

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, 2012
Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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:

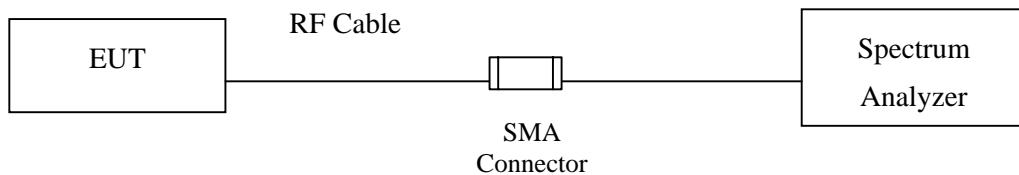
The following test equipments are used during the band edge tests:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2012
	X Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2012
	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/925975	Mar, 2012
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X Coaxial Cable	Quietek	QTK-CABLE/ CAB5	Feb., 2012
	X Controller	Quietek	QTK-CONTROLLER/ CTRL3	N/A
	X Coaxial Switch	Anritsu	MP59B/6200265729	N/A

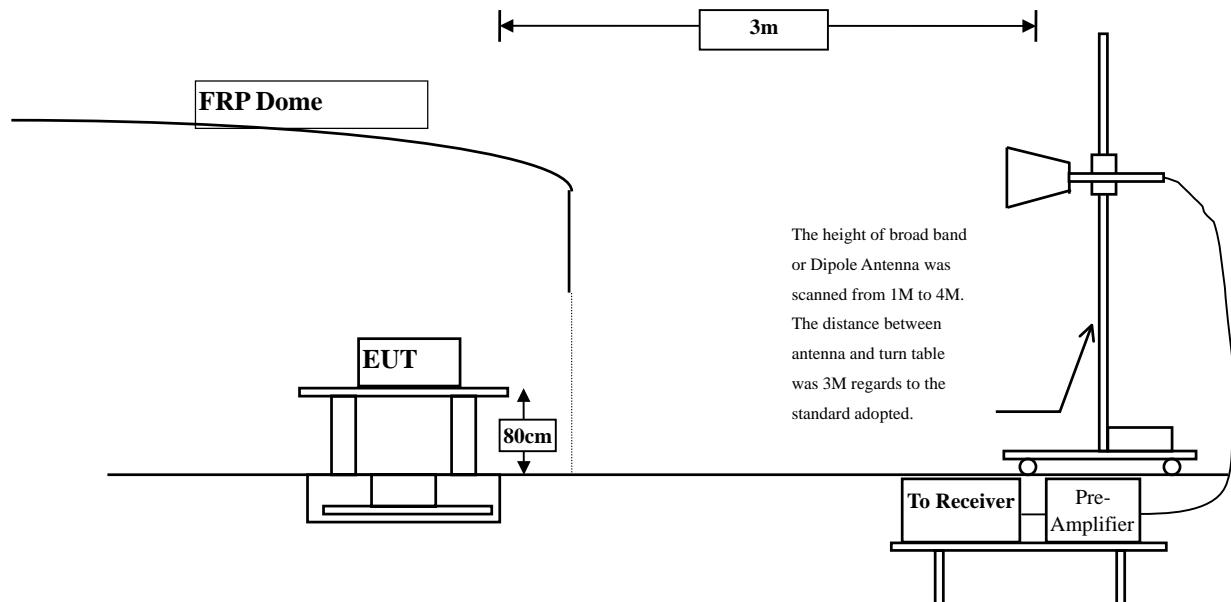
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

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 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

- Remarks :
1. RF Voltage (dBuV) = $20 \log_{10}$ RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

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 C63.4:2003 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 C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.5. Uncertainty

± 3.8 dB below 1GHz

± 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.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	0.796	53.832	54.628	74.00	54.00	Pass
36 (Peak)	5185.400	0.678	100.392	101.070	--	--	Pass
36 (Average)	5150.000	0.796	36.157	36.953	74.00	54.00	Pass
36 (Average)	5175.000	0.712	89.557	90.269	--	--	Pass

Figure Channel 36:

Horizontal (Peak)

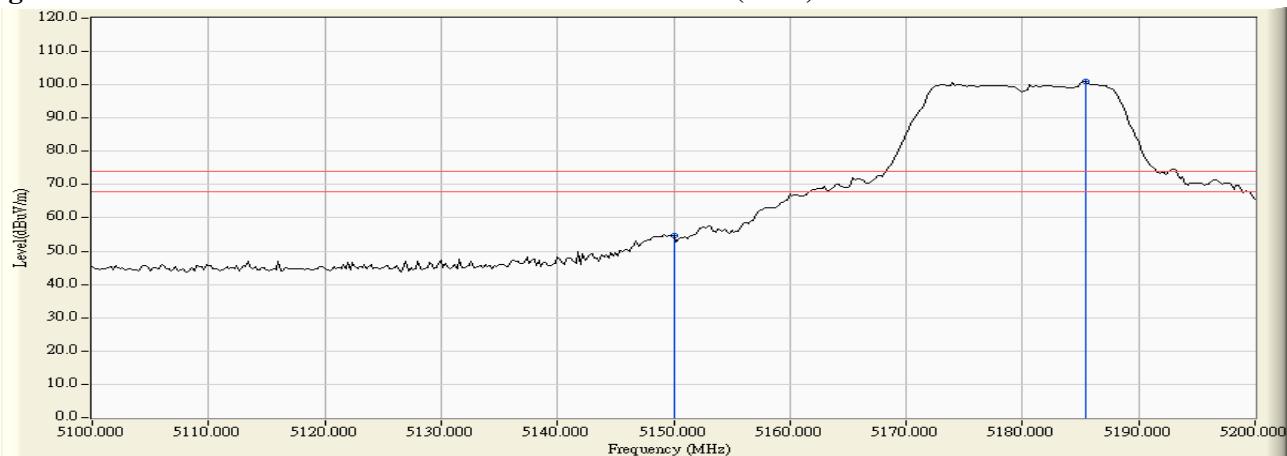
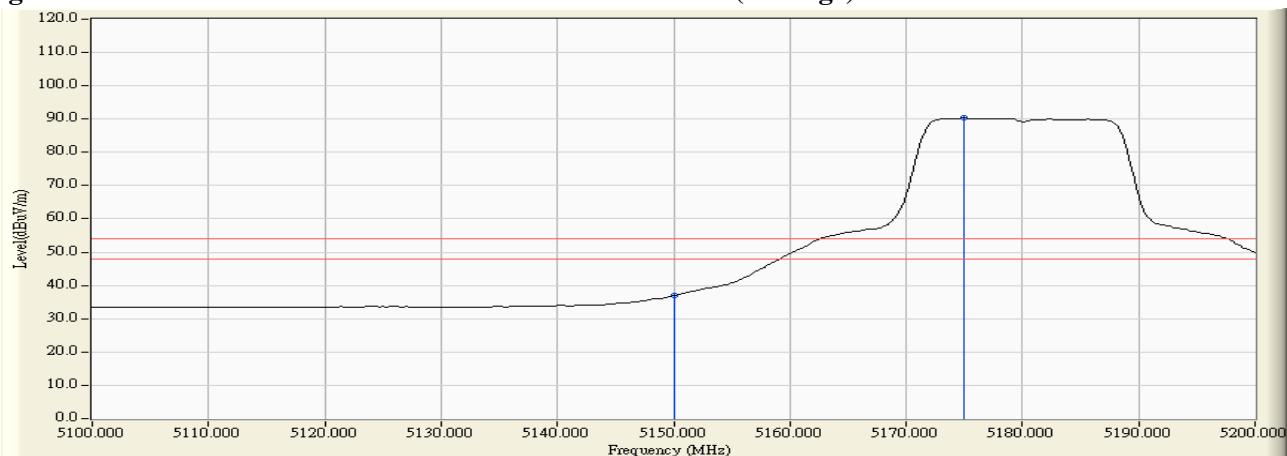


Figure Channel 36:

Horizontal (Average)



Note:

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 (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	1.331	53.580	54.912	74.00	54.00	Pass
36 (Peak)	5174.000	1.445	98.281	99.726	--	--	Pass
36 (Average)	5150.000	1.331	35.114	36.446	74.00	54.00	Pass
36 (Average)	5174.000	1.445	87.512	88.957	--	--	Pass

Figure Channel 36:

Vertical (Peak)

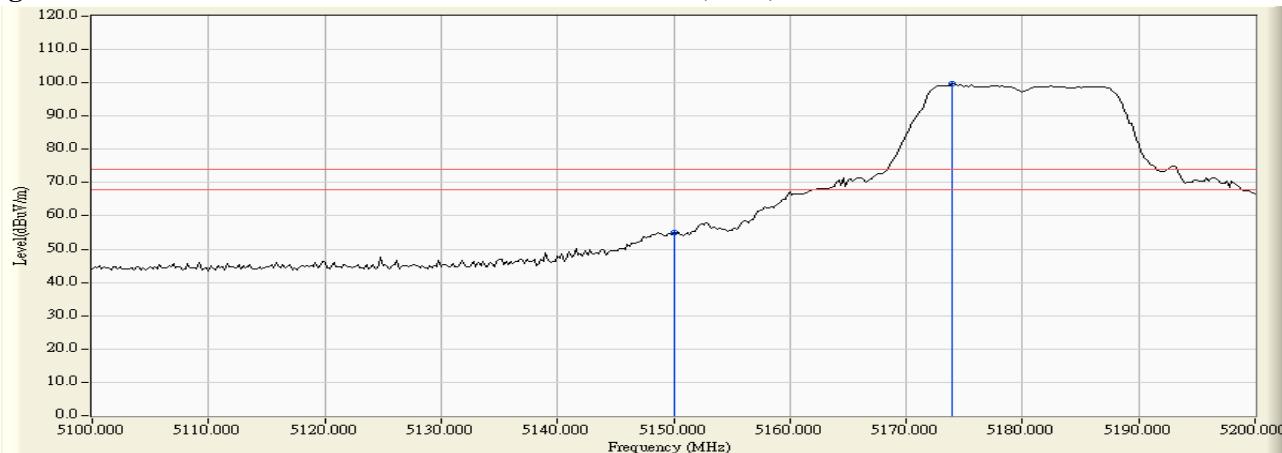
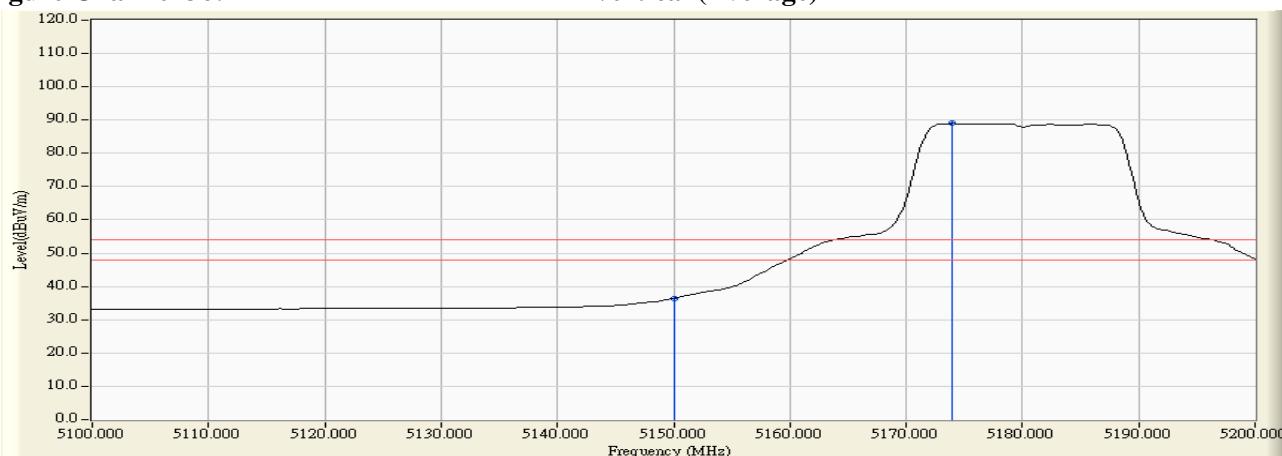


Figure Channel 36:

Vertical (Average)



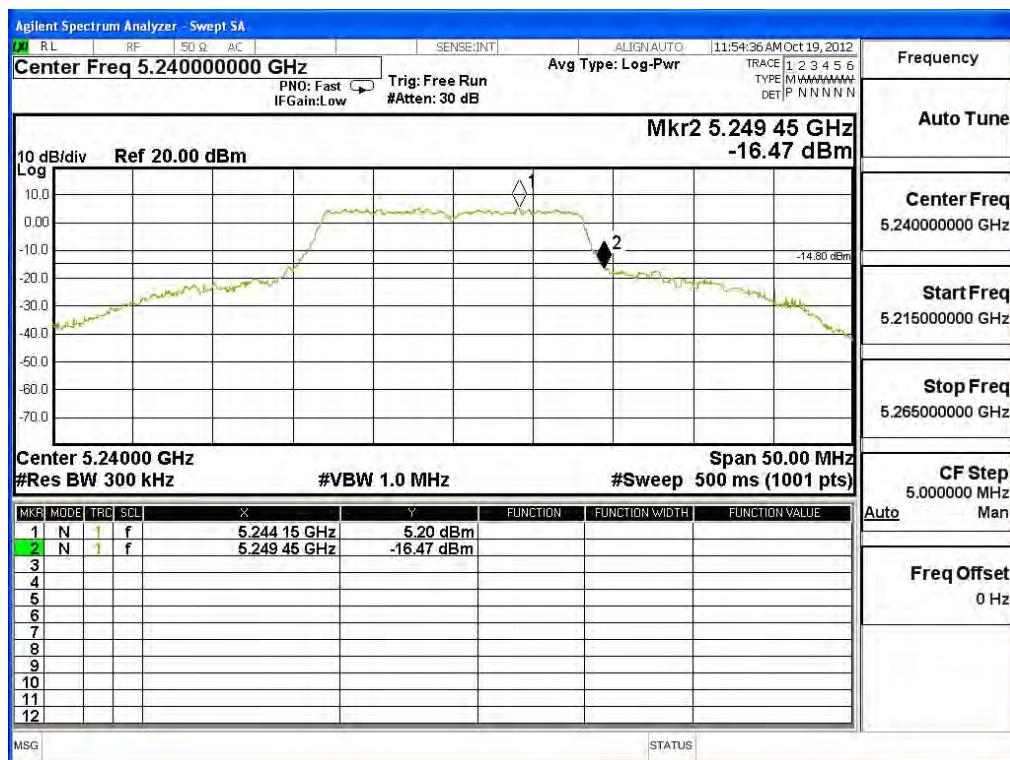
Note:

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 48

Test Frequency (MHz)	Measurement Level (20dBc) (MHz)	Limit (MHz)	Result
5240	5249.45	<5250	PASS

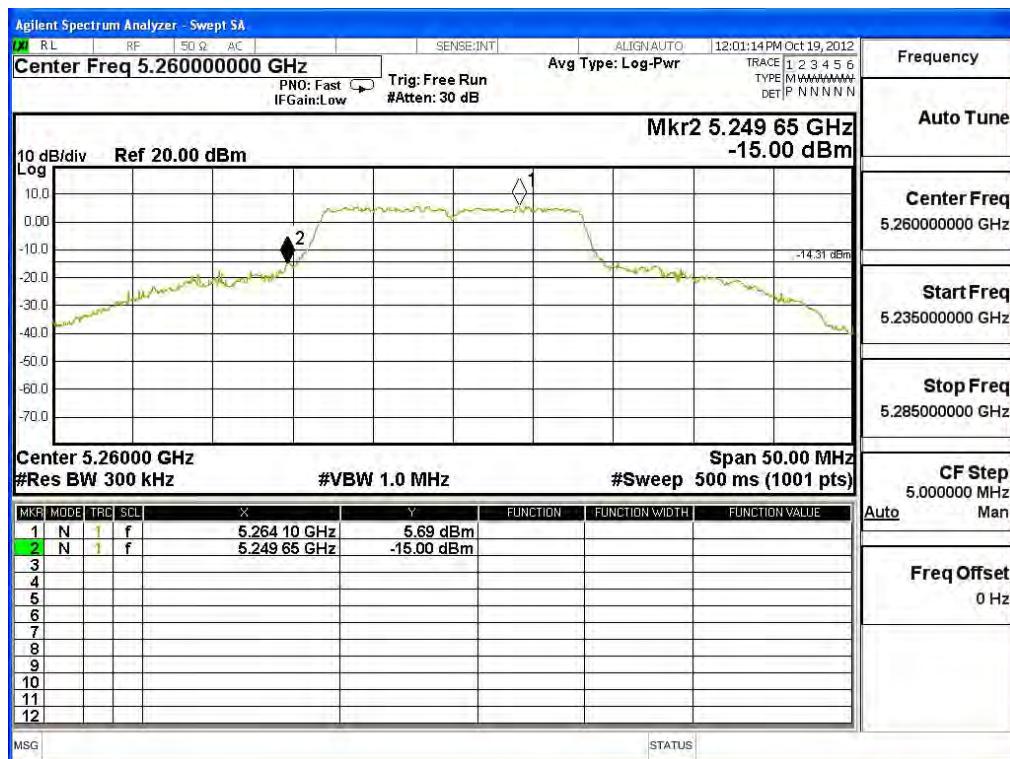
NOTE: Accordance with 15.215 requirement.



Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 52

Test Frequency (MHz)	Measurement Level (20dBc) (MHz)	Limit (MHz)	Result
5260	5249.65	>5250	PASS

NOTE: Accordance with 15.215 requirement.



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 (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
64 (Peak)	5325.400	1.633	103.089	104.721	--	--	Pass
64 (Peak)	5350.000	1.575	54.334	55.909	74.00	54.00	Pass
64 (Average)	5326.200	1.632	92.904	94.535	--	--	Pass
64 (Average)	5350.000	1.575	39.709	41.284	74.00	54.00	Pass

Figure Channel 64:

Horizontal (Peak)

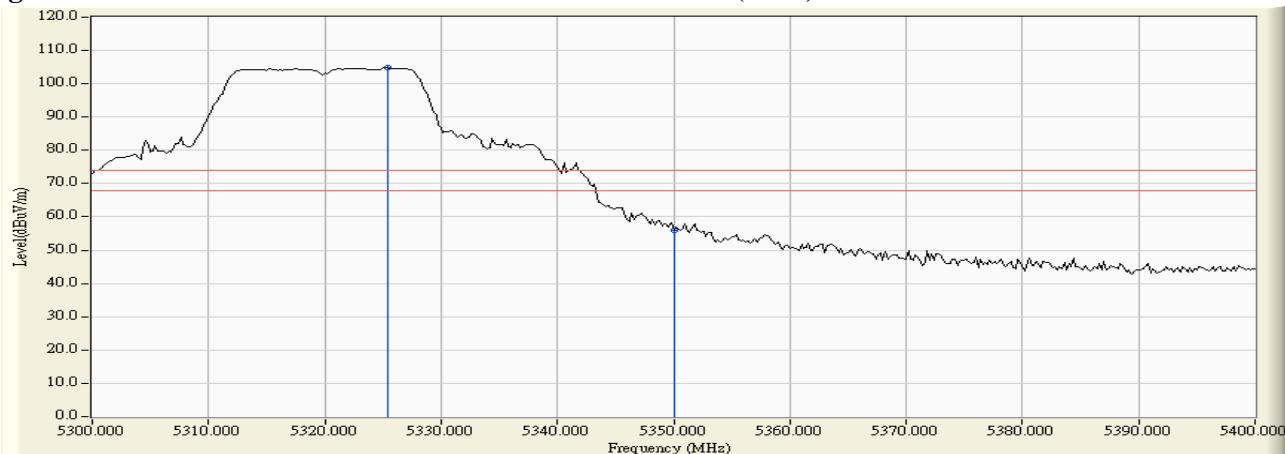
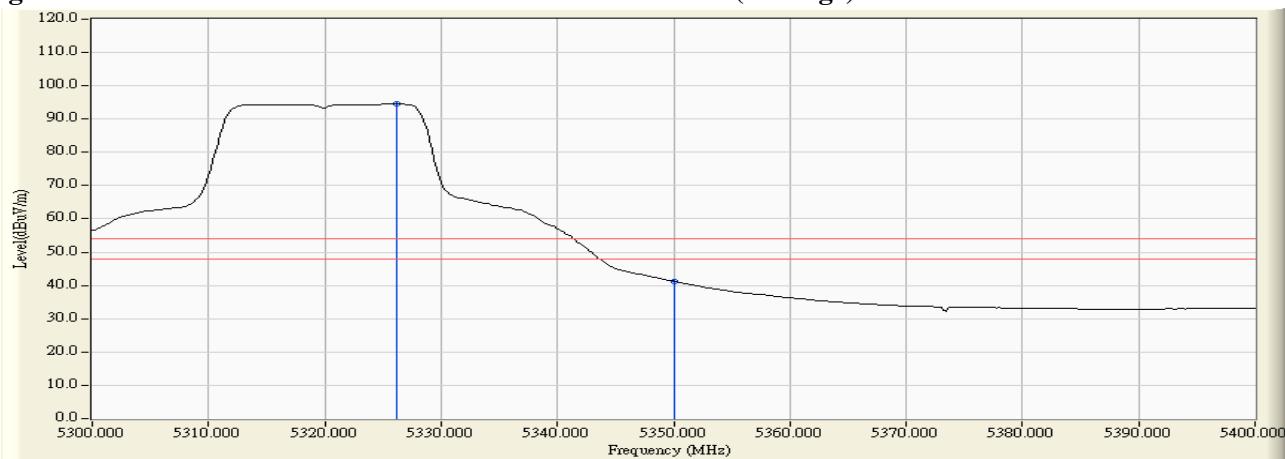


Figure Channel 64:

Horizontal (Average)



Note:

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 (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
64 (Peak)	5315.400	1.883	100.120	102.003	--	--	Pass
64 (Peak)	5350.000	1.900	50.967	52.867	74.00	54.00	Pass
64 (Peak)	5350.600	1.900	58.264	60.164	74.00	54.00	Pass
64 (Average)	5314.800	1.882	90.104	91.987	--	--	Pass
64 (Average)	5350.000	1.900	37.212	39.112	74.00	54.00	Pass

Figure Channel 64:

Vertical (Peak)

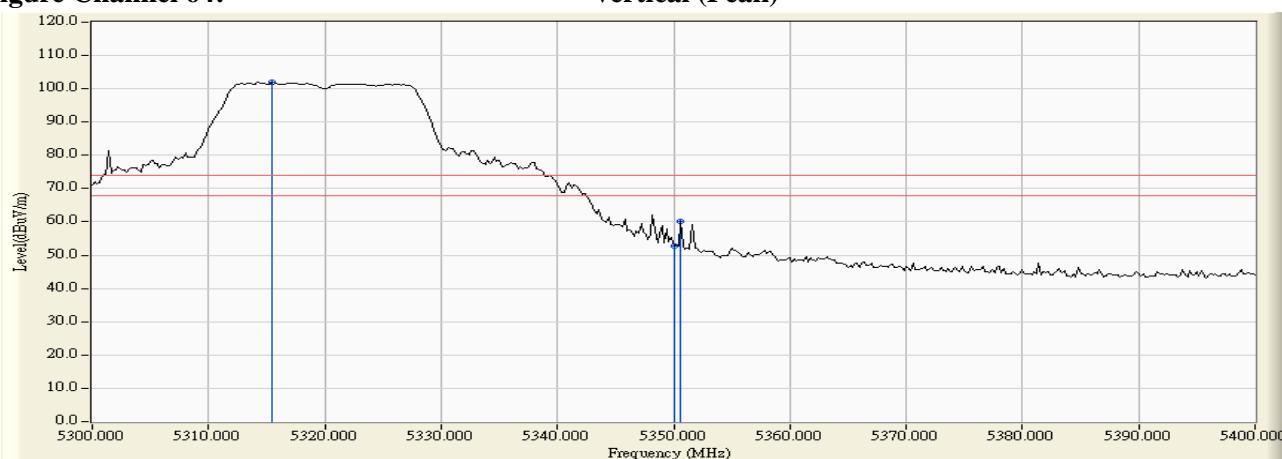
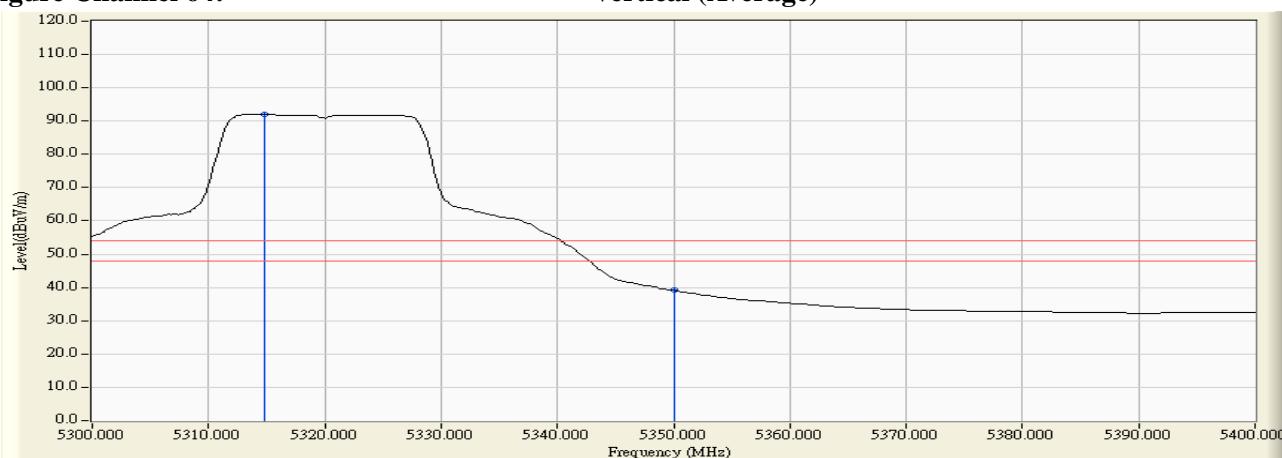


Figure Channel 64:

Vertical (Average)



Note:

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 100

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
100 (Peak)	5460.000	1.775	59.527	61.302	74.00	54.00	Pass
100 (Peak)	5494.400	2.403	103.737	106.140	--	--	Pass
100 (Average)	5460.000	1.775	41.755	43.530	74.00	54.00	Pass
100 (Average)	5493.600	2.392	93.895	96.287	--	--	Pass

Figure Channel 100:

Horizontal (Peak)

