

# **FCC TEST REPORT**

for

## **47 CFR Part 15 Subpart C**

**Equipment : IEEE802.11g PCI WLAN Card**

**Trade Name : ZINWELL/ VTECH**

**Model No. : ZPlus-G361/ VD850G**

**FCC ID : RIW-ZWX-G361**

**Filing Type : Certification**

**Applicant : ZINWELL CORPROATION**  
2, Wen-Hua Road, Hsinchu Industrial Park Hsinchu  
Hsien 303, 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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**CERTIFICATE OF COMPLIANCE**  
**for**  
**47 CFR Part 15 Subpart C**

**Equipment : IEEE802.11g PCI WLAN Card**

**Trade Name : ZINWELL/ VTECH**

**Model No. : ZPlus-G361/ VD850G**

**FCC ID : RIW-ZWX-G361**

**Filing Type : Certification**

**Applicant : ZINWELL CORPROATION**  
2, Wen-Hua Road, Hsinchu Industrial Park Hsinchu  
Hsien 303, 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 July 20, 2004 at **SPORTON International Inc.** LAB.

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Daniel Lee  
Manager

***SPORTON International Inc.***

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

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***SPORTON International Inc.***

TEL : 886-2-2696-2468  
FAX : 886-2-2696-2255

FCC ID : RIW-ZWX-G361  
Page No. : 1 of 50  
Issued Date : July 26, 2004

## **1. General Description of Equipment under Test**

### **1.1. Applicant**

**ZINWELL CORPROATION**

2, Wen-Hua Road, Hsinchu Industrial Park Hsinchu Hsien 303, Taiwan

### **1.2 Manufacturer**

**ZINWELL CORPROATION**

2, Wen-Hua Road, Hsinchu Industrial Park Hsinchu Hsien 303, Taiwan

### **1.3 Basic Description of Equipment under Test**

Equipment : IEEE802.11g PCI WLAN Card  
Trade Name : ZINWELL/ VTECH  
Model No. : ZPlus-G361/ VD850G  
FCC ID : RIW-ZWX-G361  
Power Supply Type : DC 3.3V

**1.4 Feature of Equipment under Test**

Product Feature & Specification				
1. Host/Radio Interface	Wireless LAN			
2. Modulation Type/Data Rate	OFDM / 54Mbps			
3. Freq.Range/Carrier Freqs.	2400 MHz ~ 2483.5 MHz			
4. Number of Channels	USA/Canada: 11	V	European: 13	
	Japan: 13, 14		Other:	
5. Carrier Frequency of each channel	2412 MHz~2462MHz			
6. Channel Spacing	5 MHz			
7. Maximum Output Power to Antenna (Normal condition)	802.11b: 13.5 dBm 802.11g: 13 dBm			
8. Type of Antenna Connector	Reverse SMA			
9. Antenna Type	Dipole			
10. Antenna Gain	2 dBi			
11. Function Type	Transmitter		Transceiver	V
12. Power Rating (DC/AC , Voltage)	DC 3.3V			
13. Duty Cycle	100%			

## **2 Test Configuration of Equipment under Test**

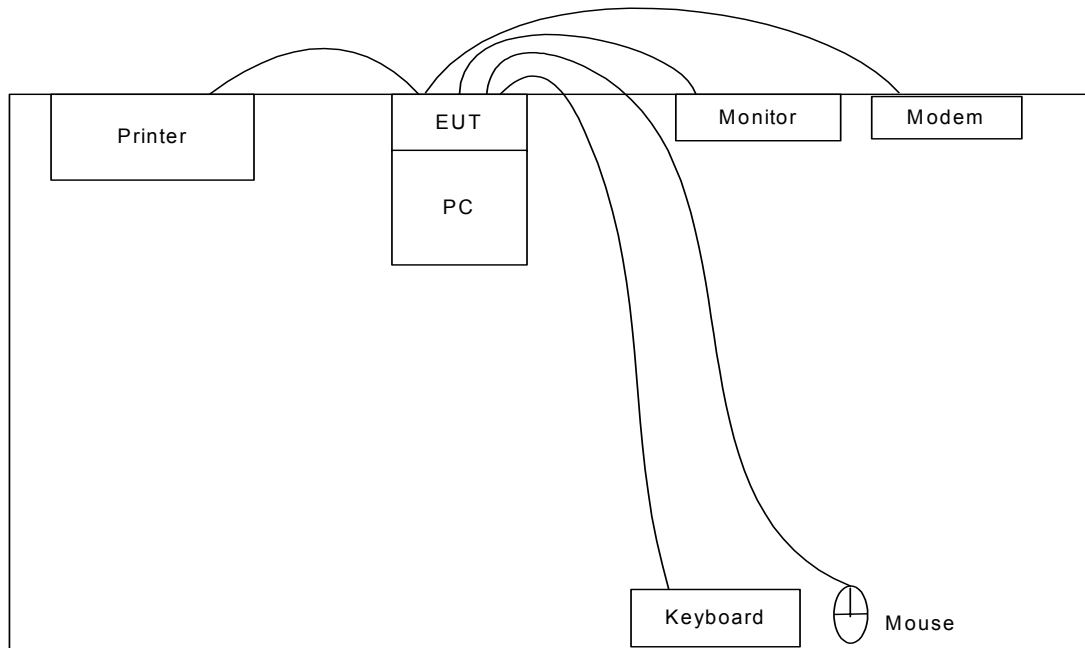
### **2.1 Test Manner**

- 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, BTC (PS2)Keyboard, EPSON Printer, ACEEX Modem, Microsoft (USB)Mouse, HP COMPAQ PC 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 tested for conduction test:
  - Mode 1: Ping link mode
 The following test modes were pretested for radiation test:
  - Mode 1: 802.11b TX CH01 (2412MHz)
  - Mode 2: 802.11b TX CH06 (2437MHz)
  - Mode 3: 802.11b TX CH11 (2462MHz)
  - Mode 4: 802.11g TX CH01 (2412MHz)
  - Mode 5: 802.11g TX CH06 (2437MHz)
  - Mode 6: 802.11g TX CH11 (2462MHz)
- e. Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

### **2.2 Description of Test System**

Item	Asset	Model Name	Power Cord	S/N
<b>1</b>	Monitor (VIEWSONIC)	VCDTS21553-3P	Shielded, 1.7m	SP0007
<b>2</b>	(PS2) Keyboard (BTC)	9110	Shielded, 1.7m	SP0012
<b>3</b>	Printer (EPSON)	STYLUS COLRO 680	Shielded, 1.35m	SP0017
<b>4</b>	Modem (ACEEX)	DM141	Shielded, 1.15m	SP0020
<b>5</b>	(USB) Mouse (Microsoft)	B75-00093	Shielded, 1.8m	SP0033
<b>6</b>	PC (HP COMPAQ)	D330	N/A	SP0034

### 2.3 Connection Diagram of Test System





### **3 Operation of Equipment under Test**

Two executive programs, EMCTEST.EXE under WIN XP, which generates a complete line of continuously repeating " H" pattern were used as the test software.

The programs were 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 internal hard disk, and the Hard Disk reads and writes the message.
- e. Repeat the steps from b to d.

At the same time, the following programs were executed:

one self test program "RT2500.EXE" to keep transmitting signals.

## **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 : CO04-HY, 03CH06-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 15.247(b)(4)	Antenna Requirement	Pass
1.1307 2.1091	RF Exposure	Pass

**5.2 6dB Bandwidth**

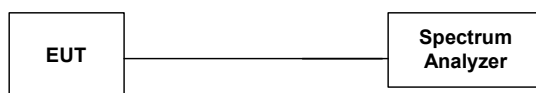
5.2.1 Measuring Instruments :

As described in chapter 10 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 : 802.11b
- Temperature : 26°C
- Relative Humidity : 53%

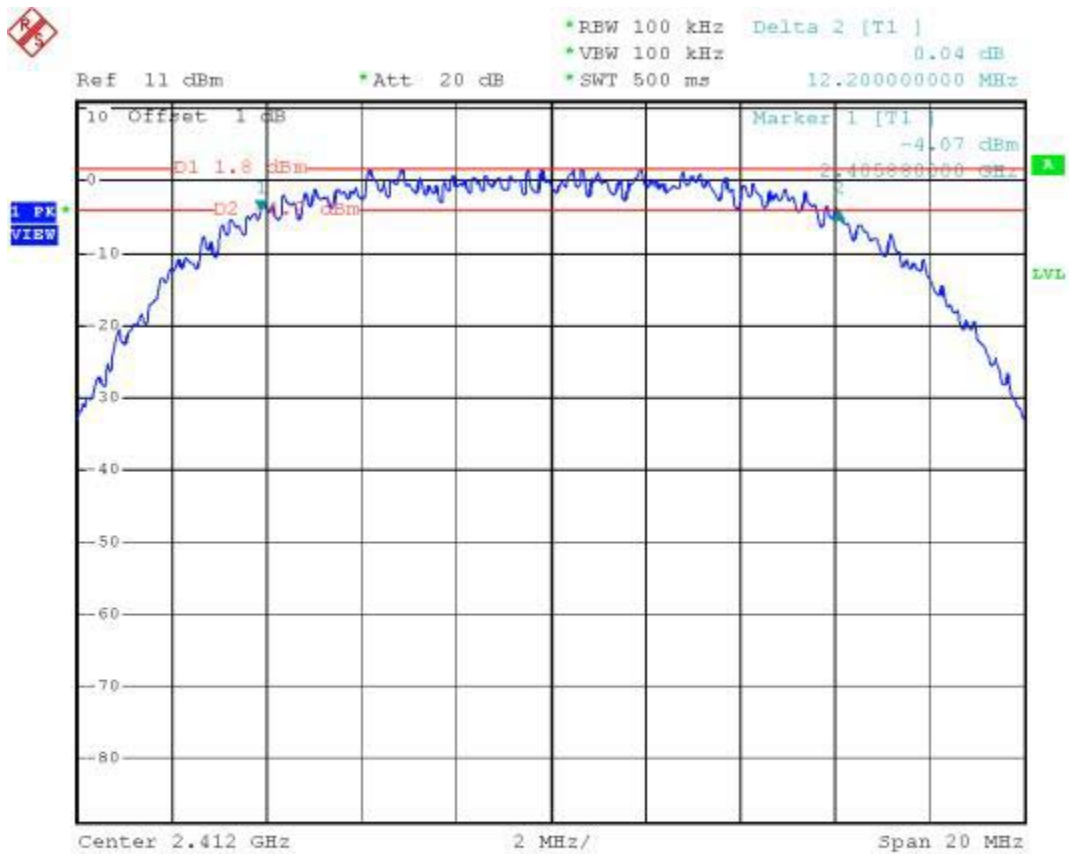
Channel	Frequency ( MHz )	6dB Emission bandwidth ( MHz )	Limits ( MHz )	Plot Ref. No.
01	2412	12.20	0.5	Mode 1
06	2437	11.96	0.5	Mode 2
11	2462	12.16	0.5	Mode 3

