



## Test Report

Product Name	Notebook
Model No.	MS-1058, MS-1058B, S271, S271B, S271R
FCC ID	I4L-MS6855C2

Applicant	MICRO-STAR INTL Co., LTD.
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.

Date of Receipt	May. 16, 2007
Issued Date	June 11, 2007
Report No.	075L109-RFUSP05V01

The test results relate only to the samples tested.  
The test report shall not be reproduced except in full without the written approval of Quietek Corporation.  
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government


# Test Report Certification

Issued Date: June 11, 2007

Report No.: 075L109-RFUSP05V01



Accredited by NIST (NVLAP)  
NVLAP Lab Code: 200533-0

Product Name	Notebook	
Applicant	MICRO-STAR INTL Co., LTD.	
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.	
Manufacturer	MICRO-STAR INTL Co., LTD.	
Model No.	MS-1058, MS-1058B, S271, S271B, S271R	
Rated Voltage	AC 120V/60Hz	
Working Voltage	DC 3.3V	
Trade Name	MSI	
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2006 ANSI C63.4: 2003	 NVLAP Lab Code: 200533-0
Test Result	Complied	

Test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quietek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : Anita Chou  
( Senior Engineering Adm. Specialist / Anita Chou )



Tested By : Dino Chen  
( Assistant Engineer / Dino Chen )



Approved By : Gene Chang  
( President / Gene Chang )

0914

## TABLE OF CONTENTS

Description	Page
<b>1. GENERAL INFORMATION.....</b>	<b>5</b>
1.1. EUT Description .....	5
1.2. Operational Description .....	6
1.3. Tested System Details .....	7
1.4. Configuration of Test System.....	7
1.5. EUT Exercise Software.....	7
1.6. Test Facility .....	8
<b>2. Conducted Emission .....</b>	<b>9</b>
2.1. Test Equipment .....	9
2.2. Test Setup.....	9
2.3. Limits .....	9
2.4. Test Procedure.....	10
2.5. Uncertainty.....	10
2.6. Test Result of Conducted Emission .....	11
<b>3. Peak Power Output.....</b>	<b>15</b>
3.1. Test Equipment .....	15
3.2. Test Setup.....	15
3.3. Limits .....	15
3.4. Uncertainty.....	15
3.5. Test Result of Peak Power Output .....	16
<b>4. Radiated Emission .....</b>	<b>18</b>
4.1. Test Equipment .....	18
4.2. Test Setup.....	19
4.3. Limits .....	19
4.4. Test Procedure.....	20
4.5. Uncertainty.....	20
4.6. Test Result of Radiated Emission .....	21
<b>5. Band Edge.....</b>	<b>29</b>
5.1. Test Equipment .....	29
5.2. Test Setup.....	29
5.3. Limits .....	30
5.4. Test Procedure.....	30
5.5. Uncertainty.....	30
5.6. Test Result of Band Edge.....	31
<b>6. Occupied Bandwidth.....</b>	<b>39</b>
6.1. Test Equipment .....	39
6.2. Test Setup.....	39
6.3. Limits .....	39
6.4. Uncertainty.....	39

---

6.5.	Test Result of Occupied Bandwidth.....	40
<b>7.</b>	<b>Power Density.....</b>	<b>46</b>
7.1.	Test Equipment .....	46
7.2.	Test Setup.....	46
7.3.	Limits .....	46
7.4.	Uncertainty.....	46
7.5.	Test Result of Power Density.....	47
<b>8.</b>	<b>EMI Reduction Method During Compliance Testing.....</b>	<b>53</b>

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name	Notebook
Trade Name	MSI
Model No.	MS-1058, MS-1058B, S271, S271B, S271R
FCC ID.	I4L-MS6855C2
Frequency Range	2412 – 2462MHz
Number of Channels	11
Data Speed	IEEE 802.11b – 1, 2, 5.5, 11Mbps IEEE 802.11g – 6, 9, 12, 18, 24, 36 48, 54Mbps
Type of Modulation	DSSS/ OFDM
Antenna Type	Connector
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Power Adapter	MFR: LI SHIN, M/N: LSE0202C1990 Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 19V, 4.74A Cable Out: Non-Shielded, 1.7m with one ferrite core bonded. Power Cord: Shielded, 1.7m

#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	HIGH-TEK	S79-1800300-H39 (Main)	PIFA	1.18dBi for 2.4 GHz
		S79-1800310-H39 (Aux)		
	HIGH-TEK	S79-1800260-H39 (Main)	PIFA	-0.87dBi for 2.4 GHz
		S79-1800270-H39 (Aux)		
2	YAGEO	CAN4313582022501B (Main) CAN4313582012501B (Aux)	PIFA	-0.98dBi for 2.4 GHz
3	VOS	S79-1800360-V03 (R) S79-1800370-V03 (L)	PIFA	-0.95dBi for 2.4 GHz
4	HIGH-TEK	S79-1800240-H39 (Main) S79-1800230-H39 (Aux)	PIFA	0.17dBi for 2.4 GHz

Frequency of Each Channel (802.11b/g):

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2412 MHz	Channel 5:	2432 MHz	Channel 9:	2452 MHz
Channel 2:	2417 MHz	Channel 6:	2437 MHz	Channel 10:	2457 MHz
Channel 3:	2422 MHz	Channel 7:	2442 MHz	Channel 11:	2462 MHz
Channel 4:	2427 MHz	Channel 8:	2447 MHz		

Note:

1. The EUT is a Notebook with a built-in 2.4GHz WLAN transceiver.
2. The EUT is including five models for different marketing requirement.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 11Mbps and 802.11g is 54Mbps)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

**1.2. Operational Description**

The EUT is a Notebook with a built-in 2.4GHz transceiver. There are 11 channels in 2412 – 2462MHz. The channels are separated by 5MHz. This device supports the data rates of 1, 2, 5.5, 11Mbps in 802.11b mode and 6, 9, 12, 18, 24, 36, 48, 54Mbps in 802.11g mode. The signals are modulated by DSSS in 802.11b mode and OFDM in 802.11g mode. The antenna type is PIFA.

Test Mode	Mode 1: Transmitter 802.11b (Antenna 1)
	Mode 2: Transmitter 802.11g (Antenna 1)

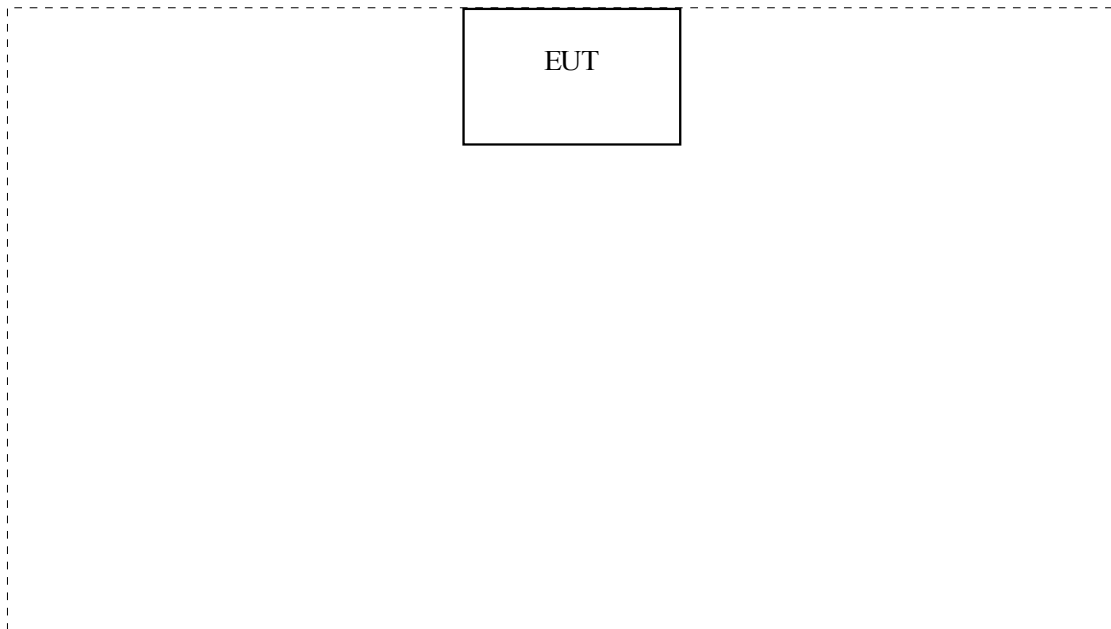
### 1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1.	N/A	N/A	N/A	N/A	N/A	N/A

	Signal Cable Type	Signal cable Description
A.	N/A	N/A

### 1.4. Configuration of Test System



### 1.5. EUT Exercise Software

- 1 Setup the EUT and simulators as shown on 1.4.
- 2 Turn on the power of all equipment.
- 3 Messages will be transmitted and received through EUT.
- 4 Test is based on the mandatory continuous transmitter.
- 5 Repeat the above procedure (3) to (4).

**1.6. Test Facility**

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: File on  
 Federal Communications Commission  
 FCC Engineering Laboratory  
 7435 Oakland Mills Road  
 Columbia, MD 21046  
 Reference 31040/SIT1300F2



Accreditation on NVLAP  
 NVLAP Lab Code: 200533-0



Site Name: Quietek Corporation  
 Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,  
 Lin-Kou Shiang, Taipei,  
 Taiwan, R.O.C.  
 TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789  
 E-Mail : [service@quietek.com](mailto:service@quietek.com)  
 FCC Accreditation Number: TW1014





## 2. Conducted Emission

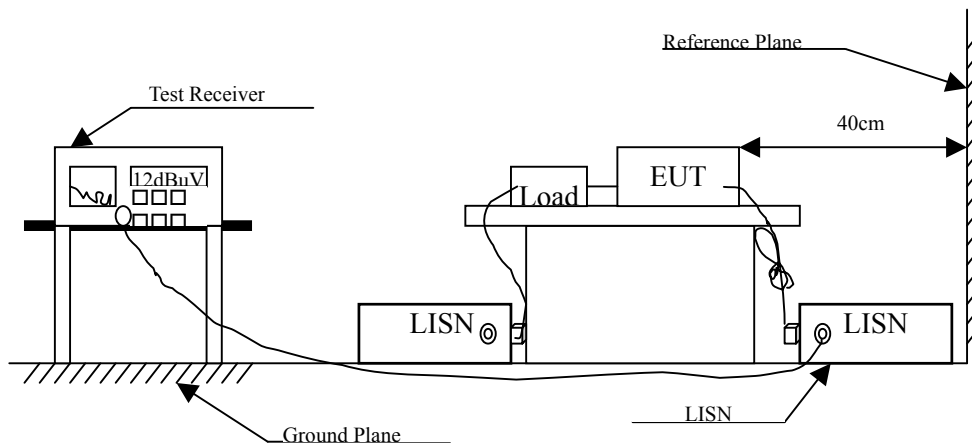
### 2.1. Test Equipment

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2007	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2007	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2007	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2007	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

### 2.2. Test Setup



### 2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56 <sup>(註)</sup>	56-46 <sup>(註)</sup>
0.50-5.0	56	46
5.0 - 30	60	50

## 2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

## 2.5. Uncertainty

± 2.26 dB

## 2.6. Test Result of Conducted Emission

Product : Notebook  
 Test Item : Conducted Emission Test  
 Power Line : Line 1  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
<b>LINE 1</b>					
<b>Quasi-Peak</b>					
0.193	0.698	47.130	47.828	-16.943	64.771
0.318	0.300	40.560	40.860	-20.340	61.200
0.631	0.301	27.730	28.031	-27.969	56.000
1.908	0.340	35.390	35.730	-20.270	56.000
3.940	0.400	29.050	29.450	-26.550	56.000
20.935	1.120	25.990	27.110	-32.890	60.000
<b>Average</b>					
0.193	0.698	46.330	47.028	-7.743	54.771
0.318	0.300	35.850	36.150	-15.050	51.200
0.631	0.301	25.030	25.331	-20.669	46.000
1.908	0.340	33.590	33.930	-12.070	46.000
3.940	0.400	19.940	20.340	-25.660	46.000
20.935	1.120	23.270	24.390	-25.610	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook  
 Test Item : Conducted Emission Test  
 Power Line : Line 2  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
<b>LINE 2</b>					
<b>Quasi-Peak</b>					
0.189	0.300	47.790	48.090	-16.796	64.886
0.447	0.310	41.460	41.770	-15.744	57.514
0.892	0.320	34.960	35.280	-20.720	56.000
1.400	0.330	36.730	37.060	-18.940	56.000
3.884	0.400	33.790	34.190	-21.810	56.000
20.939	0.940	24.340	25.280	-34.720	60.000
<b>Average</b>					
0.189	0.300	46.960	47.260	-7.626	54.886
0.447	0.310	39.660	39.970	-7.544	47.514
0.892	0.320	32.600	32.920	-13.080	46.000
1.400	0.330	35.130	35.460	-10.540	46.000
3.884	0.400	28.480	28.880	-17.120	46.000
20.939	0.940	21.180	22.120	-27.880	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook  
 Test Item : Conducted Emission Test  
 Power Line : Line 1  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
<b>LINE 1</b>					
<b>Quasi-Peak</b>					
0.189	0.725	48.240	48.965	-15.921	64.886
0.380	0.300	42.320	42.620	-16.809	59.429
0.763	0.310	36.470	36.780	-19.220	56.000
1.974	0.340	35.900	36.240	-19.760	56.000
3.947	0.400	34.270	34.670	-21.330	56.000
20.404	1.110	24.840	25.950	-34.050	60.000
<b>Average</b>					
0.189	0.725	47.360	48.085	-6.801	54.886
0.380	0.300	41.090	41.390	-8.039	49.429
0.763	0.310	29.810	30.120	-15.880	46.000
1.974	0.340	34.250	34.590	-11.410	46.000
3.947	0.400	29.420	29.820	-16.180	46.000
20.404	1.110	22.510	23.620	-26.380	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook  
 Test Item : Conducted Emission Test  
 Power Line : Line 2  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
<b>LINE 2</b>					
<b>Quasi-Peak</b>					
0.193	0.300	47.250	47.550	-17.221	64.771
0.380	0.310	42.420	42.730	-16.699	59.429
0.763	0.320	36.080	36.400	-19.600	56.000
1.974	0.350	36.000	36.350	-19.650	56.000
3.564	0.390	33.990	34.380	-21.620	56.000
20.064	0.900	25.420	26.320	-33.680	60.000
<b>Average</b>					
0.193	0.300	46.330	46.630	-8.141	54.771
0.380	0.310	40.890	41.200	-8.229	49.429
0.763	0.320	28.370	28.690	-17.310	46.000
1.974	0.350	34.190	34.540	-11.460	46.000
3.564	0.390	29.320	29.710	-16.290	46.000
20.064	0.900	22.900	23.800	-26.200	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

