

FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment : 802.11g Wireless LAN PC Card

Trade (Model) Name : EDIMAX(EW-7108PCG)

GLP(GWA-E08G)

FCC ID : NDD9571080404

Filing Type : Certification

Applicant : EDIMAX Technology Co., Ltd.
No. 3, Wu Chuan 3rd Road, Wu-Ku Industrial
Park, Taipei Hsien, Taiwan.

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SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of this test report

Original Report Issue Date: Apr. 05, 2004

☒ No additional attachment.

☐ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE
for
47 CFR Part 15 Subpart C

Equipment : **802.11g Wireless LAN PC Card**

Trade (Model) Name : **EDIMAX(EW-7108PCG)**
GLP(GWA-E08G)

FCC ID : **NDD9571080404**

Filing Type : **Certification**

Applicant : **EDIMAX Technology Co., Ltd.**
No. 3, Wu Chuan 3rd Road, Wu-Ku Industrial Park,
Taipei Hsien, Taiwan.

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 - 2001** and the equipment under test was **passed** all test items required in FCC Part 15 subpart C, relative to the equipment under test. Testing was carried out on Apr. 01, 2004 at **SPORTON International Inc. LAB.**



Daniel Lee
Manager

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1. Applicant

EDIMAX Technology Co., Ltd.

No. 3, Wu-Chuan 3rd Road, Wu-Ku Industrial Park, Taipei Hsien, Taiwan.

1.2 Manufacturer

Same as 1.1

1.3 Basic Description of Equipment under Test

Equipment : 802.11g Wireless LAN PC Card
Trade (Model) Name : EDIMAX (EW-7108PCG)
GLP (GWA-E08G)
Power Supply Type : DC 3.3V

1.4 Feature of Equipment under Test

Product Feature & Specification				
1. Type of Modulation/data rate	802.11b: CCK (11Mbps), DQPSK (5.5Mbps) DQPSK (2Mbps),DBPSK (1Mbps); 802.11g: OFDM (6/9/12/18/24/36/48/54 Mbps)			
2. Number of Channels	USA/Canada:11	V	European:13	
	Japan:13,14		Other	
3. Frequency Band	2.4 ~ 2.4835GHz			
4. Carrier Frequency of each channel	2412MHz+(n-1)* 5MHz, n=1~11			
5. Channel Spacing	5MHz			
6. Maximum Output Power to Antenna (Normal Condition)	802.11b:16.3dBm 802.11g:15.5dBm			
7. Type of Antenna Connector	None			
8. Antenna Type	Printed antenna			
9. Antenna Gain	Max gain 3dBi			
10. Function Type	Transmitter		Transceiver	V
11. Power Rating (DV/AC,Voltage)	DC3.3V			
12. Duty Cycle	100%			
13. Basic function of product	Wireless LAN for data networking applications			
14. Temperature Range (Operating)	0% at 0°C 95% at 55°C			
15. Humidity	MAX 90%			

2 Test Configuration of Equipment under Test

2.1 Test Manner

- a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2001 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
- b. The complete test system included VIEWSONIC Monitor, LOGITECH USB Mouse, EPSON Printer, ACEEX Modem, DELL Notebook, GETWAY USB Keyboard and EUT for EMI test.
- c. The EUT can operate on eleven channels from 2412MHz to 2462MHz. (as listed in section 1.4).
- d. The following test modes were pretested for conduction test:
 - Mode 1: Operating
- e. The following test modes were pretested for radiation test:
 - Mode 1: 802.11b TX CH01
 - Mode 2: 802.11b TX CH06
 - Mode 3: 802.11b TX CH11
 - Mode 4: 802.11g TX CH01
 - Mode 5: 802.11g TX CH06
 - Mode 6: 802.11g TX CH11
- f. Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

2.2 Description of Test System

Support Unit 1. –Monitor (VIEWSONIC)

FCC ID	: N/A
Model No.	: VCDTS21553-3P
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0046
Data Cable	: Shielded, 1.7m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 2. –(USB) Mouse (LOGITECH)

FCC ID	: N/A
Model No.	: M-BE58
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0048
Data Cable	: Shielded, 1.7m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 3. – Printer (EPSON)

FCC ID	: N/A
Model No.	: STYLUS COLRO 680
Power Supply Type	: Linear
Power Cord	: Non-Shielded
Data Cable	: Shielded, 1.35m
Serial No.	: SP0050
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

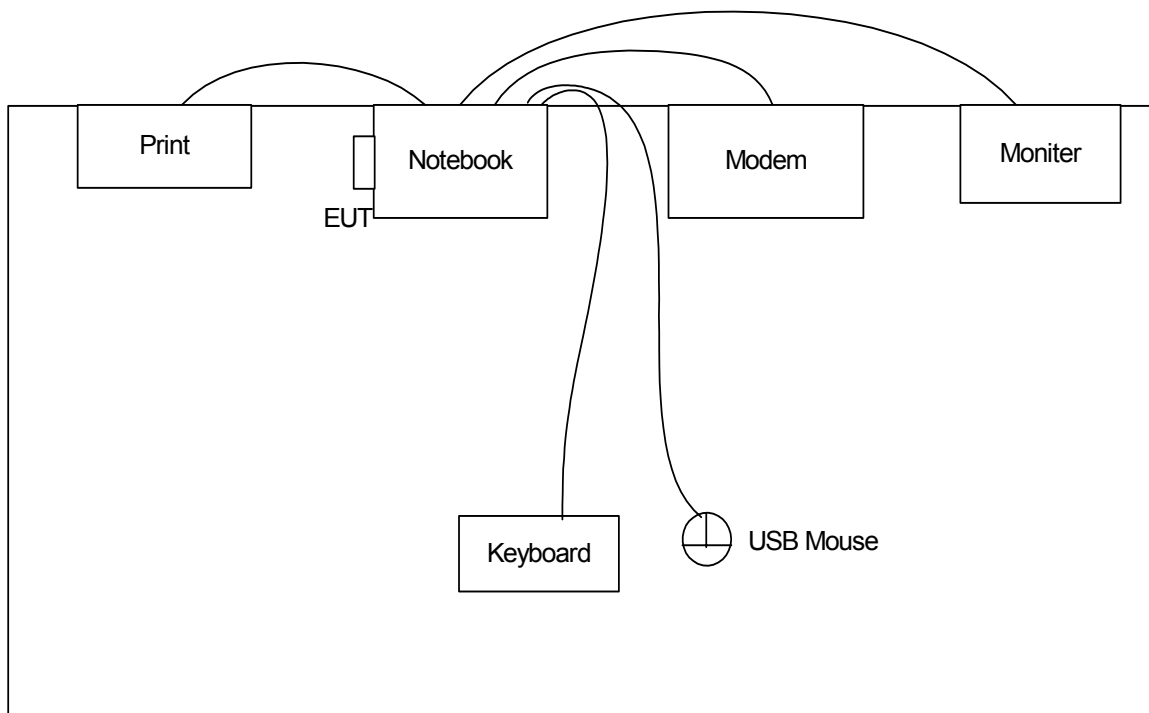
Support Unit 4. – Modem (ACEEX)

FCC ID	: IFAXDM141
Model No.	: DM141
Serial No.	: SP0052
Power Supply Type	: Switching
Power Cord	: Non-Shielded, 1.15 m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 5. –Notebook (DELL)

FCC ID	: E2K24CLNS
Model No.	: PP052
Serial No.	: SP0054
Data Cable	: Shielded, 1.35m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

2.3 Connection Diagram of Test System



3 Operation of Equipment under Test

An executive program, EMCTEST.EXE on WINXP continuously generating a complete line of "H" pattern, was used as the test software.

The program was executed as follows:

- a. Turn on the power of all equipment.
- b. The PC reads the test program from the hard disk drive and runs it.
- c. The PC sends "H" messages to the monitor, and the monitor displays "H" patterns on the screen.
- d. The PC sends "H" messages to the printer, then the printer prints them on the paper.
- e. The PC sends "H" messages to the internal hard disk , and the hard disk reads and writes the message.
- f. Repeat the steps from c to e.

At the same time, the following program was executed:

Execute " RT2500QA.EXE " to implement continuous transmitting.

4 General Information of Test

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No : CO01-HY, 03CH03-HY

4.1 Test Voltage

110V/ 60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2001

4.3 Test in Compliance with

47 CFR Part 15 Subpart C

4.4 Frequency Range Investigated

- a. Conduction: from 150 kHz to 30 MHz
- b. Radiation: from 30 MHz to 25000 MHz

4.5 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

5 Report of Measurements and Examinations

5.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
15.247(a)(2)	6dB Bandwidth	Pass
15.247(b)	Maximum Peak Output Power	Pass
15.209(a)	Radiated Emission	Pass
15.247 (c)	100kHz Bandwidth of Frequency Band Edges	Pass
15.247(d)	Power Spectral Density	Pass
15.203	Antenna Requirement	Pass

5.2 6dB Bandwidth

5.2.1 Measuring Instruments :

As described in chapter 7 of this test report.

5.2.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
2. Set RBW of spectrum analyzer to 100kHz and VBW to 100kHz.
3. The 6 dB bandwidth is defined as the frequency range where the power is higher than the peak power minus 6dB.

5.2.3 Test Setup Layout :



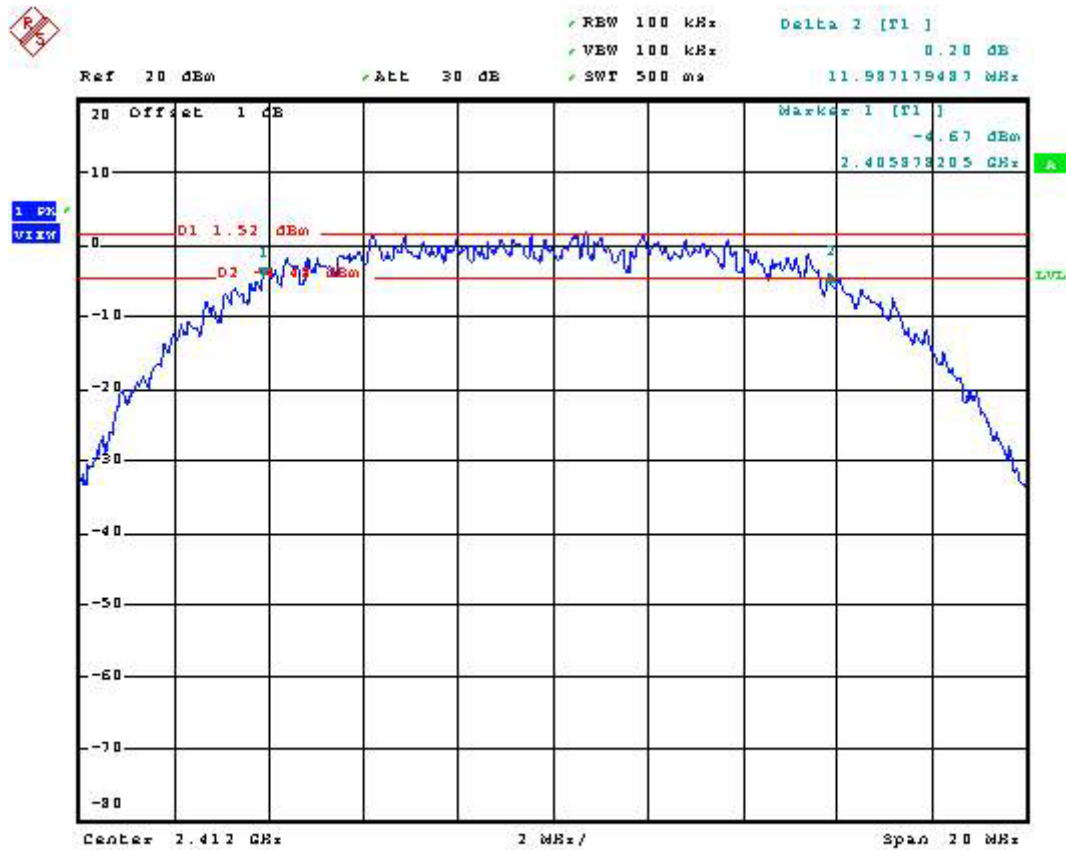
5.2.4 Test Result :