- Mode 4~6 : 802.11g
- Temperature : 26°C
- Relative Humidity : 53%

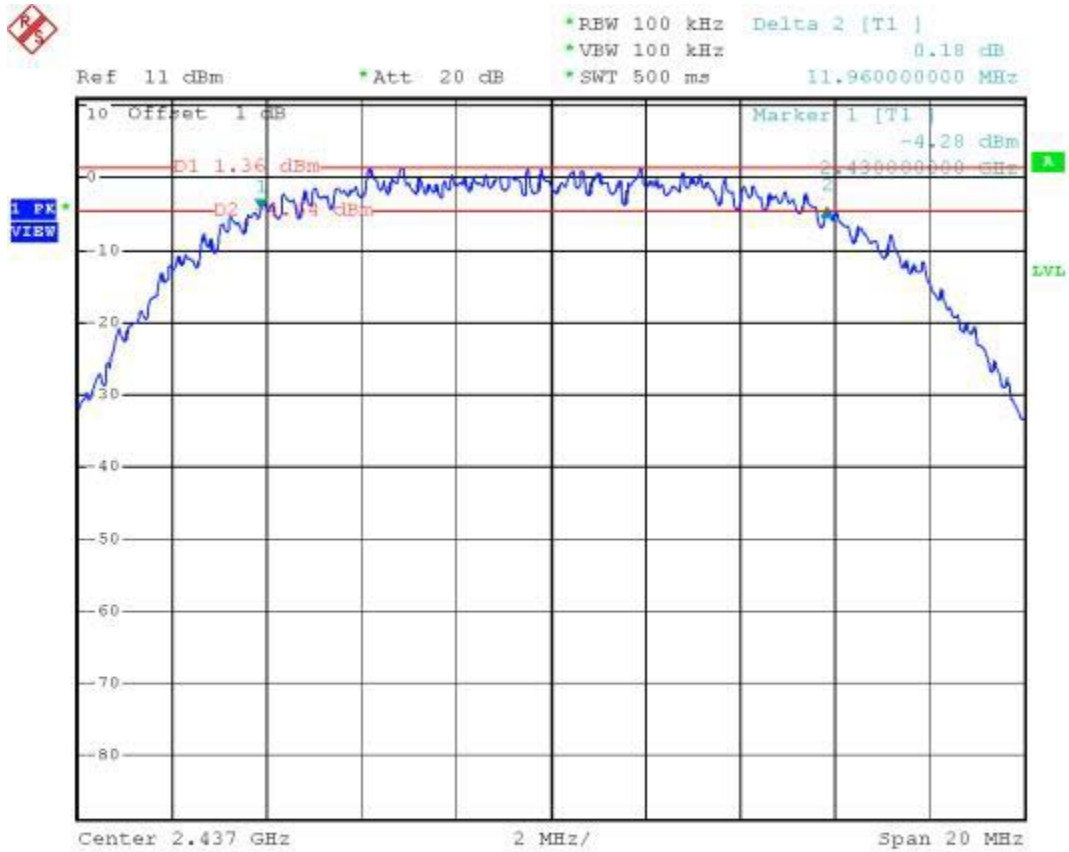
Channel	Frequency ( MHz )	6dB Emission bandwidth ( MHz )	Limits ( MHz )	Plot Ref. No.
01	2412	16.52	0.5	Mode 4
06	2437	16.52	0.5	Mode 5
11	2462	16.52	0.5	Mode 6

5.2.6 6dB Bandwidth

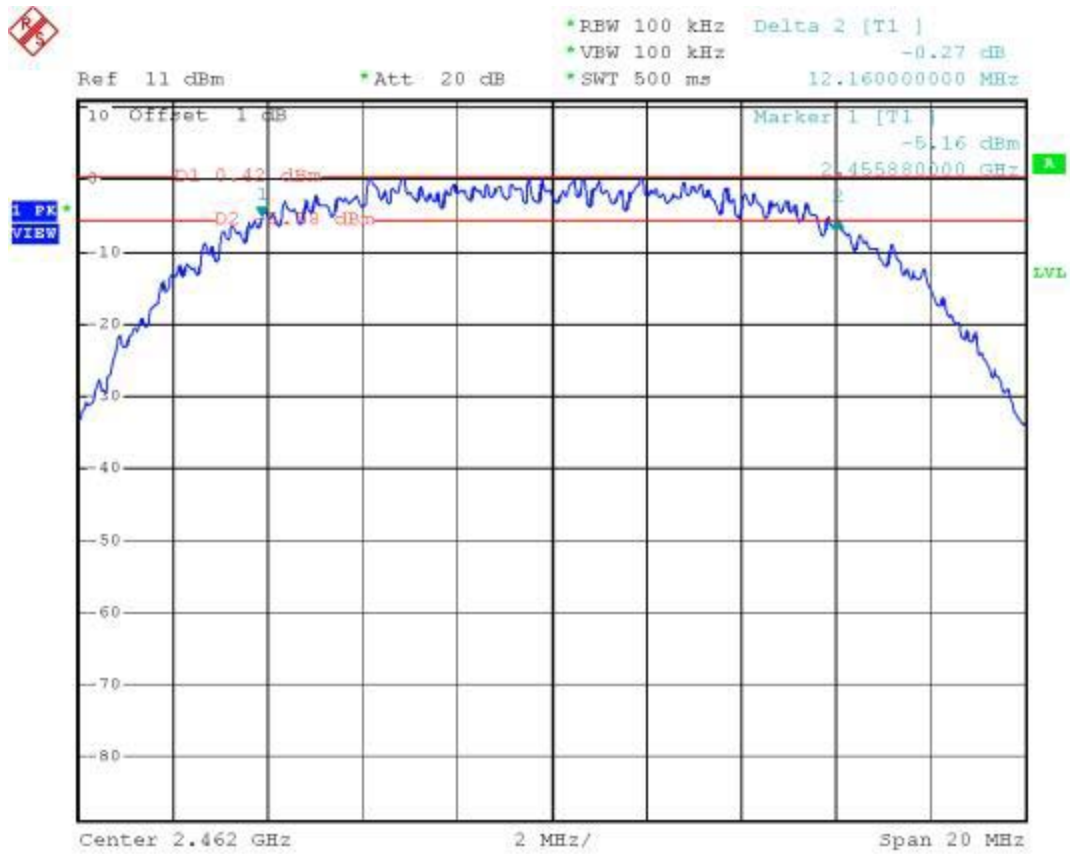
Mode 1 : 802.11b Tx CH01 (2412MHz)



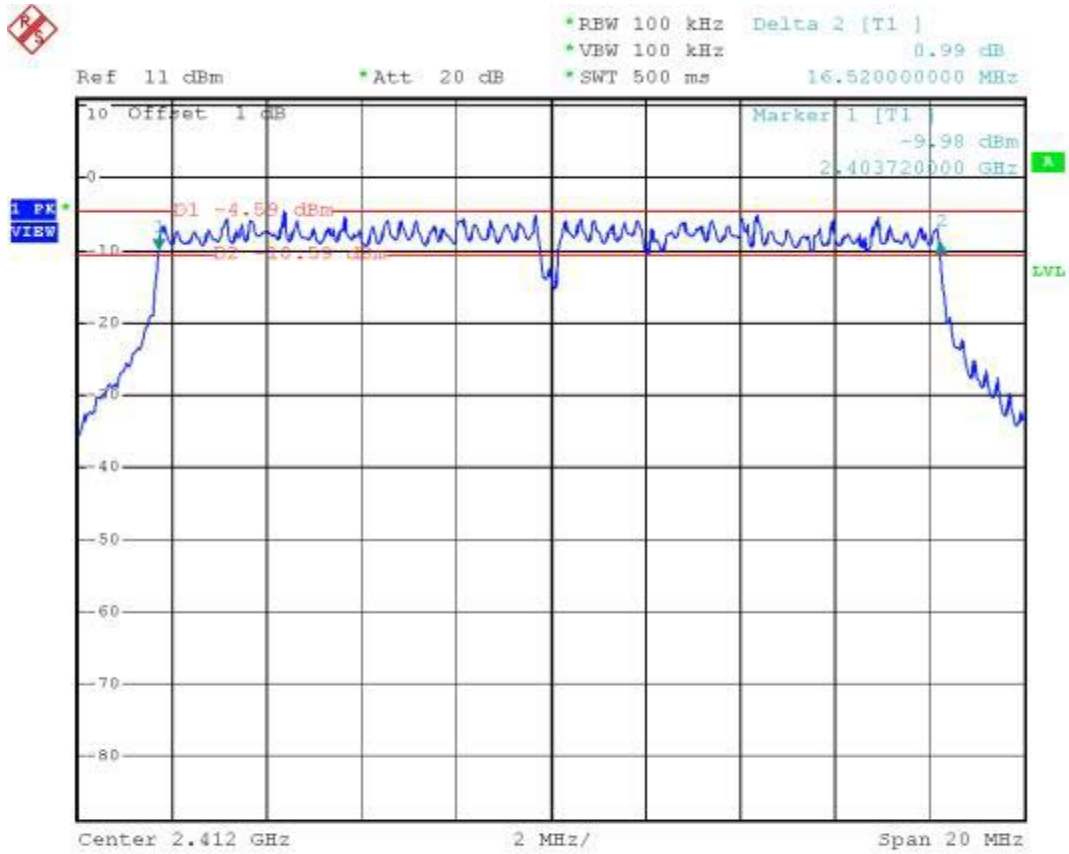
Mode 2 : 802.11b Tx CH06 (2437MHz)



Mode 3 : 802.11b Tx CH11(2462MHz)

