FCC 47 CFR PART 15 SUBPART E

Product Type	:	Wireless Module
Applicant	:	Wyse Technology
Address	:	3471 North First Street San Jose,CA 95134-1803 United States
Trade Name	:	WYSE
Model Number	:	62230WL
Test Specification	:	FCC 47 CFR PART 15 SUBPART E: Oct., 2010 Canada RSS-210 ISSUE 8: Dec., 2010 Canada RSS-Gen ISSUE 3: Dec., 2010 ANSI C63.4-2009
Application Purpose	:	Class II Permissive Change
Issue Date	:	Aug. 22, 2011

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade City,
Taoyuan County 334, Taiwan R.O.C.
Tel：+86-3-2710188 / Fax：+86-3-2710190

Taiwan Accreditation Foundation accreditation number: 1330

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Aug. 22, 2011	Initial Issue	

Verification of Compliance

Issued Date: 08/22/2011

Product Type	:	Wireless Module
Applicant	:	Wyse Technology
Address	:	3471 North First Street San Jose,CA 95134-1803 United States
Trade Name	:	WYSE
Model Number	:	62230WL
FCC ID	:	DYD62230WL
EUT Rated Voltage	:	DC 3.3V
Test Voltage	:	120 Vac / 60 Hz
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART E: Oct., 2010 Canada RSS-210 ISSUE 8: Dec., 2010 Canada RSS-Gen ISSUE 3: Dec., 2010 ANSI C63.4-2009
Test Result	:	Complied
Application Purpose	:	Class II Permissive Change
Performing Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City, Taoyuan County 334, Taiwan R.O.C. Tel：+86-3-2710188 / Fax：+86-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2009 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 15.203, 15.407 .
The test results of this report relate only to the tested sample identified in this report.

Approved By	:		Reviewed By	:	
(Manager)		(Miller Lee)	(Testing Engineer)		(Gary Wu)

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1 General Information

1.1 Summary of Test Result

Standard	Item	Result	Remark
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit.
15.407(b/1/2/3) (b)(5)	Radiated Emission	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Maximum Conducted Output Power	PASS	Ref. original FCC ID: PD962230ANH report
---	26dB RF Bandwidth	N/A	
15.407(a)(6)	Peak Power Excursion	N/A	
15.407(a/1/2/3)	Peak Power Spectral Density	N/A	
15.407 (b) (1)	Out of Band Conducted Emissions	N/A	
15.407(g)	Frequency Stability	N/A	
15.203	Antenna Requirement	PASS	Meet the requirement of limit.

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.24 dB.

Radiated Emission

The measurement uncertainty of 30 MHz - 1GHz is evaluated as ± 3.96dB.

The measurement uncertainty of 1 GHz - 40 GHz is evaluated as ± 3.62dB.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

2 EUT Description

Product	:	Wireless Module			
Trade Name	:	WYSE			
Model No.	:	62230WL			
Applicant	:	Wyse Technology 3471 North First Street San Jose,CA 95134-1803 United States			
Manufacturer	:	Intel Corporation 100 Center Point Ciole, Suite 200 Columbia, SC 29210			
FCC ID	:	DYD62230WL			
Frequency Range	:	**Band**	**Mode**	**Frequency Range (MHz)**	**Number of Channels**
		U-NII Band I	IEEE 802.11a	5180 – 5240	8 Channels
			draft 802.11n Standard-20 MHz	5180 – 5240	8 Channels
			draft 802.11n Wide-40MHz	5190 – 5230	4 Channels
		U-NII Band II	IEEE 802.11a	5260 – 5320	8 Channels
			draft 802.11n Standard-20 MHz	5260 – 5320	8 Channels
			draft 802.11n Wide-40MHz	5270 – 5310	4 Channels
		U-NII Band III	IEEE 802.11a	5500 – 5700	11 Channels
			draft 802.11n Standard-20 MHz	5500 – 5700	11 Channels
			draft 802.11n Wide-40MHz	5510 – 5670	5 Channels
Modulation Type	:	OFDM			
Antenna Type	:	Dipole Type			
Antenna Gain	:	2 dBi			
RF Output Power	:	IEEE 802.11a U-NII Band I : 0.045 W / 16.5 dBm IEEE 802.11a U-NII Band II : 0.046 W / 16.6 dBm IEEE 802.11a U-NII Band III : 0.045 W / 16.5 dBm draft 802.11n Standard-20MHz U-NII Band I: 0.042 W / 16.2 dBm draft 802.11n Standard-20MHz U-NII Band II: 0.044 W / 16.4 dBm draft 802.11n Standard-20MHz U-NII Band III: 0.044 W / 16.4 dBm draft 802.11n Wide-40MHz U-NII Band I: 0.044 W / 16.4 dBm draft 802.11n Wide-40MHz U-NII Band II: 0.04 W / 16.0 dBm draft 802.11n Wide-40MHz U-NII Band III: 0.044 W / 16.4 dBm			

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Normal Operation Mode
Mode 2: IEEE 802.11a Link Mode
Mode 3: draft 802.11n Standard-20MHz Link Mode
Mode 4: draft 802.11n Wide-40MHz Link Mode
Mode 5: Receiver Mode

Software used to control the EUT for staying in continuous transmitting mode was programmed. After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only. The output power were set to test was followed original Intel test report, FCC ID: PD962230ANH.

IEEE 802.11a mode (Chain A):

Channel Low, Channel Mid and Channel High with 6Mbps data rate were chosen for full testing.

draft 802.11n Standard-20 MHz Channel mode (Chain A + Chain B):

Channel Low, Channel Mid and Channel High with 6.5Mbps data rate were chosen for full testing.

draft 802.11n Wide-40MHz Channel mode (Chain A + Chain B):

Channel Low, Channel Mid and Channel High with 13Mbps data rate were chosen for full testing.

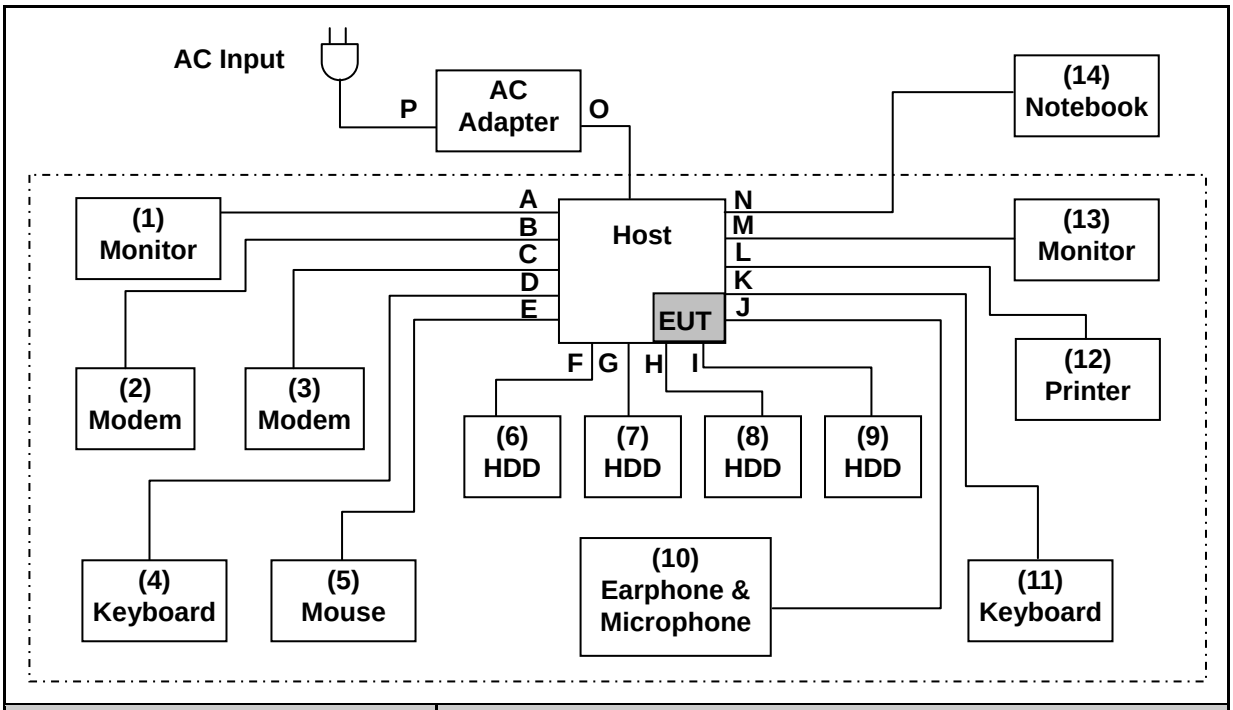
3.2. EUT Exercise Software

The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

1.	Setup the EUT shown on 3.3.
2.	Turn on the power of all equipment.
3.	Turn on Wi-Fi function link to Notebook.
4.	EUT run test program.

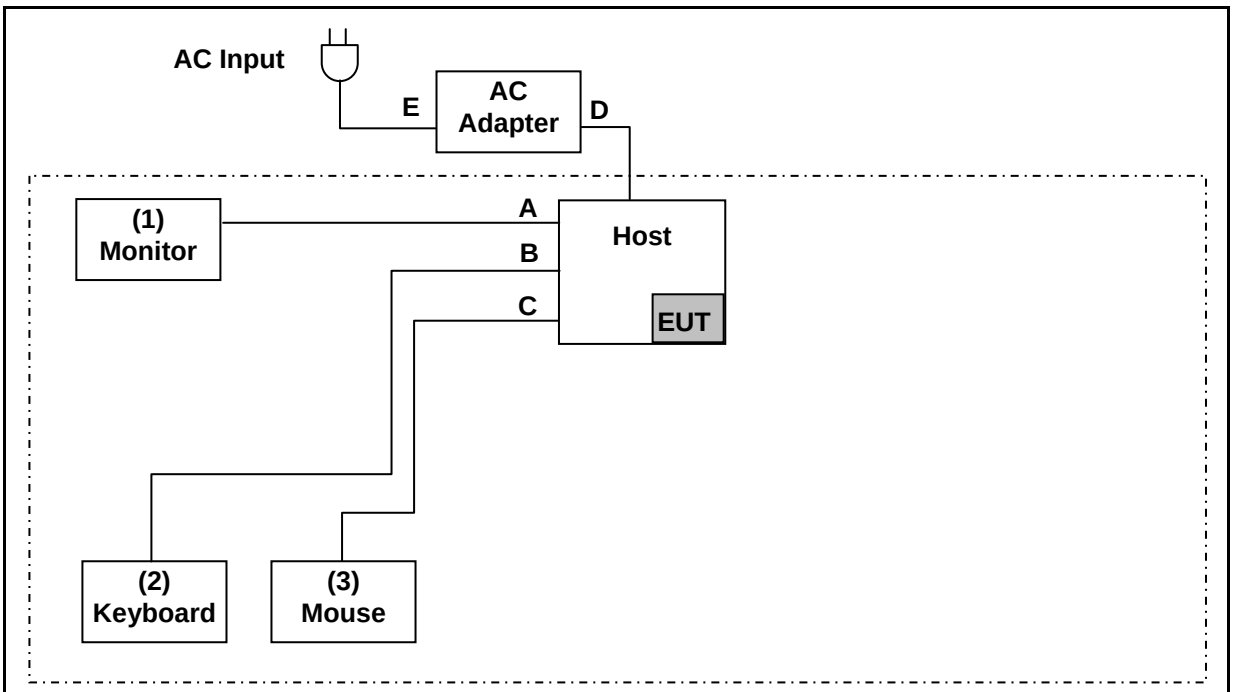
3.3. Configuration of Test System Details

Conducted Emission



Signal Cable Type		Signal Cable Description
A	Display Cable	Non-Shielded, 1.8 m
B	RS-232 Cable	Shielded, 1.8 m
C	RS-232 Cable	Shielded, 1.8 m
D	USB Cable	Shielded, 1.8 m
E	USB Cable	Shielded, 1.8 m
F	USB Cable	Shielded, 2.0 m
G	USB Cable	Shielded, 2.0 m
H	USB Cable	Shielded, 1.5 m with one core
I	USB Cable	Shielded, 1.5 m with one core
J	Earphone & Microphone Cable	Non-Shielded, 1.8 m
K	PS/2 Cable	Shielded, 1.8 m
L	Printer Cable	Shielded, 1.5 m with two cores
M	DVI Cable	Shielded, 1.8 m
N	LAN Cable	Non-Shielded, 3.0 m
O	DC Power Cable	Non-Shielded, 1.7 m with one core
P	AC Power Cable	Non-Shielded, 1.7 m

Radiated Emission



Signal Cable Type		Signal Cable Description
A	Display Cable	Non-Shielded, 1.8 m
B	USB Cable	Shielded, 1.8 m
C	USB Cable	Shielded, 1.8 m
D	DC Power Cable	Non-Shielded, 1.7 m with one core
E	AC Power Cable	Non-Shielded, 1.7 m

3.4. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

4 AC Power Conducted Emission Measurement

4.1. Limit

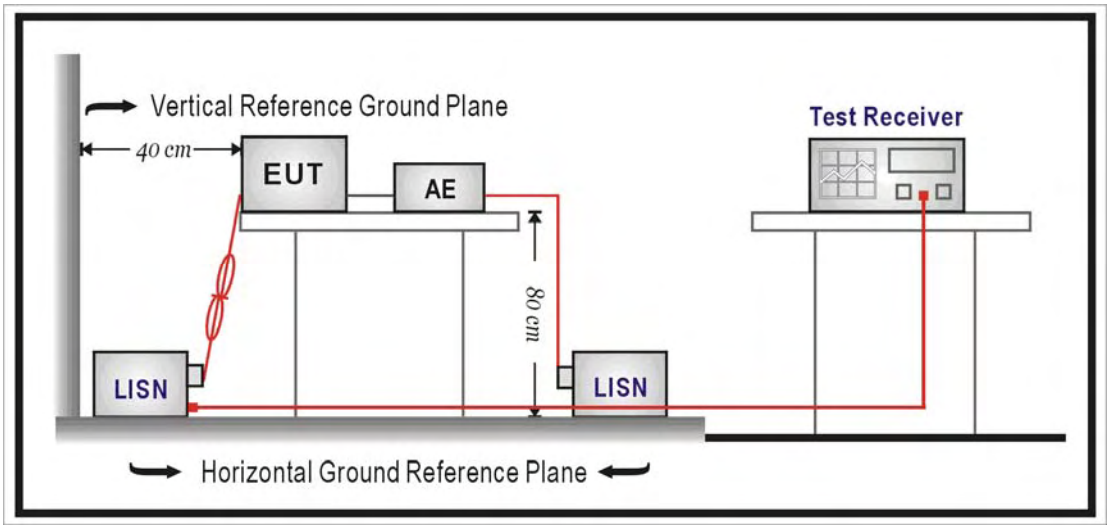
Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

4.2. Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100367	06/30/2011	(1)
LISN	R&S	ENV216	101040	03/04/2011	(1)
LISN	R&S	ENV216	101041	03/04/2011	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.
NOTE: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

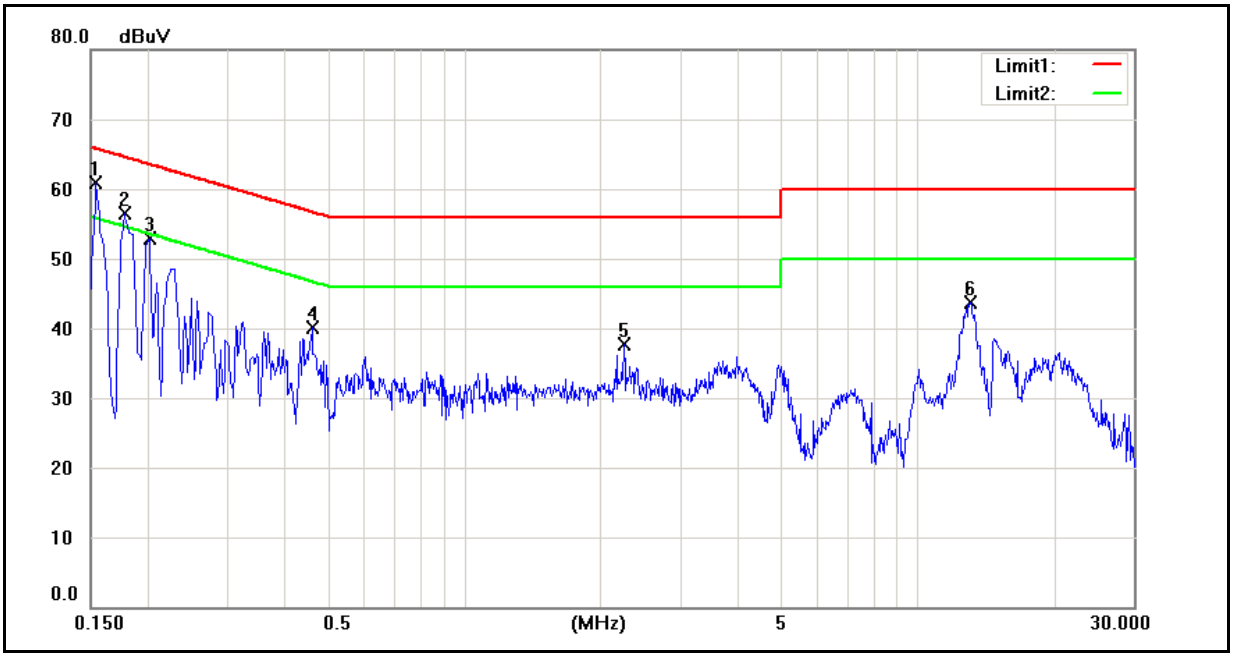
The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

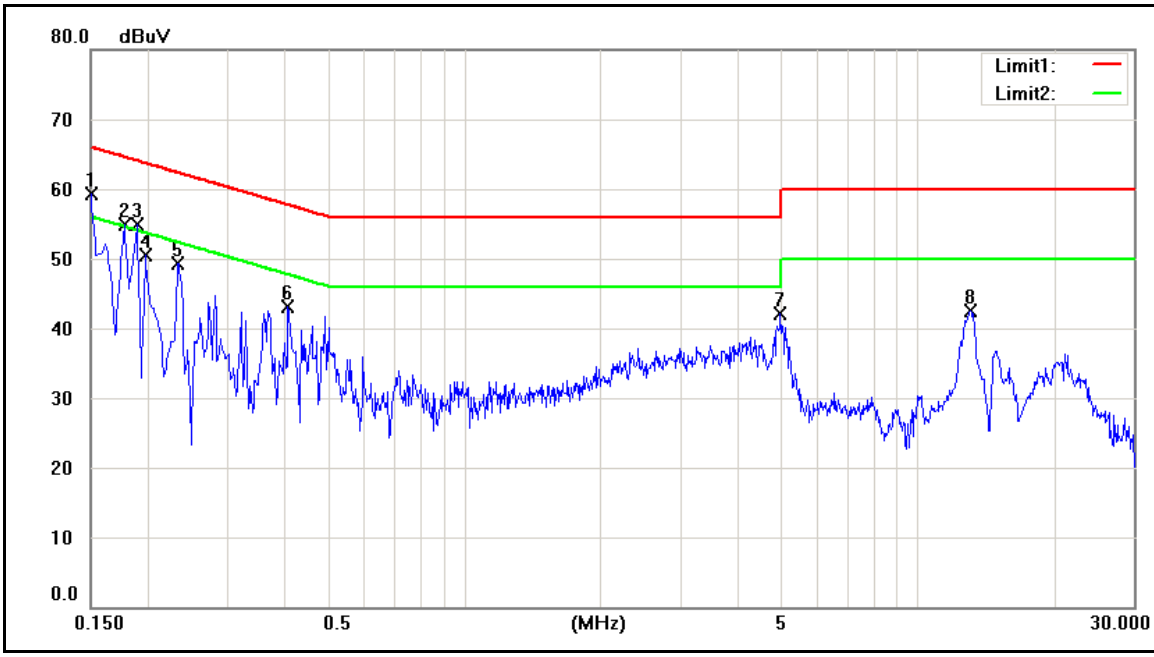
4.5. Test Result

Standard:	FCC Part 15E	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/18/2011
		Test By:	Gary Wu
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1540	47.45	25.22	10.07	57.52	35.29	65.78	55.78	-8.26	-20.49	Pass
2	0.1780	43.57	25.36	10.06	53.63	35.42	64.58	54.58	-10.95	-19.16	Pass
3	0.2020	39.80	19.61	10.05	49.85	29.66	63.53	53.53	-13.68	-23.87	Pass
4	0.4620	26.79	19.26	9.95	36.74	29.21	56.66	46.66	-19.92	-17.45	Pass
5	2.2500	22.95	16.33	9.71	32.66	26.04	56.00	46.00	-23.34	-19.96	Pass
6	13.1100	29.57	22.43	10.28	39.85	32.71	60.00	50.00	-20.15	-17.29	Pass

Standard:	FCC Part 15E	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/18/2011
		Test By:	Gary Wu
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1500	47.84	27.87	10.15	57.99	38.02	66.00	56.00	-8.01	-17.98	Pass
2	0.1780	42.75	22.20	10.14	52.89	32.34	64.58	54.58	-11.69	-22.24	Pass
3	0.1900	41.69	23.50	10.14	51.83	33.64	64.04	54.04	-12.21	-20.40	Pass
4	0.1980	39.44	19.48	10.13	49.57	29.61	63.69	53.69	-14.12	-24.08	Pass
5	0.2340	35.64	20.03	10.12	45.76	30.15	62.31	52.31	-16.55	-22.16	Pass
6	0.4100	28.55	19.74	10.05	38.60	29.79	57.65	47.65	-19.05	-17.86	Pass
7	4.9940	25.82	17.23	9.87	35.69	27.10	56.00	46.00	-20.31	-18.90	Pass
8	13.0980	27.79	20.51	10.34	38.13	30.85	60.00	50.00	-21.87	-19.15	Pass

5 Radiated Emission Measurement

5.1. Limit

Limits of Radiated Emission Measurement

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequency Range (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note:

1. The lower limit shall apply at the transition frequencies.

2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of Unwanted Emission out of the Restricted Bands

Frequency Range (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m) *NOTE
	PK	PK
5150 ~ 5350	-27	68.3
5470 ~ 5725	-27	68.3

Note:

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$E = \frac{1000000\sqrt{30P}}{3}$ μV/m, where P is the eirp (Watts).

5.2. Test Instruments

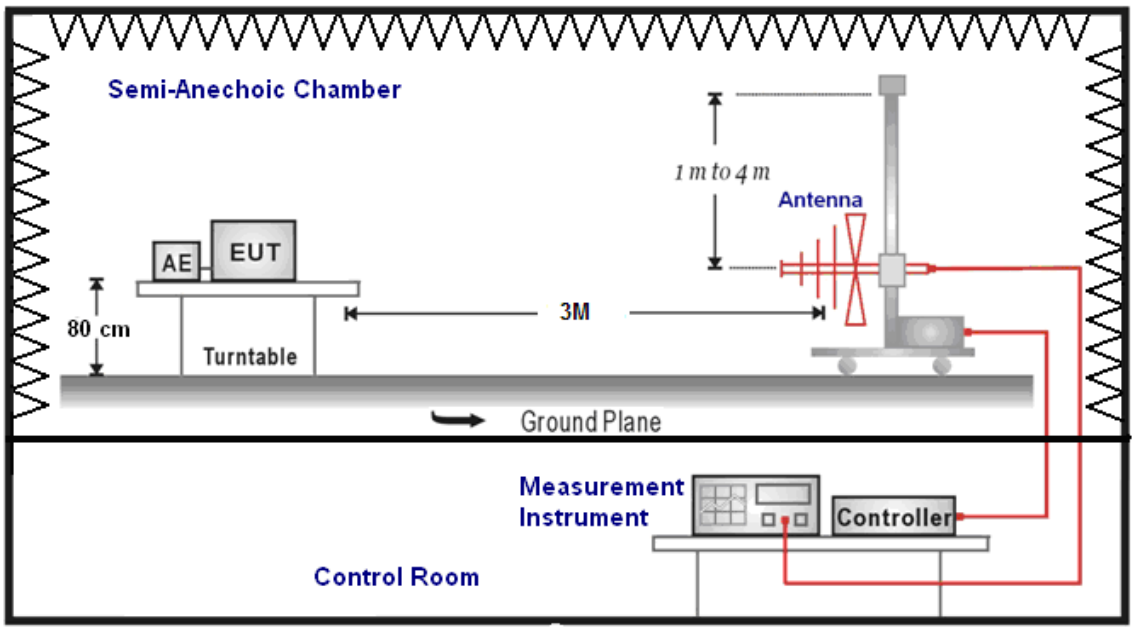
3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	06/16/2011	(1)
Amplifier	Mini-Circuits	ZKL-1R5+	N/A	05/30/2011	(1)
Amplifier	Mini-Circuits	ZVA-213-S+	N/A	05/30/2011	(1)
RF Pre-selector	Agilent	N9039A	MY46520255	05/16/2011	(1)
Broadband Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9170	9170-320	06/28/2011	(1)
Double-Ridged Waveguide Horn	ETS-Lindgren	3117	00128055	08/24/2010	(1)
Trilog-Broadband Antenna	Schwarzbeck Mess-Elektronik	SB AC VULB	9168-419	05/10/2011	(1)
Test Site	ATL	TE09	TE09	05/13/2011	(1)

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

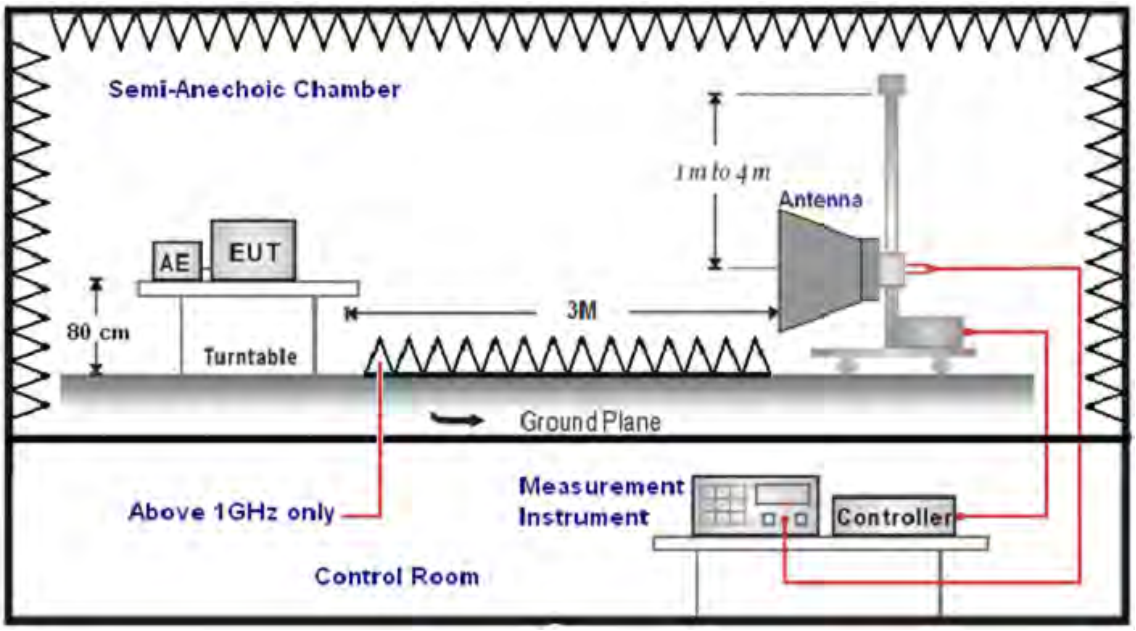
NOTE: N.C.R. = No Calibration Request.

5.3. Setup

Below 1GHz



Above 1GHz



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 40 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna (mode SB AC VULB) at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antnna (model 3117) Schwarzbeck Mess-Elektronik Broadband Horn Antenna (BBHA 9170) was used in frequencies 1 – 40 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

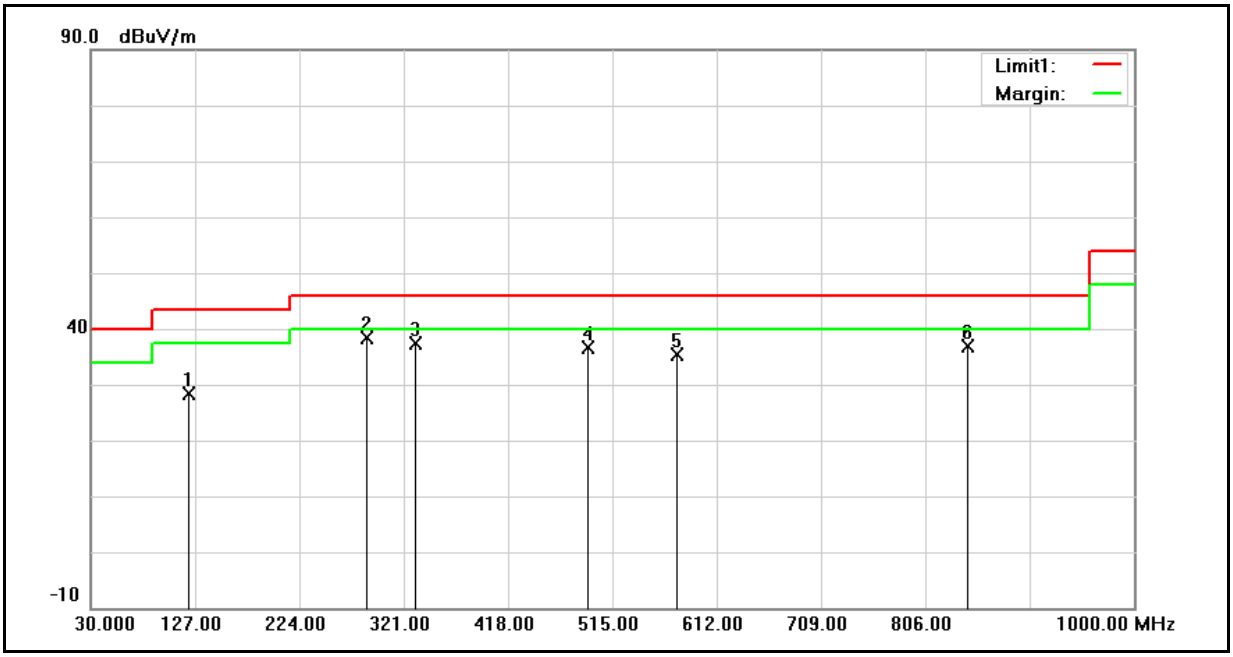
(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)
FI= Reading of the field intensity.
AF= Antenna factor.
CL= Cable loss.
P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)
The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:
(a) For fundamental frequency : Transmitter Output < +30dBm
(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

5.5. Test Result

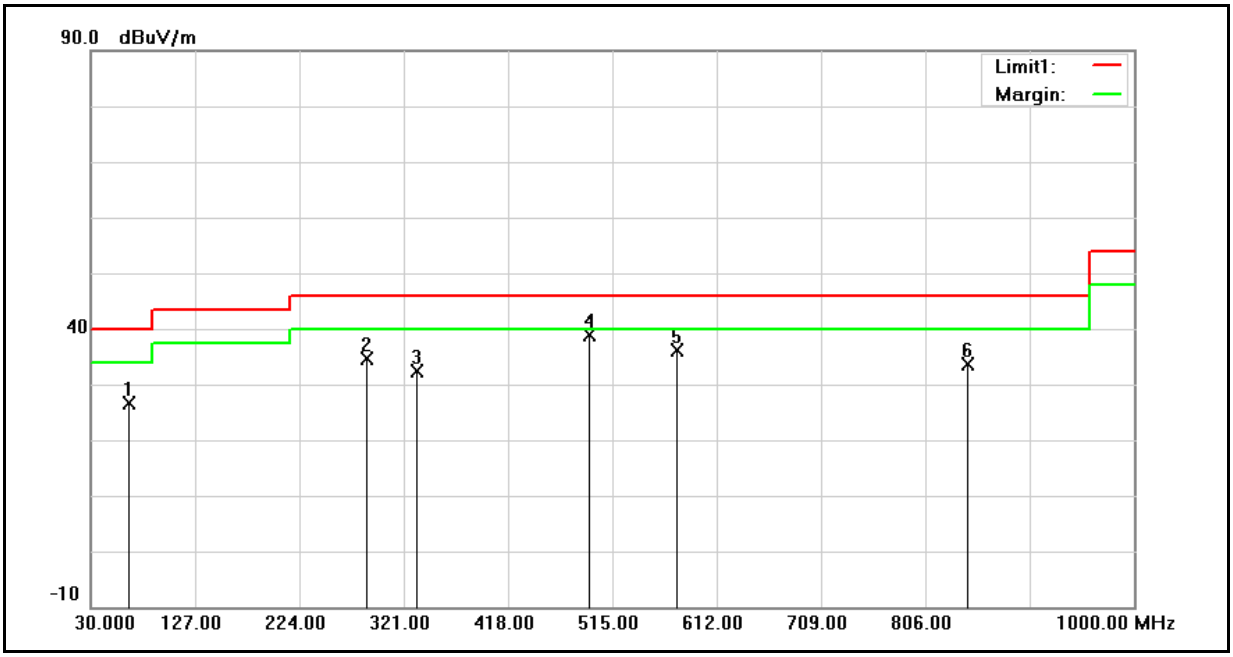
Below 1GHz

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	08/21/2011
Ant.Polar.:	Horizontal	Test By:	Gary Wu



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	121.5000	50.41	-21.98	28.43	43.50	-15.07	QP
2	288.0000	57.28	-18.95	38.33	46.00	-7.67	QP
3	332.0000	55.04	-17.68	37.36	46.00	-8.64	QP
4	492.0000	49.96	-13.31	36.65	46.00	-9.35	QP
5	576.0000	46.80	-11.41	35.39	46.00	-10.61	QP
6	845.0000	9.76	27.00	36.76	46.00	-9.24	QP

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	08/21/2011
Ant.Polar.:	Vertical	Test By:	Gary Wu



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	65.0000	48.83	-22.32	26.51	40.00	-13.49	QP
2	288.0000	53.55	-18.95	34.60	46.00	-11.40	QP
3	333.5000	50.08	-17.67	32.41	46.00	-13.59	QP
4	494.5000	52.05	-13.27	38.78	46.00	-7.22	QP
5	576.0000	47.47	-11.41	36.06	46.00	-9.94	QP
6	845.0000	6.53	27.00	33.53	46.00	-12.47	QP

Above 1GHz

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5180MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1289.000	73.26	-21.89	51.37	74.00	-22.63	peak	H
2105.000	69.71	-18.17	51.54	74.00	-22.46	peak	H
5998.000	63.91	-8.28	55.63	74.00	-18.37	peak	H
5998.000	58.01	-8.28	49.73	54.00	-4.27	AVG	H
1714.000	68.27	-19.87	48.40	74.00	-25.60	peak	V
2139.000	68.94	-18.12	50.82	74.00	-23.18	peak	V
5998.000	64.31	-8.28	56.03	74.00	-17.97	peak	V
5998.000	58.95	-8.28	50.67	54.00	-3.33	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5220MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.21	-22.23	48.98	74.00	-25.02	peak	H
3193.000	65.55	-15.75	49.80	74.00	-24.20	peak	H
5998.000	63.65	-8.28	55.37	74.00	-18.63	peak	H
5998.000	58.05	-8.28	49.77	54.00	-4.23	AVG	H
2275.000	67.18	-17.93	49.25	74.00	-24.75	peak	V
3193.000	67.26	-15.75	51.51	74.00	-22.49	peak	V
5998.000	65.50	-8.28	57.22	74.00	-16.78	peak	V
5998.000	58.77	-8.28	50.49	54.00	-3.51	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5240MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2377.000	67.02	-17.80	49.22	74.00	-24.78	peak	H
3193.000	65.21	-15.75	49.46	74.00	-24.54	peak	H
5998.000	64.27	-8.28	55.99	74.00	-18.01	peak	H
5998.000	58.51	-8.28	50.23	54.00	-3.77	AVG	H
2666.000	67.51	-17.11	50.40	74.00	-23.60	peak	V
3193.000	67.33	-15.75	51.58	74.00	-22.42	peak	V
5998.000	66.24	-8.28	57.96	74.00	-16.04	peak	V
5998.000	59.49	-8.28	51.21	54.00	-2.79	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5260MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.02	-22.23	49.79	74.00	-24.21	peak	H
3193.000	65.40	-15.75	49.65	74.00	-24.35	peak	H
5998.000	63.98	-8.28	55.70	74.00	-18.30	peak	H
5998.000	57.44	-8.28	49.16	54.00	-4.84	AVG	H
3193.000	66.10	-15.75	50.35	74.00	-23.65	peak	V
4264.000	64.41	-12.77	51.64	74.00	-22.36	peak	V
5998.000	64.53	-8.28	56.25	74.00	-17.75	peak	V
5998.000	58.78	-8.28	50.50	54.00	-3.50	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5280MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.42	-22.23	49.19	74.00	-24.81	peak	H
3193.000	65.29	-15.75	49.54	74.00	-24.46	peak	H
5998.000	62.92	-8.28	54.64	74.00	-19.36	peak	H
5998.000	57.65	-8.28	49.37	54.00	-4.63	AVG	H
3193.000	67.34	-15.75	51.59	74.00	-22.41	peak	V
4264.000	63.88	-12.77	51.11	74.00	-22.89	peak	V
5998.000	66.16	-8.28	57.88	74.00	-16.12	peak	V
5998.000	58.90	-8.28	50.62	54.00	-3.38	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5320MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2275.000	66.99	-17.93	49.06	74.00	-24.94	peak	H
3193.000	65.27	-15.75	49.52	74.00	-24.48	peak	H
5998.000	63.70	-8.28	55.42	74.00	-18.58	peak	H
5998.000	57.95	-8.28	49.67	54.00	-4.33	AVG	H
2666.000	67.79	-17.11	50.68	74.00	-23.32	peak	V
3193.000	67.03	-15.75	51.28	74.00	-22.72	peak	V
5998.000	66.58	-8.28	58.30	74.00	-15.70	peak	V
5998.000	59.59	-8.28	51.31	54.00	-2.69	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5500MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	70.43	-22.23	48.20	74.00	-25.80	peak	H
3295.000	67.44	-15.57	51.87	74.00	-22.13	peak	H
5998.000	62.67	-8.28	54.39	74.00	-19.61	peak	H
5998.000	57.72	-8.28	49.44	54.00	-4.56	AVG	H
2666.000	67.80	-17.11	50.69	74.00	-23.31	peak	V
4264.000	63.61	-12.77	50.84	74.00	-23.16	peak	V
5998.000	65.00	-8.28	56.72	74.00	-17.28	peak	V
5998.000	58.95	-8.28	50.67	54.00	-3.33	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5600MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.78	-22.23	49.55	74.00	-24.45	peak	H
3193.000	66.26	-15.75	50.51	74.00	-23.49	peak	H
5998.000	64.29	-8.28	56.01	74.00	-17.99	peak	H
5998.000	58.05	-8.28	49.77	54.00	-4.23	AVG	H
2666.000	67.28	-17.11	50.17	74.00	-23.83	peak	V
4264.000	64.66	-12.77	51.89	74.00	-22.11	peak	V
5998.000	65.26	-8.28	56.98	74.00	-17.02	peak	V
5998.000	59.40	-8.28	51.12	54.00	-2.88	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5700MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	73.12	-22.23	50.89	74.00	-23.11	peak	H
3193.000	65.79	-15.75	50.04	74.00	-23.96	peak	H
5998.000	63.47	-8.28	55.19	74.00	-18.81	peak	H
5998.000	58.22	-8.28	49.94	54.00	-4.06	AVG	H
2666.000	68.17	-17.11	51.06	74.00	-22.94	peak	V
3193.000	67.46	-15.75	51.71	74.00	-22.29	peak	V
5998.000	65.78	-8.28	57.50	74.00	-16.50	peak	V
5998.000	59.34	-8.28	51.06	54.00	-2.94	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5180MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1289.000	72.43	-21.89	50.54	74.00	-23.46	peak	H
1714.000	68.43	-19.87	48.56	74.00	-25.44	peak	H
5998.000	63.99	-8.28	55.71	74.00	-18.29	peak	H
5998.000	58.12	-8.28	49.84	54.00	-4.16	AVG	H
2649.000	68.84	-17.16	51.68	74.00	-22.32	peak	V
3193.000	67.72	-15.75	51.97	74.00	-22.03	peak	V
5998.000	66.33	-8.28	58.05	74.00	-15.95	peak	V
5998.000	58.94	-8.28	50.66	54.00	-3.34	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5220MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.96	-22.23	50.73	74.00	-23.27	peak	H
3193.000	65.25	-15.75	49.50	74.00	-24.50	peak	H
5998.000	62.61	-8.28	54.33	74.00	-19.67	peak	H
5998.000	57.55	-8.28	49.27	54.00	-4.73	AVG	H
2666.000	68.49	-17.11	51.38	74.00	-22.62	peak	V
3193.000	66.84	-15.75	51.09	74.00	-22.91	peak	V
5998.000	66.42	-8.28	58.14	74.00	-15.86	peak	V
5998.000	59.42	-8.28	51.14	54.00	-2.86	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5240MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.26	-22.23	49.03	74.00	-24.97	peak	H
3193.000	65.11	-15.75	49.36	74.00	-24.64	peak	H
5998.000	63.94	-8.28	55.66	74.00	-18.34	peak	H
5998.000	58.16	-8.28	49.88	54.00	-4.12	AVG	H
3193.000	67.63	-15.75	51.88	74.00	-22.12	peak	V
4264.000	64.75	-12.77	51.98	74.00	-22.02	peak	V
5998.000	66.87	-8.28	58.59	74.00	-15.41	peak	V
5998.000	59.32	-8.28	51.04	54.00	-2.96	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5260MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	70.91	-22.23	48.68	74.00	-25.32	peak	H
3193.000	64.44	-15.75	48.69	74.00	-25.31	peak	H
5998.000	62.72	-8.28	54.44	74.00	-19.56	peak	H
5998.000	57.41	-8.28	49.13	54.00	-4.87	AVG	H
2666.000	49.83	0.00	49.83	74.00	-24.17	peak	V
3193.000	66.08	-15.75	50.33	74.00	-23.67	peak	V
5998.000	66.11	-8.28	57.83	74.00	-16.17	peak	V
5998.000	59.29	-8.28	51.01	54.00	-2.99	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5280MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	70.62	-22.23	48.39	74.00	-25.61	peak	H
3193.000	64.09	-15.75	48.34	74.00	-25.66	peak	H
5998.000	63.73	-8.28	55.45	74.00	-18.55	peak	H
5998.000	57.24	-8.28	48.96	54.00	-5.04	AVG	H
2649.000	67.10	-17.16	49.94	74.00	-24.06	peak	V
4264.000	64.17	-12.77	51.40	74.00	-22.60	peak	V
5998.000	66.35	-8.28	58.07	74.00	-15.93	peak	V
5998.000	59.39	-8.28	51.11	54.00	-2.89	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5320MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.34	-22.23	50.11	74.00	-23.89	peak	H
3193.000	66.92	-15.75	51.17	74.00	-22.83	peak	H
5998.000	63.04	-8.28	54.76	74.00	-19.24	peak	H
5998.000	57.85	-8.28	49.57	54.00	-4.43	AVG	H
2666.000	67.48	-17.11	50.37	74.00	-23.63	peak	V
3193.000	66.48	-15.75	50.73	74.00	-23.27	peak	V
5998.000	67.54	-8.28	59.26	74.00	-14.74	peak	V
5998.000	59.62	-8.28	51.34	54.00	-2.66	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5500MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	74.05	-22.23	51.82	74.00	-22.18	peak	H
3193.000	65.52	-15.75	49.77	74.00	-24.23	peak	H
5998.000	63.32	-8.28	55.04	74.00	-18.96	peak	H
5998.000	58.01	-8.28	49.73	54.00	-4.27	AVG	H
2649.000	65.61	-17.16	48.45	74.00	-25.55	peak	V
4247.000	64.33	-12.83	51.50	74.00	-22.50	peak	V
5998.000	67.06	-8.28	58.78	74.00	-15.22	peak	V
5998.000	59.34	-8.28	51.06	54.00	-2.94	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5600MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2343.000	68.09	-17.85	50.24	74.00	-23.76	peak	H
3193.000	64.68	-15.75	48.93	74.00	-25.07	peak	H
5998.000	62.60	-8.28	54.32	74.00	-19.68	peak	H
5998.000	57.44	-8.28	49.16	54.00	-4.84	AVG	H
3193.000	64.66	-15.75	48.91	74.00	-25.09	peak	V
4264.000	63.11	-12.77	50.34	74.00	-23.66	peak	V
5998.000	67.00	-8.28	58.72	74.00	-15.28	peak	V
5998.000	59.04	-8.28	50.76	54.00	-3.24	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5700MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.21	-22.23	49.98	74.00	-24.02	peak	H
3193.000	64.86	-15.75	49.11	74.00	-24.89	peak	H
5998.000	63.47	-8.28	55.19	74.00	-18.81	peak	H
5998.000	57.80	-8.28	49.52	54.00	-4.48	AVG	H
2666.000	68.22	-17.11	51.11	74.00	-22.89	peak	V
3193.000	67.53	-15.75	51.78	74.00	-22.22	peak	V
5998.000	66.47	-8.28	58.19	74.00	-15.81	peak	V
5998.000	59.06	-8.28	50.78	54.00	-3.22	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5190MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.46	-22.23	49.23	74.00	-24.77	peak	H
2105.000	66.94	-18.17	48.77	74.00	-25.23	peak	H
5998.000	62.69	-8.28	54.41	74.00	-19.59	peak	H
5998.000	58.07	-8.28	49.79	54.00	-4.21	AVG	H
3193.000	66.55	-15.75	50.80	74.00	-23.20	peak	V
4264.000	63.99	-12.77	51.22	74.00	-22.78	peak	V
5998.000	66.32	-8.28	58.04	74.00	-15.96	peak	V
5998.000	58.93	-8.28	50.65	54.00	-3.35	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5210MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	73.74	-22.23	51.51	74.00	-22.49	peak	H
3193.000	65.47	-15.75	49.72	74.00	-24.28	peak	H
5998.000	63.56	-8.28	55.28	74.00	-18.72	peak	H
5998.000	57.92	-8.28	49.64	54.00	-4.36	AVG	H
3193.000	66.86	-15.75	51.11	74.00	-22.89	peak	V
4264.000	63.99	-12.77	51.22	74.00	-22.78	peak	V
5998.000	66.79	-8.28	58.51	74.00	-15.49	peak	V
5998.000	59.47	-8.28	51.19	54.00	-2.81	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5230MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.93	-22.23	50.70	74.00	-23.30	peak	H
2360.000	66.09	-17.82	48.27	74.00	-25.73	peak	H
5998.000	63.13	-8.28	54.85	74.00	-19.15	peak	H
5998.000	57.55	-8.28	49.27	54.00	-4.73	AVG	H
3193.000	66.67	-15.75	50.92	74.00	-23.08	peak	V
4264.000	63.55	-12.77	50.78	74.00	-23.22	peak	V
5998.000	66.64	-8.28	58.36	74.00	-15.64	peak	V
5998.000	59.49	-8.28	51.21	54.00	-2.79	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5270MHz	Test By:	Gary Wu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
1204.000	73.84	-22.23	51.61	74.00	-22.39	peak	H
3193.000	65.96	-15.75	50.21	74.00	-23.79	peak	H
5998.000	62.26	-8.28	53.98	74.00	-20.02	peak	H
5998.000	58.45	-8.28	50.17	54.00	-3.83	AVG	H
3193.000	67.59	-15.75	51.84	74.00	-22.16	peak	V
4247.000	64.63	-12.83	51.80	74.00	-22.20	peak	V
5998.000	66.40	-8.28	58.12	74.00	-15.88	peak	V
5998.000	58.37	-8.28	50.09	54.00	-3.91	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5290MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	73.06	-22.23	50.83	74.00	-23.17	peak	H
3193.000	65.38	-15.75	49.63	74.00	-24.37	peak	H
5998.000	64.16	-8.28	55.88	74.00	-18.12	peak	H
5998.000	58.02	-8.28	49.74	54.00	-4.26	AVG	H
2666.000	67.28	-17.11	50.17	74.00	-23.83	peak	V
4247.000	64.65	-12.83	51.82	74.00	-22.18	peak	V
5998.000	66.97	-8.28	58.69	74.00	-15.31	peak	V
5998.000	59.92	-8.28	51.64	54.00	-2.36	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5310MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	71.94	-22.23	49.71	74.00	-24.29	peak	H
3193.000	64.77	-15.75	49.02	74.00	-24.98	peak	H
5998.000	63.95	-8.28	55.67	74.00	-18.33	peak	H
5998.000	58.25	-8.28	49.97	54.00	-4.03	AVG	H
3193.000	67.09	-15.75	51.34	74.00	-22.66	peak	V
4264.000	64.25	-12.77	51.48	74.00	-22.52	peak	V
5998.000	66.60	-8.28	58.32	74.00	-15.68	peak	V
5998.000	59.32	-8.28	51.04	54.00	-2.96	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5510MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	69.59	-22.23	47.36	74.00	-26.64	peak	H
3193.000	64.58	-15.75	48.83	74.00	-25.17	peak	H
5998.000	63.69	-8.28	55.41	74.00	-18.59	peak	H
5998.000	58.70	-8.28	50.42	54.00	-3.58	AVG	H
2666.000	67.93	-17.11	50.82	74.00	-23.18	peak	V
4264.000	64.06	-12.77	51.29	74.00	-22.71	peak	V
5998.000	66.71	-8.28	58.43	74.00	-15.57	peak	V
5998.000	59.26	-8.28	50.98	54.00	-3.02	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5690MHz	Test By:	Gary Wu

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	73.51	-22.23	51.28	74.00	-22.72	peak	H
3193.000	65.18	-15.75	49.43	74.00	-24.57	peak	H
5998.000	62.14	-8.28	53.86	74.00	-20.14	peak	H
5998.000	57.71	-8.28	49.43	54.00	-4.57	AVG	H
3193.000	66.50	-15.75	50.75	74.00	-23.25	peak	V
4264.000	63.64	-12.77	50.87	74.00	-23.13	peak	V
5998.000	65.99	-8.28	57.71	74.00	-16.29	peak	V
5998.000	59.04	-8.28	50.76	54.00	-3.24	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5760MHz	Test By:	Gary Wu

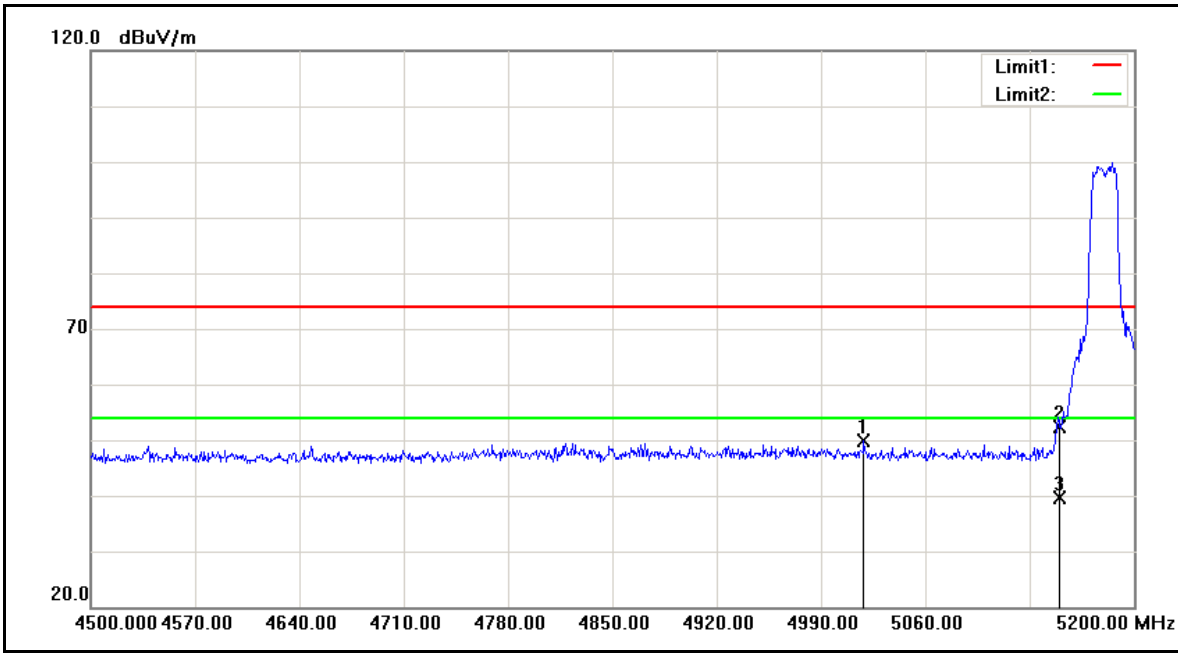
Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.11	-22.23	49.88	74.00	-24.12	peak	H
3193.000	65.72	-15.75	49.97	74.00	-24.03	peak	H
5998.000	63.28	-8.28	55.00	74.00	-19.00	peak	H
5998.000	57.74	-8.28	49.46	54.00	-4.54	AVG	H
3193.000	67.63	-15.75	51.88	74.00	-22.12	peak	V
4264.000	64.12	-12.77	51.35	74.00	-22.65	peak	V
5998.000	66.96	-8.28	58.68	74.00	-15.32	peak	V
5998.000	59.61	-8.28	51.33	54.00	-2.67	AVG	V

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	08/21/2011
Modulation:	IEEE 802.11a	Test By:	Gary Wu
Frequency:	5220 MHz		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Peak Limit (dBuV/m)	AVG. Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
1204.000	72.41	-22.23	50.18	74.00	54.00	-23.82	peak	H
3193.000	65.44	-15.75	49.69	74.00	54.00	-24.31	peak	H
5998.000	62.72	-8.28	54.44	74.00	54.00	-19.56	peak	H
5998.000	58.31	-8.28	50.03	54.00	34.00	-3.97	AVG	H
3193.000	66.13	-15.75	50.38	74.00	54.00	-23.62	peak	V
4264.000	64.25	-12.77	51.48	74.00	54.00	-22.52	peak	V
5998.000	65.87	-8.28	57.59	74.00	54.00	-16.41	peak	V
5998.000	59.27	-8.28	50.99	54.00	34.00	-3.01	AVG	V

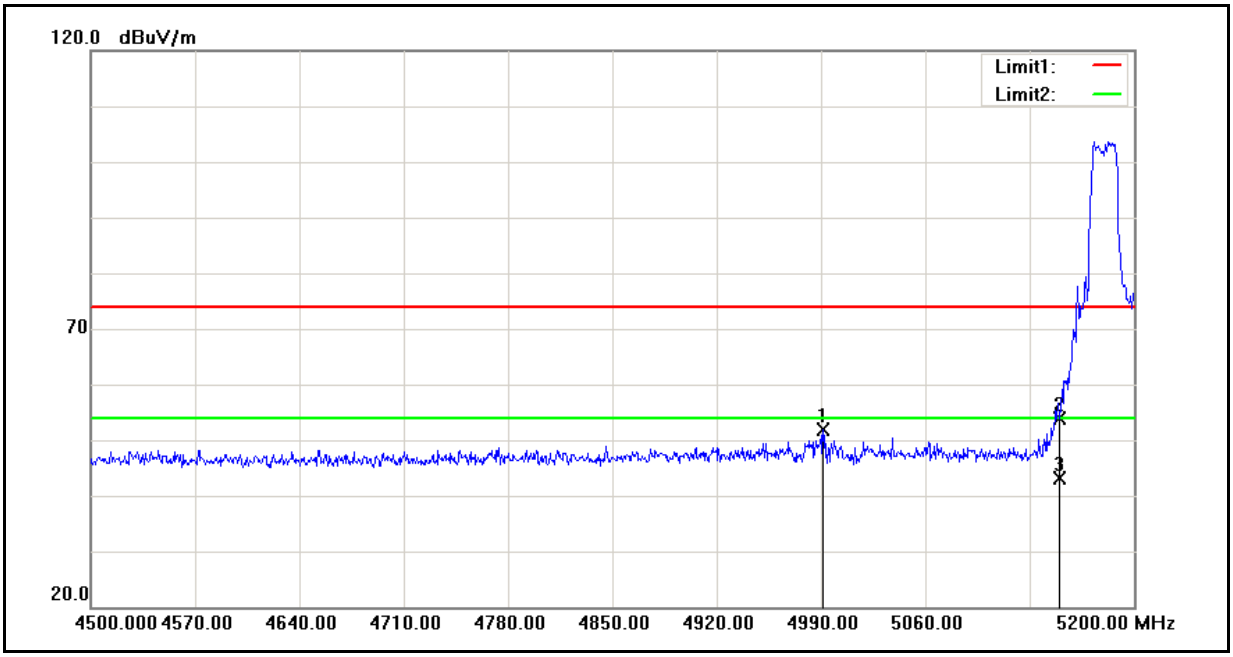
Band Edge

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5180 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



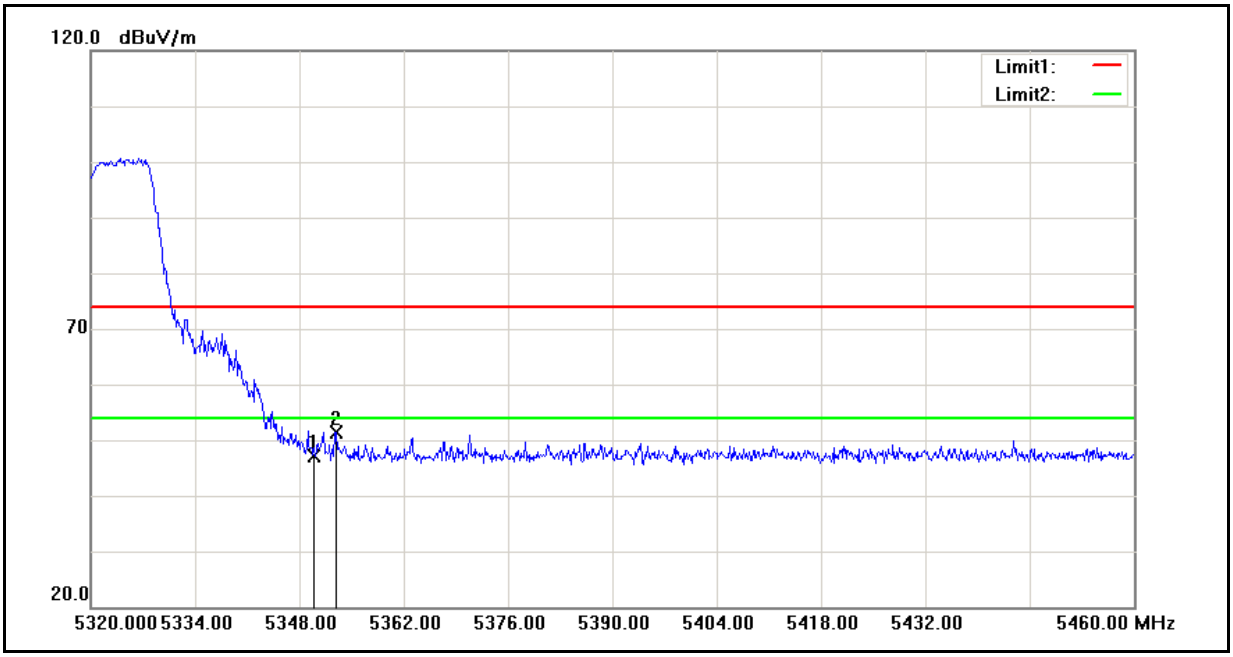
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5018.700	60.68	-10.88	49.80	74.00	-24.20	peak
2	5150.000	62.83	-10.57	52.26	74.00	-21.74	peak
3	5150.000	50.22	-10.57	39.65	54.00	-14.35	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5180 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



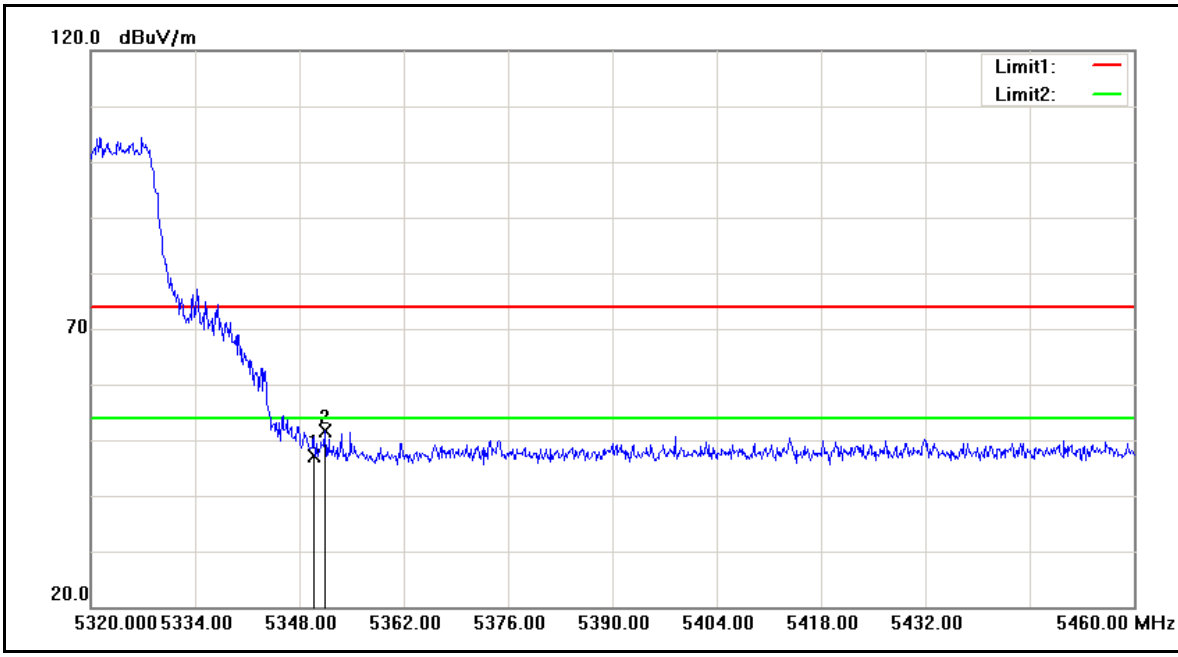
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4991.400	62.75	-10.94	51.81	74.00	-22.19	peak
2	5150.000	64.40	-10.57	53.83	74.00	-20.17	peak
3	5150.000	53.68	-10.57	43.11	54.00	-10.89	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5320 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



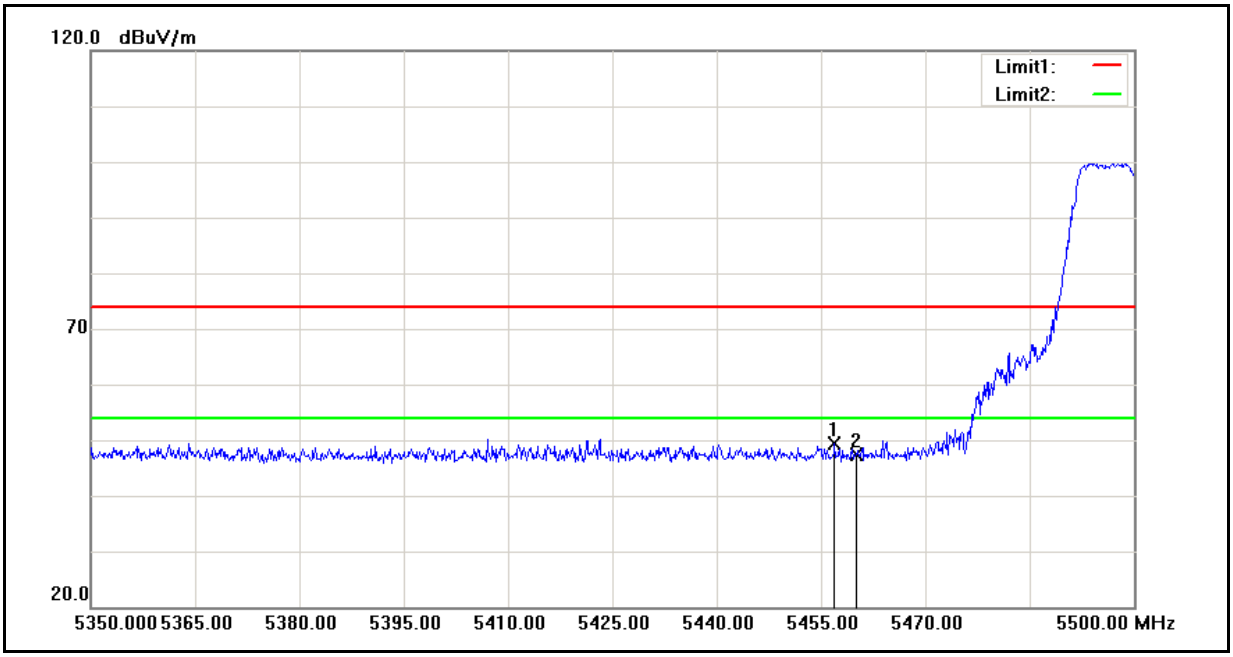
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	57.30	-10.10	47.20	74.00	-26.80	peak
2	5352.900	61.57	-10.10	51.47	74.00	-22.53	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5320 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



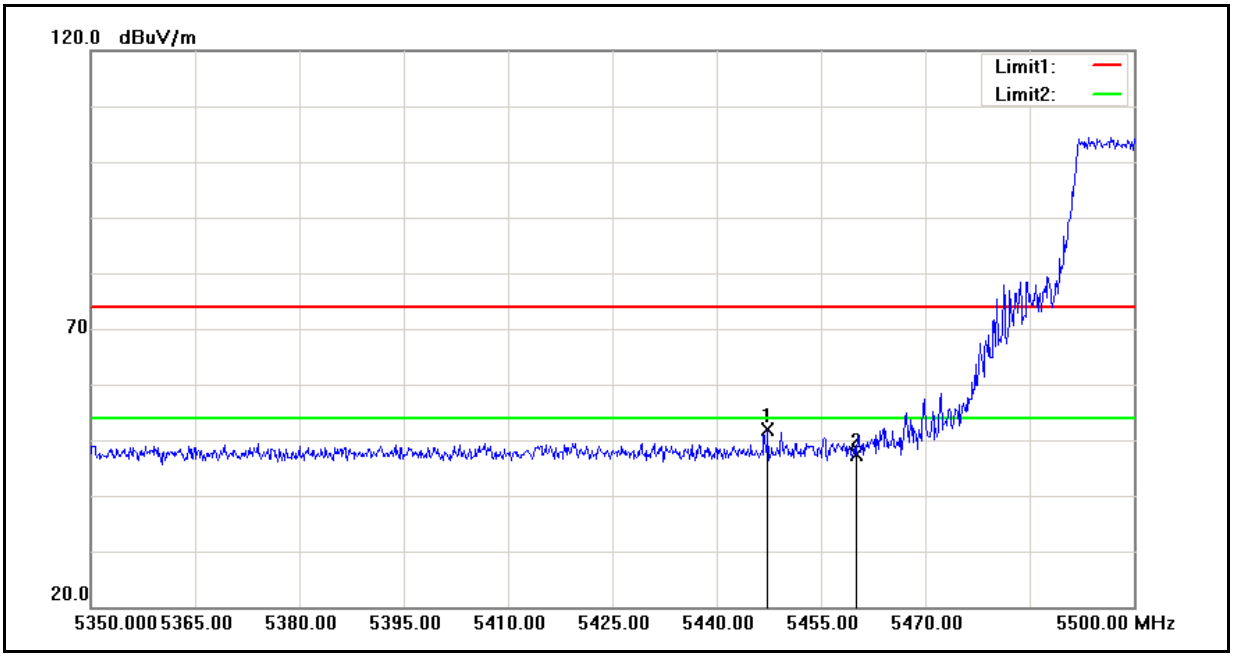
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	57.16	-10.10	47.06	74.00	-26.94	peak
2	5351.500	61.79	-10.10	51.69	74.00	-22.31	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5500 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



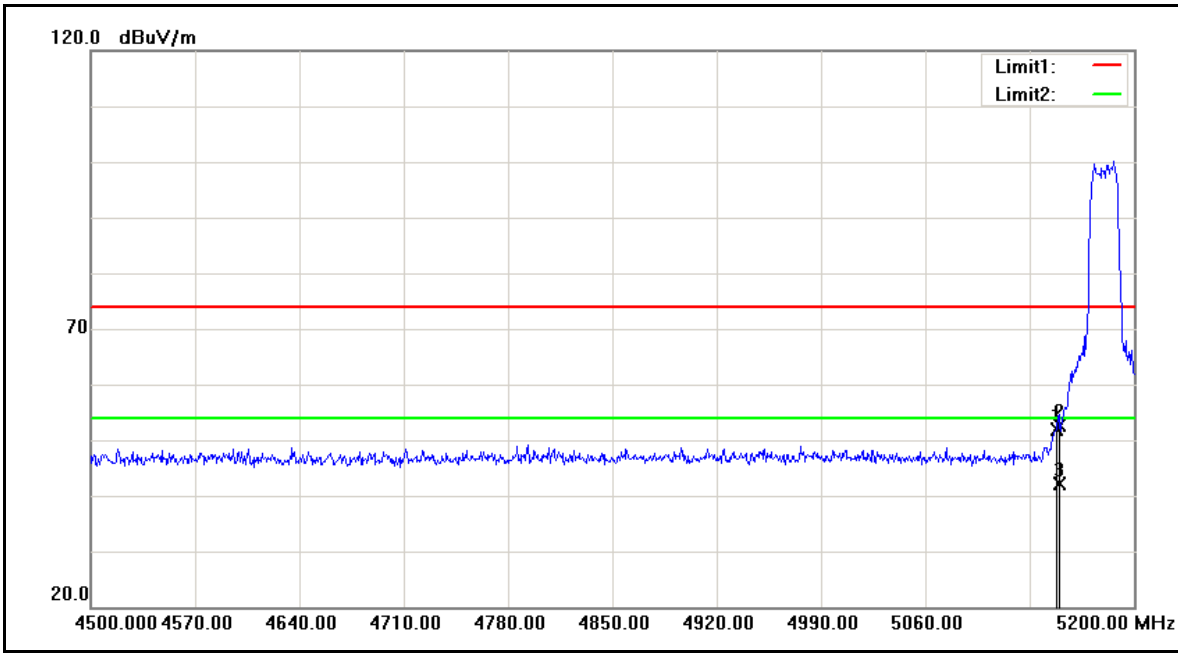
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.950	59.23	-9.85	49.38	74.00	-24.62	peak
2	5460.000	57.28	-9.84	47.44	74.00	-26.56	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	08/21/2011
Frequency:	5500 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



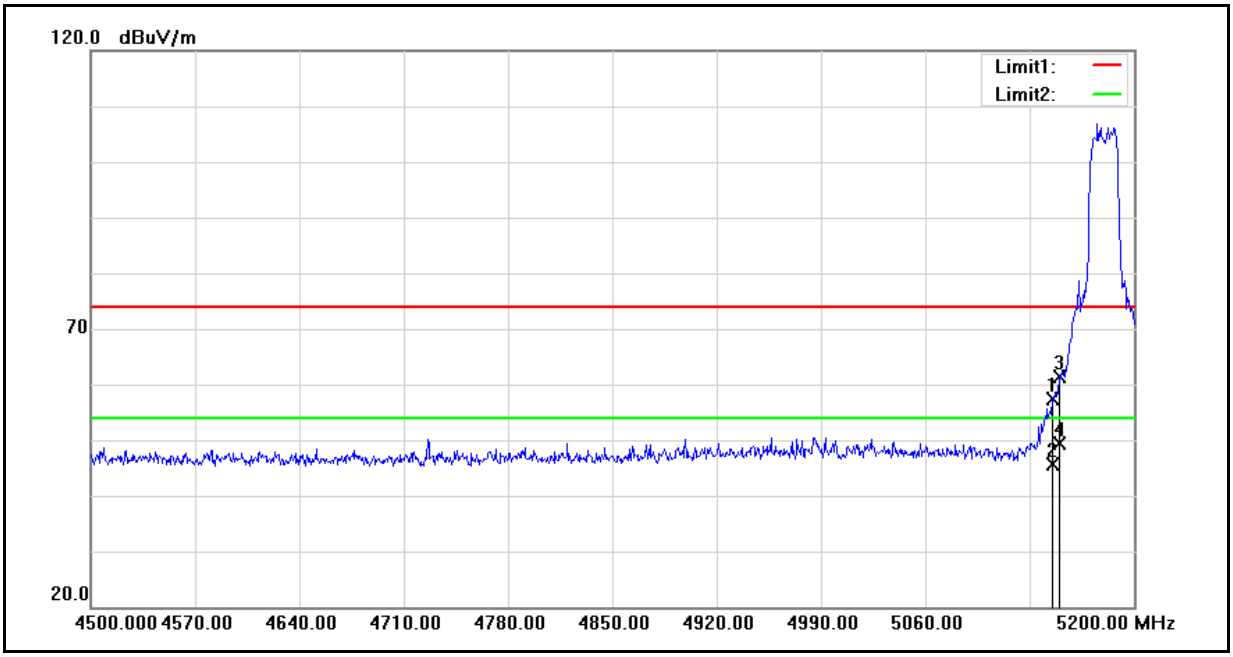
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5447.350	61.81	-9.87	51.94	74.00	-22.06	peak
2	5460.000	57.17	-9.84	47.33	74.00	-26.67	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5180 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



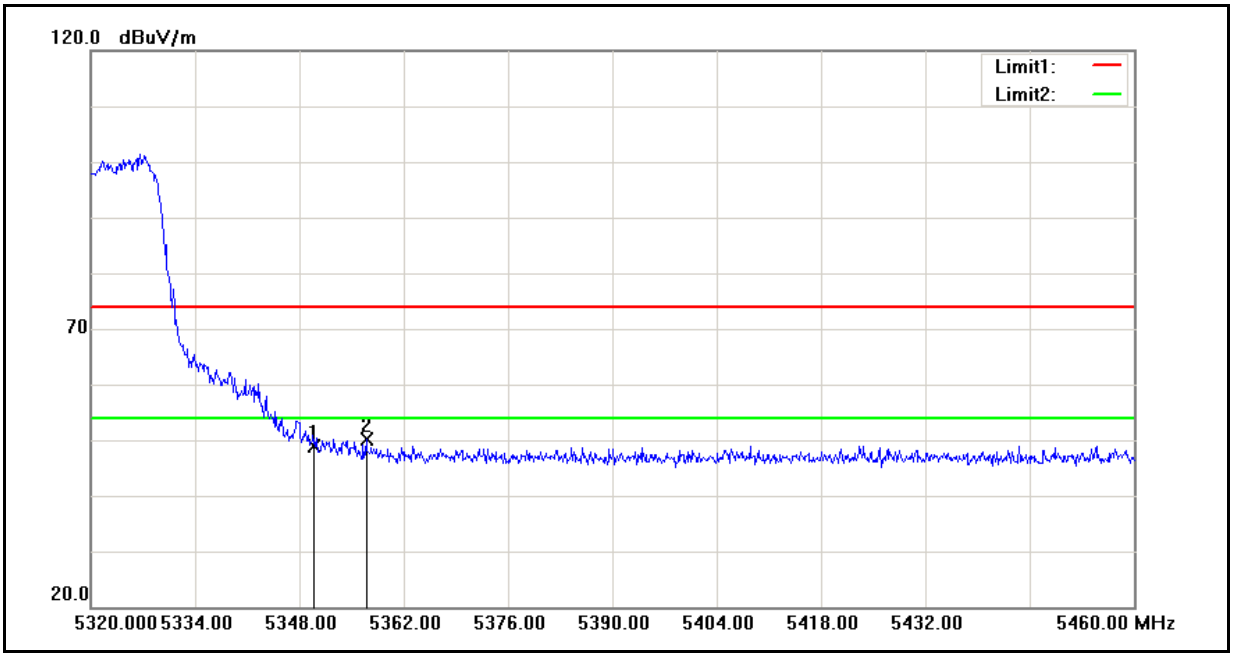
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.200	62.56	-10.57	51.99	74.00	-22.01	peak
2	5150.000	63.08	-10.57	52.51	74.00	-21.49	peak
3	5150.000	52.58	-10.57	42.01	54.00	-11.99	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5180 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



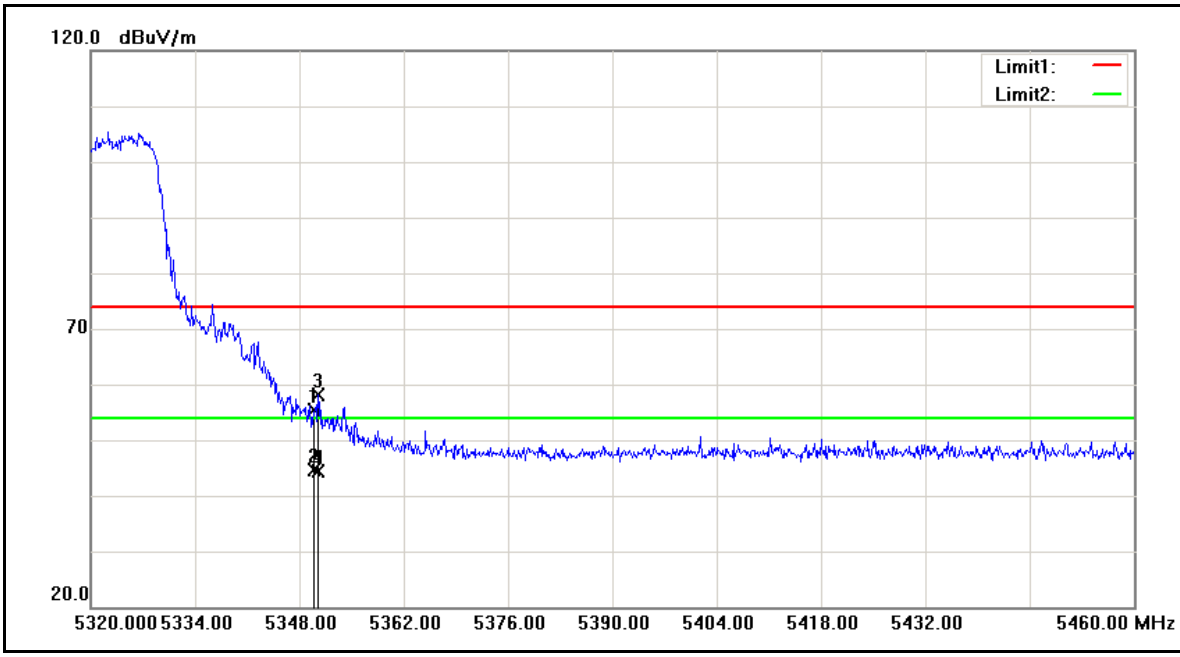
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5145.400	67.97	-10.57	57.40	74.00	-16.60	peak
2	5145.400	56.19	-10.57	45.62	54.00	-8.38	AVG
3	5150.000	71.87	-10.57	61.30	74.00	-12.70	peak
4	5150.000	59.96	-10.57	49.39	54.00	-4.61	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5320 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



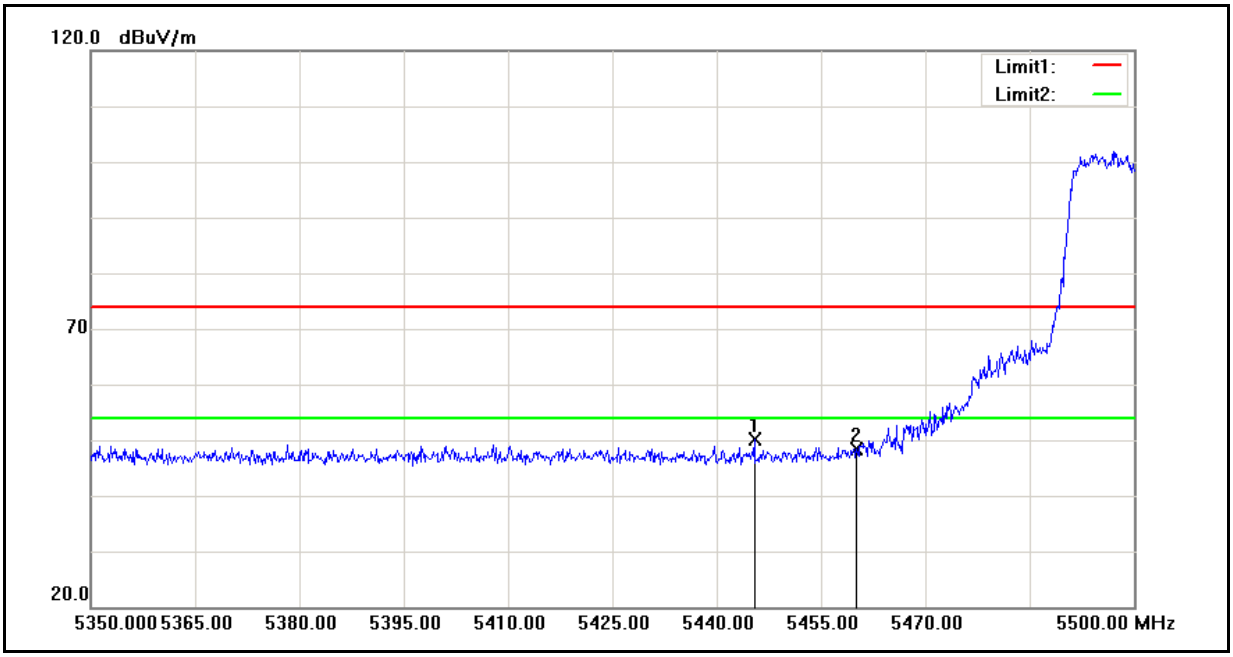
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	59.07	-10.10	48.97	74.00	-25.03	peak
2	5356.960	60.25	-10.08	50.17	74.00	-23.83	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5320 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



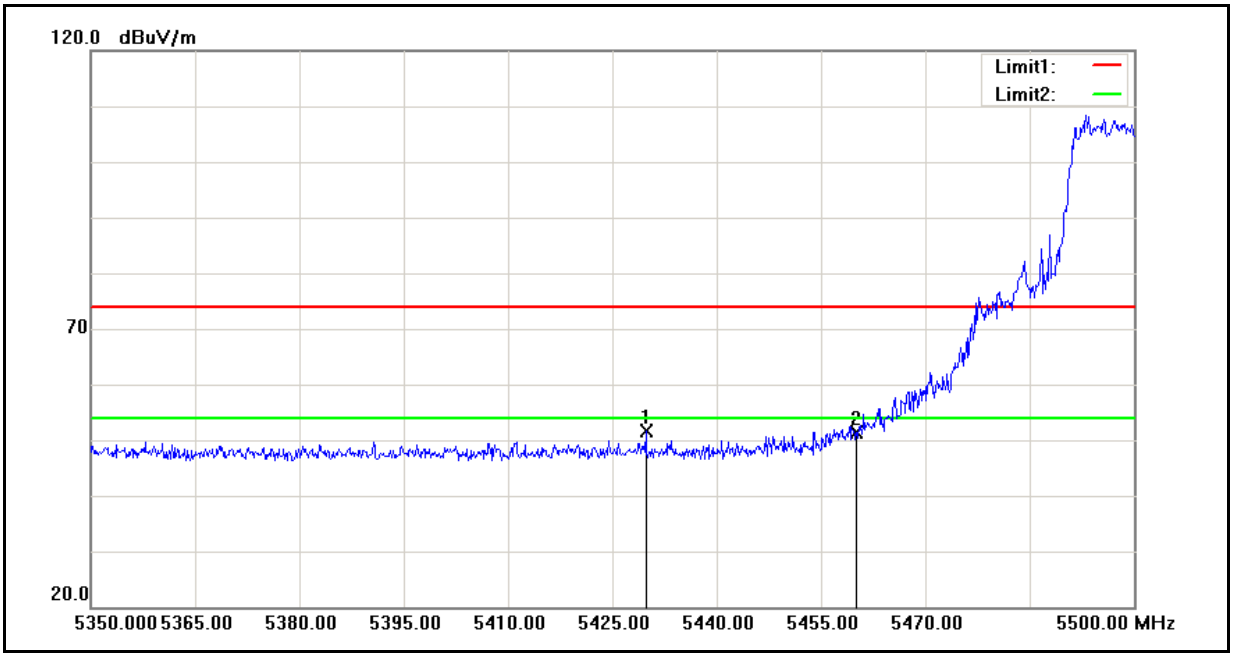
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	65.39	-10.10	55.29	74.00	-18.71	peak
2	5350.000	54.71	-10.10	44.61	54.00	-9.39	AVG
3	5350.520	68.23	-10.10	58.13	74.00	-15.87	peak
4	5350.520	54.50	-10.10	44.40	54.00	-9.60	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5500 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



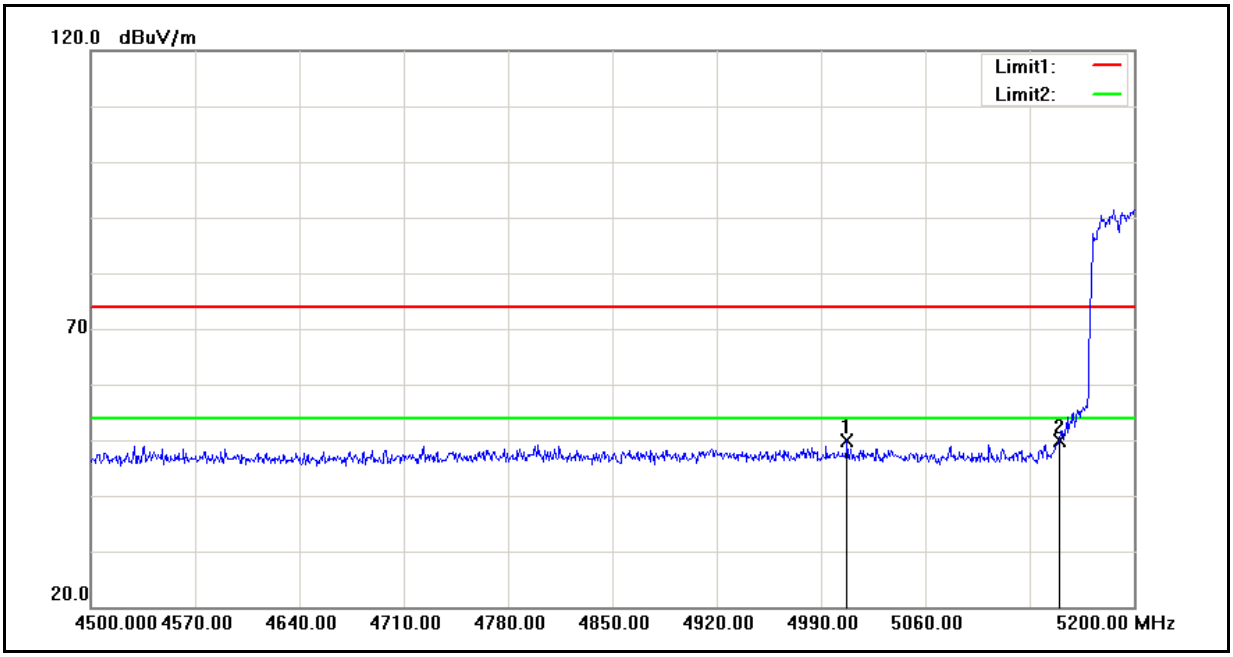
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5445.400	60.08	-9.87	50.21	74.00	-23.79	peak
2	5460.000	58.12	-9.84	48.28	74.00	-25.72	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	08/21/2011
Frequency:	5500 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



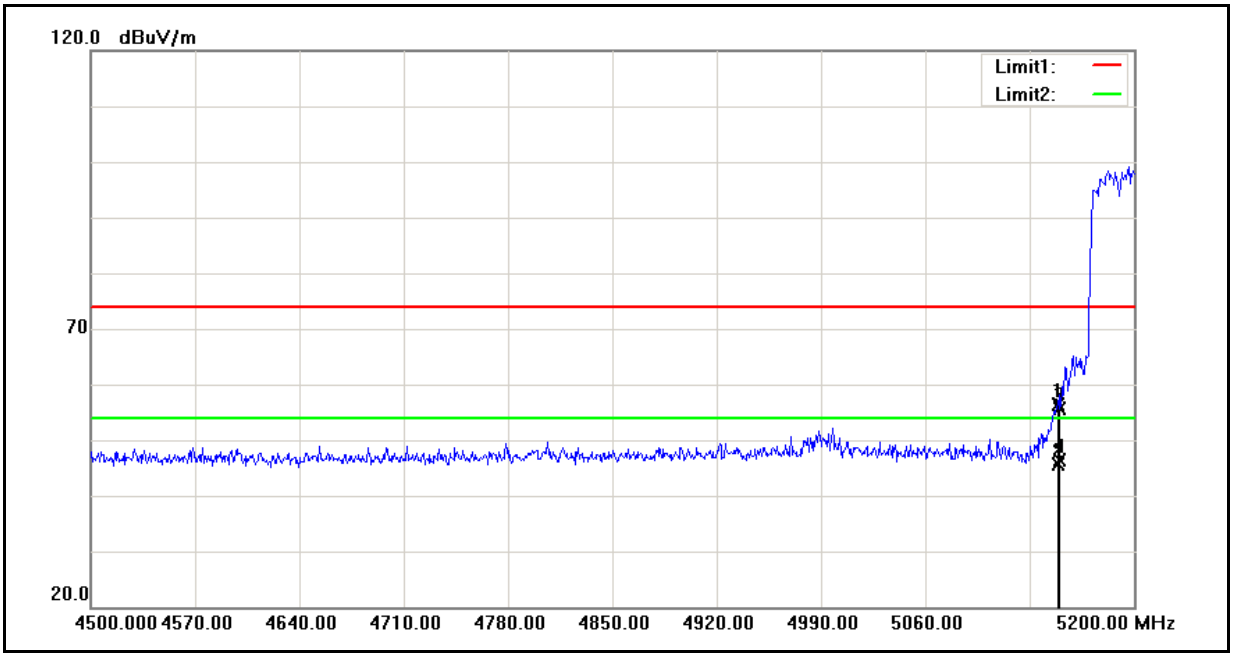
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5429.800	61.48	-9.92	51.56	74.00	-22.44	peak
2	5460.000	61.17	-9.84	51.33	74.00	-22.67	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5190 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



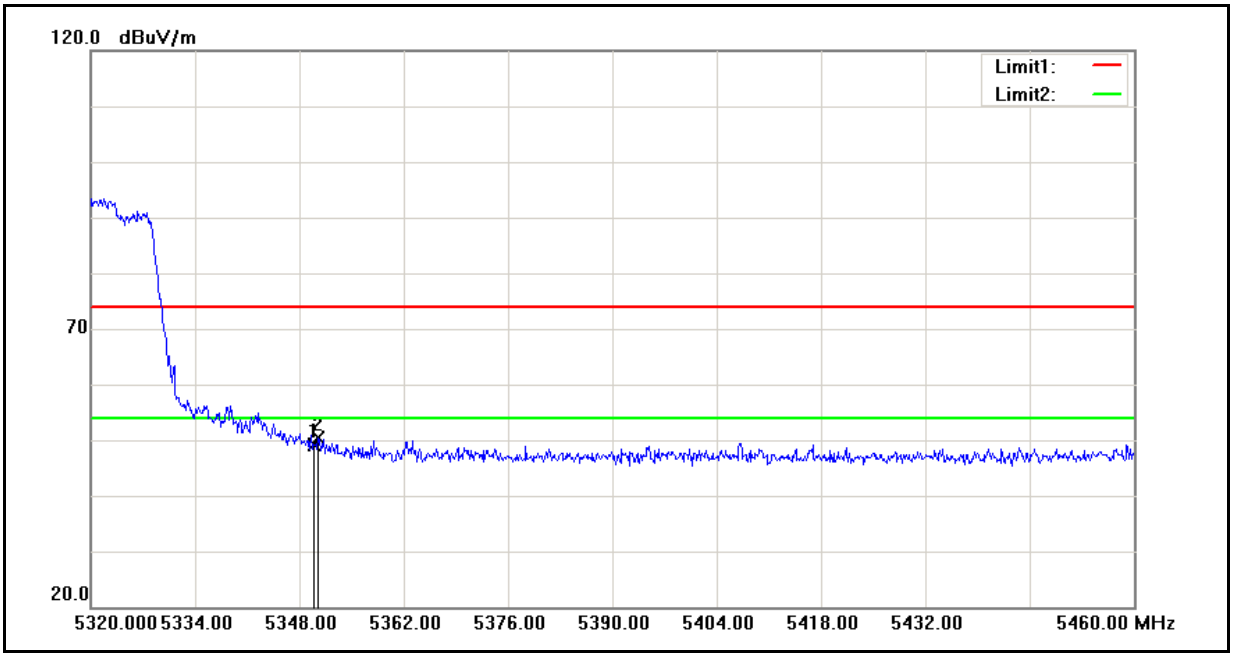
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5007.500	60.79	-10.90	49.89	74.00	-24.11	peak
2	5150.000	60.56	-10.57	49.99	74.00	-24.01	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5190 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



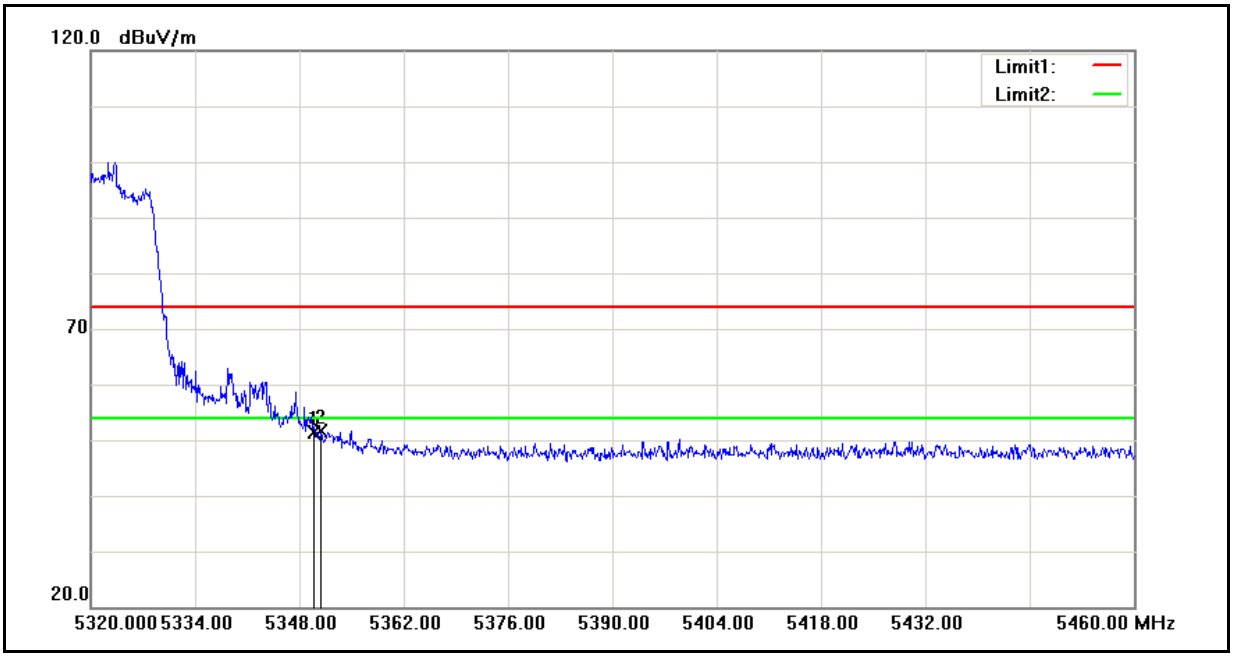
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.900	67.01	-10.57	56.44	74.00	-17.56	peak
2	5148.900	56.14	-10.57	45.57	54.00	-8.43	AVG
3	5150.000	66.30	-10.57	55.73	74.00	-18.27	peak
4	5150.000	56.96	-10.57	46.39	54.00	-7.61	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5310 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



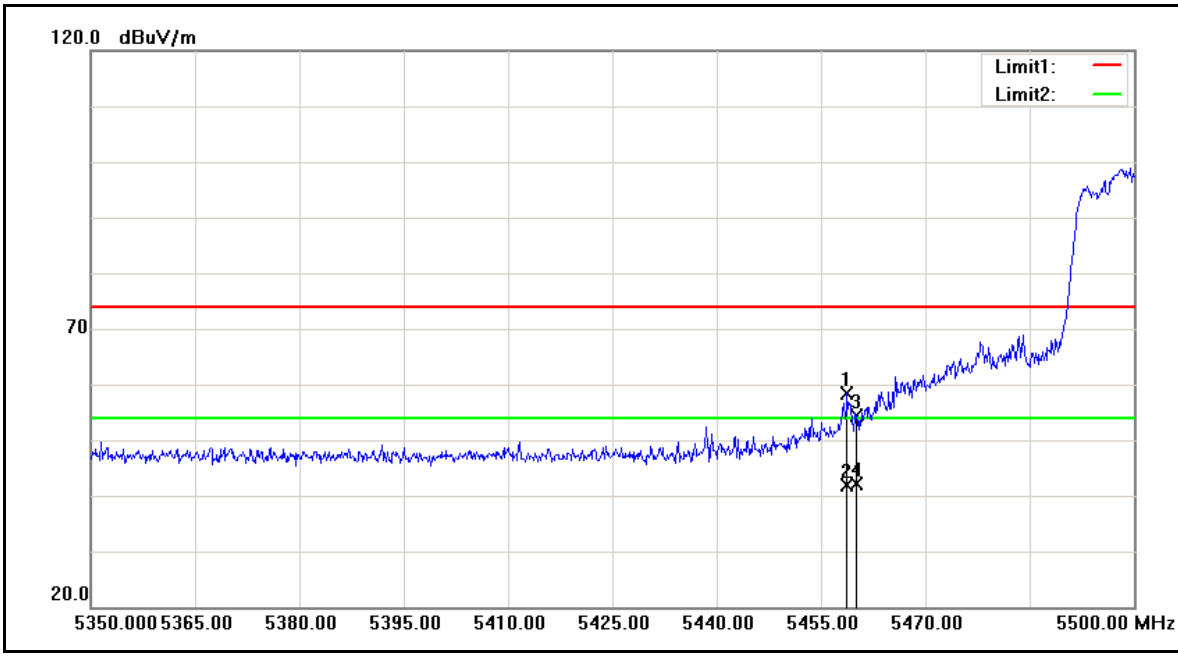
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	59.21	-10.10	49.11	74.00	-24.89	peak
2	5350.520	60.51	-10.10	50.41	74.00	-23.59	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5310 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



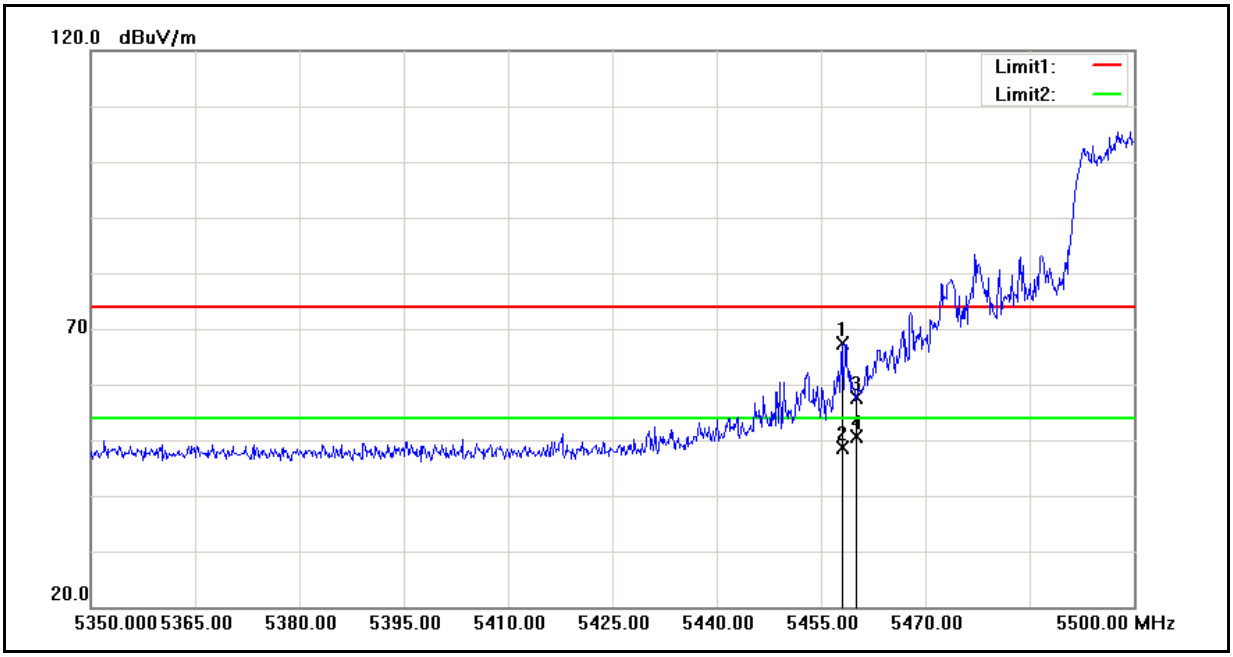
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	61.38	-10.10	51.28	74.00	-22.72	peak
2	5350.940	61.76	-10.10	51.66	74.00	-22.34	peak

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5510 MHz	Test By:	Gary Wu
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5458.750	68.19	-9.84	58.35	74.00	-15.65	peak
2	5458.750	51.61	-9.84	41.77	54.00	-12.23	AVG
3	5460.000	64.22	-9.84	54.38	74.00	-19.62	peak
4	5460.000	51.94	-9.84	42.10	54.00	-11.90	AVG

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	62230WL	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	08/21/2011
Frequency:	5510 MHz	Test By:	Gary Wu
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5458.000	77.20	-9.85	67.35	74.00	-6.65	peak
2	5458.000	58.56	-9.85	48.71	54.00	-5.29	AVG
4	5460.000	67.53	-9.84	57.69	74.00	-16.31	peak
5	5460.000	60.39	-9.84	50.55	54.00	-3.45	AVG

6 Antenna Measurement

6.1. Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

6.2. Antenna Connector Construction

The antenna used in this product is **Dipole antenna**. And the maximum Gain of this antenna is only **2 dBi**.