- Mode 1~3 : WLAN 802.11b
- Temperature : 22°C
- Relative Humidity : 53%

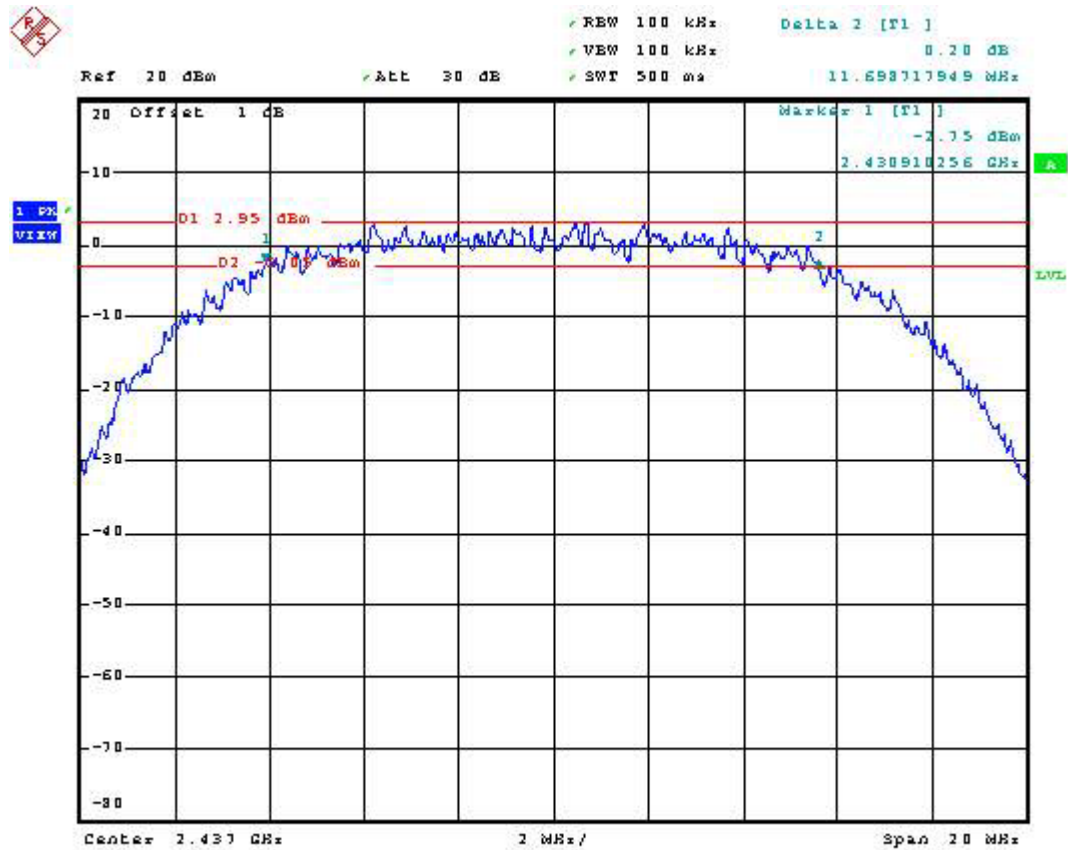
Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	11.93	0.5	Mode 1
06	2437	11.69	0.5	Mode 2
11	2462	11.73	0.5	Mode 3

5.2.5 Emission Bandwidth

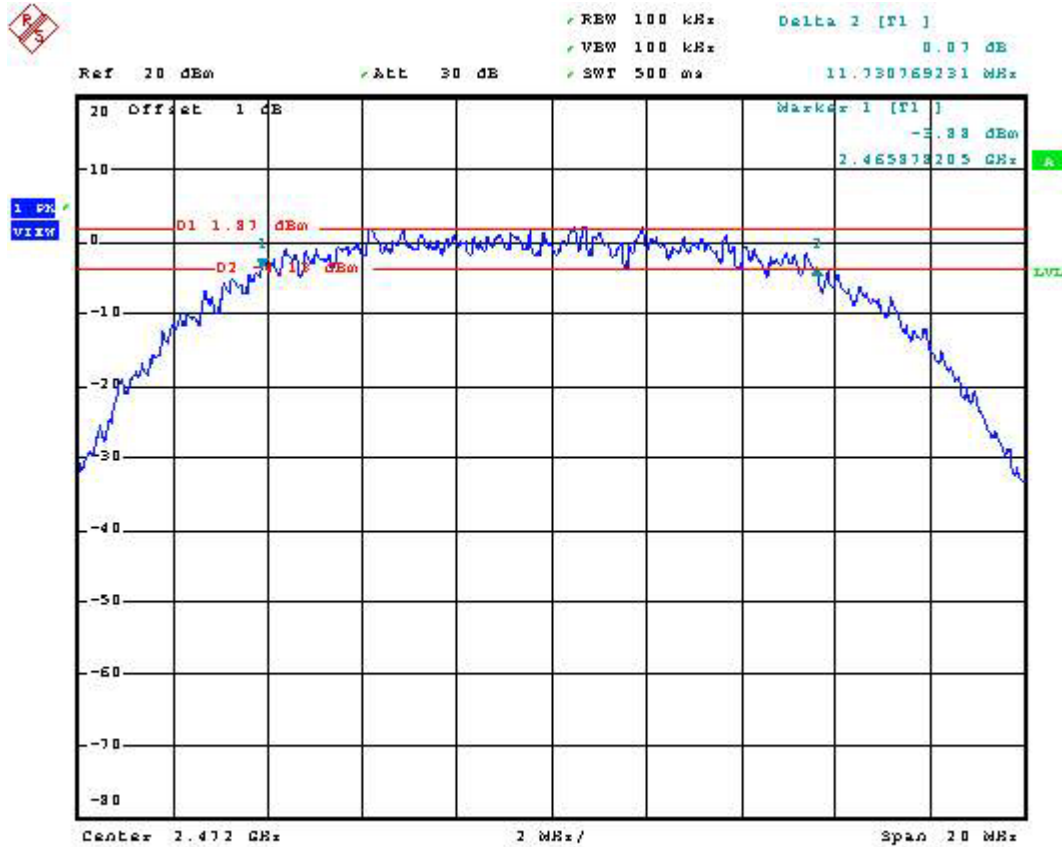
Mode1 : 11b CH01 (2412MHz)



Mode 2 : 11b CH06 (2437MHz)



Mode 3 : 11b CH11 (2462MHz)

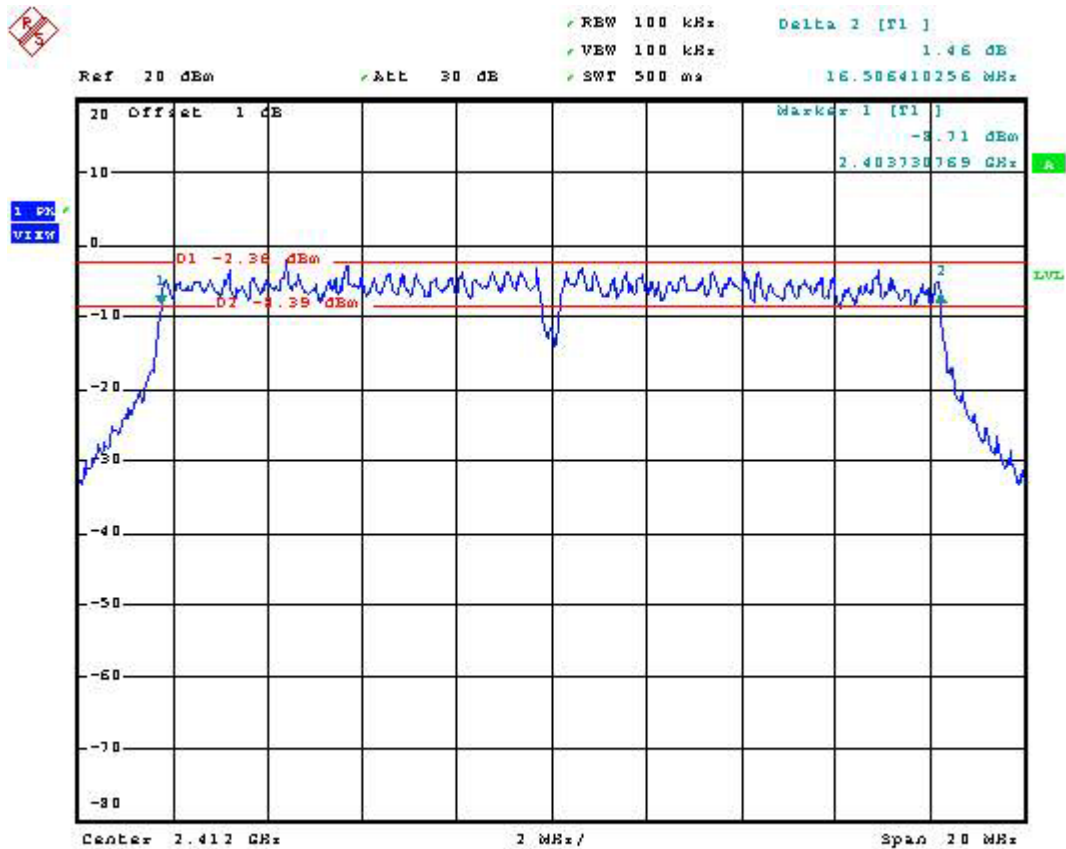


5.2.6 Test Result :

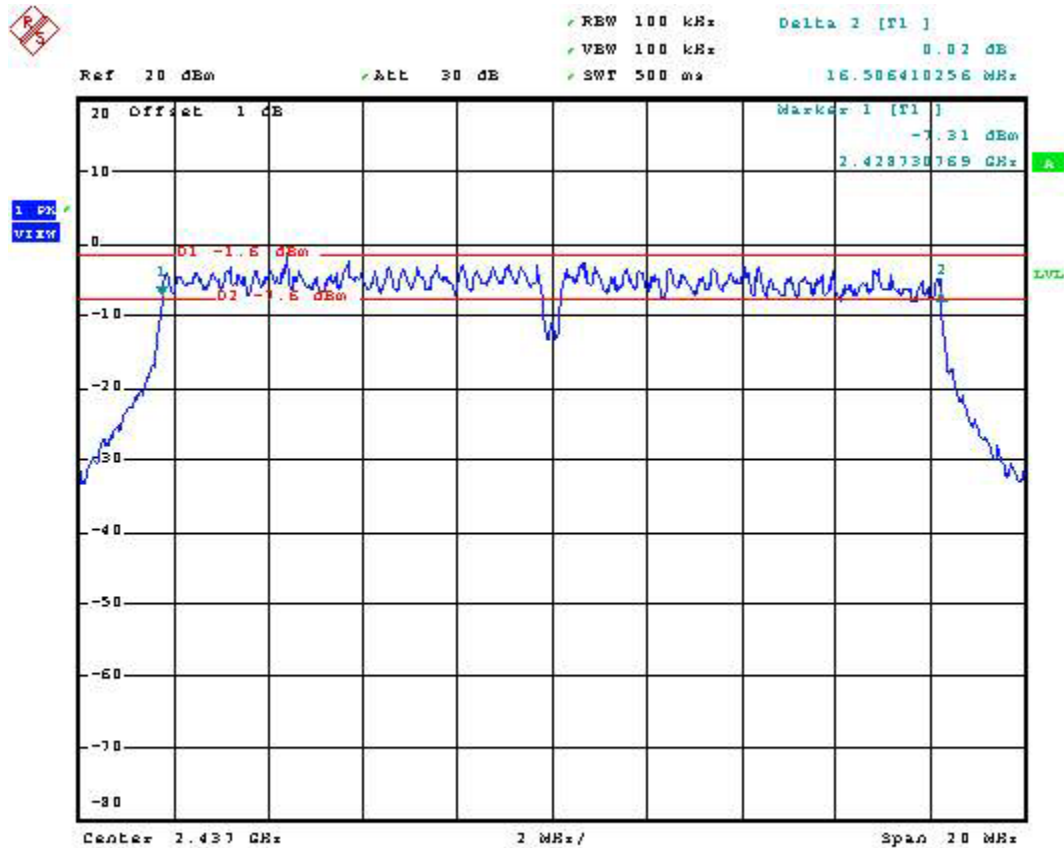
- Mode 4~6 : WLAN 802.11g
- Temperature : 22°C
- Relative Humidity : 53%

