

# MEASUREMENT REPORT of *Wireless ADSL Router*

**Applicant** : ASUSTek Computer Inc.  
**EUT** : Wireless ADSL Router  
**Model No.** : AAM6XXXTPB2 ; 6238-I2-XXX ; AM200g  
**FCC ID** : MSQAAM6KTPB2

Tested by :

*Training Research Co., Ltd.*

TEL : 886-2-26935155 FAX : 886-2-26934440

No. 255, Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C.

# CERTIFICATION

**We here by verify that:**

The test data, data evaluation, test procedures and equipment configurations shown in this report were made mainly in accordance with the procedures given in ANSI C63.4 (2003) as a reference. All test were conducted by **Training Research Co., Ltd.**, 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is **in compliance with** the technical requirements set forth in the FCC Rules Part 15 Subpart B (Declaration of Conformity) and C Section 15.247.

**Applicant** : ASUSTek Computer Inc.

**Applicant Address** : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

**Product Name** : Wireless ADSL Router

**Model** : AAM6XXXTPB2 ; 6238-I2-XXX ; AM200g

**Report No.** : A5415050742

**Test Date** : November 23, 2005

Prepared by:



Jack Tsai

Approved by:



Frank Tsai

**Conditions of issue :**

- (1) This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.
- (2) This report must not be used by the client to claim product endorsement by NVLAP or any agency of U.S. Government.
- (3) This test report, measurements made by TRC are traceable to the NIST only Conducted and Radiated Method.

★ NVLAP LAB CODE: 200174-0

# *Federal Communications Commission*

## Declaration of Conformity

*for the following equipment:*

Product name : Wireless ADSL Router  
 Trade name : ASUS ; PARADYNE ; ZHONE  
 Model name : AAM6XXXTPB2 ; 6238-I2-XXX ; AM200g

Is herewith confirmed and found to comply with the requirements of CFR 47 part15 Subpart B - Unintentional Radiators regulation. The results of electromagnetic mission evaluation are shown in the report number : A5415050742

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received,  
including interference that may cause undesired operation

<b><i>Manufacturer</i></b>	<b><i>USA local representative</i></b>
<b>Company name:</b> ASUSTeK Computer Inc.	To be determined
<b>Computer address:</b> 4/F, 150, Li-Te Rd., Peitou, Taipei, Taiwan	
<b>ZIP / Postal code</b> 112	
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## I . GENERAL

### 1.1 Introduction

The following measurement report is submitted on behalf of applicant in support that the certification in accordance with Part 2 Subpart J and Part 15 Subpart A, B and C of the Commission's Rules and Regulations.

### 1.2 Description of EUT

<b>FCC ID</b>	:	MSQAAM6KTPB2
<b>Product Name</b>	:	Wireless ADSL Router
<b>Model Name</b>	:	AAM6XXXTPB2 ; 6238-I2-XXX ; AM200g
<b>Frequency Range</b>	:	2.412GHz ~ 2.462GHz
<b>Channel Spacing</b>	:	5MHz
<b>Support Channel</b>	:	11 Channeks
<b>Modulation Skill</b>	:	DBPSK, DQPSK, CCK, OFDM
<b>Power Type</b>	:	Powered by the switching adapter (1) or (2), 1) Model: DVS-180A10FUS [DVE] I/P: 100-240VAC 50/60Hz 0.7A O/P: 18VDC 1A 190cm length, non-shielded, with ferrite core 2) Model: ADS6818-1818-W 1810 [OEM] I/P: 100-240VAC 50-60Hz 0.5A O/P: 18VDC 1A 18W 190cm length, non-shielded, no ferrite core
<b>Data Cable</b>	:	RJ45 cable x 2, 2.00m length, non-shielded, no ferrite core RJ45 cable x 2, 30.0m length, non-shielded, no ferrite core RJ11 cable x 2, 30.0m length, non-shielded, no ferrite core RJ11 cable x 2, 2.10m length, non-shielded, no ferrite core USB cable x 1, 1.84m length, shielded, no ferrite core USB cable x 1, 1.00m length, shielded, no ferrite core

### **1.3 Test method**

- 1.3.1 The DC-In connected to AC mains supply by switching adapter.
- 1.3.2 The LINE jack connected to PSTN simulator.
- 1.3.3 Two PHONE jacks each are connected a telephone set.
- 1.3.4 The USB-downstream port is connected with a USB flash drive.
- 1.3.5 The LAN4 port of EUT connected to far LAN card.
- 1.3.6 The LAN1, LAN2 and LAN3 ports are termination by RJ45 cables.
- 1.3.7 The ADSL port connected to ADSL evaluation module located remotely.
- 1.3.8 Connected the USB port of EUT with the USB of PC. Using PC and software provided by the manufacturer to control EUT, the test is performed under the specific conditions.
- 1.3.9 Set different data rate and channel (CH01/CH06/CH11) being tested and repeat the procedures above.
  - (a) Radiated for Intentional test:  
making EUT to the mode of continuous transmission
  - (b) Conducted test and Radiated for unintentional test:  
making EUT to the linking (RX/TX) mode with far support equipments

## 1.4 Description of Support Equipment

In order to construct the minimum testing, following equipment were used as the support units.

<b>PC</b>	: <b>HP, IBM 8434</b>
Model No.	: Pavilion t1000; IVG
Serial No.	: TWL3320051; 99CCZA3
FCC ID	: DoC (Declaration of Confirmation) Approved
BSMI	: R33001; R33026
Power type	: 100 ~ 127VAC/6A, 200 ~ 240VAC/3A, 50 ~ 60Hz, Switching
Power cord	: Non-shielded, 1.8m length, Plastic hood, No ferrite core
<b>Monitor</b>	: <b>HP 15' Color Monitor</b>
Model No.	: D8894A
Serial No.	: CN02364355
FCC ID	: ARSCM356N
BSMI	: 3882A031
Power type	: 100 ~ 240 VAC / 1.5A, 50 ~ 60 Hz, Switching
Power cord	: Non-shielded, 1.80m length, Plastic hood, No ferrite core
Data cable	: Shielded, 1.50m length, Plastic hood, with ferrite core
<b>Printer</b>	: <b>EPSON</b>
Model No.	: B241A
Serial No.	: FAPY155090
FCC ID	: N/A, DoC Approved
BSMI	: R33126
Power type	: Switching adaptor
Power cord	: Non-shielded, 198cm length, No ferrite core
Data cable	: Shielded, 1.50m length, No ferrite core
<b>PS/2 Mouse</b>	: <b>HP</b>
Model No.	: M-UR89, M-S69
Serial No.	: LZS21750238, 334684-002 323614-001
FCC ID	: DoC Approved
BSMI	: 3892D767, R41126
Power type	: By PC
Power cord	: Shielded, 1.90m length, No ferrite core

**PS/2 Keyboard** : **HP**  
Model No. : 5187-0343, KB0133  
Serial No. : 265987-AB1 Tch 323686-AB1, B69360MGAPW0HF  
FCC ID : DoC Approved  
BSMI : 3892C981, R31310  
Power type : By PC  
Data cable : Shielded, 1.85m length, no ferrite core

**Modem** : **ACEEX**  
Model No. : DM-1414  
Serial No. : 9010583  
FCC ID : IFAXDM1414  
Power type : Linear  
Power cord : Non-shielded, 1.9m length, No ferrite cord  
Data cable : RS232, Shielded, 1.2m length, No ferrite core  
RJ11C x 2, 7' length non-shielded, No ferrite core

**USB Game pad** : **Logitech**  
Model No. : G-UC3B  
Serial No. : AE3500500  
FCC ID : DoC Approved  
BSMI : 4902A047  
Power Cable : Shielded, 187cm length, Plastic hood, No ferrite core.

**LAN Card** : **D-Link**  
Model No. : DFE-530TX  
Serial No. : 0050BAE3158B, 0050BAE32FF3  
FCC ID : N/A, DoC Approved

### **USB**

**Flash Drive** : **City-Netek Inc.**  
Model No. : CN-2108  
FCC ID : DoC Approved

**ADSL Simulator :** **GLOBESPA<sup>N</sup> SEMICONDUCTOR INC.**

Model No. : GDS-0205-04

Serial No. : 077 3.1

**PSTN Simulator :** **KING DESIGN INDUSTRIAL CO., LTD.**

Model No. : KD 8705-A

Serial No. : GV101101186

FCC ID : N/A, Verification Approved

Power type : Switching

Power cord : Non-shielded, 1.80m length, no ferrite core

**Telephone Set :** **Netvox Technology Co., Ltd.**

Model No. : RS-802HF

Serial No. : NTC210220; NTC210450

FCC ID : Verification

DGT : T89-T177-0

Data Cable : Non-shielded, 2.10m length, Plastic, No ferrite core

**Notebook PC :** **IBM**

Model No. : 2373-IMV

Serial No. : 99R3H1H

FCC ID : DoC (Declaration of Confirmation) Approved

BSMI : R33026

DGT : 92LP0137

**Power adaptor :** **IBM**

Part No. : 08K8202

Serial No. : 11S08K8202Z1Z6LR459001A REV 06

BSMI : D33190

Power type : 100 ~ 240VAC / 50 ~ 60Hz, 1.5 ~ 0.5A, Switching

Power cord : Primary: Non-shielded, 1.0m length, Plastic hood, No ferrite core

Power cord : Secondary: Shielded, 1.84m length, Plastic hood, ferrite core

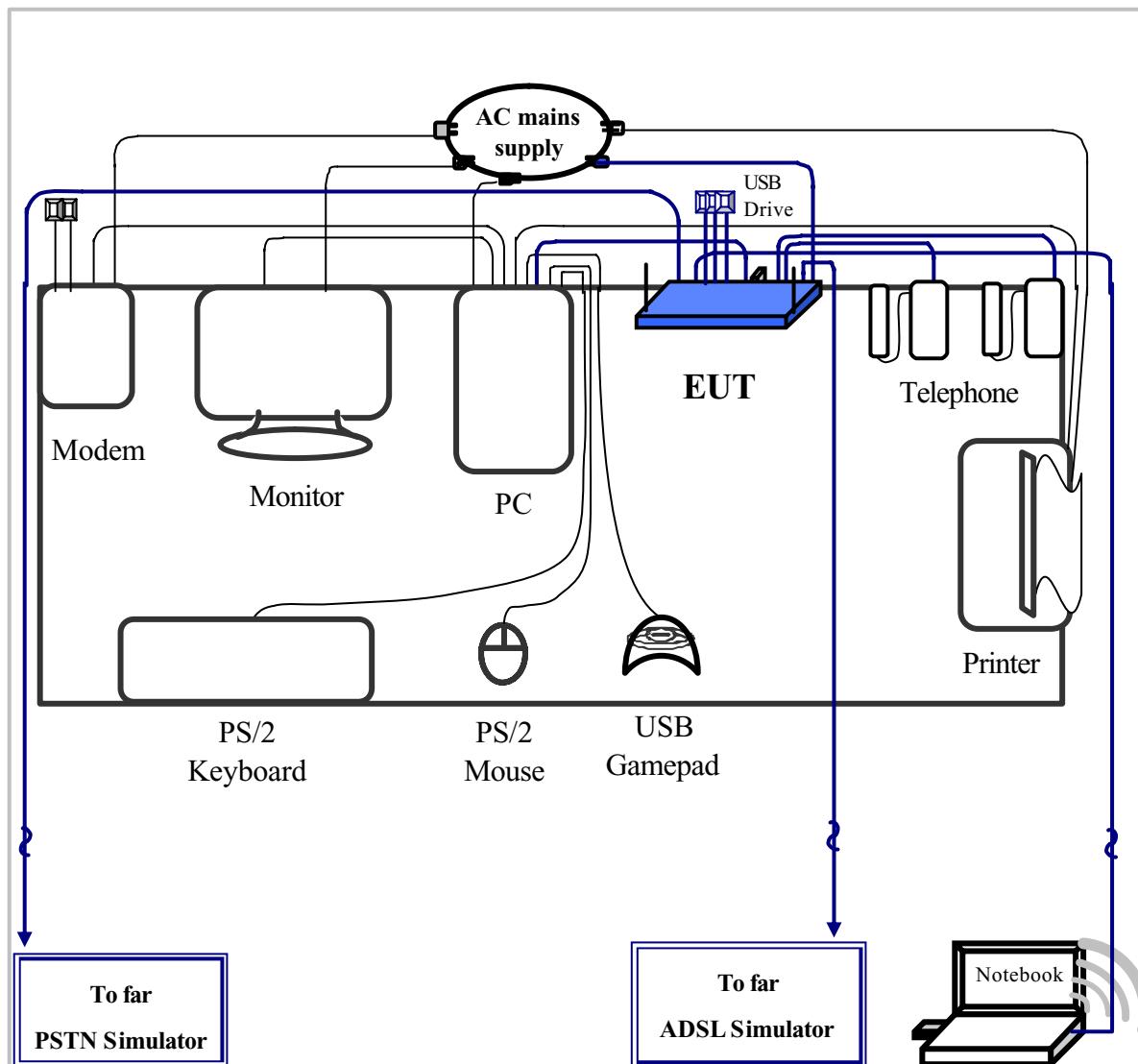
**WLAN Card :** **Gemtek Technology Co., Ltd.**

Model No. : C911003

FCC ID : MXF-C911003

## 1.5 Configuration of System Under Test

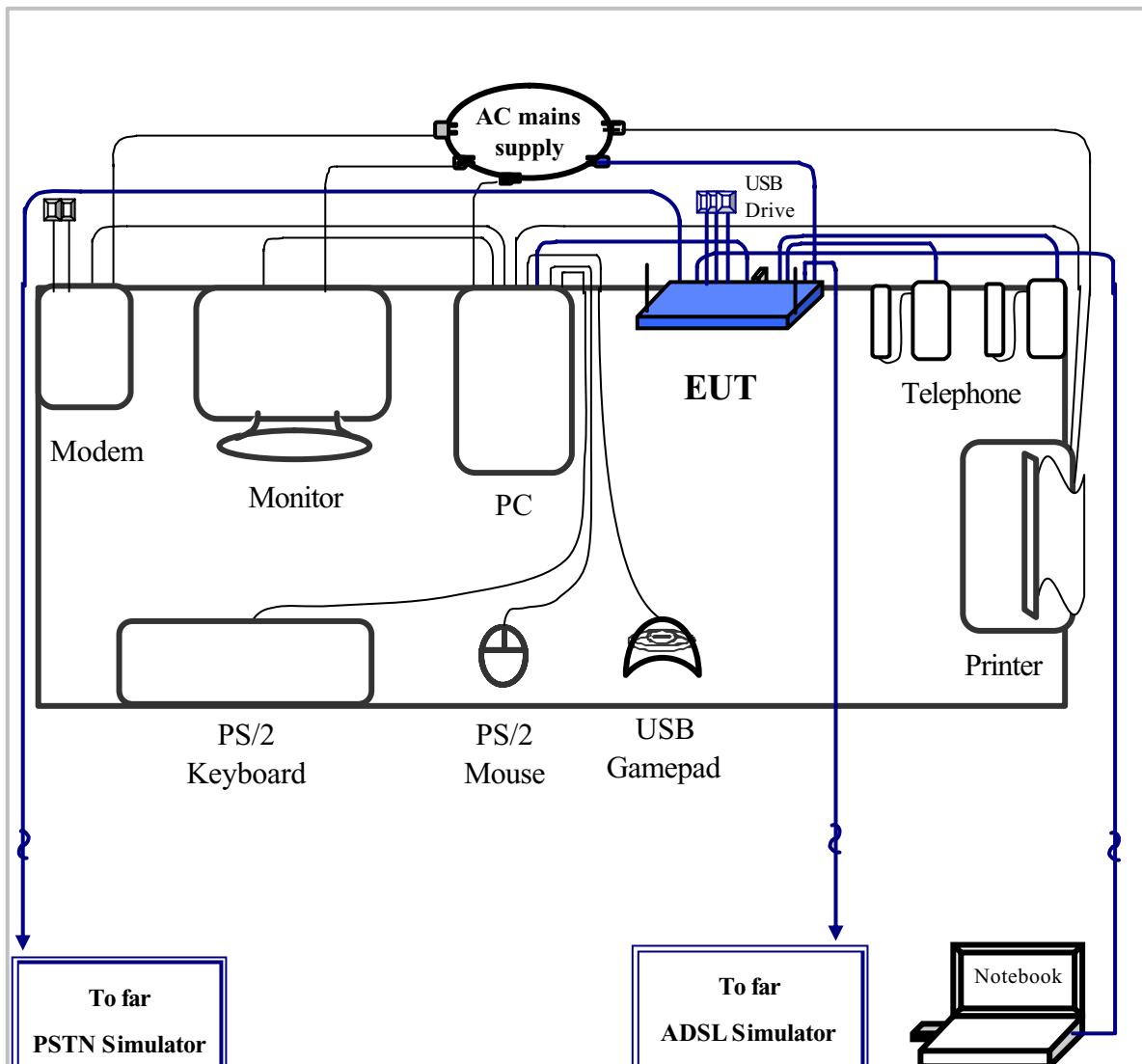
### 1.5.1 Conducted and Radiated for Unintentional



#### *Connections of Equipment*

- PC:
  - \*Parallel Port ..... a printer
  - \*VGA Port ..... a monitor
  - \*Serial Port ..... an external modem
  - \*USB#1 Port ..... a USB gamepad
  - \*PS/2-key Port ..... a PS/2 keyboard
  - \*PS/2-mouse Port ..... a PS/2 mouse
  - \*USB#2 Port ..... EUT

### 1.5.2 Radiated of Intentional



The tests below are carried with the EUT transmitter set at high power in TDD mode. The EUT is forced to select of output power level and channel number by LAN port.