### 3. Peak Power Output

#### 3.1. Test Equipment

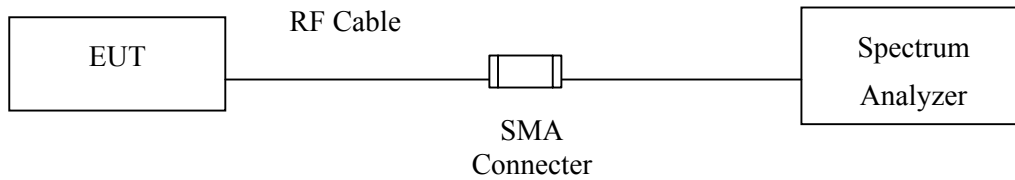
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

Note: 1. All instruments are calibrated every one year.  
 2. The test instruments marked by “X” are used to measure the final test results.

#### 3.2. Test Setup

Conducted Measurement



#### 3.3. Limits

The maximum peak power shall be less 1 Watt.

#### 3.4. Uncertainty

± 1.27 dB

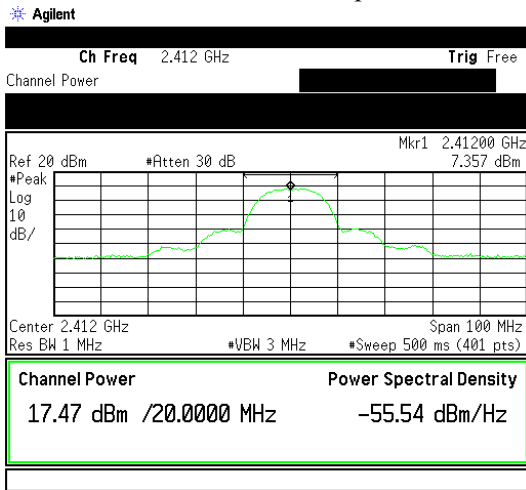
### 3.5. Test Result of Peak Power Output

Product : Notebook  
 Test Item : Peak Power Output Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1)

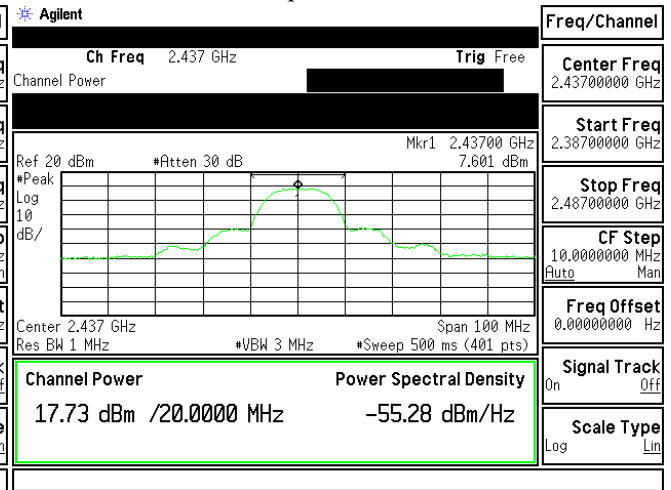
**Data Speed: 11Mbps**

Channel No.	Frequency (MHz)	Measurement	Required Limit	Result
1	2412.00	17.47 dBm	1 Watt= 30 dBm	Pass
6	2437.00	17.73 dBm	1 Watt= 30 dBm	Pass
11	2462.00	17.49 dBm	1 Watt= 30 dBm	Pass

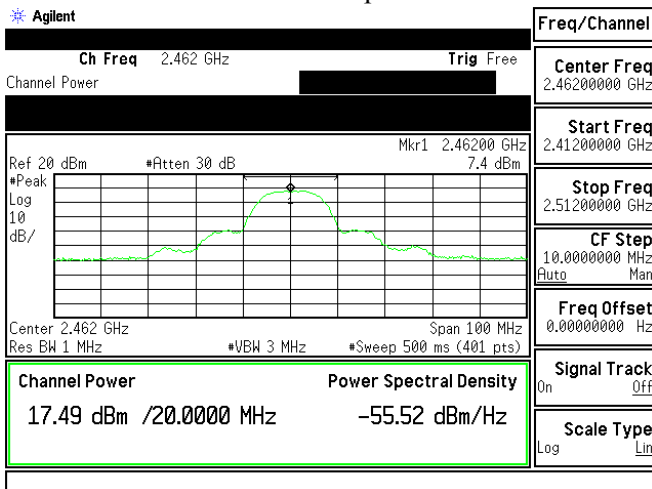
11Mbps-CH01



11Mbps-CH06



11Mbps-CH11



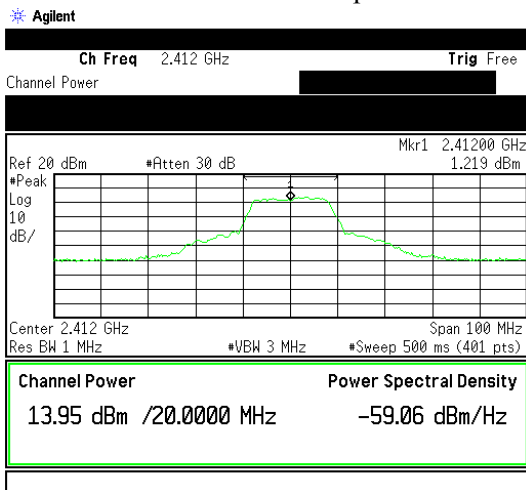


Product : Notebook  
 Test Item : Peak Power Output Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1)

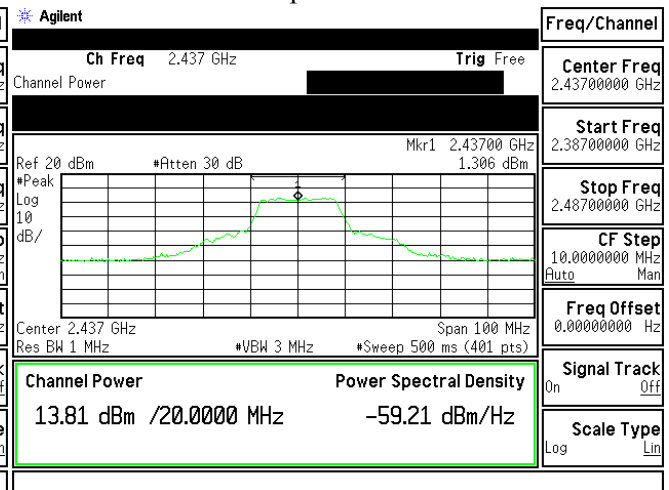
**Data Speed: 54Mbps**

Channel No.	Frequency (MHz)	Measurement	Required Limit	Result
1	2412.00	13.95 dBm	1 Watt= 30 dBm	Pass
6	2437.00	13.81 dBm	1 Watt= 30 dBm	Pass
11	2462.00	13.39 dBm	1 Watt= 30 dBm	Pass

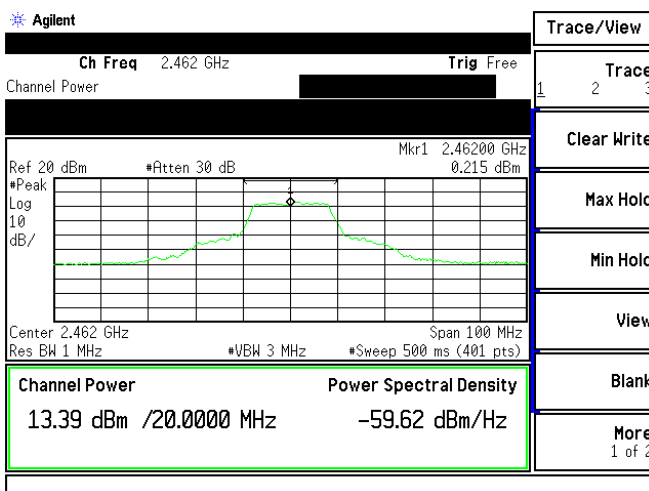
54Mbps-CH01



54Mbps-CH06



54Mbps-CH11



## 4. Radiated Emission

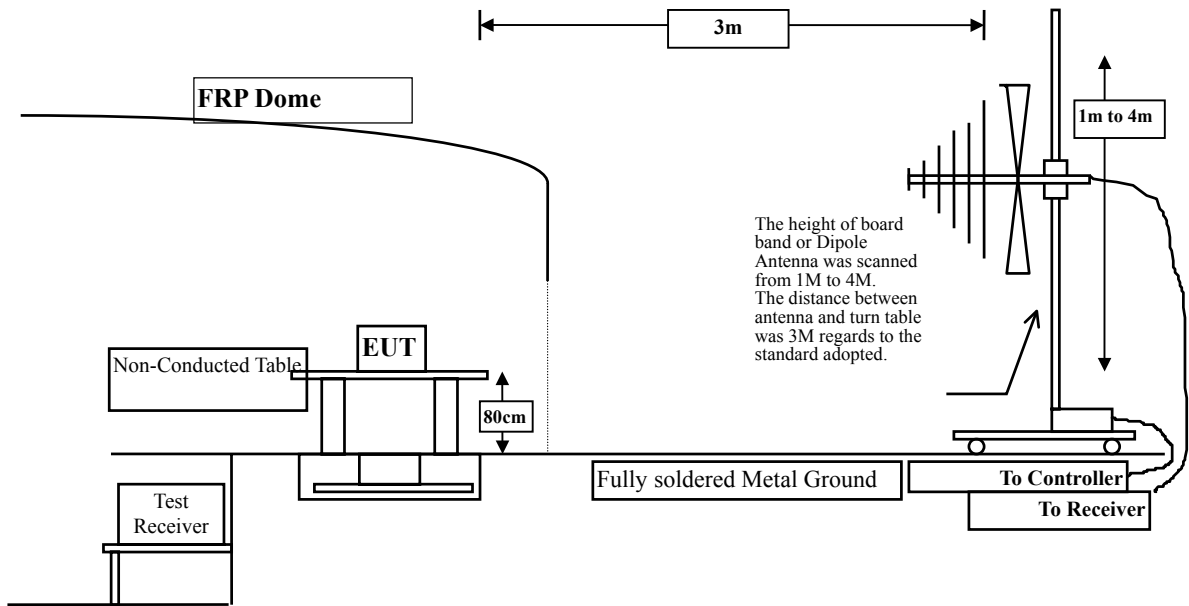
### 4.1. Test Equipment

The following test equipment are used during the radiated emission test:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 1	Test Receiver	R & S	ESCS 30 / 825442/14	May, 2007
	Spectrum Analyzer	Advantest	R3261C / 71720140	May, 2007
	Pre-Amplifier	HP	8447D/3307A01812	May, 2007
	Bilog Antenna	Chase	CBL6112B / 12452	Sep., 2006
	Horn Antenna	EM	EM6917 / 103325	May, 2007
Site # 2	Test Receiver	R & S	ESCS 30 / 825442/17	May, 2007
	Spectrum Analyzer	Advantest	R3261C / 71720609	May, 2007
	Pre-Amplifier	HP	8447D/3307A01814	May, 2007
	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2006
	Horn Antenna	EM	EM6917 / 103325	May, 2007
Site # 3	X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
	X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
	X Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2006
	X Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2006
	X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2006
	X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
X Pre-Amplifier	HP	8449B / 3008A01123	July, 2006	

- Note:
1. All instruments are calibrated every one year.
  2. The test instruments marked by "X" are used to measure the final test results.

### 4.2. Test Setup



### 4.3. Limits

#### ➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

- Remarks :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
  2. In the Above Table, the tighter limit applies at the band edges.
  3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### 4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength of harmonics measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The frequency range from 30MHz to 10th harmonics is checked.