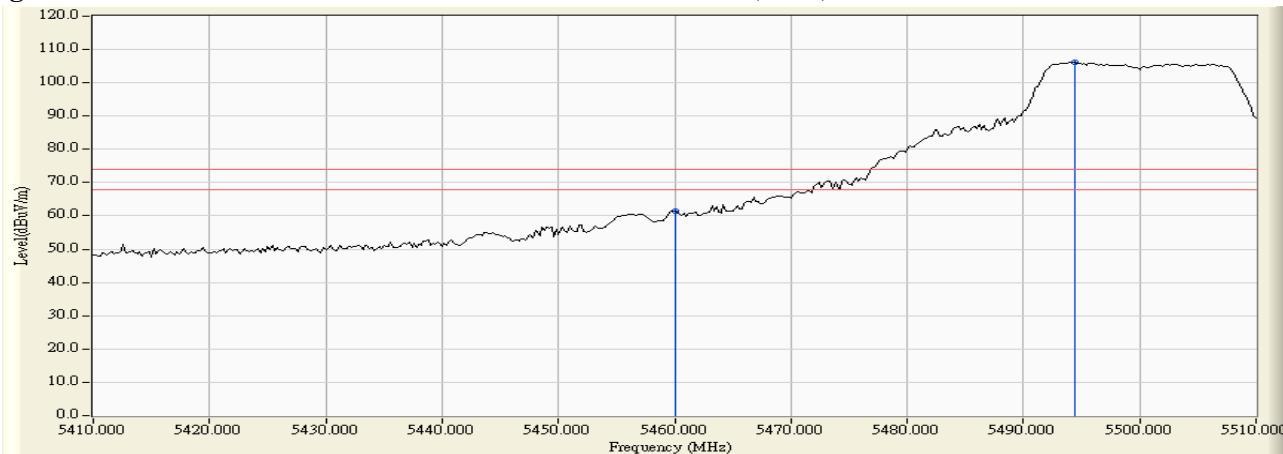
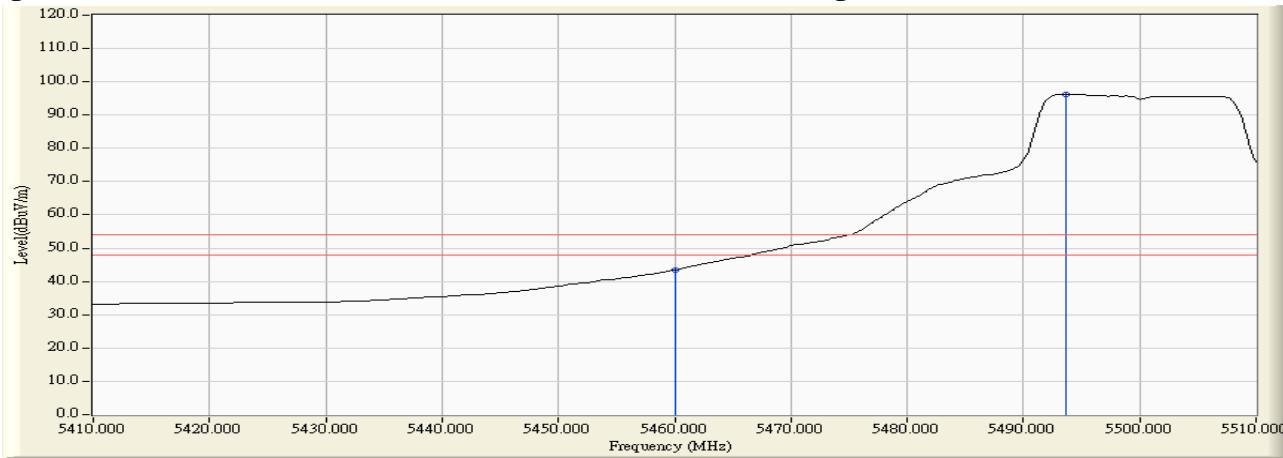


Figure Channel 100:

Horizontal (Average)



Note:

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 100

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
100 (Peak)	5460.000	1.934	53.433	55.368	74.00	54.00	Pass
100 (Peak)	5493.400	2.393	95.835	98.227	--	--	Pass
100 (Average)	5460.000	1.934	35.263	37.198	74.00	54.00	Pass
100 (Average)	5494.000	2.398	85.845	88.243	--	--	Pass

Figure Channel 100:

Vertical (Peak)

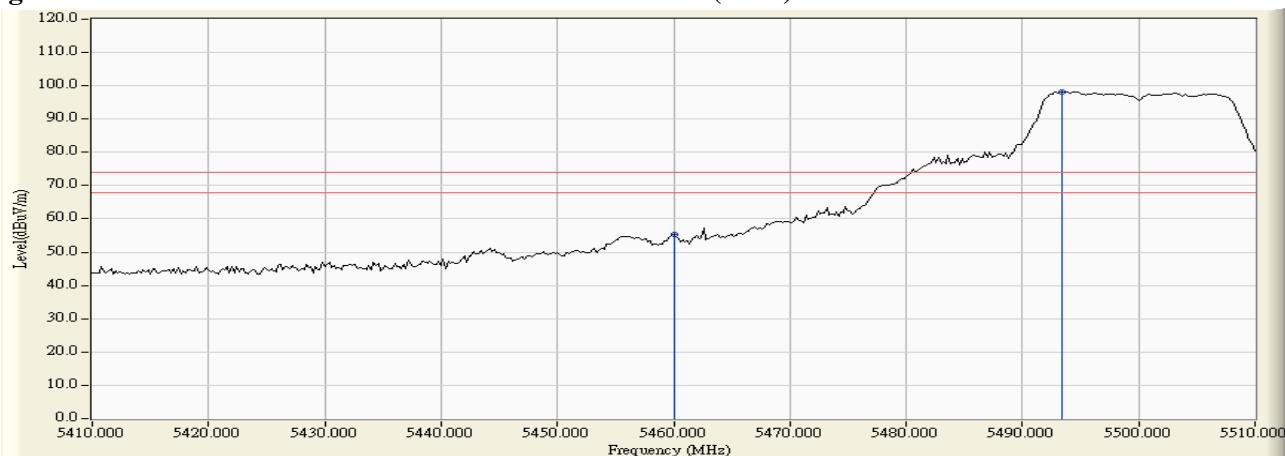
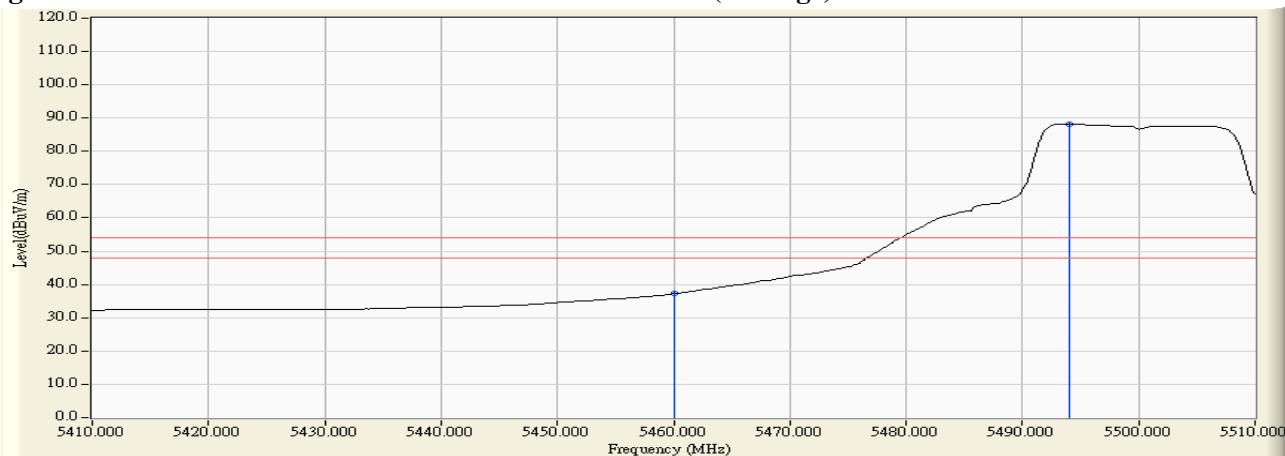


Figure Channel 100:

Vertical (Average)



Note:

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 100

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-72.580	-54.246	-27.246	-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	-72.310	-52.975	-25.975	-27.000	Pass

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 140

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-68.460	-49.811	-22.811	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-68.460	-49.088	-22.088	-27.000	Pass

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	0.796	55.836	56.632	74.00	54.00	Pass
36 (Peak)	5178.200	0.701	101.574	102.276	--	--	Pass
36 (Average)	5150.000	0.796	39.870	40.666	74.00	54.00	Pass
36 (Average)	5173.600	0.717	89.004	89.721	--	--	Pass

Figure Channel 36:

Horizontal (Peak)

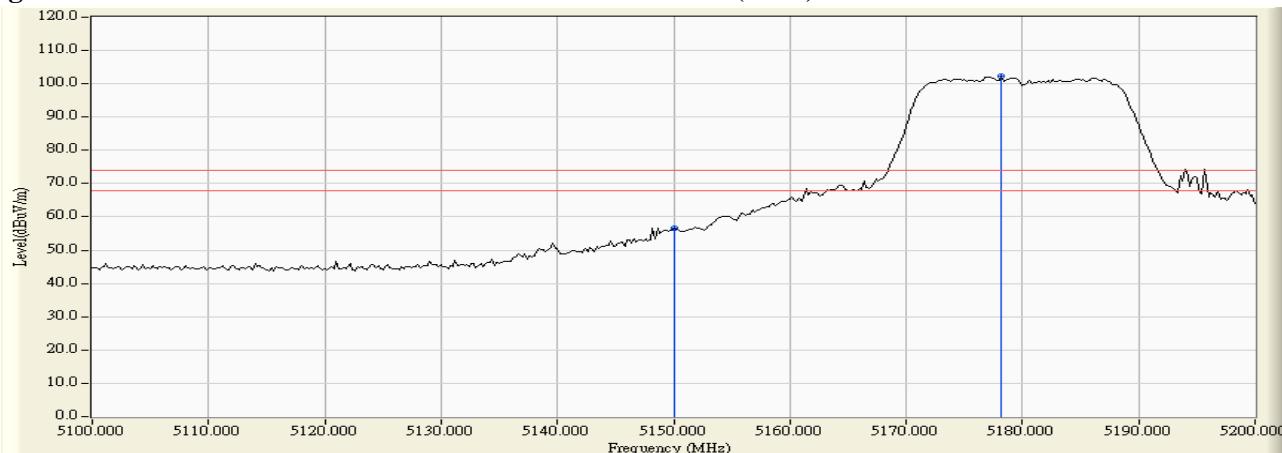
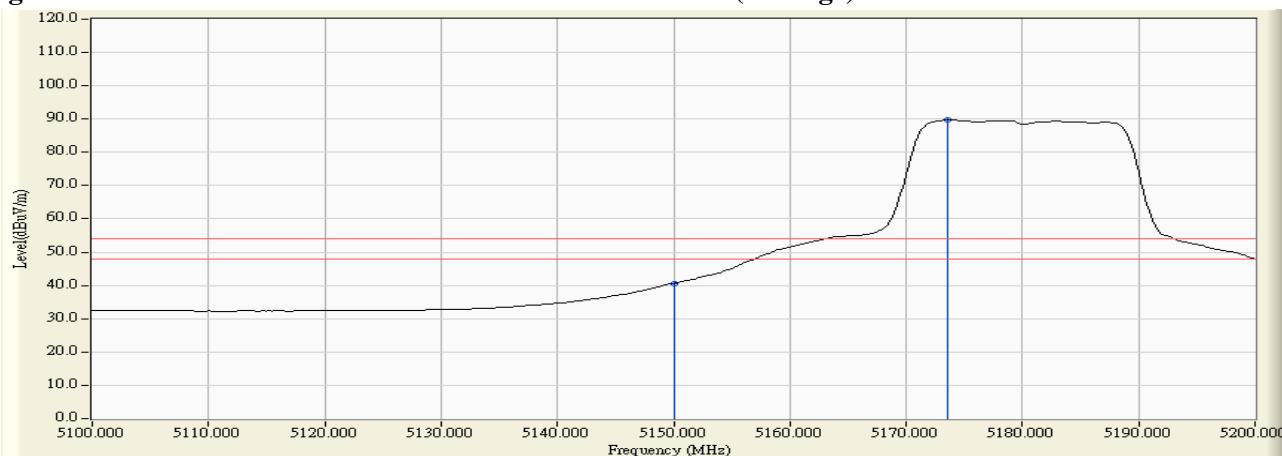


Figure Channel 36:

Horizontal (Average)



Note:

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 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	1.331	54.053	55.385	74.00	54.00	Pass
36 (Peak)	5175.200	1.450	99.181	100.631	--	--	Pass
36 (Average)	5150.000	1.331	38.546	39.878	74.00	54.00	Pass
36 (Average)	5175.000	1.449	86.332	87.781	--	--	Pass

Figure Channel 36:

Vertical (Peak)

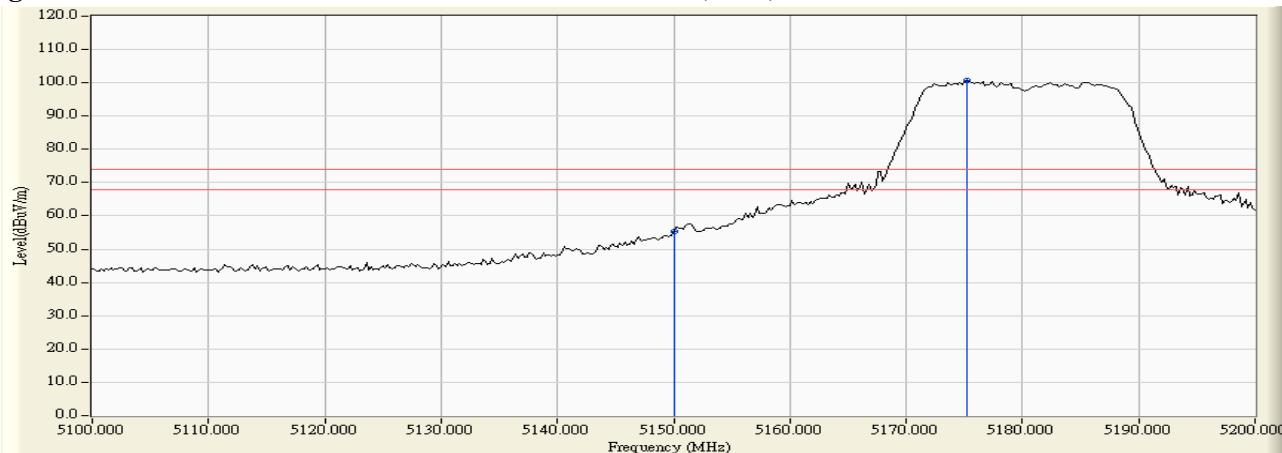
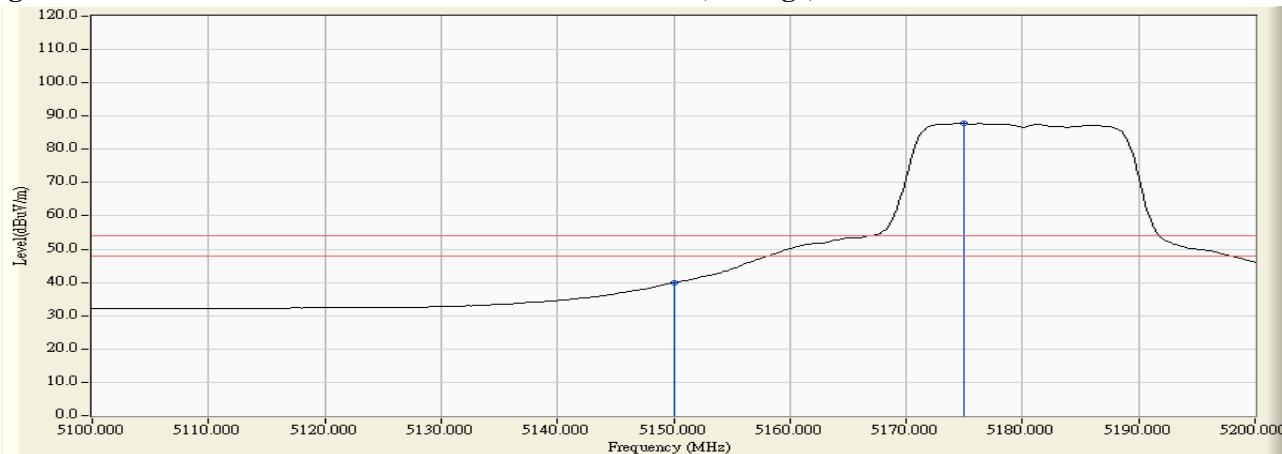


Figure Channel 36:

Vertical (Average)



Note:

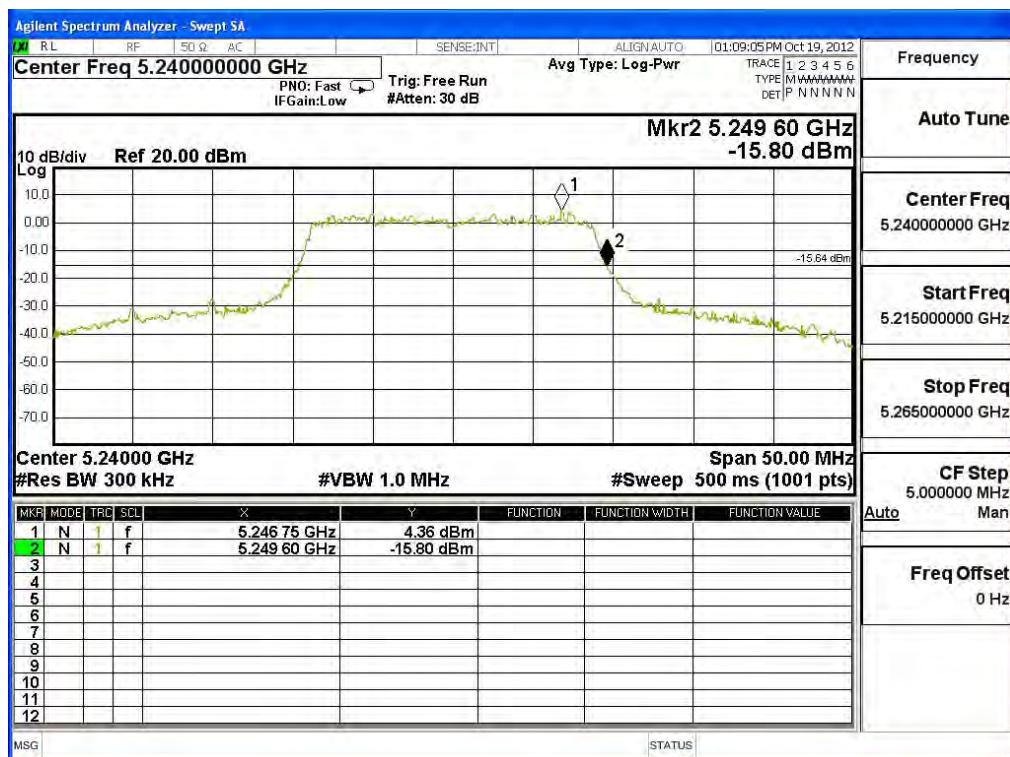
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading 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 2: Transmit (802.11n-20BW 14.4Mbps)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.60	<5250	PASS

NOTE: Accordance with 15.215 requirement.

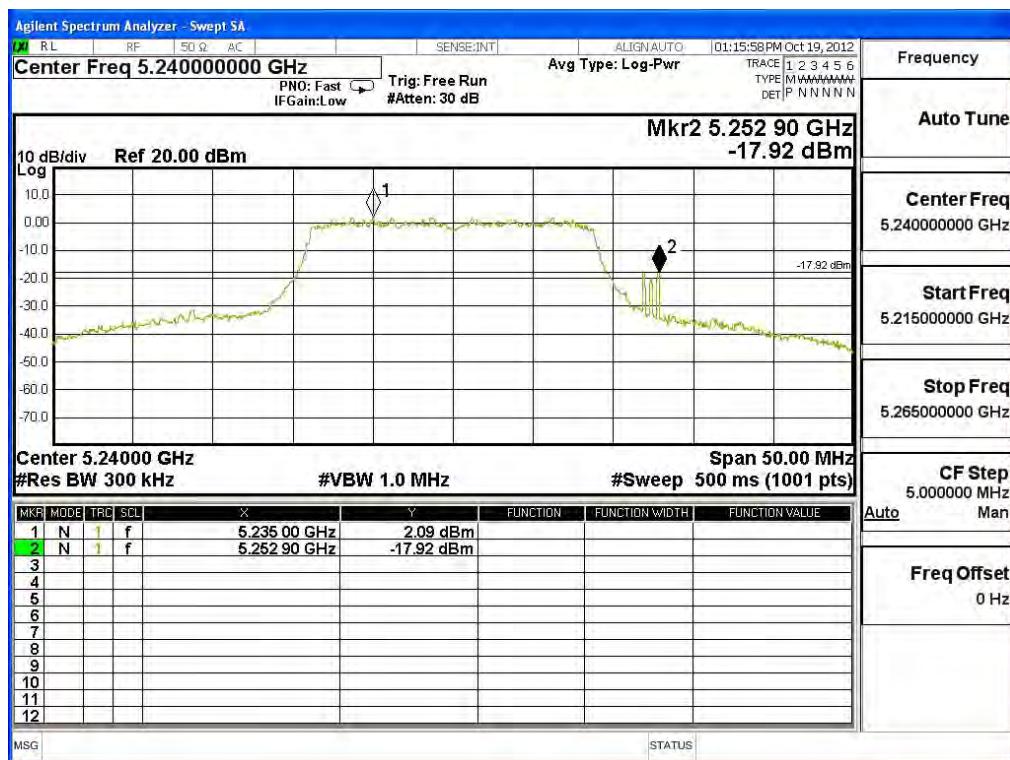


Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5252.90	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)-Channel 52

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5260	5250.45	>5250	PASS

NOTE: Accordance with 15.215 requirement.

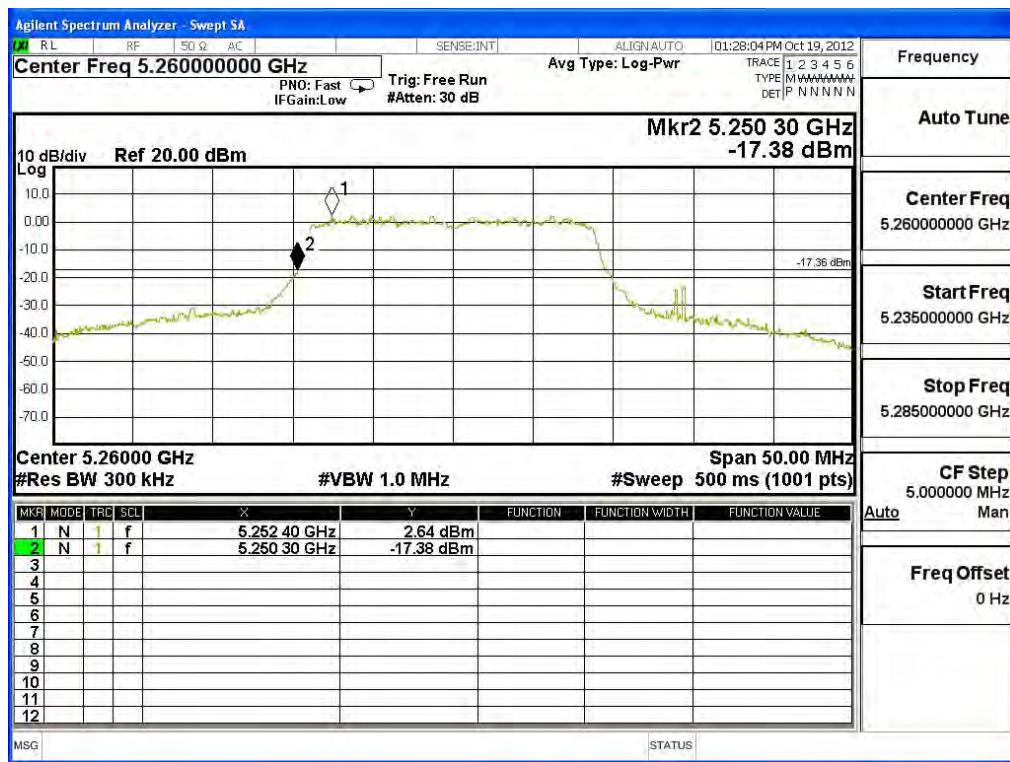


Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)-Channel 52

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5260	5250.30	>5250	PASS

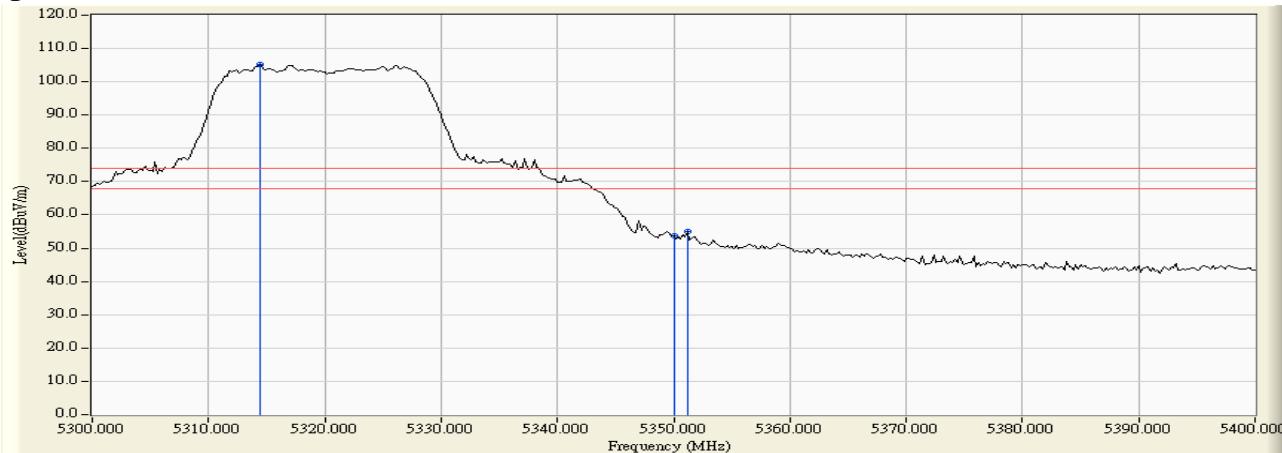
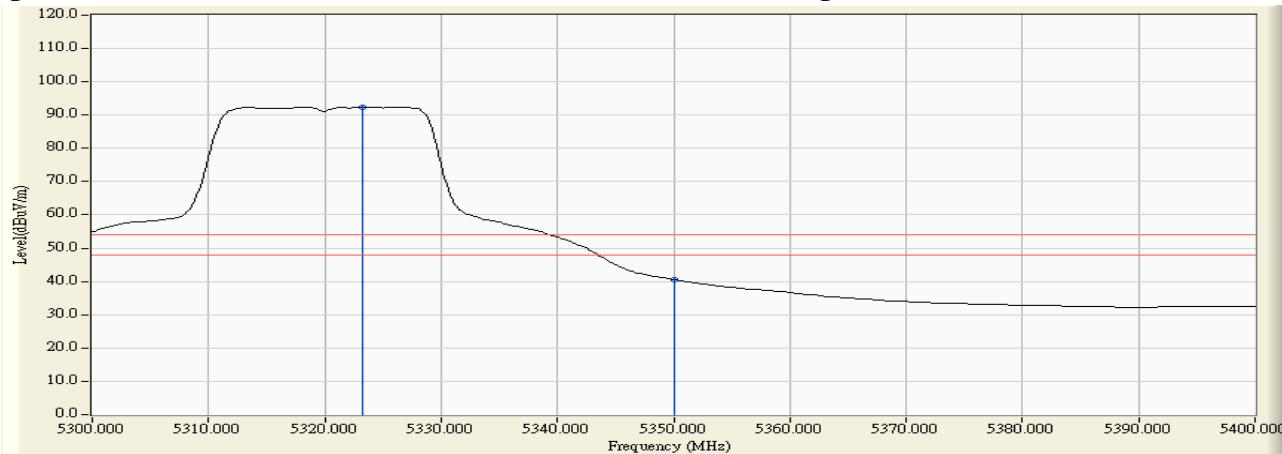
NOTE: Accordance with 15.215 requirement.



Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -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 (dBuV/m)	Result
64 (Peak)	5314.400	1.653	103.431	105.084	--	--	Pass
64 (Peak)	5350.000	1.575	52.195	53.770	74.00	54.00	Pass
64 (Peak)	5351.200	1.572	53.388	54.960	74.00	54.00	Pass
64 (Average)	5323.200	1.637	90.717	92.354	--	--	Pass
64 (Average)	5350.000	1.575	38.957	40.532	74.00	54.00	Pass

Figure Channel 64:**Horizontal (Peak)****Figure Channel 64:****Horizontal (Average)****Note:**

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 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 64

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
64 (Peak)	5314.400	1.882	98.739	100.621	--	--	Pass
64 (Peak)	5350.000	1.900	46.558	48.458	74.00	54.00	Pass
64 (Peak)	5351.400	1.901	47.206	49.106	74.00	54.00	Pass
64 (Average)	5314.400	1.882	86.158	88.040	--	--	Pass
64 (Average)	5350.000	1.900	34.470	36.370	74.00	54.00	Pass

Figure Channel 64:

Vertical (Peak)

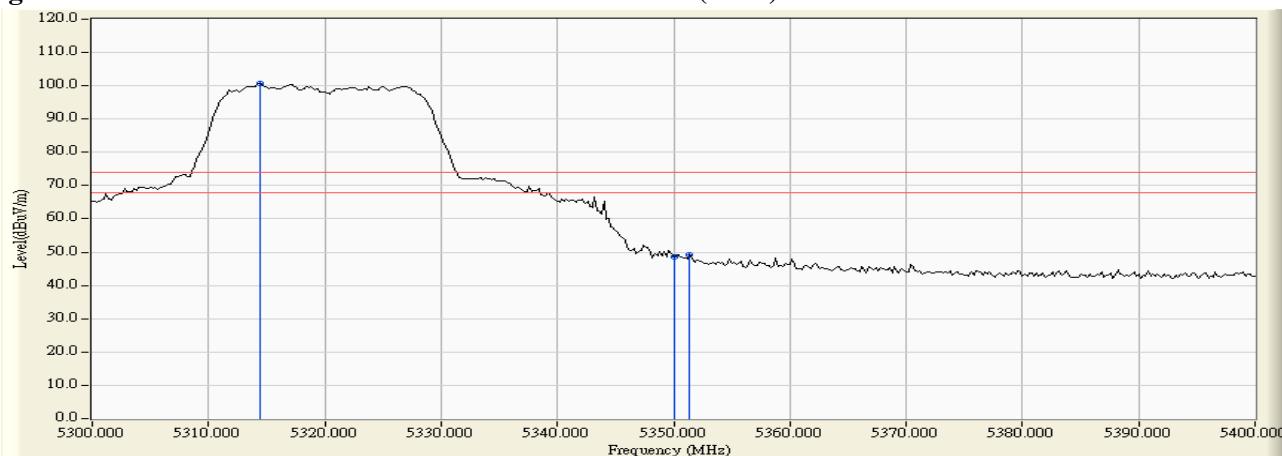
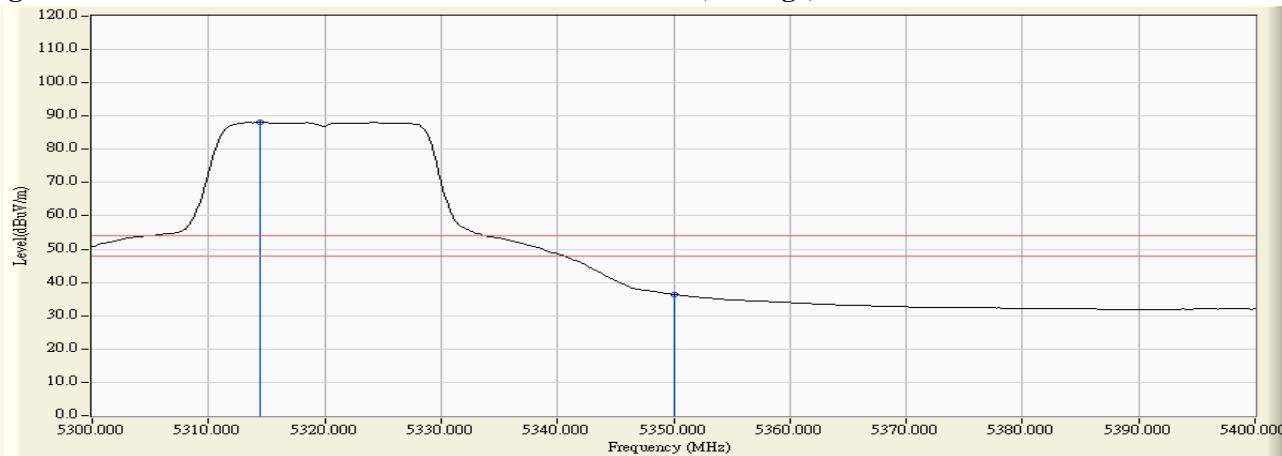


Figure Channel 64:

Vertical (Average)



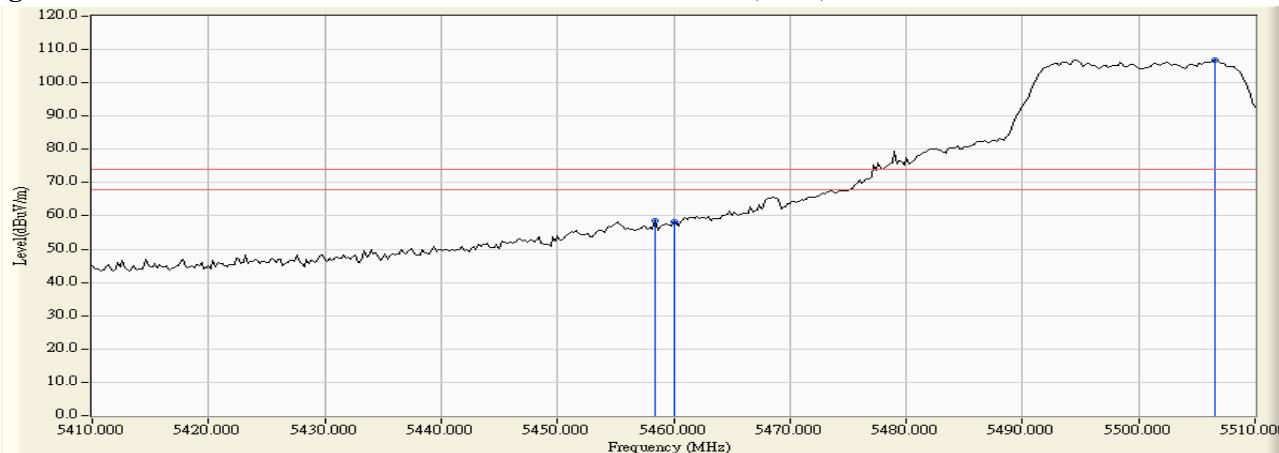
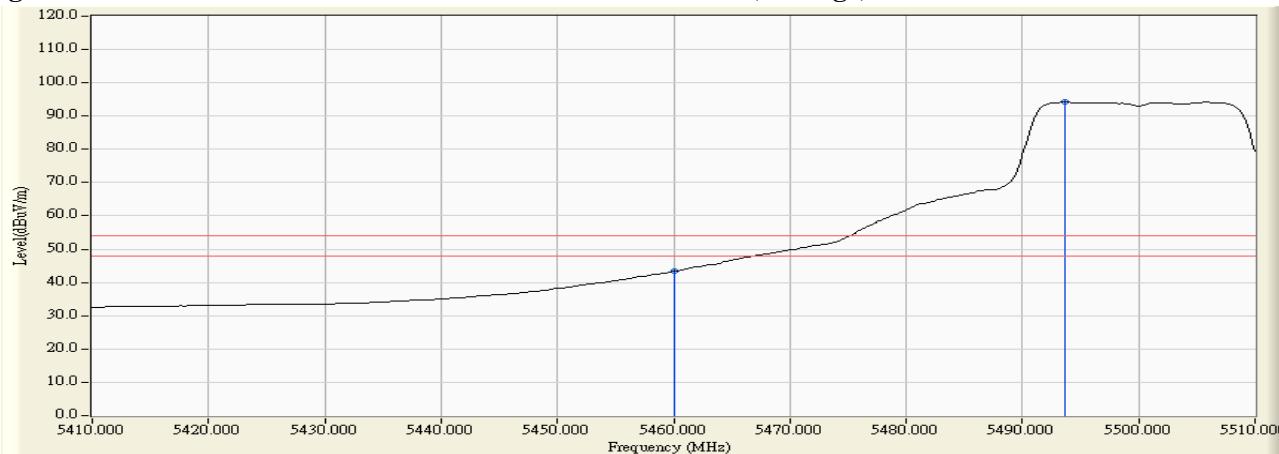
Note:

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 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
100 (Peak)	5458.400	1.745	56.797	58.541	74.00	54.00	Pass
100 (Peak)	5460.000	1.775	56.479	58.254	74.00	54.00	Pass
100 (Peak)	5506.600	2.545	104.165	106.710	--	--	Pass
100 (Average)	5460.000	1.775	41.534	43.309	74.00	54.00	Pass
100 (Average)	5493.600	2.392	91.788	94.180	--	--	Pass

Figure Channel 100:**Horizontal (Peak)****Figure Channel 100:****Horizontal (Average)**

Note:

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 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
100 (Peak)	5459.600	1.930	53.190	55.119	74.00	54.00	Pass
100 (Peak)	5460.000	1.934	52.002	53.937	74.00	54.00	Pass
100 (Peak)	5497.000	2.428	100.076	102.505	--	--	Pass
100 (Average)	5460.000	1.934	37.087	39.022	74.00	54.00	Pass
100 (Average)	5493.800	2.396	87.167	89.563	--	--	Pass

Figure Channel 100:

Vertical (Peak)

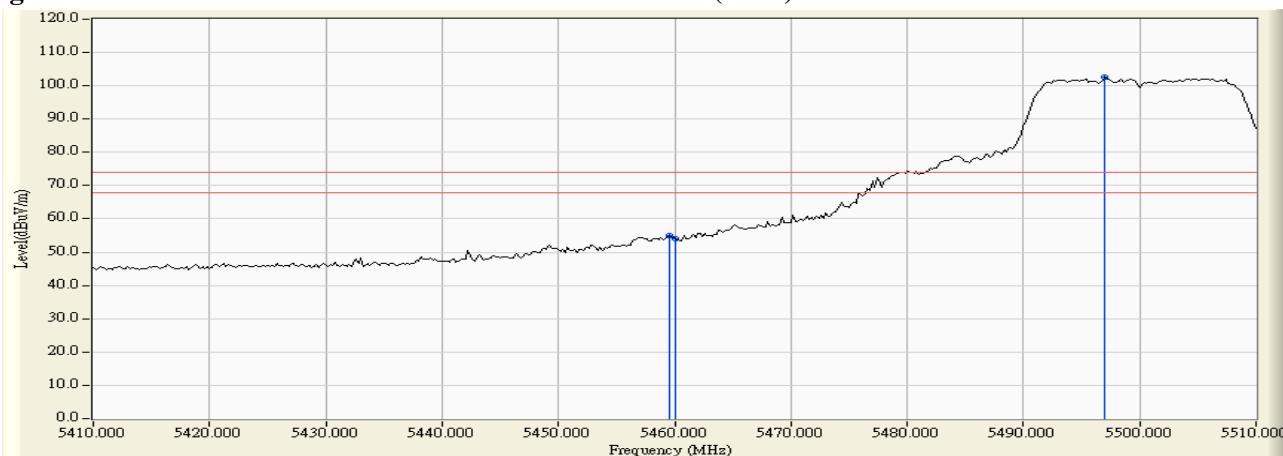
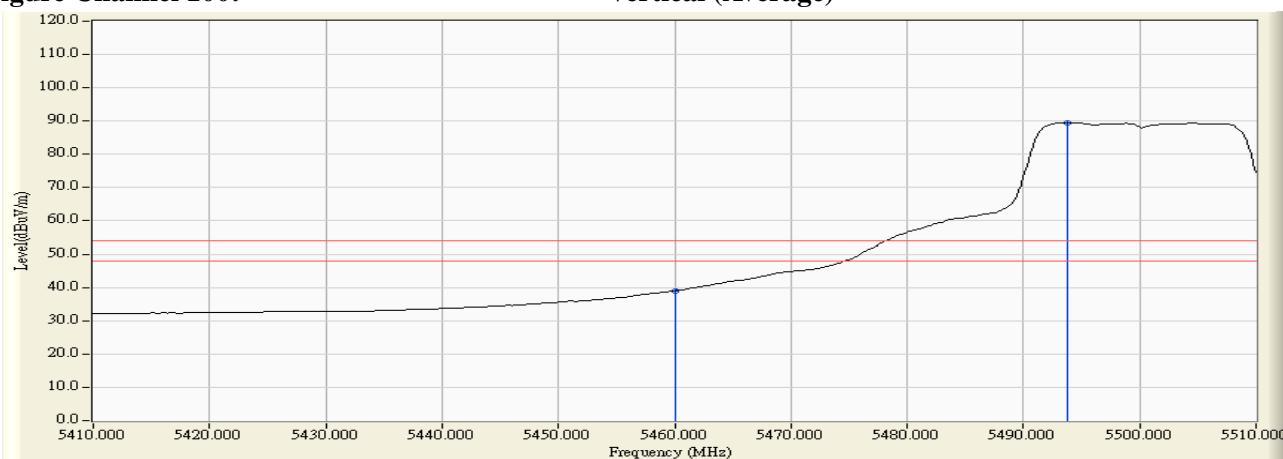


Figure Channel 100:

Vertical (Average)



Note:

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 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-66.570	-48.236	-21.236	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-69.240	-49.905	-22.905	-27.000	Pass

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 140

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	19.372	-69.510	-50.138	-23.138	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	18.649	-69.410	-50.761	-23.761	-27.000	Pass

