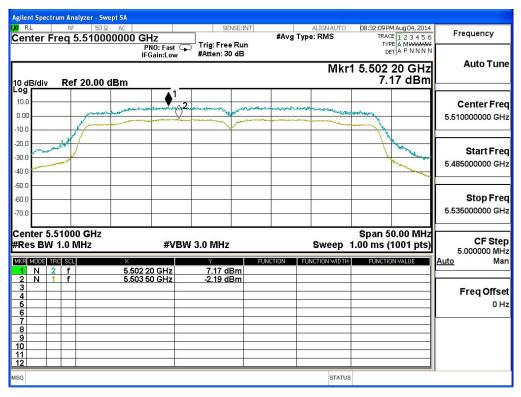
Channel No.	Frequency	Data Rate	Measurement Level	Required Limit	Result
Channel No.	(MHz)	(Mbps)	(dB)	(dB)	Result
	5510	MCS (0)	8.490	<13	Pass
102		MCS (2)	8.380	<13	Pass
102		MCS (4)	9.360	<13	Pass
		MCS (7)	9.290	<13	Pass

### Channel 102:

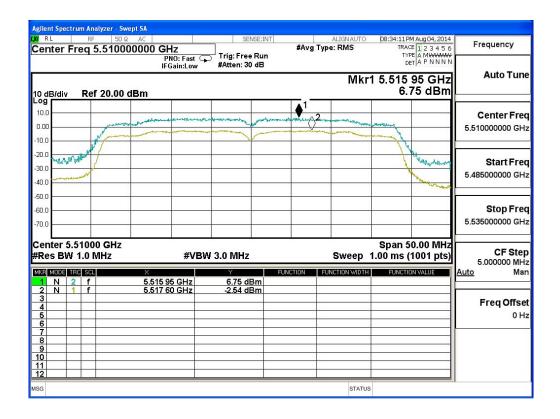












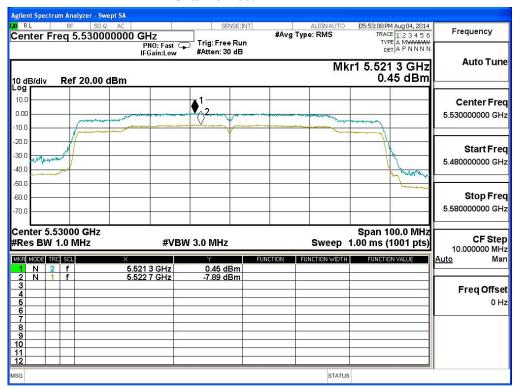


Product : TABLET PC
Test Item : Peak Excursion
Test Site : No.3 OATS

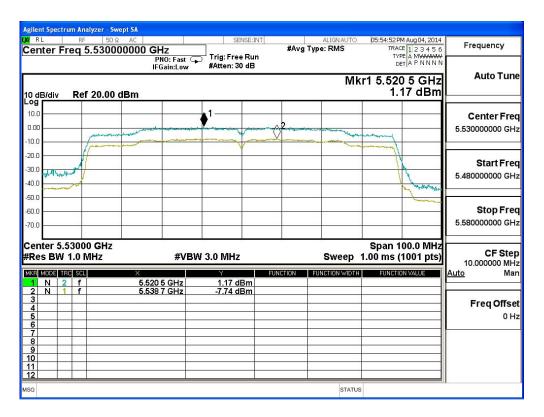
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps)

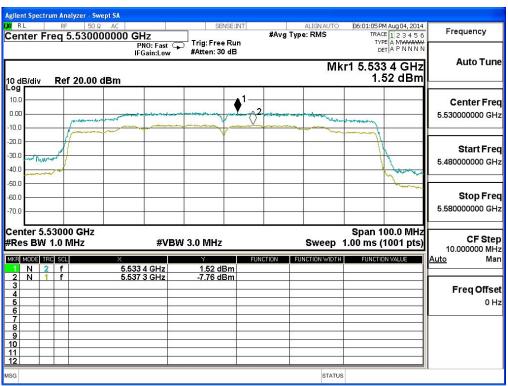
Channel No	Frequency	Data Rate	Measurement Level	Required Limit	Dogult
Channel No.	(MHz)	(Mbps)	(dB)	(dB)	Result
	5530	(VTH0)	8.340	<13	Pass
		(VTH2)	8.910	<13	Pass
106		(VTH4)	9.280	<13	Pass
		(VTH7)	9.150	<13	Pass
		(VTH9)	9.310	<13	Pass

### Channel 106:



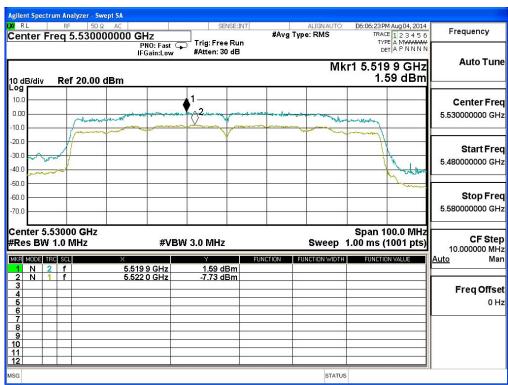














### 6. Radiated Emission

# 6.1. Test Equipment

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

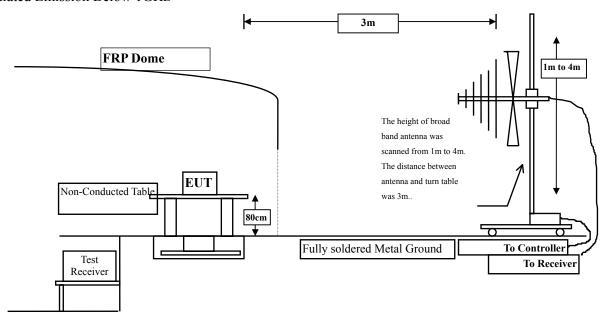
Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3	ite # 3 X Loop Antenna Teseq		Teseq	HLA6120 / 26739	Jul., 2014
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2013
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
	X Pre-Amplifier		QTK	QTK-AMP-03 / 0003	May, 2014
	X Pre-Amplifier		QTK	AP-180C / CHM_0906076	Sep., 2013
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2013
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2014
	X Controller Q		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.

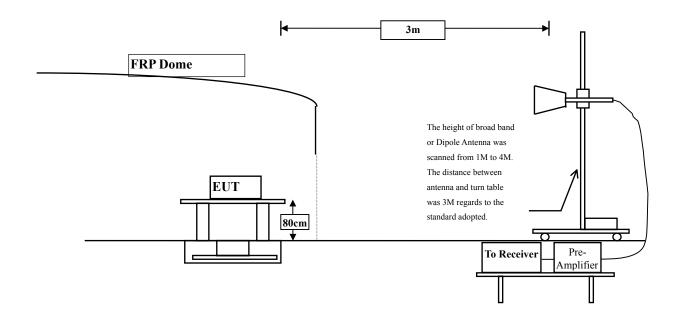
# 6.2. Test Setup

Radiated Emission Below 1GHz





Radiated Emission Above 1GHz



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

Remarks: E field strength  $(dB\mu V/m) = 20 \log E$  field strength (uV/m)



#### 6.4. 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 30MHz - 10th Harmonic of fundamental was investigated.

## 6.5. Uncertainty

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



### 6.6. Test Result of Radiated Emission

Product : TABLET PC

Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10360.000	12.930	38.100	51.030	-22.970	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10360.000	13.724	37.700	51.424	-22.576	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
10440.000	13.322	38.560	51.882	-22.118	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10440.000	14.245	37.880	52.125	-21.875	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10480.000	13.693	37.890	51.584	-22.416	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10480.000	14.620	37.980	52.601	-21.399	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
10360.000	12.930	37.590	50.520	-23.480	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10360.000	13.724	37.980	51.704	-22.296	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10600.000	14.550	37.590	52.139	-21.861	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10600.000	14.881	38.150	53.031	-20.969	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10640.000	14.690	37.890	52.580	-21.420	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10640.000	15.083	37.560	52.643	-21.357	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
11000.000	16.399	37.390	53.789	-20.211	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11000.000	17.132	36.810	53.942	-20.058	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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	37.180	53.845	-20.155	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11160.000	17.643	36.350	53.993	-20.007	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	dBμV/m	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
11400.000	16.530	37.410	53.941	-20.059	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
11400.000	17.138	36.710	53.848	-20.152	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
10360.000	12.930	36.150	49.080	-24.920	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10360.000	13.724	37.040	50.764	-23.236	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
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					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10440.000	14.245	37.140	51.385	-22.615	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
10480.000	13.693	36.480	50.174	-23.826	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10480.000	14.620	37.150	51.771	-22.229	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dΒμV	dBμV/m	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10520.000	14.015	37.260	51.275	-22.725	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10520.000	14.818	37.290	52.108	-21.892	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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	37.260	51.809	-22.191	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10600.000	14.881	38.140	53.021	-20.979	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10600.000	14.881	38.140	53.021	-20.979	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
10640.000	15.083	37.140	52.223	-21.777	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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	36.150	52.549	-21.451	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
Vertical					
Peak Detector:					
11000.000	17.132	36.760	53.892	-20.108	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
11160.000	16.664	36.890	53.555	-20.445	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
11160.000	17.643	36.210	53.853	-20.147	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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	36.020	52.551	-21.449	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11400.000	17.138	36.060	53.198	-20.802	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
11400.000	17.138	23.700	40.838	-13.162	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 Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
10380.000	12.939	37.290	50.229	-23.771	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10380.000	13.796	37.530	51.326	-22.674	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
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					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10460.000	14.433	37.140	51.573	-22.427	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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	37.260	51.410	-22.590	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
10540.000	14.829	36.150	50.978	-23.022	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
10620.000	14.623	37.140	51.763	-22.237	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10620.000	14.970	37.260	52.230	-21.770	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
11020.000	16.474	37.180	53.653	-20.347	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
11020.000	17.224	36.100	53.324	-20.676	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