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.30	0.5	Mode 4
06	2437	16.30	0.5	Mode 5
11	2462	16.50	0.5	Mode 6

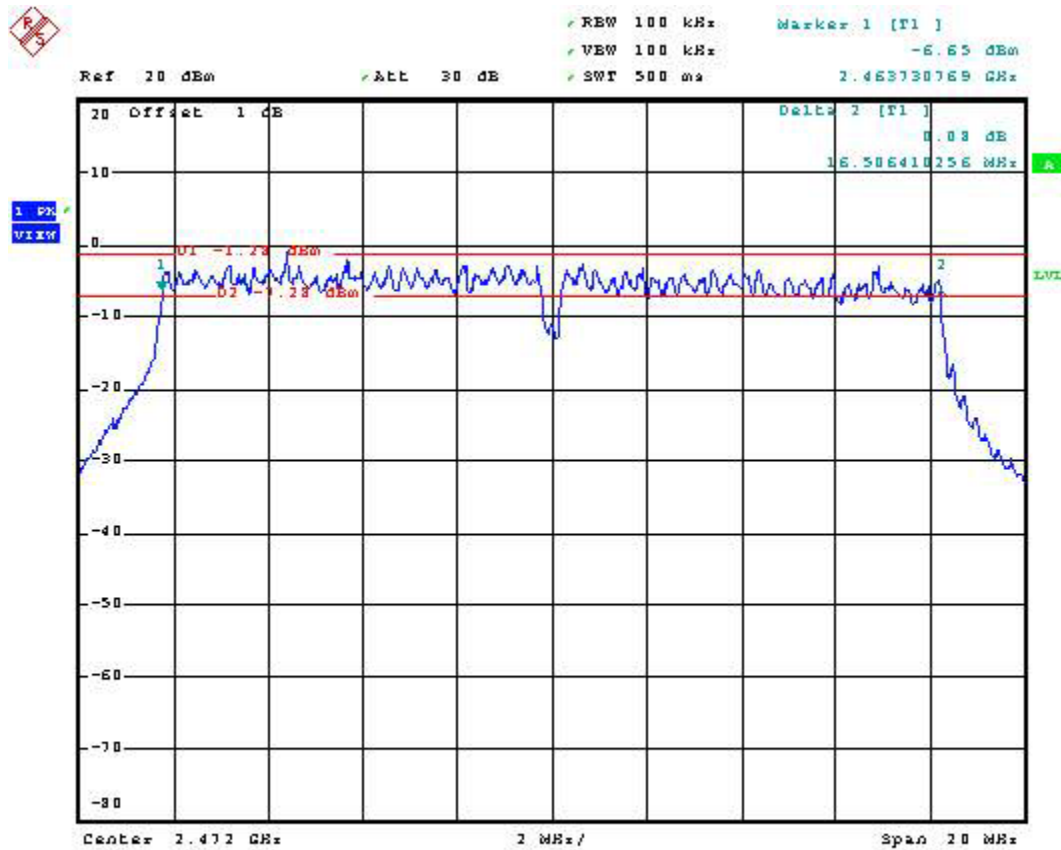
Mode 4 : 11g CH01 (2412MHz)



Mode 5 : 11g CH06 (2437MHz)



Mode 6 : 11g CH11 (2462MHz)



5.3 Power Spectral Density

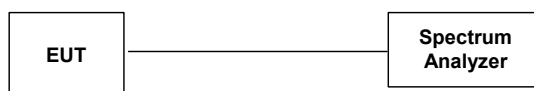
5.3.1 Measuring Instruments :

As described in chapter 7 of this test report.

5.3.2 Test Procedure :

1. The transmitter output was connected to spectrum analyzer directly.
2. The spectrum analyzer's resolution bandwidth was set at 3kHz RBW and 30kHz VBW as that of the fundamental frequency. Set the sweep time=span/3kHz.
3. The power spectral density was measured and recorded.
4. The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

5.3.3 Test Setup Layout :



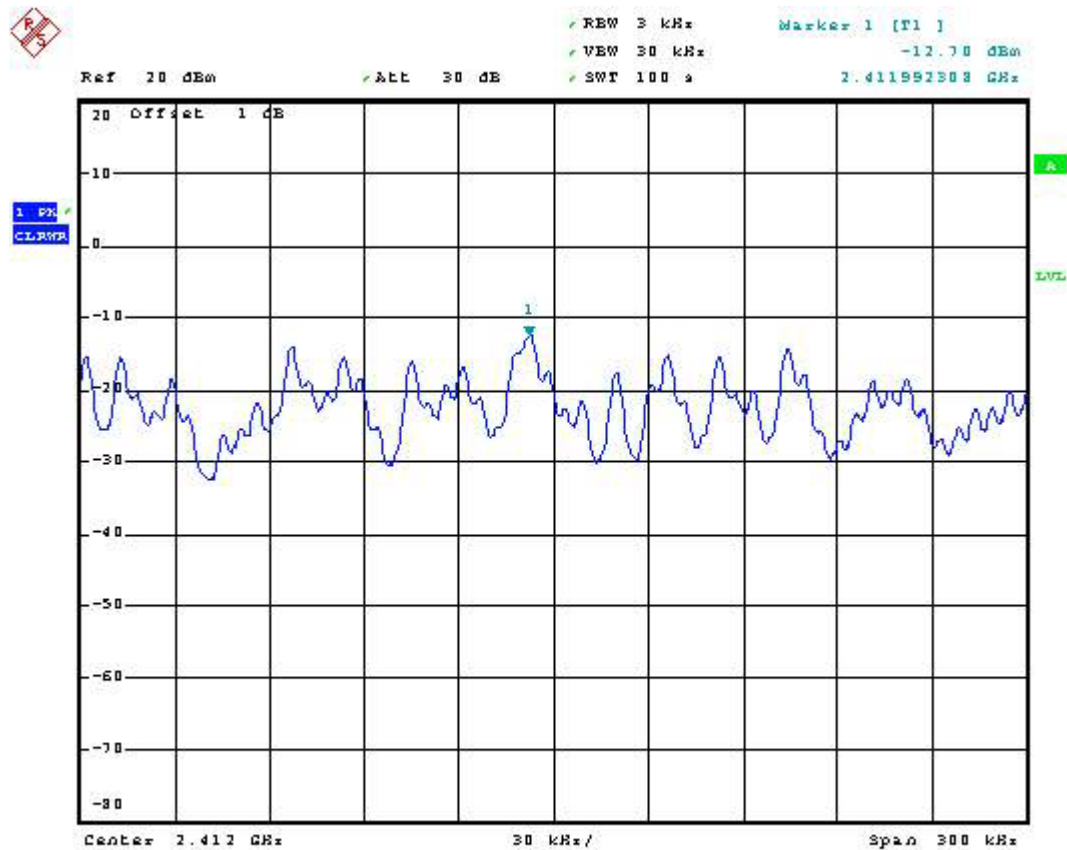
5.3.4 Test Result :

- Mode 1~3: WLAN 802.11b
- Temperature : 22°C,
- Relative Humidity : 53%

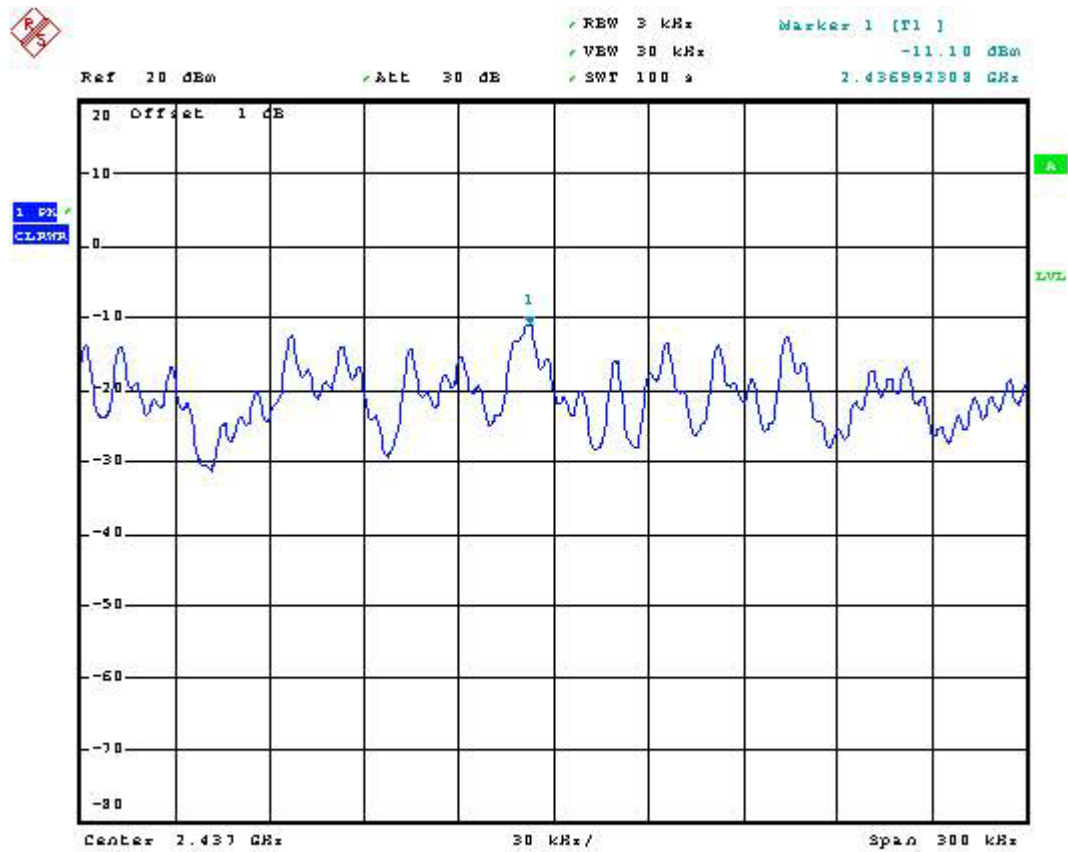
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-12.70	8	Mode 1
06	2437	-11.10	8	Mode 2
11	2462	-12.11	8	Mode 3

5.3.5 Peak Power Spectral Density

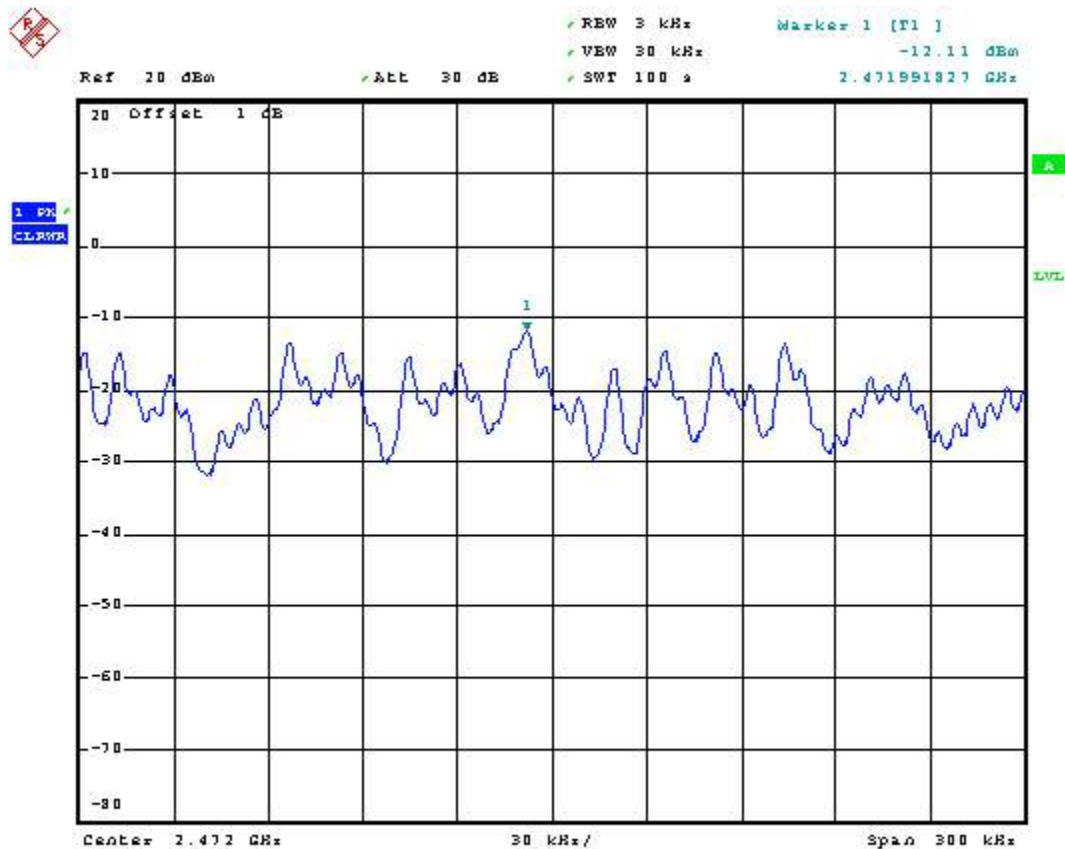
Mode 1 : 11b CH01 (2412MHz)