The setting up procedure was recorded in 1.3 test method.

## 1.6 Verify the Frequency and Channel

Channel	Frequency (GHz)
1	2.412
2	2.417
3	2.422
4	2.427
5	2.432
6	2.437
7	2.442
8	2.447
9	2.452
10	2.457
11	2.462

Note:

1. This is for confirming that all frequencies are in 2.412GHz to 2.462GHz.
2. Section 15.31(m): Measurements on intentional radiators or receivers shall be performed at three frequencies for operating frequency range over 10 MHz  
(The locations of these frequencies one near the top, one near the middle and one near the bottom.)
3. After test, the EUT operating frequencies are in 2.412GHz to 2.462GHz. So all the items as followed in testing report are need to test these three frequencies:  
Top: Channel – 1; Middle: Channel – 6; Bottom: Channel – 11.

## **1.7 Test Procedure**

All measurements contained in this report were performed mainly according to the techniques described in ANSI C63.4 (2003) and the pre-setup was written on 1.3 test method, the detail setup was written on each test item.

## **1.8 Location of the Test Site**

The radiated emissions measurements required by the rules were performed on the **three-meter, Anechoic Chamber (FCC Registration Number: 93906)** maintained by *Training Research Co., Ltd.* 1F, No. 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Complete description and measurement data have been placed on file with the commission. The conducted power line emissions tests and other test items were performed in a anechoic chamber also located at Training Research Co., Ltd.

No. 255 Nanyang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. *Training Research Co., Ltd.* is listed by the FCC as a facility available to do measurement work for others on a contract basis.

## **1.9 General Test Condition**

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests were chosen as that which produced the highest emission levels. However, only those conditions, which the EUT was considered likely to encounter in normal use were investigated.

In test, they were set in high power and continuously transmitting mode that controlled by computer. The ch01, ch06 and ch11 of EUT were all tested. The setting up procedure is recorded on 1.3 test method.

## **II. Section 15.101(a): Equipment authorization of unintentional radiators**

The EUT equipped with a USB interface and should be operated with the computer. It was categorized to *Class B personal computers and peripherals* as cannot be operated stand-alone. The authorization requires **Declaration of Conformity (DoC)** and the items required such as Section15.107 (Conducted limits) and Section15.109 (Radiated emission limits) is same as Section15.207 and 15.247(C).

### **III. Section 15.203: Antenna requirement**

The EUT has two detachable antennas, the antennas are affixed to the EUT using a unique connector, which allows for replacement of a broken antenna, but does not use a standard antenna jack or electrical connector. The antenna requirement stated in Section 15.203 is inapplicable to this EUT.

The EUT can be equipped with two kinds of antennas, the custom antenna specification of list as below: (please refer to antenna specification of RF Exposure Calculations)

1)

Manufacturer : WIESON TECHNOLOGIES CO., LTD.  
Part No : GY111C163-010  
Connector : SMA Plug Reverse  
Antenna Type : Dipole Antenna  
Antenna Gain : 3.13dBi

2)

Manufacturer : WHA YU INDUSTRIAL CO., LTD.  
Part No : C660-510059-A (Rev: X2)  
Connector : SMA Plug Reverse  
Antenna Type : Dipole Antenna  
Antenna Gain : 1.80dBi

## **VI. Section 15.207: Power Line Conducted Emissions for AC Powered Units**

### **4.1 Test Condition & Setup**

The power line conducted emission measurements were performed in an anechoic chamber. The EUT was assembled on a wooden table, which is 80 centimeters high, was placed 40 centimeters from the backwall 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 Line Impedance Stabilization Networks (LISNs). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer (or EMI receiver) 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 and average 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 4.3

There is a test condition apply in this test item, the test procedure description as <1.3>. Three channels were tested, one in the top (CH01), one in the middle (CH06) and the other in bottom (CH11).

## 4.2 List of Test Instruments

<b>Instrument Name</b>	<b>Model</b>	<b>Brand</b>	<b>Serial No.</b>	<b>Calibration Date</b>
EMI Receiver	8546A	HP	3520A00242	06/01/06
RF Filter Section	85460A	HP	3448A00217	06/01/06
LISN (EUT)	LISN-01	TRC	99-05	01/07/06
LISN (Support E.)	LISN-01	TRC	9912-03, 04	02/04/06
Pre-amplifier	15542 ZFL-500	Mini – Circuits	0 0117	05/20/06
6dB Attenuator	MCL BW-S6W2	Mini – Circuits	9915 – Conducted	05/20/06
10dB Attenuator	A5542 VAT010	Mini – Circuits	0215 – Conducted	05/20/06
Coaxial Cable (2 meter)	A30A30-0058-50FS-2M	Jyebao	SMA-08	05/20/06
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	Jyebao	SMA-09	05/20/06
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-01	05/20/06
Coaxial Cable (20 meter)	RG-214/U	Jyebao	NP-02	05/20/06
Auto Switch Box (< 30MHz)	ASB-01	TRC	9904-01	05/20/06

### 4.3 Test Result of Power Line Conducted Emissions

The following table shows a summary of the highest emissions of power line conducted emissions on the LIVE and NETURAL conductors of the EUT power cord. Show as follows.

Test Conditions: Temperature : 25 °C Humidity : 73 % RH

*Test mode: Standby mode for Adapter#1 DVE*

<i>Power Connected Emissions</i>					<i>Class B</i>		
<i>Conductor</i>	<i>Frequency (KHz)</i>	<i>Peak (dBμV)</i>	<i>QP (dBμV)</i>	<i>Average (dBμV)</i>	<i>QP-limit (dBμV)</i>	<i>AVG-limit (dBμV)</i>	<i>Margin (dB)</i>
Line 1	222.000	48.50	---	---	63.94	53.94	-5.44
	370.000	42.14	---	---	59.71	49.71	-7.57
	499.000	39.34	---	---	56.03	46.03	-6.69
	627.000	38.62	---	---	56.00	46.00	-7.38
	1269.000	38.29	---	---	56.00	46.00	-7.71
	8520.000	42.48	---	---	60.00	50.00	-7.52
Line 2	226.000	48.10	---	---	63.83	53.83	-5.73
	592.000	39.80	---	---	56.00	46.00	-6.20
	867.000	39.34	---	---	56.00	46.00	-6.66
	1123.000	38.71	---	---	56.00	46.00	-7.29
	1801.000	38.20	---	---	56.00	46.00	-7.80
	10480.000	42.32	---	---	60.00	50.00	-7.68

NOTE:

- (1) Margin = Peak Amplitude – Limit, *The reading amplitudes are all under limit.*
- (2) A "+" sign in the margin column means the emission is OVER the Class B Limit  
and "–" sign of means UNDER the Class B limit

**Test mode: IEEE 802.11b Channel 1 for Adapter#1 DVE**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	210.000	47.32	---	---	64.29	54.29	-6.97
	373.000	42.34	---	---	59.63	49.63	-7.29
	509.000	39.30	---	---	56.00	46.00	-6.70
	745.000	38.01	---	---	56.00	46.00	-7.99
	1243.000	37.38	---	---	56.00	46.00	-8.62
	8520.000	42.48	---	---	60.00	50.00	-7.52
Line 2	193.000	49.31	---	---	64.77	54.77	-5.46
	731.000	39.85	---	---	56.00	46.00	-6.15
	893.000	39.68	---	---	56.00	46.00	-6.32
	1550.000	37.83	---	---	56.00	46.00	-8.17
	8520.000	42.93	---	---	60.00	50.00	-7.07
	10480.000	42.46	---	---	60.00	50.00	-7.54

**Test mode: IEEE 802.11b Channel 6 for Adapter#1 DVE**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	191.000	49.38	---	---	64.83	54.83	-5.45
	222.000	48.87	---	---	63.94	53.94	-5.07
	598.000	38.53	---	---	56.00	46.00	-7.47
	1411.000	38.13	---	---	56.00	46.00	-7.87
	8520.000	42.74	---	---	60.00	50.00	-7.26
	10480.000	42.07	---	---	60.00	50.00	-7.93
Line 2	197.000	48.73	---	---	64.66	54.66	-5.93
	598.000	39.25	---	---	56.00	46.00	-6.75
	738.000	39.75	---	---	56.00	46.00	-6.25
	884.000	39.51	---	---	56.00	46.00	-6.49
	1645.000	38.06	---	---	56.00	46.00	-7.94
	8520.000	42.53	---	---	60.00	50.00	-7.47

*Test mode: IEEE 802.11b Channel 11 for Adapter#1 DVE*

Power Connected Emissions					Class B		
Conductor	Frequency (KHz)	Peak (dBμV)	QP (dBμV)	Average (dBμV)	QP-limit (dBμV)	AVG-limit (dBμV)	Margin (dB)
Line 1	231.000	45.75	---	---	63.69	53.69	-7.94
	302.000	44.28	---	---	61.66	51.66	-7.38
	475.000	39.37	---	---	56.71	46.71	-7.34
	752.000	37.87	---	---	56.00	46.00	-8.13
	1269.000	38.55	---	---	56.00	46.00	-7.45
	10480.000	42.23	---	---	60.00	50.00	-7.77
Line 2	201.000	48.98	---	---	64.54	54.54	-5.56
	604.000	40.49	---	---	56.00	46.00	-5.51
	893.000	39.64	---	---	56.00	46.00	-6.36
	1398.000	37.76	---	---	56.00	46.00	-8.24
	8520.000	41.22	---	---	60.00	50.00	-8.78
	10480.000	42.60	---	---	60.00	50.00	-7.40

*Test mode: IEEE 802.11g Channel 1 for Adapter#1 DVE*

Power Connected Emissions					Class B		
Conductor	Frequency (KHz)	Peak (dBμV)	QP (dBμV)	Average (dBμV)	QP-limit (dBμV)	AVG-limit (dBμV)	Margin (dB)
Line 1	222.000	48.15	---	---	63.94	53.94	-5.79
	300.000	44.16	---	---	61.71	51.71	-7.55
	373.000	42.44	---	---	59.63	49.63	-7.19
	509.000	39.66	---	---	56.00	46.00	-6.34
	1123.000	38.71	---	---	56.00	46.00	-7.29
	8520.000	42.62	---	---	60.00	50.00	-7.38
Line 2	185.000	51.03	---	---	65.00	55.00	-3.97
	222.000	48.19	---	---	63.94	53.94	-5.75
	447.000	40.15	---	---	57.51	47.51	-7.36
	745.000	40.15	---	---	56.00	46.00	-5.85
	998.000	39.39	---	---	56.00	46.00	-6.61
	8520.000	42.79	---	---	60.00	50.00	-7.21

***Test mode: IEEE 802.11g Channel 6 for Adapter#1 DVE***

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	224.000	48.41	---	---	63.89	53.89	-5.48
	485.000	39.71	---	---	56.43	46.43	-6.72
	752.000	38.01	---	---	56.00	46.00	-7.99
	1269.000	38.69	---	---	56.00	46.00	-7.31
	8520.000	42.46	---	---	60.00	50.00	-7.54
	10480.000	41.85	---	---	60.00	50.00	-8.15
Line 2	297.000	43.28	---	---	61.80	51.80	-8.52
	592.000	39.92	---	---	56.00	46.00	-6.08
	745.000	40.32	---	---	56.00	46.00	-5.68
	980.000	40.21	---	---	56.00	46.00	-5.79
	1411.000	38.20	---	---	56.00	46.00	-7.80
	8520.000	42.46	---	---	60.00	50.00	-7.54

***Test mode: IEEE 802.11g Channel 11 for Adapter#1 DVE***

<b>Power Connected Emissions</b>					<b>FCC Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	189.000	50.00	---	---	64.89	54.89	-4.89
	226.000	46.70	---	---	63.83	53.83	-7.13
	373.000	42.58	---	---	59.63	49.63	-7.05
	598.000	39.75	---	---	56.00	46.00	-6.25
	8520.000	42.72	---	---	60.00	50.00	-7.28
	10480.000	42.20	---	---	60.00	50.00	-7.80
Line 2	277.000	45.15	---	---	62.37	52.37	-7.22
	373.000	43.38	---	---	59.63	49.63	-6.25
	598.000	39.34	---	---	56.00	46.00	-6.66
	745.000	39.71	---	---	56.00	46.00	-6.29
	1783.000	38.32	---	---	56.00	46.00	-7.68
	8520.000	43.36	---	---	60.00	50.00	-6.64

*Test mode: Standby mode for Adapter#2 OEM*

Conductor	Power	Connected	Emissions		Class B		
	Frequency (KHz)	Peak (dB $\mu$ V)	QP (dB $\mu$ V)	Average (dB $\mu$ V)	QP-limit (dB $\mu$ V)	AVG-limit (dB $\mu$ V)	Margin (dB)
Line 1	166.000	50.11	---	---	65.54	55.54	-5.43
	563.000	40.35	---	---	56.00	46.00	-5.65
	809.000	40.83	---	---	56.00	46.00	-5.17
	1134.000	40.53	---	---	56.00	46.00	-5.47
	2094.000	41.57	---	---	56.00	46.00	-4.43
	4619.000	41.46	---	---	56.00	46.00	-4.54
Line 2	724.000	39.94	---	---	56.00	46.00	-6.06
	972.000	40.56	---	---	56.00	46.00	-5.44
	1372.000	41.46	---	---	56.00	46.00	-4.54
	1696.000	41.06	---	---	56.00	46.00	-4.94
	2029.000	41.10	---	---	56.00	46.00	-4.90
	3975.000	42.48	---	---	56.00	46.00	-3.52

**Test mode: IEEE 802.11b Channel 1 for Adapter#2 OEM**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	166.000	49.45	---	---	65.54	55.54	-6.09
	809.000	40.32	---	---	56.00	46.00	-5.68
	1372.000	40.39	---	---	56.00	46.00	-5.61
	2351.000	42.25	---	---	56.00	46.00	-3.75
	4619.000	41.17	---	---	56.00	46.00	-4.83
	9420.000	45.13	---	---	60.00	50.00	-4.87
Line 2	163.000	51.31	---	---	65.63	55.63	-4.32
	809.000	41.92	---	---	56.00	46.00	-4.08
	1134.000	40.51	---	---	56.00	46.00	-5.49
	2029.000	40.53	---	---	56.00	46.00	-5.47
	7190.000	43.90	---	---	60.00	50.00	-6.10
	10780.000	43.87	---	---	60.00	50.00	-6.13

**Test mode: IEEE 802.11b Channel 6 for Adapter#2 OEM**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	809.000	40.99	---	---	56.00	46.00	-5.01
	1451.000	40.97	---	---	56.00	46.00	-5.03
	2029.000	41.22	---	---	56.00	46.00	-4.78
	2663.000	42.25	---	---	56.00	46.00	-3.75
	4523.000	41.22	---	---	56.00	46.00	-4.78
	9420.000	45.31	---	---	60.00	50.00	-4.69
Line 2	161.000	50.78	---	---	65.69	55.69	-4.91
	563.000	40.99	---	---	56.00	46.00	-5.01
	809.000	41.95	---	---	56.00	46.00	-4.05
	1134.000	41.88	---	---	56.00	46.00	-4.12
	1783.000	40.80	---	---	56.00	46.00	-5.20
	4210.000	42.41	---	---	56.00	46.00	-3.59

**Test mode: IEEE 802.11b Channel 11 for Adapter#2 OEM**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	809.000	41.04	---	---	56.00	46.00	-4.96
	1451.000	40.42	---	---	56.00	46.00	-5.58
	1783.000	41.55	---	---	56.00	46.00	-4.45
	2663.000	42.30	---	---	56.00	46.00	-3.70
	3317.000	40.90	---	---	56.00	46.00	-5.10
	4210.000	40.83	---	---	56.00	46.00	-5.17
Line 2	163.000	50.55	---	---	65.63	55.63	-5.08
	809.000	41.50	---	---	56.00	46.00	-4.50
	1134.000	42.58	---	---	56.00	46.00	-3.42
	1451.000	41.20	---	---	56.00	46.00	-4.80
	2351.000	40.65	---	---	56.00	46.00	-5.35
	4210.000	41.53	---	---	56.00	46.00	-4.47

**Test mode: IEEE 802.11g Channel 1 for Adapter#2 OEM**

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	809.000	41.20	---	---	56.00	46.00	-4.80
	1134.000	41.27	---	---	56.00	46.00	-4.73
	1783.000	42.04	---	---	56.00	46.00	-3.96
	2094.000	42.32	---	---	56.00	46.00	-3.68
	2663.000	41.74	---	---	56.00	46.00	-4.26
	4523.000	40.85	---	---	56.00	46.00	-5.15
Line 2	563.000	40.70	---	---	56.00	46.00	-5.30
	809.000	41.90	---	---	56.00	46.00	-4.10
	1134.000	41.20	---	---	56.00	46.00	-4.80
	1372.000	41.55	---	---	56.00	46.00	-4.45
	1941.000	40.49	---	---	56.00	46.00	-5.51
	3858.000	42.46	---	---	56.00	46.00	-3.54

***Test mode: IEEE 802.11g Channel 6 for Adapter#2 OEM***

<b>Power Connected Emissions</b>					<b>Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	563.000	39.99	---	---	56.00	46.00	-6.01
	809.000	40.72	---	---	56.00	46.00	-5.28
	1134.000	41.69	---	---	56.00	46.00	-4.31
	2741.000	42.51	---	---	56.00	46.00	-3.49
	4131.000	40.53	---	---	56.00	46.00	-5.47
	6800.000	41.92	---	---	60.00	50.00	-8.08
Line 2	563.000	40.16	---	---	56.00	46.00	-5.84
	809.000	41.46	---	---	56.00	46.00	-4.54
	1134.000	41.78	---	---	56.00	46.00	-4.22
	1696.000	40.94	---	---	56.00	46.00	-5.06
	3975.000	42.88	---	---	56.00	46.00	-3.12
	9200.000	44.30	---	---	60.00	50.00	-5.70

***Test mode: IEEE 802.11g Channel 11 for Adapter#2 OEM***

<b>Power Connected Emissions</b>					<b>FCC Class B</b>		
<b>Conductor</b>	<b>Frequency (KHz)</b>	<b>Peak (dBμV)</b>	<b>QP (dBμV)</b>	<b>Average (dBμV)</b>	<b>QP-limit (dBμV)</b>	<b>AVG-limit (dBμV)</b>	<b>Margin (dB)</b>
Line 1	809.000	40.77	---	---	56.00	46.00	-5.23
	1783.000	41.71	---	---	56.00	46.00	-4.29
	2351.000	41.99	---	---	56.00	46.00	-4.01
	3004.000	42.07	---	---	56.00	46.00	-3.93
	4210.000	40.97	---	---	56.00	46.00	-5.03
	9420.000	46.72	---	---	60.00	50.00	-3.28
Line 2	163.000	50.71	---	---	65.63	55.63	-4.92
	809.000	41.83	---	---	56.00	46.00	-4.17
	1134.000	41.53	---	---	56.00	46.00	-4.47
	1372.000	41.67	---	---	56.00	46.00	-4.33
	1613.000	41.01	---	---	56.00	46.00	-4.99
	4053.000	42.88	---	---	56.00	46.00	-3.12

## **V. Section 15.247 (a): Technical description of the EUT**

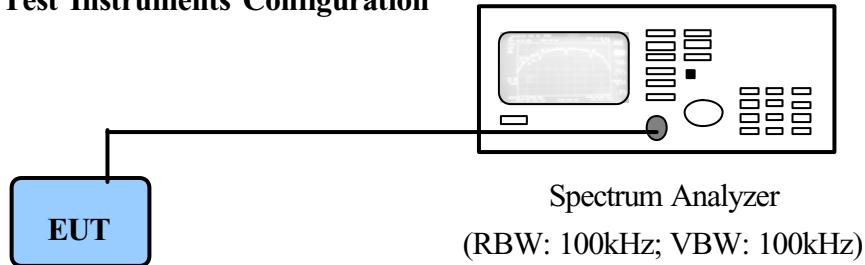
*Direct Sequence System* is a spread spectrum system in which the carrier has been modulated by a high speed spreading code and an information data stream. The high speed code sequence dominates the “modulating function” and is the direct cause of the wide spreading of the transmitted signal. In the operational description demonstrates the operation principles of the Baseband processor employed by the EUT, shows that which is a complete DSSS baseband processor and meets the definition of the direct sequence spread spectrum system.

## VI. Section 15.247(a)(2): Bandwidth for Direct Sequence System.

### 6.1 Test Condition & Setup

The transmitter bandwidth measurements were performed by the contact manner. The EUT was set to transmit continuously, also various channels were investigated to find the maximum occupied bandwidth. The output of the EUT was connected to the spectrum analyzer. The bandwidth of the fundamental frequency is observed by the spectrum analyzer with 100kHz RBW and 100kHz VBW.

### 6.2 Test Instruments Configuration



*PC to control the EUT at maximal power output and channel number and set antenna kit*

### 6.3 List of Test Instruments

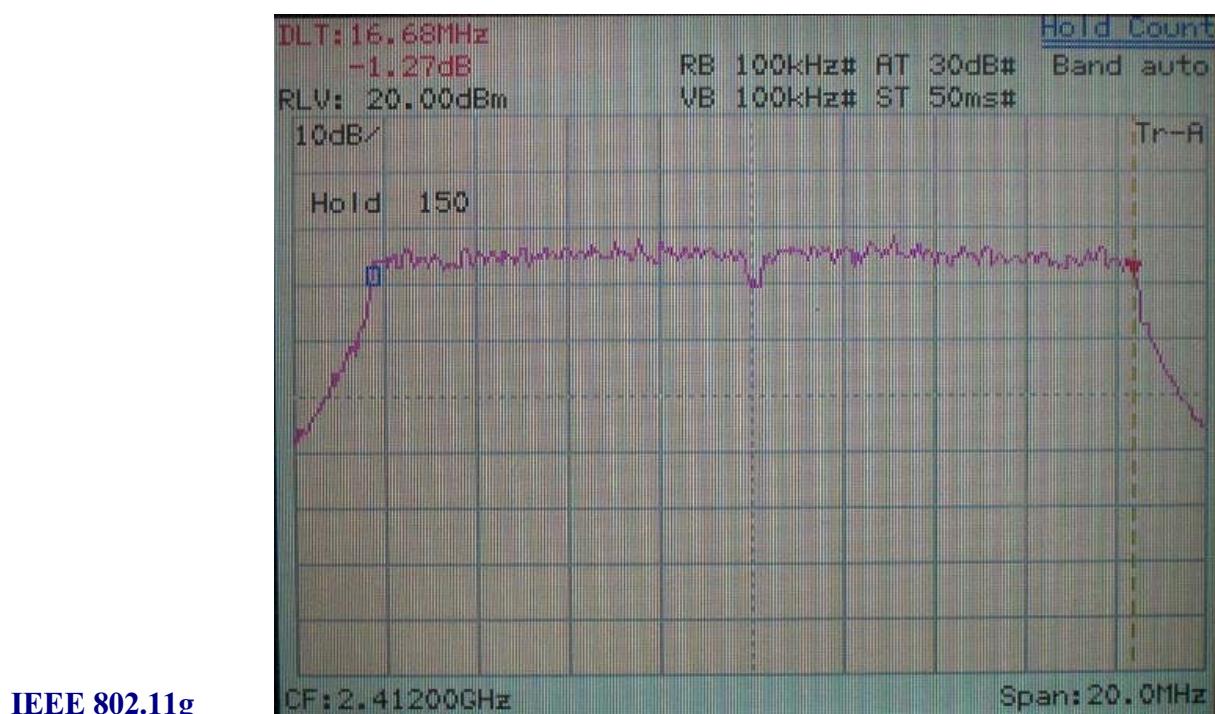
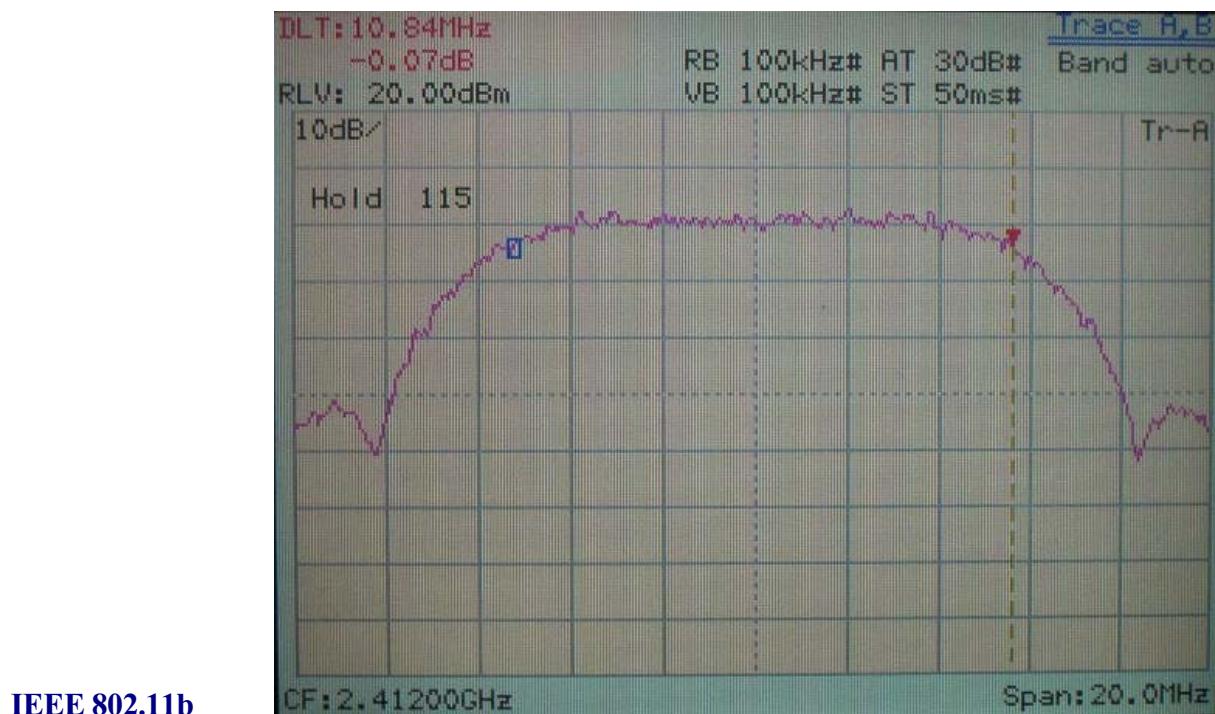
Instrument Name	Model No.	Brand	Serial No.	Next time
Spectrum Analyzer	MS2665C	ANRITSU	6200175476	11/15/06

### 6.4 Test Result of Bandwidth

Channel	802.11b	802.11g
01	10.84 MHz	16.68 MHz
06	10.96 MHz	16.76 MHz
11	11.08 MHz	16.80 MHz

Note: 1. The data in the above table are summarizing the following attachment spectrum analyzer hard copy. According to the guidance, we'd made the measurement with the spectrum analyzer's resolution bandwidth ( $RBW=100kHz$ ) and set the  $span>>RBW$ . The results show the measured 6dB bandwidth comply with the minimum 500kHz requirement.  
2. The attachments show these on the following pages.

**6dB Bandwidth of Channel 1 (The minimum 6dB BW at least 500kHz)**

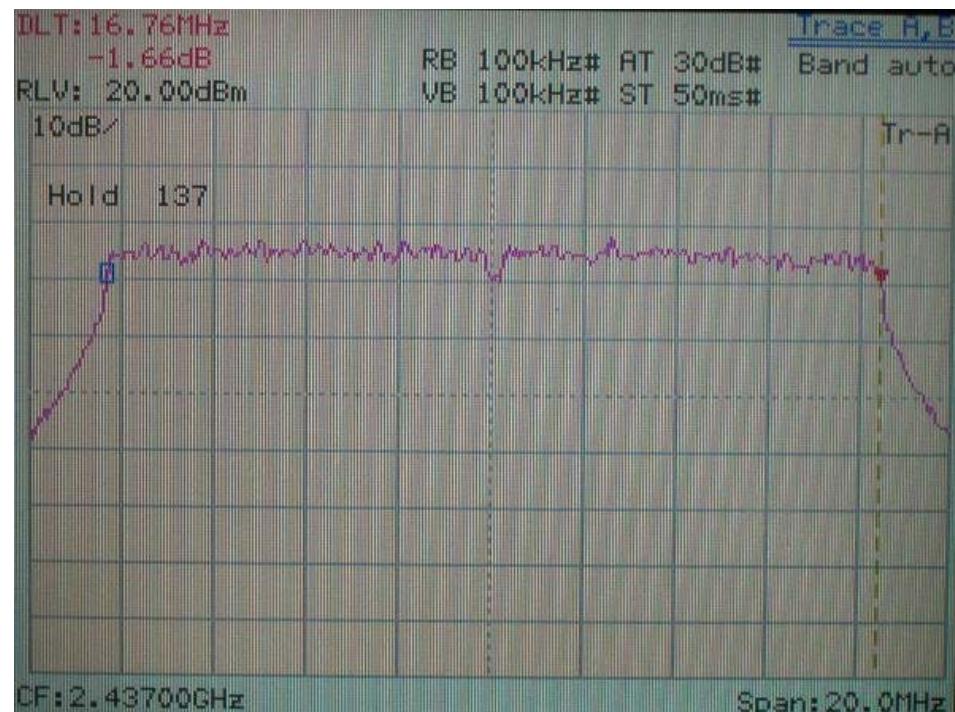


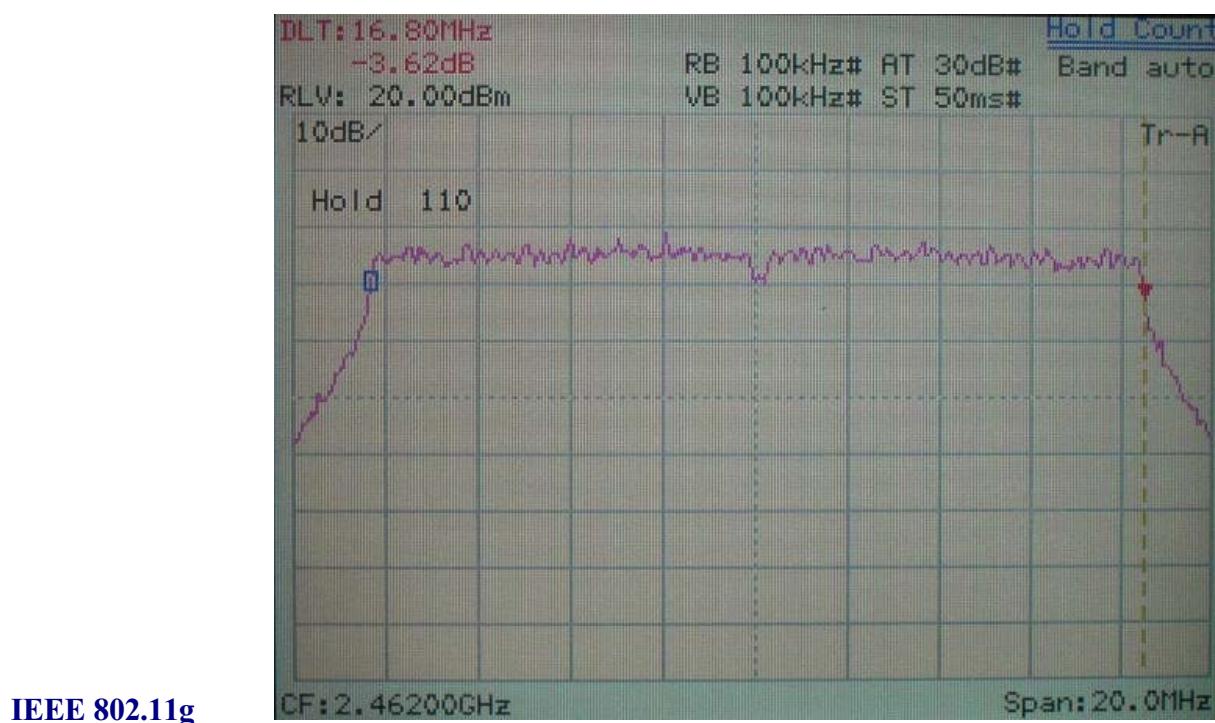
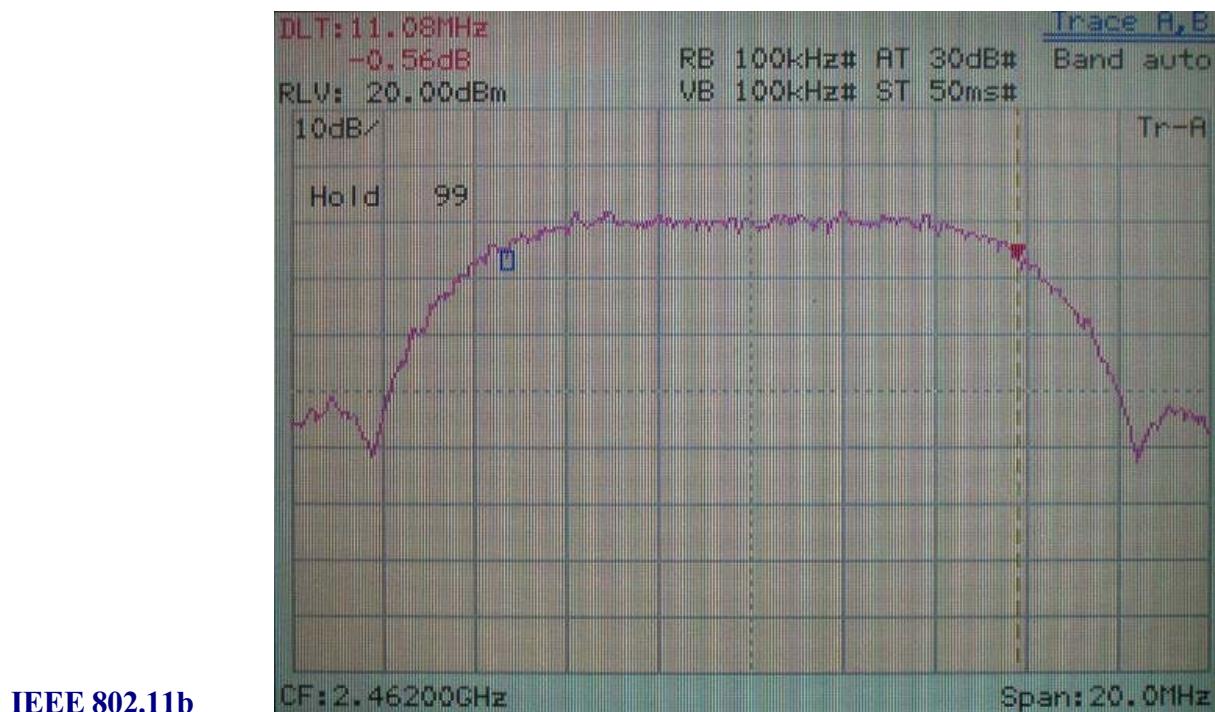
**6dB Bandwidth of Channel 6 (The minimum 6dB BW at least 500kHz)**

IEEE 802.11b



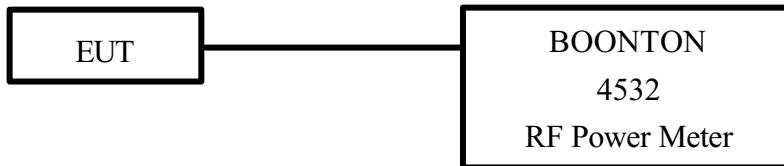
IEEE 802.11g



**6dB Bandwidth of Channel 11 (The minimum 6dB BW at least 500kHz)**

## VII. Section 15.247(b): Power Output

### 7.1 Test Condition & Setup



1. The output of the transmitter is connected to the BOONTON RF Power Meter.
2. The calibration is performed before every test. The values of the output power of the EUT will be shown in the dBm directly are the transmitter output peak power. Recording as follows.

### 7.2 List of Test Instruments

Instrument Name	Model	Brand	Serial No.	Next time
RF Power Meter	4532	BOONTON	117501	04/21/06
Peak Power Sensor	57340	BOONTON	2696	04/26/06

### 7.3 Test Result

#### Formula:

RF Output of EUT + |Cable Loss| = Output Peak Power

Channel	RF Output dBm	Cable Loss dBm	Output Peak Power	
			dBm	mW
802.11b CH01	18.06	1.00	19.06	80.54
802.11b CH06	18.01	1.00	19.01	79.62
802.11b CH11	17.15	1.00	18.15	65.31
802.11g CH01	18.87	1.00	19.87	97.05
802.11g CH06	18.29	1.00	19.29	84.92
802.11g CH11	18.86	1.00	19.86	96.83

## VIII. Section 15.247 (C): Spurious Emissions (Radiated)

### 8.1 Test Condition & Setup

We'd performed the test by the *radiated emission* skill: The EUT was placed in an anechoic chamber, and set the EUT transmitting continuously and scanned at 3-meter distance to determine its emission characteristics. The physical arrangement of the EUT 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, directivity, and frequency. The exact system configuration, which produced the highest emissions was noted so it could be reproduced later during the final tests. For the measurement above 1GHz, according to the guidance we'd set the spectrum analyzer's 6dB bandwidth RBW to 1MHz.

This was done to ensure that the final measurements would demonstrate the worst-case interference potential of the EUT.

Final radiation measurements were made on a three-meter, 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 30MHz to 1000MHz using an Hewlett Packard 85460A EMI Receiver, SCHWARZECK whole range Small Biconical Antenna (Model No.: UBAA9114 & BBVU9135) is used to measure frequency from 30 MHz to 1GHz. The final test is used the HP 85460A spectrum and 8564E spectrum was examined from 1GHz to 25GHz using an Hewlett Packard Spectrum Analyzer, EMCO/HP Horn Antenna (Model 3115 / 84125-80008) for 1G - 25GHz.

At each frequency, 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.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. There are two spectrum analyzers use on this testing, HP 85460A for frequency 30MHz to 1000MHz, and 8564E for frequency 1GHz to 25GHz. No post-detector video filters were used in the test. The spectrum analyzer's 6dB bandwidth was set to 120KHz (spectrum was examined from 30 MHz to 1000 MHz), the spectrum analyzer's 6 dB bandwidth was set to 1 MHz (spectrum was examined from 1GHz to 25GHz) and the analyzer was operated in the maximum hold mode. There is a test condition applies in this test item, the test procedure description as the following:

Three channels were tested, one in the top (CH01), one in the middle (CH06) and the other in bottom (CH11). The setting up procedure is recorded on <1.3>

With the transmitter operating from a AC source and using the internal of EUT, radiates spurious emissions falling within the restricted bands of 15.209 were measured at operating frequencies corresponding to upper, middle and bottom channels in the 2400 ~ 2483.5 MHz band.

The actual field intensity in decibels referenced to 1 microvolt per meter ( $\text{dB}\mu\text{V}/\text{m}$ ) is determined by algebraically adding the measured reading in  $\text{dB}\mu\text{V}$ , the antenna factor (dB), and cable loss (dB) at the appropriate frequency. Since the EUT was set to transmit continuously, no *duty cycle* is present.

**For frequency between 30MHz to 1000MHz**

$$F_{Ia} (\text{dB}\mu\text{V}/\text{m}) = F_{Ir} (\text{dB}\mu\text{V}) + \text{Correction Factors}$$

$F_{Ia}$  : Actual Field Intensity

$F_{Ir}$  : Reading of the Field Intensity

Correction Factors = Antenna Factor + (Cable Loss – Amplifier Gain) + Switching Box Loss

**For frequency between 1GHz to 25GHz**

$$F_{Ia} (\text{dB}\mu\text{V}/\text{m}) = F_{Ir} (\text{dB}\mu\text{V}) + \text{Correction Factor}$$

$F_{Ia}$  : Actual Field Intensity

$F_{Ir}$  : Reading of the Field Intensity

Correction Factors = Antenna Factor + (Cable Loss – Amplifier Gain) + Switching Box Loss

## 8.2 List of Test Instruments

<b>Instrument Name</b>	<b>Model</b>	<b>Brand</b>	<b>Serial No.</b>	<b>Calibration Date</b>
EMI Receiver	8546A	HP	3520A00242	06/01/06
RF Filter Section	85460A	HP	3448A00217	06/01/06
Small Biconical Antenna	UBAA9114 & BBVU9135	SCHWARZECK	127	08/17/06
Pre-amplifier	PA1F	TRC	1FAC	05/20/06
Auto Switch Box (>30MHz)	ASB-01	TRC	9904-01	05/20/06
Coaxial Cable (Double shielded, 15 meter)	A30A30-0058-50FS-15M	JYEBAO	SMA-01	05/20/06
Coaxial Cable (1.1 meter)	A30A30-0058-50FS-1M	JYEBAO	SMA-02	05/20/06
Spectrum Analyzer	8564E	HP	3720A00840	11/07/06
Microwave Preamplifier	84125C	HP	US36433002	11/07/06
Horn Antenna	3115	EMCO	9104-3668	12/27/05
Standard Guide Horn Antenna	84125-80008	HP	18-26.5GHz	01/15/06
Standard Guide Horn Antenna	84125-80001	HP	26.5-40GHz	01/15/06
Horn Antenna	1196E (3115)	HP (EMCO)	9704-5178	01/11/06
Pre-amplifier	PA2F	TRC	2F1GZ	06/20/06
Coaxial Cable (3 miter)	A30A30-0058-50FST118	JYEBAO	MSA-05	06/20/06
Coaxial Cable (1 meter)	A30A30-0058-50FST118	JYEBAO	MSA-04	06/20/06

### 8.3 Test Result of Spurious Radiated Emissions

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarizations, EUT orientation, etc. are recorded on the following.

Test Conditions: Temperature : 23 ° C Humidity : 68 % RH

*Test mode: Standby mode for 30MHz to 1GHz , Antenna#1 [Horizontal]*

<b>Radiated Emission</b>				<b>Correction Factors</b> (dB)	<b>Corrected Amplitude</b> (dB $\mu$ V/m)	<b>Class B (3 m)</b>	
<b>Frequency (MHz)</b>	<b>Amplitude (dB<math>\mu</math>V)</b>	<b>Ant. H. (m)</b>	<b>Table (°)</b>			<b>Limit (dB<math>\mu</math>V/m)</b>	<b>Margin (dB)</b>
300.39	43.04	1.00	281	-3.70	39.34	46.00	-6.66
384.00	42.48	1.00	329	-1.55	40.93	46.00	-5.07
401.02	40.66	1.00	256	-0.96	39.70	46.00	-6.30
512.00	37.36	1.00	298	3.41	40.77	46.00	-5.23
896.94	25.04	1.00	170	14.60	39.64	46.00	-6.36

*Test mode: Standby mode for 30MHz to 1GHz , Antenna#1 [Vertical]*

<b>Radiated Emission</b>				<b>Correction Factors</b> (dB)	<b>Corrected Amplitude</b> (dB $\mu$ V/m)	<b>Class B (3 m)</b>	
<b>Frequency (MHz)</b>	<b>Amplitude (dB<math>\mu</math>V)</b>	<b>Ant. H. (m)</b>	<b>Table (°)</b>			<b>Limit (dB<math>\mu</math>V/m)</b>	<b>Margin (dB)</b>
37.61	24.32	1.00	121	6.10	30.42	40.00	-9.58
59.22	30.49	1.00	37	2.33	32.82	40.00	-7.18
513.18	34.41	1.00	225	3.46	37.87	46.00	-8.13
704.15	27.72	1.00	40	9.65	37.37	46.00	-8.63
767.81	27.82	1.00	55	10.84	38.66	46.00	-7.34
896.00	26.60	1.00	291	14.57	41.17	46.00	-4.83

Note:

1. Margin = Amplitude – limit, if margin is minus means under limit.
2. Corrected Amplitude = Reading Amplitude + Correction Factors
3. Correction factor = Antenna factor + (Cable Loss – Amplitude gain) + Switching Box Loss

**Test mode: Standby mode for 1GHz to 25GHz , Antenna#1 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1637.50	1.00	261	38.41	---	0.43	38.84	---
3174.58	1.00	227	31.74	---	9.58	41.32	---
5717.50	1.00	91	27.07	---	17.45	44.52	---
11178.75	1.00	30	26.74	---	21.96	48.70	---
23128.33	1.00	154	47.33	---	3.60	50.93	---

**Test mode: Standby mode for 1GHz to 25GHz , Antenna#1 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1637.50	1.00	235	39.24	---	0.43	39.67	---
3287.92	1.00	229	31.91	---	9.82	41.73	---
7219.17	1.00	229	25.41	---	21.40	46.81	---
13771.25	1.00	312	31.91	---	19.65	51.56	---
22653.75	1.00	36	46.67	---	3.82	50.49	---

Note:

1. Margin = Corrected - Limit.
2. The EUT utilizes a *permanently attached antenna*. In addition the spurious RF radiated emissions levels do comply with the *20dBc limit* both at its bandedges and other spurious emissions.
3. As stated in Section 15.35(b), for any frequencies above 1000MHz, radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. As the results of our test, the peak amplitudes are already below the FCC limit. Thus the average amplitudes of the rest are omitted.

***Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz , Antenna#1 [Horizontal]***

<i>Radiated Emission</i>				<i>Correction Factors</i> (dB)	<i>Corrected Amplitude</i> (dB $\mu$ V/m)	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dB<math>\mu</math>V)</i>	<i>Ant. H. (m)</i>	<i>Table (°)</i>			<i>Limit (dB<math>\mu</math>V/m)</i>	<i>Margin (dB)</i>
63.95	26.90	1.00	281	1.87	28.77	40.00	-11.23
259.16	39.59	1.00	241	-4.20	35.39	46.00	-10.61
300.02	46.30	1.00	256	-3.71	42.59	46.00	-3.41
384.00	41.26	1.00	11	-1.55	39.71	46.00	-6.29
512.00	38.40	1.00	292	3.41	41.81	46.00	-4.19
896.94	25.27	1.00	175	14.60	39.87	46.00	-6.13

***Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz , Antenna#1 [Vertical]***

<i>Radiated Emission</i>				<i>Correction Factors</i> (dB)	<i>Corrected Amplitude</i> (dB $\mu$ V/m)	<i>Class B (3 m)</i>	
<i>Frequency (MHz)</i>	<i>Amplitude (dB<math>\mu</math>V)</i>	<i>Ant. H. (m)</i>	<i>Table (°)</i>			<i>Limit (dB<math>\mu</math>V/m)</i>	<i>Margin (dB)</i>
37.03	23.86	1.00	227	6.18	30.04	40.00	-9.96
60.31	31.81	1.00	54	2.19	34.00	40.00	-6.00
512.00	36.67	1.00	216	3.41	40.08	46.00	-5.92
768.41	27.72	1.00	327	10.85	38.57	46.00	-7.43
896.00	26.26	1.00	320	14.57	40.83	46.00	-5.17

**Test mode: IEEE 802.11b CH01 for 1GHz to 25GHz , Antenna#1 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1608.01	1.00	249	38.49	35.00	14.21	52.70	49.21	73.96	53.96	-4.75
3135.42	1.00	193	34.50	---	11.08	45.58	---	73.96	53.96	-8.38
7233.75	1.00	286	36.11	---	10.07	46.18	---	73.96	53.96	-7.78
9650.42	1.00	266	35.11	---	11.47	46.58	---	73.96	53.96	-7.38
12061.04	1.00	99	38.27	---	9.81	48.08	---	73.96	53.96	-5.88

**Test mode: IEEE 802.11b CH01 for 1GHz to 25GHz , Antenna#1 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1608.00	1.00	238	38.66	34.50	14.21	52.87	48.71	73.96	53.96	-5.25
2345.17	1.00	168	40.50	---	9.06	49.56	---	73.96	53.96	-4.40
2599.00	1.00	7	37.50	---	9.68	47.18	---	73.96	53.96	-6.78
2895.65	1.00	154	34.84	---	10.23	45.07	---	73.96	53.96	-8.89
3114.95	1.00	52	35.67	---	10.98	46.65	---	73.96	53.96	-7.31
9650.42	1.00	331	36.27	---	11.47	47.74	---	73.96	53.96	-6.22

**Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz , Antenna#1 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
300.02	46.04	1.00	277	-3.71	42.33	46.00	-3.67
384.00	40.90	1.00	191	-1.55	39.35	46.00	-6.65
470.14	35.16	1.00	256	1.77	36.93	46.00	-9.07
515.00	35.11	1.00	281	3.53	38.64	46.00	-7.36
896.94	25.04	1.00	211	14.60	39.64	46.00	-6.36

**Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz , Antenna#1 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
36.83	24.90	1.00	151	6.20	31.10	40.00	-8.90
61.52	31.23	1.00	292	2.09	33.32	40.00	-6.68
515.00	33.19	1.00	216	3.53	36.72	46.00	-9.28
768.41	28.55	1.00	327	10.85	39.40	46.00	-6.60
896.00	26.22	1.00	320	14.57	40.79	46.00	-5.21

**Test mode: IEEE 802.11b CH06 for 1GHz to 25GHz , Antenna#1 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1624.68	1.00	4	38.17	34.83	13.94	52.11	48.77
2943.75	1.00	87	34.84	---	10.32	45.16	---
7312.29	1.00	246	35.44	---	10.30	45.74	---
9747.08	1.00	270	36.77	---	11.89	48.66	---
12187.92	1.00	247	38.77	---	9.74	48.51	---

**Test mode: IEEE 802.11b CH06 for 1GHz to 25GHz , Antenna#1 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1624.66	1.00	234	38.32	34.83	13.95	52.27	48.78
2036.00	1.00	126	35.83	---	8.19	44.02	---
2366.17	1.00	191	39.66	---	9.12	48.78	---
3015.50	1.00	203	36.50	---	10.50	47.00	---
9747.08	1.00	113	35.77	---	11.89	47.66	---
12187.92	1.00	138	39.10	---	9.74	48.84	---

**Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz , Antenna#1 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
259.16	39.59	1.00	252	-4.20	35.39	46.00	-10.61
300.02	46.28	1.00	256	-3.71	42.57	46.00	-3.43
384.00	41.31	1.00	191	-1.55	39.76	46.00	-6.24
512.00	38.50	1.00	162	3.41	41.91	46.00	-4.09
896.94	25.11	1.00	175	14.60	39.71	46.00	-6.29

**Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz , Antenna#1 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
37.03	23.84	1.00	11	6.18	30.02	40.00	-9.98
302.81	25.42	1.00	356	2.89	28.31	40.00	-11.69
641.10	29.11	1.00	320	8.14	37.25	46.00	-8.75
768.41	27.14	1.00	320	10.85	37.99	46.00	-8.01
896.00	26.29	1.00	313	14.57	40.86	46.00	-5.14

**Test mode: IEEE 802.11b CH11 for 1GHz to 25GHz , Antenna#1 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1641.34	1.00	25	38.66	35.67	13.69	52.35	49.36	73.96	53.96	-4.60
3125.00	1.00	132	34.83	---	11.03	45.86	---	73.96	53.96	-8.10
9849.79	1.00	26	35.61	---	11.93	47.54	---	73.96	53.96	-6.42
12308.75	1.00	224	38.44	---	9.56	48.00	---	73.96	53.96	-5.96
19696.46	1.00	5	47.24	---	1.81	49.05	---	73.96	53.96	-4.91

**Test mode: IEEE 802.11b CH11 for 1GHz to 25GHz , Antenna#1 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1641.34	1.00	245	38.32	34.67	13.69	52.01	48.36	73.96	53.96	-5.60
2327.67	1.00	174	38.00	---	9.01	47.01	---	73.96	53.96	-6.95
2693.35	1.00	40	34.67	---	9.85	44.52	---	73.96	53.96	-9.44
3013.80	1.00	158	36.50	---	10.50	47.00	---	73.96	53.96	-6.96
3280.70	1.00	235	36.16	---	11.78	47.94	---	73.96	53.96	-6.02
9849.79	1.00	245	35.44	---	11.93	47.37	---	73.96	53.96	-6.59

**Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz , Antenna#1 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
97.90	34.63	1.00	313	-1.05	33.58	43.50	-9.92
300.02	46.04	1.00	263	-3.71	42.33	46.00	-3.67
384.00	41.29	1.00	331	-1.55	39.74	46.00	-6.26
512.00	38.54	1.00	194	3.41	41.95	46.00	-4.05
896.94	25.36	1.00	175	14.60	39.96	46.00	-6.04

**Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz , Antenna#1 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
36.84	24.26	1.00	97	6.20	30.46	40.00	-9.54
30.31	31.69	1.00	302	2.19	33.88	40.00	-6.12
705.36	26.96	1.00	40	9.67	36.63	46.00	-9.37
768.41	27.86	1.00	320	10.85	38.71	46.00	-7.29
896.00	26.15	1.00	335	14.57	40.72	46.00	-5.28

Test mode: IEEE 802.11g CH01 for 1GHz to 25GHz , Antenna#1 [Horizontal]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1608.00	1.00	254	38.16	35.00	14.21	52.37	49.21	73.96	53.96	-4.75
2787.50	1.00	0	34.33	---	10.03	44.36	---	73.96	53.96	-9.60
7233.75	1.00	271	35.78	---	10.07	45.85	---	73.96	53.96	-8.11
9650.42	1.00	330	35.11	---	11.47	46.58	---	73.96	53.96	-7.38
12061.04	1.00	287	37.94	---	9.81	47.75	---	73.96	53.96	-6.21

Test mode: IEEE 802.11g CH01 for 1GHz to 25GHz , Antenna#1 [Vertical]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1608.00	1.00	254	37.82	34.33	14.21	52.03	48.54	73.96	53.96	-5.42
2843.75	1.00	146	34.33	---	10.14	44.47	---	73.96	53.96	-9.49
7233.75	1.00	195	35.78	---	10.07	45.85	---	73.96	53.96	-8.11
9650.42	1.00	0	34.94	---	11.47	46.41	---	73.96	53.96	-7.55
12061.04	1.00	201	38.27	---	9.81	48.08	---	73.96	53.96	-5.88

**Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz , Antenna#1 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
99.11	35.02	1.00	0	-1.15	33.87	43.50	-9.63
300.02	46.11	1.00	256	-3.71	42.40	46.00	-3.60
387.69	41.07	1.00	169	-1.43	39.64	46.00	-6.36
515.00	35.57	1.00	162	3.53	39.10	46.00	-6.90
896.94	24.79	1.00	175	14.60	39.39	46.00	-6.61

**Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz , Antenna#1 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
36.69	22.81	1.00	97	6.22	29.03	40.00	-10.97
60.31	31.51	1.00	335	2.19	33.70	40.00	-6.30
515.00	33.75	1.00	205	3.53	37.28	46.00	-8.72
768.41	27.53	1.00	335	10.85	38.38	46.00	-7.62
896.00	26.26	1.00	269	14.57	40.83	46.00	-5.17

*Test mode: IEEE 802.11g CH06 for 1GHz to 25GHz , Antenna#1 [Horizontal]*

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>	<i>dB/m</i>	<i>dBμV/m</i>	<i>dBμV/m</i>	<i>dB</i>
1624.67	1.00	275	38.16	34.33	13.95	52.11	48.28
3062.50	1.00	314	36.00	---	10.73	46.73	---
9747.08	1.00	77	35.77	---	11.89	47.66	---
12187.92	1.00	248	39.44	---	9.74	49.18	---
21934.79	1.00	220	45.90	---	3.09	48.99	---

*Test mode: IEEE 802.11g CH06 for 1GHz to 25GHz , Antenna#1 [Vertical]*

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>	<i>dB/m</i>	<i>dBμV/m</i>	<i>dBμV/m</i>	<i>dB</i>
1625.00	1.00	237	38.17	---	13.94	52.11	---
2814.58	1.00	122	34.17	---	10.08	44.25	---
4871.46	1.00	38	38.10	---	3.95	42.05	---
7312.29	1.00	276	35.77	---	10.30	46.07	---
9747.08	1.00	78	35.10	---	11.89	46.99	---
12187.92	1.00	360	39.77	---	9.74	49.51	---

**Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz , Antenna#1 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
97.90	34.80	1.00	122	-1.05	33.75	43.50	-9.75
300.02	46.28	1.00	263	-3.71	42.57	46.00	-3.43
403.45	38.39	1.00	137	-0.86	37.53	46.00	-8.47
515.00	36.22	1.00	292	3.53	39.75	46.00	-6.25
896.94	25.29	1.00	175	14.60	39.89	46.00	-6.11

**Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz , Antenna#1 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
36.01	20.94	1.00	97	6.31	27.25	40.00	-12.75
59.20	30.00	1.00	4	2.33	32.33	40.00	-7.67
508.94	31.87	1.00	216	3.28	35.15	46.00	-10.85
601.09	27.68	1.00	280	6.71	34.39	46.00	-11.61
768.41	27.18	1.00	349	10.85	38.03	46.00	-7.97
896.00	26.22	1.00	335	14.57	40.79	46.00	-5.21

**Test mode: IEEE 802.11g CH11 for 1GHz to 25GHz , Antenna#1 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1641.33	1.00	3	38.32	35.00	13.69	52.01	48.69
3025.00	1.00	298	34.67	---	10.55	45.22	---
7384.79	1.00	300	35.44	---	10.42	45.86	---
9849.79	1.00	138	35.61	---	11.93	47.54	---
12308.75	1.00	5	37.94	---	9.56	47.50	---

**Test mode: IEEE 802.11g CH11 for 1GHz to 25GHz , Antenna#1 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1641.34	1.00	256	38.49	35.50	13.69	52.18	48.19
2891.67	1.00	327	35.33	---	10.23	45.56	---
4925.83	1.00	211	38.94	---	4.13	43.07	---
9849.79	1.00	335	35.78	---	11.93	47.71	---
12308.75	1.00	180	37.77	---	9.56	47.33	---

*Test mode: Standby mode for 30MHz to 1GHz , Antenna#2 [Horizontal]*

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
257.34	41.56	1.00	143	-4.16	37.40	46.00	-8.60
332.52	42.71	1.00	239	-3.07	39.64	46.00	-6.36
384.00	42.92	1.00	31	-1.55	41.37	46.00	-4.63
513.18	36.41	1.00	69	3.46	39.87	46.00	-6.13
896.00	26.03	1.00	41	14.57	40.60	46.00	-5.40

*Test mode: Standby mode for 30MHz to 1GHz , Antenna#2 [Vertical]*

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
94.26	37.28	1.00	213	-0.76	36.52	43.50	-6.98
167.01	37.89	1.00	42	-3.69	34.20	43.50	-9.30
376.17	39.43	1.00	208	-1.82	37.61	46.00	-8.39
400.42	37.70	1.00	76	-0.98	36.72	46.00	-9.28
768.00	29.14	1.00	10	10.84	39.98	46.00	-6.02
896.00	28.06	1.00	357	14.57	42.63	46.00	-3.37

*Test mode: Standby mode for 1GHz to 25GHz , Antenna#2 [Horizontal]*

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
4043.75	1.00	314	30.91	---	12.57	43.48	---
5880.42	1.00	294	26.41	---	17.71	44.12	---
8907.29	1.00	163	24.74	---	23.03	47.77	---
13873.54	1.00	87	31.58	---	18.94	50.52	---
23138.96	1.00	205	47.17	---	3.60	50.77	---

*Test mode: Standby mode for 1GHz to 25GHz , Antenna#2 [Vertical]*

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
4327.71	1.00	333	30.08	---	12.96	43.04	---
6569.17	1.00	240	25.90	---	19.07	44.97	---
10466.04	1.00	170	26.41	---	22.28	48.69	---
13776.87	1.00	298	31.58	---	19.61	51.19	---
22883.96	1.00	356	47.83	---	3.51	51.34	---

**Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
332.52	41.64	1.00	240	-3.07	38.57	46.00	-7.43
384.00	43.18	1.00	343	-1.55	41.63	46.00	-4.37
512.00	36.51	1.00	72	3.41	39.92	46.00	-6.08
768.41	25.75	1.00	304	10.85	36.60	46.00	-9.40
896.00	26.39	1.00	160	14.57	40.96	46.00	-5.04

**Test mode: IEEE 802.11b CH01 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
90.62	36.76	1.00	143	-0.47	36.29	43.50	-7.21
376.17	39.38	1.00	180	-1.82	37.56	46.00	-8.44
401.02	38.14	1.00	83	-0.96	37.18	46.00	-8.82
768.00	28.88	1.00	7	10.84	39.72	46.00	-6.28
896.00	28.18	1.00	281	14.57	42.75	46.00	-3.25

**Test mode: IEEE 802.11b CH01 for 1GHz to 25GHz , Antenna#2 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1607.99	1.00	57	39.32	36.33	14.21	53.53	50.54
2941.67	1.00	252	35.67	---	10.32	45.99	---
7233.75	1.00	279	35.61	---	10.07	45.68	---
9650.42	1.00	96	35.11	---	11.47	46.58	---
12061.04	1.00	75	37.10	---	9.81	46.91	---

**Test mode: IEEE 802.11b CH01 for 1GHz to 25GHz , Antenna#2 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>
1608.33	1.00	78	37.50	---	14.20	51.70	---
2858.33	1.00	242	34.84	---	10.16	45.00	---
7233.75	1.00	58	35.94	---	10.07	46.01	---
9650.42	1.00	3	36.27	---	11.47	47.74	---
12061.04	1.00	51	37.10	---	9.81	46.91	---

**Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
332.52	42.41	1.00	250	-3.07	39.34	46.00	-6.66
384.00	43.08	1.00	27	-1.55	41.53	46.00	-4.47
512.00	36.52	1.00	51	3.41	39.93	46.00	-6.07
767.81	26.08	1.00	308	10.84	36.92	46.00	-9.08
896.00	26.39	1.00	97	14.57	40.96	46.00	-5.04

**Test mode: IEEE 802.11b CH06 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
96.02	33.90	1.00	353	-0.90	33.00	43.50	-10.50
376.17	39.13	1.00	187	-1.82	37.31	46.00	-8.69
640.49	28.31	1.00	325	8.12	36.43	46.00	-9.57
768.00	28.99	1.00	360	10.84	39.83	46.00	-6.17
896.00	28.09	1.00	298	14.57	42.66	46.00	-3.34

**Test mode: IEEE 802.11b CH06 for 1GHz to 25GHz , Antenna#2 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>	<i>dB/m</i>	<i>dBμV/m</i>	<i>dBμV/m</i>	<i>dB</i>			
1624.66	1.00	174	38.82	36.50	13.95	52.77	50.45	73.96	53.96	-3.51
3016.67	1.00	301	34.67	---	10.51	45.18	---	73.96	53.96	-8.78
7312.29	1.00	168	36.11	---	10.30	46.41	---	73.96	53.96	-7.55
9747.08	1.00	139	35.44	---	11.89	47.33	---	73.96	53.96	-6.63
12187.92	1.00	211	39.27	---	9.74	49.01	---	73.96	53.96	-4.95

**Test mode: IEEE 802.11b CH06 for 1GHz to 25GHz , Antenna#2 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<i>MHz</i>	<i>m</i>	<i>degree</i>	<i>dBμV</i>	<i>dB/m</i>	<i>dBμV/m</i>	<i>dBμV/m</i>	<i>dB</i>			
1625.00	1.00	128	37.17	---	13.94	51.11	---	73.96	53.96	-2.85
3197.92	1.00	353	34.67	---	11.38	46.05	---	73.96	53.96	-7.91
9747.08	1.00	65	35.10	---	11.89	46.99	---	73.96	53.96	-6.97
12187.92	1.00	252	39.60	---	9.74	49.34	---	73.96	53.96	-4.62
21934.79	1.00	278	46.10	---	3.09	49.19	---	73.96	53.96	-4.77

**Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
333.12	39.84	1.00	190	-3.06	36.78	46.00	-9.22
384.00	43.38	1.00	350	-1.55	41.83	46.00	-4.17
512.00	36.66	1.00	340	3.41	40.07	46.00	-5.93
768.41	25.63	1.00	305	10.85	36.48	46.00	-9.52
896.00	26.73	1.00	80	14.57	41.30	46.00	-4.70

**Test mode: IEEE 802.11b CH11 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
94.87	37.97	1.00	185	-0.81	37.16	43.50	-6.34
375.56	38.94	1.00	202	-1.85	37.09	46.00	-8.91
401.02	38.19	1.00	86	-0.96	37.23	46.00	-8.77
640.49	29.61	1.00	325	8.12	37.73	46.00	-8.27
768.00	29.04	1.00	346	10.84	39.88	46.00	-6.12
896.00	28.13	1.00	298	14.57	42.70	46.00	-3.30

**Test mode: IEEE 802.11b CH11 for 1GHz to 25GHz , Antenna#2 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1641.32	1.00	163	39.66	36.50	13.69	53.35	50.19	73.96	53.96	-3.77
2789.58	1.00	123	34.84	---	10.03	44.87	---	73.96	53.96	-9.09
7384.79	1.00	107	34.28	---	10.42	44.70	---	73.96	53.96	-9.26
9849.79	1.00	212	35.28	---	11.93	47.21	---	73.96	53.96	-6.75
12308.75	1.00	255	37.94	---	9.56	47.50	---	73.96	53.96	-6.46

**Test mode: IEEE 802.11b CH11 for 1GHz to 25GHz , Antenna#2 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1641.33	1.00	128	38.99	35.83	13.69	52.68	49.52	73.96	53.96	-4.44
3129.17	1.00	166	34.83	---	11.05	45.88	---	73.96	53.96	-8.08
9849.79	1.00	5	34.78	---	11.93	46.71	---	73.96	53.96	-7.25
12308.75	1.00	23	36.11	---	9.56	45.67	---	73.96	53.96	-8.29
24619.37	1.00	181	47.57	---	3.01	50.58	---	73.96	53.96	-3.38

**Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
257.34	41.46	1.00	140	-4.16	37.30	46.00	-8.70
384.00	43.33	1.00	31	-1.55	41.78	46.00	-4.22
513.18	36.74	1.00	339	3.46	40.20	46.00	-5.80
768.41	26.55	1.00	305	10.85	37.40	46.00	-8.60
896.00	26.62	1.00	163	14.57	41.19	46.00	-4.81