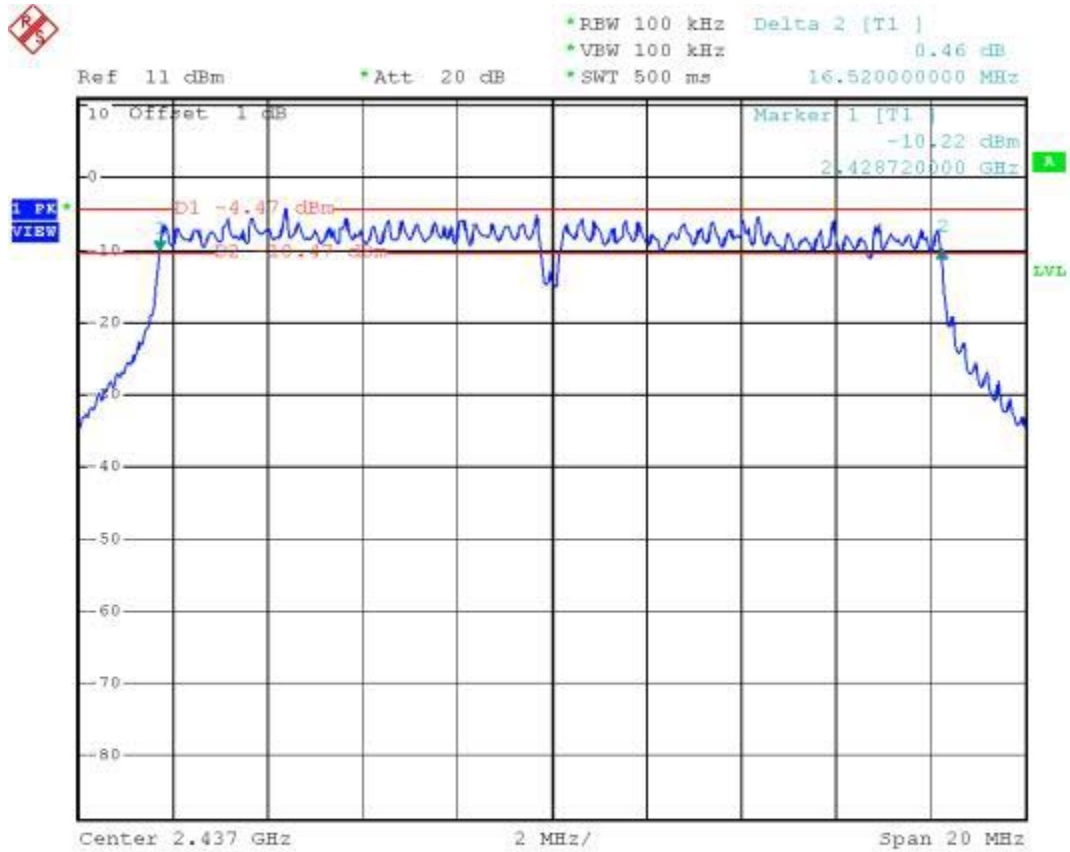


Mode 4 : 802.11g Tx CH01 (2412MHz)

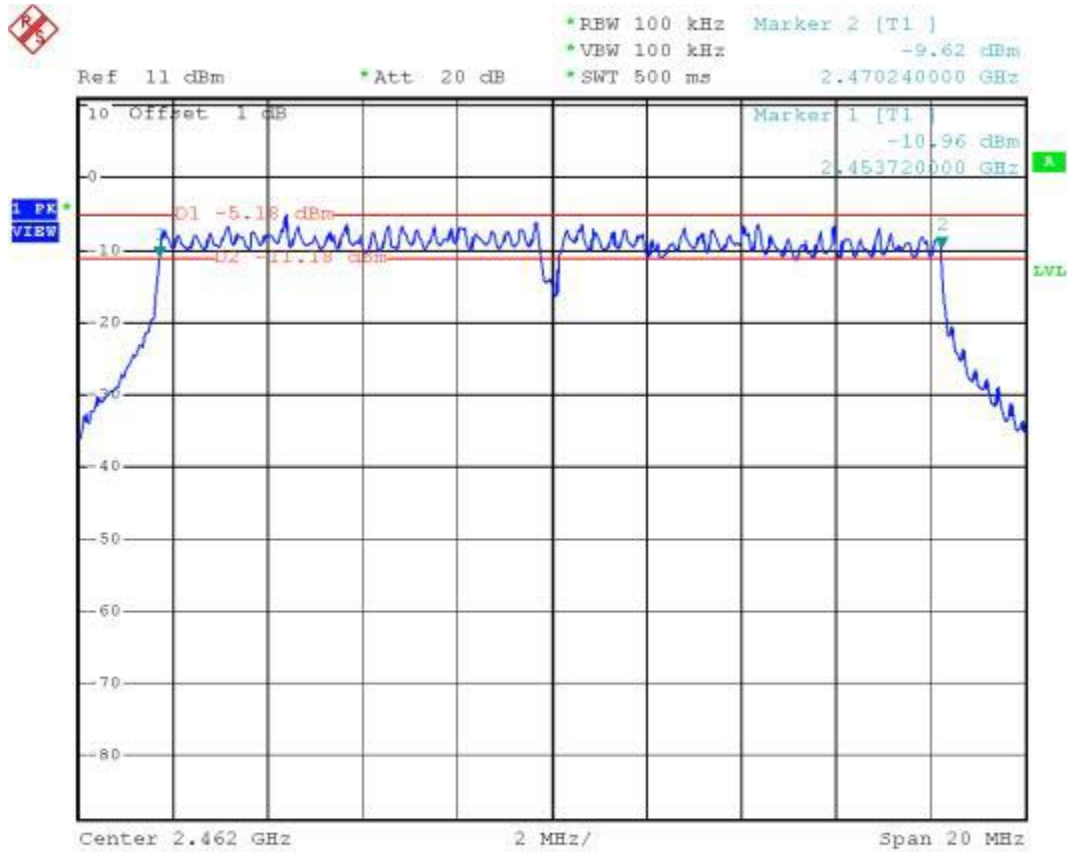




Mode 5 : 802.11g Tx CH06 (2437MHz)



Mode 6 : 802.11g Tx CH11(2462MHz)



**5.3 Power Spectral Density**

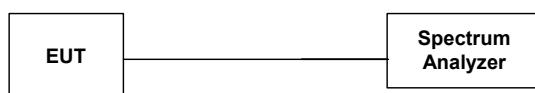
5.3.1 Measuring Instruments :

As described in chapter 10 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: 802.11b
- Temperature : 26°C,
- Relative Humidity : 53%

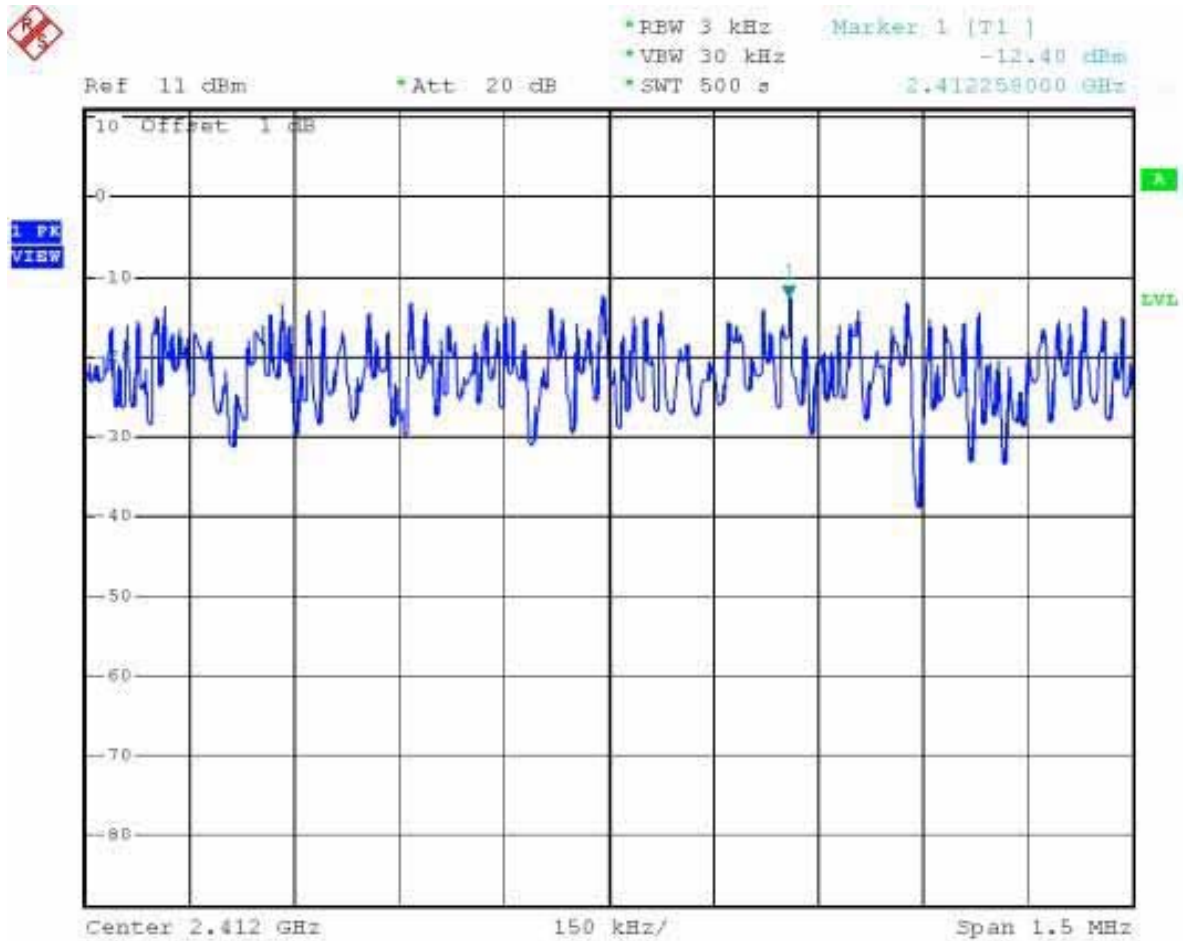
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm )	Plot Ref. No.
01	2412	-12.40	8	Mode 1
06	2437	-12.48	8	Mode 2
11	2462	-13.60	8	Mode 3