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:					
11100.000	16.681	36.260	52.941	-21.059	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
Peak Detector:					
11100.000	17.523	36.410	53.933	-20.067	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector:</b>					
11340.000	16.408	36.480	52.887	-21.113	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11340.000	17.167	36.230	53.397	-20.603	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
11440.000	16.779	33.530	50.309	-23.691	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11440.000	17.519	33.940	51.459	-22.541	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
11420.000	16.648	35.940	52.587	-21.413	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11420.000	17.311	36.410	53.720	-20.280	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
10420.000	13.135	37.740	50.875	-23.125	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10420.000	14.057	37.870	51.927	-22.073	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
10580.000	14.423	36.220	50.643	-23.357	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
10580.000	14.849	36.440	51.289	-22.711	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
11060.000	16.580	35.630	52.210	-21.790	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
11060.000	17.375	35.450	52.825	-21.175	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
11380.000	16.480	36.159	52.640	-21.360	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11380.000	17.125	36.644	53.770	-20.230	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

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



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
<b>Peak Detector:</b>					
11550.000	16.914	35.600	52.514	-21.486	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					
Vertical					
<b>Peak Detector:</b>					
11550.000	17.826	35.820	53.645	-20.355	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
<b>Detector:</b>					

- 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)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
111.480	-7.489	38.479	30.991	-12.509	43.500
225.940	-9.647	41.838	32.191	-13.809	46.000
365.620	0.382	34.910	35.292	-10.708	46.000
577.080	3.221	26.373	29.594	-16.406	46.000
800.180	6.417	24.352	30.769	-15.231	46.000
932.100	7.270	23.566	30.836	-15.164	46.000
Vertical					
Peak Detector					
111.480	-3.439	36.529	33.091	-10.409	43.500
225.940	-6.267	30.340	24.073	-21.927	46.000
365.620	0.282	26.684	26.966	-19.034	46.000
538.280	1.996	24.274	26.270	-19.730	46.000
689.600	2.302	23.109	25.411	-20.589	46.000
842.860	2.378	23.165	25.543	-20.457	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
103.720	-8.230	39.354	31.123	-12.377	43.500
225.940	-9.647	40.542	30.895	-15.105	46.000
365.620	0.382	35.933	36.315	-9.685	46.000
633.340	1.530	28.524	30.054	-15.946	46.000
767.200	5.099	25.170	30.270	-15.730	46.000
932.100	7.270	23.581	30.851	-15.149	46.000
Vertical					
Peak Detector					
107.600	-4.027	39.753	35.726	-7.774	43.500
260.860	-4.870	29.444	24.574	-21.426	46.000
460.680	-1.930	23.479	21.549	-24.451	46.000
674.080	0.003	23.737	23.740	-22.260	46.000
838.980	1.961	23.554	25.515	-20.485	46.000
947.620	3.231	23.136	26.367	-19.633	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
128.940	-7.390	35.248	27.858	-15.642	43.500
266.680	-5.510	35.396	29.886	-16.114	46.000
365.620	0.382	35.317	35.699	-10.301	46.000
577.080	3.221	25.751	28.972	-17.028	46.000
767.200	5.099	24.822	29.922	-16.078	46.000
901.060	5.878	23.852	29.730	-16.270	46.000
Vertical					
Peak Detector					
107.600	-4.027	37.659	33.632	-9.868	43.500
229.820	-6.141	31.313	25.172	-20.828	46.000
390.840	-0.768	25.402	24.634	-21.366	46.000
606.180	2.246	22.612	24.858	-21.142	46.000
782.720	2.757	24.759	27.516	-18.484	46.000
920.460	3.272	22.667	25.939	-20.061	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Correct	Reading	Measurement	Margin	Limit
Factor	Level	Level		
dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
-8.230	38.413	30.182	-13.318	43.500
-5.484	36.472	30.988	-15.012	46.000
0.382	35.060	35.442	-10.558	46.000
4.386	23.852	28.238	-17.762	46.000
2.759	26.176	28.935	-17.065	46.000
6.327	24.488	30.815	-15.185	46.000
-4.027	37.668	33.641	-9.859	43.500
-6.267	29.959	23.692	-22.308	46.000
-0.726	24.730	24.004	-21.996	46.000
1.943	24.032	25.974	-20.026	46.000
2.724	24.166	26.891	-19.109	46.000
3.640	23.392	27.032	-18.968	46.000
	Factor dB  -8.230 -5.484  0.382  4.386 2.759 6.327  -4.027 -6.267 -0.726 1.943 2.724	Factor Level dB dBμV  -8.230 38.413 -5.484 36.472 0.382 35.060 4.386 23.852 2.759 26.176 6.327 24.488  -4.027 37.668 -6.267 29.959 -0.726 24.730 1.943 24.032 2.724 24.166	Factor dB       Level dBμV       Level dBμV/m         -8.230       38.413       30.182         -5.484       36.472       30.988         0.382       35.060       35.442         4.386       23.852       28.238         2.759       26.176       28.935         6.327       24.488       30.815         -4.027       37.668       33.641         -6.267       29.959       23.692         -0.726       24.730       24.004         1.943       24.032       25.974         2.724       24.166       26.891	Factor dB dBμV dBμV/m dB $\frac{1}{4}$ dBμV/m dB $\frac{1}{4}$ dBμV/m dB $\frac{1}{4}$

- 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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
107.600	-7.597	38.653	31.056	-12.444	43.500
258.920	-5.440	34.701	29.261	-16.739	46.000
365.620	0.382	35.092	35.474	-10.526	46.000
547.980	4.028	24.491	28.519	-17.481	46.000
701.240	2.759	26.994	29.753	-16.247	46.000
903.000	5.938	23.853	29.791	-16.209	46.000
Vertical					
Peak Detector					
107.600	-4.027	38.446	34.419	-9.081	43.500
253.100	-5.039	26.538	21.499	-24.501	46.000
472.320	-3.508	24.800	21.292	-24.708	46.000
687.660	2.292	23.148	25.440	-20.560	46.000
817.640	2.966	23.413	26.379	-19.621	46.000
889.420	1.224	23.232	24.456	-21.544	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
117.300	-7.350	33.898	26.548	-16.952	43.500
225.940	-9.647	39.718	30.071	-15.929	46.000
365.620	0.382	35.835	36.217	-9.783	46.000
577.080	3.221	27.521	30.742	-15.258	46.000
800.180	6.417	25.174	31.591	-14.409	46.000
930.160	7.530	22.574	30.104	-15.896	46.000
Vertical					
<b>Peak Detector</b>					
43.580	-10.919	43.395	32.476	-7.524	40.000
192.960	-5.655	33.477	27.822	-15.678	43.500
379.200	0.881	23.710	24.591	-21.409	46.000
598.420	1.114	23.324	24.438	-21.562	46.000
784.660	2.736	24.840	27.576	-18.424	46.000
930.160	3.830	23.126	26.956	-19.044	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
107.600	-7.597	35.415	27.818	-15.682	43.500
264.740	-5.501	36.047	30.547	-15.453	46.000
365.620	0.382	35.055	35.437	-10.563	46.000
522.760	3.176	26.050	29.226	-16.774	46.000
701.240	2.759	27.265	30.024	-15.976	46.000
862.260	6.327	24.986	31.313	-14.687	46.000
Vertical					
Peak Detector					
43.580	-10.919	43.530	32.611	-7.389	40.000
192.960	-5.655	33.185	27.530	-15.970	43.500
379.200	0.881	23.269	24.150	-21.850	46.000
604.240	2.199	22.259	24.459	-21.541	46.000
784.660	2.736	25.001	27.737	-18.263	46.000
908.820	0.730	24.298	25.028	-20.972	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Correct	Reading	Measurement	Margin	Limit
Factor	Level	Level		
dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
-7.291	34.251	26.961	-16.539	43.500
-5.484	39.106	33.622	-12.378	46.000
0.382	35.473	35.855	-10.145	46.000
3.140	27.622	30.762	-15.238	46.000
2.759	27.311	30.070	-15.930	46.000
5.878	24.745	30.623	-15.377	46.000
-10.919	44.206	33.287	-6.713	40.000
-5.655	35.191	29.536	-13.964	43.500
0.043	24.393	24.436	-21.564	46.000
2.175	22.966	25.141	-20.859	46.000
2.736	25.284	28.020	-17.980	46.000
3.272	23.260	26.532	-19.468	46.000
	Factor dB  -7.291 -5.484 0.382 3.140 2.759 5.878  -10.919 -5.655 0.043 2.175 2.736	Factor Level dB dBμV  -7.291 34.251 -5.484 39.106 0.382 35.473 3.140 27.622 2.759 27.311 5.878 24.745  -10.919 44.206 -5.655 35.191 0.043 24.393 2.175 22.966 2.736 25.284	Factor dB       Level dBμV       Level dBμV/m         -7.291       34.251       26.961         -5.484       39.106       33.622         0.382       35.473       35.855         3.140       27.622       30.762         2.759       27.311       30.070         5.878       24.745       30.623         -10.919       44.206       33.287         -5.655       35.191       29.536         0.043       24.393       24.436         2.175       22.966       25.141         2.736       25.284       28.020	Factor dB         Level dBμV         Level dBμV/m         dB           -7.291 $34.251$ $26.961$ $-16.539$ -5.484 $39.106$ $33.622$ $-12.378$ $0.382$ $35.473$ $35.855$ $-10.145$ $3.140$ $27.622$ $30.762$ $-15.238$ $2.759$ $27.311$ $30.070$ $-15.930$ $5.878$ $24.745$ $30.623$ $-15.377$ -10.919 $44.206$ $33.287$ $-6.713$ $-5.655$ $35.191$ $29.536$ $-13.964$ $0.043$ $24.393$ $24.436$ $-21.564$ $2.175$ $22.966$ $25.141$ $-20.859$ $2.736$ $25.284$ $28.020$ $-17.980$