Mode 2 : 11b CH06 (2437MHz)



Mode 3 : 11b CH11 (2462MHz)

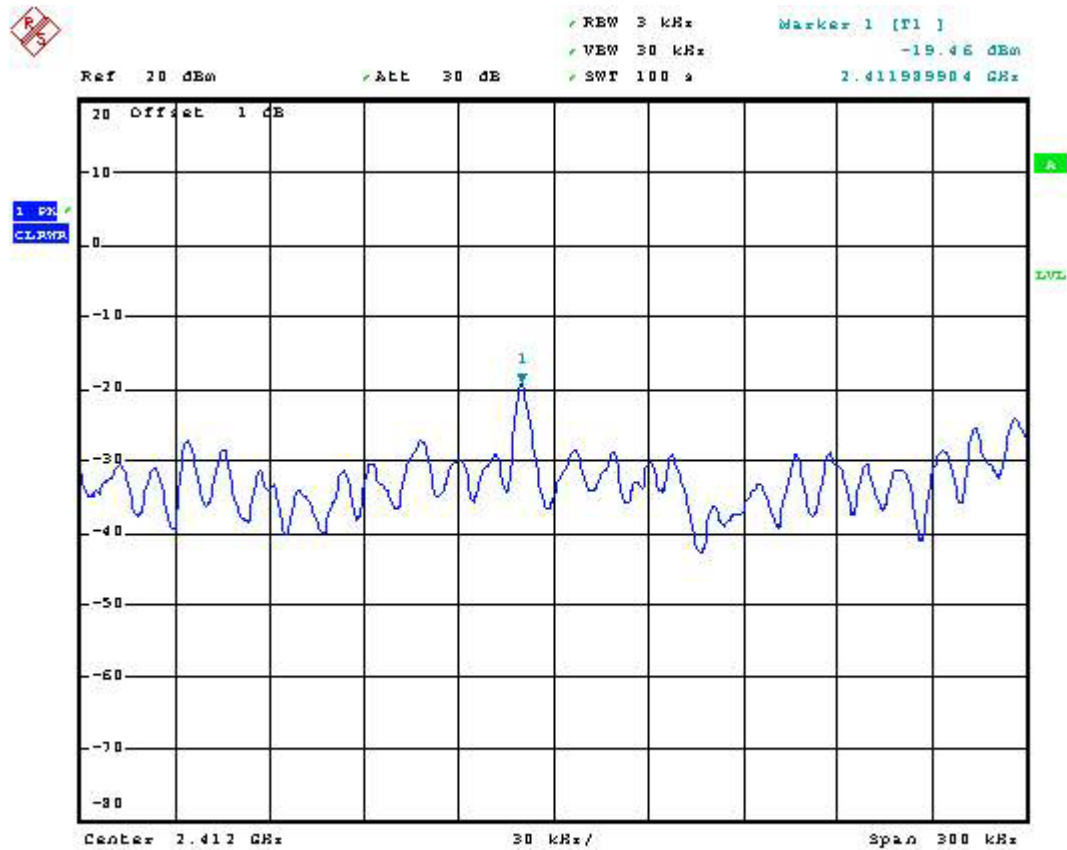


5.3.6 Test Result :

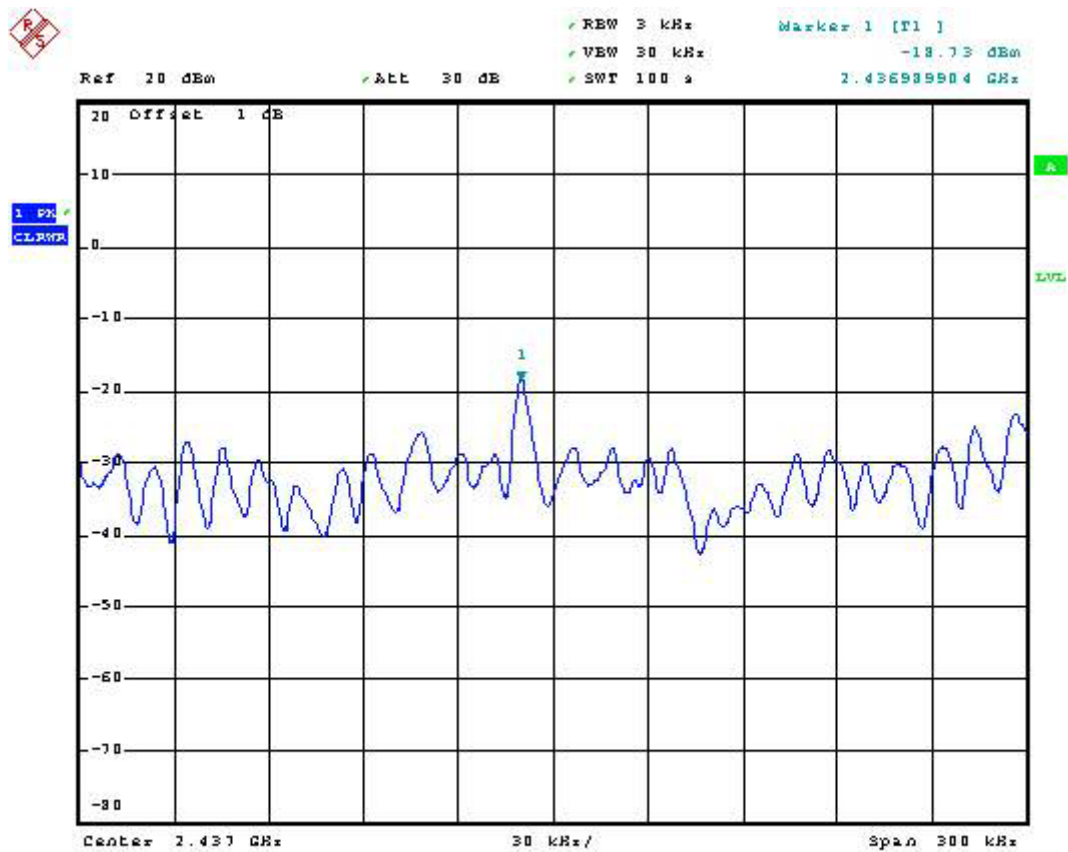
- Mode 4~6: WLAN 802.11g
- Temperature : 22°C,
- Relative Humidity : 53%

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-19.46	8	Mode 4
06	2437	-13.73	8	Mode 5
11	2462	-13.70	8	Mode 6

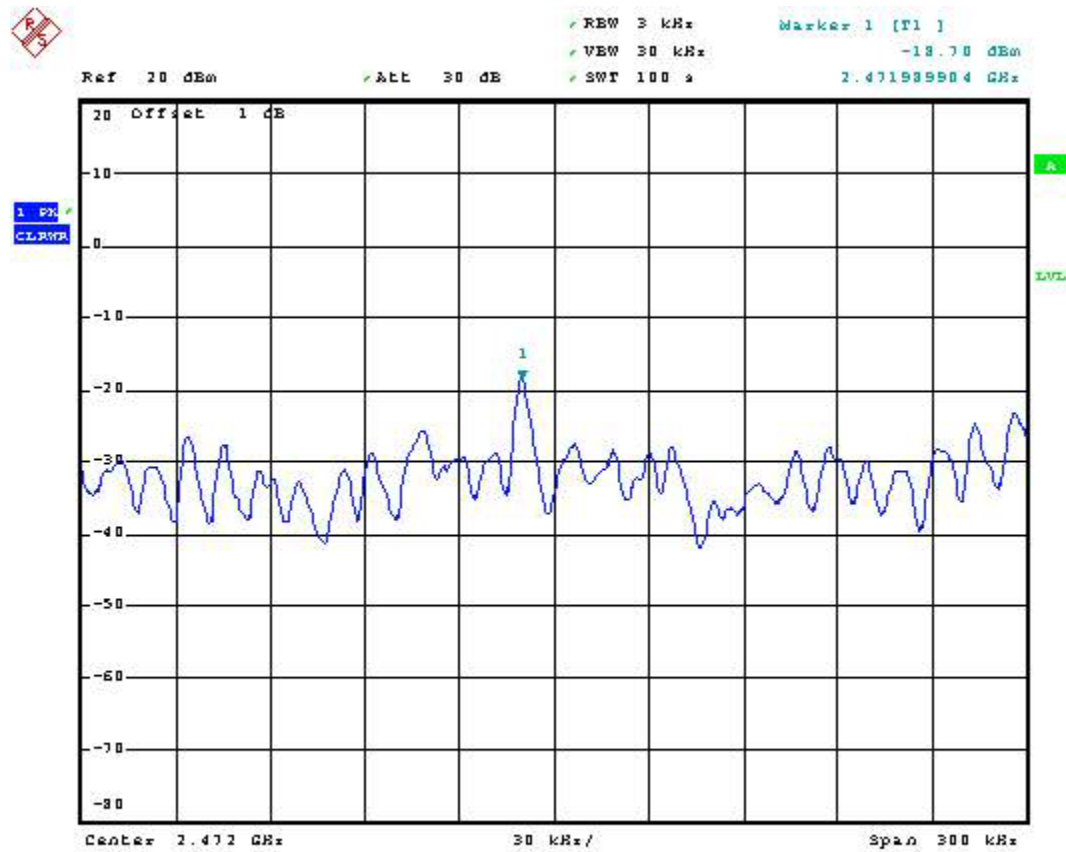
Mode 4 : 11g CH01 (2412MHz)



Mode 5 : 11g CH06 (2437MHz)



Mode 6 : 11g CH11 (2462MHz)



5.4 Band Edges Measurement

5.4.1 Measuring Instruments :

As described in chapter 7 of this test report.

5.4.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100 kHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.4.3 Test Result :

- Mode 1 and 3 : WLAN 802.11b
- Temperature : 22°C,
- Relative Humidity : 53%
- Test Result in lower band (Channel 1) : PASS
- Test Result in higher band (Channel 11) : PASS

5.4.4 Note on Band Edge Emission

The band edge emission shows 53.07 dB delta between carrier maximum power and local maximum emission in the restricted band (2.390GHz).

The band edge emission shows 42.07 dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835GHz).