- Mode 4~6: 802.11g
- Temperature : 26°C,
- Relative Humidity : 53%

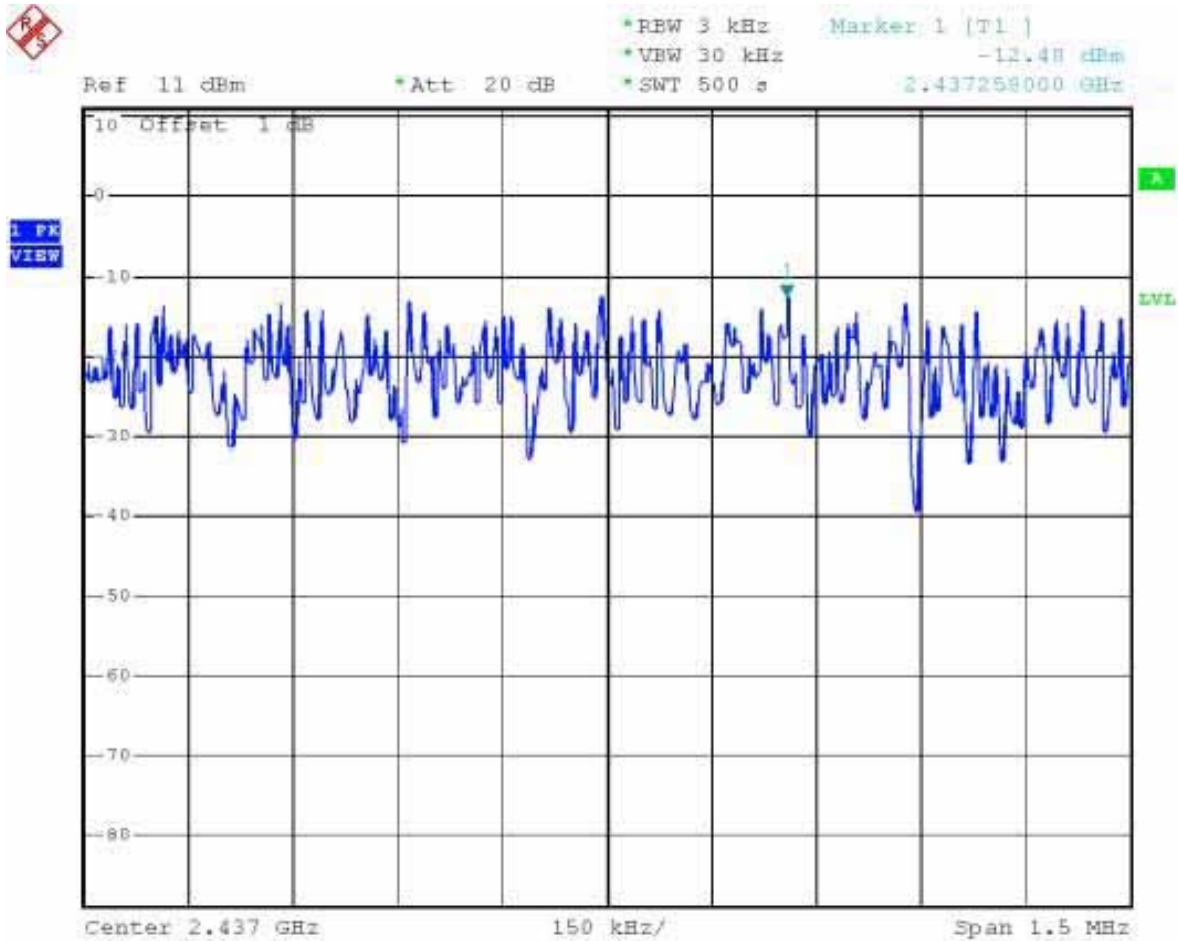
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm )	Plot Ref. No.
01	2412	-18.42	8	Mode 1
06	2437	-18.48	8	Mode 2
11	2462	-19.36	8	Mode 3

5.3.5 Power Spectral Density

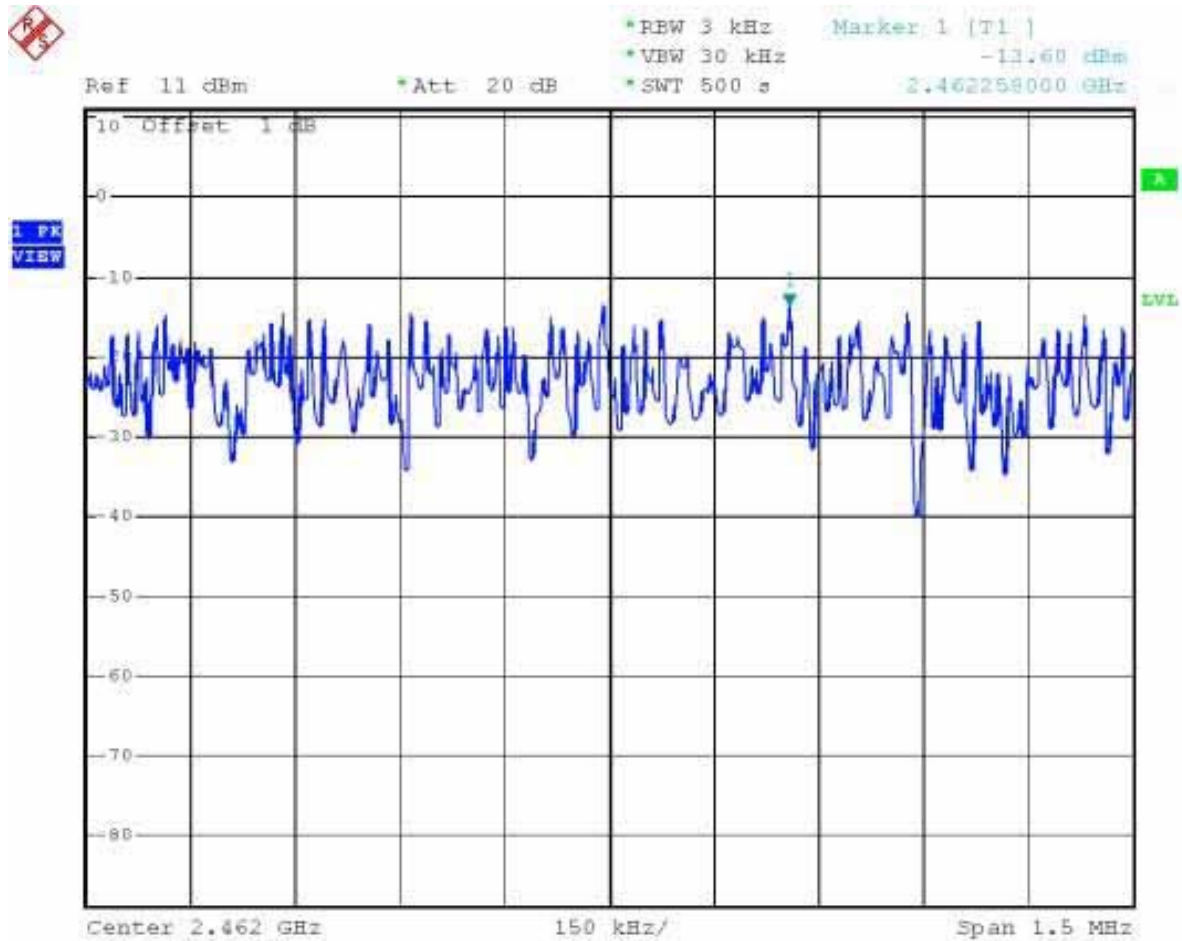
Mode 1 : 802.11b Tx CH01(2412MHz)



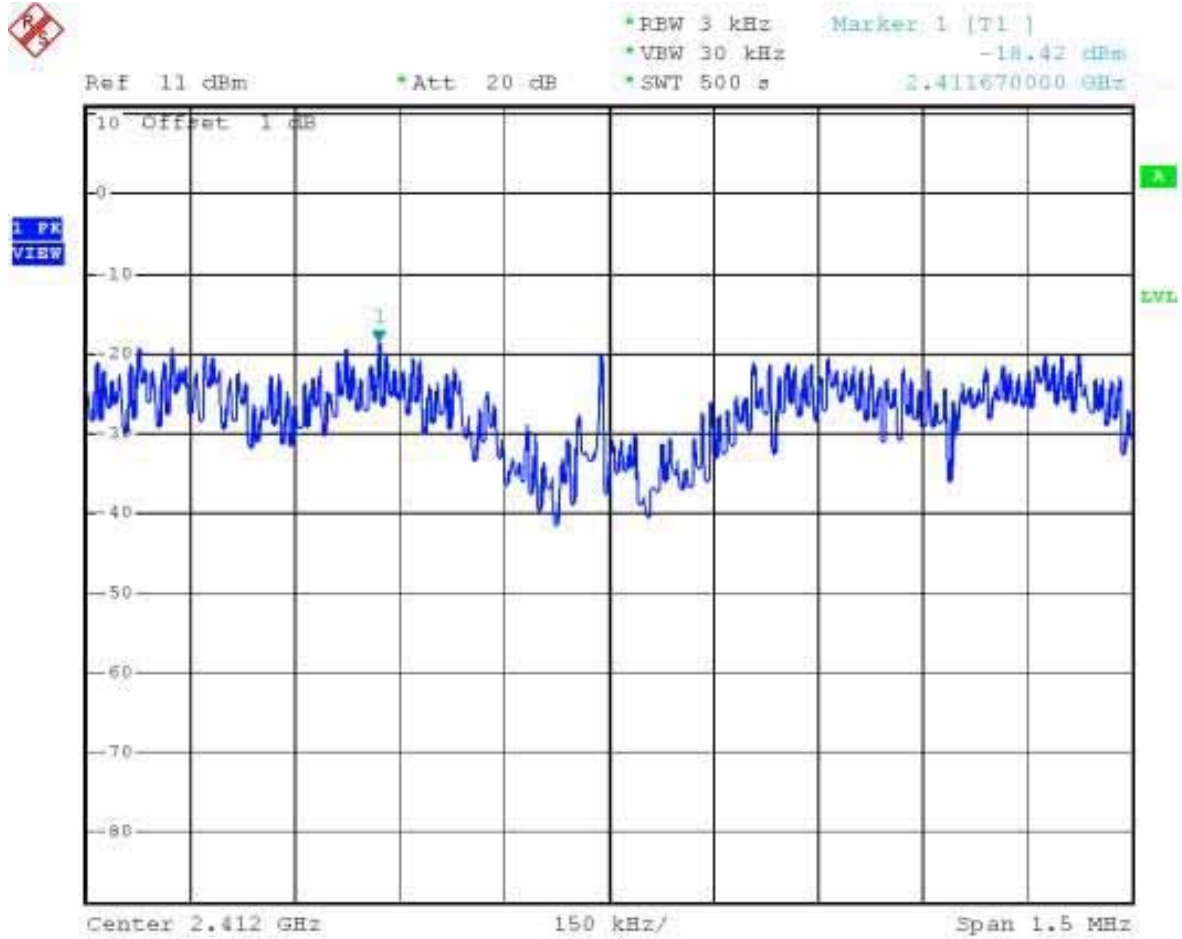
Mode 2 : 802.11b Tx CH06 (2437MHz)