**Test mode: IEEE 802.11g CH01 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
96.69	38.37	1.00	28	-0.96	37.41	43.50	-6.09
376.17	39.55	1.00	195	-1.82	37.73	46.00	-8.27
640.49	30.77	1.00	10	8.12	38.89	46.00	-7.11
768.00	29.19	1.00	353	10.84	40.03	46.00	-5.97
896.00	27.99	1.00	31	14.57	42.56	46.00	-3.44

Test mode: IEEE 802.11g CH01 for 1GHz to 25GHz , Antenna#2 [Horizontal]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1607.98	1.00	66	39.32	34.00	14.21	53.53	48.21	73.96	53.96	-5.75
2047.92	1.00	120	38.50	---	8.22	46.72	---	73.96	53.96	-7.24
2852.08	1.00	261	35.34	---	10.15	45.49	---	73.96	53.96	-8.47
9650.42	1.00	250	35.27	---	11.47	46.74	---	73.96	53.96	-7.22
12061.04	1.00	260	37.44	---	9.81	47.25	---	73.96	53.96	-6.71

Test mode: IEEE 802.11g CH01 for 1GHz to 25GHz , Antenna#2 [Vertical]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1608.00	1.00	9	38.32	32.67	14.21	52.53	46.88	73.96	53.96	-7.08
2983.33	1.00	145	34.83	---	10.40	45.23	---	73.96	53.96	-8.73
7233.75	1.00	235	36.11	---	10.07	46.18	---	73.96	53.96	-7.78
9650.42	1.00	158	36.77	---	11.47	48.24	---	73.96	53.96	-5.72
12061.04	1.00	166	39.10	---	9.81	48.91	---	73.96	53.96	-5.05

**Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
333.12	41.44	1.00	237	-3.06	38.38	46.00	-7.62
384.00	43.33	1.00	339	-1.55	41.78	46.00	-4.22
513.18	36.12	1.00	65	3.46	39.58	46.00	-6.42
768.41	25.83	1.00	312	10.85	36.68	46.00	-9.32
896.00	26.42	1.00	100	14.57	40.99	46.00	-5.01

**Test mode: IEEE 802.11g CH06 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
96.08	38.78	1.00	241	-0.91	37.87	43.50	-5.63
376.17	39.94	1.00	189	-1.82	38.12	46.00	-7.88
640.49	30.24	1.00	329	8.12	38.36	46.00	-7.64
768.00	29.15	1.00	7	10.84	39.99	46.00	-6.01
896.00	28.09	1.00	294	14.57	42.66	46.00	-3.34

**Test mode: IEEE 802.11g CH06 for 1GHz to 25GHz , Antenna#2 [Horizontal]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1624.68	1.00	68	39.00	34.17	13.94	52.94	48.11	73.96	53.96	-5.85
2047.92	1.00	117	38.00	---	8.22	46.22	---	73.96	53.96	-7.74
2952.08	1.00	121	35.50	---	10.34	45.84	---	73.96	53.96	-8.12
9747.08	1.00	232	35.27	---	11.89	47.16	---	73.96	53.96	-6.80
12187.92	1.00	292	38.94	---	9.74	48.68	---	73.96	53.96	-5.28

**Test mode: IEEE 802.11g CH06 for 1GHz to 25GHz , Antenna#2 [Vertical]**

<b>Frequency</b>	<b>Ant. H.</b>	<b>Table</b>	<b>Amplitude</b>	<b>Correction Factor</b>	<b>Corrected Amplitude</b>	<b>Limit</b>	<b>Margin</b>			
<b>MHz</b>	<b>m</b>	<b>degree</b>	<b>dB<math>\mu</math>V</b>	<b>dB/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB<math>\mu</math>V/m</b>	<b>dB</b>			
1625.00	1.00	106	37.50	---	13.94	51.44	---	73.96	53.96	-2.52
3006.25	1.00	0	35.17	---	10.46	45.63	---	73.96	53.96	-8.33
7312.29	1.00	165	35.94	---	10.30	46.24	---	73.96	53.96	-7.72
9747.08	1.00	58	35.27	---	11.89	47.16	---	73.96	53.96	-6.80
12187.92	1.00	30	39.94	---	9.74	49.68	---	73.96	53.96	-4.28

**Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz , Antenna#2 [Horizontal]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
256.74	42.89	1.00	148	-4.15	38.74	46.00	-7.26
384.00	43.33	1.00	360	-1.55	41.78	46.00	-4.22
512.00	36.81	1.00	159	3.41	40.22	46.00	-5.78
768.41	25.33	1.00	305	10.85	36.18	46.00	-9.82
896.00	26.37	1.00	107	14.57	40.94	46.00	-5.06

**Test mode: IEEE 802.11g CH11 for 30MHz to 1GHz , Antenna#2 [Vertical]**

Radiated Emission				Correction Factors (dB)	Corrected Amplitude (dB $\mu$ V/m)	Class B (3 m)	
Frequency (MHz)	Amplitude (dB $\mu$ V)	Ant. H. (m)	Table (°)			Limit (dB $\mu$ V/m)	Margin (dB)
96.08	37.94	1.00	217	-0.91	37.03	43.50	-6.47
376.17	39.57	1.00	195	-1.82	37.75	46.00	-8.25
401.02	38.37	1.00	79	-0.96	37.41	46.00	-8.59
768.00	29.12	1.00	3	10.84	39.96	46.00	-6.04
896.00	28.06	1.00	336	14.57	42.63	46.00	-3.37

Test mode: IEEE 802.11g CH11 for 1GHz to 25GHz , Antenna#2 [Horizontal]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1641.32	1.00	175	38.99	34.33	13.69	52.68	48.02	73.96	53.96	-5.94
2047.92	1.00	122	39.34	---	8.22	47.56	---	73.96	53.96	-6.40
2958.33	1.00	199	34.34	---	10.35	44.69	---	73.96	53.96	-9.27
9849.79	1.00	153	35.28	---	11.93	47.21	---	73.96	53.96	-6.75
12308.75	1.00	176	37.94	---	9.56	47.50	---	73.96	53.96	-6.46

Test mode: IEEE 802.11g CH11 for 1GHz to 25GHz , Antenna#2 [Vertical]

Frequency	Ant. H.	Table	Amplitude Peak / Ave.	Correction Factor	Corrected Amplitude Peak / Ave.	Limit Peak / Ave.	Margin			
MHz	m	degree	dB $\mu$ V	dB/m	dB $\mu$ V/m	dB $\mu$ V/m	dB			
1641.33	1.00	120	39.82	33.50	13.69	53.51	47.19	73.96	53.96	-6.77
2927.08	1.00	209	36.00	---	10.29	46.29	---	73.96	53.96	-7.67
4925.83	1.00	350	38.27	---	4.13	42.40	---	73.96	53.96	-11.56
9849.79	1.00	330	35.11	---	11.93	47.04	---	73.96	53.96	-6.92
12308.75	1.00	341	36.61	---	9.56	46.17	---	73.96	53.96	-7.79
24619.37	1.00	189	47.98	---	3.01	50.99	---	73.96	53.96	-2.97

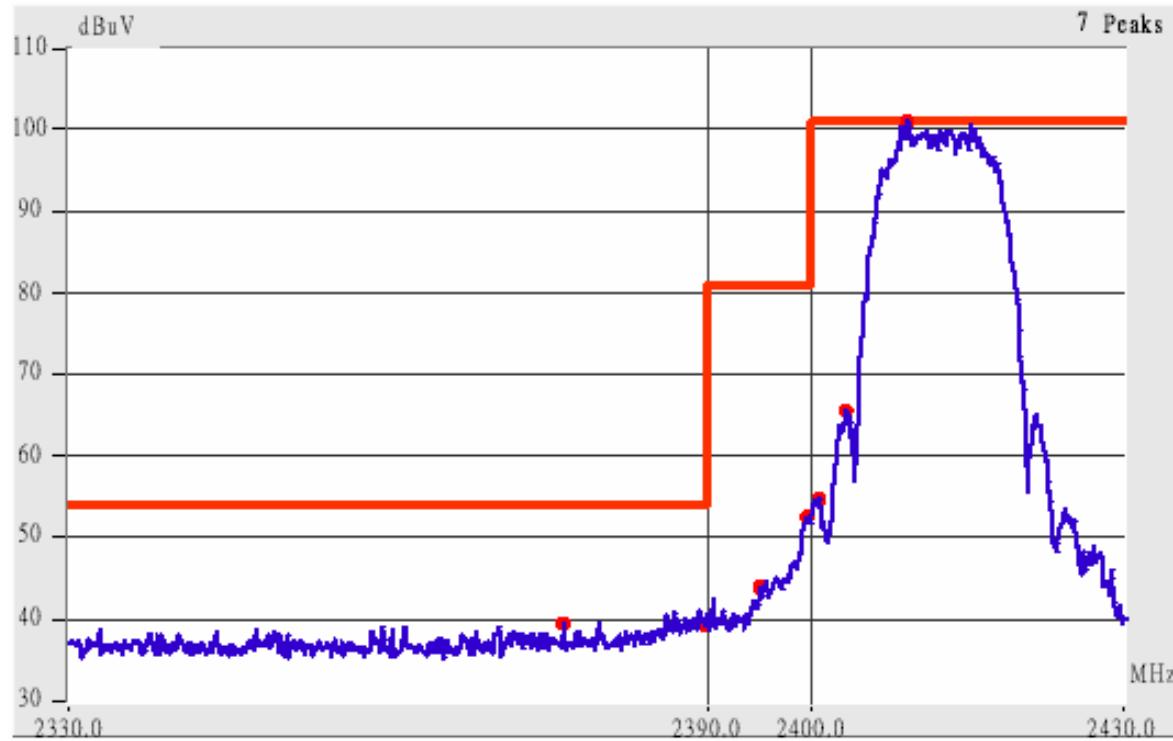
#### **8.4 Test Result of the Bandedge**

If any 100 kHz bandwidth outside these frequency bands, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either *at least 20 dB below that in any 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in §15.209(a)*,

We perform this section by the *radiated manner*, the RBW is set to 100kHz and VBW>RBW. We'd made the observation *up to 10<sup>th</sup> harmonics and the criterion is all the harmonic/spurious emissions must be 20dB below the highest emission level measured.* If the emissions fall in the restricted bands stated in the Part15.205(a) must also *comply with the radiated emission limits specified in Part15.209(a).* (Peak mode: RBW=VBW=1MHz, Average mode: RBW=1MHz; VBW=10Hz)

The following pages show our observations referring to the channel 1 and 11 respectively.

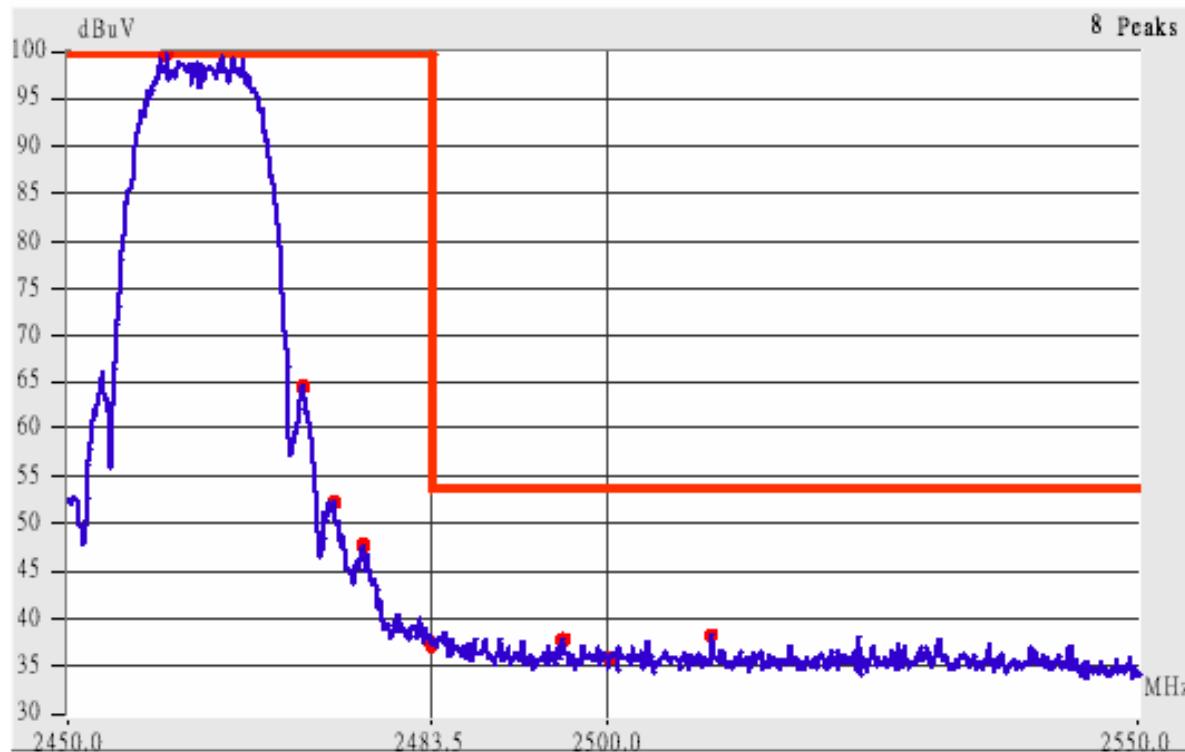
Test Condition & Setup: same as < 8.1 >

**Channel 1 of IEEE 802.11b for Antenna#1**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

1. The lobe left by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

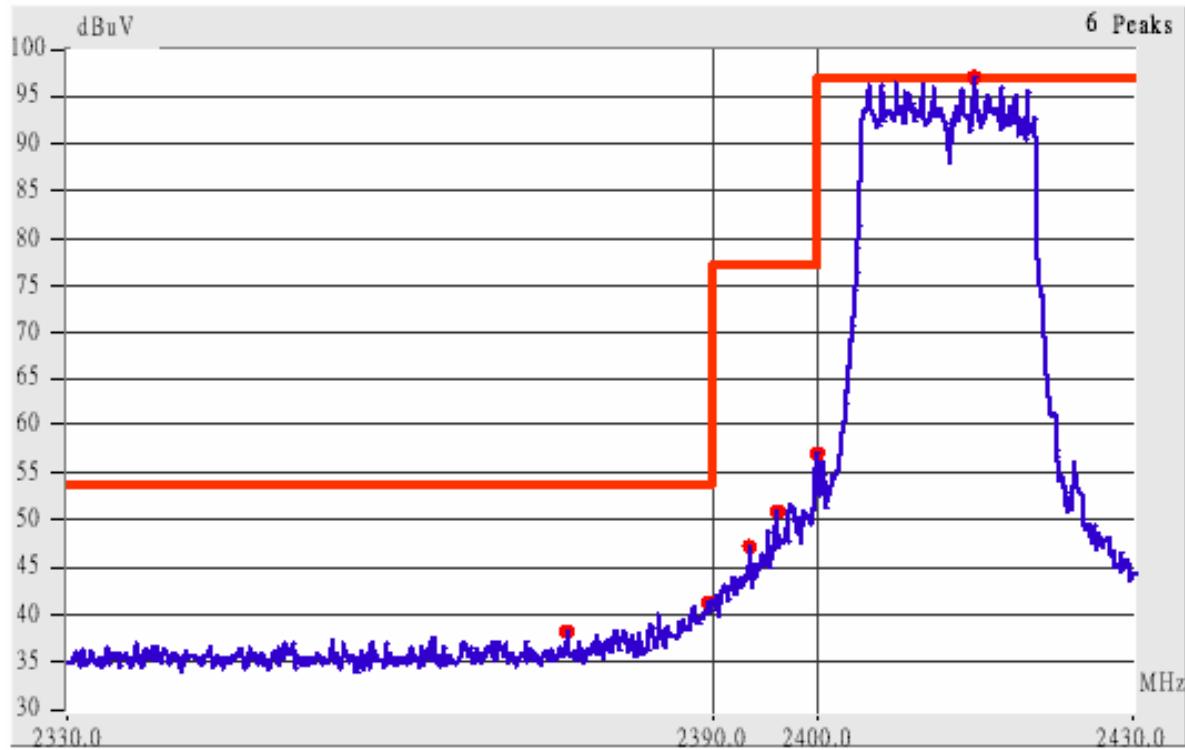
Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2356.54	Hor	1.00	274	9.09	46.09	---	73.96	53.96	-7.87
2374.80	Hor	1.00	348	9.14	47.64	---	73.96	53.96	-6.32
2390.02	Hor	1.00	348	9.18	48.02	---	73.96	53.96	-5.94
2356.27	Ver	1.00	51	9.09	50.09	---	73.96	53.96	-3.87
2371.06	Ver	1.00	169	9.13	50.63	---	73.96	53.96	-3.33
2389.68	Ver	1.00	169	9.18	52.85	42.18	73.96	53.96	-11.78

**Channel 11 of IEEE 802.11b for Antenna#1**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

3. The lobe right by the fundamental side is already 20dB below the highest emission level.
4. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

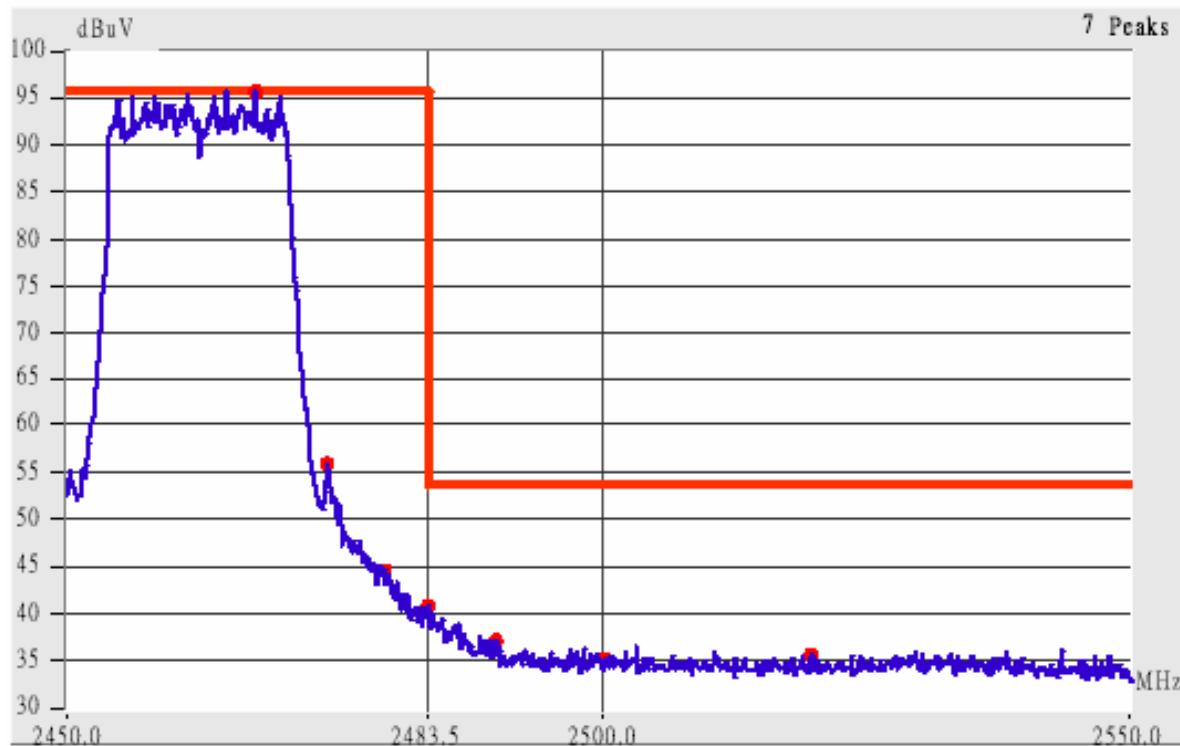
Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dBμV/m)		Limit (dBμV/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2483.50	Hor	1.00	232	9.44	45.78	---	73.96	53.96	-8.18
2492.19	Hor	1.00	256	9.47	45.80	---	73.96	53.96	-8.16
2516.57	Hor	1.00	334	9.52	46.35	---	73.96	53.96	-7.61
2500.01	Ver	1.00	251	9.49	45.49	---	73.96	53.96	-8.47
2508.41	Ver	1.00	57	9.51	47.17	---	73.96	53.96	-6.79
2529.53	Ver	1.00	173	9.55	46.55	---	73.96	53.96	-7.41

**Channel 1 of IEEE 802.11g for Antenna#1**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

5. The lobe left by the fundamental side is already 20dB below the highest emission level.
6. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

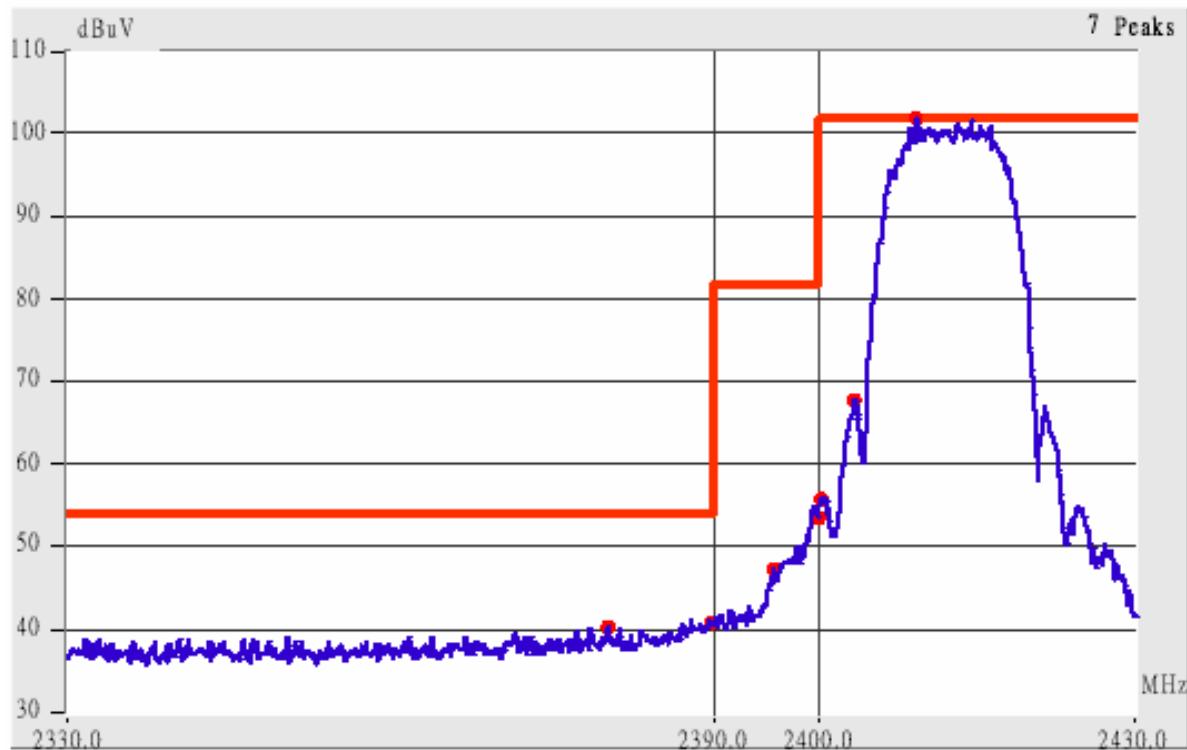
<i>Radiated Emission</i>					<i>Corrected Amplitude</i>		<i>Class B (3m)</i>		
<i>Frequency (MHz)</i>	<i>Ant. P.</i>	<i>Ant. H. (m)</i>	<i>Table (°)</i>	<i>Factors (dB)</i>	<i>(dB<math>\mu</math>V/m)</i>		<i>Limit (dB<math>\mu</math>V/m)</i>	<i>Margin (dB)</i>	
					<i>Peak</i>	<i>Average</i>	<i>Peak</i>	<i>Ave.</i>	
2366.67	Hor	1.00	349	9.12	44.28	---	73.96	53.96	-9.68
2378.10	Hor	1.00	54	9.15	44.98	---	73.96	53.96	-8.98
2390.02	Hor	1.00	344	9.18	49.02	---	73.96	53.96	-4.94
2373.33	Ver	1.00	176	9.14	47.80	---	73.96	53.96	-6.16
2385.05	Ver	1.00	172	9.17	52.00	36.00	73.96	53.96	-17.96
2390.47	Ver	1.00	170	9.18	52.52	38.51	73.96	53.96	-15.45

**Channel 11 of IEEE 802.11g for Antenna#1**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

7. The lobe right by the fundamental side is already 20dB below the highest emission level.
8. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

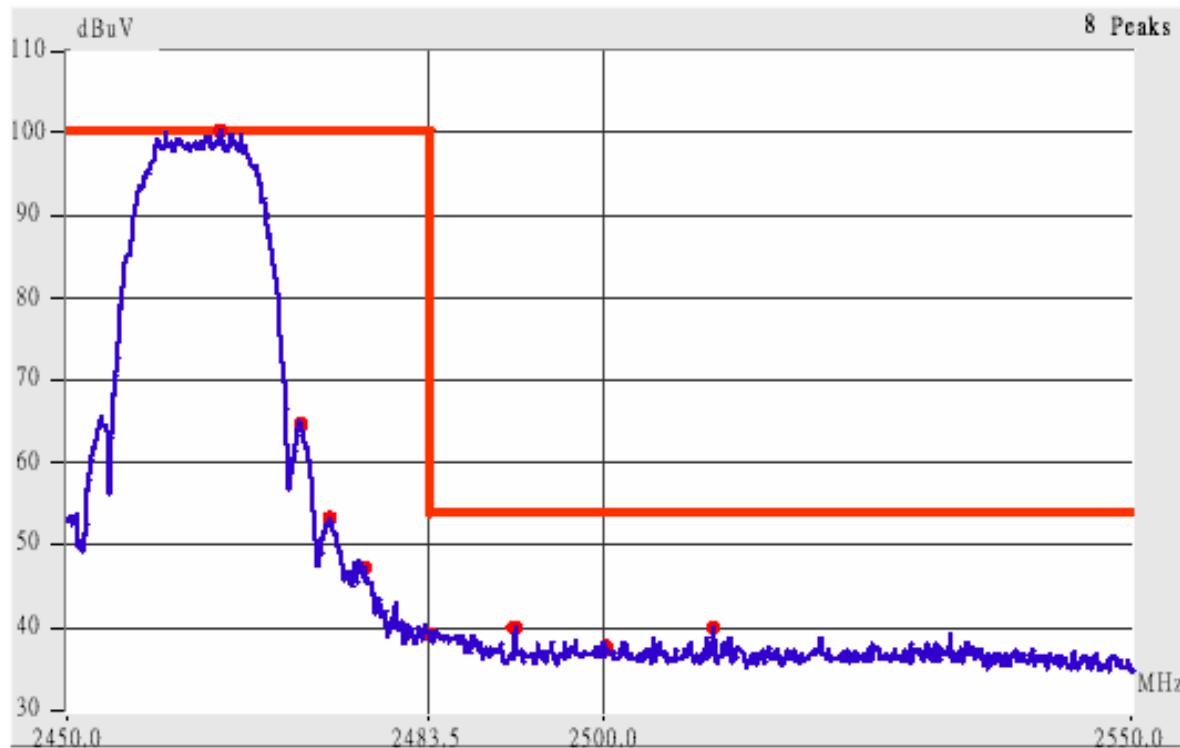
Radiated Emission					Corrected Amplitude		Class B (3m)			
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Margin (dB)	
					Peak	Average	Peak	Ave.		
2483.03	Hor	1.00	256	9.44	46.94	---	73.96	53.96	-7.02	
2485.31	Hor	1.00	247	9.45	50.45	---	73.96	53.96	-3.51	
2483.50	Ver	1.00	9	9.44	49.78	---	73.96	53.96	-4.18	
2484.20	Ver	1.00	57	9.45	51.95	---	73.96	53.96	-2.01	
2500.07	Ver	1.00	55	9.49	45.99	---	73.96	53.96	-7.97	
2515.64	Ver	1.00	316	9.52	45.69	---	73.96	53.96	-8.27	

**Channel 1 of IEEE 802.11b for Antenna#2**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

1. The lobe left by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

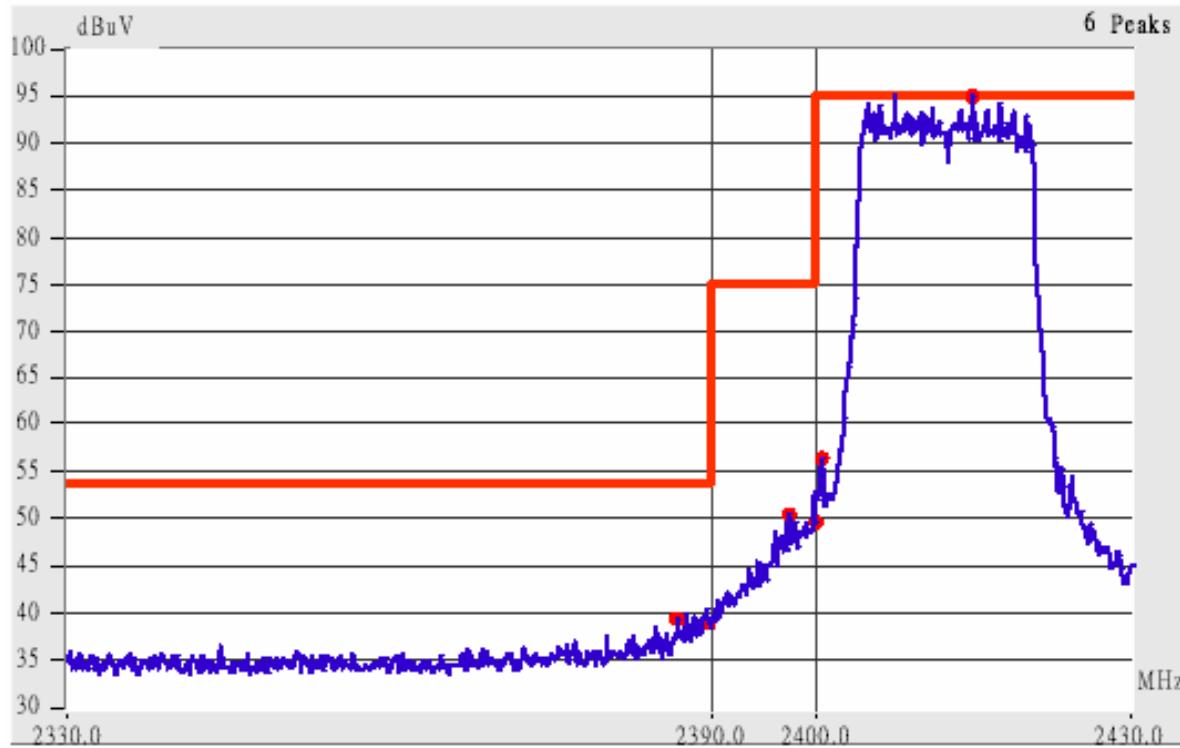
Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2372.68	Hor	1.00	203	9.13	44.80	---	73.96	53.96	-9.16
2380.65	Hor	1.00	326	9.16	44.66	---	73.96	53.96	-9.30
2390.02	Hor	1.00	260	9.18	43.52	---	73.96	53.96	-10.44
2367.16	Ver	1.00	207	9.12	46.28	---	73.96	53.96	-7.68
2379.83	Ver	1.00	216	9.15	48.15	---	73.96	53.96	-5.81
2390.02	Ver	1.00	200	9.18	47.02	---	73.96	53.96	-6.94

**Channel 11 of IEEE 802.11b for Antenna#2**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

3. The lobe right by the fundamental side is already 20dB below the highest emission level.
4. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

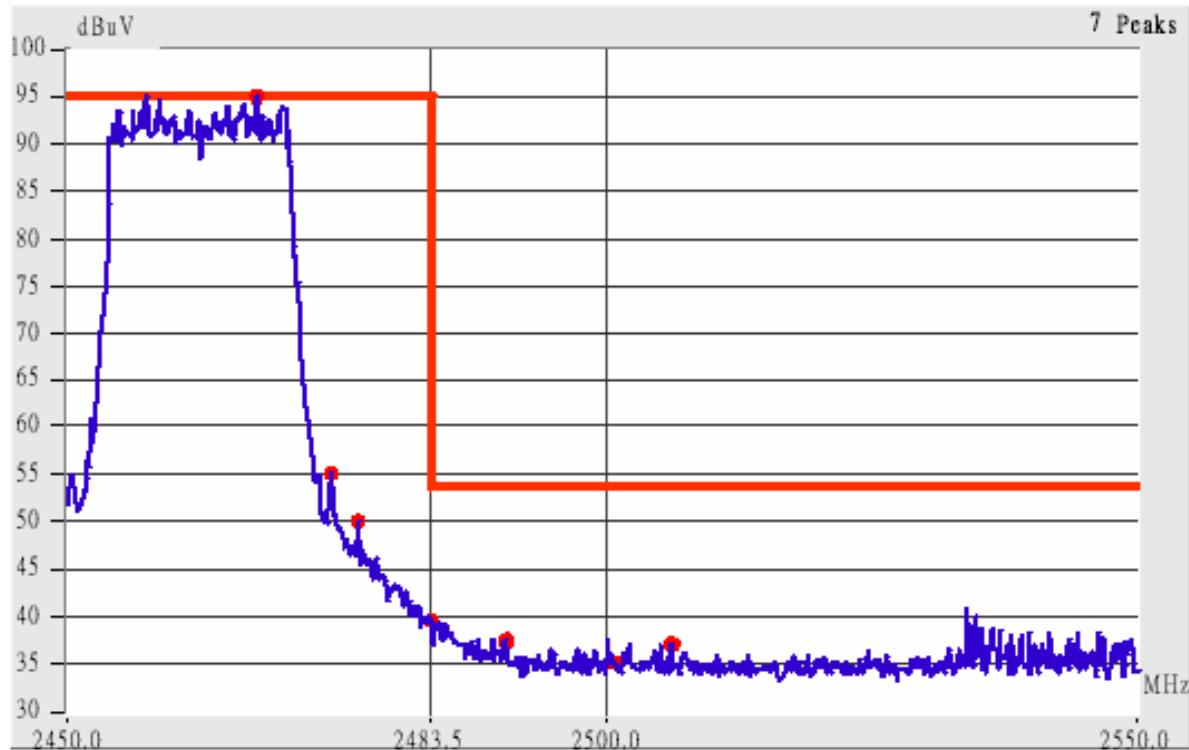
Radiated Emission					Corrected Amplitude		Class B (3m)			
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Margin (dB)	
					Peak	Average	Peak	Ave.		
2487.18	Hor	1.00	153	9.45	44.62	---	73.96	53.96	-9.34	
2508.70	Hor	1.00	302	9.51	45.01	---	73.96	53.96	-8.95	
2483.50	Ver	1.00	89	9.44	46.61	---	73.96	53.96	-7.35	
2488.34	Ver	1.00	93	9.46	48.12	---	73.96	53.96	-5.84	
2500.01	Ver	1.00	147	9.49	45.66	---	73.96	53.96	-8.30	
2512.32	Ver	1.00	96	9.51	48.18	---	73.96	53.96	-5.78	

**Channel 1 of IEEE 802.11g for Antenna#2**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1.

5. The lobe left by the fundamental side is already 20dB below the highest emission level.
6. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below.