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
105.660	-7.676	34.361	26.684	-16.816	43.500
262.800	-5.484	37.441	31.957	-14.043	46.000
365.620	0.382	35.859	36.241	-9.759	46.000
577.080	3.221	26.463	29.684	-16.316	46.000
800.180	6.417	24.622	31.039	-14.961	46.000
914.640	6.410	23.365	29.775	-16.225	46.000
Vertical					
Peak Detector					
43.580	-10.919	41.572	30.653	-9.347	40.000
171.620	-3.691	32.703	29.012	-14.488	43.500
365.620	0.282	24.105	24.387	-21.613	46.000
542.160	1.855	23.205	25.060	-20.940	46.000
689.600	2.302	22.806	25.108	-20.892	46.000
817.640	2.966	22.840	25.806	-20.194	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
113.420	-7.449	33.443	25.994	-17.506	43.500
225.940	-9.647	42.746	33.099	-12.901	46.000
365.620	0.382	35.578	35.960	-10.040	46.000
575.140	3.025	25.795	28.820	-17.180	46.000
800.180	6.417	24.562	30.979	-15.021	46.000
930.160	7.530	22.844	30.374	-15.626	46.000
Vertical					
Peak Detector					
43.580	-10.919	42.356	31.437	-8.563	40.000
192.960	-5.655	36.123	30.468	-13.032	43.500
373.380	0.043	26.176	26.219	-19.781	46.000
604.240	2.199	23.680	25.880	-20.120	46.000
780.780	2.769	24.745	27.514	-18.486	46.000
930.160	3.830	23.434	27.264	-18.736	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					_
<b>Peak Detector</b>					
119.240	-7.291	33.406	26.116	-17.384	43.500
225.940	-9.647	42.578	32.931	-13.069	46.000
365.620	0.382	35.125	35.507	-10.493	46.000
633.340	1.530	27.052	28.582	-17.418	46.000
800.180	6.417	24.761	31.178	-14.822	46.000
932.100	7.270	22.889	30.159	-15.841	46.000
Vertical					
Peak Detector					
107.600	-4.027	33.766	29.739	-13.761	43.500
262.800	-4.944	32.784	27.840	-18.160	46.000
458.740	-2.562	23.556	20.994	-25.006	46.000
546.040	0.956	24.281	25.237	-20.763	46.000
751.680	2.372	23.301	25.673	-20.327	46.000
899.120	1.647	22.201	23.848	-22.152	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
128.940	-7.390	33.906	26.516	-16.984	43.500
225.940	-9.647	43.037	33.390	-12.610	46.000
365.620	0.382	35.798	36.180	-9.820	46.000
544.100	4.373	23.340	27.713	-18.287	46.000
800.180	6.417	25.680	32.097	-13.903	46.000
930.160	7.530	22.763	30.293	-15.707	46.000
Vertical					
Peak Detector					
43.580	-10.919	44.043	33.124	-6.876	40.000
192.960	-5.655	36.252	30.597	-12.903	43.500
379.200	0.881	23.297	24.178	-21.822	46.000
613.940	1.782	24.037	25.819	-20.181	46.000
784.660	2.736	25.407	28.143	-17.857	46.000
928.220	3.640	23.593	27.233	-18.767	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
<b>Peak Detector</b>					
119.240	-7.291	32.875	25.585	-17.915	43.500
258.920	-5.440	36.377	30.937	-15.063	46.000
365.620	0.382	35.554	35.936	-10.064	46.000
577.080	3.221	24.677	27.898	-18.102	46.000
800.180	6.417	25.388	31.805	-14.195	46.000
930.160	7.530	23.560	31.090	-14.910	46.000
Vertical					
Peak Detector					
107.600	-4.027	33.712	29.685	-13.815	43.500
260.860	-4.870	33.611	28.741	-17.259	46.000
460.680	-1.930	23.174	21.244	-24.756	46.000
617.820	0.958	22.644	23.602	-22.398	46.000
784.660	2.736	24.470	27.206	-18.794	46.000
943.740	3.383	24.323	27.706	-18.294	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					_
<b>Peak Detector</b>					
103.720	-8.230	33.747	25.516	-17.984	43.500
225.940	-9.647	42.637	32.990	-13.010	46.000
365.620	0.382	35.102	35.484	-10.516	46.000
544.100	4.373	24.228	28.601	-17.399	46.000
800.180	6.417	25.395	31.812	-14.188	46.000
930.160	7.530	23.026	30.556	-15.444	46.000
Vanti a al					
Vertical					
Peak Detector					
103.720	-5.090	34.322	29.231	-14.269	43.500
260.860	-4.870	33.990	29.120	-16.880	46.000
379.200	0.881	24.043	24.924	-21.076	46.000
544.100	1.503	23.398	24.901	-21.099	46.000
784.660	2.736	26.542	29.278	-16.722	46.000
934.040	2.986	24.065	27.051	-18.949	46.000

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



Test Item : General Radiated Emission

Test Site : No.3 OATS

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

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	$dB\mu V$	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					_
<b>Peak Detector</b>					
128.940	-7.390	33.302	25.912	-17.588	43.500
266.680	-5.510	36.750	31.240	-14.760	46.000
365.620	0.382	35.720	36.102	-9.898	46.000
633.340	1.530	28.238	29.768	-16.232	46.000
776.900	5.167	22.308	27.475	-18.525	46.000
934.040	6.956	23.065	30.021	-15.979	46.000
Vertical					
Peak Detector					
105.660	-4.576	33.814	29.237	-14.263	43.500
225.940	-6.267	32.606	26.339	-19.661	46.000
388.900	-0.726	23.850	23.124	-22.876	46.000
608.120	2.175	23.479	25.654	-20.346	46.000
782.720	2.757	26.127	28.884	-17.116	46.000
920.460	3.272	23.130	26.402	-19.598	46.000

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



# 7. Band Edge

# 7.1. Test Equipment

#### **RF Conducted Measurement**

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

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

#### 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.

#### **RF Radiated Measurement:**

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

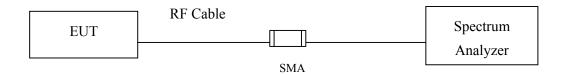
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2013
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2013
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2013
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2014
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

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

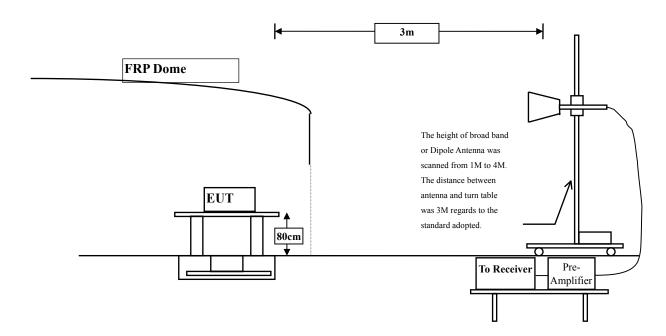


# 7.2. Test Setup

# **RF Conducted Measurement**



#### **RF Radiated Measurement:**





#### 7.3. 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  $(dB\mu V) = 20 \log RF \text{ Voltage } (uV)$ 
  - 2. In the Above Table, the tighter limit applies at the band edges.
  - 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### **7.4. 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 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.



# 7.5. Uncertainty

 $\pm$  3.8 dB below 1GHz

 $\pm$  3.9 dB above 1GHz



# 7.6. Test Result of Band Edge

Product : TABLET PC
Test Item : Band Edge Data
Test Site : No.3 OATS

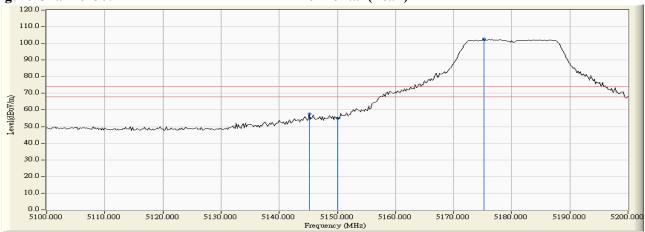
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36

#### **RF Radiated Measurement (Horizontal):**

Channel No.	1 -	Correct Factor	Reading Level	Emission Level		Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
36 (Peak)	5145.200	3.357	54.202	57.559	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	51.663	55.003	74.00	54.00	Pass
36 (Peak)	5175.200	3.251	99.249	102.500			
36 (Average)	5150.000	3.340	37.945	41.285	74.00	54.00	Pass
36 (Average)	5176.200	3.248	88.383	91.631			

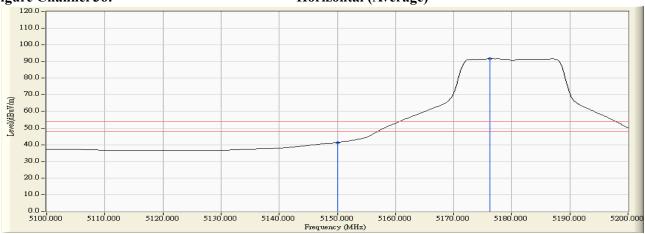
#### Figure Channel 36:

#### 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.



Product : TABLET PC
Test Item : Band Edge Data
Test Site : No.3 OATS

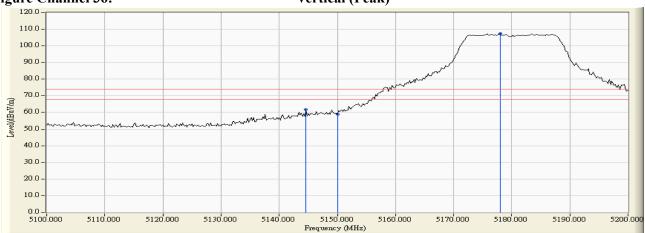
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36

## RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	<b>Emission Level</b>	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
36 (Peak)	5144.600	5.245	56.447	61.692	74.00	54.00	Pass
36 (Peak)	5150.000	5.260	53.617	58.877	74.00	54.00	Pass
36 (Peak)	5178.000	5.335	102.104	107.440			
36 (Average)	5150.000	5.260	40.094	45.354	74.00	54.00	Pass
36 (Average)	5176.000	5.332	90.764	96.095			



## 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.



Product : TABLET PC
Test Item : Band Edge Data
Test Site : No.3 OATS

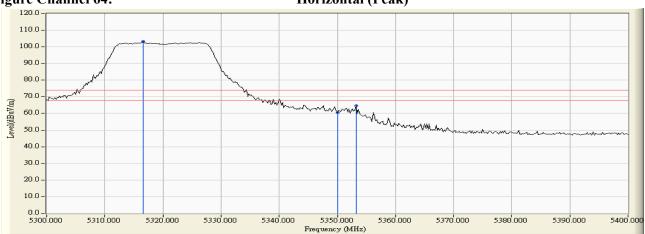
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
64 (Peak)	5316.600	3.823	99.293	103.116			
64 (Peak)	5350.000	3.716	56.757	60.474	74.00	54.00	Pass
64 (Peak)	5353.200	3.706	61.008	64.714	74.00	54.00	Pass
64 (Average)	5327.000	3.790	88.175	91.965			
64 (Average)	5350.000	3.716	38.977	42.694	74.00	54.00	Pass

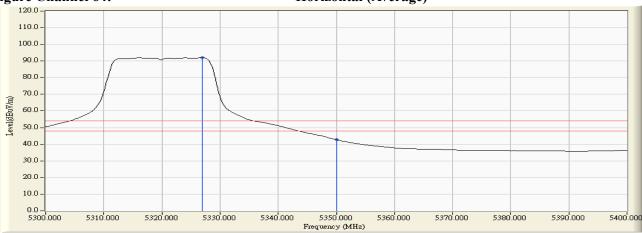
#### Figure Channel 64:

#### Horizontal (Peak)



### Figure Channel 64:

### Horizontal (Average)



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



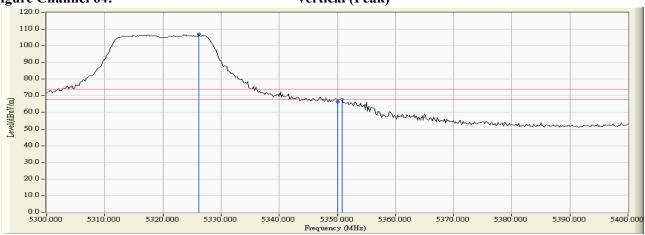
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64

## RF Radiated Measurement (Vertical):

Channel No.	1		_	Emission Level		_	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	11000110
64 (Peak)	5326.200	5.721	101.398	107.119	-		
64 (Peak)	5350.000	5.691	60.649	66.341	74.00	54.00	Pass
64 (Peak)	5350.800	5.690	62.204	67.895	74.00	54.00	Pass
64 (Average)	5327.000	5.720	89.972	95.692			
64 (Average)	5350.000	5.691	41.961	47.653	74.00	54.00	Pass

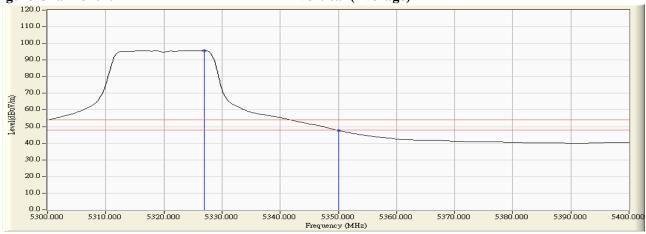


## Vertical (Peak)



#### **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.



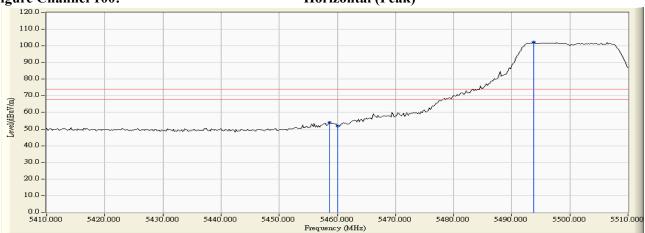
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamile No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5458.600	4.335	49.580	53.915	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	47.571	51.925	74.00	54.00	Pass
100 (Peak)	5493.800	4.771	97.410	102.182			
100 (Average)	5460.000	4.354	34.315	38.669	74.00	54.00	Pass
100 (Average)	5496.400	4.789	86.329	91.119			

#### 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.



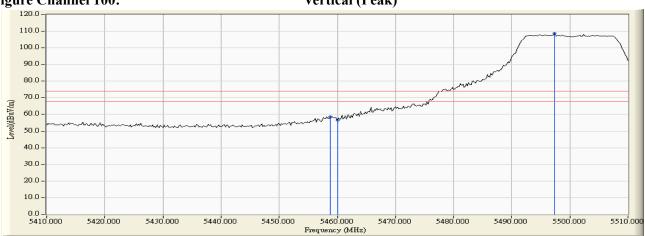
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100

#### **RF Radiated Measurement (Vertical):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chainlei No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5458.800	6.032	52.600	58.632	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	50.511	56.552	74.00	54.00	Pass
100 (Peak)	5497.400	6.267	102.356	108.623			
100 (Average)	5460.000	6.041	37.751	43.792	74.00	54.00	Pass
100 (Average)	5496.400	6.264	91.196	97.460			

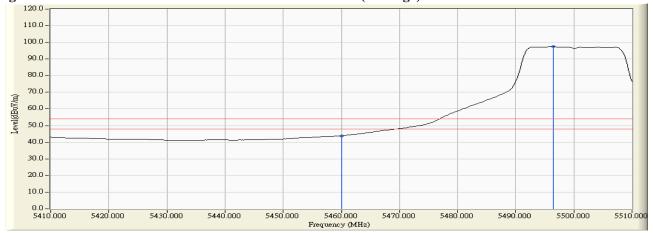


## Vertical (Peak)



#### Figure Channel 100:

#### Vertical (Average)



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



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-66.930	-48.596	-21.596	-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	-64.400	-45.065	-18.065	-27.000	Pass



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-68.490	-49.841	-22.841	-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	-65.020	-45.648	-18.648	-27.000	Pass



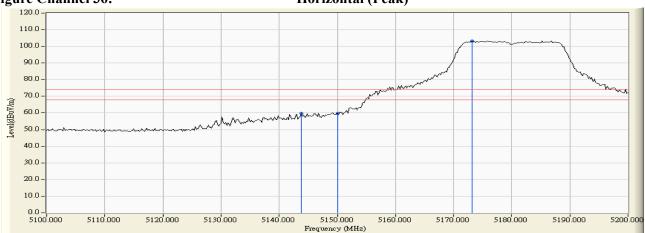
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36

#### **RF Radiated Measurement (Horizontal):**

		,					
Channel No.	Frequency	Correct Factor	Reading Level	<b>Emission Level</b>	Peak Limit	Average Limit	Result
Chamie No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
36 (Peak)	5143.800	3.362	56.600	59.962	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	56.568	59.908	74.00	54.00	Pass
36 (Peak)	5173.200	3.259	100.080	103.339			
36 (Average)	5150.000	3.340	41.512	44.852	74.00	54.00	Pass
36 (Average)	5175.800	3.249	89.290	92.539			

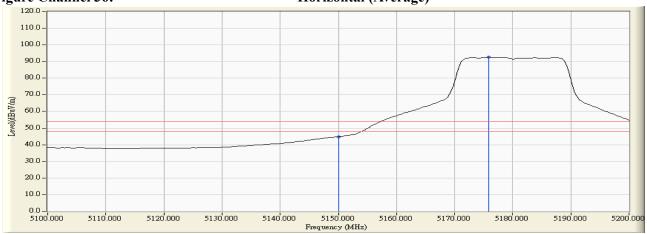
#### **Figure Channel 36:**

### 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.



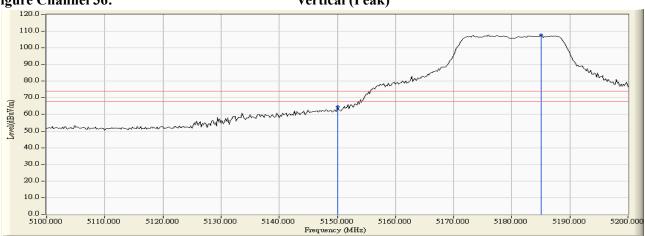
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36

## RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
36 (Peak)	5150.000	5.260	59.337	64.597	74.00	54.00	Pass
36 (Peak)	5185.000	5.356	102.354	107.709			
36 (Average)	5150.000	5.260	42.942	48.202	74.00	54.00	Pass
36 (Average)	5187.200	5.361	91.318	96.680			

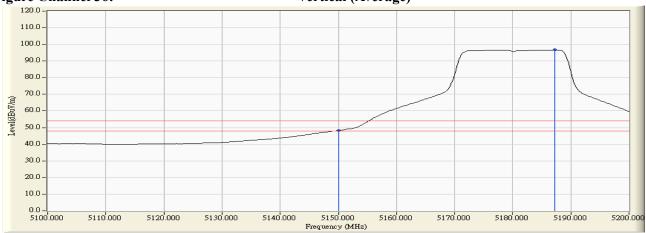






## Figure Channel 36:

## 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.



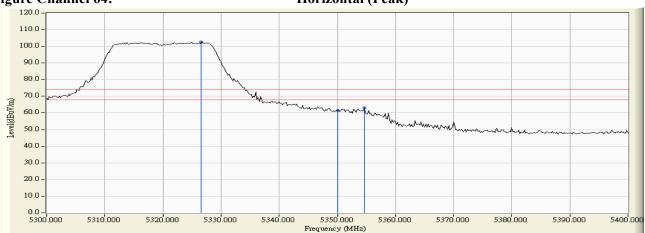
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64

## RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBµV/m)	Result
64 (Peak)	5326.600	3.792	98.790	102.582			
64 (Peak)	5350.000	3.716	57.579	61.296	74.00	54.00	Pass
64 (Peak)	5354.600	3.702	59.448	63.149	74.00	54.00	Pass
64 (Average)	5327.000	3.790	87.962	91.752			
64 (Average)	5350.000	3.716	40.239	43.956	74.00	54.00	Pass

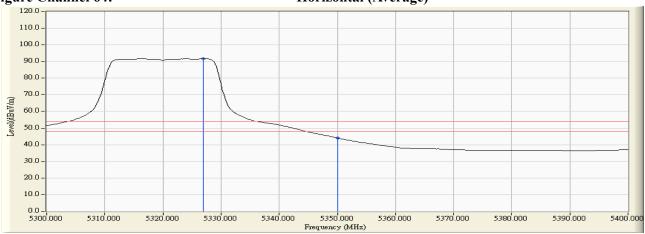
#### Figure Channel 64:

## Horizontal (Peak)



#### Figure Channel 64:

## Horizontal (Average)



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



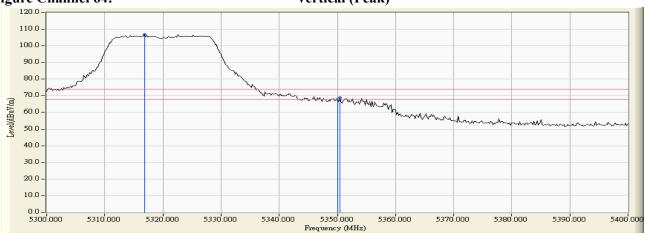
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64

## RF Radiated Measurement (Vertical):

Channel No.		Correct Factor	_	Emission Level		_	Result
Chamier 110.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	resure
64 (Peak)	5316.800	5.733	101.200	106.933			
64 (Peak)	5350.000	5.691	62.035	67.727	74.00	54.00	Pass
64 (Peak)	5350.400	5.690	63.211	68.902	74.00	54.00	Pass
64 (Average)	5327.000	5.720	89.954	95.674			
64 (Average)	5350.000	5.691	43.553	49.245	74.00	54.00	Pass

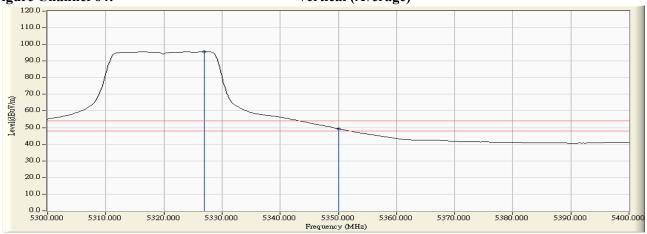


## Vertical (Peak)



### 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.



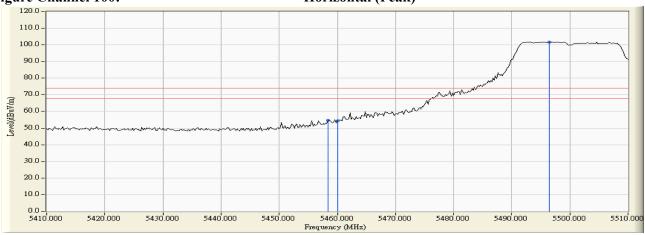
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
100 (Peak)	5458.400	4.332	50.488	54.820	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	50.108	54.462	74.00	54.00	Pass
100 (Peak)	5496.400	4.789	96.949	101.739			
100 (Average)	5460.000	4.354	35.622	39.976	74.00	54.00	Pass
100 (Average)	5493.000	4.766	86.718	91.484			

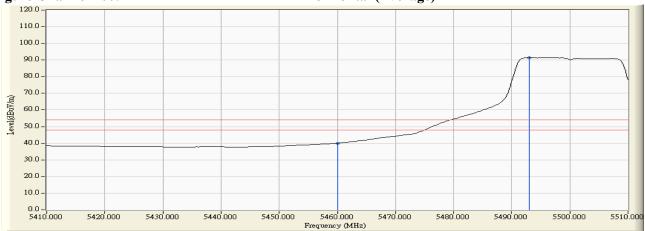
### Figure Channel 100:

### 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 Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100

## RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5459.800	6.040	55.373	61.412	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	52.522	58.563	74.00	54.00	Pass
100 (Peak)	5493.000	6.253	102.223	108.477			-
100 (Average)	5460.000	6.041	38.752	44.793	74.00	54.00	Pass
100 (Average)	5496.400	6.264	91.181	97.445			

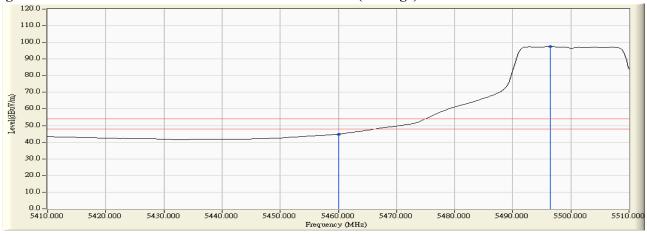
### Figure Channel 100:

### Vertical (Peak)



#### Figure Channel 100:

### Vertical (Average)



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



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-68.410	-50.076	-23.076	-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	-64.530	-45.195	-18.195	-27.000	Pass



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-67.580	-48.931	-21.931	-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	-62.540	-43.168	-16.168	-27.000	Pass



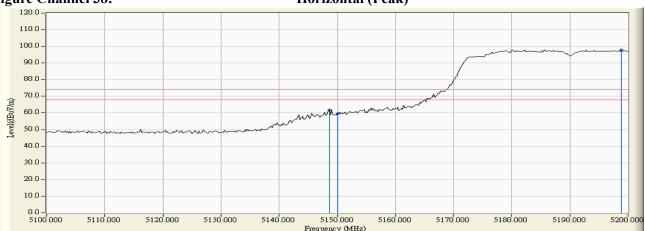
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38

## RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
38 (Peak)	5148.600	3.345	58.401	61.746	74.00	54.00	Pass
38 (Peak)	5150.000	3.340	56.266	59.606	74.00	54.00	Pass
38 (Peak)	5198.800	3.157	94.651	97.808	74.00	34.00	1 033
38 (Average)	5150.000	3.340	41.613	44.953	74.00	54.00	Pass
38 (Average)	5197.200	3.164	83.147	86.311	7 1.00	<i>3</i> 1.00	

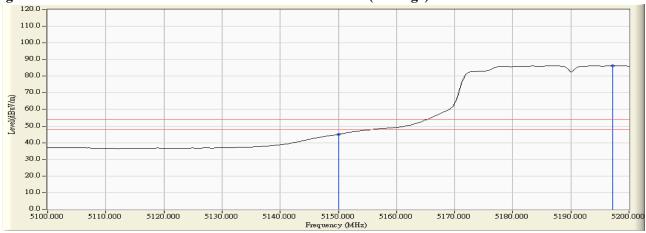


## Horizontal (Peak)



## 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.



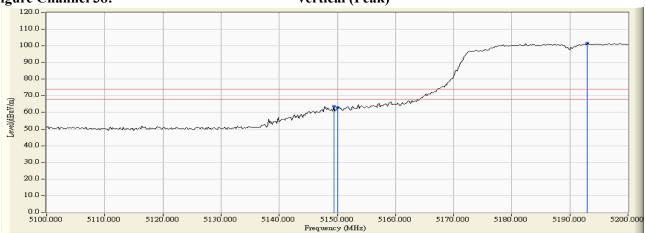
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38

## RF Radiated Measurement (Vertical):

Channal Na	Frequency	Correct Factor	Reading Level	<b>Emission Level</b>	Peak Limit	Average Limit	D14
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
38 (Peak)	5149.400	5.258	58.491	63.749	74.00	54.00	Pass
38 (Peak)	5150.000	5.260	57.897	63.157	74.00	54.00	Pass
38 (Peak)	5193.000	5.373	96.229	101.601			
38 (Average)	5150.000	5.260	42.435	47.695	74.00	54.00	Pass
38 (Average)	5198.600	5.382	85.006	90.388			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.



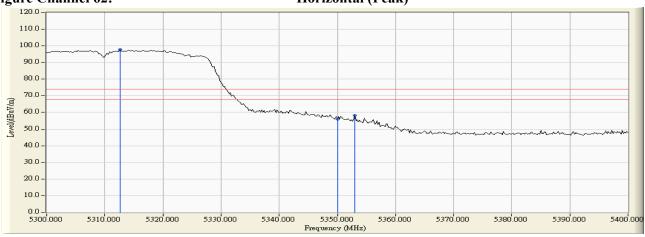
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Resuit
62 (Peak)	5312.600	3.836	94.009	97.845			
62 (Peak)	5350.000	3.716	52.376	56.093	74.00	54.00	Pass
62 (Peak)	5353.000	3.707	54.516	58.223	74.00	54.00	Pass
62 (Average)	5316.400	3.823	82.345	86.169			
62 (Average)	5350.000	3.716	39.253	42.970	74.00	54.00	Pass

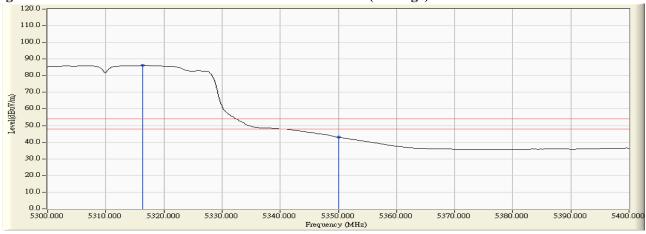


### Horizontal (Peak)



#### 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.



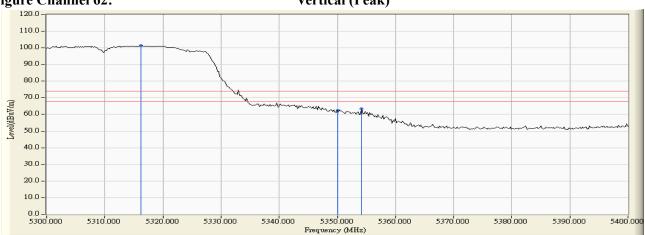
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62

### **RF Radiated Measurement (Vertical):**

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
62 (Peak)	5316.200	5.733	95.589	101.323			
62 (Peak)	5350.000	5.691	56.660	62.352	74.00	54.00	Pass
62 (Peak)	5354.200	5.686	57.730	63.416	74.00	54.00	Pass
62 (Average)	5316.400	5.733	84.327	90.061			
62 (Average)	5350.000	5.691	42.495	48.187	74.00	54.00	Pass

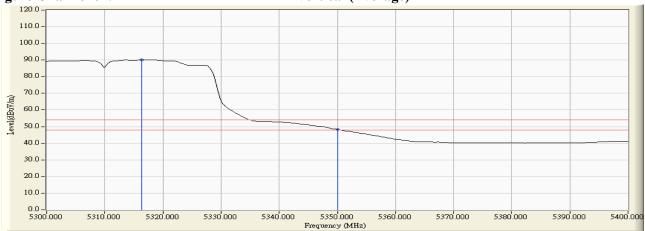
#### Figure Channel 62:

### Vertical (Peak)



### Figure Channel 62:

## Vertical (Average)



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



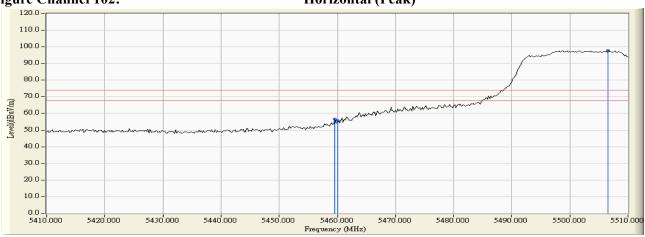
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102

#### **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)	5459.600	4.349	52.331	56.680	74.00	54.00	Pass
102 (Peak)	5460.000	4.354	51.407	55.761	74.00	54.00	Pass
102 (Peak)	5506.600	4.837	92.915	97.751			
102 (Average)	5460.000	4.354	36.464	40.818	74.00	54.00	Pass
102 (Average)	5506.800	4.835	81.319	86.154			

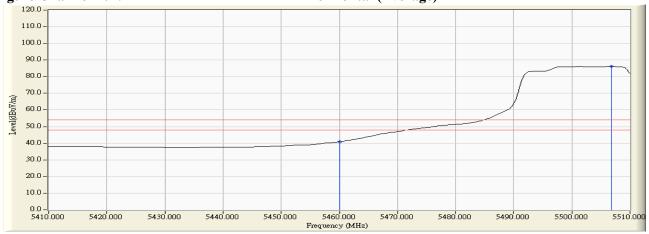


## Horizontal (Peak)



#### 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.



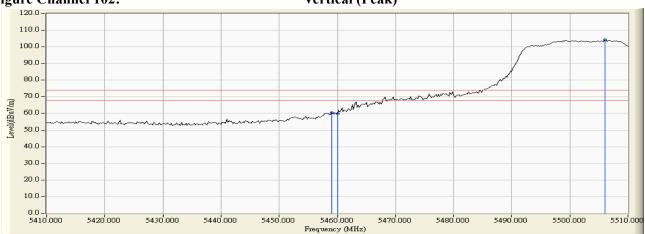
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102

## RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamile No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
102 (Peak)	5459.000	6.033	54.479	60.513	74.00	54.00	Pass
102 (Peak)	5460.000	6.041	53.647	59.688	74.00	54.00	Pass
102 (Peak)	5506.000	6.283	97.822	104.106			
102 (Average)	5460.000	6.041	40.191	46.232	74.00	54.00	Pass
102 (Average)	5506.600	6.280	86.171	92.451			

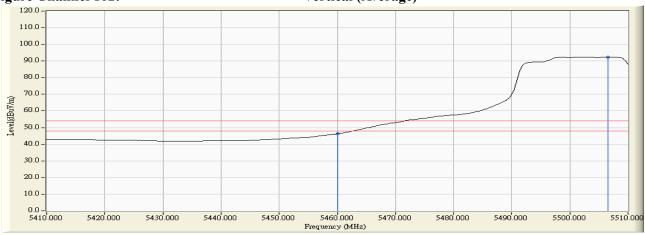


### Vertical (Peak)



#### Figure Channel 102:

#### Vertical (Average)



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



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizonta	1 5470.000	18.334	-65.070	-46.736	-19.736	-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	-61.450	-42.115	-15.115	-27.000	Pass



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

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-66.480	-47.831	-20.831	-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	-62.610	-43.238	-16.238	-27.000	Pass



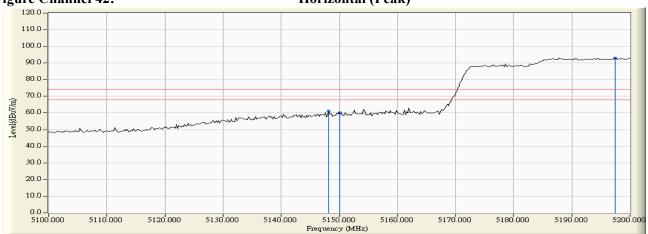
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 42

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
42 (Peak)	5148.200	3.347	57.696	61.043	74.00	54.00	Pass
42 (Peak)	5150.000	3.340	56.669	60.009	74.00	54.00	Pass
42 (Peak)	5197.400	3.163	89.740	92.903			
42 (Average)	5150.000	3.340	41.479	44.819	74.00	54.00	Pass
42 (Average)	5198.800	3.157	77.493	80.650			

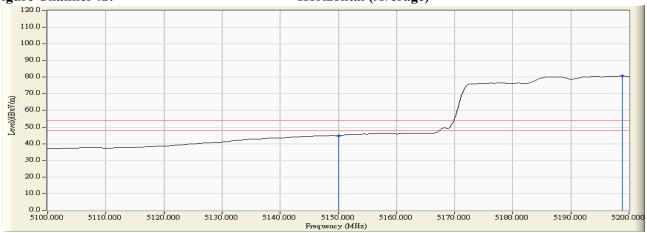


#### Horizontal (Peak)



#### Figure Channel 42:

## Horizontal (Average)



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



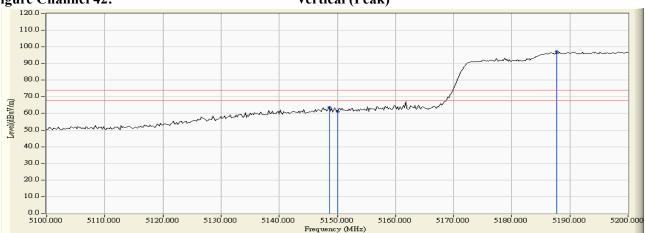
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 42

## RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
42 (Peak)	5148.600	5.256	58.599	63.855	74.00	54.00	Pass
42 (Peak)	5150.000	5.260	55.759	61.019	74.00	54.00	Pass
42 (Peak)	5187.800	5.363	91.681	97.044			
42 (Average)	5150.000	5.260	42.392	47.652	74.00	54.00	Pass
42 (Average)	5198.800	5.383	79.275	84.658			







#### **Figure Channel 42:**

#### Vertical (Average)



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



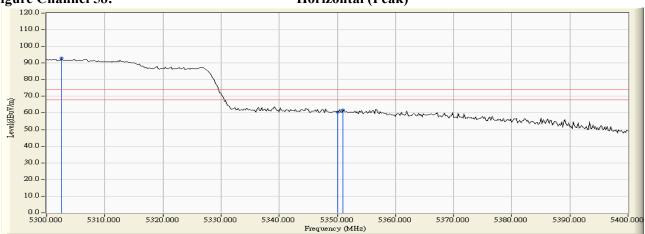
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 58

#### **RF Radiated Measurement (Horizontal):**

		. ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chamilei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
58 (Peak)	5302.600	3.869	88.950	92.819	74.00	54.00	Pass
58 (Peak)	5350.000	3.716	56.811	60.528	74.00	54.00	Pass
58 (Peak)	5351.000	3.713	58.149	61.862			
58 (Average)	5301.200	3.874	75.615	79.488	74.00	54.00	Pass
58 (Average)	5350.000	3.716	41.791	45.508			

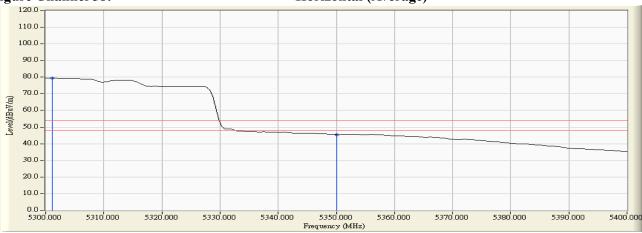
#### Figure Channel 58:

#### Horizontal (Peak)



### **Figure Channel 58:**

## Horizontal (Average)



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



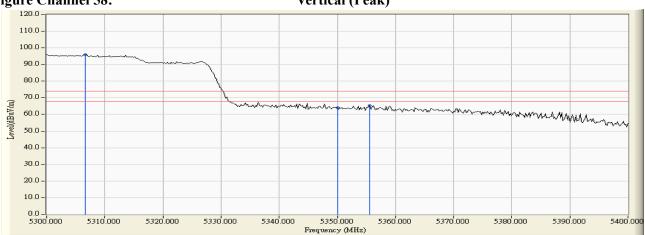
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 58

## RF Radiated Measurement (Vertical):

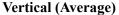
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
58 (Peak)	5306.600	5.747	90.097	95.844			
58 (Peak)	5350.000	5.691	58.211	63.903	74.00	54.00	Pass
58 (Peak)	5355.600	5.685	59.721	65.405	74.00	54.00	Pass
58 (Average)	5301.200	5.754	77.376	83.130			
58 (Average)	5350.000	5.691	43.537	49.229	74.00	54.00	Pass

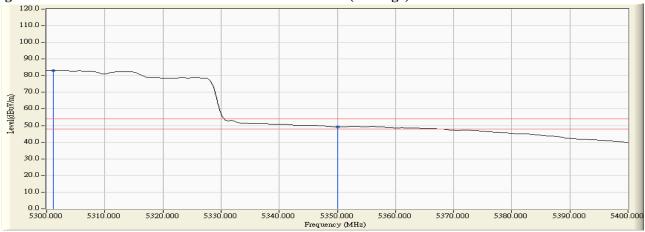






#### **Figure Channel 58:**





- 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 Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 106

#### **RF Radiated Measurement (Horizontal):**

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
106 (Peak)	5460.000	4.354	50.621	54.975	74.00	54.00	Pass
106 (Peak)	5506.800	4.835	86.271	91.106	1		-
106 (Average)	5460.000	4.354	36.615	40.969	74.00	54.00	Pass
106 (Average)	5507.400	4.830	74.104	78.934			

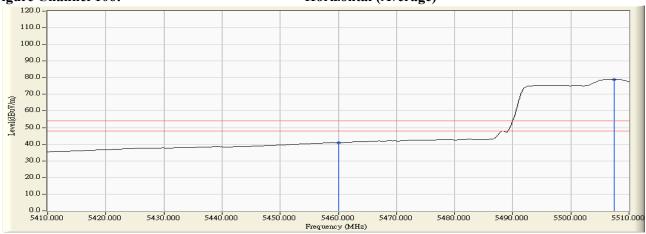
### Figure Channel 106:

## Horizontal (Peak)



### Figure Channel 106:

### **Horizontal (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.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



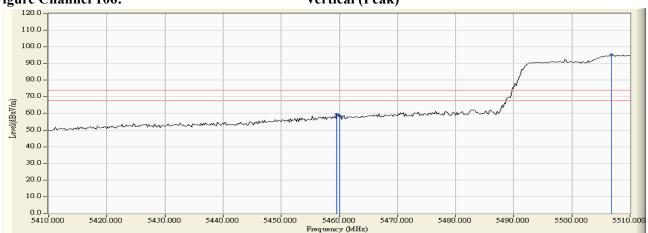
Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 106

### RF Radiated Measurement (Vertical):

		` ,					
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chainei No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
106 (Peak)	5459.600	6.039	53.551	59.589	74.00	54.00	Pass
106 (Peak)	5460.000	6.041	52.359	58.400	74.00	54.00	Pass
106 (Peak)	5506.800	6.279	88.862	95.141			
106 (Average)	5460.000	6.041	38.228	44.269	74.00	54.00	Pass
106 (Average)	5507.400	6.275	76.313	82.588			

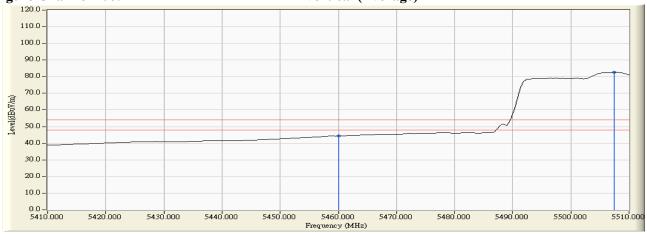


#### Vertical (Peak)



#### **Figure Channel 106:**

#### Vertical (Average)



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



Test Mode : Mode 4: Transmit (802.11ac-20BW-7.2Mbps) -Channel 44

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5825.000	18.983	-68.460	-49.477	-32.477	-17.000	Pass
Horizontal	5835.000	19.106	-69.370	-50.264	-23.264	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5825.000	20.205	-66.490	-46.285	-29.285	-17.000	Pass
Vertical	5835.000	20.326	-67.940	-47.614	-20.614	-27.000	Pass



Test Mode : Mode 5: Transmit (802.11ac-40BW-15Mbps) -Channel 42

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5825.000	18.983	-68.970	-49.987	-32.987	-17.000	Pass
Horizontal	5835.000	19.106	-70.010	-50.904	-23.904	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5825.000	20.205	-67.210	-47.005	-30.005	-17.000	Pass
Vertical	5835.000	20.326	-68.340	-48.014	-21.014	-27.000	Pass



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 106

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-63.600	-45.266	-18.266	-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	-61.260	-41.925	-14.925	-27.000	Pass



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 138

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5825.000	18.983	-68.930	-49.947	-32.947	-17.000	Pass
Horizontal	5835.000	19.106	-70.990	-51.884	-24.884	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5825.000	20.205	-67.970	-47.765	-30.765	-17.000	Pass
Vertical	5835.000	20.326	-69.370	-49.044	-22.044	-27.000	Pass



Test Mode : Mode 6: Transmit (802.11ac-80BW-32.5Mbps) -Channel 155

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5715.000	18.644	-55.510	-36.866	-9.866	-27.000	Pass
Horizontal	5725.000	18.649	-54.220	-35.571	-18.571	-17.000	Pass
Horizontal	5825.000	18.983	-60.430	-41.447	-24.447	-17.000	Pass
Horizontal	5835.000	19.106	-61.080	-41.974	-14.974	-27.000	Pass

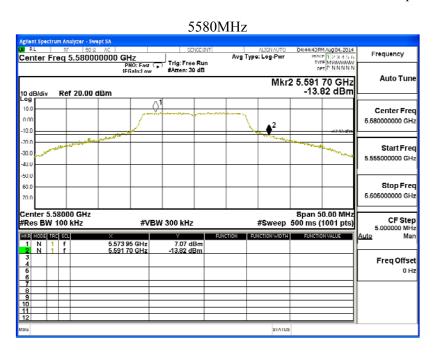
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5715.000	19.296	-49.080	-29.784	-2.784	-27.000	Pass
Vertical	5725.000	19.372	-48.200	-28.828	-11.828	-17.000	Pass
Vertical	5825.000	20.205	-53.550	-33.345	-16.345	-17.000	Pass
Vertical	5835.000	20.326	-54.190	-33.864	-6.864	-27.000	Pass

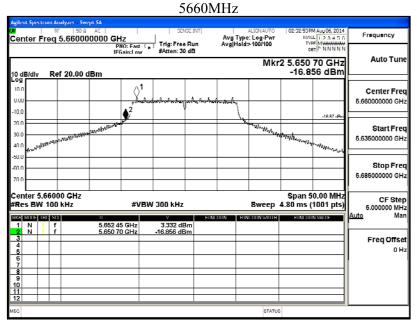


Test Mode : Mode 1: Transmit (802.11a-6Mbps)

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5580	5591.70	< 5600	PASS
5660	5650.70	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.



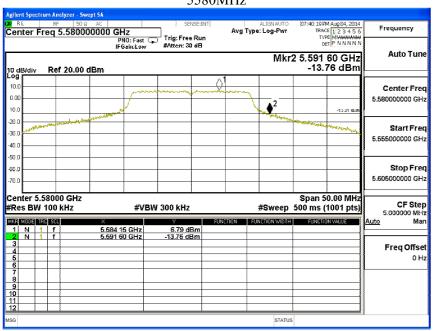


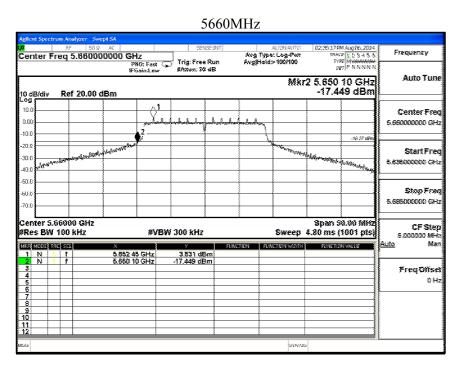


Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps)

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5580	5591.60	< 5600	PASS
5660	5650.10	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement. 5580MHz





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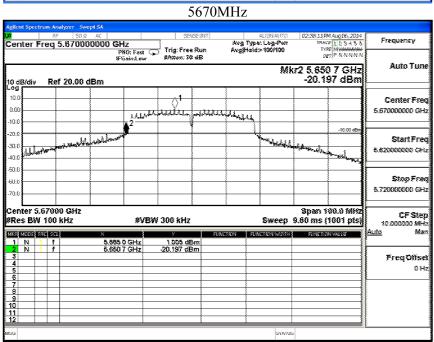


Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps)

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5550	5569.40	< 5600	PASS
5670	5650.70	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

#### 5550MHz Center Freq 5.550000000 GHz Frequency TRACE 1 2 3 4 5 6 TYPE M Avg Type: Log-Pwr Auto Tune Mkr2 5.569 4 GHz -16.54 dBm Ref 20.00 dBm 5.550000000 GHz -3D.0 -15.41 d Start Fred -30.0 5.500000000 GH: -58.0 Stop Freq -68. 5.600000000 GHz Center 5.55000 GHz #Res BW 100 kHz Span 100.0 MH: CF Step 10.000000 MHz #VBW 300 kHz 500 ms (1001 pts) MKRI MODEL TREE SCL. Mai Freq Offset 0 Hz



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

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5530	5569.00	< 5600	PASS
5690	5650.20	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

#### 5530MHz Center Freq 5.530000000 GHz Frequency Avg Type: Log-Pwr DET P NNNN Auto Tune Mkr2 5.569 0 GHz -26.01 dBm Ref 20.00 dBm 5.530000000 GHz 10.0 -24.82 c Start Fred 30.0 5.430000000 GHz 50.0 Stop Freq 60.0 Center 5.5380 GHz #Res BW 308 kHz Span 200.0 MHz CF Step 20.000000 MHz 0 Man #VBW 1.0 MHz #Sweep 500 ms (1001 pts MKR MODEL TROUGOLD 1 N 1 f 2 N 1 f -4.82 dBm -26.01 dBm 5.516 0 GHz 5.569 0 GHz Freq Offset 0 Hz



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## 8. Frequency Stability

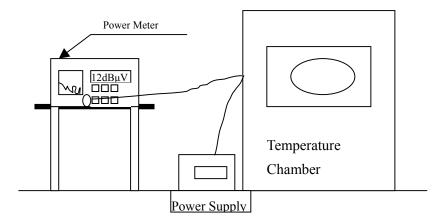
## 8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.	
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014	_
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014	
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014	

#### 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.

## 8.2. Test Setup



#### 8.3. 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

### **8.4.** 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.

## 8.5. Uncertainty

± 150 Hz



# 8.6. Test Result of Frequency Stability

Product : TABLET PC

Test Item : Frequency Stability
Test Site : Temperature Chamber

Test Mode : Carrier Wave

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
	Vnom (120)V	36	5180.0000	5179.9500	0.0500
		38	5190.0000	5189.9600	0.0400
		44	5220.0000	5219.9600	0.0400
		46	5230.0000	5229.9400	0.0600
		48	5240.0000	5239.9200	0.0800
		52	5260.0000	5259.9400	0.0600
		54	5270.0000	5269.9400	0.0600
T (20) %C		60	5300.0000	5299.9400	0.0600
Tnom (20) °C		62	5310.0000	5309.9800	0.0200
		64	5320.0000	5319.9700	0.0300
		100	5500.0000	5499.9600	0.0400
		102	5510.0000	5509.9600	0.0400
		110	5550.0000	5549.9600	0.0400
		116	5580.0000	5579.9800	0.0200
		134	5670.0000	5669.9600	0.0400
		140	5700.0000	5699.9700	0.0300



Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5179.9500	0.0500
		38	5190.0000	5189.9800	0.0200
		44	5220.0000	5219.9600	0.0400
		46	5230.0000	5229.9200	0.0800
		48	5240.0000	5239.9200	0.0800
		52	5260.0000	5259.9400	0.0600
		54	5270.0000	5269.9400	0.0600
T (50) %C	X/ (120)X/	60	5300.0000	5299.9400	0.0600
Tmax (50) °C	Vmax (138)V	62	5310.0000	5309.9800	0.0200
		64	5320.0000	5319.9400	0.0600
		100	5500.0000	5499.9600	0.0400
		102	5510.0000	5509.9600	0.0400
		110	5550.0000	5549.9600	0.0400
		116	5580.0000	5579.9600	0.0400
		134	5670.0000	5669.9600	0.0400
		140	5700.0000	5699.9700	0.0300
Test C	Test Conditions		Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
	Vmin (102)V	36	5180.0000	5179.9500	0.0500
		38	5190.0000	5189.9800	0.0200
Tmax (50) °C		44	5220.0000	5219.9600	0.0400
		46	5230.0000	5229.9200	0.0800
		48	5240.0000	5239.9200	0.0800
		52	5260.0000	5259.9400	0.0600
		54	5270.0000	5269.9400	0.0600
		60	5300.0000	5299.9400	0.0600
		62	5310.0000	5309.9800	0.0200
		64	5320.0000	5319.9400	0.0600
		100	5500.0000	5499.9600	0.0400
		102	5510.0000	5509.9600	0.0400
		110	5550.0000	5549.9600	0.0400
		116	5580.0000	5579.9600	0.0400
		134	5670.0000	5669.9600	0.0400
		140	5700.0000	5699.9700	0.0300

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Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5179.9500	0.0500
		38	5190.0000	5189.9800	0.0200
		44	5220.0000	5219.9700	0.0300
		46	5230.0000	5229.9400	0.0600
		48	5240.0000	5239.9200	0.0800
		52	5260.0000	5259.9500	0.0500
		54	5270.0000	5269.9400	0.0600
T : (0) 9G	V (120)V	60	5300.0000	5299.9400	0.0600
Tmin (0) °C	Vmax (138)V	62	5310.0000	5309.9800	0.0200
		64	5320.0000	5319.9300	0.0700
		100	5500.0000	5499.9600	0.0400
		102	5510.0000	5509.9600	0.0400
		110	5550.0000	5549.9600	0.0400
		116	5580.0000	5579.9400	0.0600
		134	5670.0000	5669.9600	0.0400
		140	5700.0000	5699.9300	0.0700
Test C	Test Conditions		Frequency (MHz)	Frequency (MHz)	△F (MHz)
	Vmin (102)V	36	5180.0000	5179.9500	0.0500
		38	5190.0000	5189.9800	0.0200
Tmin (0) °C		44	5220.0000	5219.9700	0.0300
		46	5230.0000	5229.9400	0.0600
		48	5240.0000	5239.9200	0.0800
		52	5260.0000	5259.9500	0.0500
		54	5270.0000	5269.9500	0.0500
		60	5300.0000	5299.9400	0.0600
		62	5310.0000	5309.9800	0.0200
		64	5320.0000	5319.9300	0.0700
		100	5500.0000	5499.9600	0.0400
		102	5510.0000	5509.9400	0.0600
		110	5550.0000	5549.9600	0.0400
		116	5580.0000	5579.9400	0.0600
		134	5670.0000	5669.9200	0.0800
		1		I	·

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Product : TABLET PC

Test Item : Frequency Stability
Test Site : Temperature Chamber

Test Mode : Carrier Wave

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
	Vnom (120)V	42ac80	5210.0000	5209.9400	0.0600
		58ac80	5290.0000	5289.9600	0.0400
		106ac80	5530.0000	5529.9400	0.0600
Tnom (20) °C		138ac80	5690.0000	5689.9400	0.0600
		142F	5710.0000	5709.9600	0.0400
		144	5720.0000	5719.9400	0.0600
		155ac80	5775.0000	5774.9800	0.0200
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
	Vmax (138)V	42ac80	5210.0000	5209.9400	0.0600
		58ac80	5290.0000	5289.9600	0.0400
		106ac80	5530.0000	5529.9500	0.0500
Tmax (50) °C		138ac80	5690.0000	5689.9400	0.0600
		142F	5710.0000	5709.9600	0.0400
		144	5720.0000	5719.9500	0.0500
		155ac80	5775.0000	5774.9700	0.0300
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
	Vmin (102)V	42ac80	5210.0000	5209.9200	0.0800
Tmax (50) °C		58ac80	5290.0000	5289.9600	0.0400
		106ac80	5530.0000	5529.9500	0.0500
		138ac80	5690.0000	5689.9400	0.0600
		142F	5710.0000	5709.9500	0.0500
		144	5720.0000	5719.9500	0.0500
		155ac80	5775.0000	5774.9700	0.0300



Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		42ac80	5210.0000	5209.9400	0.0600
		58ac80	5290.0000	5289.9600	0.0400
		106ac80	5530.0000	5529.9500	0.0500
Tmin (0) °C	Vmax (138)V	138ac80	5690.0000	5689.9400	0.0600
		142F	5710.0000	5709.9500	0.0500
		144	5720.0000	5719.9400	0.0600
		155ac80	5775.0000	5774.9700	0.0300
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (0) °C	Vmin (102)V	42ac80	5210.0000	5209.9200	0.0800
		58ac80	5290.0000	5289.9600	0.0400
		106ac80	5530.0000	5529.9400	0.0600
		138ac80	5690.0000	5689.9400	0.0600
		142F	5710.0000	5709.9500	0.0500
		144	5720.0000	5719.9500	0.0500
		155ac80	5775.0000	5774.9400	0.0600



9.	<b>EMI Reduction</b>	Method During	Compliance	Testing
<i>)</i> •	Livii ixcuucuon	Michiga During	Compilance	I Count

No modification was made during testing.