



**FCC 47 CFR PART 15 SUBPART C
(Class II Permissive Change)**

TEST REPORT

For

Wireless Mini PCI Adapter

Model Number: WL533MAM

Issued to

**Advance Multimedia Internet Technology Inc.
No. 32, Hwan-Gong Rd. Yung Kang City, Tainan Hsien, Taiwan**

Issued by

**Compliance Certification Services Inc.
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No. 8, Jiu Cheng Ling, Jiaokeng Village, Sinhua
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1 TEST RESULT CERTIFICATION

Applicant : Advance Multimedia Internet Technology Inc.
Address : No. 32, Hwan-Gong Rd. Yung Kang City, Tainan Hsien, Taiwan
Manufacture : Advance Multimedia Internet Technology Inc.
Address : No. 32, Hwan-Gong Rd. Yung Kang City, Tainan Hsien, Taiwan
Equipment Under Test : Wireless Mini PCI Adapter
Model Number : WL533MAM
Date of Test : April 21 ~ April 28, 2006; January 12, 2009

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 15 Subpart C	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. 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: 2003 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by:

Jeter Wu
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Eric Yang
Senior Engineer
Compliance Certification Services Inc.



2 EUT DESCRIPTION

Product	Wireless Mini PCI Adapter
Model Number	WL533MAM
Model Discrepancy	N/A
Power Supply	Powered from Host Device
Frequency Range	2412 ~ 2462 MHz
Transmit Power	IEEE802.11b mode: 18.6dBm IEEE802.11g mode: 17.08dBm
Modulation Technique	IEEE802.11b: DSSS IEEE802.11g: OFDM
Transmit Data Rate	IEEE802.11b: 11Mbps(CCK) with fall back rates of 5.5, 2, and 1Mbps IEEE802.11g: 54Mbps with fall back rates of 48/36/24/18/12/9/6 Mbps (OFDM)
Number of Channels	11 Channels
Antenna Specification	Gain: 3.4dBi
Antenna Designation	One antenna PIFA Antenna Manufacture: WHA YU INDUSTRIAL CO., LTD. Model: C381-510137-A(SSR-83208) Connector: Sticky
Class II Permissive Change	The major change filed under this application is to add one type antenna.

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: PBLWL533M filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.
3. For more details, please refer to the User's manual of the EUT.
4. This report is modified from 60410407-RP1.



3 TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.207, 15.209 and 15.247.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4.

3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.



3.5 DESCRIPTION OF TEST MODES

The EUT (Model: WL533MAM) have been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

After verified, the worst data of radiated spurious emission recorded in the test report is from Note Book (Brand Name: HP; Model Name: Compaq nc6000).

After verification, all tests carried out are with the worst-case test modes as shown below except radiated spurious emission below 1GHz's worst case is in normal link mode.

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 11Mbps higher data rate were chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 54Mbps higher data rate were chosen for the final testing.



4 INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

MEASUREMENT EQUIPMENT USED

Open Area Test Site # 6				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
TYPE N COAXIAL CABLE	SUHNER	CHA9513	005	AUG. 26, 2009
EMI Receiver	R&S	ESVS10	833206/012	APR. 15, 2009
Spectrum Analyzer	R&S	FSEM	829054/017	APR. 14, 2009
BI-LOG Antenna	Sunol	JB1	A070506-2	SEP. 8, 2009
Horn Antenna	Com-Power	AH-118	071032	DEC. 20, 2009
SMA RF CABLE	SUHNER	SUCOFLEX104PEA	20520/4PEA	NOV. 07, 2009
Pre-Amplifier	MITEQ	AFS44-00108650-42-10P-44	1052908	OCT. 24, 2009
Signal Generator	HP	8673C	2938A00663	JUL. 30, 2009
Pre-Amplifier	HP	8447F	2944A03817	NOV. 1, 2009
Turn Table	Yo Chen	001	-----	N.C.R.
Antenna Tower	AR	TP1000A	309874	N.C.R.
Controller	CT	SC101	-----	N.C.R.
Test S/W	e-3 (5.04303e)			

Remark: Each piece of equipment is scheduled for calibration once a year.



5 FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No. 8, Jiu Cheng Ling, Jiaokeng Village, Sinhua Township, Tainan Hsien 712, Taiwan R.O.C.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 TABLE OF ACCREDITATIONS AND LISTINGS

The test facilities used to perform Electromagnetic compatibility tests are registered or accredited by the organizations listed in the following table which includes the recognized scope specifically.

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	 228014
Japan	VCCI	3/10 meter Open Area Test Sites and conducted test sites to perform radiated/conducted measurements	 R-1989 C-2142
Taiwan	CNLA	CISPR 11 FCC METHOD-47 CFR Part 18 EN 55011 CNS 13803, CISPR 14 EN 55014 CNS 13783-1, CISPR 22 EN 55022 VCCI FCC Method-47 CFR Part 15 Subpart B CNS 13438	 Testing Laboratory 1109
Taiwan	BSMI	CNS 13438, CNS 13783-1, CNS 13803	 SL2-IS-E-0039 SL2-IN-E-0039 SL2-A1-E-0039
Canada	Industry Canada	RSS210, Issue 7	

* No part of this report may be used to claim or imply product endorsement by TAF or any agency of the US Government.



6 SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	FCC ID	Signal cable
1	Note Book	HP	Compaq nc6000	DoC	N/A
2	Mini Extension Card	GIGABYTE	CK8B003500034	DoC	N/A

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

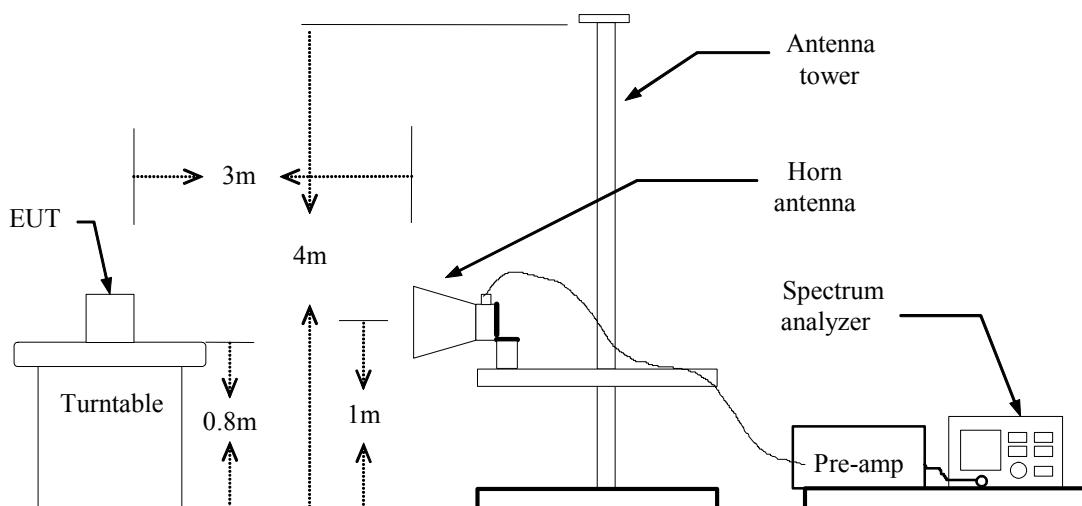
7 FCC PART 15.247 REQUIREMENTS

7.1 BAND EDGES MEASUREMENT

LIMIT

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a). The spectrum plots include reference levels of 54 and 74 dB μ V. It would appear that the intention of these reference levels is to demonstrate compliance with the restricted band radiated emission limits of 54 and 74 dB μ V/m, i.e. field strength values and not absolute voltage levels.

Test Configuration

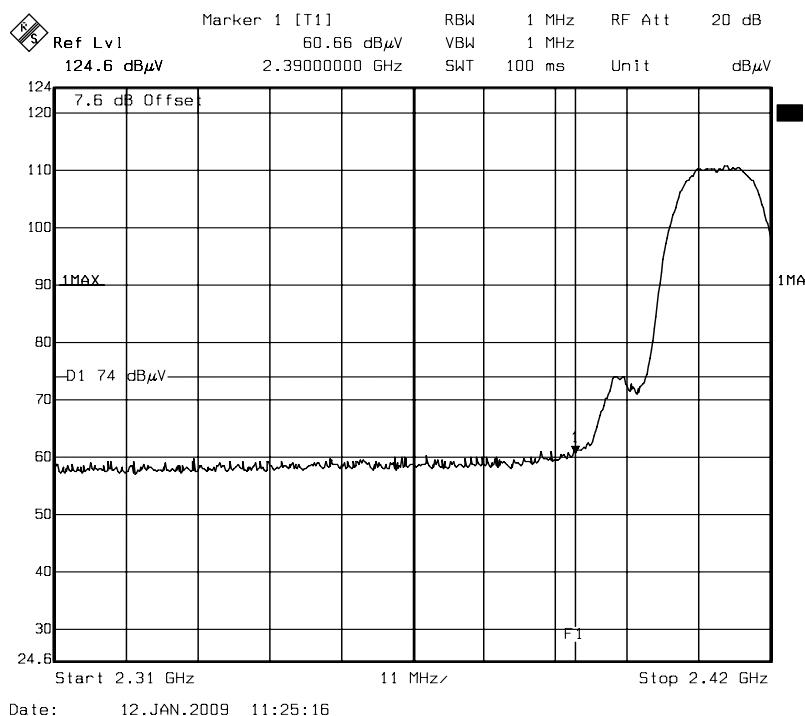
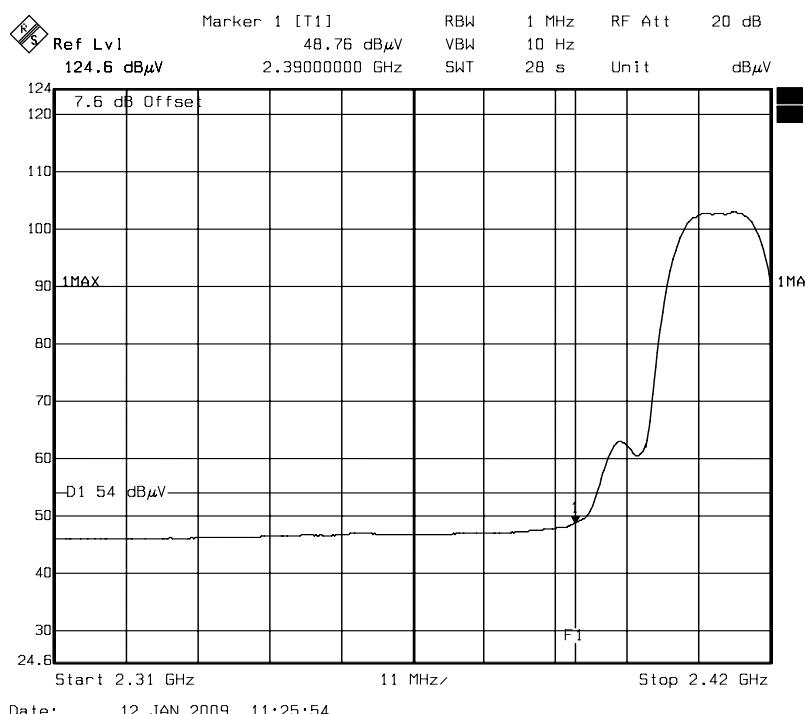


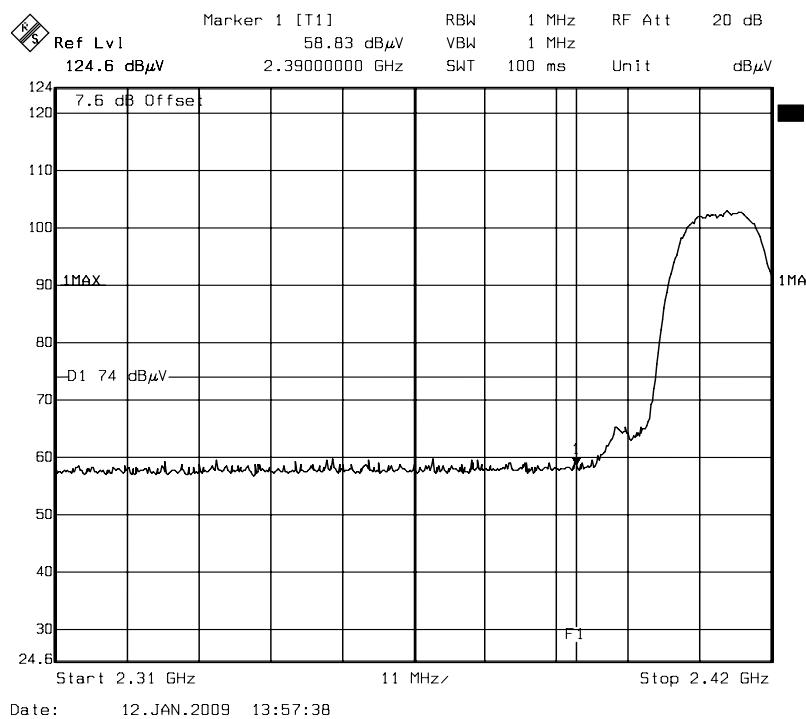
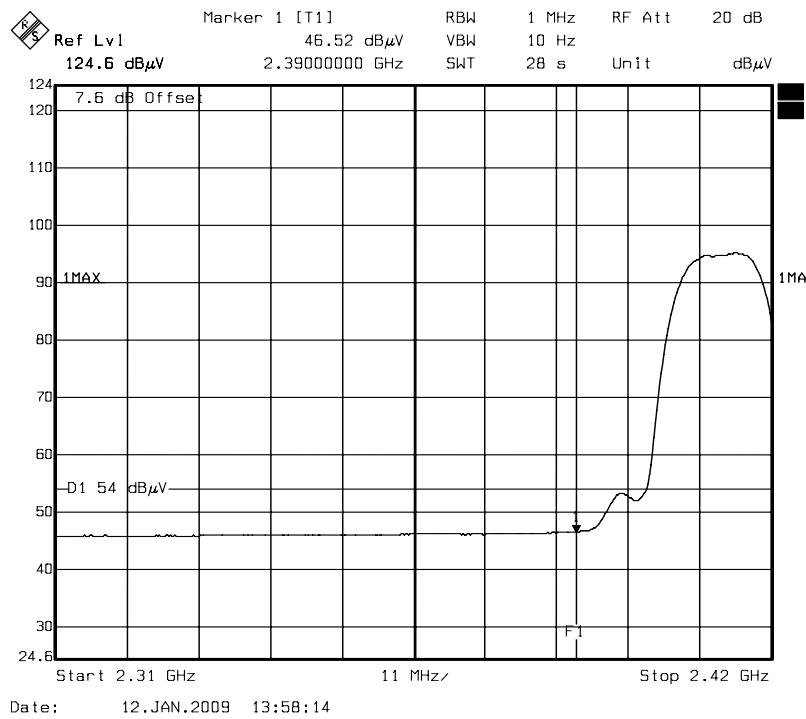
TEST PROCEDURE