<i>Radiated Emission</i>					<i>Corrected Amplitude</i> (dB $\mu$ V/m)		<i>Class B (3m)</i>		
<i>Frequency (MHz)</i>	<i>Ant. P.</i>	<i>Ant. H. (m)</i>	<i>Table (°)</i>	<i>Factors (dB)</i>	<i>Peak</i>	<i>Average</i>	<i>Peak</i>	<i>Ave.</i>	<i>Margin (dB)</i>
2369.81	Hor	1.00	268	9.13	44.79	---	73.96	53.96	-9.17
2382.05	Hor	1.00	243	9.16	44.16	---	73.96	53.96	-9.80
2354.43	Ver	1.00	120	9.08	46.92	---	73.96	53.96	-7.04
2373.17	Ver	1.00	215	9.13	46.13	---	73.96	53.96	-7.83
2388.34	Ver	1.00	190	9.18	51.84	---	73.96	53.96	-2.12
2390.02	Ver	1.00	308	9.18	50.18	---	73.96	53.96	-3.78

**Channel 11 of IEEE 802.11g for Antenna#2**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 11.

7. The lobe right by the fundamental side is already 20dB below the highest emission level.
8. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

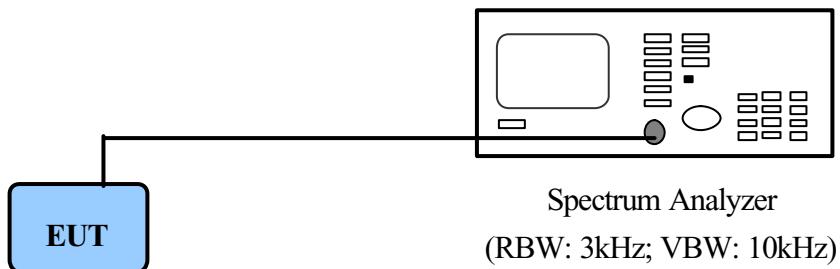
Radiated Emission					Corrected Amplitude		Class B (3m)		
Frequency (MHz)	Ant. P.	Ant. H. (m)	Table (°)	Factors (dB)	(dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Margin (dB)
					Peak	Average	Peak	Ave.	
2492.13	Hor	1.00	237	9.47	44.13	---	73.96	53.96	-9.83
2504.50	Hor	1.00	150	9.50	44.67	---	73.96	53.96	-9.29
2483.50	Ver	1.00	171	9.44	49.28	---	73.96	53.96	-4.68
2484.72	Ver	1.00	93	9.45	50.78	---	73.96	53.96	-3.18
2490.21	Ver	1.00	91	9.46	47.80	---	73.96	53.96	-6.16
2500.12	Ver	1.00	49	9.49	44.82	---	73.96	53.96	-9.14
2513.13	Ver	1.00	115	9.51	46.68	---	73.96	53.96	-7.28

## IX. Section 15.247(d): Power Spectral Density

### 9.1 Test Condition & Setup

The tests below are running with the EUT transmitter set at high power in TDD mode. The EUT is needed to force selection of output power level and channel number. While testing, the EUT was set to transmit continuously and to be tested by the contact manner with the spectrum analyzer.

### 9.2 Test Instruments Configuration



*PC to control the EUT at maximal power output and channel number and set antenna kit*

### 9.3 List of Test Instruments

Instrument Name	Model No.	Brand	Serial No.	Next time
Spectrum Analyzer	MS2665C	ANRITSU	6200175476	11/15/06

#### 9.4 Test Result of Power spectral density

The following table shows a summary of the test results of the Power Spectral Density.

##### *IEEE 802.11b*

<i>Channel</i>	<i>Ppr</i> (dBm)	<i>Cable Loss</i> (dB)	<i>Ppq</i> (dBm)	<i>Limit</i> (dB)	<i>Margin</i> (dB)
CH 01	-13.41	1.00	-12.41	8.00	-20.41
CH 06	-13.89	1.00	-12.89	8.00	-20.89
CH 11	-13.93	1.00	-12.93	8.00	-20.93

##### *IEEE 802.11g*

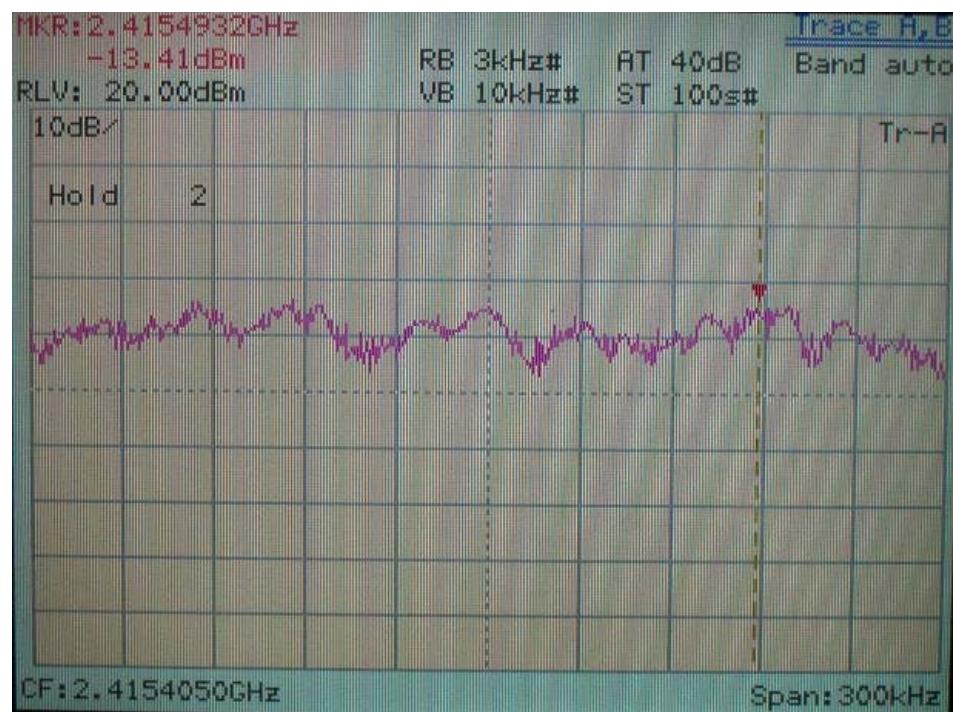
<i>Channel</i>	<i>Ppr</i> (dBm)	<i>Cable Loss</i> (dB)	<i>Ppq</i> (dBm)	<i>Limit</i> (dB)	<i>Margin</i> (dB)
CH 01	-18.00	1.00	-17.00	8.00	-25.00
CH 06	-18.26	1.00	-17.26	8.00	-25.26
CH 11	-17.13	1.00	-16.13	8.00	-24.13

Note:

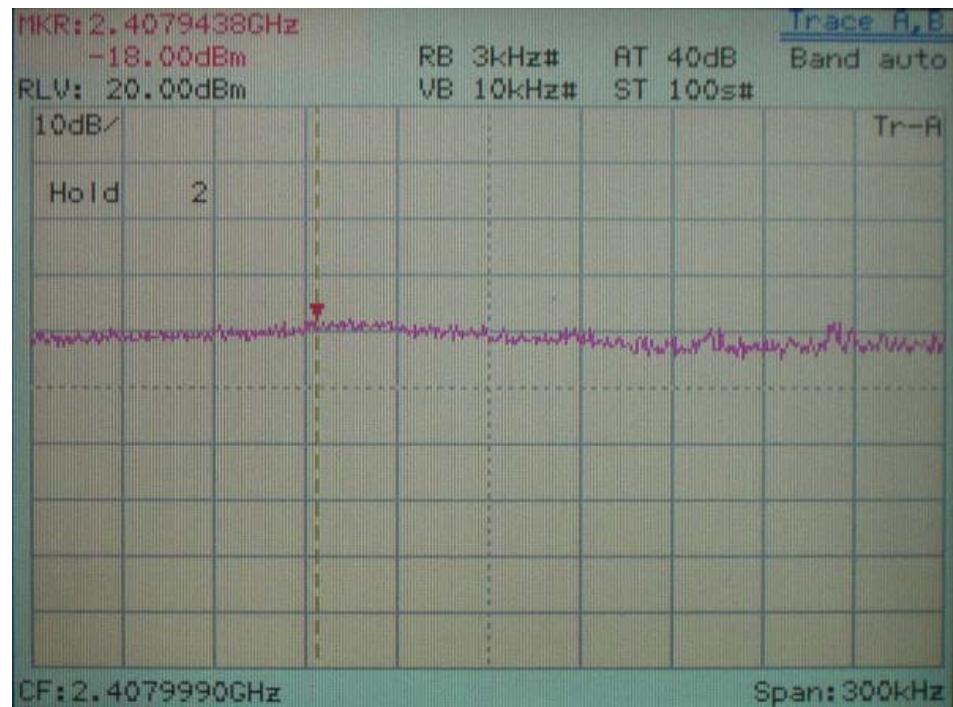
1. The following pages show the results of spectrum reading.
2. Ppr: spectrum read power density (using peak search mode),  
Ppq: actual peak power density in the spread spectrum band.
3.  $Ppq = Ppr + |Cable\ Loss|$

**Power Spectral Density for Channel 01**

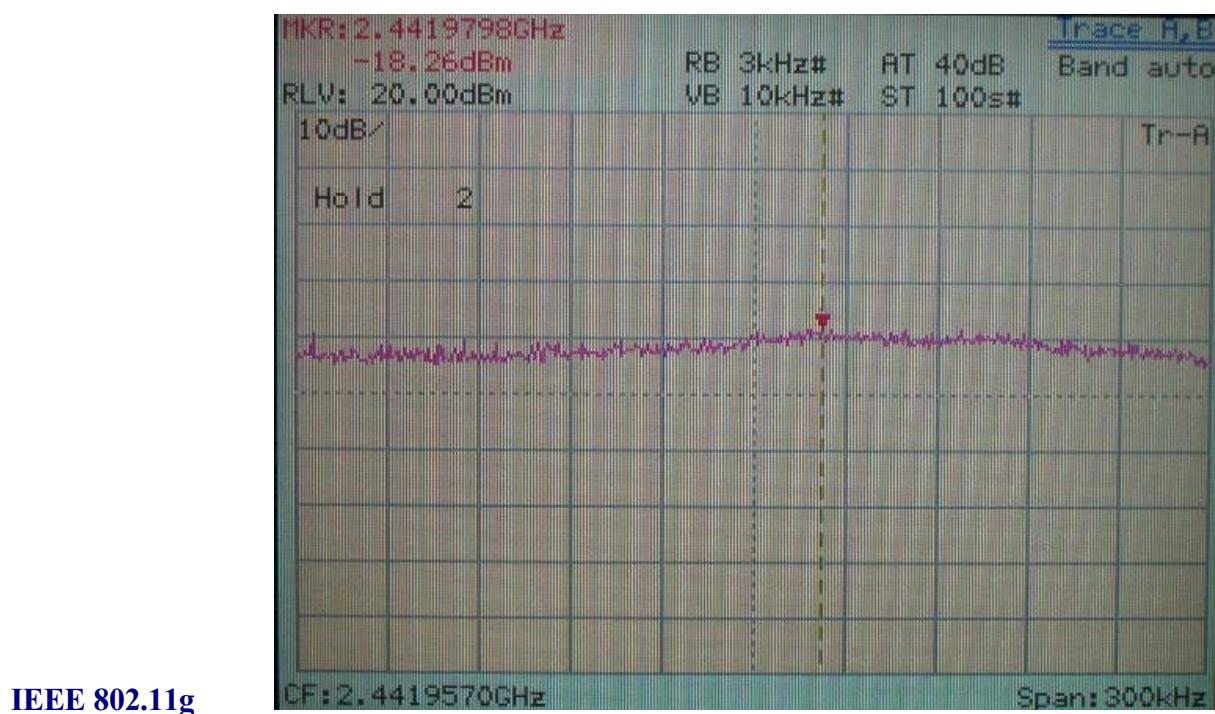
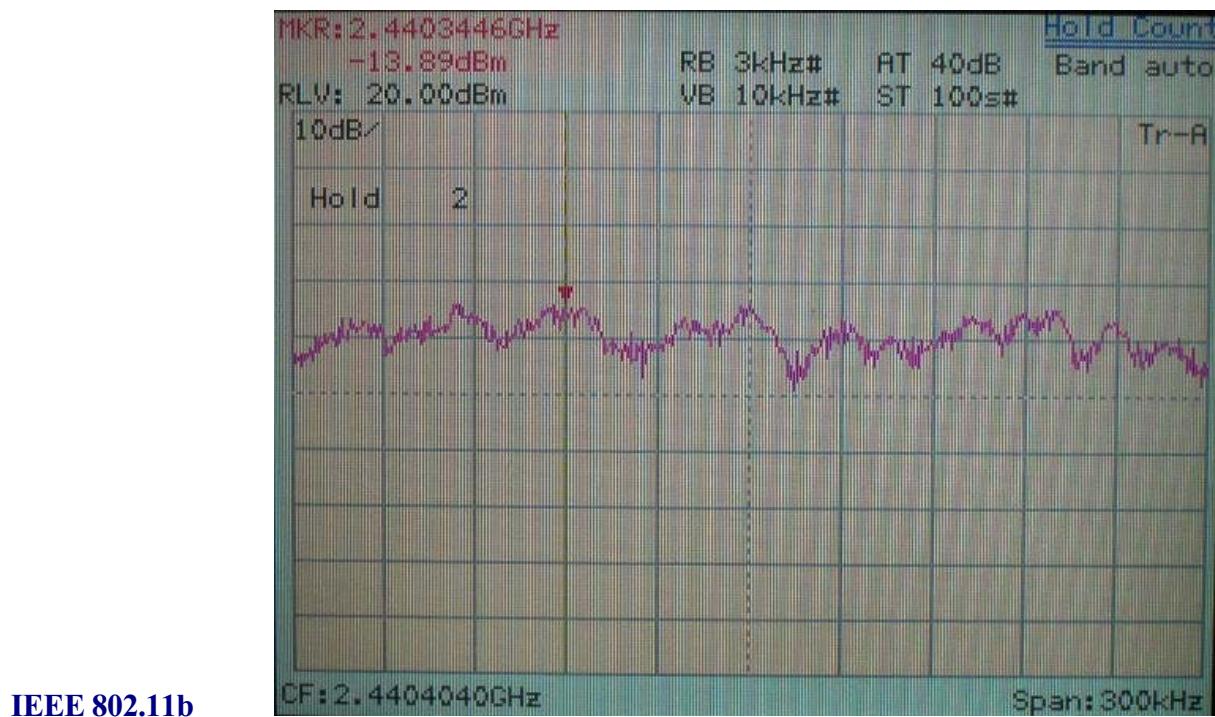
**IEEE 802.11b**



**IEEE 802.11g**



**Power Spectral Density for Channel 06**



**Power Spectral Density for Channel 11**