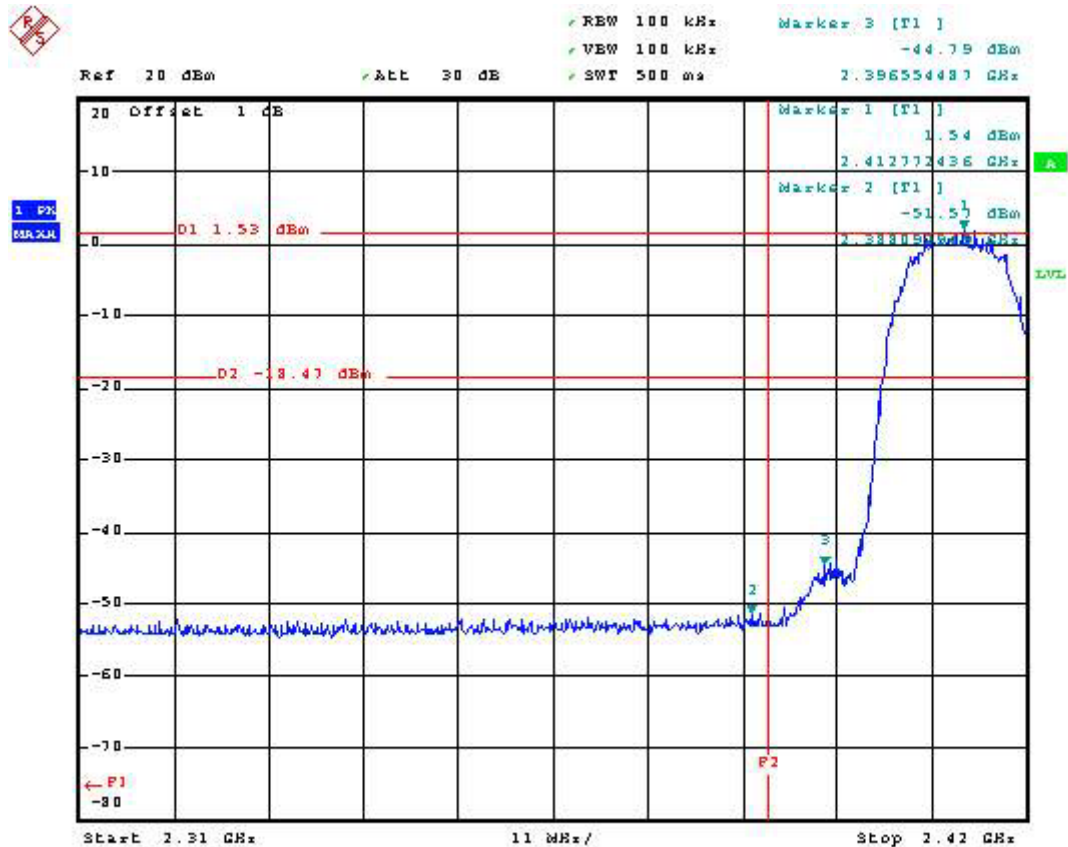
802.11b

Channel	Polarity	The emission of carrier power strength	Frenquency	The maximum field strength in restrict band	Limit	Margin	Result
		(dB μ V/m)	(GHz)	(dB μ V/m)	(dB μ V/m)	(dB)	
CH01	V	102.67	2.3880	49.6	74	-24.4	Peak
	V	94.96	2.3880	41.89	54	-12.11	Average
	H	104.96	2.3880	51.89	74	-22.11	Peak
	H	87.82	2.3880	34.75	54	-19.25	Average
CH11	V	97.4	2.4838	55.33	74	-18.67	Peak
	V	92.52	2.4838	50.45	54	-3.55	Average
	H	97.81	2.4838	55.74	74	-18.26	Peak
	H	92.2	2.4838	50.13	54	-3.87	Average

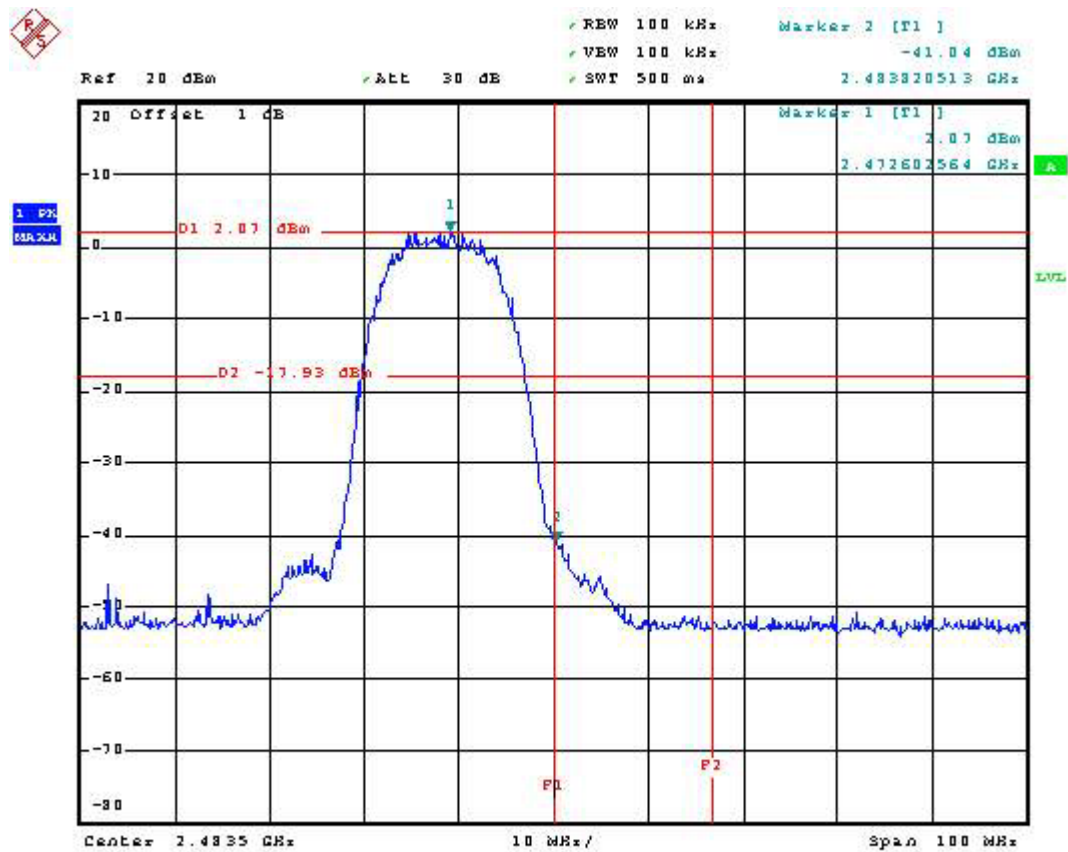
Remark: The data above can refer to radiated emission in section 7.

5.4.5 Band Edges Measurement

Mode 1 : 11b CH01 (2412MHz)



Mode 2 : 11b CH11 (2462MHz)



5.4.6 Test Result :

- Mode 4 and 6 : WLAN 802.11g
- Temperature : 22°C,
- Relative Humidity : 53%

- Test Result in lower band (Channel 1) : PASS
- Test Result in higher band (Channel 11) : PASS

5.4.6 Note on Band Edge Emission

The band edge emission shows 48.9 dB delta between carrier maximum power and local maximum emission in the restricted band (2.390GHz).

The band edge emission shows 41.68 dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835GHz).

802.11g

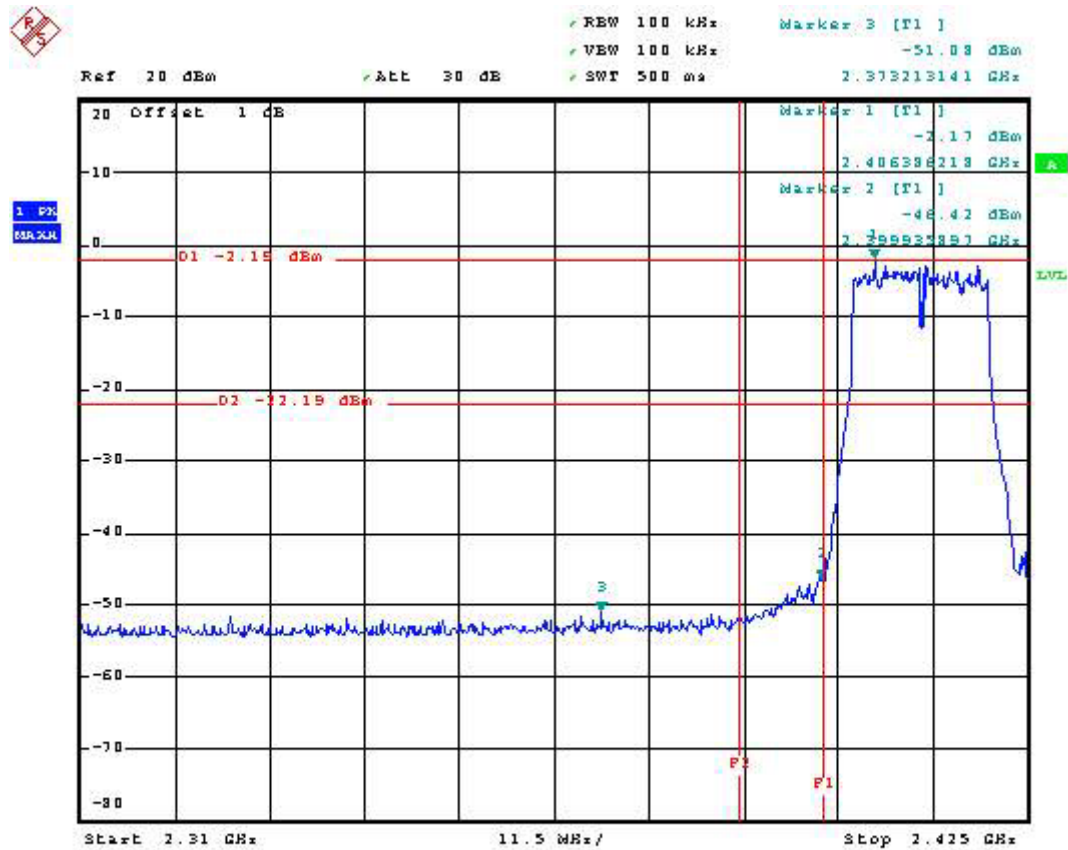
Channel	Polarity	The emission of carrier power strength	Frenquency	The maximum field strength in restrict band	Limit	Margin	Remark	Result
		(dB μ V/m)	(GHz)	(dB μ V/m)	(dB μ V/m)	(dB)		
01	V	96.73	2.3732	47.83	74	-26.17	Peak	Pass
	V	90.07	2.3732	41.17	54	-12.83	Average	Pass
	H	95.32	2.3732	46.42	74	-27.58	Peak	Pass
	H	89.02	2.3732	40.12	54	-13.88	Average	Pass
11	V	96.04	2.4844	54.36	74	-19.64	Peak	Pass
	V	91.04	2.4844	49.36	54	-4.64	Average	Pass
	H	99.07	2.4844	57.39	74	-16.61	Peak	Pass
	H	93.05	2.4844	51.37	54	-2.63	Average	Pass

Remark: The data above can refer to radiated emission in section 7.

FCC TEST REPORT

Report No. : F431003

Mode 3 : 11g CH01 (2412MHz)



SPORTON International Inc.

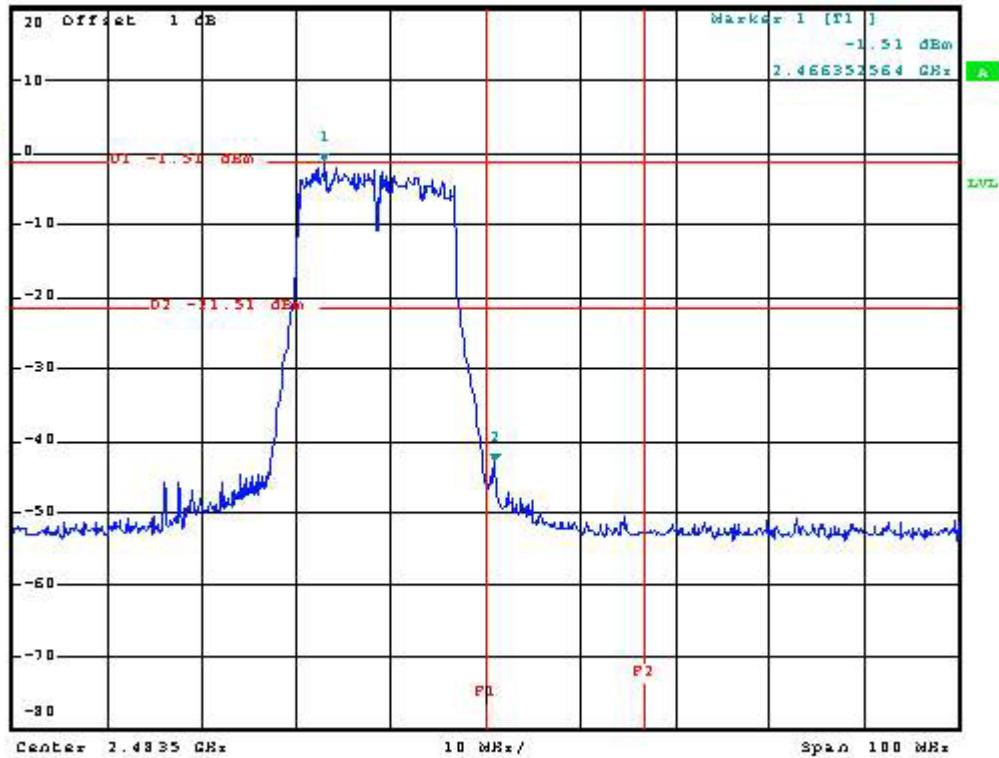
TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

FCC ID : NDD9571080404

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Issued Date : Apr. 05, 2004



5.5 Peak Output Power

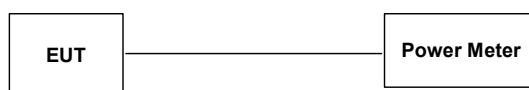
5.5.1 Measuring Instruments :

As described in chapter 7 of this test report.