#### 4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

#### 4.6. Test Result of Radiated Emission

Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2412MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
<b>Horizontal</b>					
<b>Peak Detector:</b>					
4824.000	3.723	43.426	47.149	-26.851	74.000
7236.000	9.439	33.024	42.462	-31.538	74.000
9648.000	11.829	31.872	43.701	-30.299	74.000
<b>Average Detector:</b>					
--					
<b>Vertical</b>					
<b>Peak Detector:</b>					
4824.000	3.723	42.755	46.478	-27.522	74.000
7236.000	9.439	32.496	41.934	-32.066	74.000
9648.000	11.829	32.462	44.291	-29.709	74.000
<b>Average Detector:</b>					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
------------------	-------------------------	--------------------------	--------------------------------	--------------	-----------------

**Horizontal**

**Peak Detector:**

4874.000	3.893	37.811	41.703	-32.297	74.000
7311.000	9.624	33.549	43.173	-30.827	74.000
9748.000	11.805	31.729	43.535	-30.465	74.000

**Average Detector:**

--

**Vertical**

**Peak Detector:**

4874.000	3.893	38.493	42.385	-31.615	74.000
7311.000	9.624	32.800	42.424	-31.576	74.000
9748.000	11.805	32.989	44.795	-29.205	74.000

**Average Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBuV/m
	dB	dBuV	dBuV/m		

**Horizontal**
**Peak Detector:**

4924.000	4.075	45.025	49.099	-24.901	74.000
7386.000	9.812	32.927	42.739	-31.261	74.000
9848.000	11.819	32.402	44.221	-29.779	74.000

**Average Detector:**

--

**Vertical**
**Peak Detector:**

4924.000	4.075	45.375	49.449	-24.551	74.000
7386.000	9.812	33.321	43.133	-30.867	74.000
9848.000	11.819	31.301	43.120	-30.880	74.000

**Average Detector:**

--

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2412MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
<b>Horizontal</b>					
<b>Peak Detector:</b>					
4824.000	3.723	36.315	40.038	-33.962	74.000
7236.000	9.439	33.090	42.528	-31.472	74.000
9648.000	11.829	32.208	44.037	-29.963	74.000
<b>Average Detector:</b>					
--					
<b>Vertical</b>					
<b>Peak Detector:</b>					
4824.000	3.723	37.416	41.139	-32.861	74.000
7236.000	9.439	32.358	41.796	-32.204	74.000
9648.000	11.829	32.445	44.274	-29.726	74.000
<b>Average Detector:</b>					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.



Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBuV/m
	dB	dBuV	dBuV/m		

**Horizontal**

**Peak Detector:**

4874.000	3.893	35.964	39.856	-34.144	74.000
7311.000	9.624	33.141	42.765	-31.235	74.000
9748.000	11.805	31.690	43.496	-30.504	74.000

**Average Detector:**

--

**Vertical**

**Peak Detector:**

4874.000	3.893	36.185	40.077	-33.923	74.000
7311.000	9.624	33.329	42.953	-31.047	74.000
9748.000	11.805	32.063	43.869	-30.131	74.000

**Average Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook  
 Test Item : Harmonic Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBuV/m
	dB	dBuV	dBuV/m		

**Horizontal**

**Peak Detector:**

4924.000	4.075	35.747	39.821	-34.179	74.000
7386.000	9.812	33.320	43.132	-30.868	74.000
9848.000	11.819	32.888	44.707	-29.293	74.000

**Average Detector:**

--

**Vertical**

**Peak Detector:**

4924.000	4.075	36.192	40.266	-33.734	74.000
7386.000	9.812	33.046	42.858	-31.142	74.000
9848.000	11.819	31.572	43.391	-30.609	74.000

**Average Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook  
 Test Item : General Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
<b>Horizontal</b>					
136.700	12.421	19.653	32.074	-11.426	43.500
238.550	11.671	20.921	32.592	-13.408	46.000
367.075	15.892	20.769	36.661	-9.339	46.000
437.400	17.718	23.916	41.634	-4.366	46.000
527.125	18.485	16.628	35.113	-10.887	46.000
878.750	22.185	17.058	39.243	-6.757	46.000
<b>Vertical</b>					
240.975	12.463	20.968	33.431	-12.569	46.000
301.600	13.669	23.289	36.958	-9.042	46.000
442.250	18.959	21.041	40.000	-6.000	46.000
500.450	18.354	12.431	30.785	-15.215	46.000
798.725	21.809	19.192	41.000	-5.000	46.000
876.325	22.616	15.426	38.042	-7.958	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. “■” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : Notebook  
 Test Item : General Radiated Emission Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
<b>Horizontal</b>					
119.725	12.953	24.133	37.086	-6.414	43.500
192.475	9.304	28.901	38.205	-5.295	43.500
367.075	15.892	25.397	41.289	-4.711	46.000
401.025	16.644	25.356	42.000	-4.000	46.000
481.050	18.786	22.714	41.500	-4.500	46.000
798.725	21.908	18.893	40.801	-5.199	46.000
<b>Vertical</b>					
119.725	11.494	22.806	34.300	-9.200	43.500
243.400	12.541	20.549	33.090	-12.910	46.000
301.600	13.669	24.061	37.730	-8.270	46.000
367.075	16.475	22.030	38.505	-7.495	46.000
437.400	19.065	18.995	38.060	-7.940	46.000
796.300	21.884	19.445	41.329	-4.671	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

## 5. Band Edge

### 5.1. Test Equipment

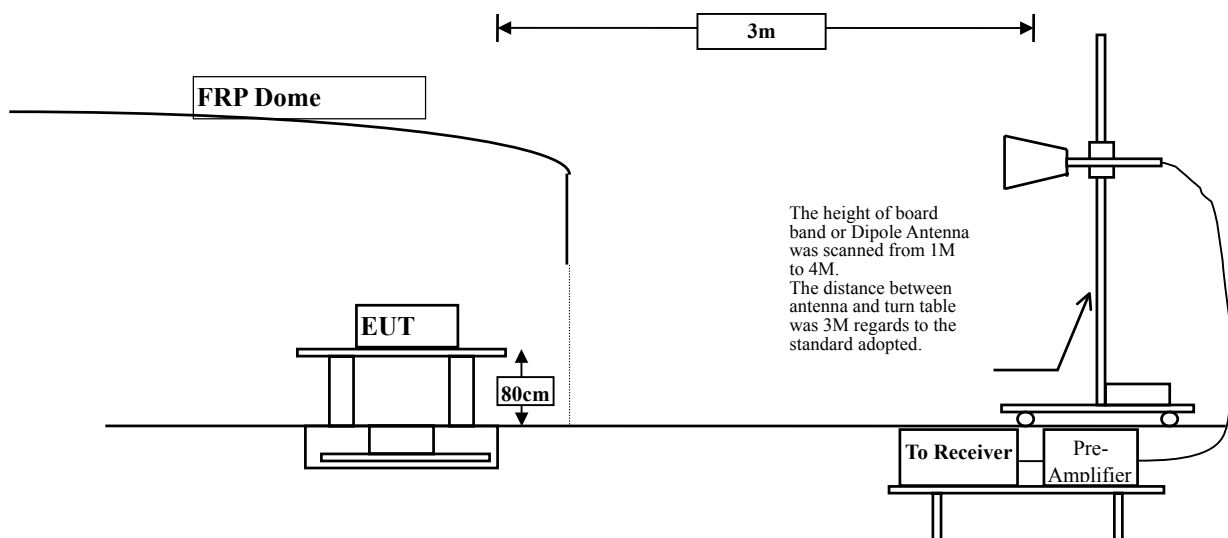
The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
X	Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2006
X	Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2006
X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2006
X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
X	Pre-Amplifier	HP	8449B / 3008A01123	July, 2006

- Note:
1. All instruments are calibrated every one year.
  2. The test instruments marked by "X" are used to measure the final test results.

### 5.2. Test Setup

#### RF Radiated Measurement:



### 5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

### 5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

### 5.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

### 5.6. Test Result of Band Edge

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) +BT 2402MHz

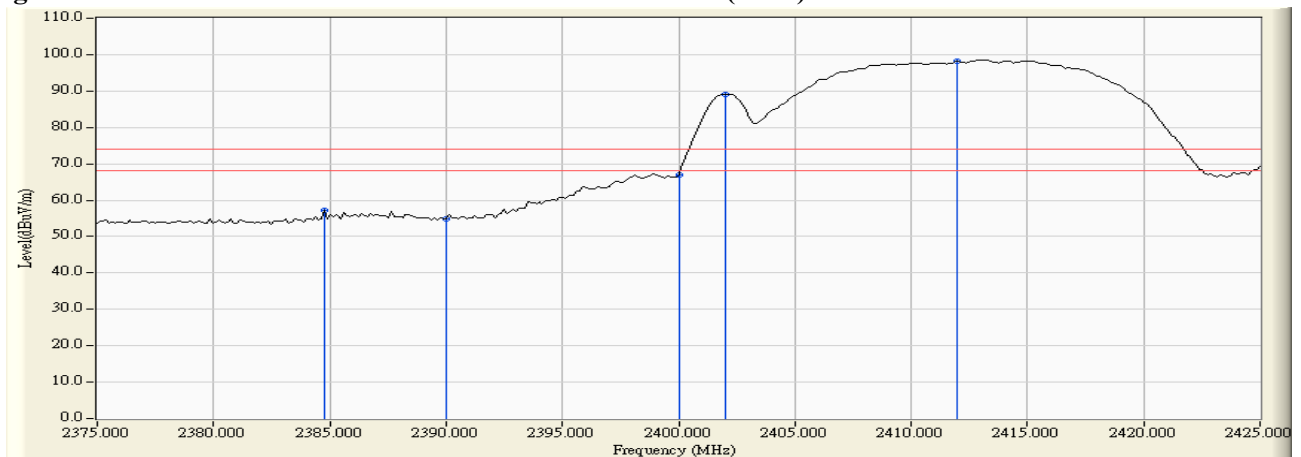
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Horizontal)	<2400	>20	Pass

**RF Radiated Measurement (Horizontal):**

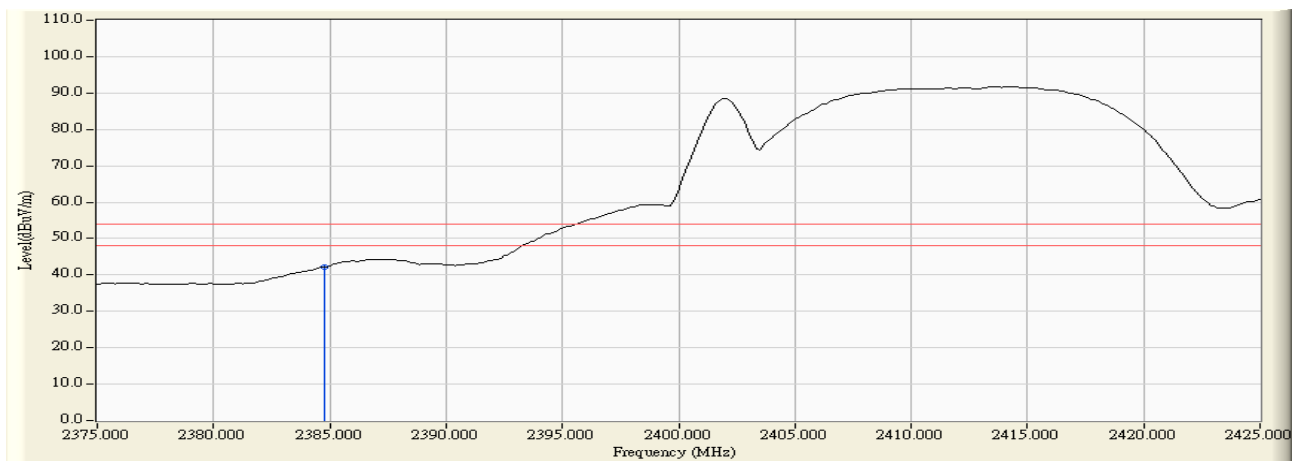
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2384.750	-2.403	59.604	57.201	74.00	54.00	Pass
1 (Average)	2384.750	-2.403	44.611	42.208	74.00	54.00	Pass

**Figure Channel 1: Horizontal (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 1: Horizontal (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) +BT 2402MHz

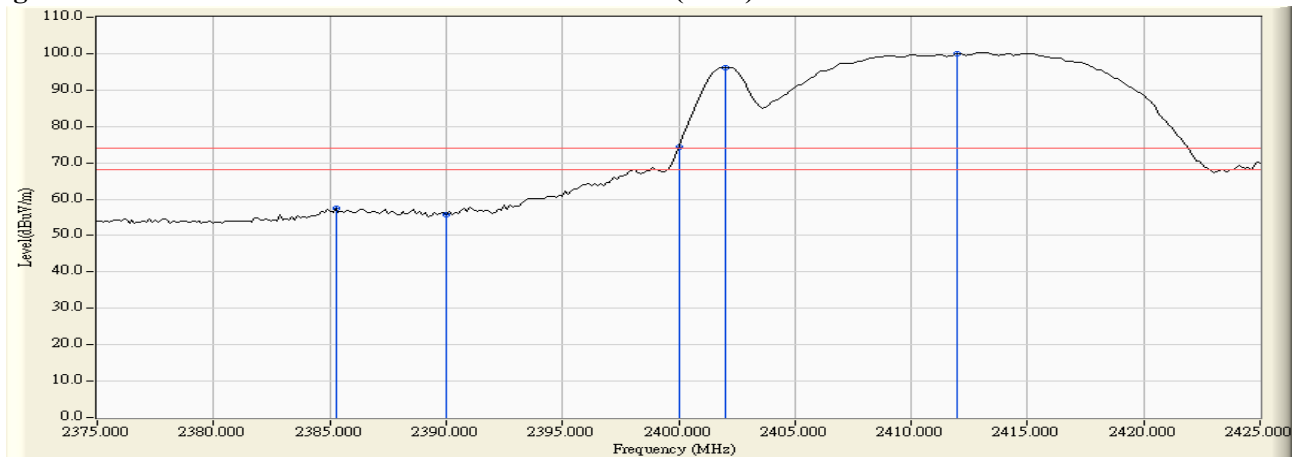
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Vertical)	<2400	>20	Pass

**RF Radiated Measurement (Vertical):**

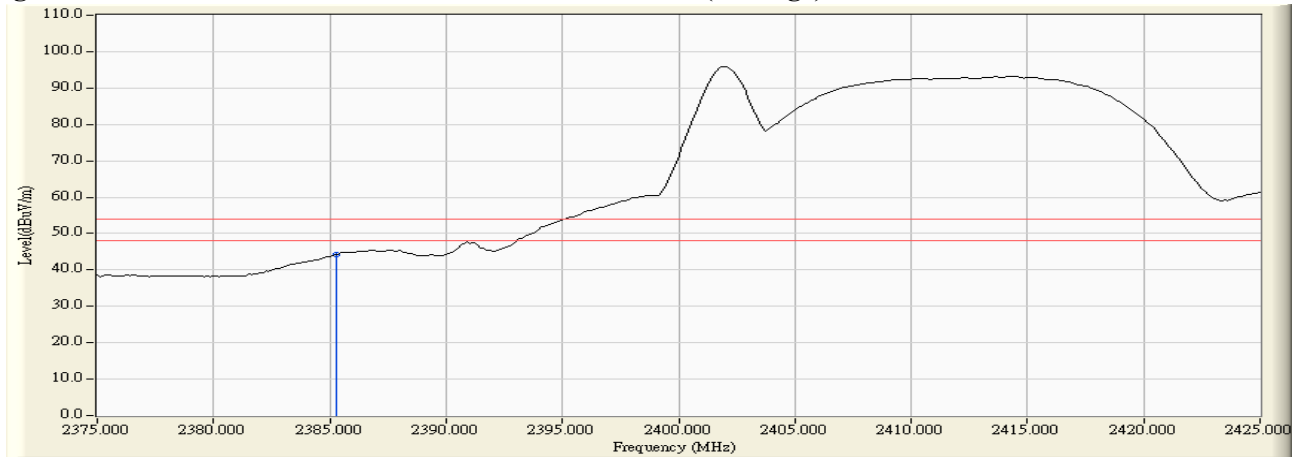
Channel	Frequency (MHz)	Correct Fcator (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2385.250	-2.402	59.993	57.592	74.00	54.00	Pass
1 (Average)	2385.250	-2.402	46.640	44.239	74.00	54.00	Pass

**Figure Channel 1: Vertical (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 1: Vertical (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms



Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) +BT 2480MHz

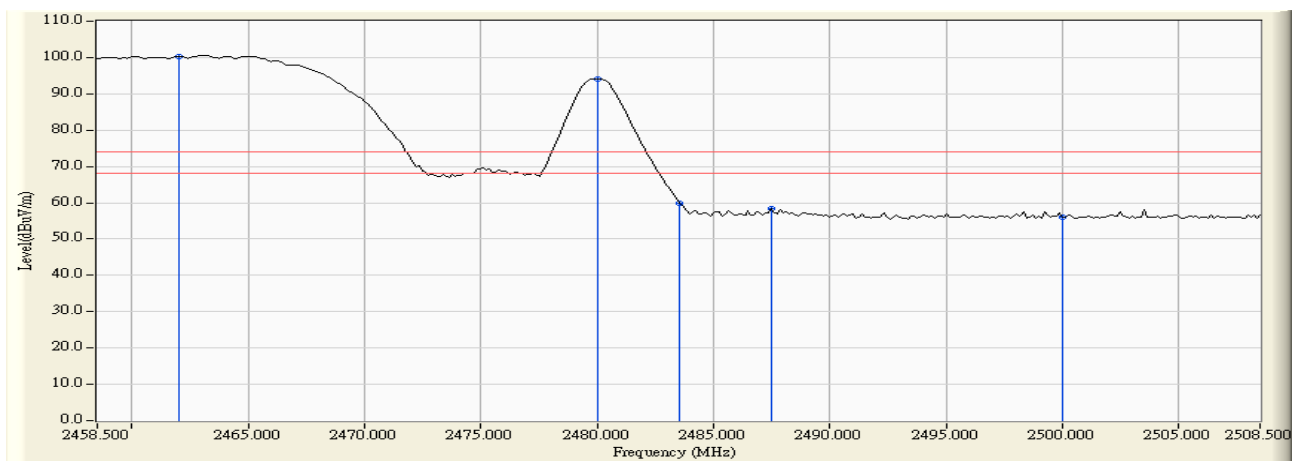
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Horizontal)	>2483.5	>20	Pass

**RF Radiated Measurement (Horizontal):**

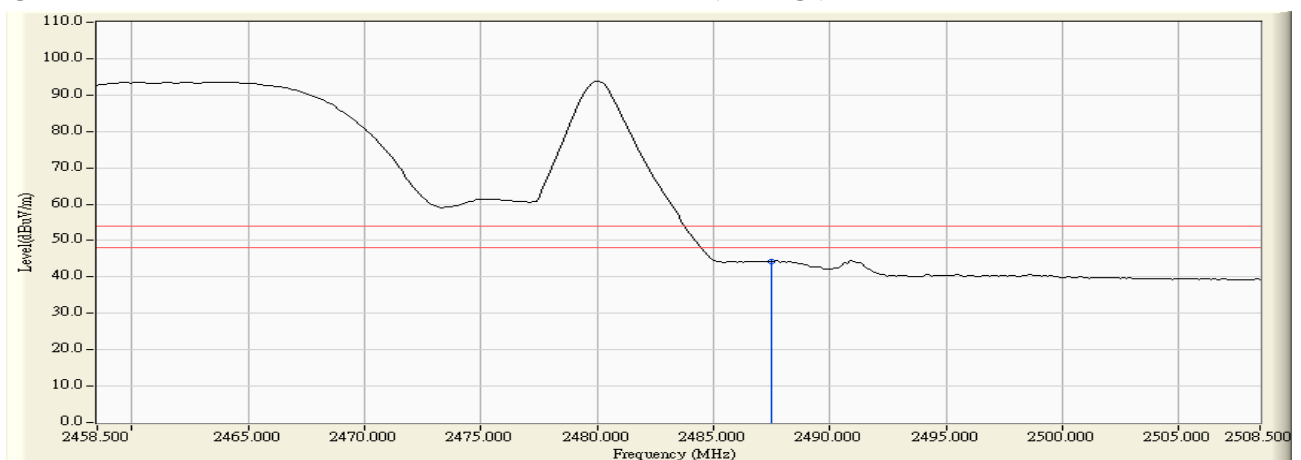
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2487.500	-1.925	60.413	58.488	74.00	54.00	Pass
11(Average)	2487.500	-1.925	46.108	44.183	74.00	54.00	Pass

**Figure Channel 11: Horizontal (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms

**Figure Channel 11: Horizontal (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) +BT 2480MHz

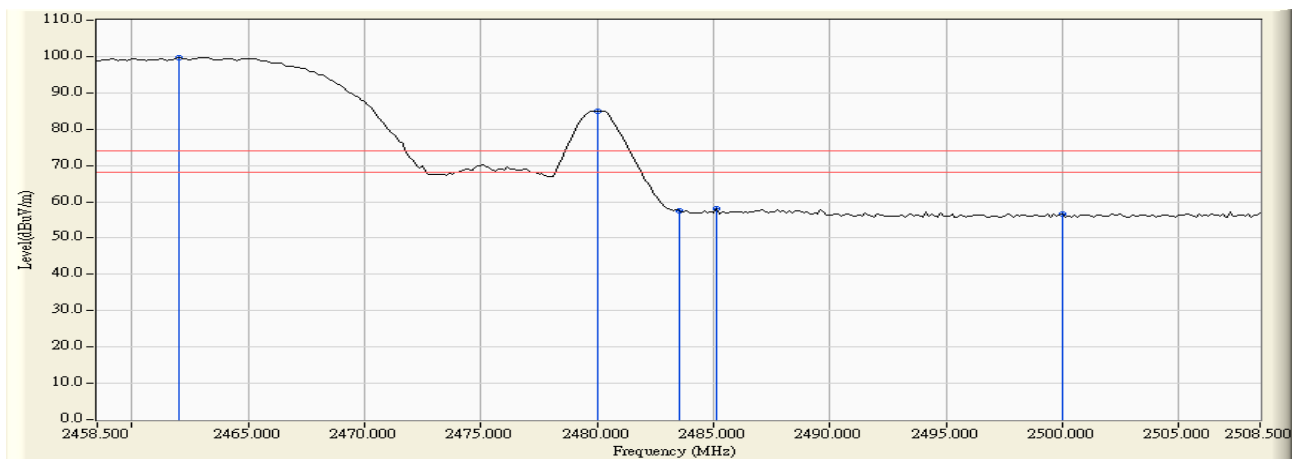
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Vertical)	>2483.5	>20	Pass

**RF Radiated Measurement (Vertical):**

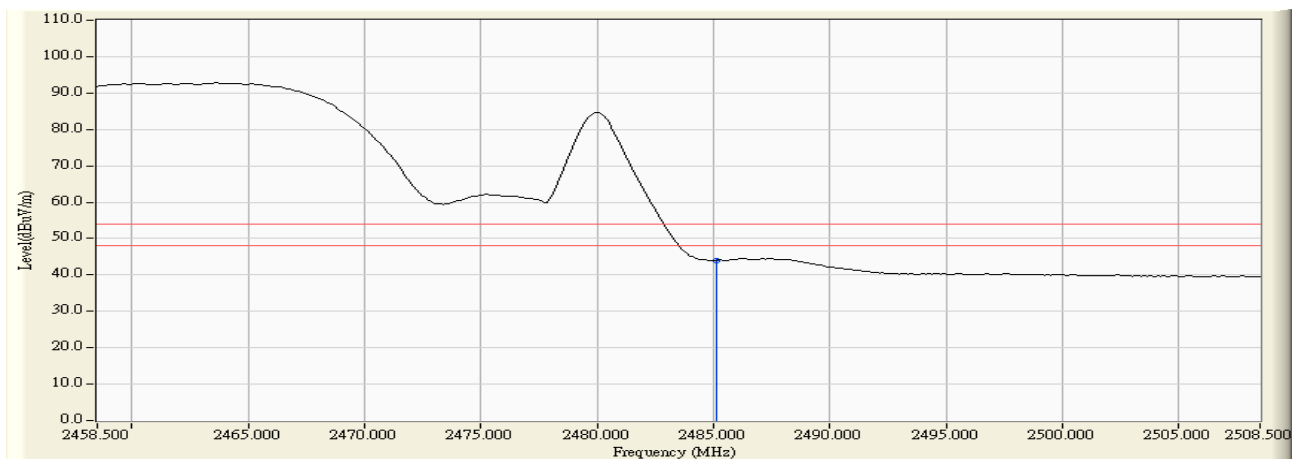
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2485.125	-1.933	59.956	58.024	74.00	54.00	Pass
11(Average)	2485.125	-1.933	45.910	43.978	74.00	54.00	Pass

**Figure Channel 11: (Vertical) (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 11: (Vertical) (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) +BT 2402MHz

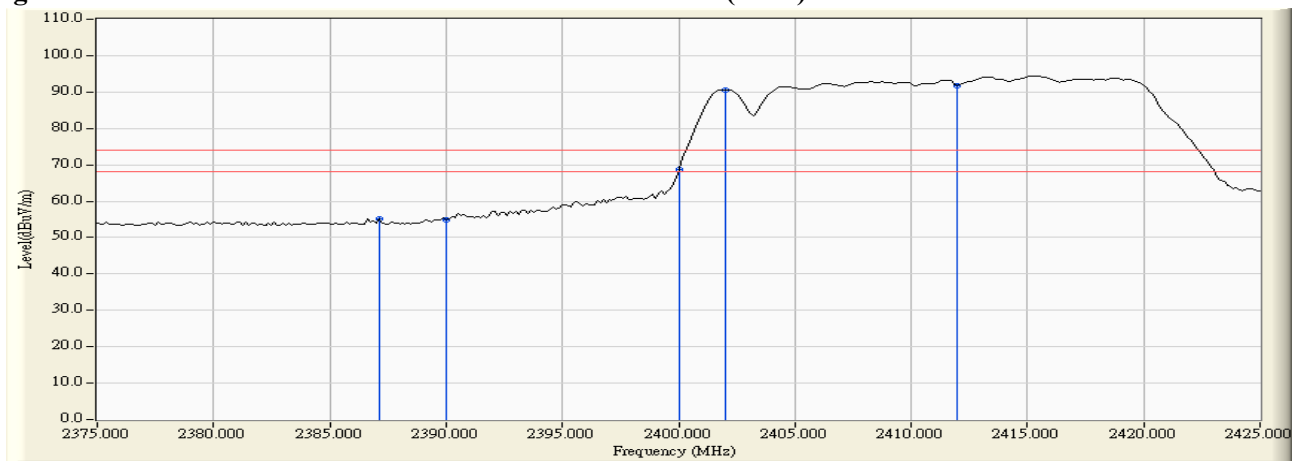
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Horizontal)	<2400	>20	Pass

**RF Radiated Measurement (Horizontal):**

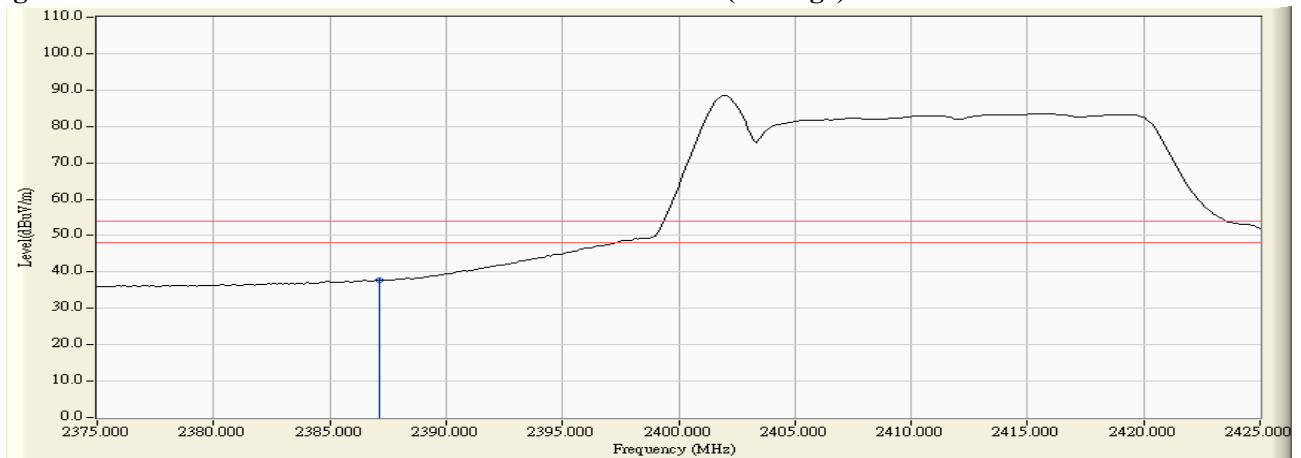
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2387.125	-2.391	57.454	55.063	74.00	54.00	Pass
1 (Average)	2387.125	-2.391	40.025	37.634	74.00	54.00	Pass

**Figure Channel 1: Horizontal (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 1: Horizontal (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) +BT 2402MHz

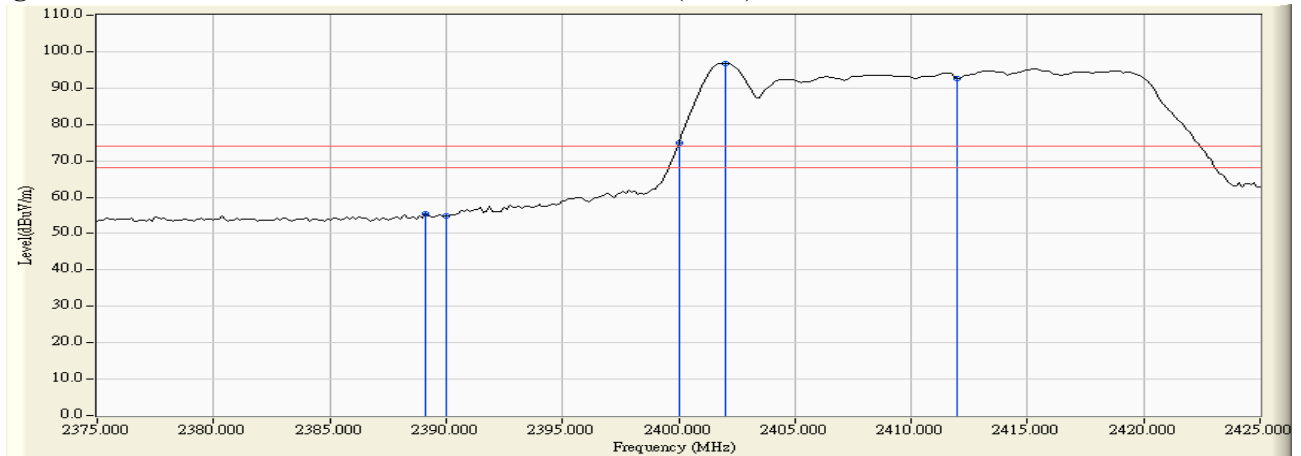
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Vertical)	<2400	>20	Pass

**RF Radiated Measurement (Vertical):**

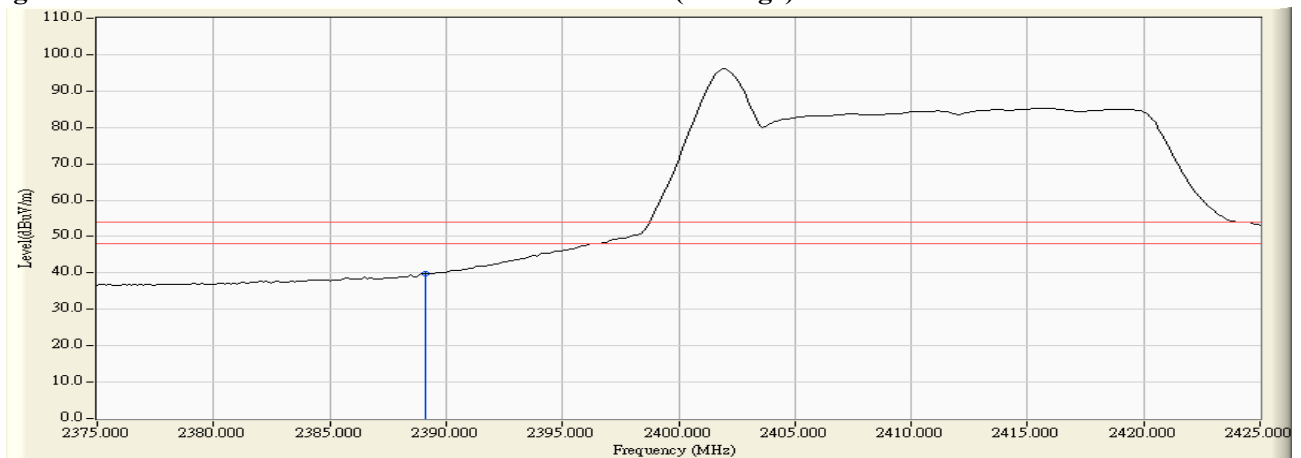
Channel	Frequency (MHz)	Correct Fcator (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2389.125	-2.382	57.784	55.403	74.00	54.00	Pass
1 (Average)	2389.125	-2.382	42.115	39.734	74.00	54.00	Pass

**Figure Channel 1: Vertical (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 1: Vertical (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) +BT 2480MHz

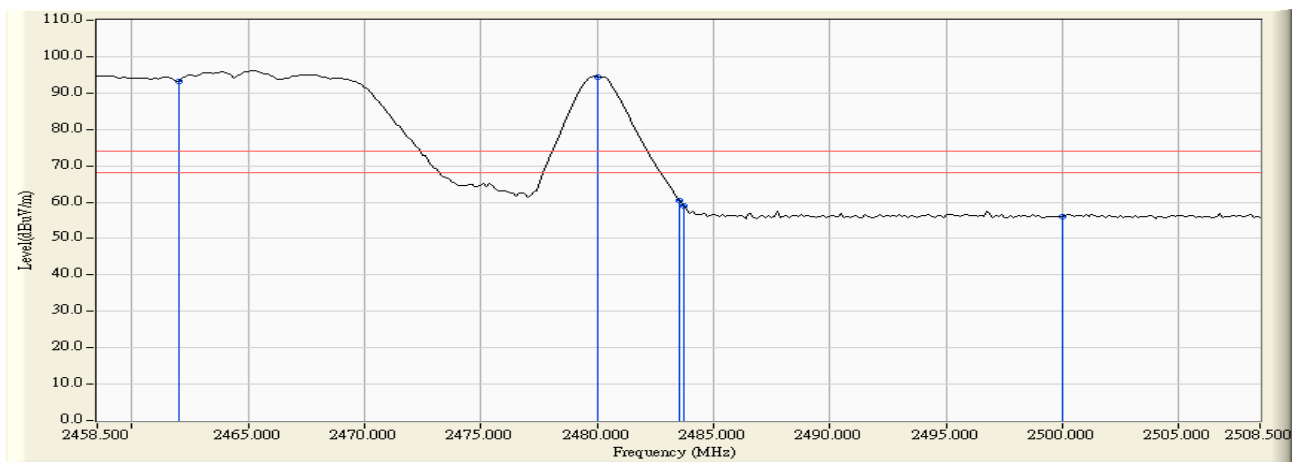
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Horizontal)	>2483.5	>20	Pass

**RF Radiated Measurement (Horizontal):**

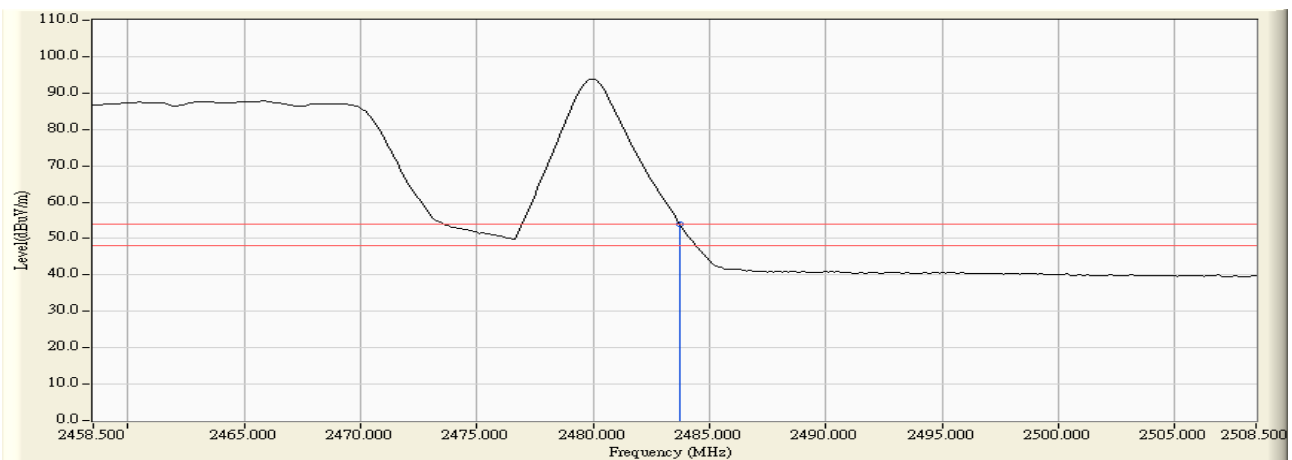
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2483.750	-1.936	60.904	58.968	74.00	54.00	Pass
11(Average)	2483.750	-1.936	55.817	53.881	74.00	54.00	Pass

**Figure Channel 11: Horizontal (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms

**Figure Channel 11: Horizontal (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

Product : Notebook  
 Test Item : Band Edge Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) +BT 2480MHz

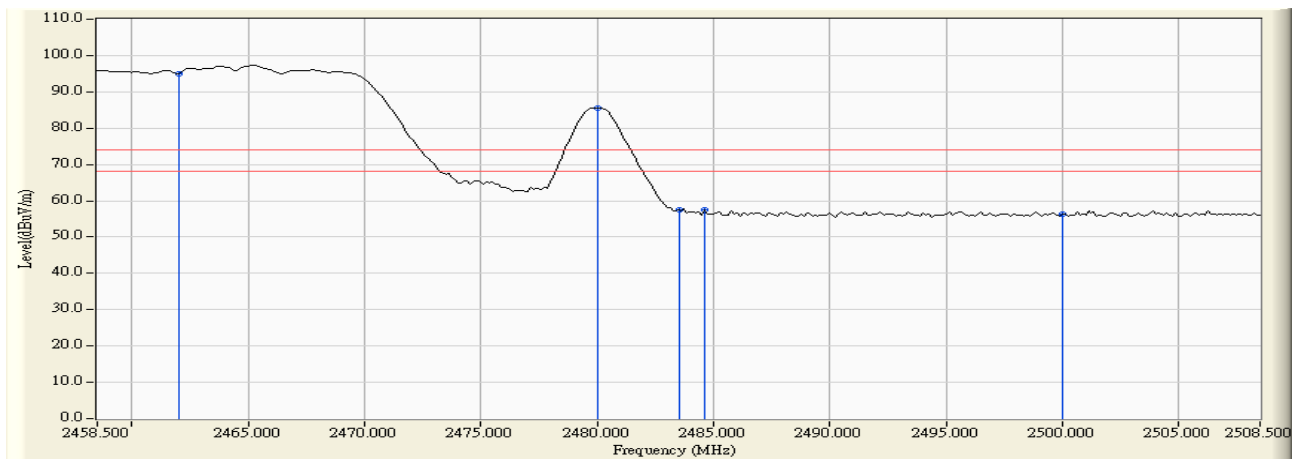
**RF Radiated Measurement:**

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Vertical)	>2483.5	>20	Pass

**RF Radiated Measurement (Vertical):**

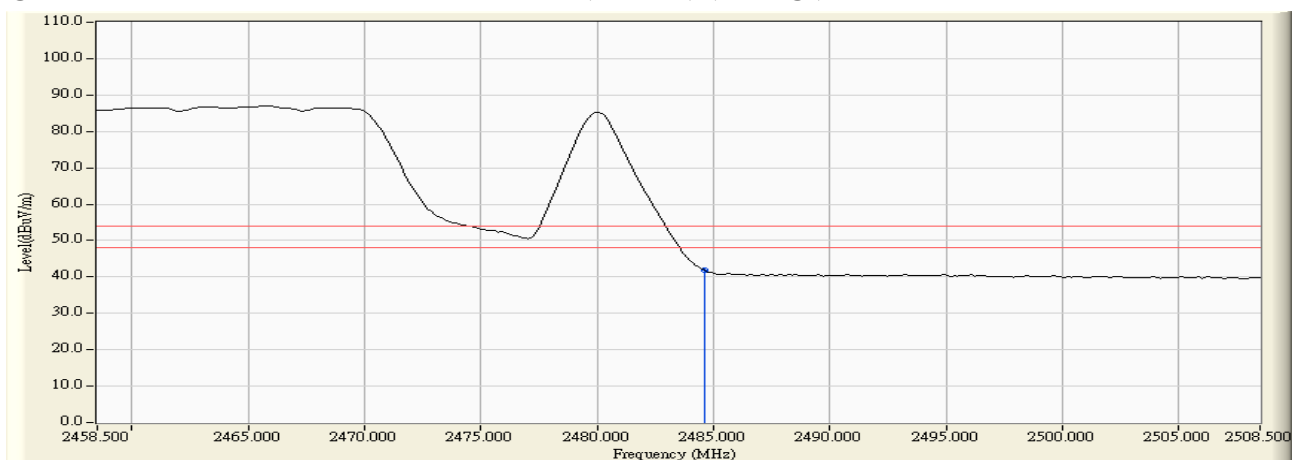
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2484.625	-1.934	59.504	57.571	74.00	54.00	Pass
11(Average)	2484.625	-1.934	43.827	41.894	74.00	54.00	Pass

**Figure Channel 11: (Vertical) (Peak)**



Note: RBW=1MHz, VBW=1MHz, Sweep Time=500ms.

**Figure Channel 11: (Vertical) (Average)**



Note: RBW=1MHz, VBW=300Hz, Sweep Time=500ms

## 6. Occupied Bandwidth

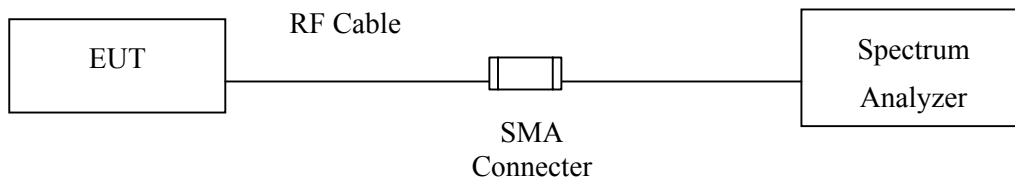
### 6.1. Test Equipment

The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

- Note:
1. All instruments are calibrated every one year.
  2. The test instruments marked by “X” are used to measure the final test results.

### 6.2. Test Setup



### 6.3. Limits

The minimum bandwidth shall be at least 500kHz.

### 6.4. Uncertainty

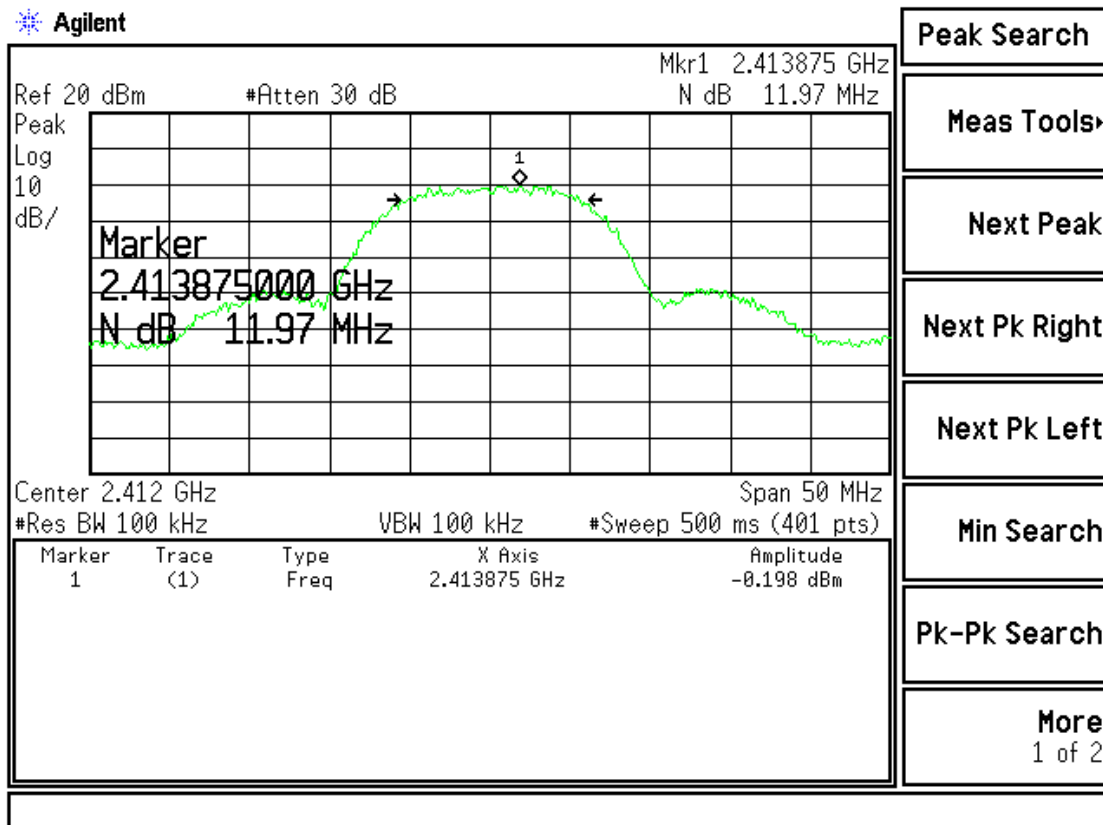
$\pm 150\text{Hz}$

### 6.5. Test Result of Occupied Bandwidth

Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (11Mbps)	2412.00	11970	>500	Pass

**Figure Channel 1: 11Mbps**

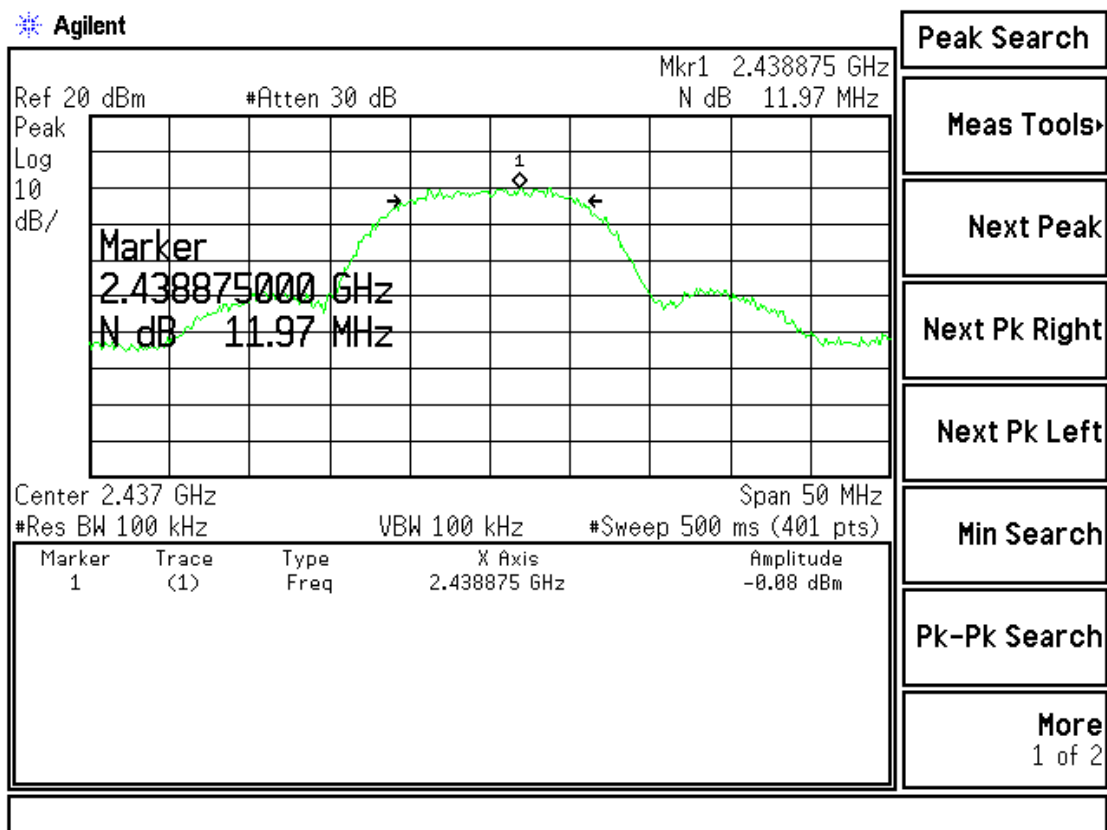




Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (11Mbps)	2437.00	11970	>500	Pass

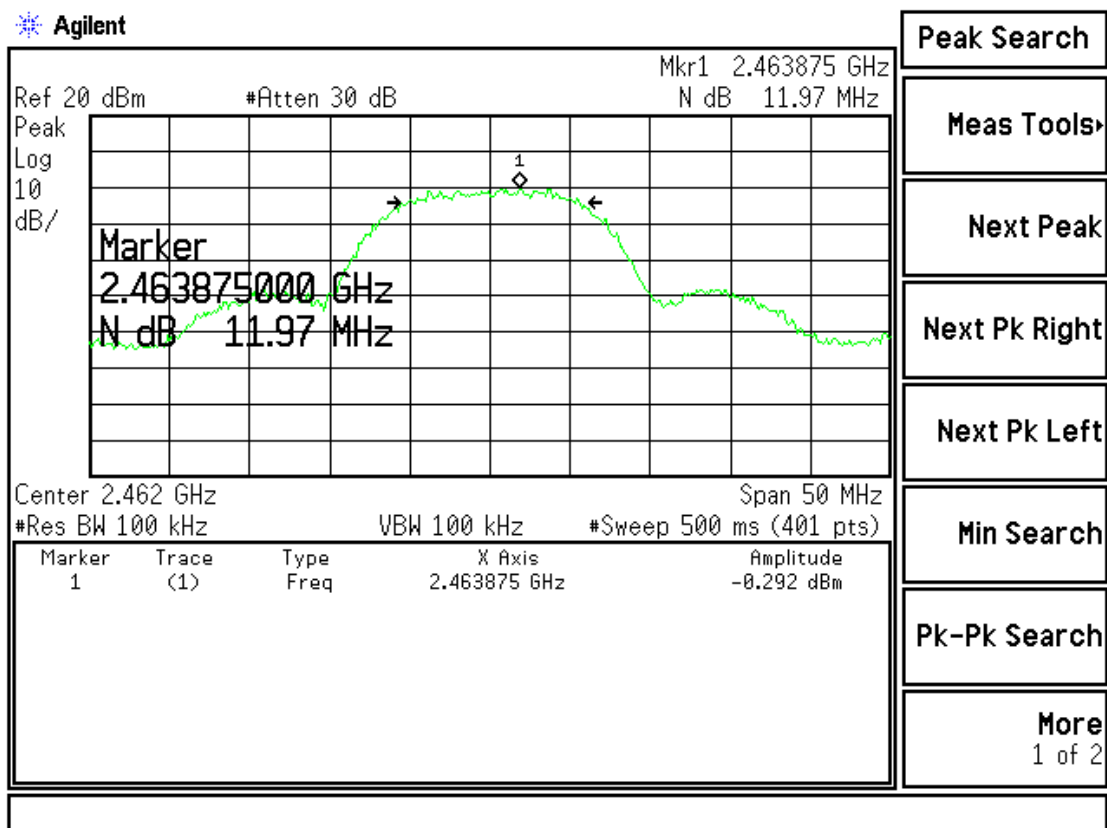
**Figure Channel 6: 11Mbps**



Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (11Mbps)	2462.00	11970	>500	Pass

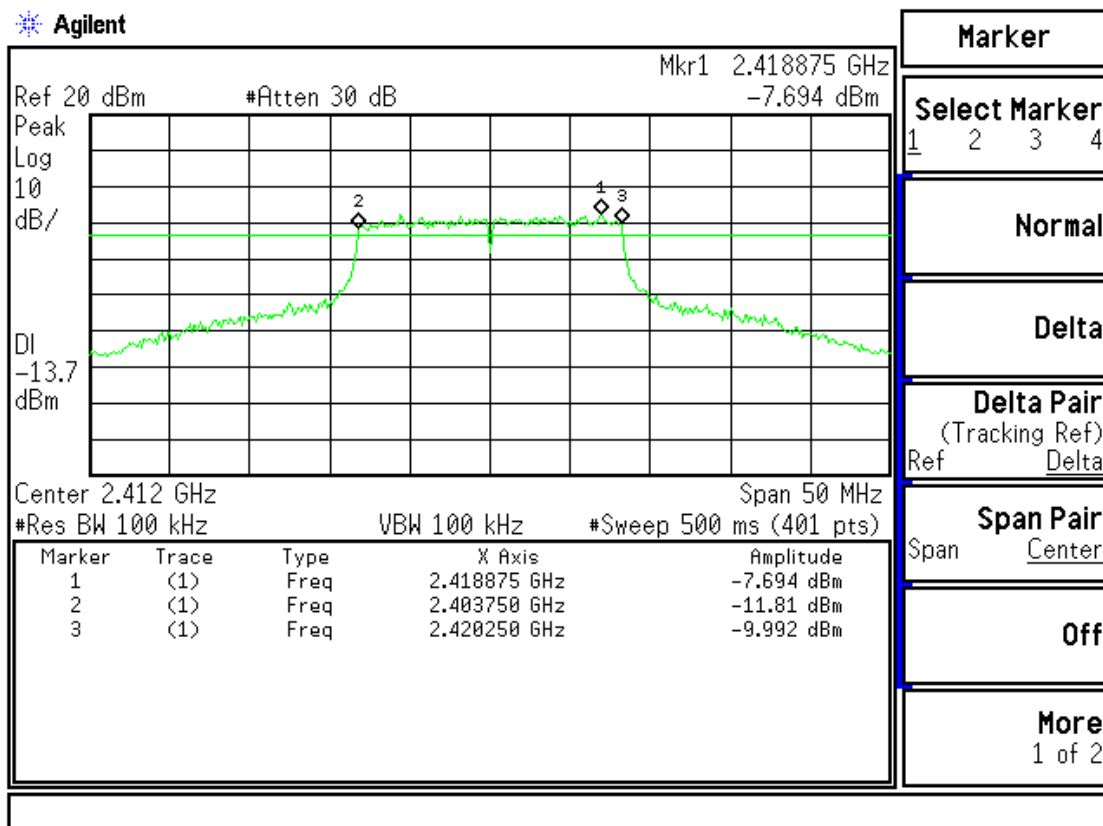
**Figure Channel 11: 11Mbps**



Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (54Mbps)	2412.00	16500	>500	Pass

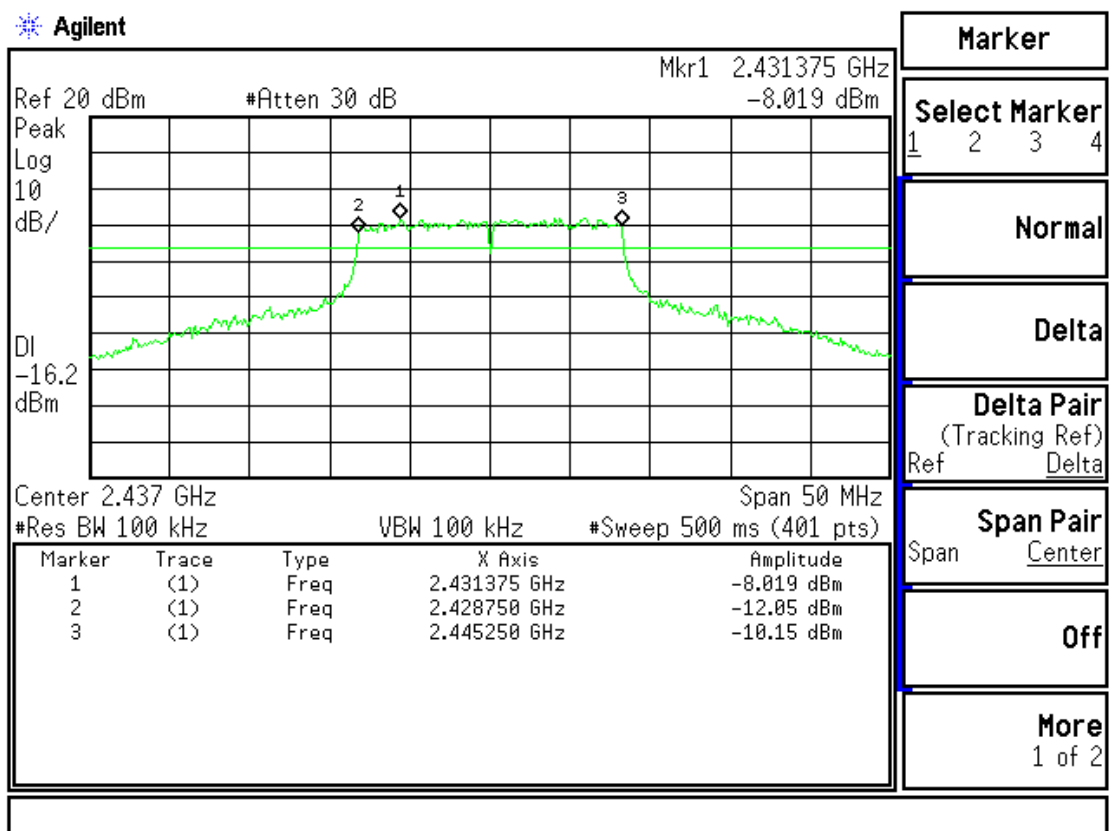
**Figure Channel 1:**



Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (54Mbps)	2437.00	16500	>500	Pass

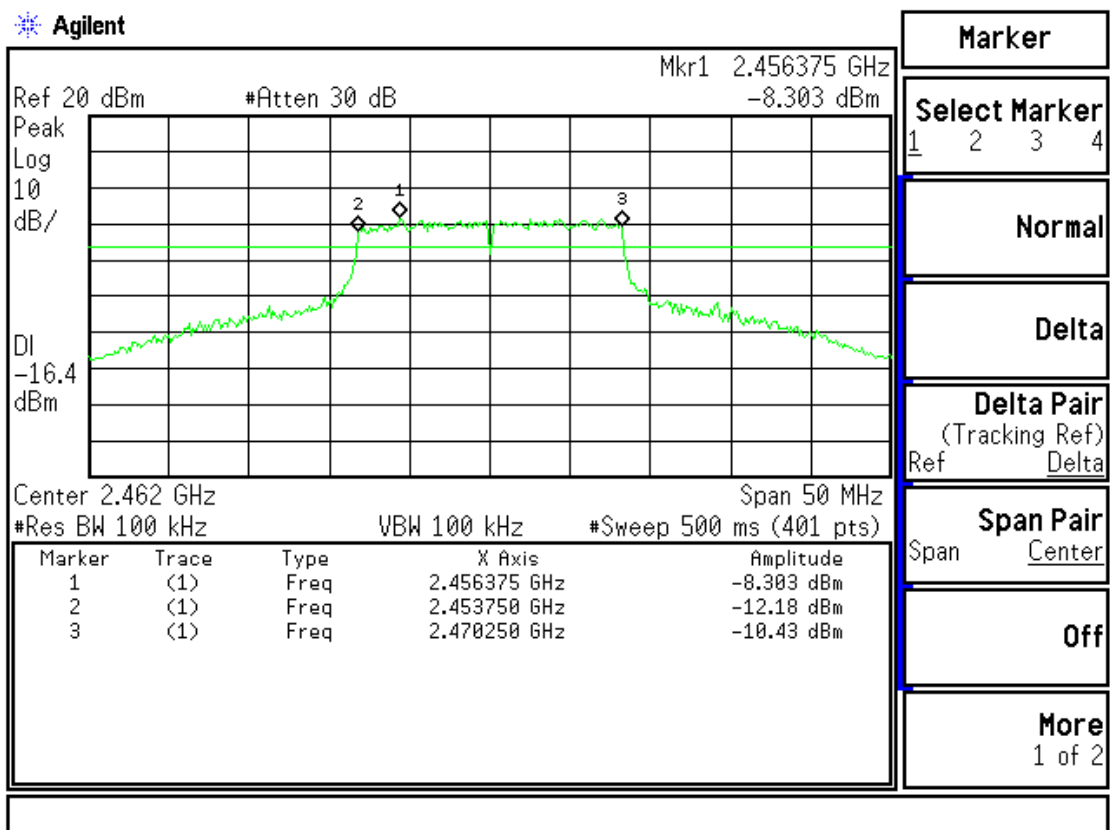
**Figure Channel 6:**



Product : Notebook  
 Test Item : Occupied Bandwidth Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (54Mbps)	2462.00	16500	>500	Pass

**Figure Channel 11:**



## 7. Power Density

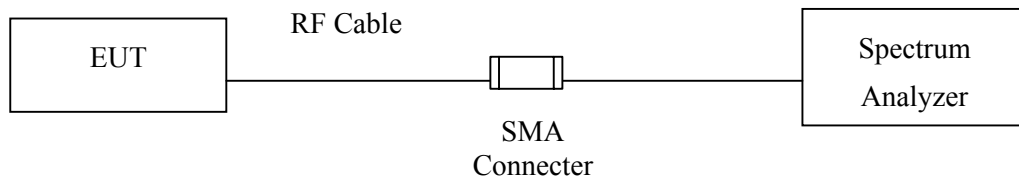
### 7.1. Test Equipment

The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

- Note:
1. All equipments are calibrated every one year.
  2. The test instruments marked by “X” are used to measure the final test results.

### 7.2. Test Setup



### 7.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

### 7.4. Uncertainty

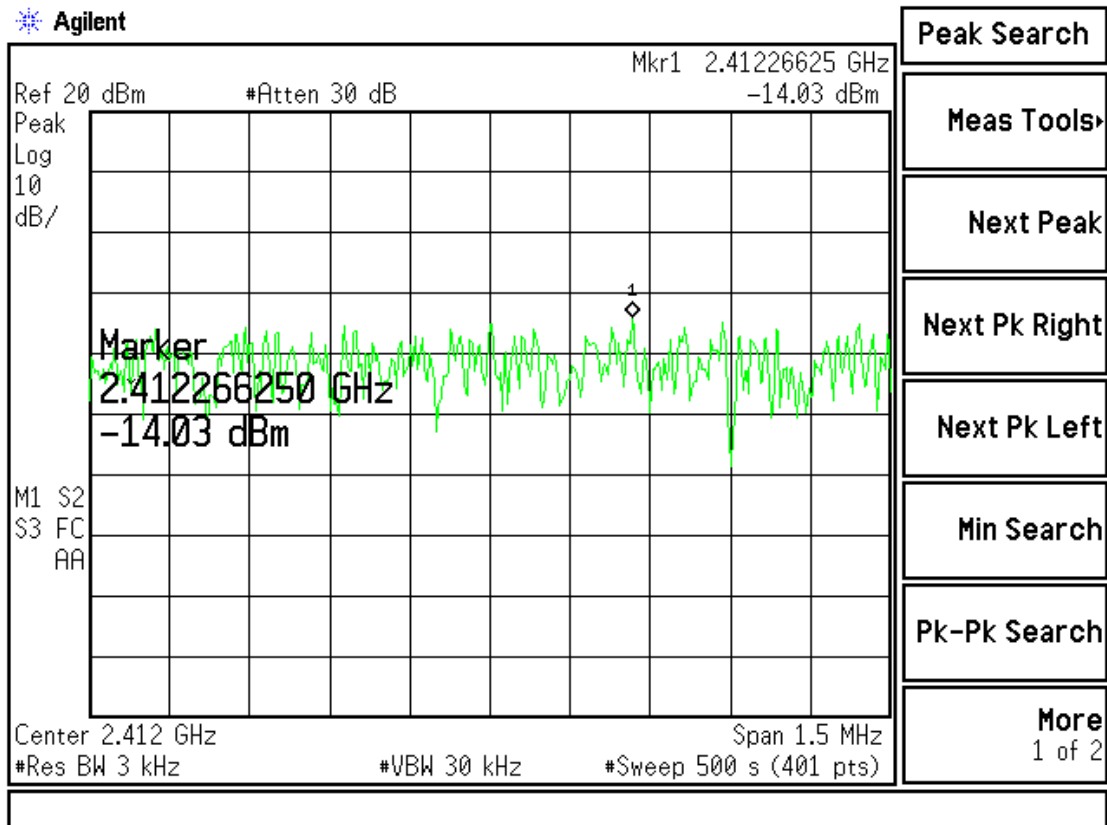
± 1.27 dB

### 7.5. Test Result of Power Density

Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (11Mbps)	2412.00	-14.03	< 8dBm	Pass

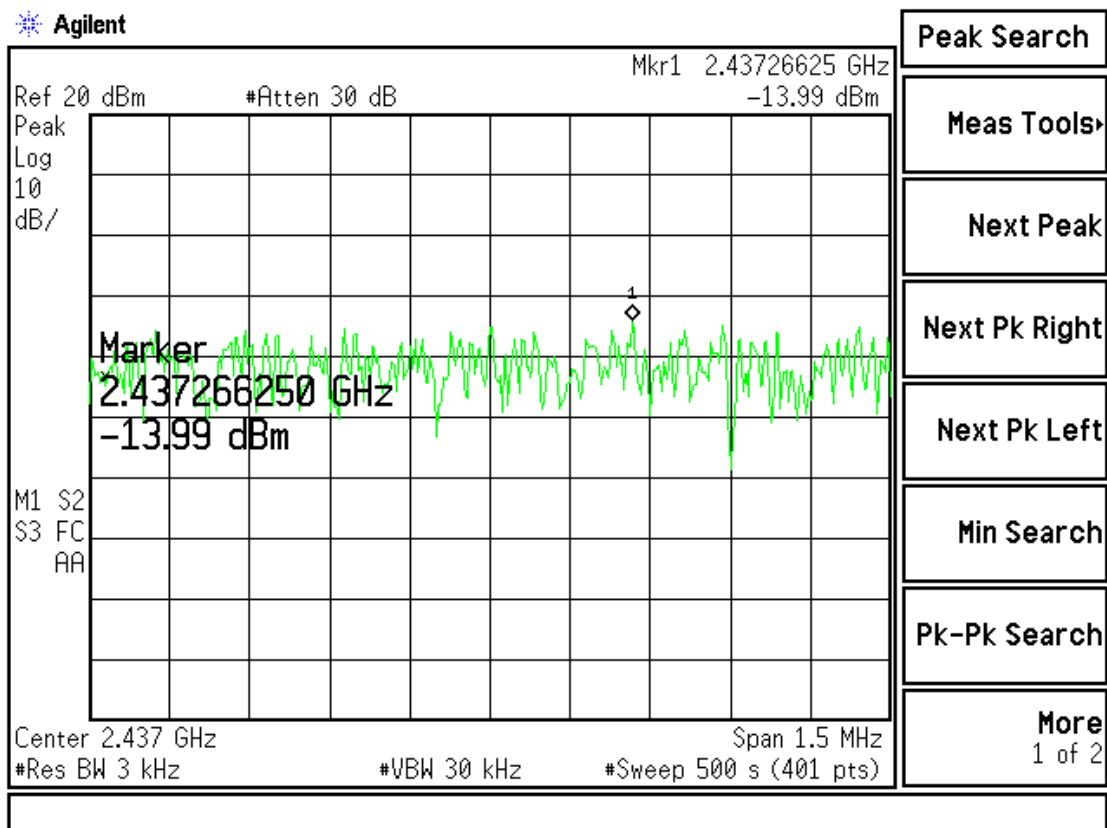
**Figure Channel 1: 11Mbps**



Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (11Mbps)	2437.000	-13.99	< 8dBm	Pass

**Figure Channel 6: 11Mbps**

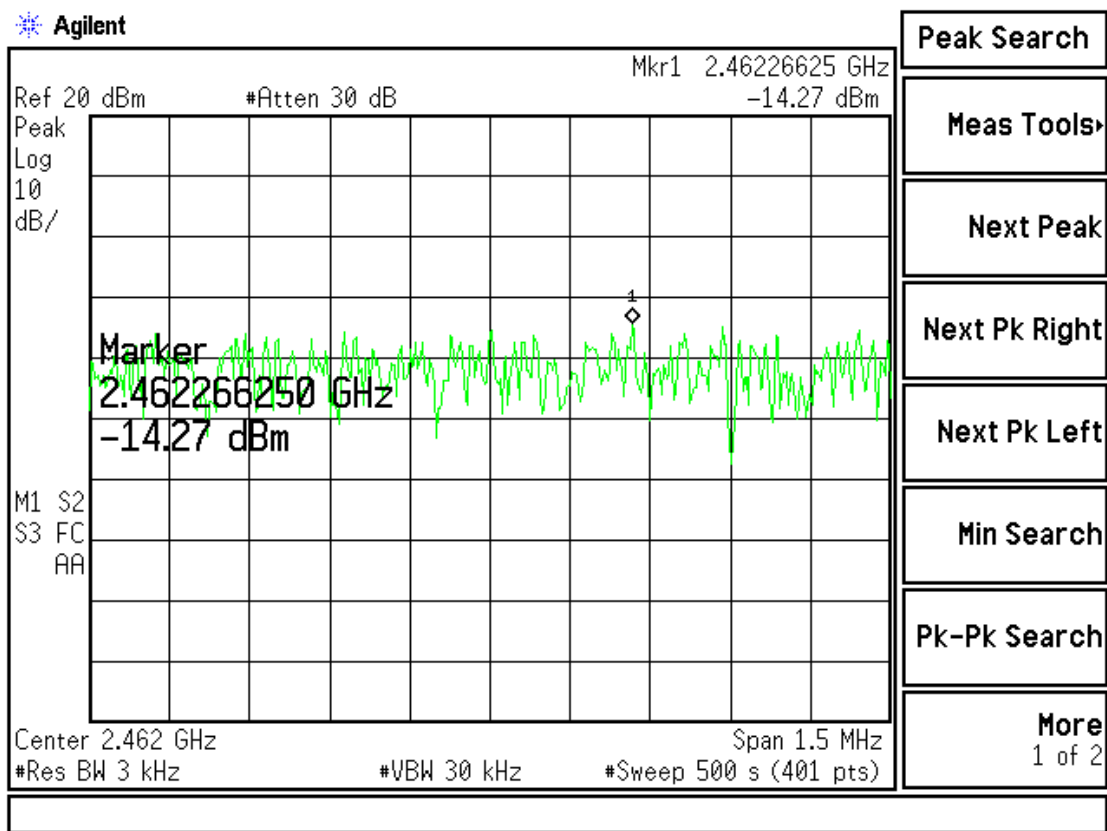




Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmitter 802.11b (Antenna 1) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (11Mbps)	2462.00	-14.27	< 8dBm	Pass

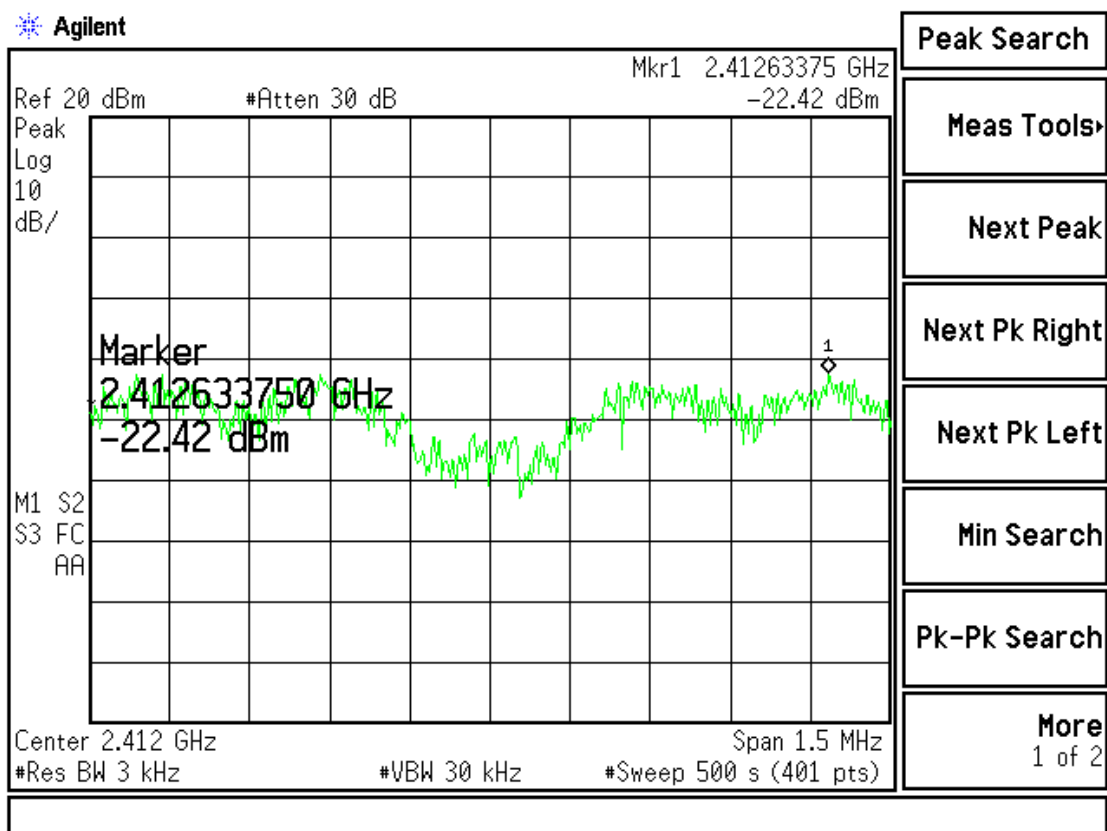
**Figure Channel 11: 11Mbps**



Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (54Mbps)	2412.00	-22.42	< 8dBm	Pass

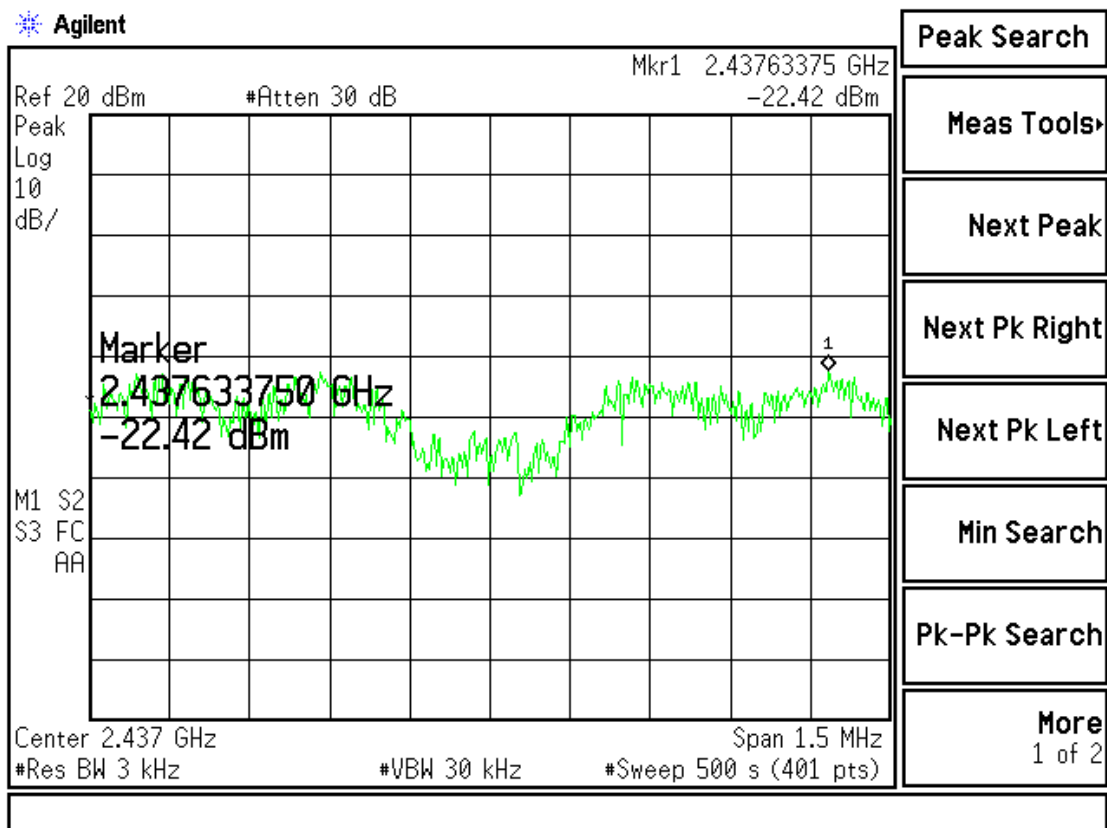
**Figure Channel 1:**



Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (54Mbps)	2437.000	-22.42	< 8dBm	Pass

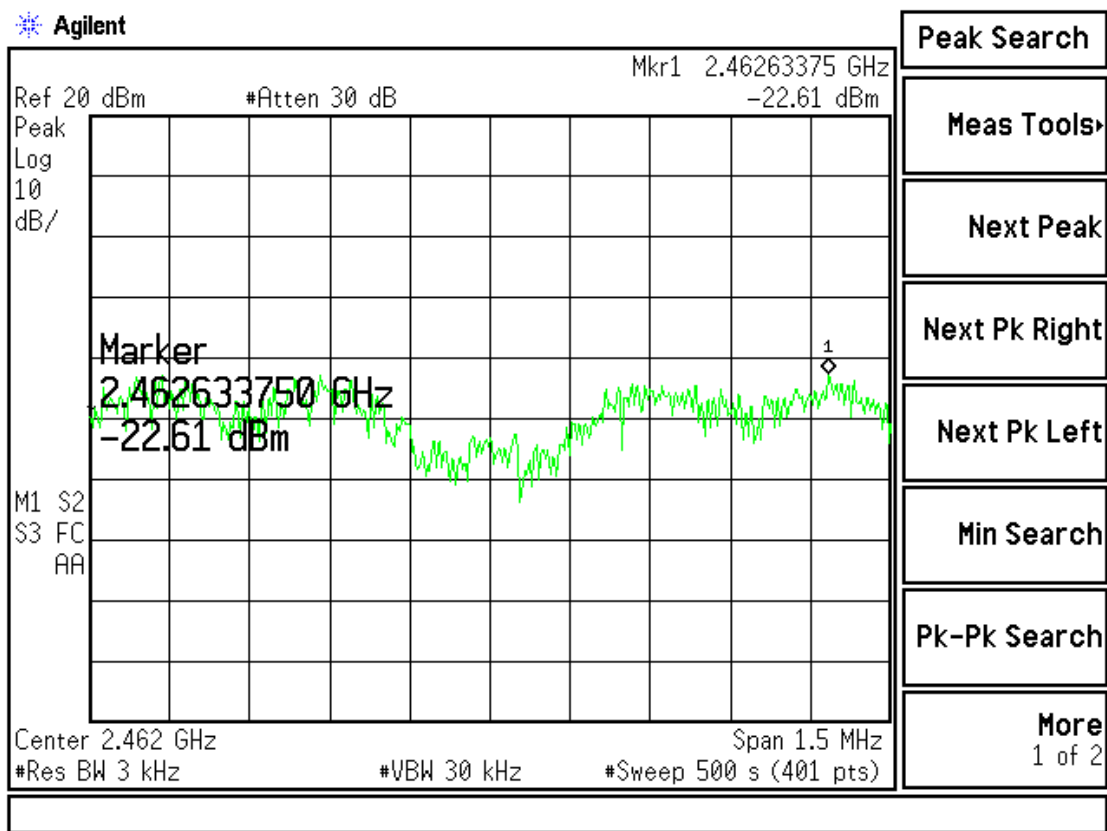
**Figure Channel 6:**



Product : Notebook  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmitter 802.11g (Antenna 1) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (54Mbps)	2462.00	-22.61	< 8dBm	Pass

**Figure Channel 11:**



## 8. EMI Reduction Method During Compliance Testing

No modification was made during testing.