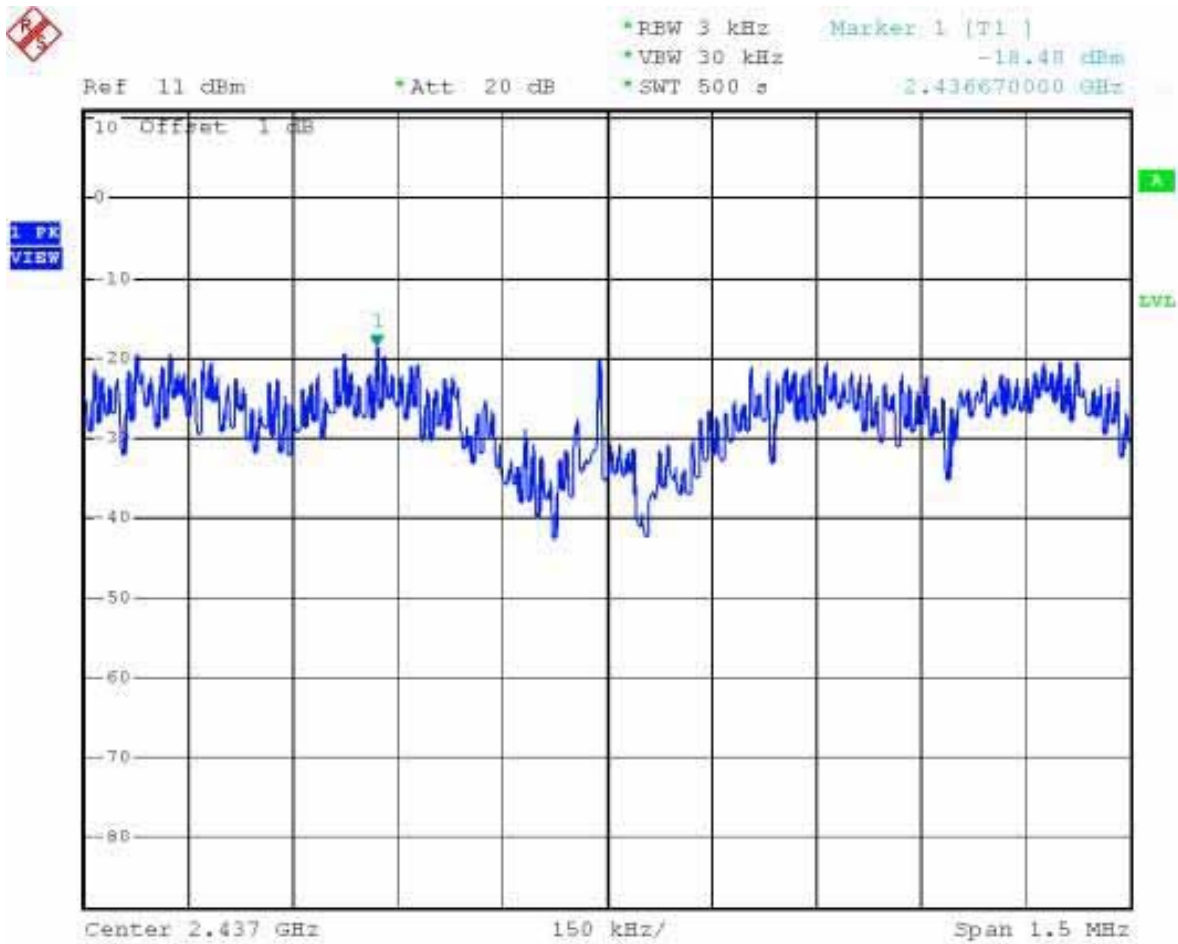
Mode 3 : 802.11b Tx CH11 (2462MHz)



Mode 4 : 802.11g Tx CH01(2412MHz)

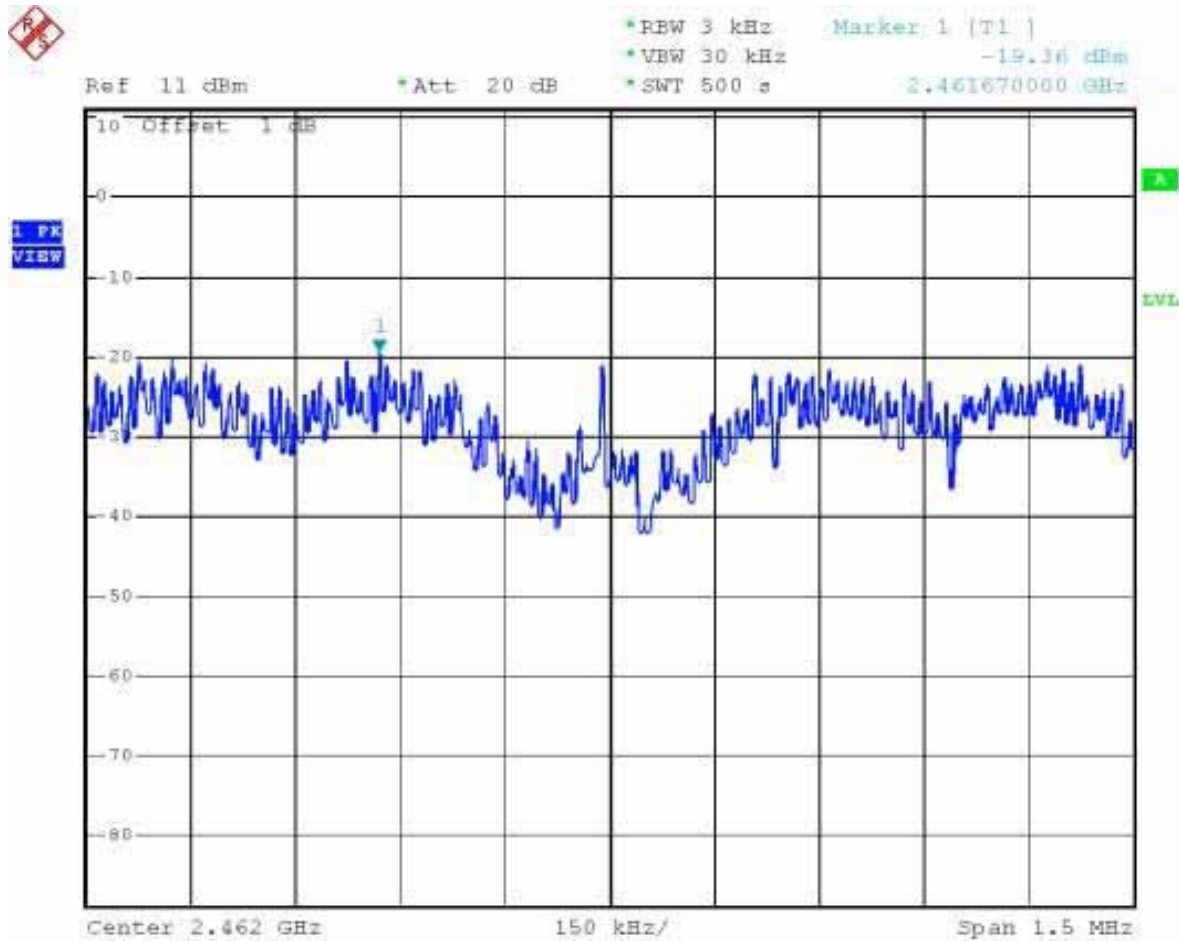


Mode 5 : 802.11g Tx CH06 (2437MHz)





Mode 6 : 802.11g Tx CH11 (2462MHz)



## **5.4 Band Edges Measurement**

### 5.4.1 Measuring Instruments :

As described in chapter 10 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 : 802.11b
- Temperature : 26°C,
- Relative Humidity : 53%
  
- Test Result in lower band (Channel 1) : PASS
- Test Result in higher band (Channel 11) : PASS
  
- Mode 4 and 6 : 802.11g
- Temperature : 26°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

802.11b

The band edge emission shows 55.34 dB delta between carrier maximum power and local maximum emission in the restricted band (2.390GHz).