5.5.2 Test Procedure :

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter.
The power is equal to the reading level on power meter plus cable loss at the EUT antenna terminal.

5.5.3 Test Setup Layout :



5.5.4 Test Result :

- Mode 1~3 : WLAN 802.11b
- Temperature : 22°C
- Relative Humidity : 53 %
- Antenna Gain: 3 dBi

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	15.5	1W/30 dBm
06	2437	15.5	1W/30 dBm
11	2462	16.3	1W/30 dBm

5.5.5 Test Result :

- Mode 4~6 : WLAN 802.11g
- Temperature : 22°C
- Relative Humidity : 53 %
- Antenna Gain: 3 dBi

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	15.5	1W/30 dBm
06	2437	15.5	1W/30 dBm
11	2462	15.2	1W/30 dBm

6. Test of Conducted Emission

Conducted emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz and return leads of the EUT according to the methods defined in ANSI C63.4-2001 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

6.1. Major Measuring Instruments :

● Test Receiver	(R&S ESCS 30)
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

6.2. Test Procedures :

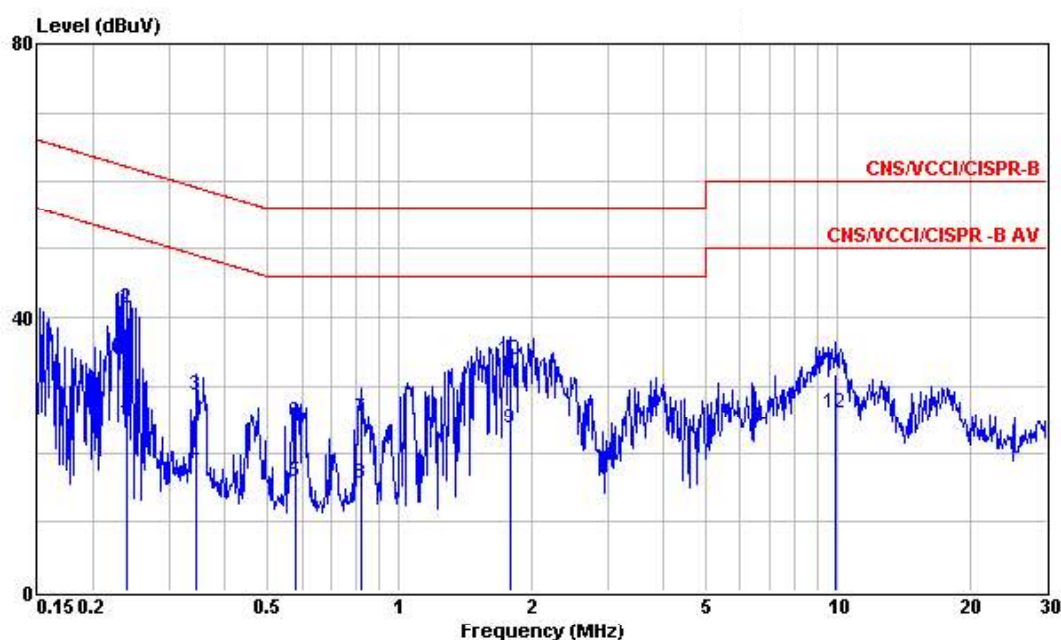
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power port of the line impedance stabilization network (LISN).
- c. All the support units are connect to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

6.3. Test Result of Conducted Emission :

6.3.1 Frequency Range of Test : 150kHz to 30 MHz

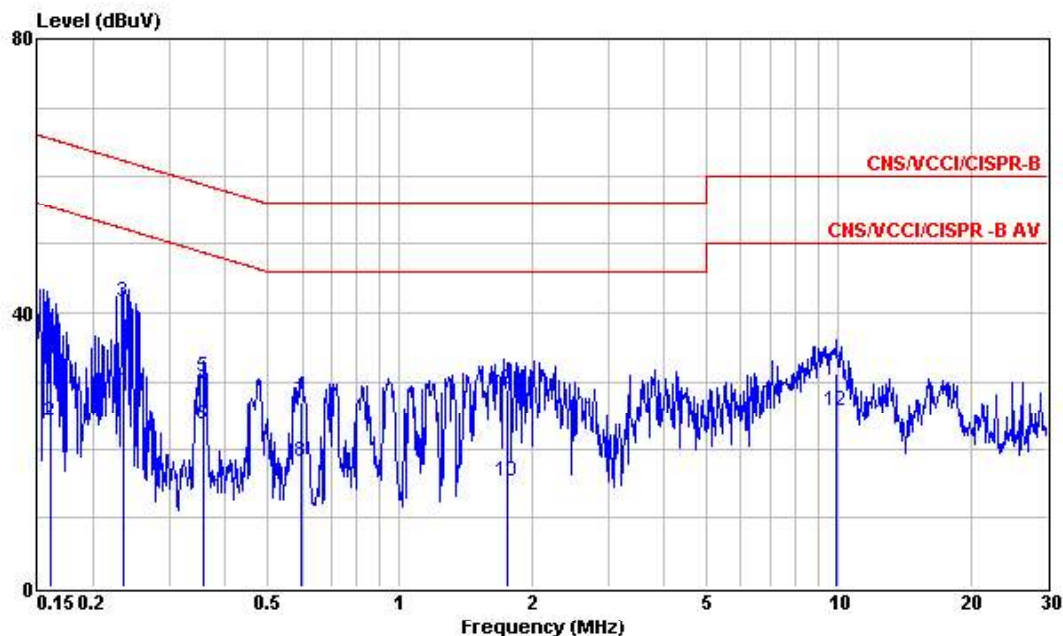
- Test Mode : Mode 1 Link mode
- Temperature : 25°C
- Relative Humidity : 51 %

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2003 2001/008 LINE
 EUT : PCMCIA
 Model : EW-7108PCG
 Power :
 Memo : Operating

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.239	24.60	-27.53	52.13	24.49	0.10	0.01	Average
2	0.239	41.20	-20.93	62.13	41.09	0.10	0.01	QP
3	0.345	28.69	-30.39	59.08	28.59	0.10	0.00	QP
4	0.345	18.47	-30.61	49.08	18.37	0.10	0.00	Average
5	0.582	15.78	-30.22	46.00	15.67	0.10	0.01	Average
6	0.582	24.75	-31.25	56.00	24.64	0.10	0.01	QP
7	0.817	25.25	-30.75	56.00	25.13	0.10	0.02	QP
8	0.817	15.54	-30.46	46.00	15.42	0.10	0.02	Average
9	1.790	23.64	-22.36	46.00	23.50	0.10	0.04	Average
10	1.790	33.88	-22.12	56.00	33.74	0.10	0.04	QP
11	9.910	31.66	-28.34	60.00	31.36	0.20	0.10	QP
12	9.910	26.09	-23.91	50.00	25.79	0.20	0.10	Average



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2003 2001/008 NEUTRAL
 EUT : PCMCIA
 Model : EW-7108PCG
 Power :
 Memo : Operating

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.161	35.93	-29.50	65.43	35.79	0.10	0.04	QP
2	0.161	24.16	-31.27	55.43	24.02	0.10	0.04	Average
3	0.236	41.67	-20.58	62.25	41.56	0.10	0.01	QP
4	0.236	29.49	-22.76	52.25	29.38	0.10	0.01	Average
5	0.358	30.73	-28.04	58.77	30.63	0.10	0.00	QP
6	0.358	23.52	-25.25	48.77	23.42	0.10	0.00	Average
7	0.595	27.03	-28.97	56.00	26.92	0.10	0.01	QP
8	0.595	18.13	-27.87	46.00	18.02	0.10	0.01	Average
9	1.762	28.95	-27.05	56.00	28.81	0.10	0.04	QP
10	1.762	15.45	-30.55	46.00	15.31	0.10	0.04	Average
11	9.860	31.28	-28.72	60.00	30.98	0.20	0.10	QP
12	9.860	25.73	-24.27	50.00	25.43	0.20	0.10	Average

Test Engineer : 

Jay

7. Test of Radiated Emission

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defined in ANSI C63.4-2001. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

7.1. Major Measuring Instruments

- Amplifier (MITEQ AFS44)
 - RF Gain 40 dB
 - Signal Input 100 MHz to 26.5 GHz

- Amplifier (HP8447D)
 - RF Gain 30 dB
 - Signal Input 100 MHz to 1.3 GHz

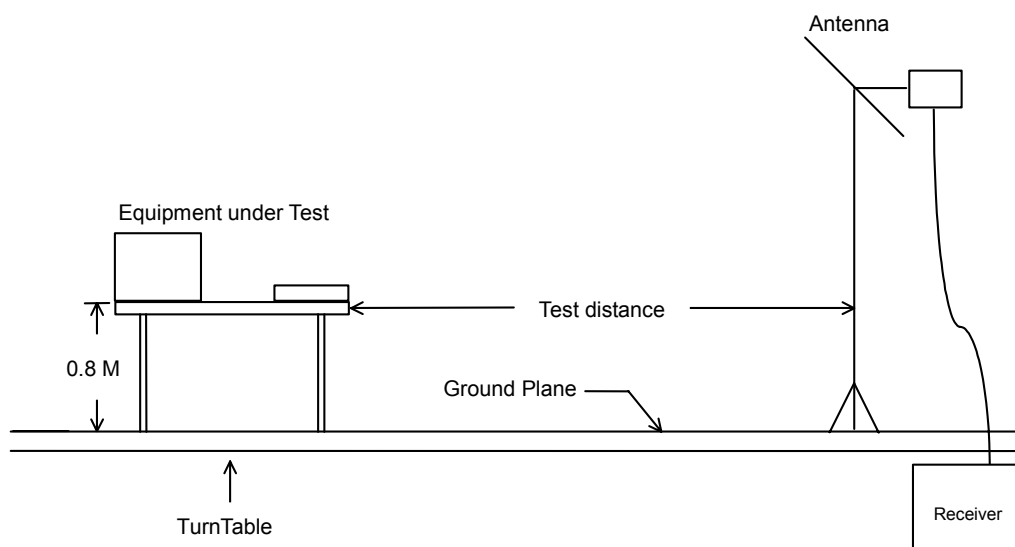
- Spectrum analyzer (R&S FSP40)
 - Attenuation 10 dB
 - Start Frequency 1 GHz
 - Stop Frequency 25 GHz
 - Resolution Bandwidth 1 MHz
 - Video Bandwidth 1 MHz
 - Signal Input 9 kHz to 40 GHz

- Spectrum analyzer (R&S FSP40)
 - Attenuation 10 dB
 - Start Frequency 30MHz
 - Stop Frequency 1 GHz
 - Resolution Bandwidth 120 kHz
 - Video Bandwidth 300kHz
 - Signal Input 9 kHz to 40 GHz

7.2. Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
8. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