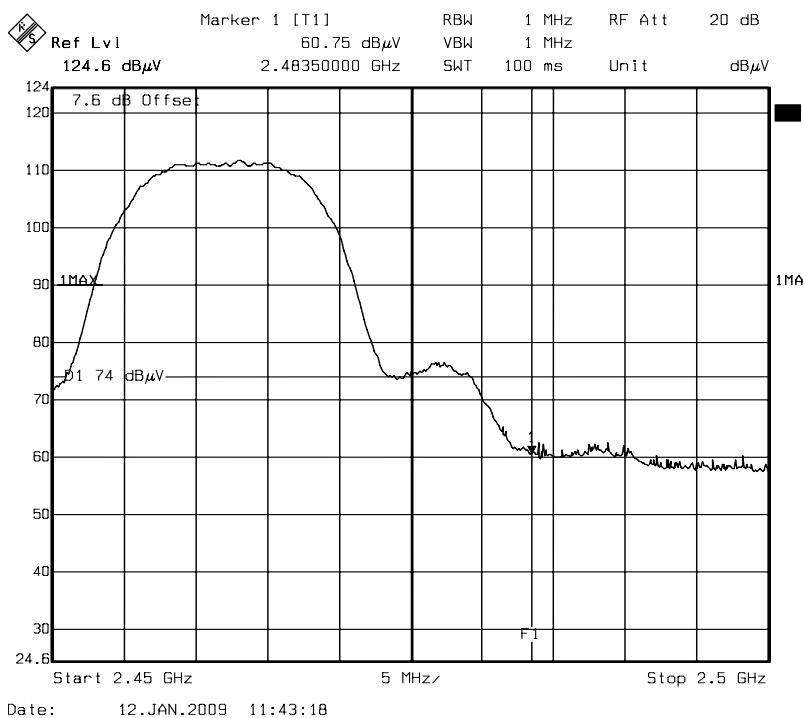
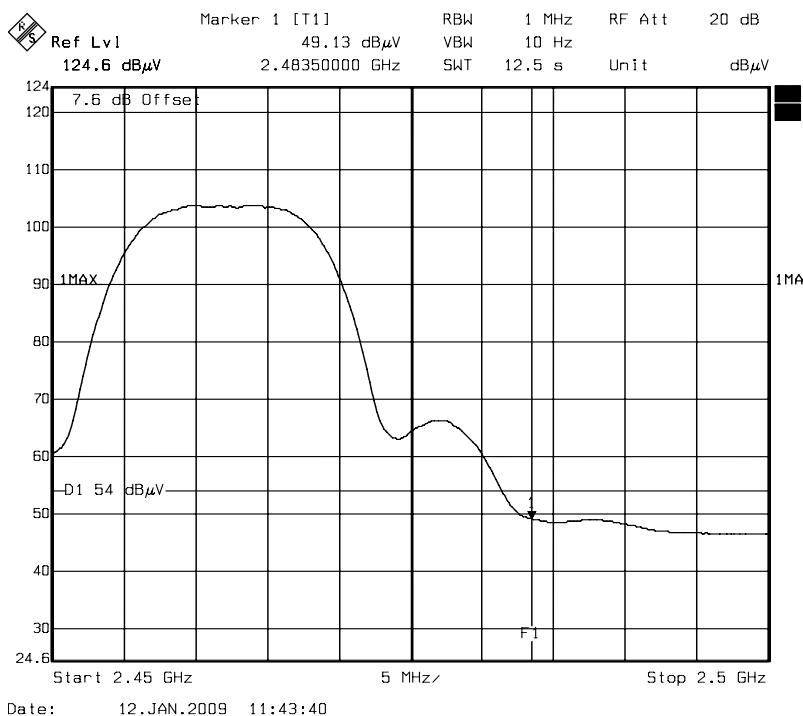
1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=VBW=1MHz / Sweep=100ms
 - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.
6. Offset : Antenna Factor + Cable Loss - Amplifier GAIN

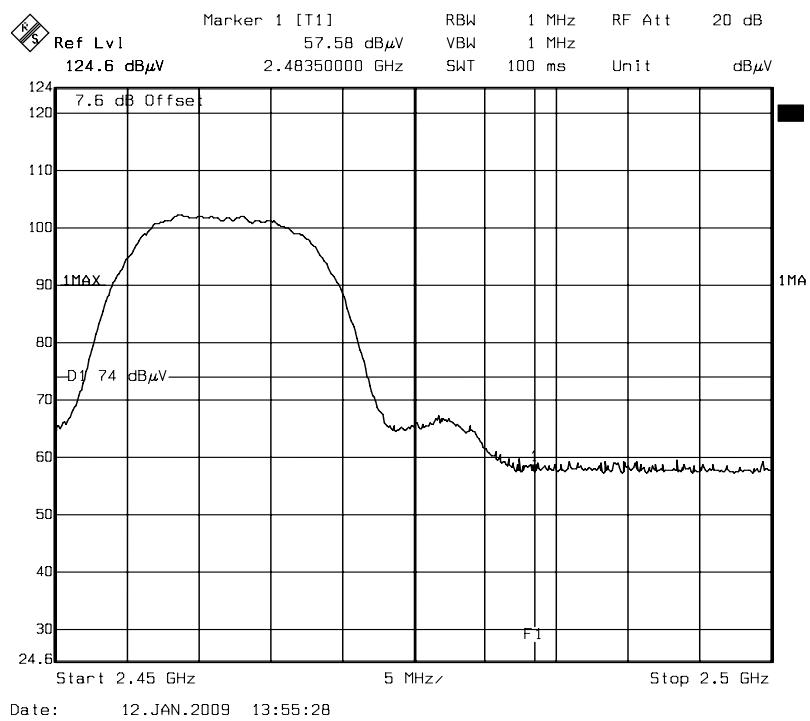
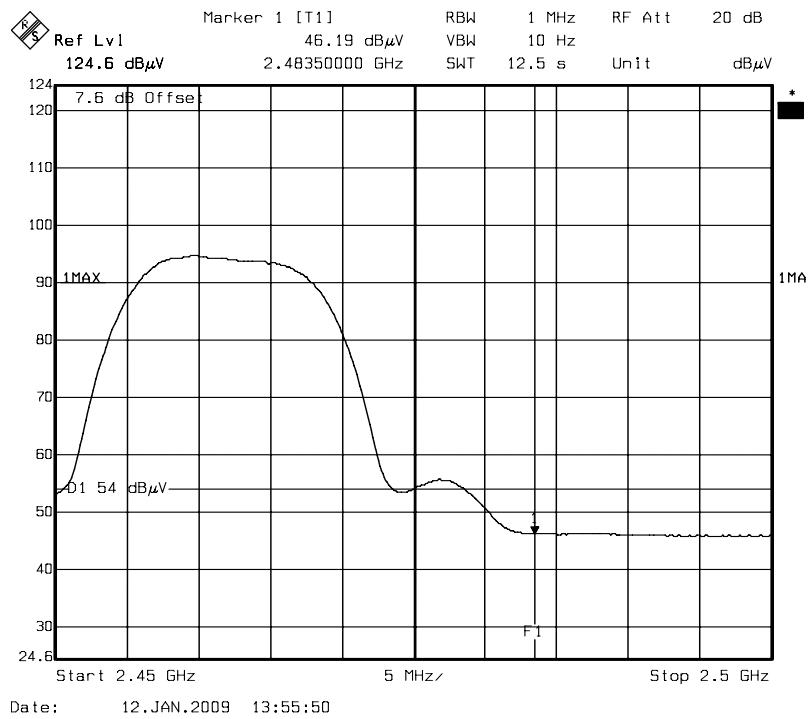
TEST RESULTS

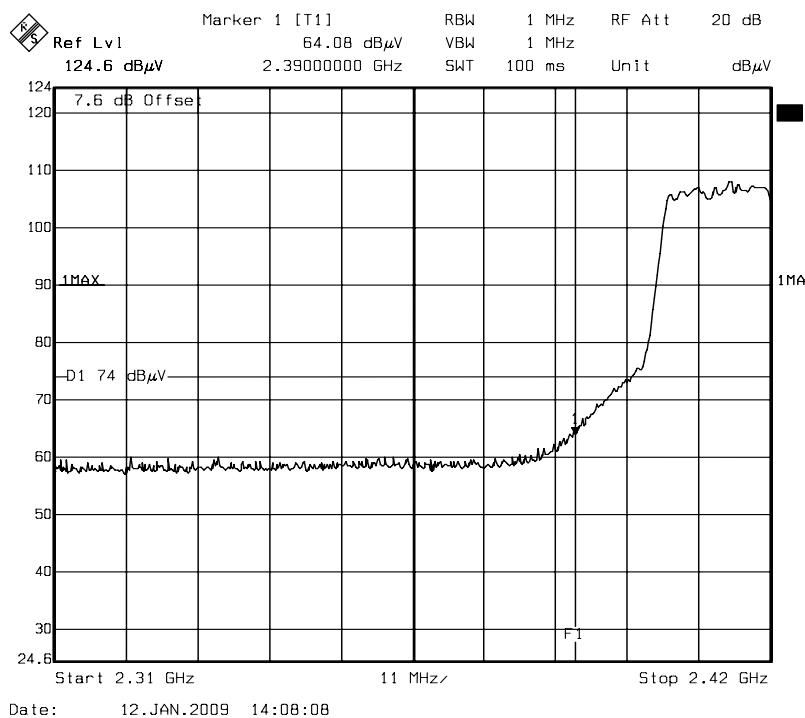
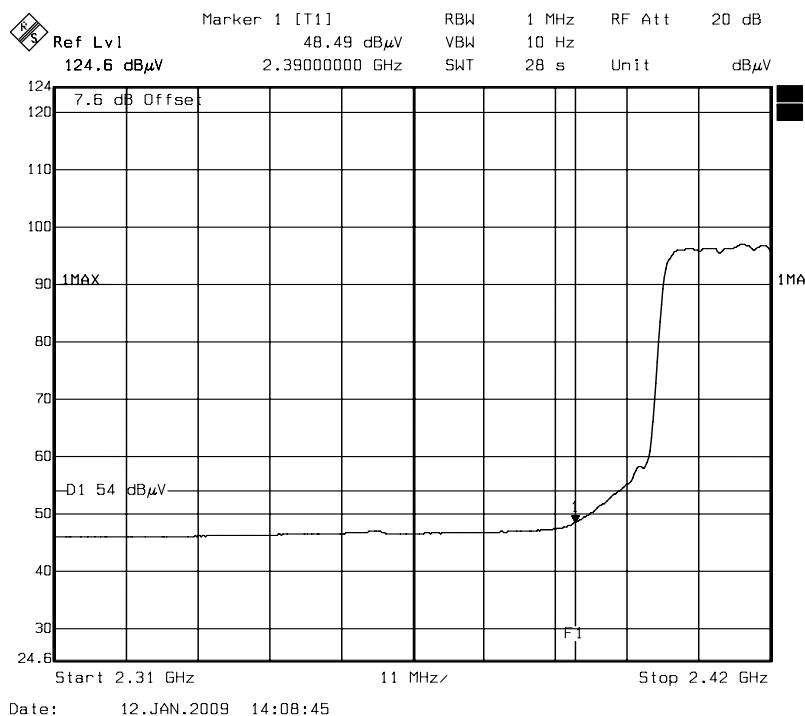
Refer to attach spectrum analyzer data chart.

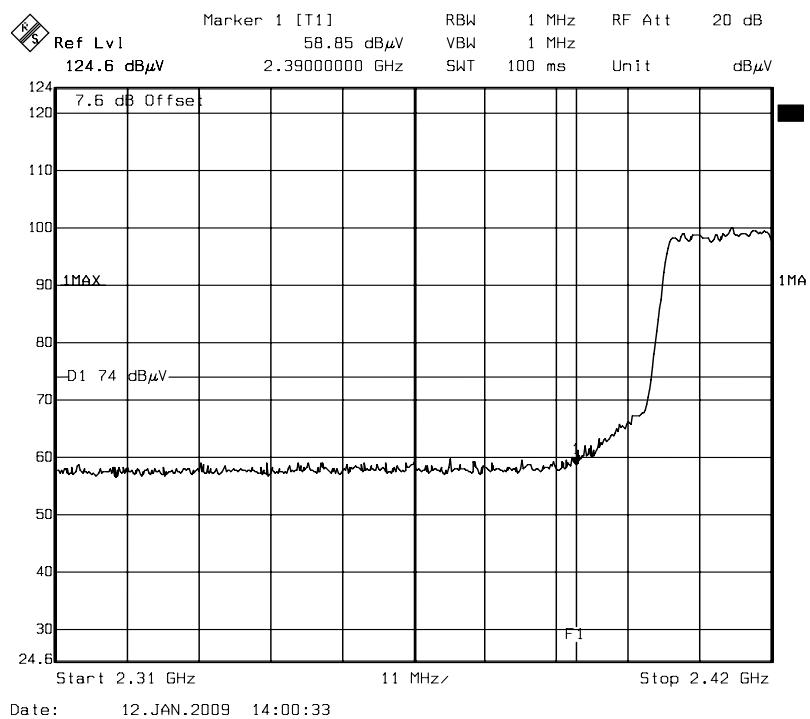
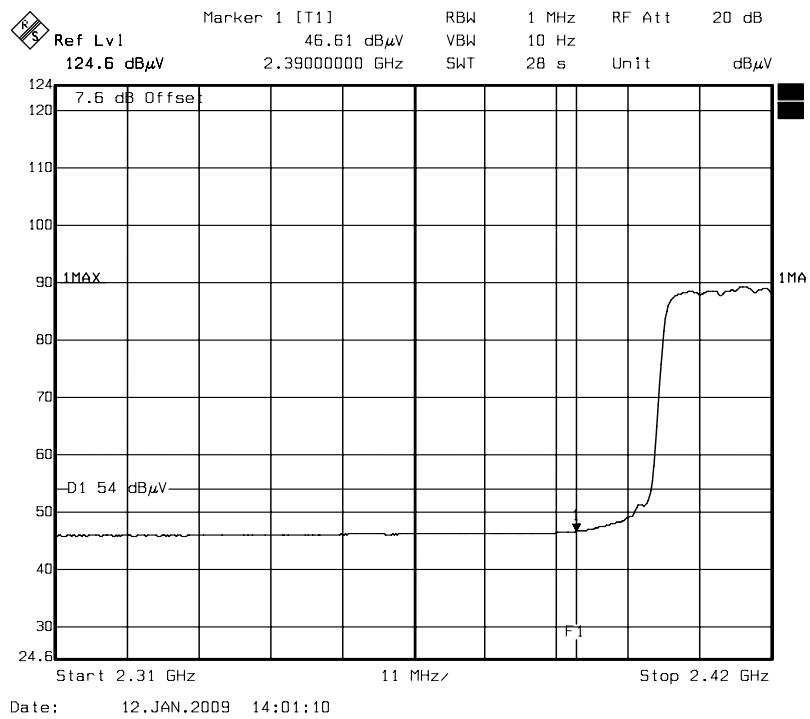
Band Edges (IEEE 802.11b mode / CH Low)**Detector mode: Peak Polarity: Vertical****Detector mode: Average Polarity: Vertical**

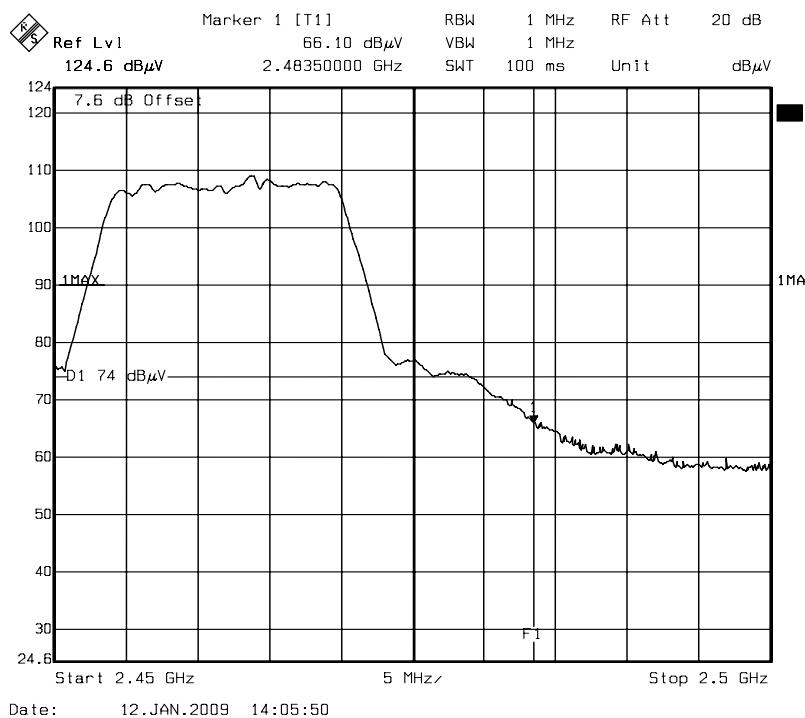
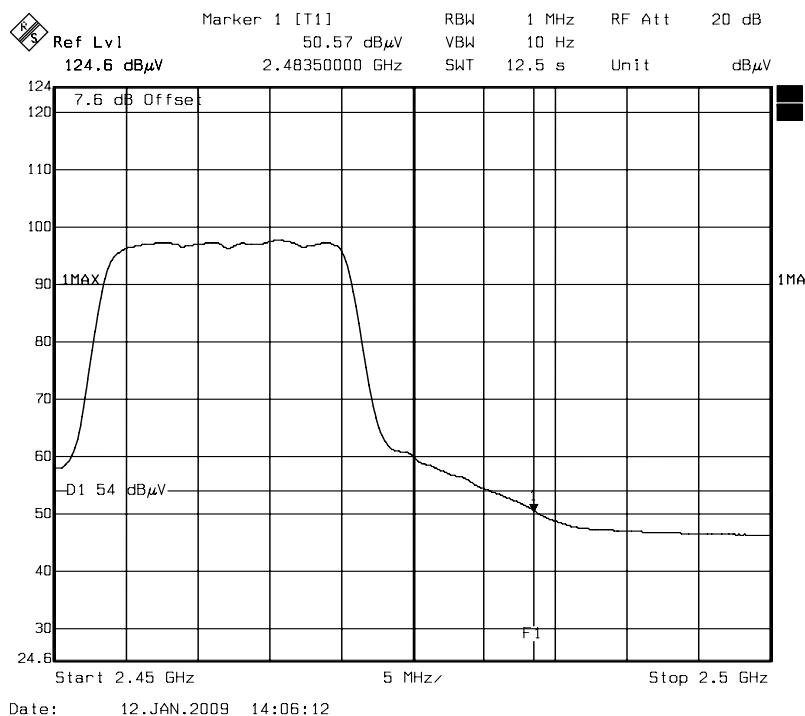
Detector mode: Peak Polarity: Horizontal**Detector mode: Average Polarity: Horizontal**

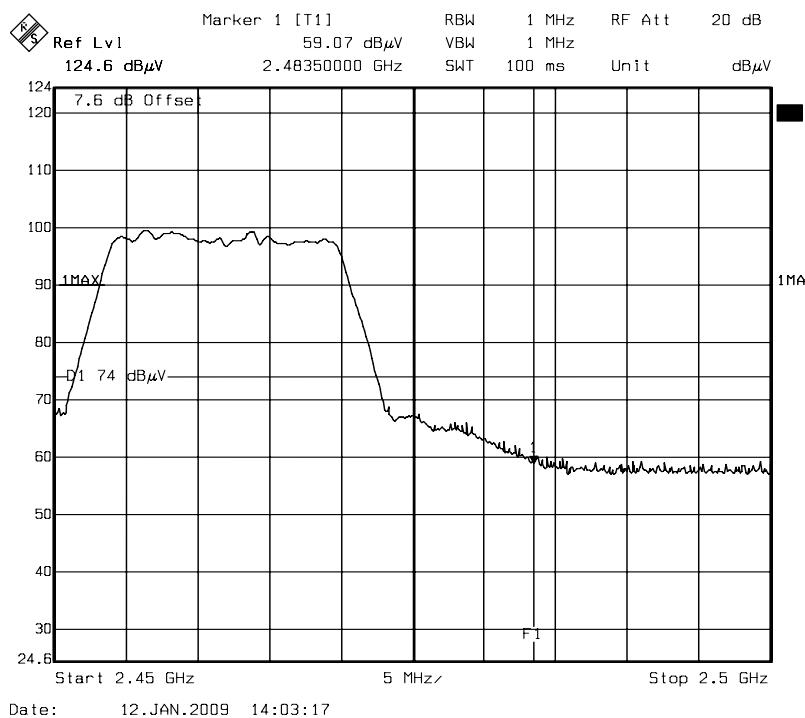
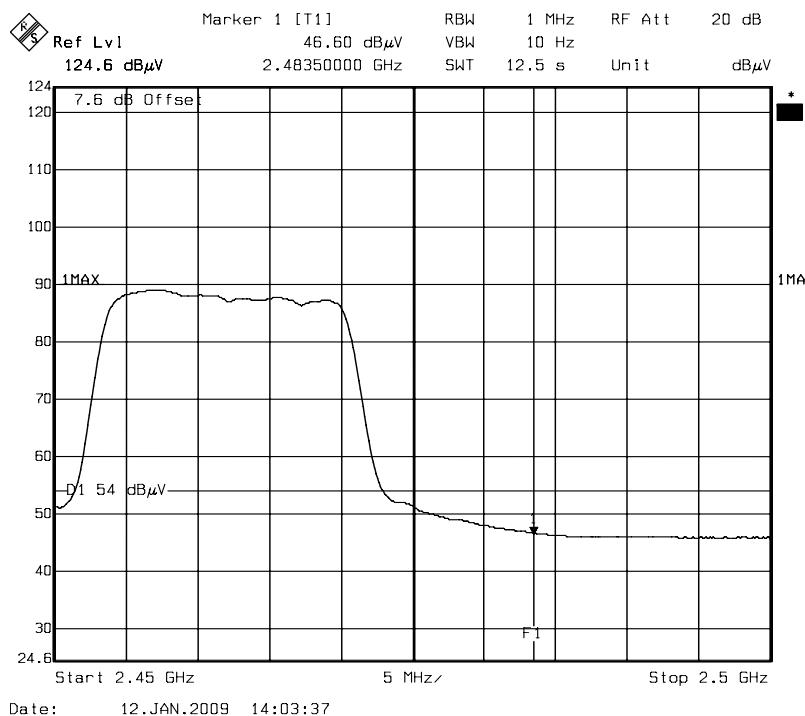
Band Edges (IEEE 802.11b mode / CH High)**Detector mode: Peak Polarity: Vertical****Detector mode: Average Polarity: Vertical**

Detector mode: Peak Polarity: Horizontal**Detector mode: Average Polarity: Horizontal**

Band Edges (IEEE 802.11g mode / CH Low)**Detector mode: Peak Polarity: Vertical****Detector mode: Average Polarity: Vertical**

Detector mode: Peak Polarity: Horizontal**Detector mode: Average Polarity: Horizontal**

Band Edges (IEEE 802.11g mode / CH High)**Detector mode: Peak Polarity: Vertical****Detector mode: Average Polarity: Vertical**

Detector mode: Peak Polarity: Horizontal**Detector mode: Average Polarity: Horizontal**



7.2 MAXIMUM PERMISSIBLE EXPOSURE

According to FCC 1.1310 : The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time
(A) Limits for Occupational / Control Exposures				
300-1,500	--	--	F/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Population / Uncontrol Exposures				
300-1,500	--	--	F/1500	6
1,500-100,000	--	--	1	30

CALCULATIONS

Given
$$E = \frac{\sqrt{30 \times P \times G}}{d} \quad \& \quad S = \frac{E^2}{3770}$$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770d^2}$$

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

**LIMIT**Power Density Limit, S=1.0mW/cm²**TEST RESULTS**

No non-compliance noted.

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$

G=3.4dBi=2.18776162 mW

IEEE 802.11b = 0.0796 * 72.4436 * 2.18776162 / 400 = 0.031539

IEEE 802.11g = 0.0796 * 51.0505 * 2.18776162 / 400 = 0.022226

Mode	Minimum separation distance (cm)	Output Power (dBm)	Output Power (mw)	Antenna Gain (dBi)	Power Density Limit (mW/cm ²)	Power Density at 20cm (mW/cm ²)
IEEE 802.11b	20.0	18.60	72.4436	3.4	1	0.031539
IEEE 802.11g	20.0	17.08	51.0505	3.4	1	0.022226

REMARK: For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.



7.3 SPURIOUS EMISSIONS

LIMIT

1. Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μ V/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

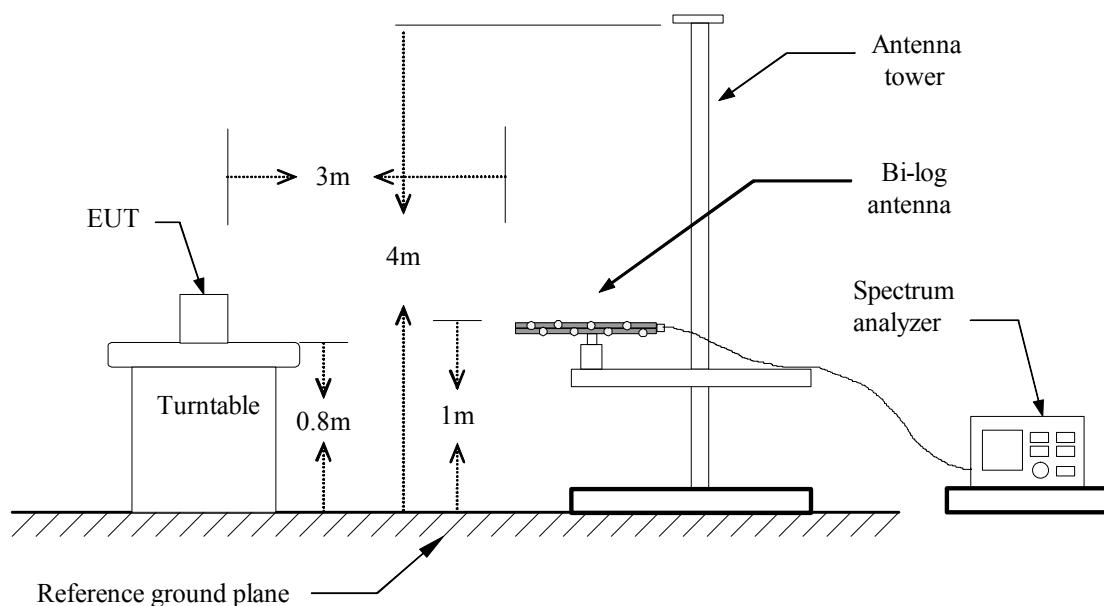
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

2. In the above emission table, the tighter limit applies at the band edges.

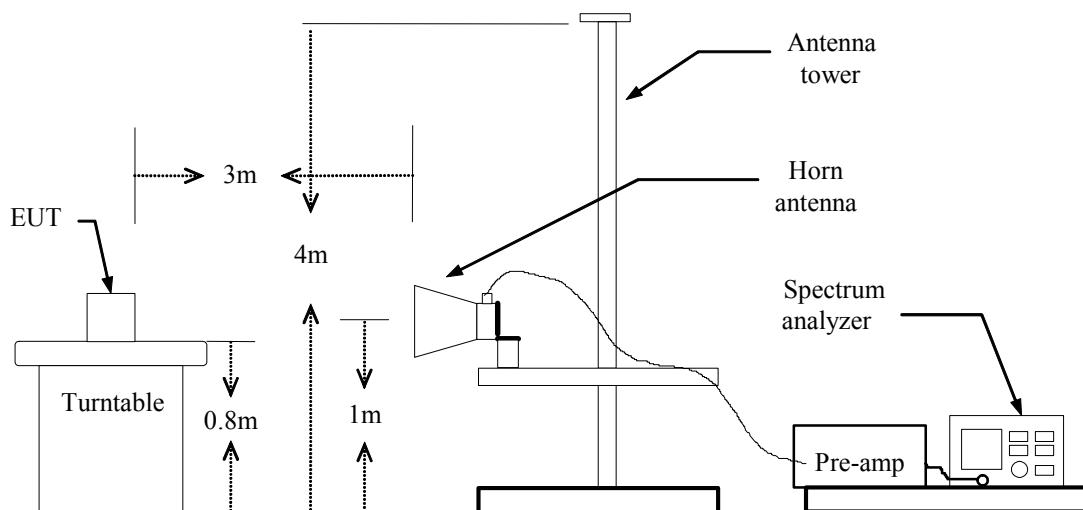
Frequency (Hz)	Field Strength (μ V/m at 3-meter)	Field Strength (dB μ V/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

Below 1 GHz



Above 1 GHz





TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

7. Repeat above procedures until the measurements for all frequencies are complete.



TEST RESULTS

No non-compliance noted.

Below 1 GHz

Operation Mode: WL533MAM

Test Date: January 16, 2009

Temperature: 26.5°C

Tested by: Eric Yang

Humidity: 45 % RH

Polarity: Horizontal; Vertical

Freq-Uency (MHz)	Meter Reading at 3 m(dB μV/M)	Antenna Factor	Cable Loss	Limits	Emission Level	Detector Mode	Margin
					at 3 m(dB μV/M)		
(MHz)	Horizontal	(dB)	(dB)	(dB μV/M)	Horizontal	PK/QP	(dB)
65.84	21.54	8.05	1.03	40.00	30.62	QP	-9.38
200.00	16.84	13.50	1.79	43.50	32.13	QP	-11.37
236.54	19.75	12.55	1.96	46.00	34.26	QP	-11.74
370.25	18.64	15.55	3.34	46.00	37.53	QP	-8.47
568.41	16.30	18.89	3.40	46.00	38.59	QP	-7.41
798.72	11.28	21.78	4.14	46.00	37.20	QP	-8.80
900.00	10.80	22.70	4.51	46.00	38.01	QP	-7.99

Freq-Uency (MHz)	Meter Reading at 3 m(dB μV/M)	Antenna Factor	Cable Loss	Limits	Emission Level	Detector Mode	Margin
					at 3 m(dB μV/M)		
(MHz)	Vertical	(dB)	(dB)	(dB μV/M)	Vertical	PK/QP	(dB)
65.34	19.80	8.02	1.02	40.00	28.84	QP	-11.16
200.00	16.30	13.50	1.79	43.50	31.59	QP	-11.91
233.35	20.30	12.63	1.94	46.00	34.88	QP	-11.12
442.35	14.72	16.96	3.43	46.00	35.11	QP	-10.89
565.95	16.38	18.86	3.39	46.00	38.62	QP	-7.38
798.76	12.50	21.79	4.14	46.00	38.42	QP	-7.58
900.00	13.23	22.70	4.51	46.00	40.44	QP	-5.56

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.

**Above 1 GHz****Operation Mode:** TX / IEEE 802.11b mode / CH Low**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11b mode / CH Low				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2413.65	110.27	30.20	2.34	41.85	0.00	100.96	Fundamental Frequency		P
2413.65	103.56	30.20	2.34	41.85	0.00	94.25			A
3215.98	50.43	30.53	2.77	42.51	1.26	42.48	80.96	-38.48	P
3215.98	46.11	30.53	2.77	42.51	1.26	38.16	74.25	-36.09	A
* 4824.03	65.34	33.58	3.70	43.88	0.69	59.44	74.00	-14.56	P
* 4824.03	52.39	33.58	3.70	43.88	0.69	46.49	54.00	-7.51	A
6432.02	61.55	36.11	4.56	43.81	0.77	59.18	80.96	-21.78	P
6432.02	59.90	36.11	4.56	43.81	0.77	57.53	74.25	-16.72	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11b mode / CH Low**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Vertical

TX / IEEE 802.11b mode / CH Low				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2413.26	114.72	30.20	2.34	41.85	0.00	105.41	Fundamental Frequency	P	A
2413.26	107.78	30.20	2.34	41.85	0.00	98.47			
3216.03	55.99	30.53	2.77	42.51	1.26	48.04	85.41	-37.37	P
3216.03	51.03	30.53	2.77	42.51	1.26	43.08	78.47	-35.39	A
* 4822.21	69.17	33.57	3.70	43.88	0.69	63.26	74.00	-10.74	P
* 4822.21	56.18	33.57	3.70	43.88	0.69	50.27	54.00	-3.73	A
6431.99	67.66	36.11	4.56	43.81	0.77	65.29	85.41	-20.12	P
6431.99	66.46	36.11	4.56	43.81	0.77	64.09	78.47	-14.38	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11b mode / CH Mid**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11b mode / CH Mid				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2438.64	110.78	30.17	2.34	41.85	0.00	101.44	Fundamental Frequency	P	A
2438.64	104.07	30.17	2.34	41.85	0.00	94.73			
3249.58	49.65	30.55	2.82	42.53	1.22	41.70	81.44	-39.74	P
3249.58	44.17	30.55	2.82	42.53	1.22	36.22	74.73	-38.51	A
* 4876.13	62.50	33.70	3.73	43.91	0.71	56.74	74.00	-17.26	P
* 4876.13	51.16	33.70	3.73	43.91	0.71	45.40	54.00	-8.60	A
6498.75	59.82	36.30	4.59	43.80	0.78	57.69	81.44	-23.75	P
6498.75	57.33	36.30	4.59	43.80	0.78	55.20	74.73	-19.53	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11b mode / CH Mid**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Vertical

TX / IEEE 802.11b mode / CH Mid				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2438.05	116.08	30.17	2.34	41.85	0.00	106.74	Fundamental Frequency	P	A
2438.05	109.30	30.17	2.34	41.85	0.00	99.96			
3249.56	54.38	30.55	2.82	42.53	1.22	46.43	86.74	-40.31	P
3249.56	49.78	30.55	2.82	42.53	1.22	41.83	79.96	-38.13	A
* 4876.01	69.89	33.70	3.73	43.91	0.71	64.13	74.00	-9.87	P
* 4876.01	56.84	33.70	3.73	43.91	0.71	51.08	54.00	-2.92	A
6498.73	64.54	36.30	4.59	43.80	0.78	62.41	86.74	-24.34	P
6498.73	63.07	36.30	4.59	43.80	0.78	60.94	79.96	-19.03	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11b mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11b mode / CH High				Measurement Distance at 3m			Horizontal polarity		
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2460.58	110.23	30.15	2.34	41.86	0.00	100.86	Fundamental Frequency		P
2460.58	103.48	30.15	2.34	41.86	0.00	94.11			A
3282.58	49.68	30.57	2.87	42.56	1.17	41.73	80.86	-39.13	P
3282.58	40.32	30.57	2.87	42.56	1.17	32.37	74.11	-41.74	A
* 4924.57	63.35	33.82	3.76	43.94	0.73	57.72	74.00	-16.28	P
* 4924.57	51.24	33.82	3.76	43.94	0.73	45.61	54.00	-8.39	A
6565.42	56.74	36.73	4.62	43.76	0.80	55.13	80.86	-25.73	P
6565.42	53.64	36.73	4.62	43.76	0.80	52.03	74.11	-22.08	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11b mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Vertical

TX / IEEE 802.11b mode / CH High				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2459.94	116.69	30.15	2.34	41.86	0.00	107.32	Fundamental Frequency	P	A
2459.94	110.17	30.15	2.34	41.86	0.00	100.80			
3282.63	54.45	30.57	2.87	42.56	1.17	46.50	87.32	-40.82	P
3282.63	45.89	30.57	2.87	42.56	1.17	37.94	80.80	-42.86	A
* 4923.96	70.25	33.82	3.76	43.94	0.73	64.62	74.00	-9.38	P
* 4923.96	57.26	33.82	3.76	43.94	0.73	51.63	54.00	-2.37	A
6565.41	61.56	36.73	4.62	43.76	0.80	59.95	87.32	-27.37	P
6565.41	59.15	36.73	4.62	43.76	0.80	57.54	80.80	-23.26	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH Low**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11g mode / CH Low				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2414.65	107.58	30.20	2.34	41.85	0.00	98.27	Fundamental Frequency	P	A
2414.65	98.79	30.20	2.34	41.85	0.00	89.48			
3216.02	51.14	30.53	2.77	42.51	1.26	43.19	78.27	-35.08	P
3216.02	46.82	30.53	2.77	42.51	1.26	38.87	69.48	-30.61	A
* 4824.56	63.75	33.58	3.71	43.88	0.69	57.85	74.00	-16.15	P
* 4824.56	49.85	33.58	3.71	43.88	0.69	43.95	54.00	-10.05	A
6432.02	61.24	36.11	4.56	43.81	0.77	58.87	78.27	-19.40	P
6432.02	60.25	36.11	4.56	43.81	0.77	57.88	69.48	-11.60	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH Low**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Vertical

TX / IEEE 802.11g mode / CH Low				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2411.58	113.54	30.21	2.34	41.85	0.00	104.23	Fundamental Frequency	P	A
2411.58	105.05	30.21	2.34	41.85	0.00	95.74			
3216.09	56.53	30.53	2.77	42.51	1.26	48.58	84.23	-35.65	P
3216.09	51.52	30.53	2.77	42.51	1.26	43.57	75.74	-32.17	A
* 4823.78	70.21	33.58	3.70	43.88	0.69	64.31	74.00	-9.69	P
* 4823.78	54.81	33.58	3.70	43.88	0.69	48.91	54.00	-5.09	A
6431.98	67.44	36.11	4.56	43.81	0.77	65.07	84.23	-19.17	P
6431.98	66.35	36.11	4.56	43.81	0.77	63.98	75.74	-11.77	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH Mid**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11g mode / CH Mid				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2438.85	108.07	30.17	2.34	41.85	0.00	98.73	Fundamental Frequency	P	A
2438.85	98.84	30.17	2.34	41.85	0.00	89.50			
3249.51	49.65	30.55	2.82	42.53	1.22	41.70	78.73	-37.03	P
3249.51	44.75	30.55	2.82	42.53	1.22	36.80	69.50	-32.70	A
* 4874.56	63.45	33.70	3.73	43.91	0.71	57.68	74.00	-16.32	P
* 4874.56	49.82	33.70	3.73	43.91	0.71	44.05	54.00	-9.95	A
6498.66	58.32	36.30	4.59	43.80	0.78	56.19	78.73	-22.54	P
6498.66	56.49	36.30	4.59	43.80	0.78	54.36	69.50	-15.14	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH Mid**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Vertical

TX / IEEE 802.11g mode / CH Mid				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2440.05	114.58	30.17	2.34	41.85	0.00	105.24	Fundamental Frequency	P	A
2440.05	105.14	30.17	2.34	41.85	0.00	95.80			
3249.49	54.92	30.55	2.82	42.53	1.22	46.97	85.24	-38.27	P
3249.49	49.48	30.55	2.82	42.53	1.22	41.53	75.80	-34.27	A
* 4874.34	70.29	33.70	3.73	43.91	0.71	64.52	74.00	-9.48	P
* 4874.34	55.26	33.70	3.73	43.91	0.71	49.49	54.00	-4.51	A
6498.70	63.67	36.30	4.59	43.80	0.78	61.54	85.24	-23.70	P
6498.70	61.89	36.30	4.59	43.80	0.78	59.76	75.80	-16.04	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal

TX / IEEE 802.11g mode / CH High				Measurement Distance at 3m			Horizontal polarity		
Freq.	Reading	AF	Closs	Pre-amp	Filter	Level	Limit	Margin	Mark
(MHz)	(dB μ V)	(dB μ V)	(dB)	(dB)	dB	(dB μ V/m)	(dB μ V/m)	(dB)	(P/Q/A)
2462.58	107.64	30.14	2.34	41.86	0.00	98.27	Fundamental Frequency		P
2462.58	98.76	30.14	2.34	41.86	0.00	89.39			A
3282.58	50.22	30.57	2.87	42.56	1.17	42.27	78.27	-36.00	P
3282.58	45.68	30.57	2.87	42.56	1.17	37.73	69.39	-31.66	A
* 4912.54	60.25	33.79	3.75	43.93	0.73	54.59	74.00	-19.41	P
* 4912.54	45.38	33.79	3.75	43.93	0.73	39.72	54.00	-14.28	A
6565.28	57.34	36.73	4.62	43.76	0.80	55.73	78.27	-22.54	P
6565.28	54.62	36.73	4.62	43.76	0.80	53.01	69.39	-16.38	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** TX / IEEE 802.11g mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Vertical

TX / IEEE 802.11g mode / CH High				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
2458.74	114.42	30.15	2.34	41.86	0.00	105.05	Fundamental Frequency	P	A
2458.74	105.60	30.15	2.34	41.86	0.00	96.23			
3282.62	54.71	30.57	2.87	42.56	1.17	46.76	85.05	-38.29	P
3282.62	49.17	30.57	2.87	42.56	1.17	41.22	76.23	-35.01	A
* 4913.85	65.58	33.79	3.75	43.93	0.73	59.92	74.00	-14.08	P
* 4913.85	50.34	33.79	3.75	43.93	0.73	44.68	54.00	-9.32	A
6565.31	61.09	36.73	4.62	43.76	0.80	59.48	85.05	-25.57	P
6565.31	58.82	36.73	4.62	43.76	0.80	57.21	76.23	-19.02	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “*” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11b mode / CH Low**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Horizontal; Vertical

RX / IEEE 802.11b mode / CH Low				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3216.02	46.33	30.53	2.77	42.51	1.26	38.38	74	-35.62	P
3216.02	38.52	30.53	2.77	42.51	1.26	30.57	54	-23.43	A
6432.01	47.61	36.11	4.56	43.81	0.77	45.24	74	-28.76	P
6432.01	37.52	36.11	4.56	43.81	0.77	35.15	54	-18.85	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11b mode / CH Low				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3215.98	48.66	30.53	2.77	42.51	1.26	40.71	74	-33.29	P
3215.98	40.25	30.53	2.77	42.51	1.26	32.30	54	-21.70	A
6432.05	49.81	36.11	4.56	43.81	0.77	47.44	74	-26.56	P
6432.05	39.68	36.11	4.56	43.81	0.77	37.31	54	-16.69	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11b mode / CH Mid**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Horizontal; Vertical

RX / IEEE 802.11b mode / CH Mid				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3249.56	47.65	30.55	2.82	42.53	1.22	39.70	74	-34.30	P
3249.56	38.52	30.55	2.82	42.53	1.22	30.57	54	-23.43	A
6498.69	47.81	36.30	4.59	43.80	0.78	45.68	74	-28.32	P
6498.69	37.65	36.30	4.59	43.80	0.78	35.52	54	-18.48	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11b mode / CH Mid				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3249.53	49.81	30.55	2.82	42.53	1.22	41.86	74	-32.14	P
3249.53	40.15	30.55	2.82	42.53	1.22	32.20	54	-21.80	A
6498.66	49.35	36.30	4.59	43.80	0.78	47.22	74	-26.78	P
6498.66	39.82	36.30	4.59	43.80	0.78	37.69	54	-16.31	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11b mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal; Vertical

RX / IEEE 802.11b mode / CH High				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3282.57	48.32	30.57	2.87	42.56	1.17	40.37	74	-33.63	P
3282.57	38.65	30.57	2.87	42.56	1.17	30.70	54	-23.30	A
6565.44	47.85	36.73	4.62	43.76	0.80	46.24	74	-27.76	P
6565.44	38.26	36.73	4.62	43.76	0.80	36.65	54	-17.35	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11b mode / CH High				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3282.57	50.24	30.57	2.87	42.56	1.17	42.29	74	-31.71	P
3282.57	41.65	30.57	2.87	42.56	1.17	33.70	54	-20.30	A
6565.43	49.82	36.73	4.62	43.76	0.80	48.21	74	-25.79	P
6565.43	40.61	36.73	4.62	43.76	0.80	39.00	54	-15.00	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11g mode / CH Low**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Horizontal; Vertical

RX / IEEE 802.11g mode / CH Low				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3216.02	48.67	30.53	2.77	42.51	1.26	40.72	74	-33.28	P
3216.02	38.52	30.53	2.77	42.51	1.26	30.57	54	-23.43	A
6432.03	47.99	36.11	4.56	43.81	0.77	45.62	74	-28.38	P
6432.03	37.54	36.11	4.56	43.81	0.77	35.17	54	-18.83	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11g mode / CH Low				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3215.96	50.71	30.53	2.77	42.51	1.26	42.76	74	-31.24	P
3215.96	40.36	30.53	2.77	42.51	1.26	32.41	54	-21.59	A
6432.05	49.81	36.11	4.56	43.81	0.77	47.44	74	-26.56	P
6432.05	39.82	36.11	4.56	43.81	0.77	37.45	54	-16.55	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11g mode / CH Mid**Temperature:** 24.5°C**Humidity:** 42 % RH**Test Date:** January 12, 2009**Tested by:** Eric Yang**Polarity:** Horizontal; Vertical

RX / IEEE 802.11g mode / CH Mid				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3249.53	48.25	30.55	2.82	42.53	1.22	40.30	74	-33.70	P
3249.53	38.65	30.55	2.82	42.53	1.22	30.70	54	-23.30	A
6498.62	48.36	36.30	4.59	43.80	0.78	46.23	74	-27.77	P
6498.62	37.95	36.30	4.59	43.80	0.78	35.82	54	-18.18	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11g mode / CH Mid				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3249.56	49.68	30.55	2.82	42.53	1.22	41.73	74	-32.27	P
3249.56	39.82	30.55	2.82	42.53	1.22	31.87	54	-22.13	A
6498.59	50.24	36.30	4.59	43.80	0.78	48.11	74	-25.89	P
6498.59	41.33	36.30	4.59	43.80	0.78	39.20	54	-14.80	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.

**Operation Mode:** RX / IEEE 802.11g mode / CH High**Test Date:** January 12, 2009**Temperature:** 24.5°C**Tested by:** Eric Yang**Humidity:** 42 % RH**Polarity:** Horizontal; Vertical

RX / IEEE 802.11g mode / CH High				Measurement Distance at 3m				Horizontal polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3282.58	48.62	30.57	2.87	42.56	1.17	40.67	74	-33.33	P
3282.58	37.92	30.57	2.87	42.56	1.17	29.97	54	-24.03	A
6565.46	47.83	36.73	4.62	43.76	0.80	46.22	74	-27.78	P
6565.46	38.25	36.73	4.62	43.76	0.80	36.64	54	-17.36	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

RX / IEEE 802.11g mode / CH High				Measurement Distance at 3m				Vertical polarity	
Freq. (MHz)	Reading (dB μ V)	AF (dB μ V)	Closs (dB)	Pre-amp (dB)	Filter dB	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Mark (P/Q/A)
3282.56	49.86	30.57	2.87	42.56	1.17	41.91	74	-32.09	P
3282.56	38.55	30.57	2.87	42.56	1.17	30.60	54	-23.40	A
6565.43	49.72	36.73	4.62	43.76	0.80	48.11	74	-25.89	P
6565.43	39.64	36.73	4.62	43.76	0.80	38.03	54	-15.97	A
N/A	-----	-----	-----	-----	-----	-----	-----	-----	P
N/A	-----	-----	-----	-----	-----	-----	-----	-----	A

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 1MHz, Sweep time = Auto.
 - b. AV Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, b. Sweep time = Auto.
5. Remark “ **” means the Restricted band.