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
38 (Peak)	5148.200	0.802	60.116	60.918	74.00	54.00	Pass
38 (Peak)	5150.000	0.796	59.178	59.974	74.00	54.00	Pass
38 (Peak)	5194.000	0.650	99.723	100.373	--	--	Pass
38 (Average)	5150.000	0.796	45.997	46.793	74.00	54.00	Pass
38 (Average)	5193.000	0.654	85.339	85.992	--	--	Pass

Figure Channel 38:

Horizontal (Peak)

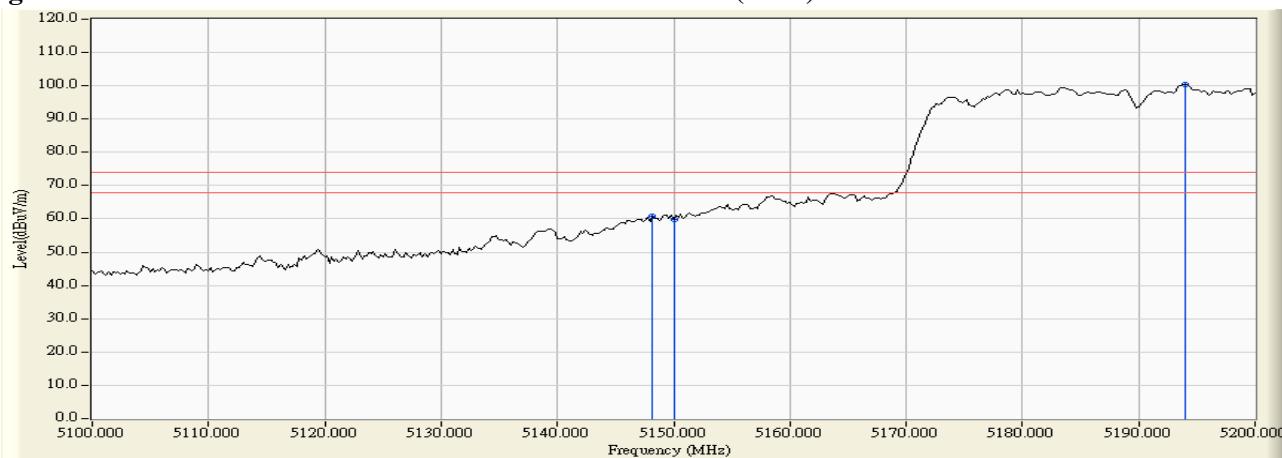
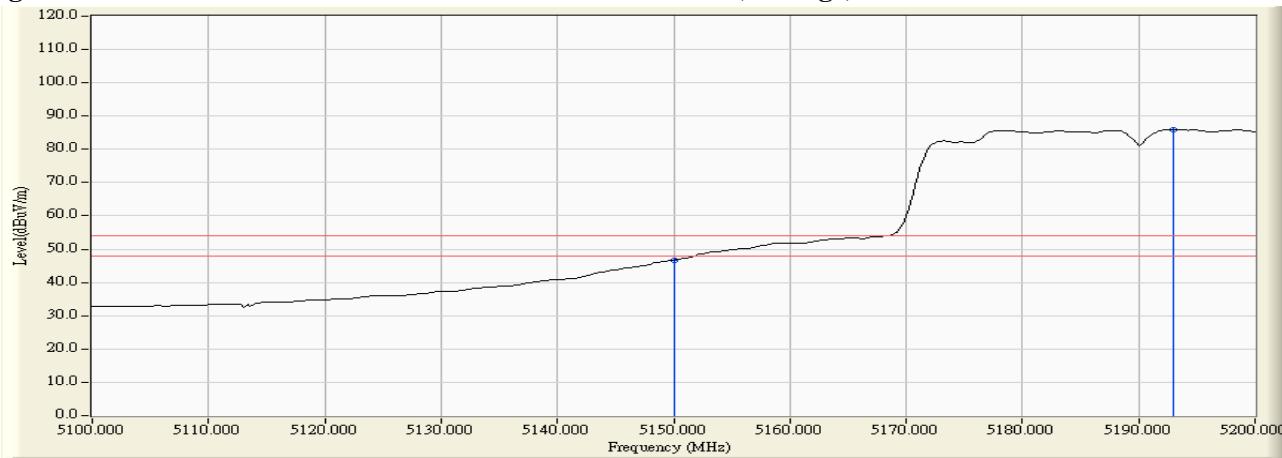


Figure Channel 38:

Horizontal (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
38 (Peak)	5148.000	1.322	61.074	62.396	74.00	54.00	Pass
38 (Peak)	5150.000	1.331	58.529	59.861	74.00	54.00	Pass
38 (Peak)	5195.800	1.549	96.165	97.714	--	--	Pass
38 (Average)	5150.000	1.331	45.141	46.473	74.00	54.00	Pass
38 (Average)	5192.600	1.533	82.151	83.684	--	--	Pass

Figure Channel 38:

Vertical (Peak)

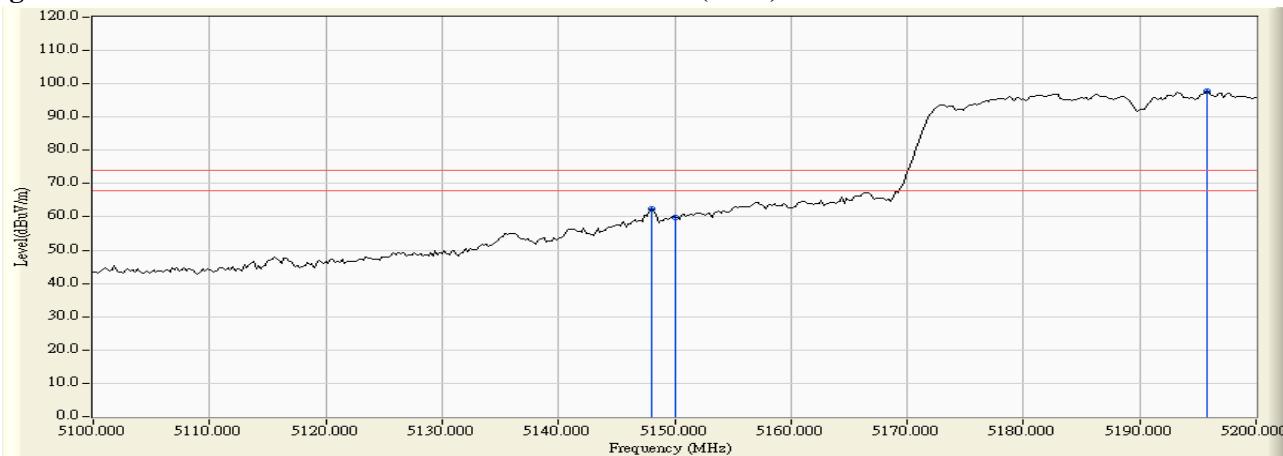
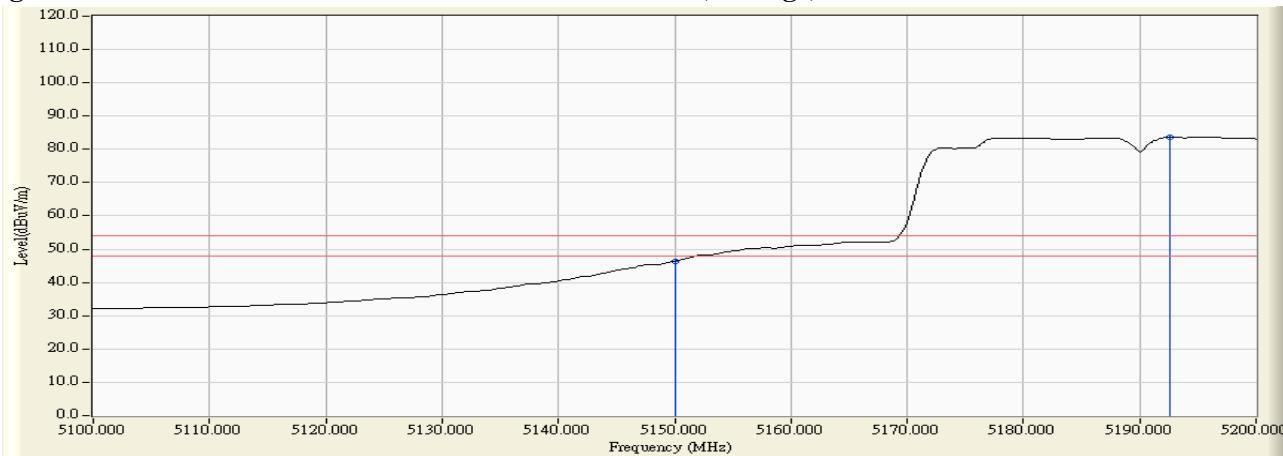


Figure Channel 38:

Vertical (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps)-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5248.60	<5250	PASS

NOTE: Accordance with 15.215 requirement.

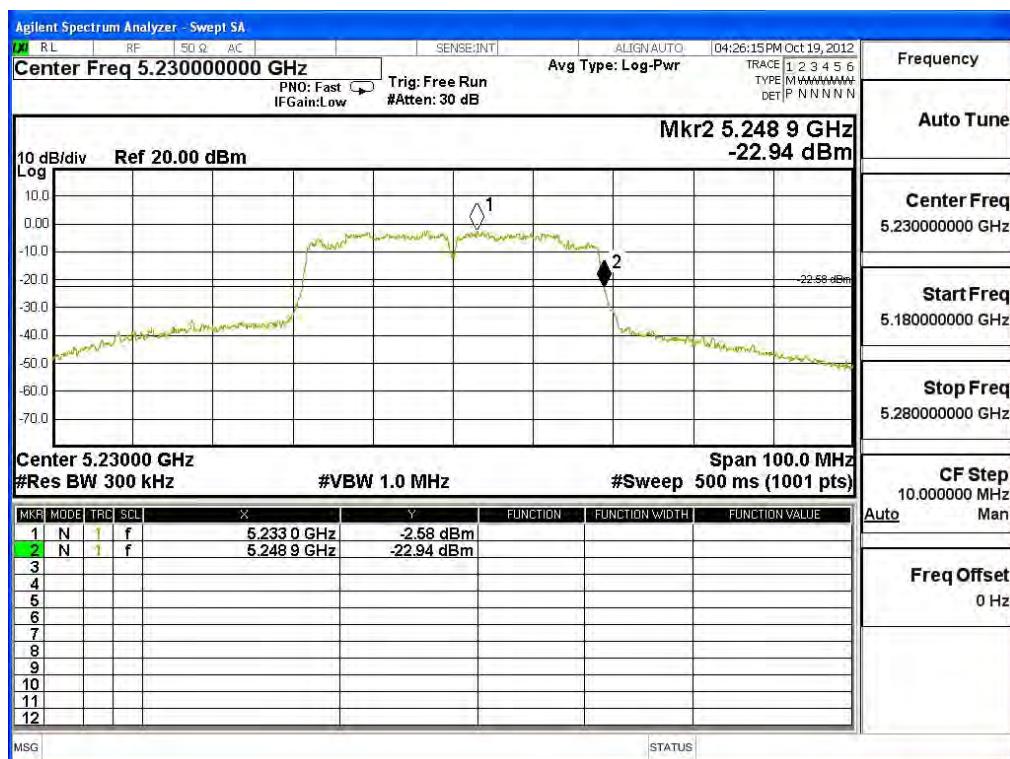


Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5248.90	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)-Channel 54

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5270	5251.30	>5250	PASS

NOTE: Accordance with 15.215 requirement.

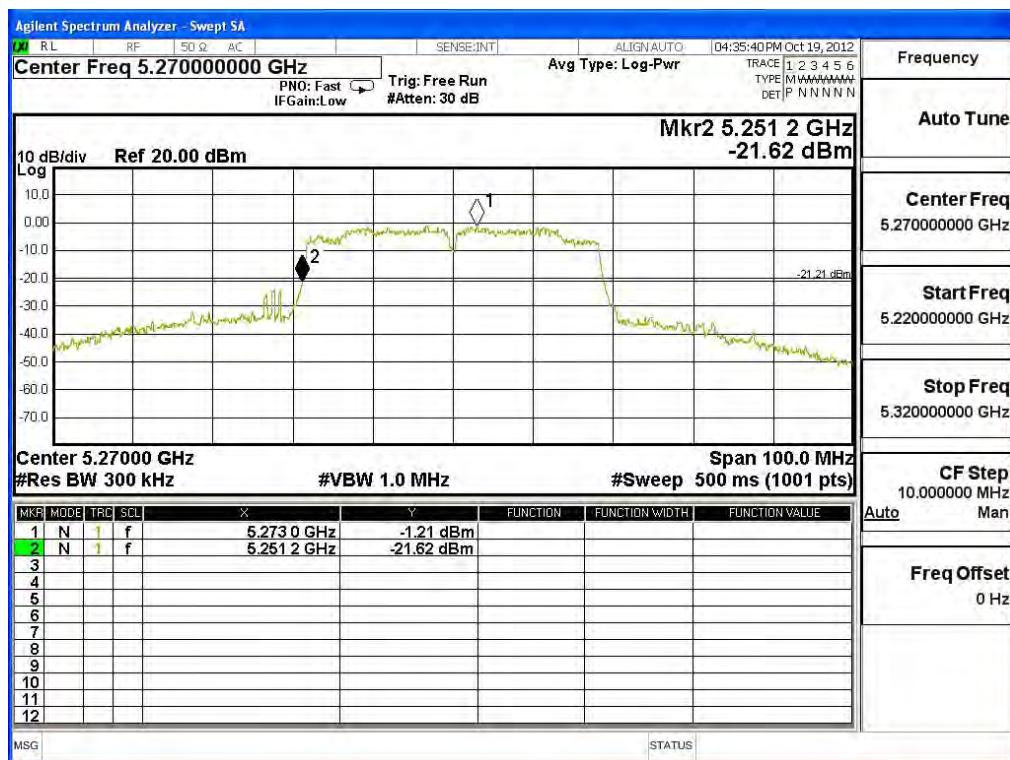


Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)-Channel 54

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5270	5251.20	>5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 62

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
62 (Peak)	5317.800	1.647	100.213	101.860	--	--	Pass
62 (Peak)	5350.000	1.575	62.472	64.047	74.00	54.00	Pass
62 (Peak)	5350.800	1.572	64.609	66.182	74.00	54.00	Pass
62 (Average)	5317.800	1.647	86.506	88.153	--	--	Pass
62 (Average)	5350.000	1.575	46.280	47.855	74.00	54.00	Pass

Figure Channel 62:

Horizontal (Peak)

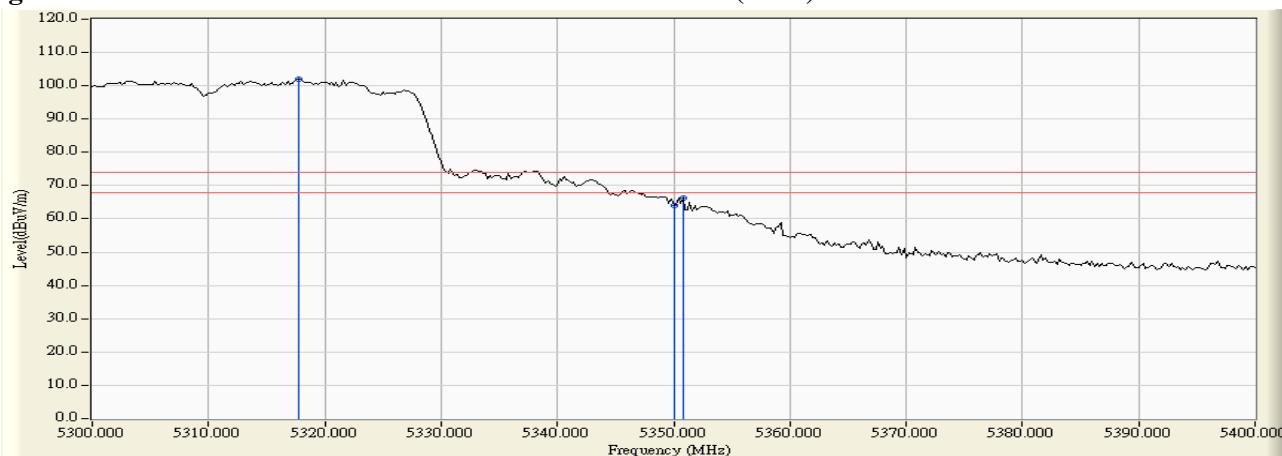
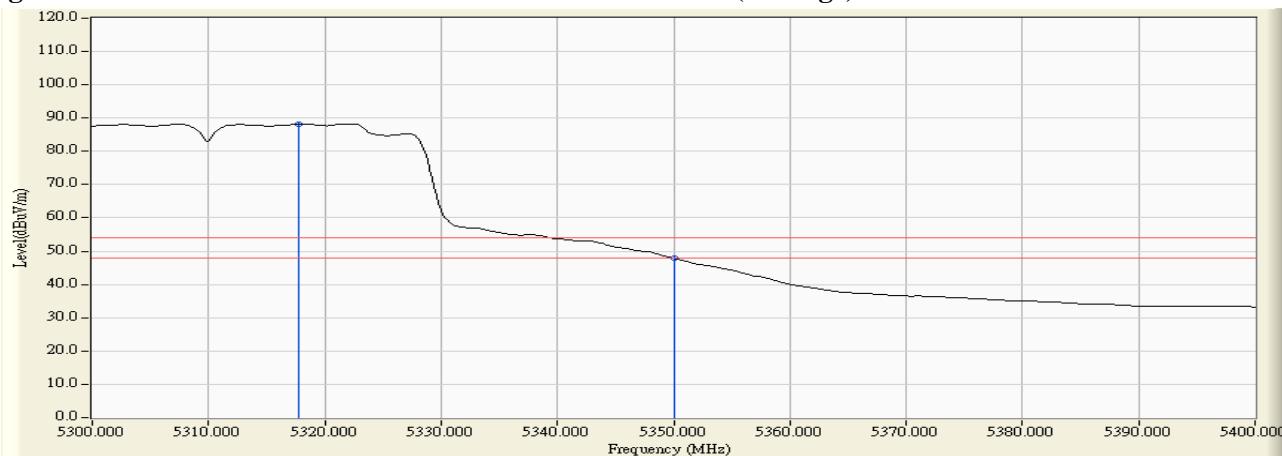


Figure Channel 62:

Horizontal (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps) -Channel 62

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
62 (Peak)	5317.600	1.885	96.818	98.703	--	--	Pass
62 (Peak)	5350.000	1.900	56.707	58.607	74.00	54.00	Pass
62 (Peak)	5352.600	1.897	57.225	59.122	74.00	54.00	Pass
62 (Average)	5307.200	1.877	83.138	85.014	--	--	Pass
62 (Average)	5350.000	1.900	41.817	43.717	74.00	54.00	Pass

Figure Channel 62:

Vertical (Peak)

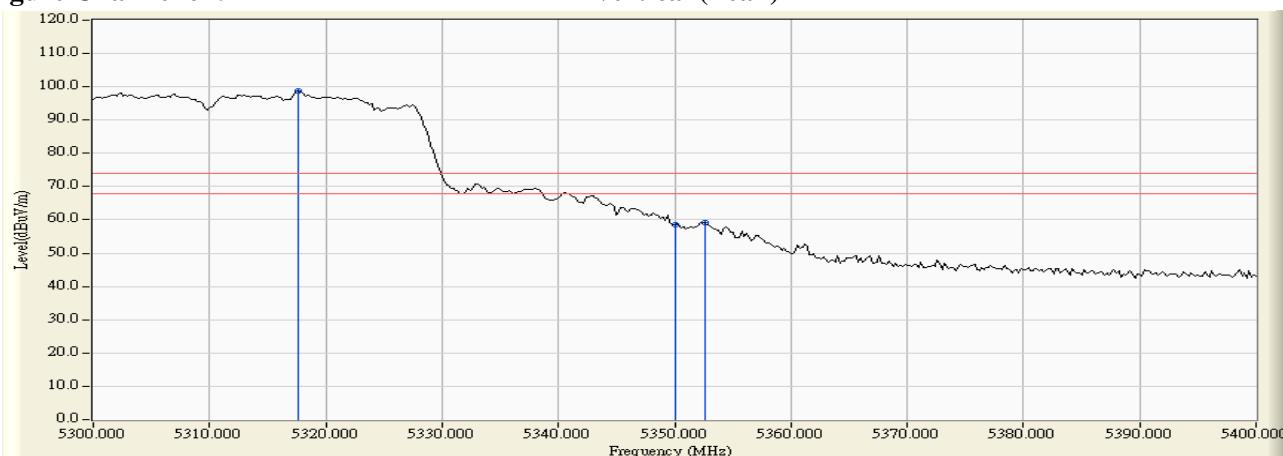
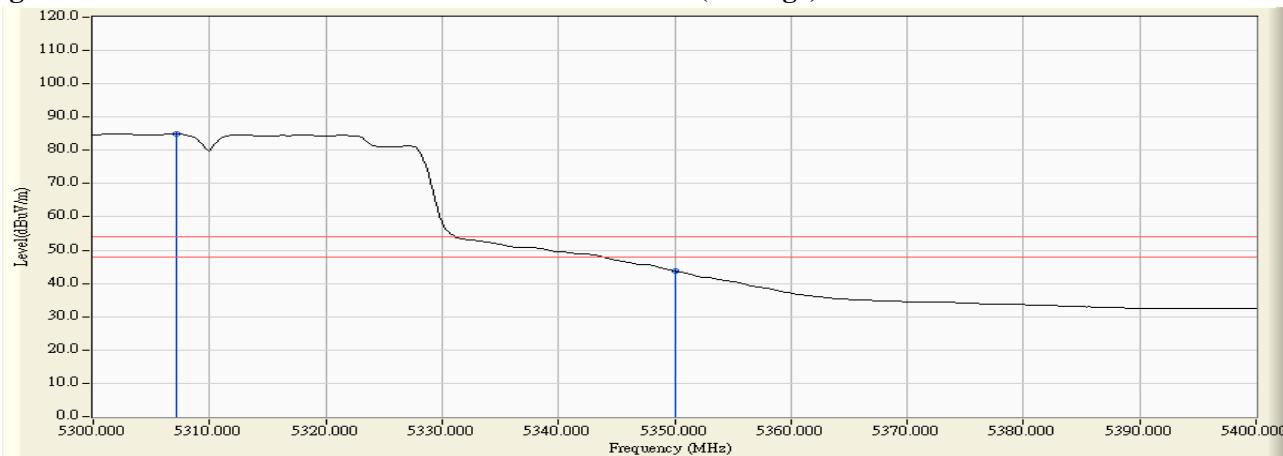


Figure Channel 62:

Vertical (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
102 (Peak)	5457.000	1.717	63.337	65.054	74.00	54.00	Pass
102 (Peak)	5460.000	1.775	61.013	62.788	74.00	54.00	Pass
102 (Peak)	5506.600	2.545	100.062	102.607	--	--	Pass
102 (Average)	5460.000	1.775	47.270	49.045	74.00	54.00	Pass
102 (Average)	5507.400	2.544	86.726	89.270	--	--	Pass

Figure Channel 102:

Horizontal (Peak)

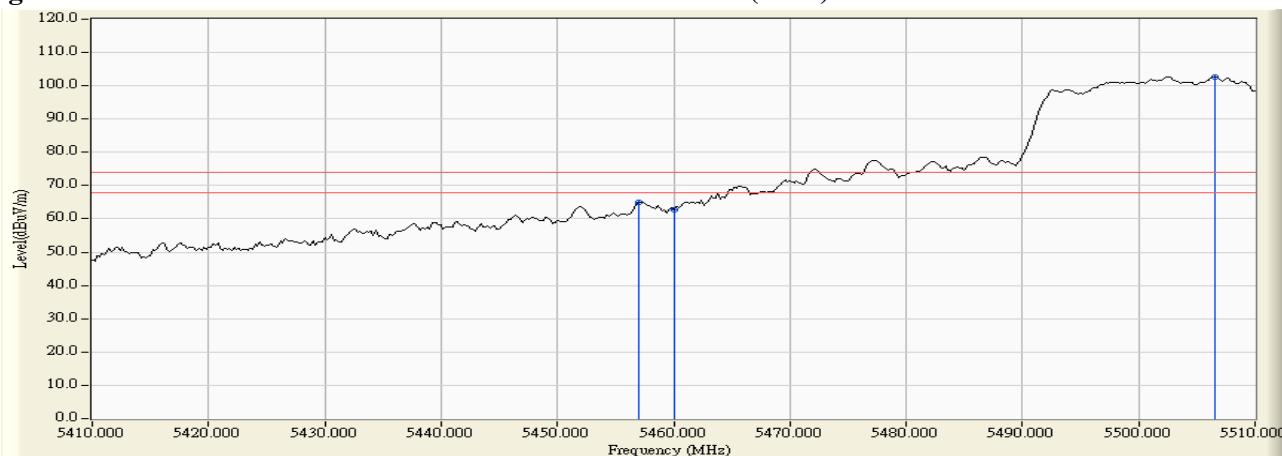
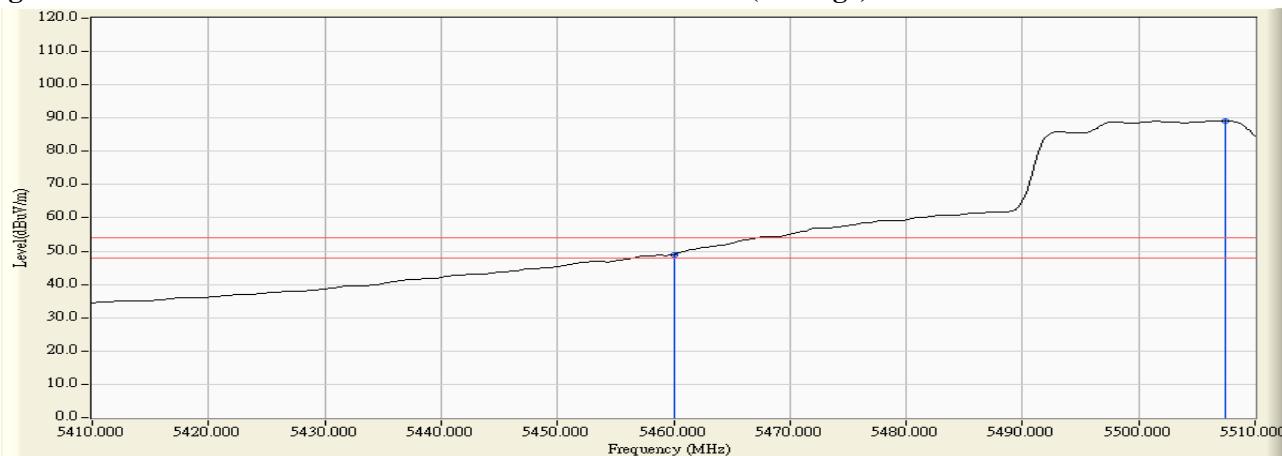


Figure Channel 102:

Horizontal (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
102 (Peak)	5458.000	1.907	58.857	60.763	74.00	54.00	Pass
102 (Peak)	5460.000	1.934	54.680	56.615	74.00	54.00	Pass
102 (Peak)	5503.600	2.496	96.135	98.632	--	--	Pass
102 (Average)	5460.000	1.934	42.212	44.147	74.00	54.00	Pass
102 (Average)	5507.400	2.511	81.757	84.268	--	--	Pass

Figure Channel 102:

Vertical (Peak)

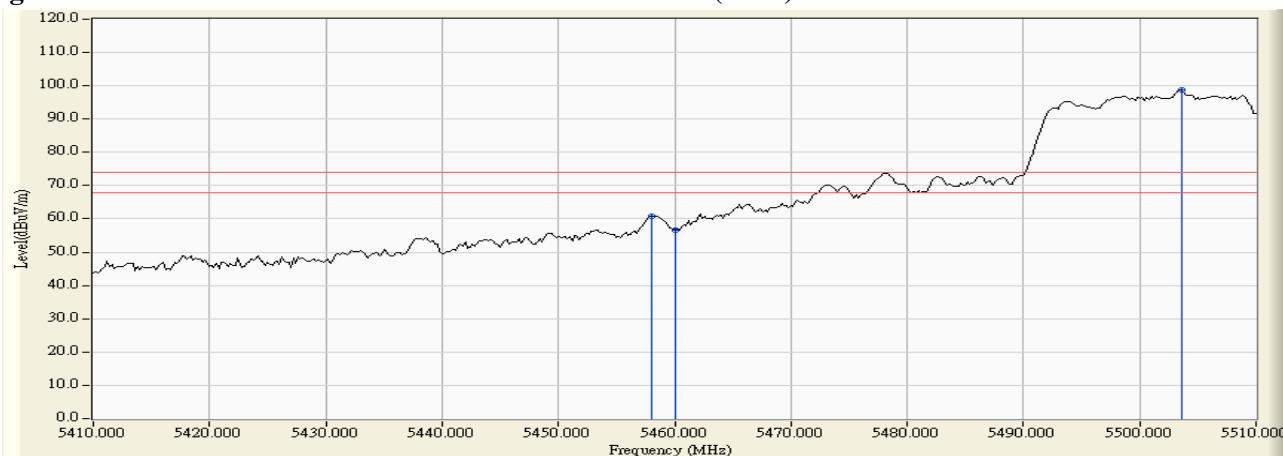
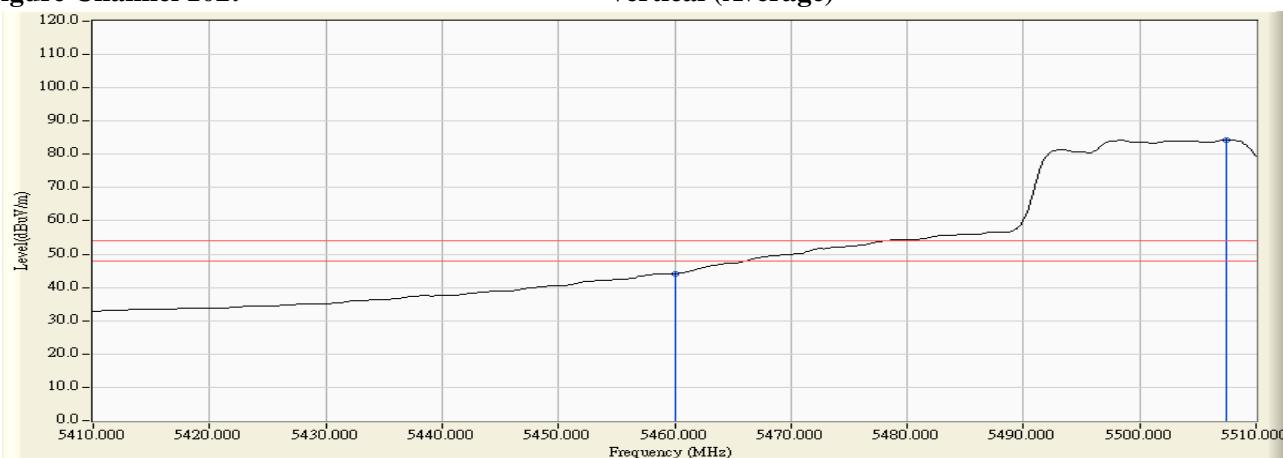


Figure Channel 102:

Vertical (Average)



Note:

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 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-58.900	-40.566	-13.566	-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	-61.520	-42.185	-15.185	-27.000	Pass

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 134

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-76.630	-57.981	-30.981	-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	-76.630	-57.258	-30.258	-27.000	Pass

8. Frequency Stability

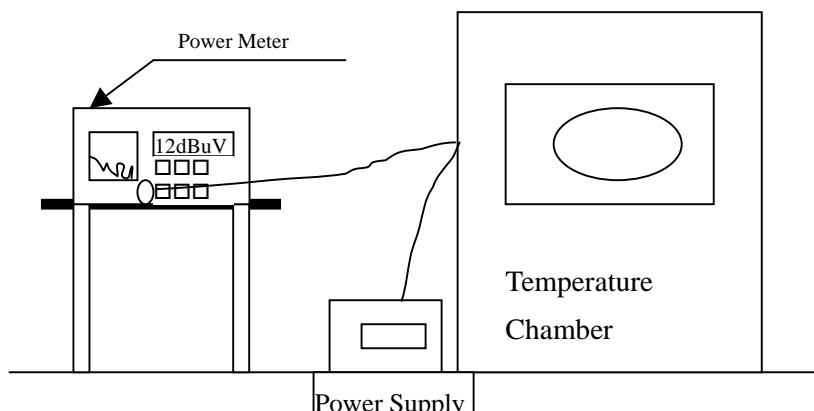
8.1. Test Equipment

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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

Manufacturers 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 C63.4, 2003; 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

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
T _{nom} (20) °C	V _{nom} (110)V	36	5180.0000	5180.0064	-0.0064
		38	5190.0000	5190.0089	-0.0089
		44	5220.0000	5220.0095	-0.0095
		46	5230.0000	5230.0085	-0.0085
		48	5240.0000	5240.0099	-0.0099
		52	5260.0000	5260.0085	-0.0085
		54	5270.0000	5270.0098	-0.0098
		60	5300.0000	5300.0089	-0.0089
		62	5310.0000	5310.0010	-0.0010
		64	5320.0000	5320.0010	-0.0010
		100	5500.0000	5500.0096	-0.0096
		102	5510.0000	5510.0010	-0.0010
		110	5550.0000	5590.0020	-0.0020
		116	5580.0000	5600.0016	-0.0016
		134	5670.0000	5670.0099	-0.0099
		140	5700.0000	5700.0036	-0.0036

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmax (50) °C	Vmax (126.5)V	36	5180.0000	5180.0058	-0.0058
		38	5190.0000	5190.0099	-0.0099
		44	5220.0000	5220.0095	-0.0095
		46	5230.0000	5230.0084	-0.0084
		48	5240.0000	5240.0094	-0.0094
		52	5260.0000	5260.0084	-0.0084
		54	5270.0000	5270.0094	-0.0094
		60	5300.0000	5300.0083	-0.0083
		62	5310.0000	5310.0097	-0.0097
		64	5320.0000	5320.0096	-0.0096
		100	5500.0000	5500.0065	-0.0065
		102	5510.0000	5510.0094	-0.0094
		110	5550.0000	5590.0094	-0.0094
		116	5580.0000	5600.0084	-0.0084
		134	5670.0000	5670.0089	-0.0089
		140	5700.0000	5700.0093	-0.0093
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmax (50) °C	Vmin (93.5)V	36	5180.0000	5180.0058	-0.0058
		38	5190.0000	5190.0099	-0.0099
		44	5220.0000	5220.0095	-0.0095
		46	5230.0000	5230.0084	-0.0084
		48	5240.0000	5240.0094	-0.0094
		52	5260.0000	5260.0084	-0.0084
		54	5270.0000	5270.0094	-0.0094
		60	5300.0000	5300.0083	-0.0083
		62	5310.0000	5310.0097	-0.0097
		64	5320.0000	5320.0096	-0.0096
		100	5500.0000	5500.0065	-0.0065
		102	5510.0000	5510.0094	-0.0094
		110	5550.0000	5590.0094	-0.0094
		116	5580.0000	5600.0084	-0.0084
		134	5670.0000	5670.0089	-0.0089
		140	5700.0000	5700.0093	-0.0093

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmin (0) °C	Vmax (126.5)V	36	5180.0000	5180.0098	-0.0098
		38	5190.0000	5190.0097	-0.0097
		44	5220.0000	5220.0089	-0.0089
		46	5230.0000	5230.0096	-0.0096
		48	5240.0000	5240.0096	-0.0096
		52	5260.0000	5260.0098	-0.0098
		54	5270.0000	5270.0094	-0.0094
		60	5300.0000	5300.0095	-0.0095
		62	5310.0000	5310.0096	-0.0096
		64	5320.0000	5320.0089	-0.0089
		100	5500.0000	5500.0098	-0.0098
		102	5510.0000	5510.0099	-0.0099
		110	5550.0000	5590.0097	-0.0097
		116	5580.0000	5600.0097	-0.0097
		134	5670.0000	5670.0096	-0.0096
		140	5700.0000	5700.0096	-0.0096
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmin (0) °C	Vmin (93.5)V	36	5180.0000	5180.0098	-0.0098
		38	5190.0000	5190.0097	-0.0097
		44	5220.0000	5220.0089	-0.0089
		46	5230.0000	5230.0096	-0.0096
		48	5240.0000	5240.0096	-0.0096
		52	5260.0000	5260.0098	-0.0098
		54	5270.0000	5270.0094	-0.0094
		60	5300.0000	5300.0095	-0.0095
		62	5310.0000	5310.0096	-0.0096
		64	5320.0000	5320.0089	-0.0089
		100	5500.0000	5500.0098	-0.0098
		102	5510.0000	5510.0099	-0.0099
		110	5550.0000	5590.0097	-0.0097
		116	5580.0000	5600.0097	-0.0097
		134	5670.0000	5670.0096	-0.0096
		140	5700.0000	5700.0096	-0.0096

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
T _{nom} (20) °C	V _{nom} (110)V	36	5180.0000	5180.0065	-0.0065
		38	5190.0000	5190.0091	-0.0091
		44	5220.0000	5220.0093	-0.0093
		46	5230.0000	5230.0084	-0.0084
		48	5240.0000	5240.0097	-0.0097
		52	5260.0000	5260.0083	-0.0083
		54	5270.0000	5270.0097	-0.0097
		60	5300.0000	5300.0087	-0.0087
		62	5310.0000	5310.0009	-0.0009
		64	5320.0000	5320.0008	-0.0008
		100	5500.0000	5500.0095	-0.0095
		102	5510.0000	5510.0009	-0.0009
		110	5550.0000	5590.0018	-0.0018
		116	5580.0000	5600.0017	-0.0017
		134	5670.0000	5670.0098	-0.0098
		140	5700.0000	5700.0035	-0.0035

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmax (50) °C	Vmax (126.5)V	36	5180.0000	5180.0053	-0.0053
		38	5190.0000	5190.0097	-0.0097
		44	5220.0000	5220.0093	-0.0093
		46	5230.0000	5230.0085	-0.0085
		48	5240.0000	5240.0092	-0.0092
		52	5260.0000	5260.0084	-0.0084
		54	5270.0000	5270.0095	-0.0095
		60	5300.0000	5300.0081	-0.0081
		62	5310.0000	5310.0096	-0.0096
		64	5320.0000	5320.0092	-0.0092
		100	5500.0000	5500.0063	-0.0063
		102	5510.0000	5510.0092	-0.0092
		110	5550.0000	5590.0092	-0.0092
		116	5580.0000	5600.0084	-0.0084
		134	5670.0000	5670.0085	-0.0085
		140	5700.0000	5700.0091	-0.0091
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmax (50) °C	Vmin (93.5)V	36	5180.0000	5180.0053	-0.0053
		38	5190.0000	5190.0097	-0.0097
		44	5220.0000	5220.0093	-0.0093
		46	5230.0000	5230.0085	-0.0085
		48	5240.0000	5240.0092	-0.0092
		52	5260.0000	5260.0084	-0.0084
		54	5270.0000	5270.0095	-0.0095
		60	5300.0000	5300.0081	-0.0081
		62	5310.0000	5310.0096	-0.0096
		64	5320.0000	5320.0092	-0.0092
		100	5500.0000	5500.0063	-0.0063
		102	5510.0000	5510.0092	-0.0092
		110	5550.0000	5590.0092	-0.0092
		116	5580.0000	5600.0084	-0.0084
		134	5670.0000	5670.0085	-0.0085
		140	5700.0000	5700.0091	-0.0091

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmin (0) °C	Vmax (126.5)V	36	5180.0000	5180.0097	-0.0097
		38	5190.0000	5190.0096	-0.0096
		44	5220.0000	5220.0090	-0.0090
		46	5230.0000	5230.0095	-0.0095
		48	5240.0000	5240.0095	-0.0095
		52	5260.0000	5260.0097	-0.0097
		54	5270.0000	5270.0093	-0.0093
		60	5300.0000	5300.0094	-0.0094
		62	5310.0000	5310.0093	-0.0093
		64	5320.0000	5320.0087	-0.0087
		100	5500.0000	5500.0097	-0.0097
		102	5510.0000	5510.0098	-0.0098
		110	5550.0000	5590.0096	-0.0096
		116	5580.0000	5600.0095	-0.0095
		134	5670.0000	5670.0095	-0.0095
		140	5700.0000	5700.0093	-0.0093
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tmin (0) °C	Vmin (93.5)V	36	5180.0000	5180.0097	-0.0097
		38	5190.0000	5190.0096	-0.0096
		44	5220.0000	5220.0090	-0.0090
		46	5230.0000	5230.0095	-0.0095
		48	5240.0000	5240.0095	-0.0095
		52	5260.0000	5260.0097	-0.0097
		54	5270.0000	5270.0093	-0.0093
		60	5300.0000	5300.0094	-0.0094
		62	5310.0000	5310.0930	-0.0930
		64	5320.0000	5320.0087	-0.0087
		100	5500.0000	5500.0097	-0.0097
		102	5510.0000	5510.0098	-0.0098
		110	5550.0000	5590.0096	-0.0096
		116	5580.0000	5600.0095	-0.0095
		134	5670.0000	5670.0095	-0.0095
		140	5700.0000	5700.0093	-0.0093

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.