7.3. Typical Test Setup Layout of Radiated Emission

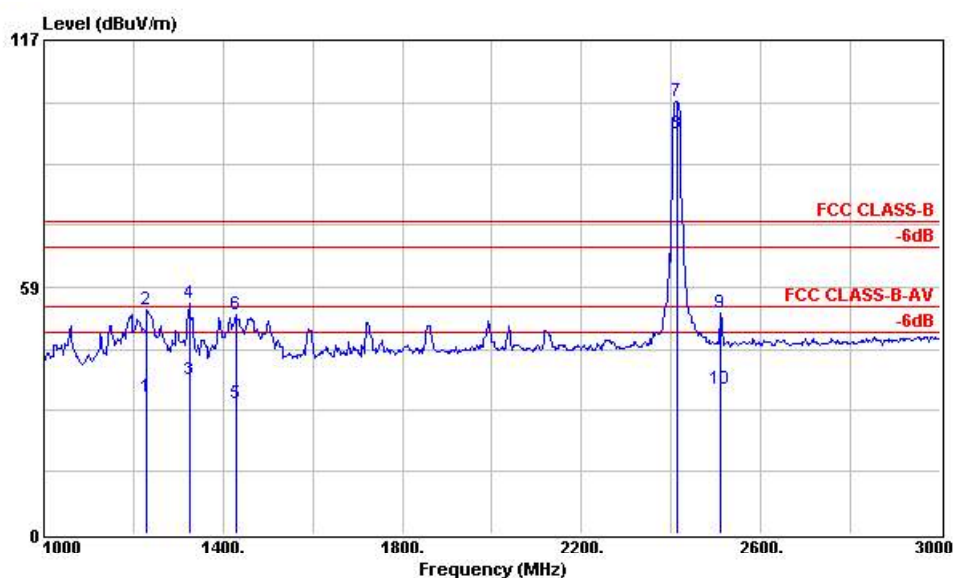


7.4. Test Result of Radiated Emission

7.4.1 Test Mode: Mode 1 802.11b TX CH01

- Test Distance : 3 m
- Temperature : 26°C
- Relative Humidity :55 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

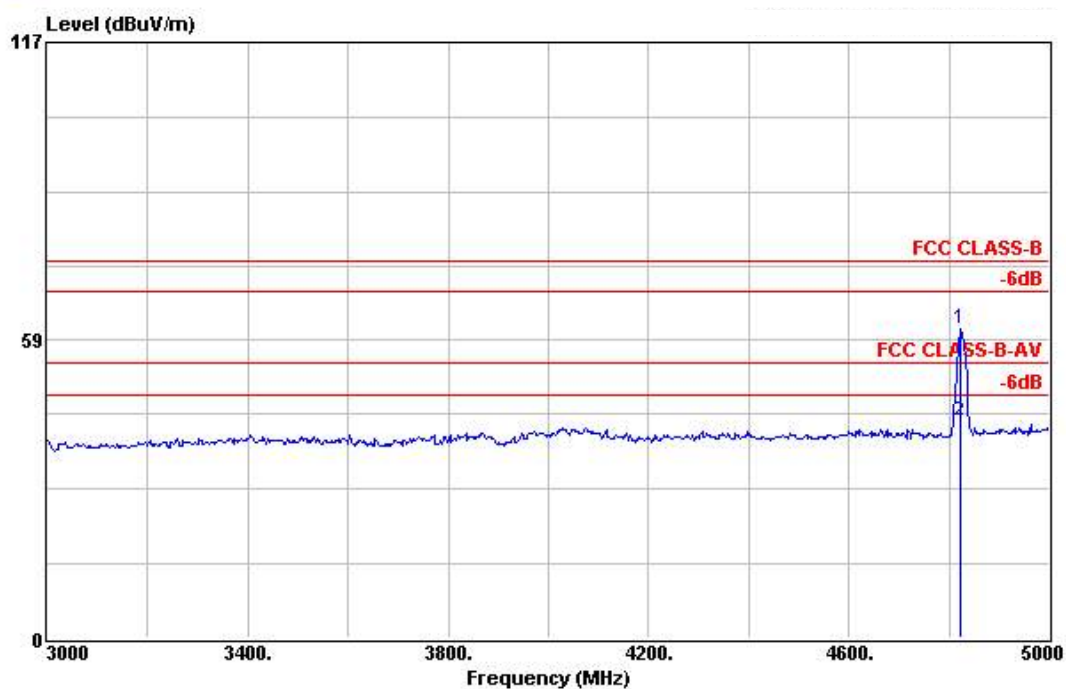
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 VERTICAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH01

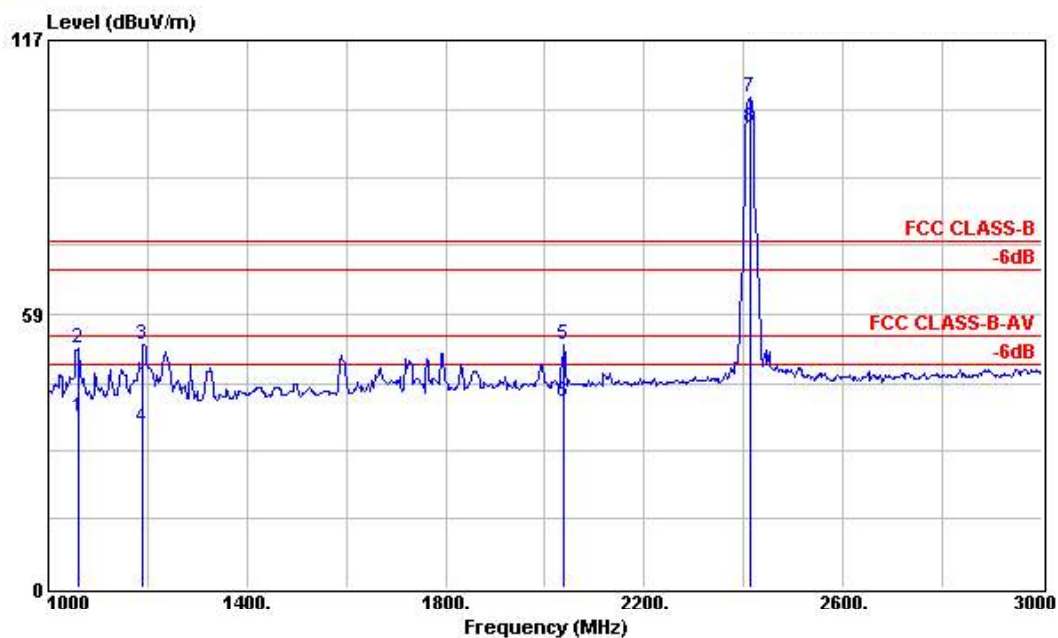
	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1230.000	32.47	-21.53	54.00	46.85	24.68	1.28	40.34	Average	100	227
2	1230.000	53.07	-20.93	74.00	67.45	24.68	1.28	40.34	Peak	100	227
3	1324.000	36.31	-17.69	54.00	50.48	24.91	1.36	40.44	Average	100	158
4	1324.000	54.67	-19.33	74.00	68.84	24.91	1.36	40.44	Peak	100	158
5	1428.000	30.62	-23.38	54.00	44.54	25.16	1.46	40.54	Average	100	158
6	1428.000	52.22	-21.78	74.00	66.14	25.16	1.46	40.54	Peak	100	158
7 X	2412.000	102.67			113.84	28.24	1.74	41.15	Peak	100	151
8 X	2412.000	94.96			106.13	28.24	1.74	41.15	Average	100	151
9	2510.000	52.59	-21.41	74.00	63.46	28.47	1.86	41.20	Peak	100	151
10	2510.000	34.24	-19.76	54.00	45.11	28.47	1.86	41.20	Average	100	151

Remark: The "X" represent a fundamental frequency.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 VERTICAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH01

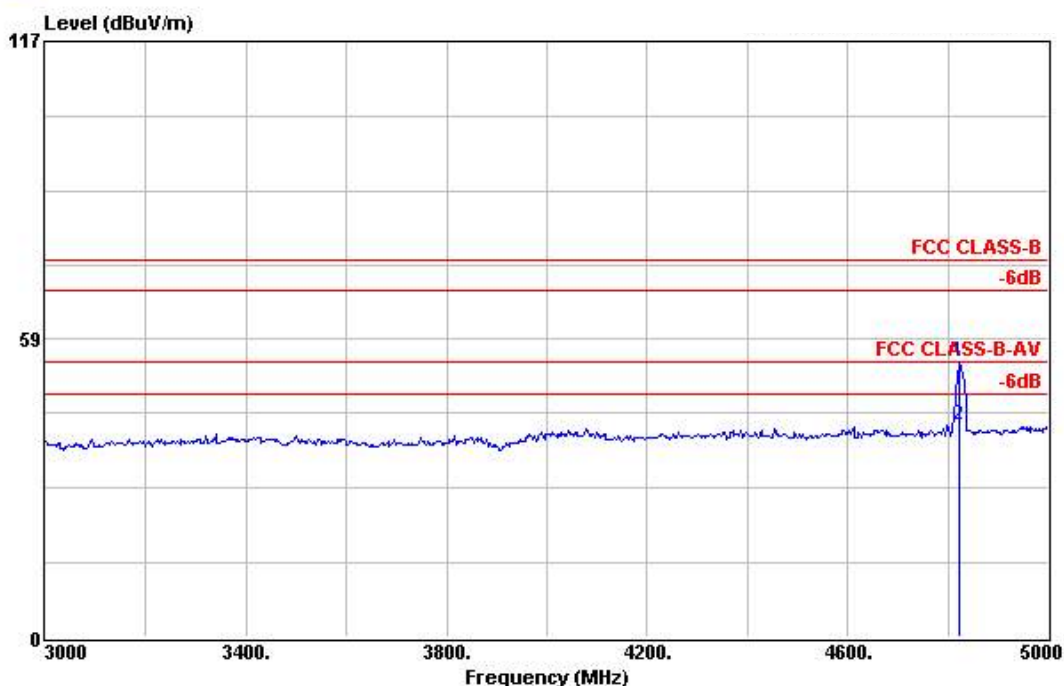
	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4822.000	60.66	-13.34	74.00	67.50	33.06	2.47	42.37	Peak	100	207
2	4822.000	42.57	-11.43	54.00	49.41	33.06	2.47	42.37	Average	100	207



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 HORIZONTAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH01

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1060.000	36.49	-17.51	54.00	51.20	24.27	1.19	40.17	Average	100	95
2	1060.000	51.14	-22.86	74.00	65.85	24.27	1.19	40.17	Peak	100	95
3	1190.000	52.11	-21.89	74.00	66.61	24.58	1.22	40.30	Peak	100	194
4	1190.000	34.15	-19.85	54.00	48.65	24.58	1.22	40.30	Average	100	194
5	2038.000	51.89	-22.11	74.00	63.68	27.49	1.65	40.93	Peak	100	142
6	2038.000	39.77	-14.23	54.00	51.56	27.49	1.65	40.93	Average	100	142
7 X	2412.000	104.96			116.13	28.24	1.74	41.15	Peak	100	8
8 X	2412.000	98.42			109.59	28.24	1.74	41.15	Average	100	8

Remark: The "X" represent a fundamental frequency.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 HORIZONTAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH01

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4822.000	53.98	-20.02	74.00	60.82	33.06	2.47	42.37	Peak	---	---
2	4822.000	41.47	-12.53	54.00	48.31	33.06	2.47	42.37	Average	100	210

For 5GHz ~ 25GHz

Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured

■ Field strength of fundamental and harmonics

Frequency	Antenna	Cable	Reading	Preamp	Factor	Limits	Emission	Margin	Detect
Polarity	Factor	Loss							
(MHz)	(dB/m)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)		Mode
2412.000	V	28.24	1.74	113.84	41.15	-	102.67	-	Peak
2412.000	V	28.24	1.74	106.13	41.15	-	94.96	-	AV
2412.000	H	28.24	1.74	116.13	41.15	-	104.96	-	Peak
2412.000	H	28.24	1.74	98.99	41.15	-	87.82	-	AV
4822.000	V	33.06	2.47	67.50	42.37	74.00	60.66	-13.34	Peak
4822.000	V	33.06	2.47	49.41	42.37	54.00	42.57	-11.43	AV
4822.000	H	33.06	2.47	60.82	42.37	74.00	53.98	-20.02	Peak
4822.000	H	33.06	2.47	48.31	42.37	54.00	41.47	-12.53	AV
7236.000	V/H	-	-	-	-	-	-	-	AV/Peak
9648.000	V/H	-	-	-	-	-	-	-	AV/Peak
12060.000	V/H	-	-	-	-	-	-	-	AV/Peak
14472.000	V/H	-	-	-	-	-	-	-	AV/Peak
16884.000	V/H	-	-	-	-	-	-	-	AV/Peak
19296.000	V/H	-	-	-	-	-	-	-	AV/Peak
21708.000	V/H	-	-	-	-	-	-	-	AV/Peak
24120.000	V/H	-	-	-	-	-	-	-	AV/Peak