The band edge emission shows 53.05 dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835GHz)

Channel	Polarity	The emission of carrier power strength	Frequency	The emission of band edge power strength	Limit	Margin	Remark	Result
		(dB $\mu$ V/m)		(MHz)				
01	H	103.97	2391.20	48.63	74	-25.37	Peak	Pass
	H	96.39	2391.20	41.05	54	-12.95	Average	Pass
	V	113.13	2391.20	57.79	74	-16.21	Peak	Pass
	V	105.03	2391.20	49.69	54	-4.31	Average	Pass
11	H	103.06	2488.00	50.01	74	-23.99	Peak	Pass
	H	95.85	2488.00	42.8	54	-11.2	Average	Pass
	V	112.78	2488.00	59.73	74	-14.27	Peak	Pass
	V	105.31	2488.00	52.26	54	-1.74	Average	Pass

802.11g

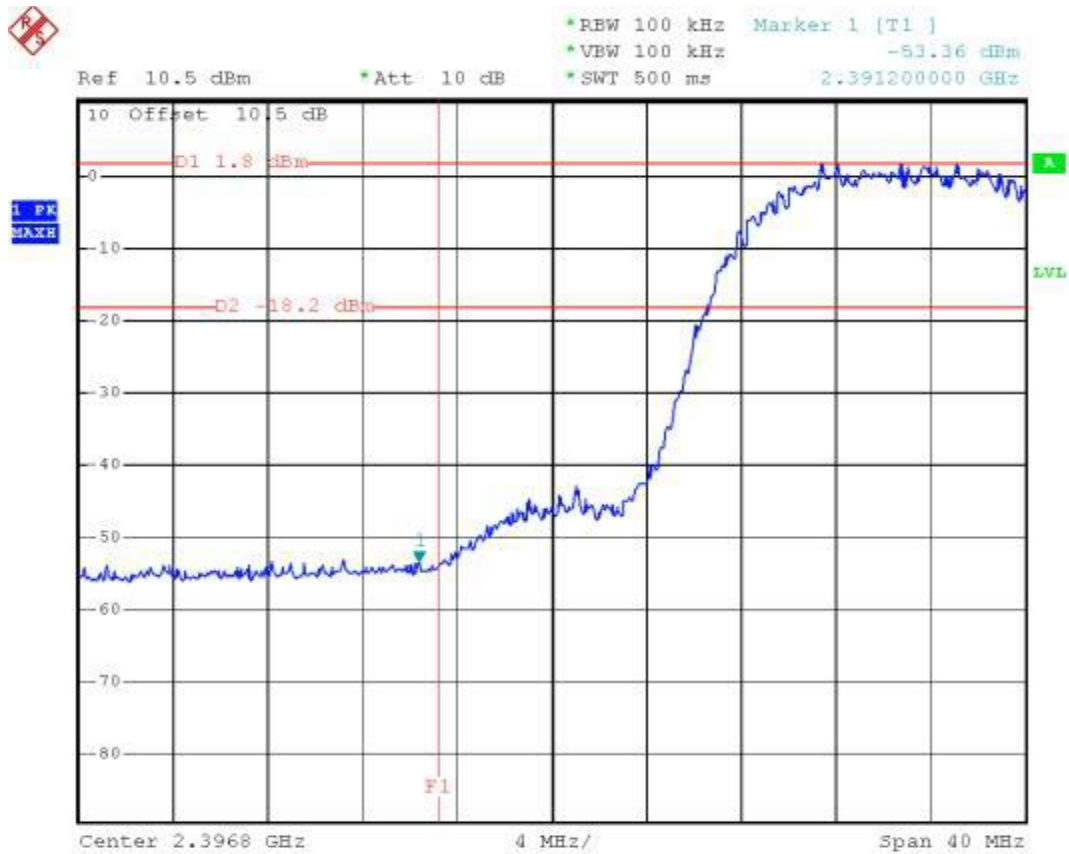
The band edge emission shows 46.70 dB delta between carrier maximum power and local maximum emission in the restricted band (2.390GHz).

The band edge emission shows 48.23 dB delta between carrier maximum power and local maximum emission in the restricted band (2.4835GHz)

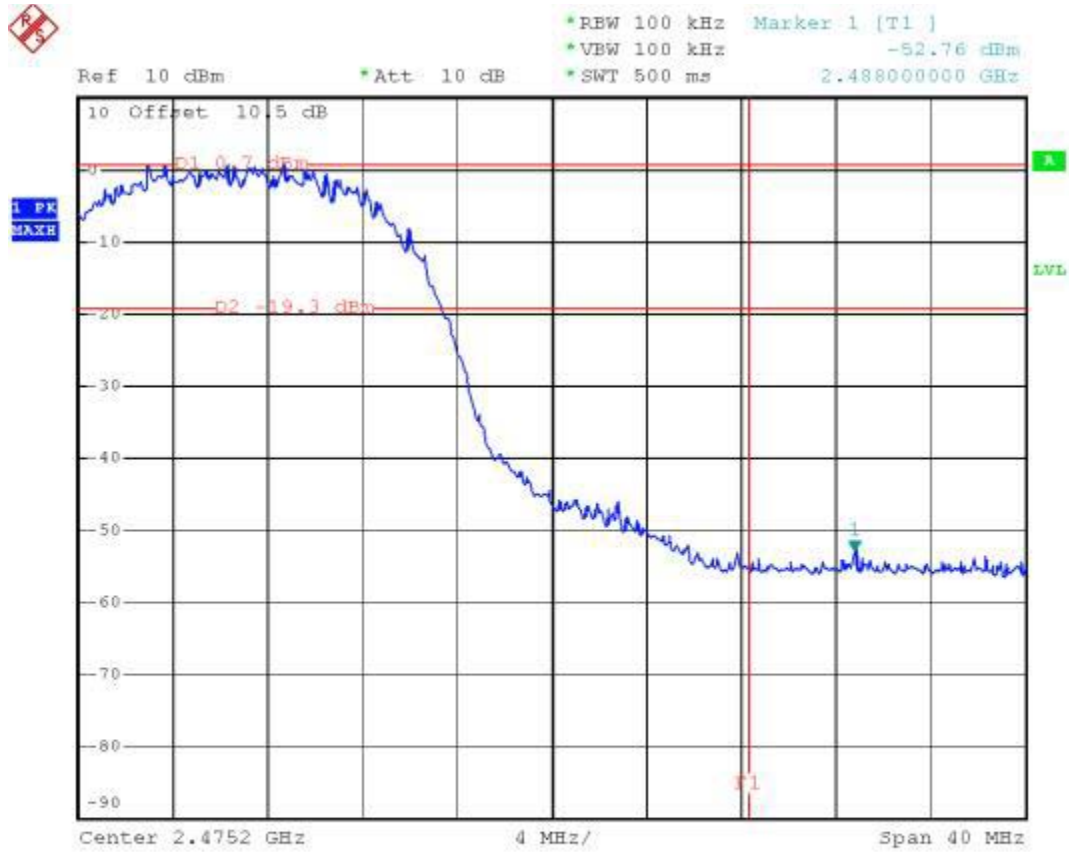
Channel	Polarity	The emission of carrier power strength	Frequency	The emission of band edge power strength	Limit	Margin	Remark	Result
		(dB $\mu$ V/m)		(MHz)				
01	H	98.54	2384.56	51.84	74	-22.16	Peak	Pass
	H	86.98	2384.56	40.28	54	-13.72	Average	Pass
	V	106.57	2384.56	59.87	74	-14.13	Peak	Pass
	V	97.12	2384.56	50.42	54	-3.58	Average	Pass
11	H	106.28	2485.12	58.05	74	-15.95	Peak	Pass
	H	97.12	2485.12	48.89	54	-5.11	Average	Pass
	V	106.34	2485.12	58.11	74	-15.89	Peak	Pass
	V	97.41	2485.12	49.18	54	-4.82	Average	Pass

5.4.7 20dB Band Edge

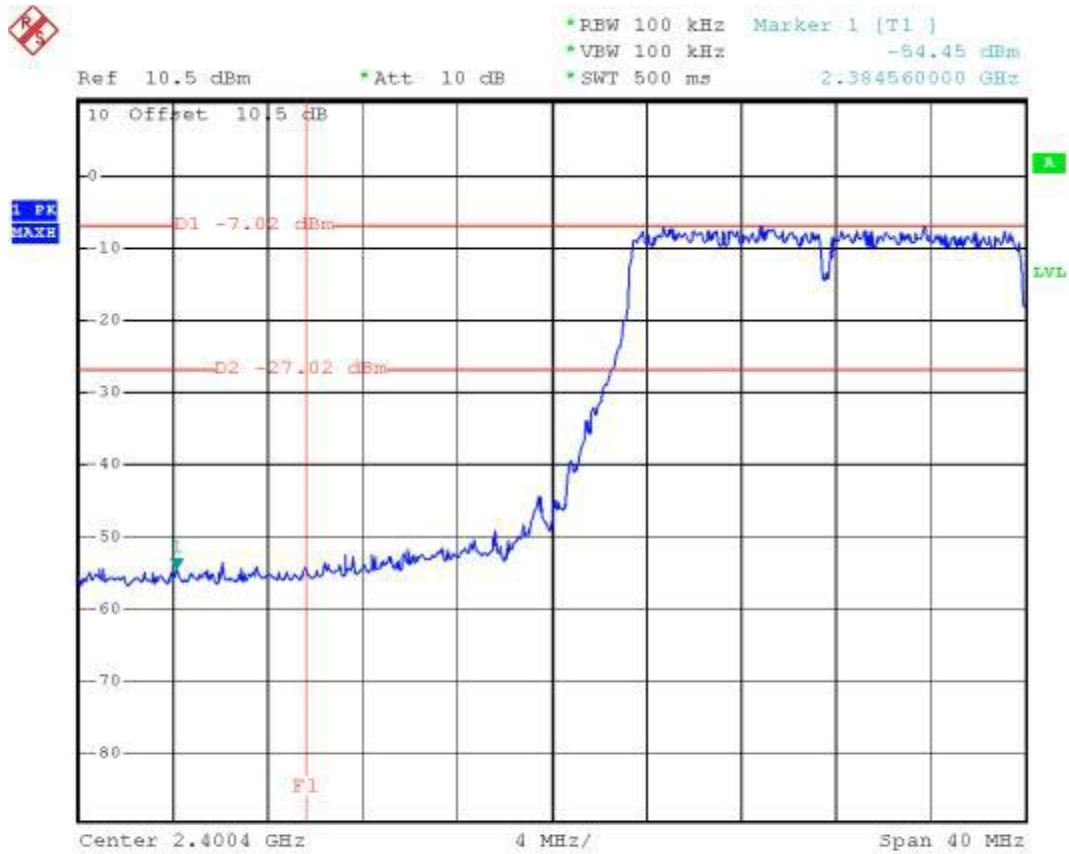
Mode1 : 802.11b Tx CH01 (2412MHz)



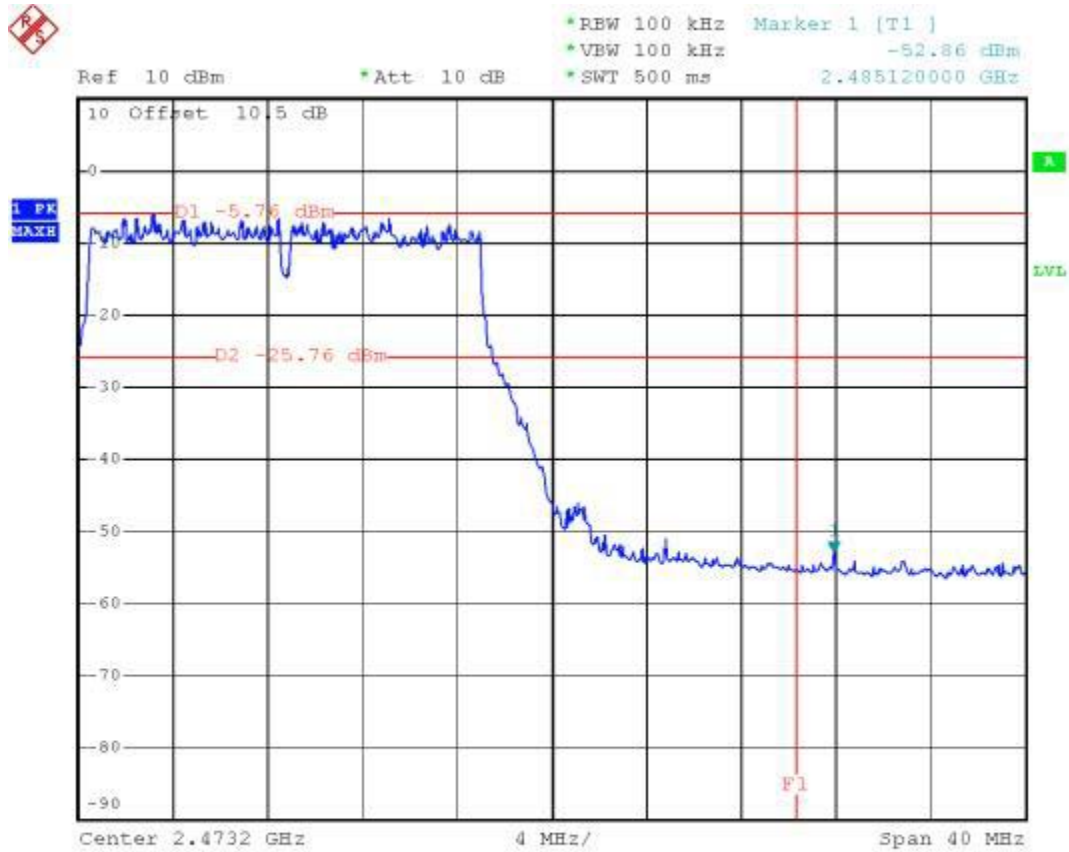
Mode 2 : 802.11b Tx CH11 (2462MHz)



Mode 4 : 802.11g Tx CH01 (2412MHz)



Mode 6 : 802.11g Tx CH11 (2462MHz)



**5.5 Peak Output Power**

5.5.1 Measuring Instruments :

As described in chapter 10 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 : 802.11b
- Temperature : 26°C
- Relative Humidity : 53 %

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm )
01	2412	13.2	1W/30 dBm
06	2437	13.1	1W/30 dBm
11	2462	12.8	1W/30 dBm

- Mode 4~6 : 802.11g
- Temperature : 26°C
- Relative Humidity : 53 %

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm )
01	2412	12.9	1W/30 dBm
06	2437	12.8	1W/30 dBm
11	2462	12.6	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**

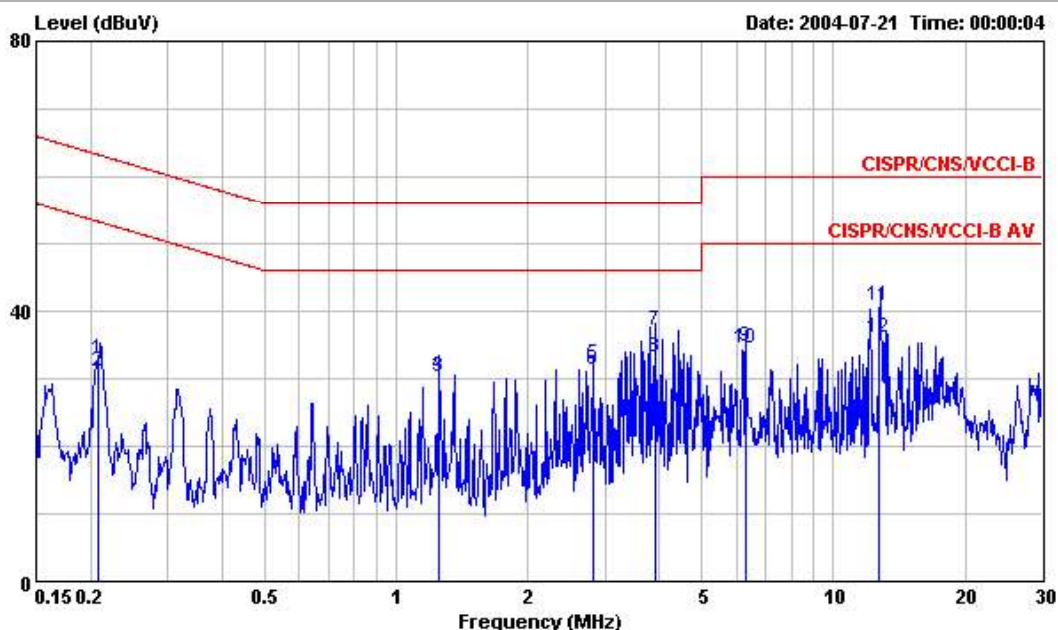
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power port of the line impedance stabilization network (LISN).
- c. All the support units are connect to the other LISN.
- 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

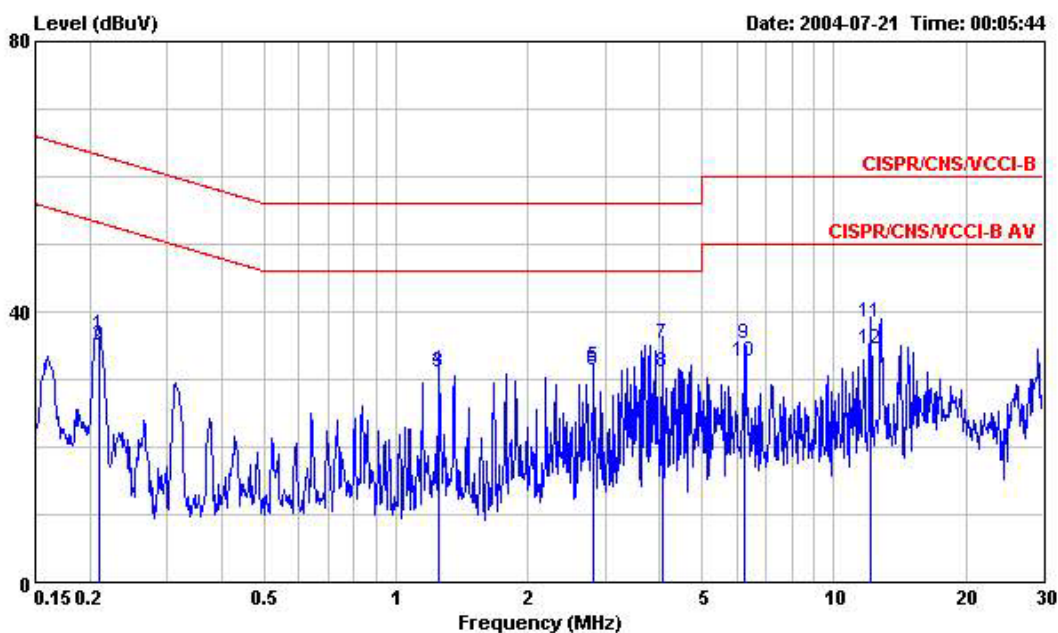
- Test Mode : Mode 1
- Temperature : 26°C
- Relative Humidity : 53 %

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



Site : CO04-HY  
 Condition : CISPR/CNS/VCCI-B 2004 2001/004 LINE  
 EUT : Wireless PCI Adapter  
 POWER: 120Vac/60Hz  
 MODEL : ZWX-G361  
 MEMO : Ping Link

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.2089780	32.91	-30.34	63.25	32.80	0.10	0.01	QP
2	0.2089780	31.00	-22.25	53.25	30.89	0.10	0.01	Average
3	1.252	30.18	-25.82	56.00	30.05	0.10	0.03	QP
4	1.252	30.44	-15.56	46.00	30.31	0.10	0.03	Average
5	2.820	32.10	-23.90	56.00	31.91	0.15	0.04	QP
6	2.820	31.44	-14.56	46.00	31.25	0.15	0.04	Average
7	3.912	37.11	-18.89	56.00	36.84	0.20	0.07	QP
8	3.912	33.27	-12.73	46.00	33.00	0.20	0.07	Average
9	6.324	34.62	-25.38	60.00	34.33	0.20	0.09	QP
10	6.324	34.44	-15.56	50.00	34.15	0.20	0.09	Average
11	12.756	40.71	-19.29	60.00	40.37	0.20	0.14	QP
12	12.756	36.05	-13.95	50.00	35.71	0.20	0.14	Average



Site : CO04-HY  
 Condition : CISPR/CNS/VCCI-B 2004 2001/004 NEUTRAL  
 EUT : Wireless PCI Adapter  
 POWER: 120Vac/60Hz  
 MODEL : ZWX-G361  
 MEMO : Ping Link

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.2092820	36.56	-26.67	63.23	36.45	0.10	0.01	QP
2	0.2092820	35.07	-18.16	53.23	34.96	0.10	0.01	Average
3	1.253	31.14	-24.86	56.00	31.01	0.10	0.03	QP
4	1.253	31.35	-14.65	46.00	31.22	0.10	0.03	Average
5	2.821	31.94	-24.06	56.00	31.80	0.10	0.04	QP
6	2.821	31.39	-14.61	46.00	31.25	0.10	0.04	Average
7	4.074	35.26	-20.74	56.00	35.09	0.10	0.07	QP
8	4.074	30.94	-15.06	46.00	30.77	0.10	0.07	Average
9	6.269	35.20	-24.80	60.00	34.96	0.15	0.09	QP
10	6.269	32.56	-17.44	50.00	32.32	0.15	0.09	Average
11	12.114	38.47	-21.53	60.00	38.14	0.20	0.13	QP
12	12.114	34.47	-15.53	50.00	34.14	0.20	0.13	Average

Test Engineer : Jay  
 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

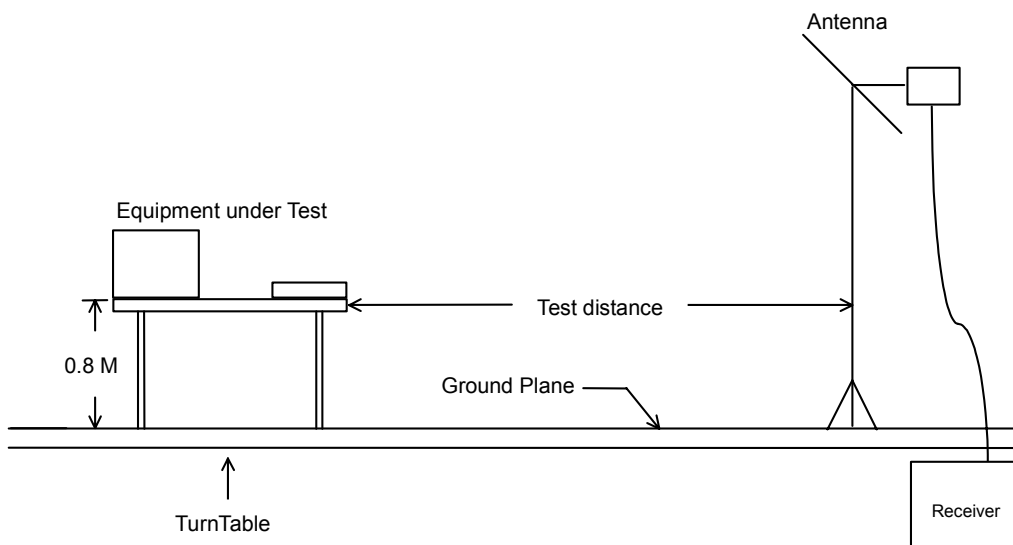
### 7.1. Major Measuring Instruments

- Amplifier (MITEQ AFS44 )
  - RF Gain 40 dB
  - Signal Input 100 MHz to 26.5 GHz
  
- Amplifier PA-103
  - RF Gain 30 dB
  - Signal Input 100 MHz to 1 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. For testing below 1GHz, 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**

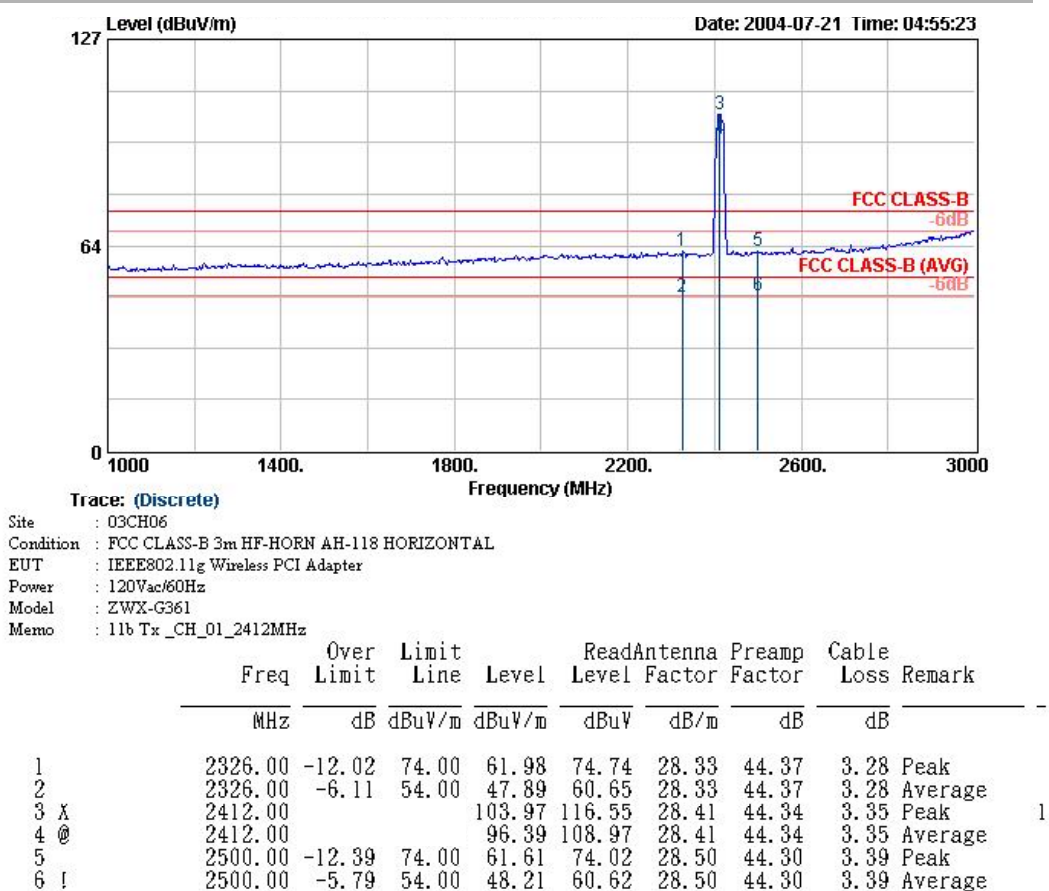


7.4. Test Result of Radiated Emission

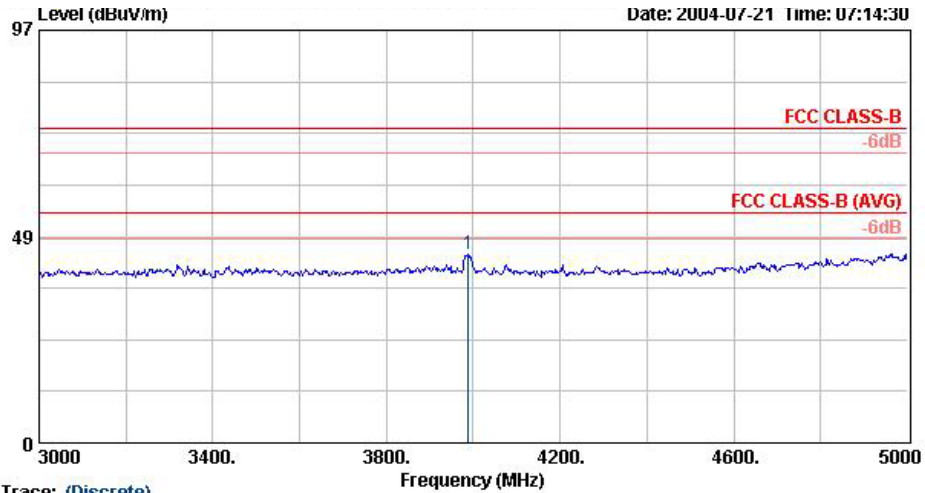
7.4.1 Test Mode: Mode 1 (802.11b TX CH01)

- Test Distance : 3 m
- Temperature : 26 °C
- Relative Humidity :53 %
- 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.



Remark: The "X" represent a fundamental frequency.

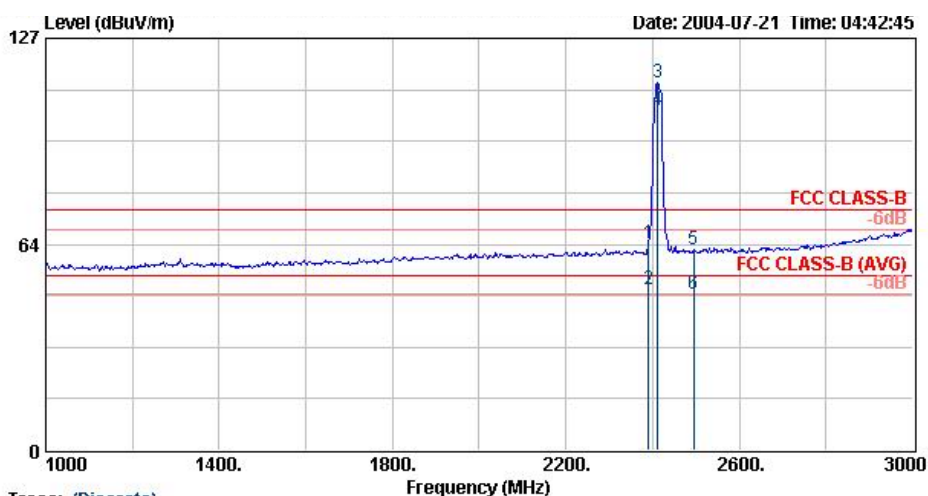


Trace: (Discrete)  
 Site : 03CH06  
 Condition : FCC CLASS-B 3m HF-HORN AH-118 HORIZONTAL  
 EUT : IEEE802.11g Wireless PCI Adapter  
 Power : 120Vac/60Hz  
 Model : ZWX-G361  
 Memo : 11b Tx\_CH\_01\_2412MHz

	Over	Limit		ReadAntenna	Preamp	Cable	
1	Freq	Limit	Level	Level	Factor	Factor	Loss
	MHz	dB	dBuV/m	dBuV/m	dBuV	dB/m	dB
1	3988.00	-29.76	74.00	44.24	54.45	30.50	45.00
							4.29 Peak

Remark:

Frequency from 5GHz to 25GHz, the emission emitted by the EUT is too low to be measured.



Trace: (Discrete)  
 Site : 03CH06  
 Condition : FCC CLASS-B 3m HF-HORN AH-118 VERTICAL  
 EUT : IEEE802.11g Wireless PCI Adapter  
 Power : 120Vac/60Hz  
 Model : ZWX-G361  
 Memo : 11b Tx\_CH\_01\_2412MHz

		Over	Limit		ReadAntenna	Preamp	Cable		
	Freq	Limit	Line	Level	Level	Factor	Factor	Loss	Remark
	MHz	dB	dBuV/m	dBuV/m	dBuV	dB/m	dB	dB	
1	2390.00	-10.36	74.00	63.64	76.26	28.40	44.34	3.33	Peak
2 I	2390.00	-4.52	54.00	49.48	62.10	28.40	44.34	3.33	Average
3 X	2412.00			113.13	125.71	28.41	44.34	3.35	Peak 4
4 @	2412.00			105.03	117.61	28.41	44.34	3.35	Average 1
5	2494.00	-12.33	74.00	61.67	74.08	28.50	44.30	3.39	Peak
6 !	2494.00	-5.79	54.00	48.21	60.62	28.50	44.30	3.39	Average

Remark: The "X" represent a fundamental frequency.