Remark:

1. The emission emitted by the EUT is too low to be measured except the emission listed above,
2. Reading = Reading on SA-Preamp Factor

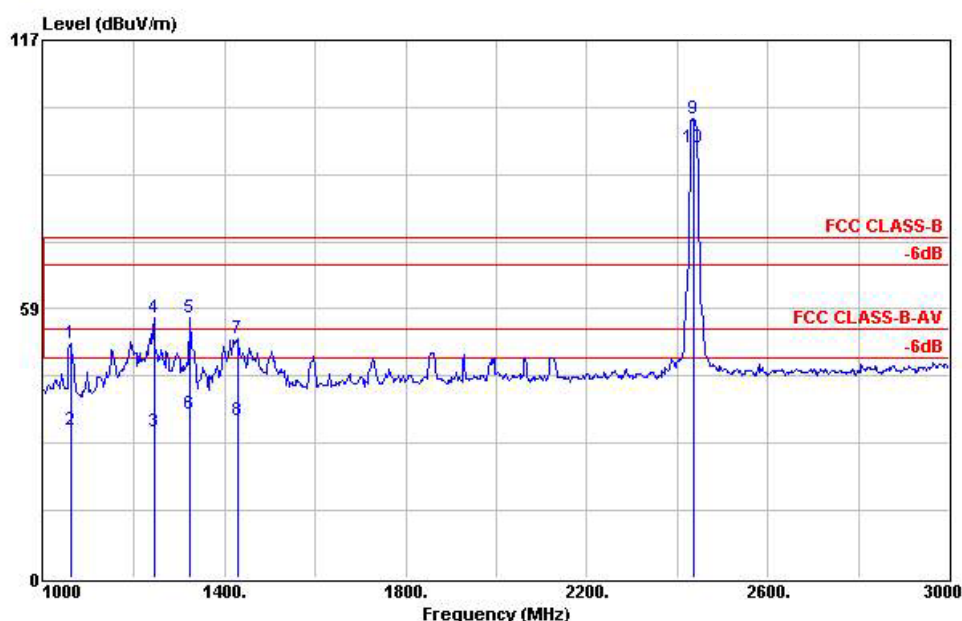
Test Engineer : 

Jay

7.4.2 Test Mode: Mode 2 802.11b TX CH06

- Test Distance : 3 m
- Temperature : 26°C
- Relative Humidity :55 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

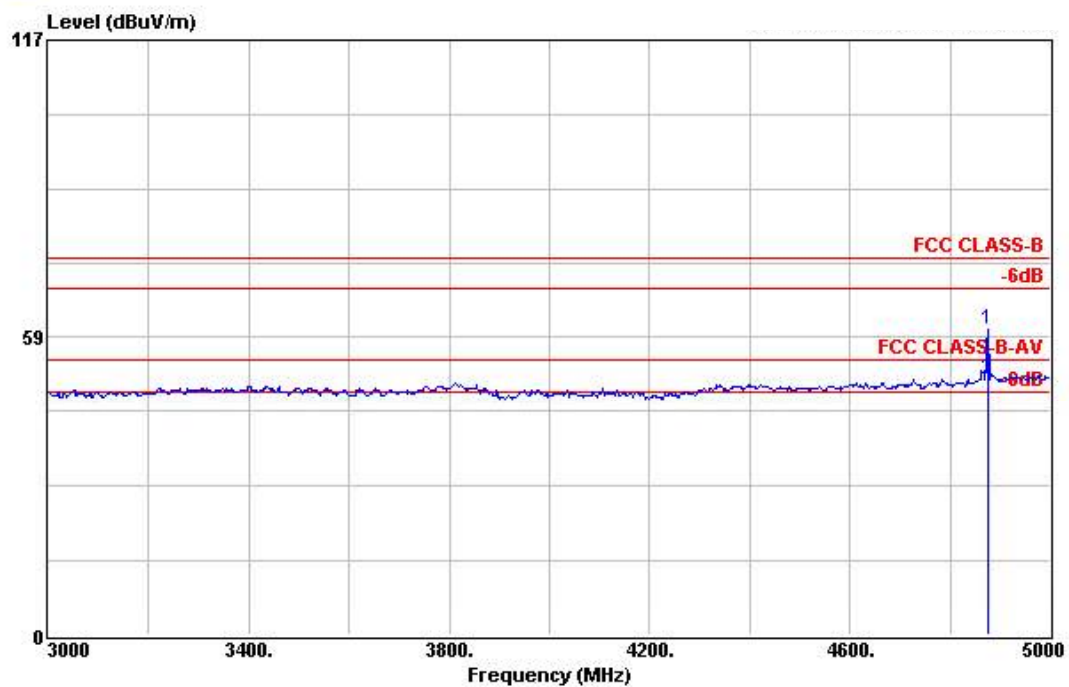
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 VERTICAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH06

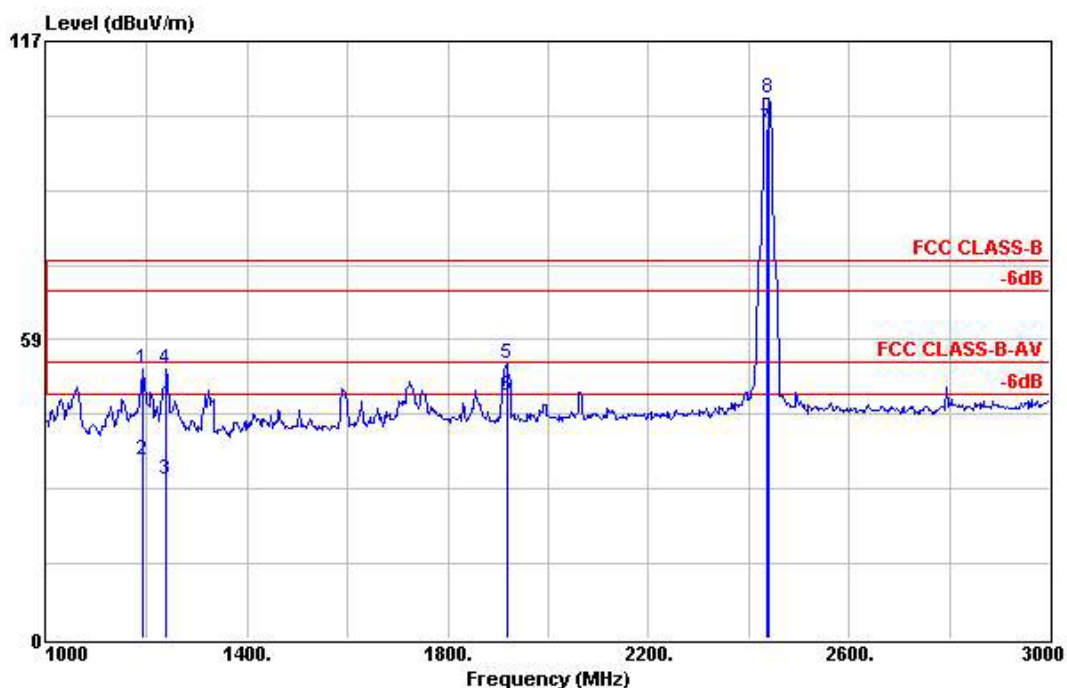
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1060.000	50.83	-23.17	74.00	65.54	24.27	1.19	40.17	Peak	100	274
2	1060.000	32.30	-21.70	54.00	47.01	24.27	1.19	40.17	Average	100	274
3	1244.000	31.89	-22.11	54.00	46.20	24.71	1.34	40.36	Average	100	156
4	1244.000	56.50	-17.50	74.00	70.81	24.71	1.34	40.36	Peak	100	156
5	1324.000	56.70	-17.30	74.00	70.87	24.91	1.36	40.44	Peak	100	152
6	1324.000	35.79	-18.21	54.00	49.96	24.91	1.36	40.44	Average	100	152
7	1428.000	52.01	-21.99	74.00	65.93	25.16	1.46	40.54	Peak	100	256
8	1428.000	34.18	-19.82	54.00	48.10	25.16	1.46	40.54	Average	100	256
9 X	2436.000	99.78			110.90	28.29	1.76	41.17	Peak	100	255
10 X	2436.000	93.71			104.83	28.29	1.76	41.17	Average	100	255

Remark: The "X" represent a fundamental frequency.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 VERTICAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH06

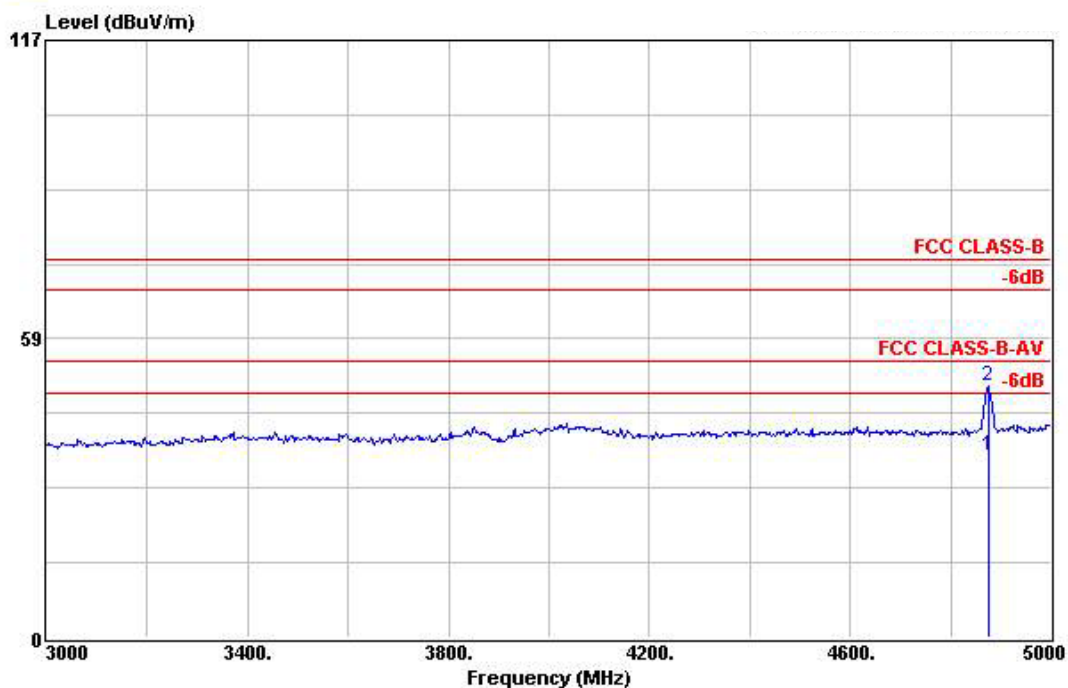
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4876.000	60.01	-13.99	74.00	66.76	33.17	2.52	42.44	Peak	---	---
2	4876.000	50.25	-3.75	54.00	57.00	33.17	2.52	42.44	Average	116	238



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 HORIZONTAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH06

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	1190.000	52.71	-21.29	74.00	67.21	24.58	1.22	40.30	Peak	100	124
2	1190.000	35.00	-19.00	54.00	49.50	24.58	1.22	40.30	Average	100	124
3	1238.000	31.12	-42.88	74.00	45.46	24.70	1.31	40.35	Peak	100	154
4	1238.000	52.63	-21.37	74.00	66.97	24.70	1.31	40.35	Peak	100	154
5	1918.000	53.73	-20.27	74.00	65.95	27.08	1.56	40.86	Peak	100	100
6	1918.000	47.67	-6.33	54.00	59.89	27.08	1.56	40.86	Average	100	10
7 X	2436.000	99.87			110.99	28.29	1.76	41.17	Average	100	9
8 X	2440.000	105.86			116.96	28.30	1.77	41.17	Peak	---	---

Remark: The "X" represent a fundamental frequency.



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m HORN-ANT-6741 HORIZONTAL
 EUT : PCMCIA
 Power :
 Model : EW-7108PCG
 Memo : 11b TX CH06

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4875.900	35.68	-18.32	54.00	42.43	33.17	2.52	42.44	Average	200	206
2	4876.000	49.36	-24.64	74.00	56.11	33.17	2.52	42.44	Peak	200	206

For 5GHz ~ 25GHz

Frequency from 5000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured