

# FCC Part 15C (WLAN) TEST REPORT

*of*

## IPTV-STB

**FCC ID :** VXF2008011601

**Model No. :** N8608I-AW

**Serial No. :** /

**Report No. :** FCC08-8002

**Date :** Jan 29, 2008

*Prepared for*

### **COSHIP ELECTRONICS CO., LTD**

7/F, Block A, W2 Bldg, Hi-Tech Industrial Park, Shenzhen, China

*Prepared by*

### **ShenZhen Electronic Product Quality Testing Center**

Electronic Testing Building, Shahe Road, Xili, Nanshan District, ShenZhen, 518055, P.R.China

Tel: 86 755 26627338 Fax: 86 755 26627238

This test report consists of **48** pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by SET. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver.

## Table of Contents

1	Test Report Certification.....	4
2	General Information.....	5
	2.1 Description of EUT .....	5
	2.3 Test Standards and Results .....	6
	2.4 List of Test Equipments Used .....	6
	2.5 Test Facility.....	7
	2.6 Environmental conditions .....	7
3	Conducted Emission Test .....	8
	3.1 Limits of Conducted Emission.....	8
	3.2 Test Procedure .....	8
	3.3 Test Setup .....	9
	3.4 EUT Setup and Operating Conditions.....	9
	3.5 Test Results.....	10
4	Radiated Emission Test.....	12
	4.1 Limits of Radiated Emission.....	12
	4.2 Test Procedure .....	12
	4.3 Test Setup .....	13
	4.4 EUT Setup and Operating Conditions.....	13
	4.5 Test Results.....	14
5	6dB Bandwidth.....	15
	5.1 Definition .....	15
	5.2 Test Procedure .....	15
	5.3 Test Setup .....	15
	5.4 EUT Setup and Operating Conditions.....	15
	5.5 Test Results.....	16
6	Peak Output Power.....	20
	6.1 Requirement of the standard .....	20
	6.2 Test Procedure .....	20
	6.3 Test Setup .....	20
	6.4 EUT Setup and Operating Conditions.....	20
	6.5 Test Results.....	21
7	Band Edge .....	25

7.1 Requirement of the standard .....	25
7.2 Test Procedure .....	25
7.3 Test Setup .....	25
7.4 EUT Setup and Operating Conditions.....	25
7.5 Test Results.....	26
8 Conducted Spurious Emission .....	31
8.1 Requirement of the standard .....	31
8.2 Test Procedure .....	31
8.3 Test Setup .....	31
8.4 EUT Setup and Operating Conditions.....	31
8.5 Test Results.....	32
9 Peak Power Spectral Density .....	35
9.1 Requirement of the standard .....	35
9.2 Test Procedure .....	35
9.3 Test Setup .....	35
9.4 EUT Setup and Operating Conditions.....	35
9.5 Test Results.....	35
Appendix I : Photographs of the EUT.....	40
Appendix II : Photographs of the Test Configuration.....	46

## 1 Test Report Certification

**Product:** IPTV-STB

**FCC ID:** VXF2008011601

**Model No.:** N8608I-AW

**Applicant:** COSHIP ELECTRONICS CO., LTD

**Applicant Address:** 7/F, Block A, W2 Bldg, Hi-Tech Industrial Park, Shenzhen, China

**Manufacturer:** COSHIP ELECTRONICS CO., LTD

**Manufacturer Address:** 7/F, Block A, W2 Bldg, Hi-Tech Industrial Park, Shenzhen, China

**Test Standards:** 47 CFR Part 15

**Test Result:** PASS

We, Shenzhen Electronic Product Quality Testing Center, hereby certify that the submitted samples of the above item, as detailed in chapter 2.1 of this report, has been tested in our facility. The test record, data evaluation and test configuration represented herein are true and accurate accounts of measurements of the sample's EMC characteristics under the conditions herein specified.

Tested by: Zhu Qi, Date: Sept. 9, 2008  
Zhu Qi

Checked by: Smart Li, Date: Sept. 9, 2008  
Smart Li

Approved by: Li An. Wu, Date: Sept. 9, 2008  
Wu Li An

## 2 General Information

### 2.1 Description of EUT

<b>Description:</b>	IPTV-STB
<b>Model No.:</b>	N8608I-AW
<b>Serial No.:</b>	/
<b>Modulation</b>	802.11b: DSSS (CCK; DQPSK;DBPSK) 802.11g: OFDM
<b>Frequency:</b>	802.11b: 2412 – 2462 MHz 802.11g: 2412 – 2462 MHz
<b>Transmit Data Rate:</b>	802.11b: 11Mbps(CCK) with fall back rates of 5.5, 2 and 1Mbps 802.11g:54Mbps with fall back rates of 48/36/24/18/12/9/6 Mbps (OFDM)
<b>Number of Channels:</b>	11
<b>Power Supply:</b>	DC 12V,1.5A

**NOTE:**

1. The EUT is an IPTV-STB. Please refer to Appendix I for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

### 2.2 Objective

Perform EMC test according to Section 15.207, 15.209 and 15.247 of FCC Part 15 Subpart C.

## 2.3 Test Standards and Results

The EUT has been tested according to 47 CFR Part 15, Radio Frequency Devices.

Test items and the results are as bellow:

?	FCC Rules	Test Type	Result	Test Date
1	§15.207 KDB558074	Conducted Emission	PASS	2008.1.21
2	§15.209 §15.247(c) KDB558074	Radiated Emission	PASS	2008.1.21
3	§15.247(a) KDB558074	6dB Bandwidth	PASS	2008.8.21
4	§15.247(b) KDB558074	Peak Output Power	PASS	2008.8.21
5	§15.247(c) KDB558074	Band Edge	PASS	2008.8.21
6	§15.247(c) KDB558074	Conducted Spurious Emission	PASS	2008.8.21
7	§15.247(D) KDB558074	Peak Power Spectral Density	PASS	2008.8.21

## 2.4 List of Test Equipments Used

Description	Manufacture r	Model No.	Cal. Due Date	Serial No.
Test Receiver	Rohde & Schwarz	ESIB26	2009.06.10	A0304218
Test Receiver	Schwarzbeck	FCKL1528	2009.06.10	A0304230
LISN	Schwarzbeck	NSLK8127	2009.06.10	A0304233
Loop Antenna	Rohde & Schwarz	HFH2-Z2	2009.06.10	A0304220
Ultra Broadband Ant.	Rohde & Schwarz	HL562	2009.06.10	A0304224
Horn Ant.	Rohde & Schwarz	HF906	2009.06.10	100150
Horn Ant.	EMCO	3160-09	2009.05.27	00703809
Bluetooth Tester	Rohde & Schwarz	CBT	2009.06.10	100261
Shield Room	Nanbo Tech	Site 1	2009.06.10	A0304188
Anechoic Chamber	Albatross	EMC12.8× 6.8× 6.4(m)	2009.06.10	A0304210

## 2.5 Test Facility

Shenzhen Electronic Product Quality Testing Center (SET) is a third party testing organization accredited by China National Accreditation Board for Laboratories (CNAL) according to ISO/IEC 17025. The accreditation certificate number is **L1659**.

The EMC chamber site No.1 (EMC12.8×6.8×6.4(m)), and the radiated and conducted Emission test equipments of SET are constructed and calibrated to meet the FCC requirements ANSI C63.4:2001 and CISPR 22/EN 55022. The FCC Registration Number is **261302**.

The EMC chamber site No.1 (EMC12.8×6.8×6.4(m)) also complies with Canada standard RSS 212, and acceptable to Industry Canada for the performance of radiated measurements. The Industry Canada Registration Number is **IC 5915**.

## 2.6 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C
- Humidity: 30-60 %
- Atmospheric pressure: 86-106 kPa

### 3 Conducted Emission Test

#### 3.1 Limits of Conducted Emission

According to FCC §15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBmV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

**NOTE:**

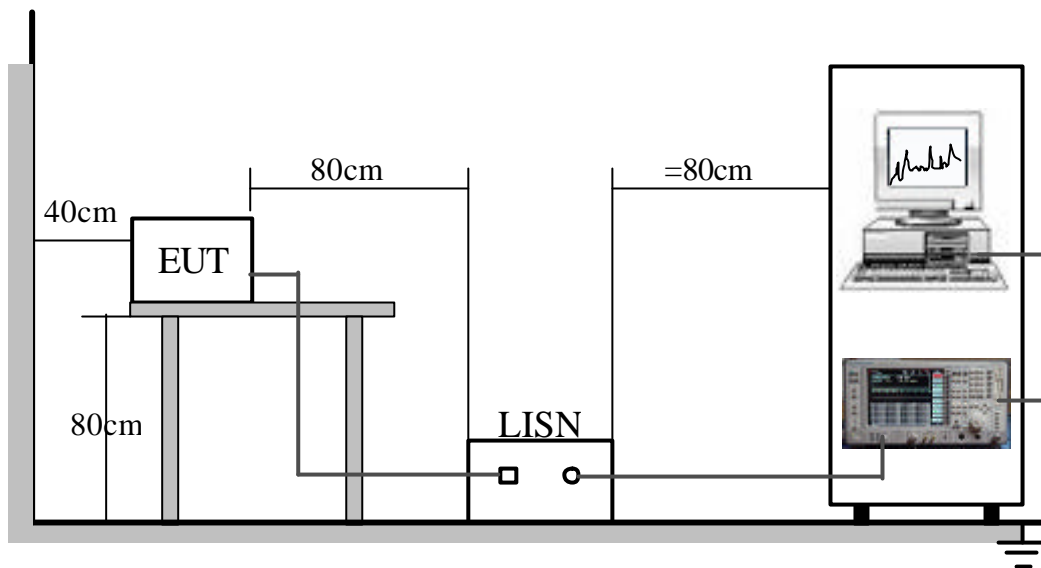
1. The lower limit shall apply at the band edges.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

#### 3.2 Test Procedure

- a. The EUT was placed on a 0.8m high insulating table and kept 0.4 meters from the conducting wall of shielded room.
- b. The EUT was connected to the power mains through a line impedance stabilization network (LISN). The LISN provide 50 $\mu$  H of coupling impedance for the measuring instrument.
- c. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- d. The frequency range from 150 kHz to 30 MHz was searched using CISPR Quasi-Peak and Average detector.



### 3.3 Test Setup



For the actual test configuration, please refer to the related item - Photographs of the Test Configuration.

### 3.4 EUT Setup and Operating Conditions

The EUT configuration of the emission tests was EUT + Adaptor.

During the measurement, the EUT was operated in the engineering mode to fix the TX frequency. The Adaptor was powered by 120V 60Hz AC mains supply.

### 3.5 Test Results

L :

No.	Freq. (MHz)	Limit Value (dBmV)		Emission Level (dBmV)	
		QP	AV	QP	AV
1	0.2310	62.4	52.4	50.20	42.58
2	0.2895	60.5	50.5	45.27	38.79
3	0.3435	59.1	49.1	42.80	29.64
4	0.4065	57.7	47.7	36.06	30.46
5	0.4605	56.7	46.7	38.56	31.94
6	17.7000	60	50	33.66	24.88

N:

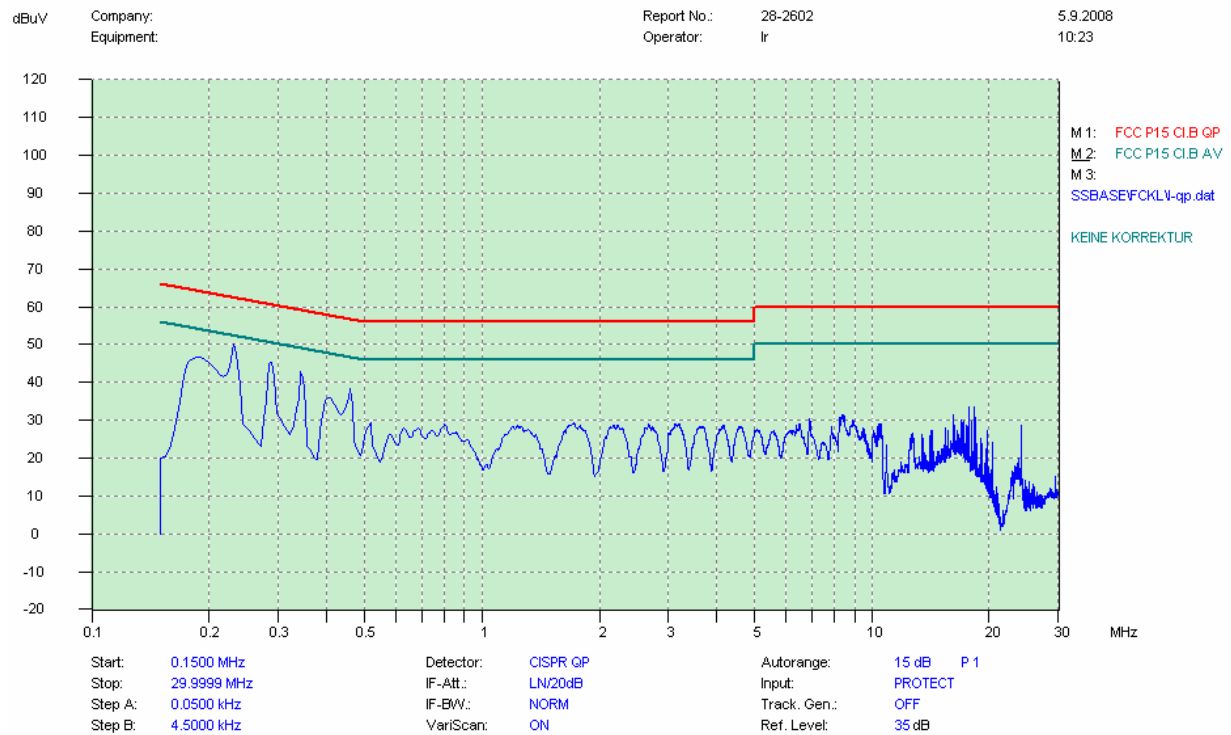
No.	Freq. (MHz)	Limit Value (dBmV)		Emission Level (dBmV)	
		QP	AV	QP	AV
1	0.1770	64.6	54.6	48.07	40.18
2	0.2310	62.4	52.4	45.37	42.13
3	0.2850	60.7	50.7	41.81	35.29
4	0.3435	59.1	49.1	37.73	28.49
5	0.3975	57.9	47.9	38.74	32.44
6	0.4605	56.7	46.7	39.24	31.24

**NOTE:**

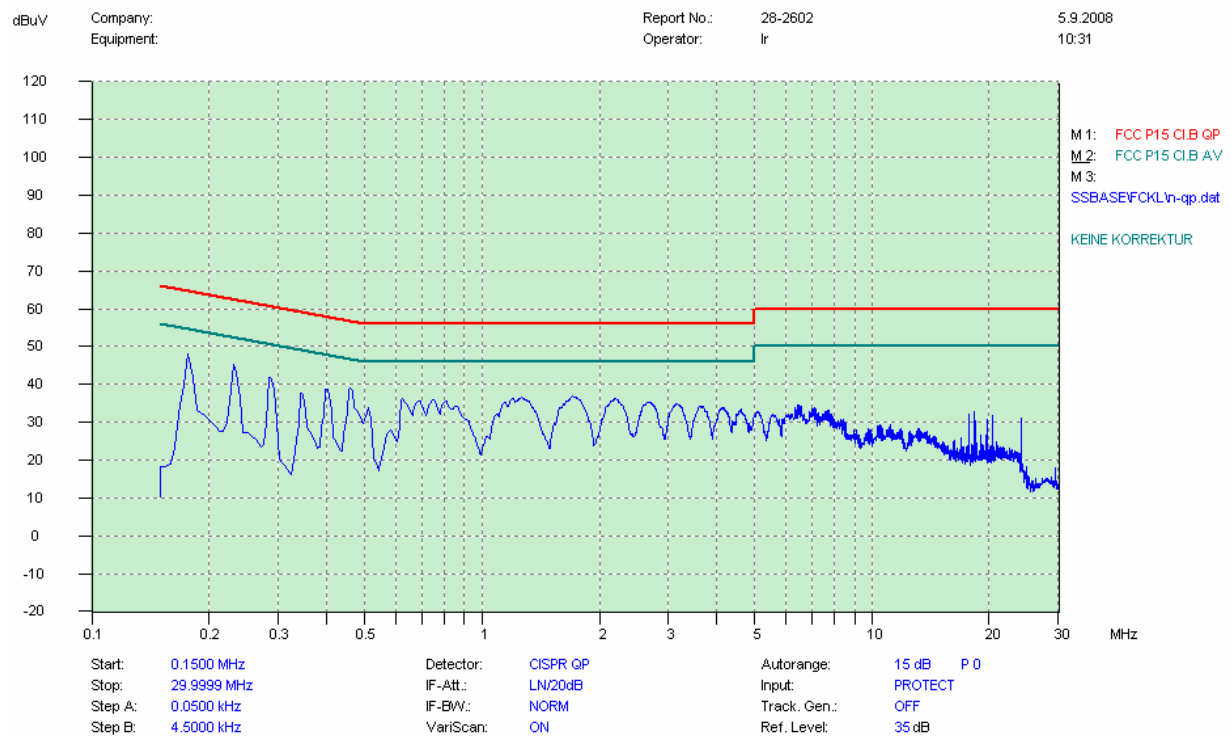
1. QP and AV are abbreviations of the quasi-peak and average individually.
2. If the emission levels measured with QP detector are lower than AV limits, there is unnecessary to measure with AV detector.
3. The emission levels recorded above is the larger ones of both L phase and N phase.

## Test Plots

### 1. Mains terminal disturbance voltage, L phase



### 2. Mains terminal disturbance voltage, N phase



## 4 Radiated Emission Test

### 4.1 Limits of Radiated Emission

According to FCC §15.247(c), radiated emission outside the frequency band 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).

According to FCC §15.209 (a), Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency(MHz)	Field Strength(mV/m)	Measurement Distance(m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules,

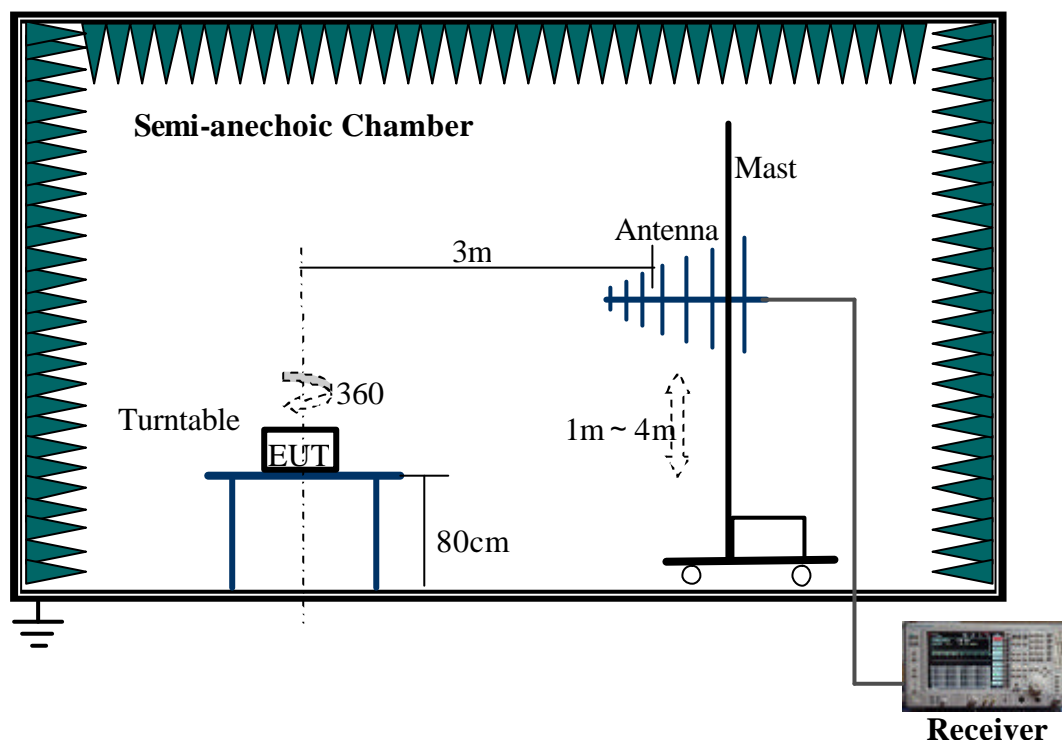
### 4.2 Test Procedure

- The EUT was placed on the top of a ratable 0.8 meters above the ground at a semi-anechoic chamber.
- In the frequency range of 9 kHz to 30 MHz, magnetic field was measured with loop antenna. The antenna was positioned with its plane vertical at 1 m distance from the EUT. The center of the loop was 1 m above the ground. During the measurement the loop antenna rotated about its vertical axis for maximum response at each azimuth about the EUT.
- In the frequency range above 30MHz, ultra-broadband bi-log antenna (30 MHz to 1 GHz) and horn antenna (1GHz to 26.5GHz) were used. Antenna was 3 meters away from the EUT. Antenna height was varied from one meter to four meter above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The test-receiver system was set to Peak Detector Function and Specified Bandwidth with

Maximum Hold Mode.

- e. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emission that did not have 10 dB margins would be retested one by one using the quasi-peak and average method.
- f. Repeat above procedures until the measurements for all frequency are complete.
- g. According to KDB558074 requirement, for measurements above 1GHz, the resolution bandwidth of the spectrum analyzer was set to RBW=1 MHz, VBW=10Hz.

### 4.3 Test Setup



For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

### 4.4 EUT Setup and Operating Conditions

During the measurement, the EUT was operated in the engineering mode to fix the TX frequency. Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

802.11b: Channel 1 (2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz)with 1Mbps highest data rate(the worst case) are chosen for the final testing.

802.11g: Channel 1 (2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz)with 6Mbps highest data rate(the worst case) are chosen for the final testing.

## 4.5 Test Results

### 802.11b

EUT Operating Freq. (MHz)	Emissions Freq(MHz)	Antenna Polarization	Emission Level (dBmV/m)		QP Limits (dBmV/m)	
			PK	AV	PK	AV
2412(Ch 1)	3217.48	Vertical	40.34	--	74	54
	4827.66	Vertical	56.95	52.68	74	54
	4827.66	Horizontal	45.26	--	74	54
2437(Ch 6)	4883.77	Vertical	56.17	52.47	74	54
	4883.77	Horizontal	50.83	--	74	54
2462(Ch 11)	4923.85	Vertical	52.48	--	74	54
	4923.85	Horizontal	55.82	52.04	74	54

### 802.11g

EUT Operating Freq. (MHz)	Emissions Freq(MHz)	Antenna Polarization	Emission Level (dBmV/m)		QP Limits (dBmV/m)	
			PK	AV	PK	AV
2412(Ch 1)	4827.66	Vertical	53.65	--	74	54
	4827.66	Horizontal	47.41	--	74	54
2437(Ch 6)	4883.77	Vertical	56.15	51.98	74	54
	4883.77	Horizontal	46.85	--	74	54
2462(Ch 11)	4923.85	Vertical	51.81	--	74	54
	4923.85	Horizontal	49.84	--	74	54

#### NOTE:

1. The spurious Emissions from 9 kHz to 10th harmonic of the fundamental frequency were researched.

## 5 6dB Bandwidth

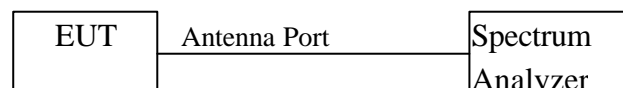
### 5.1 Definition

According to FCC §15.247(a)(2), Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500kHz

### 5.2 Test Procedure

- The EUT temporary antenna port was coupled to the spectrum analyzer. The loss of the cables the test system is calibrated to correct the reading.
- The spectrum analyzer was set to Maxpeak Detector function and Maximum Hold mode.
- According to KDB558074 requirement, the resolution bandwidth of the spectrum analyzer was set to at least 1% of the EUT emission bandwidth. RBW=100 kHz, VBW=300 kHz.
- Mark the -6dB (upper and lower) frequency.
- Repeat until all the rest channels are investigated.

### 5.3 Test Setup



For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

### 5.4 EUT Setup and Operating Conditions

During the measurement, the EUT was operated in the engineering mode to fix the TX frequency. Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

802.11b: Channel 1 (2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz)with 1Mbps highest data rate(the worst case) are chosen for the final testing.

802.11g: Channel 1 (2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz)with 6Mbps highest data rate(the worst case) are chosen for the final testing.

## 5.5 Test Results

802.11b

Operating Frequency ( MHz )	Bandwidth(kHz)	Limit(kHz)
2412(Ch 1)	9344	500
2437(Ch 6)	9375	
2462(Ch 11)	9344	

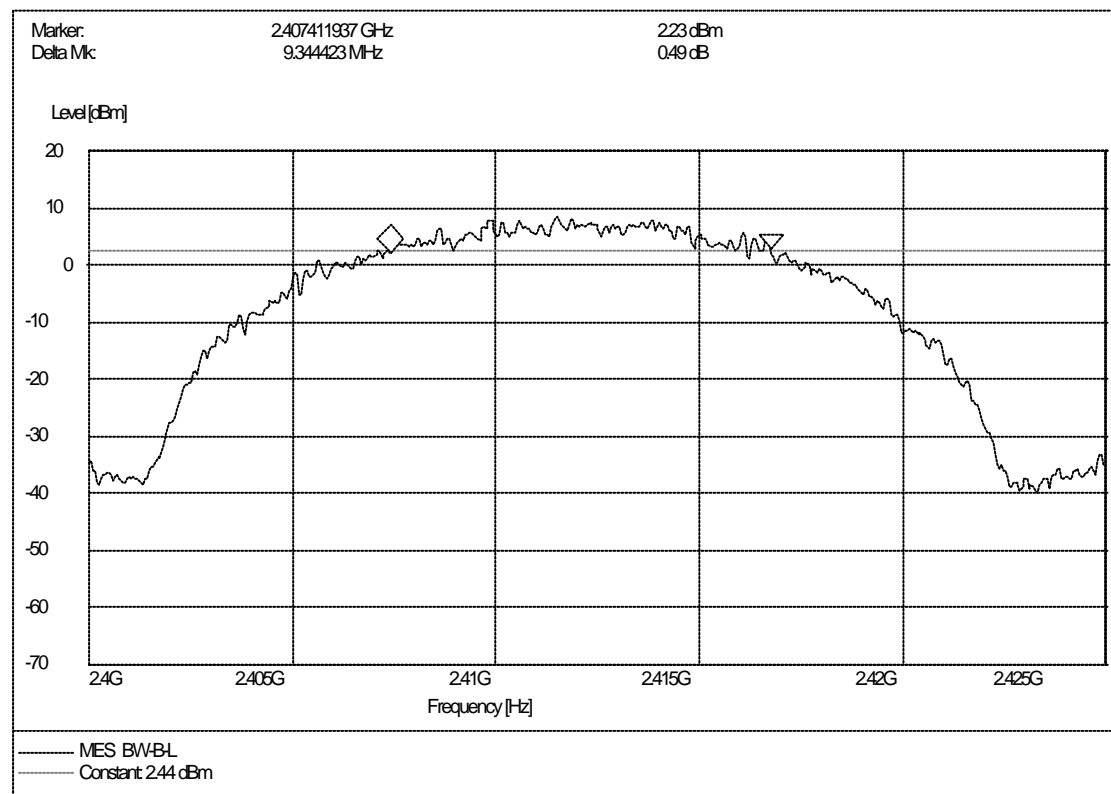
802.11b

Operating Frequency ( MHz )	Bandwidth(kHz)	Limit(kHz)
2412(Ch 1)	16585	500
2437(Ch 6)	16560	
2462(Ch 11)	16575	

Test Plots

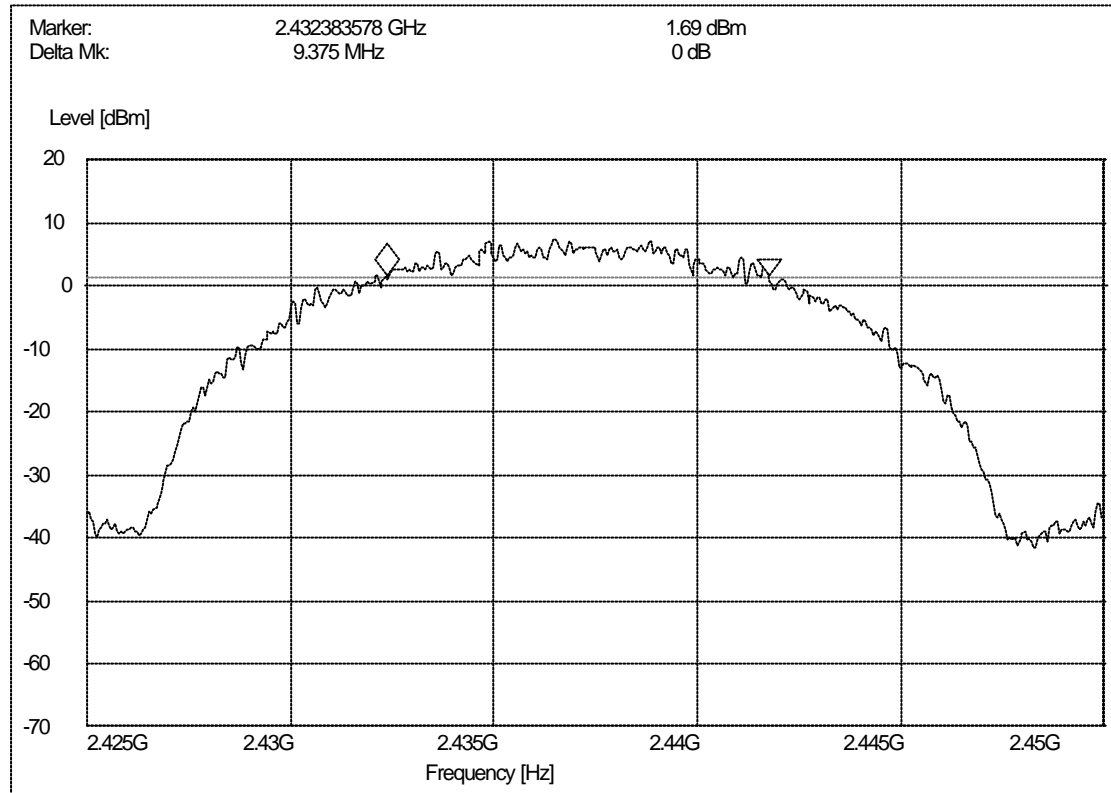
802.11b Mode

Ch 1

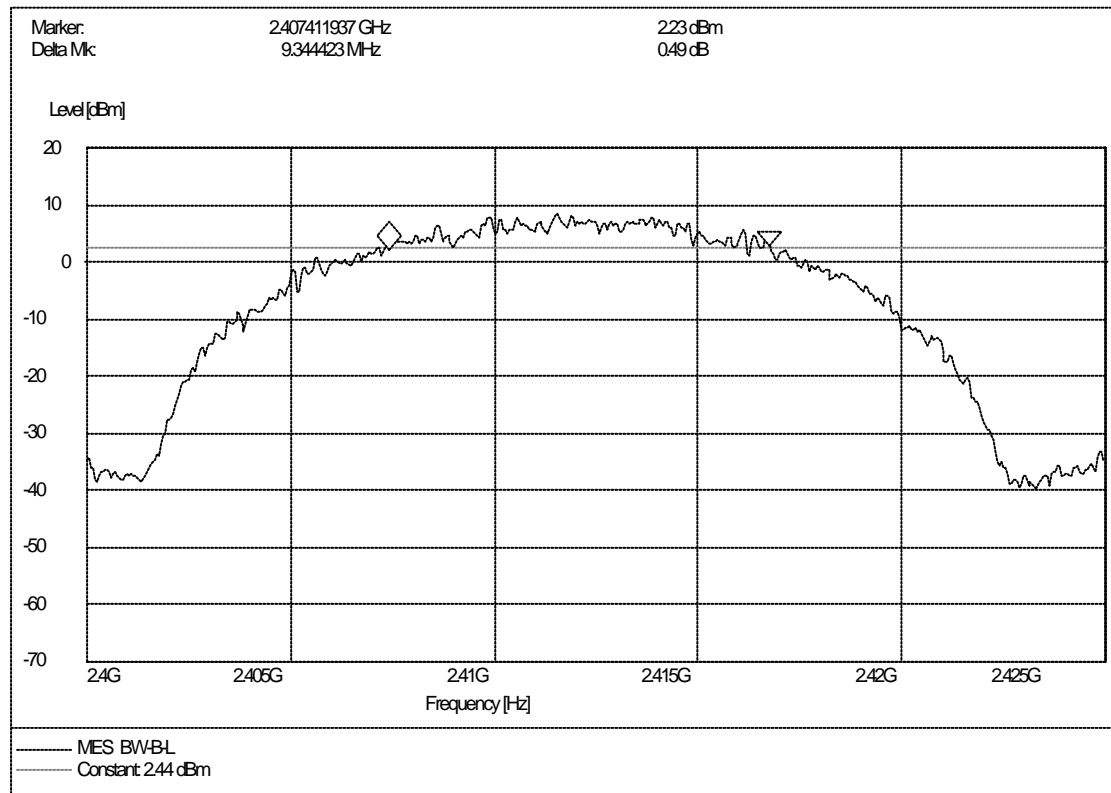




# Ch 6

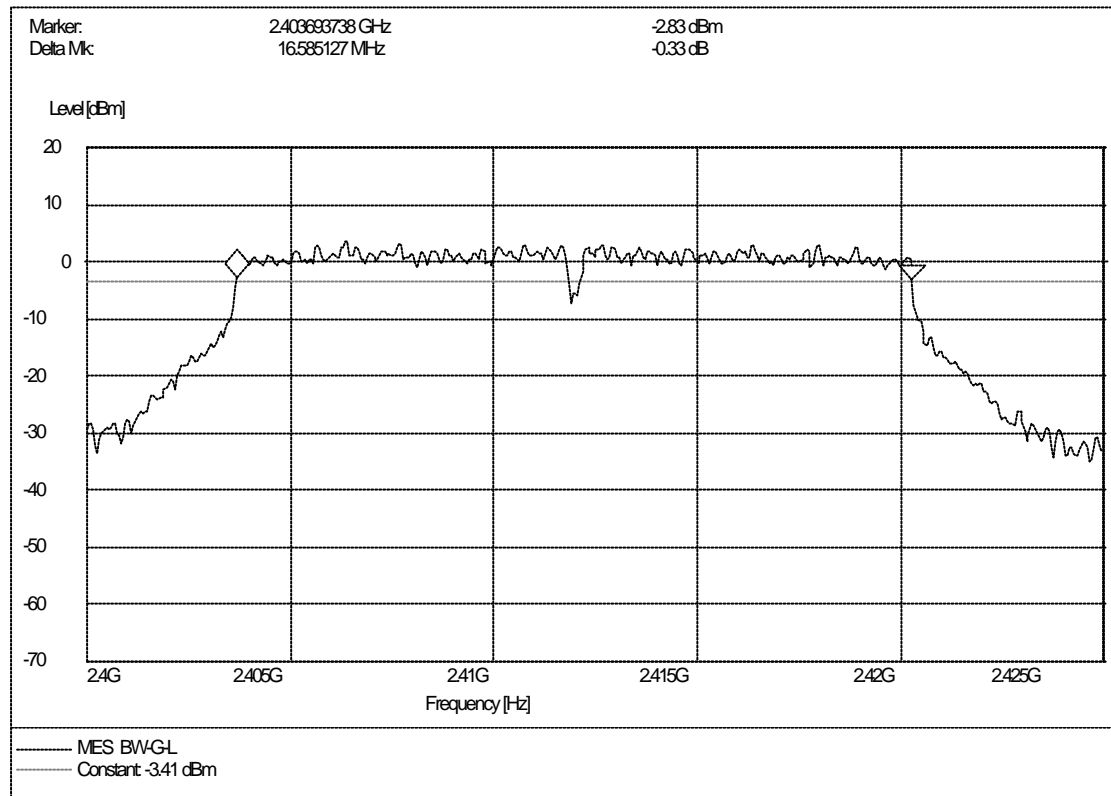


# Ch 11

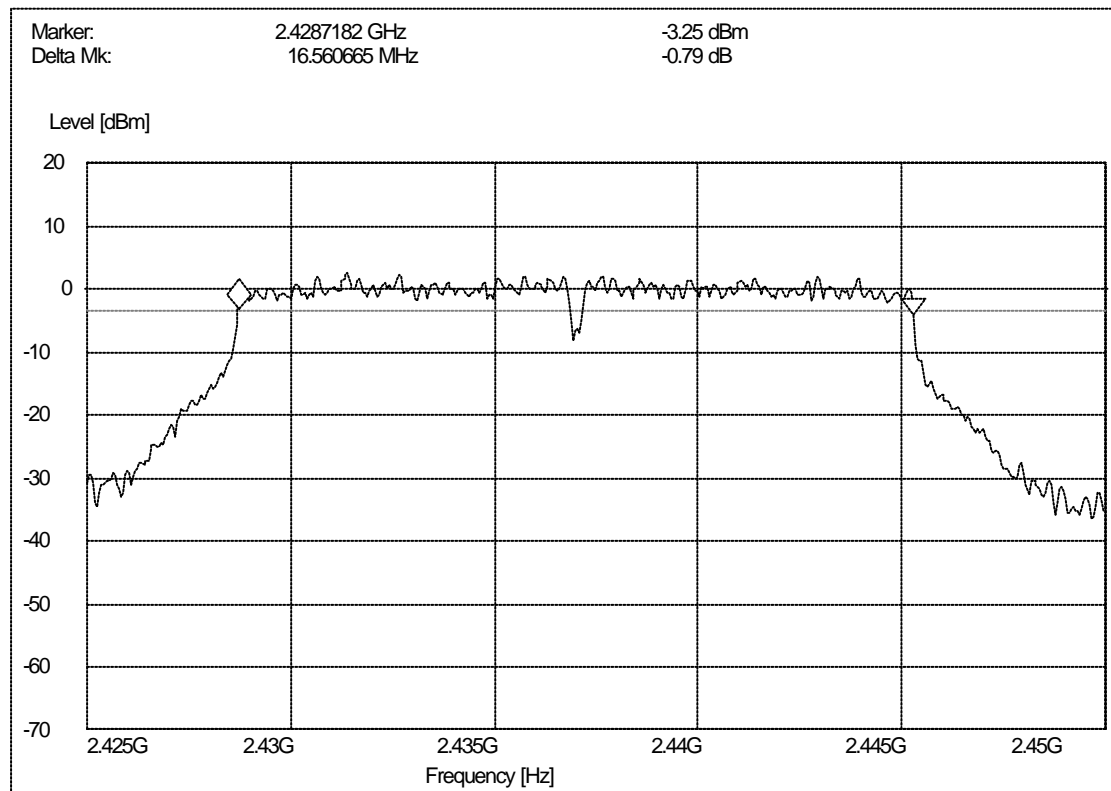




802.11g  
Ch 1

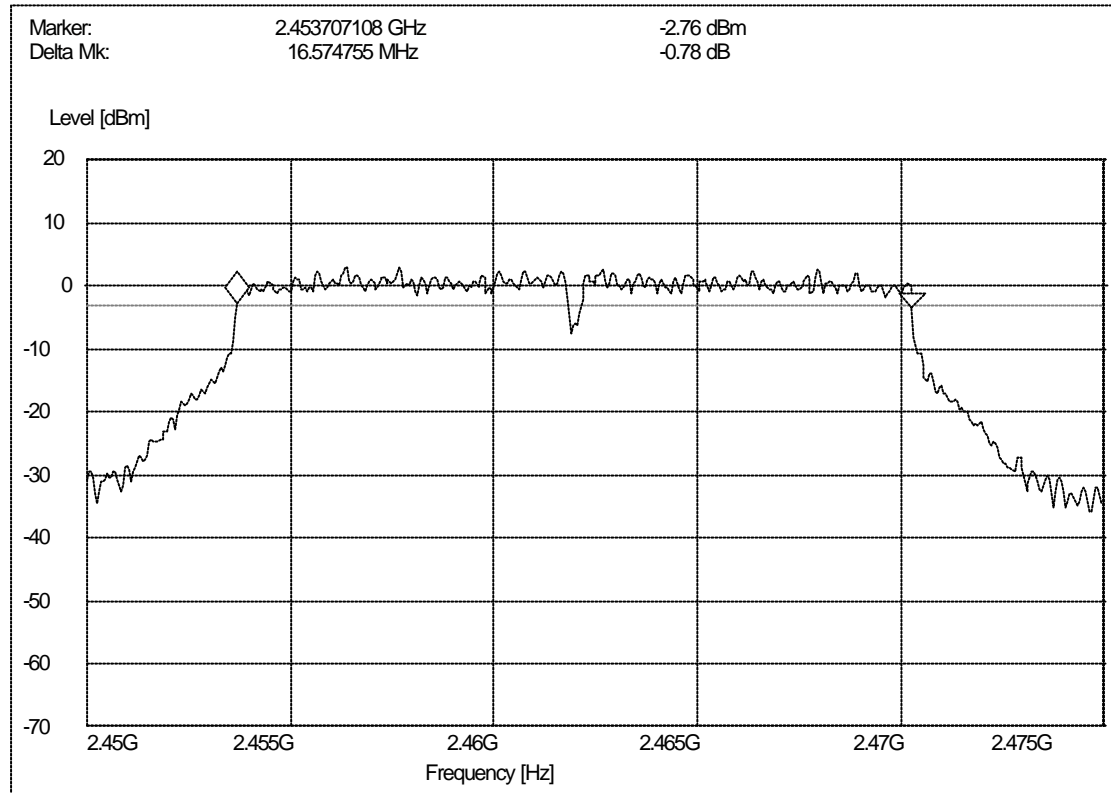


Ch 6





Ch 11



## 6 Peak Output Power

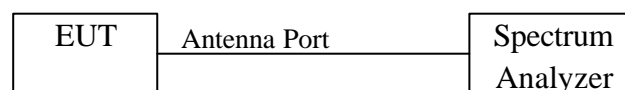
### 6.1 Requirement of the standard

According to FCC §15.247(b)(2), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands, The maximum peak output power of the intentional radiator shall not exceed 1 Watt.

### 6.2 Test Procedure

- a. The antenna port of the EUT was connected to a spectrum analyzer. The loss of the cables the test system is calibrated to correct the reading.
- b. According to KDB558074 requirement the spectrum analyzer was set to channel power mode. The RBW of the spectrum analyzer was set to 1 MHz, VBW was set to 10MHz. The channel bandwidth was set to be larger than 26dB EBW, 18MHz in 802.11b mode and 21MHz in 802.11g mode.

### 6.3 Test Setup



### 6.4 EUT Setup and Operating Conditions

Same as 5.4

## 6.5 Test Results

### 802.11b

Operating Frequency ( MHz )	Data Rate (Mbps)	Peak Output Power	Limit (W)
		(dBm)	
2412	1	18.55	1
2437	1	17.60	1
	2	15.43	
	5.5	13.87	
	11	13.46	
2462	1	16.62	1

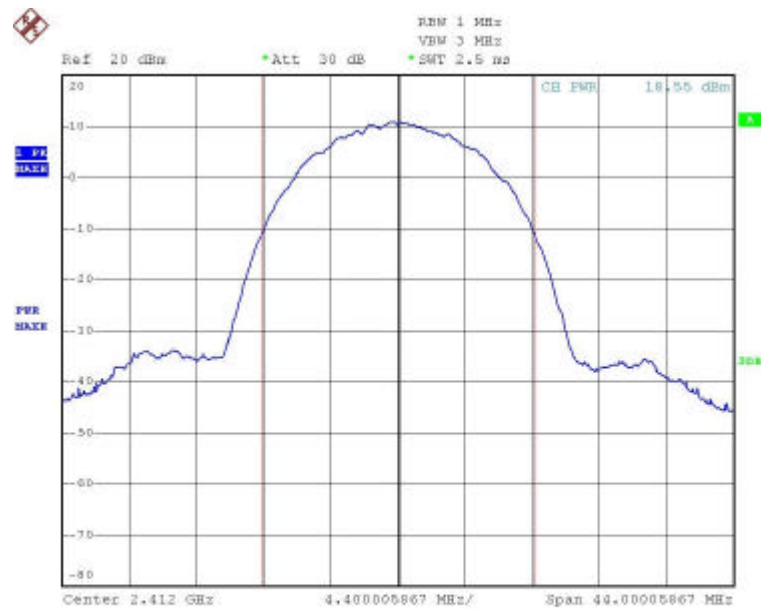
### 802.11g

Operating Frequency ( MHz )	Data Rate (Mbps)	Peak Output Power	Limit (W)
		(dBm)	
2412	6	18.26	1
2437	6	17.27	1
	9	16.87	
	12	16.54	
	18	16.38	
	24	16.22	
	36	15.78	
	48	15.98	
	54	16.04	
2462	6	16.48	1

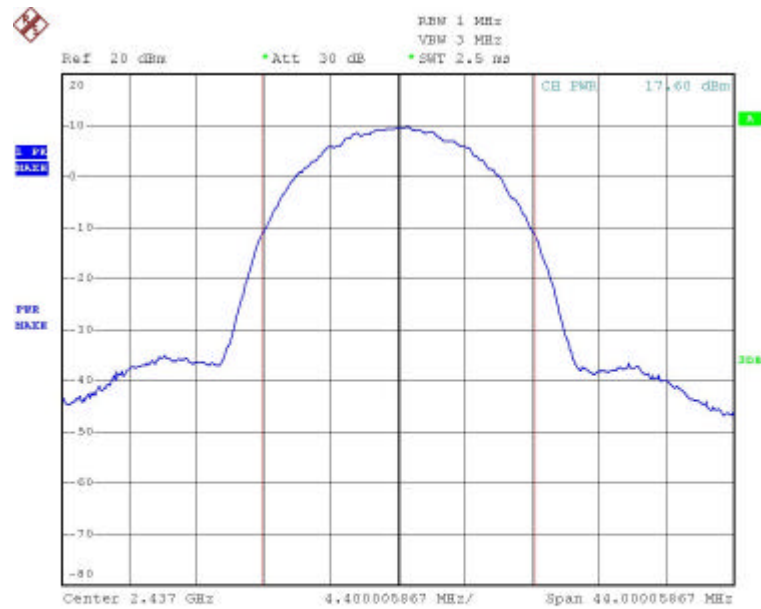
Note: The RF power was tested across WiFi data rate from 1 to 54MB/s in Ch 6(2437MHz).The highest power of 802.11b mode is 1Mbps, and of 802.11g mode is 6Mbps. All other tests were performed in 1Mbps(802.11b) and 6Mbps(802.11g).

# Test Plots:

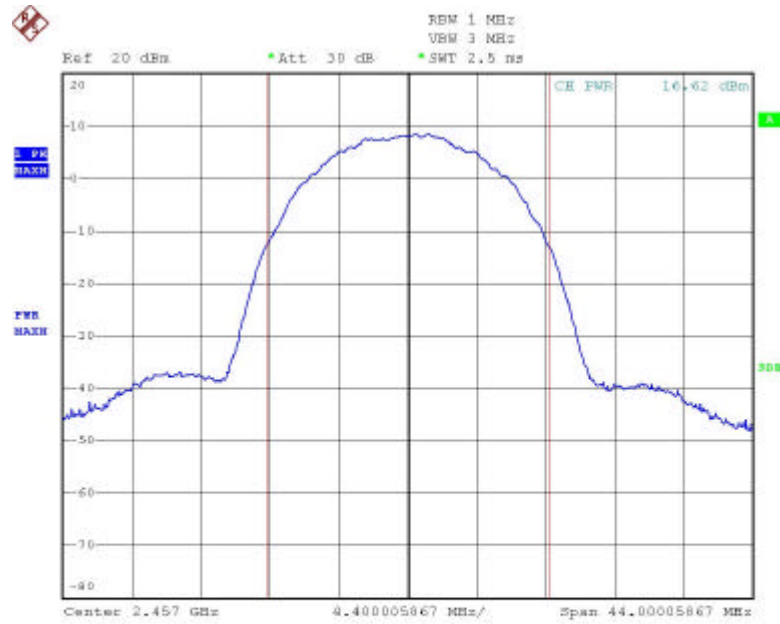
## 802.11b Low Ch:



## Middle Ch:

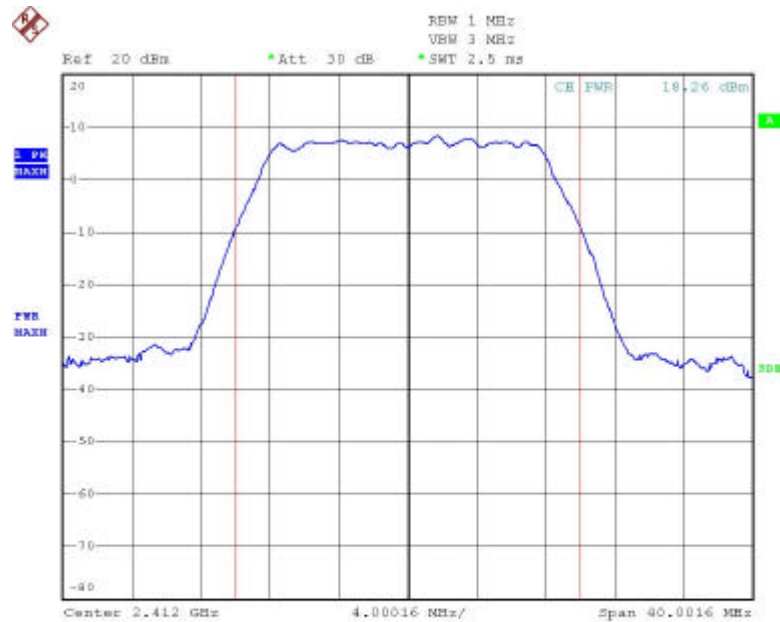


High Ch:



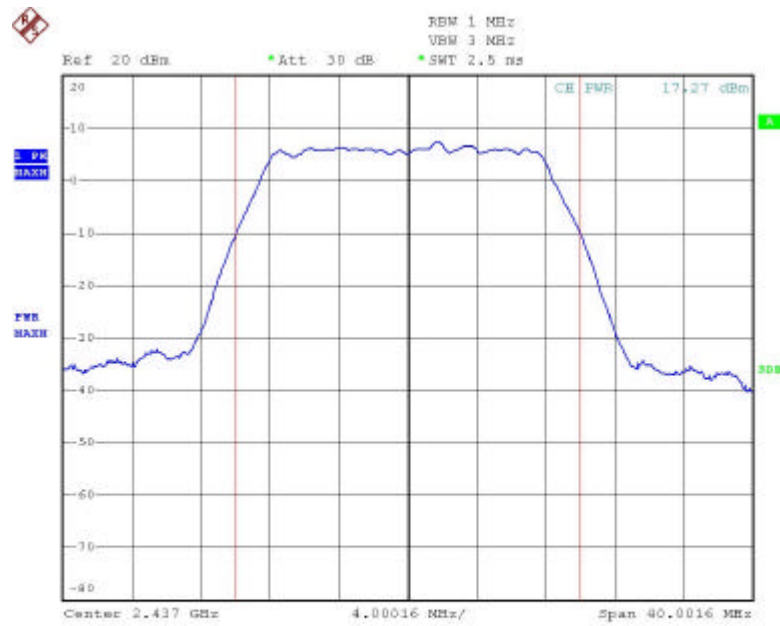
LL  
Date: 14.OCT.2008 10:29:42

802.11g Low Ch:



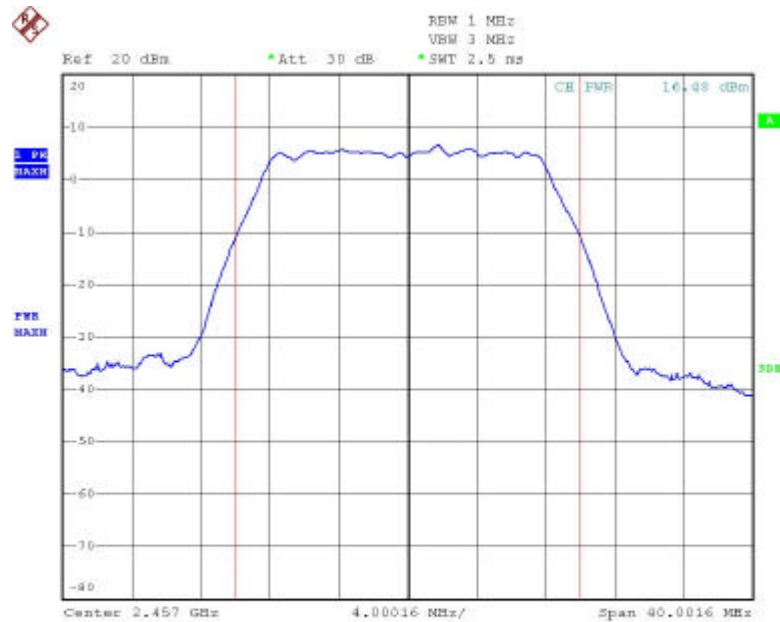
LL  
Date: 14.OCT.2008 10:39:06

Middle Ch:



LL  
Date: 14.OCT.2008 10:37:51

High Ch:



LL  
Date: 14.OCT.2008 10:36:05



## 7 Band Edge

### 7.1 Requirement of the standard

According to FCC §15.247(c), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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. 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).

### 7.2 Test Procedure

- a. The EUT was placed on a turntable, which is 0.8m above the ground plane.
- b. Antenna was 3 meters away from the EUT. Antenna height was varied from one meter to four meter above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. The spectrum analyzer was set to Maxpeak Detector function and Maximum Hold mode.
- d. According to the standard requirement KDB558074, for measurements above 1GHz, the RBW was set to 1MHz and the VBW was set to 3MHz(Peak)/10Hz(Average).

### 7.3 Test Setup

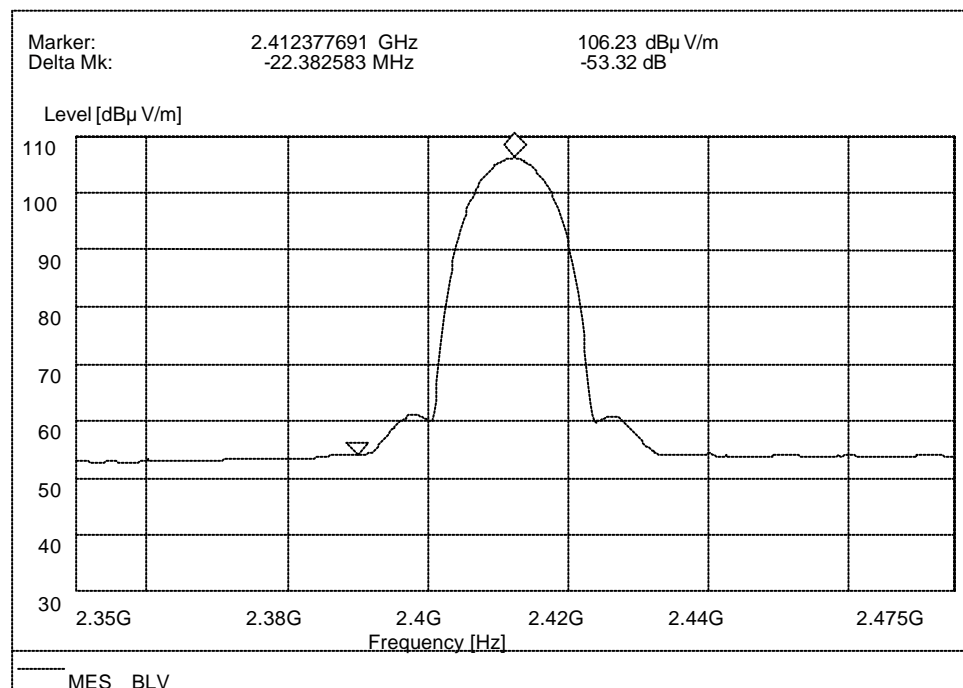
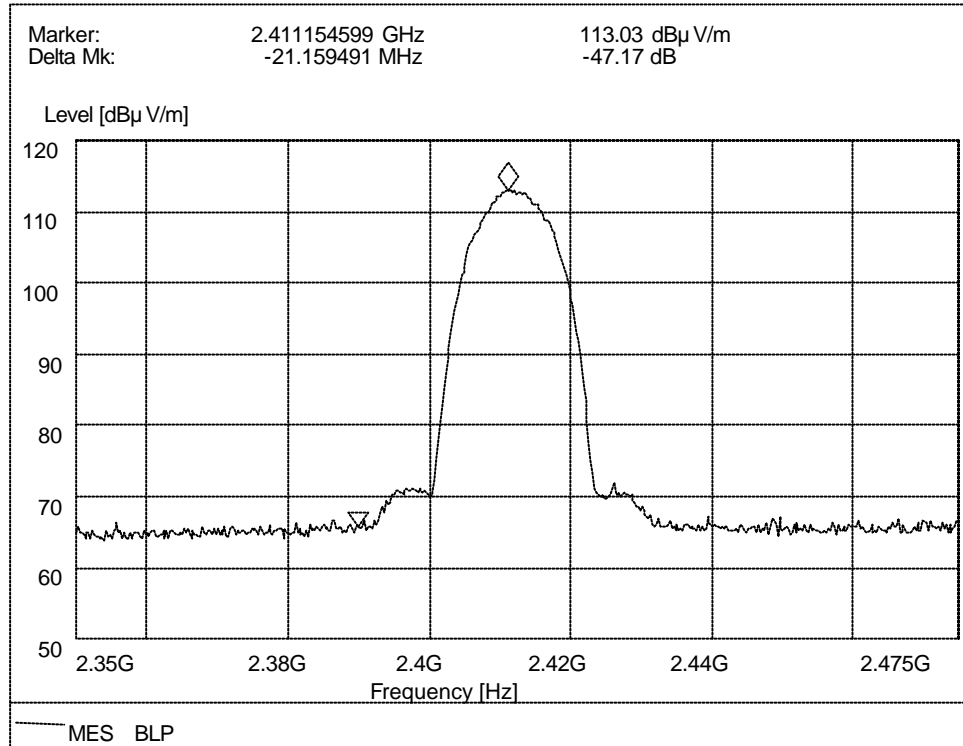
Same as 4.3

### 7.4 EUT Setup and Operating Conditions

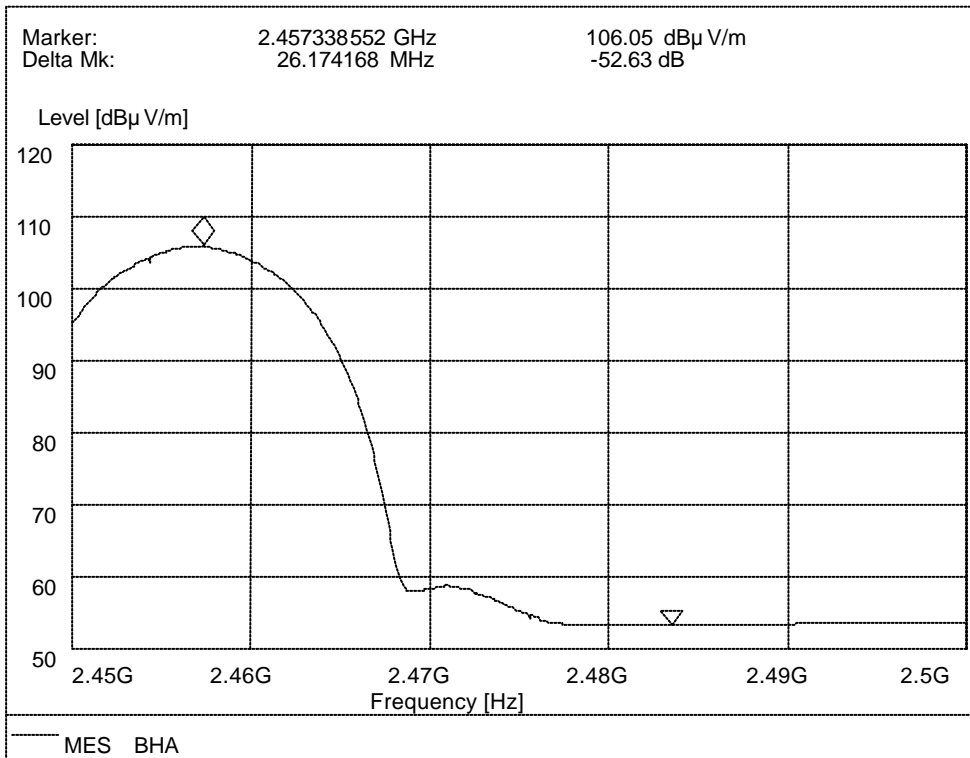
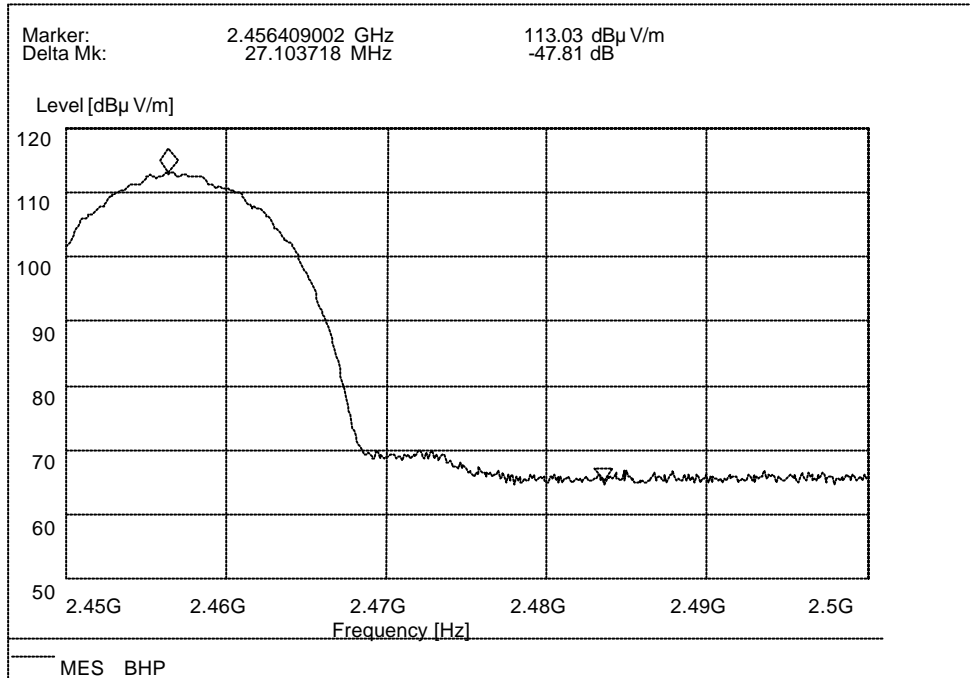
Same as 4.4.

## 7.5 Test Results

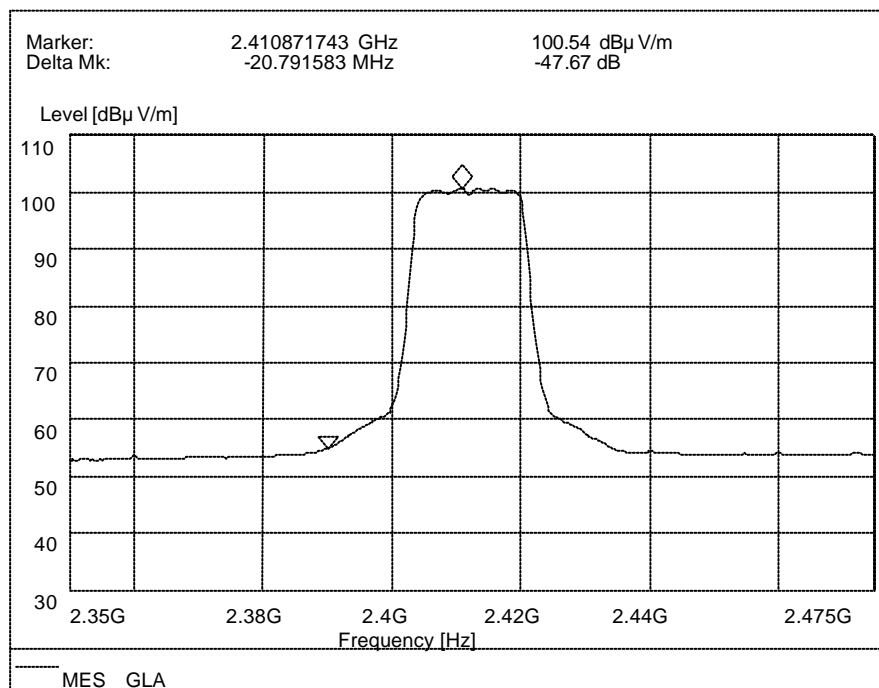
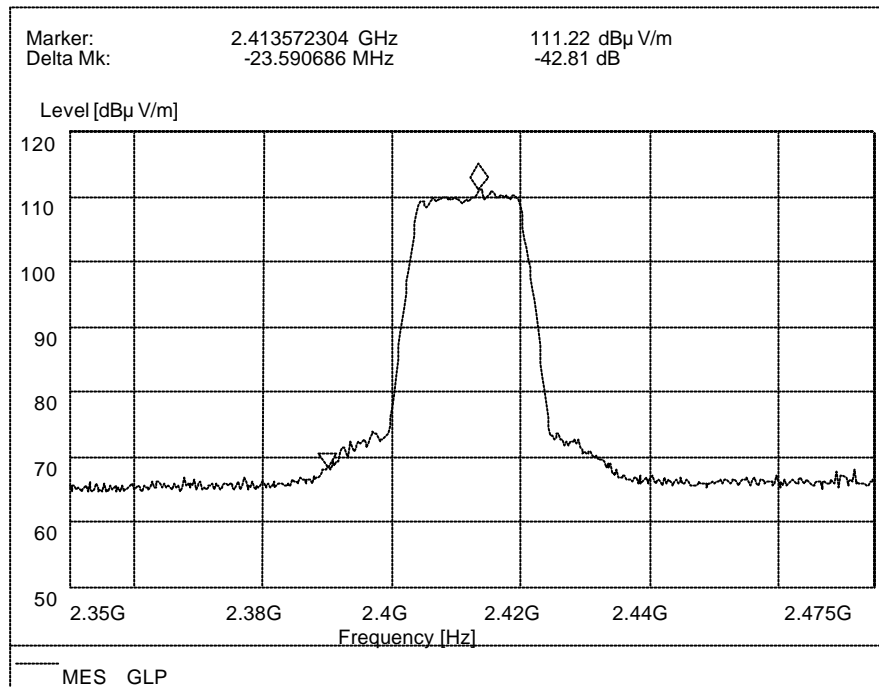
### 1. 802.11b Lowest channel, 2412MHz



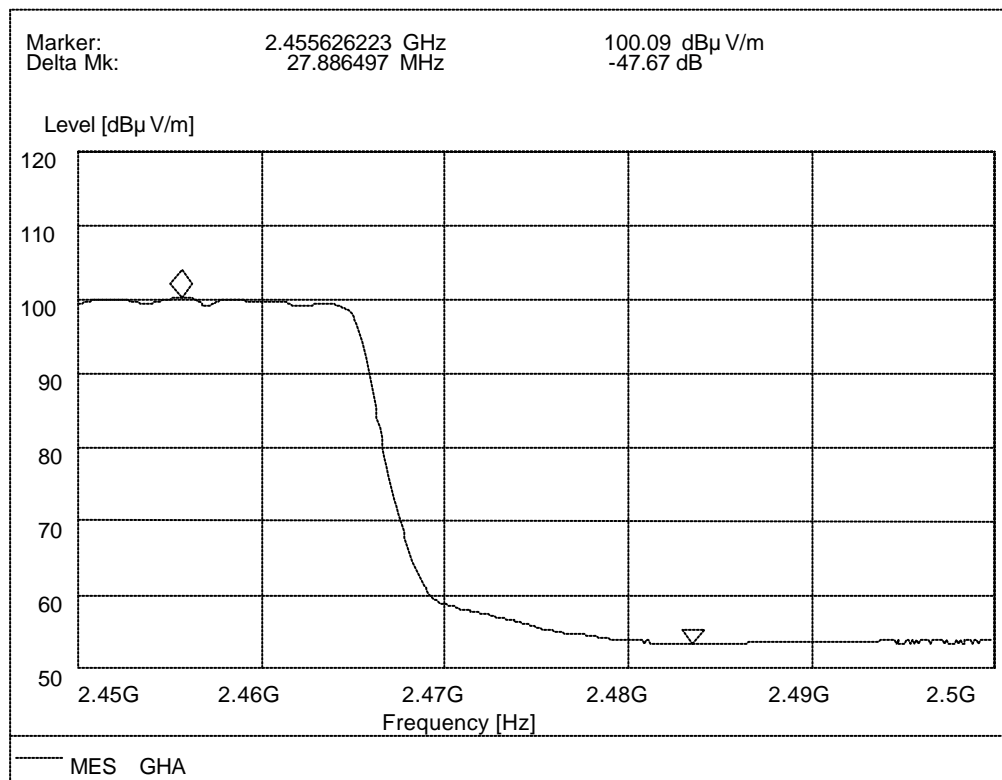
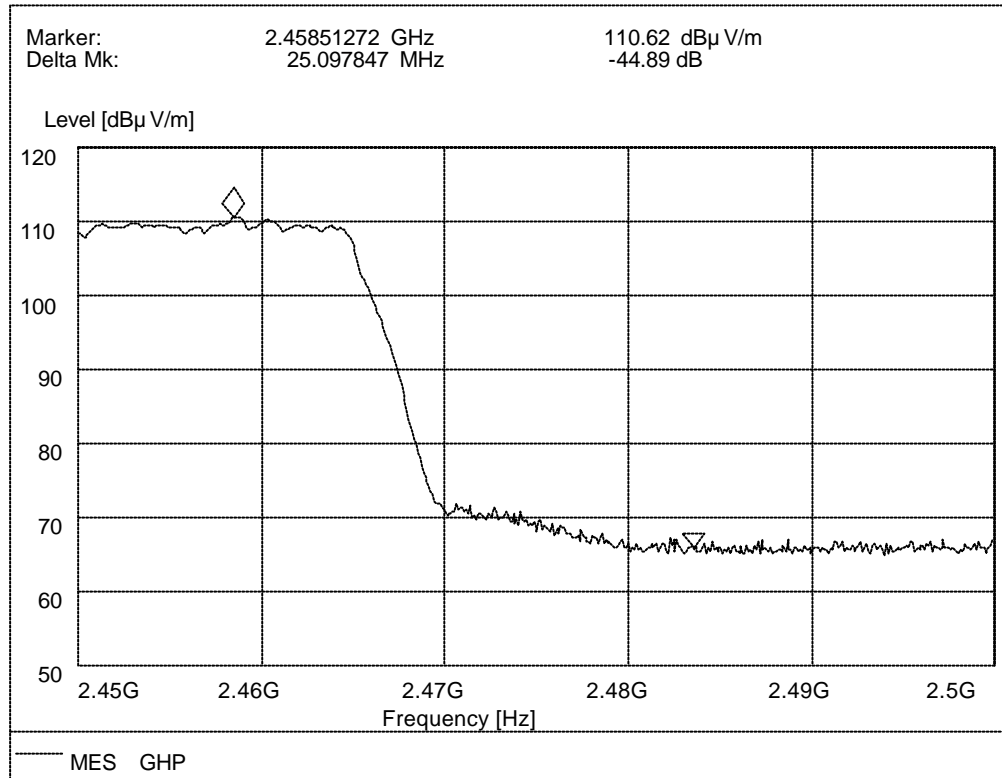
## 2. 802.11b Highest channel, 2462MHz



### 3. 802.11g Lowest channel, 2412MHz



#### 4. 802.11g Highest channel 2462MHz



**802.11b**

EUT Operating Freq. (MHz)	Emissions Freq(MHz)	Emission Level (dBmV/m)		QP Limits (dBmV/m)	
		PK	AV	PK	AV
2412(Ch 1)	2.4112	113.03	106.23	--	--
	2.3900	65.86	52.91	74	54
	2.3870	66.53	51.87	74	54
2462(Ch 11)	2.4573	113.03	106.05	--	--
	2.4835	65.90	52.42	74	54
	2.4940	66.96	50.84	74	54

**802.11g**

EUT Operating Freq. (MHz)	Emissions Freq(MHz)	Emission Level (dBmV/m)		QP Limits (dBmV/m)	
		PK	AV	PK	AV
2412(Ch 1)	2.4135	112.22	100.54	--	--
	2.3900	68.41	52.87	74	54
	2.3770	66.77	51.48	74	54
2462(Ch 11)	2.4585	110.62	100.09	--	--
	2.4835	65.73	52.42	74	54
	2.4970	66.96	51.20	74	54

## 8 Conducted Spurious Emission

### 8.1 Requirement of the standard

According to FCC §15.247(c), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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.

### 8.2 Test Procedure

- a. The EUT was coupled to the spectrum analyzer. The loss of the cables the test system is calibrated to correct the reading.
- b. The spectrum analyzer was set to Maxpeak Detector function and Maximum Hold mode.
- c. The spurious Emissions from 9 KHz to 10th harmonic of the fundamental frequency were researched.
- d. According to KDB558074 requirement, the resolution bandwidth of the spectrum analyzer was set to RBW=100 kHz, VBW=300 kHz.

### 8.3 Test Setup

Same as 5.3

### 8.4 EUT Setup and Operating Conditions

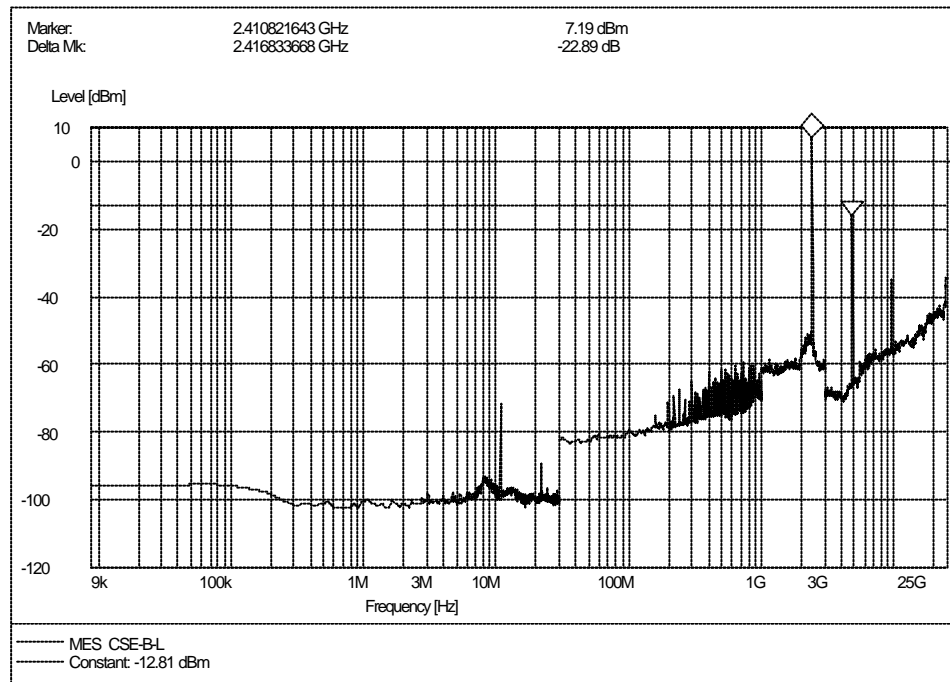
Same as 5.4

## 8.5 Test Results

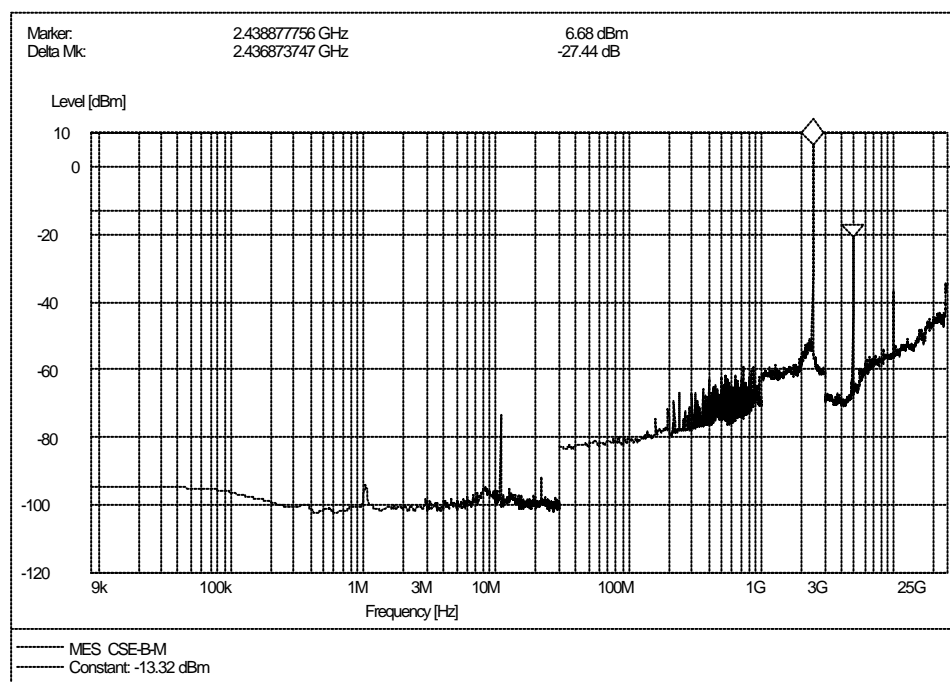
The following test plots shows that spurious emissions in the whole frequency range were below the 20dBc limit line.

### Conducted Spurious Emission Test Plots

#### 1. 802.11b Ch 1, 2412MHz

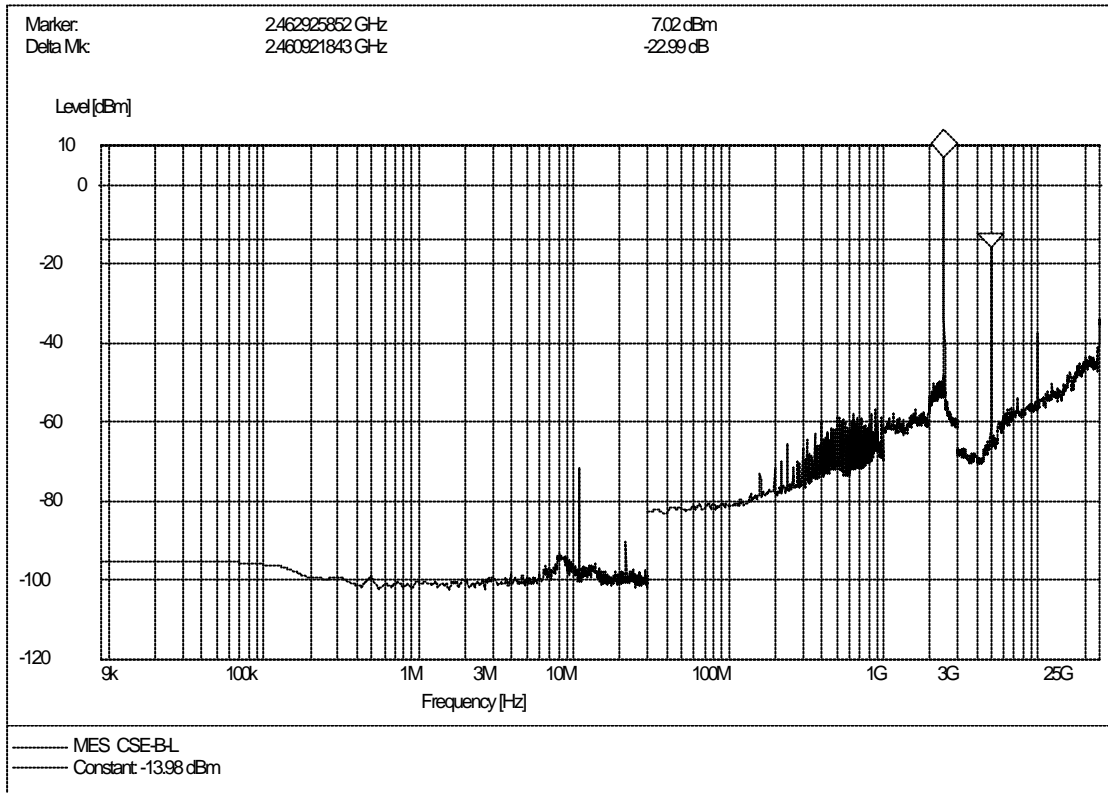


#### 2. 802.11b Ch 6, 2437MHz

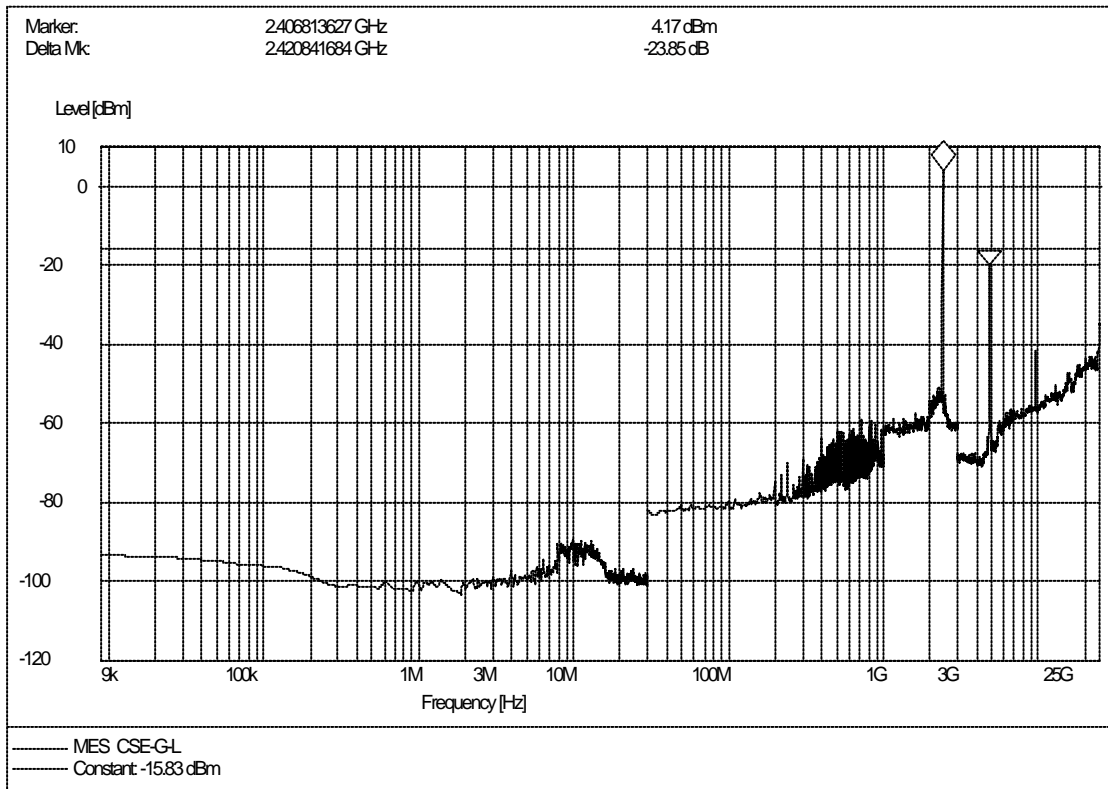




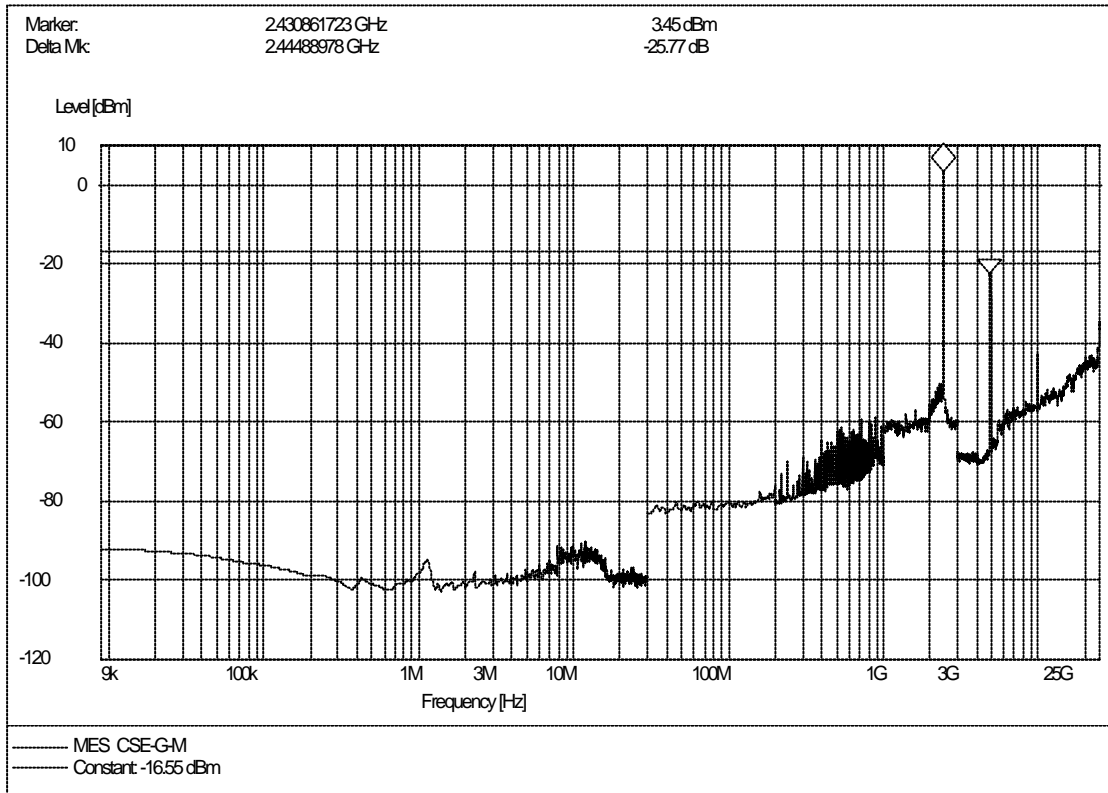
### 3.802.11b Ch 11, 2462MHz



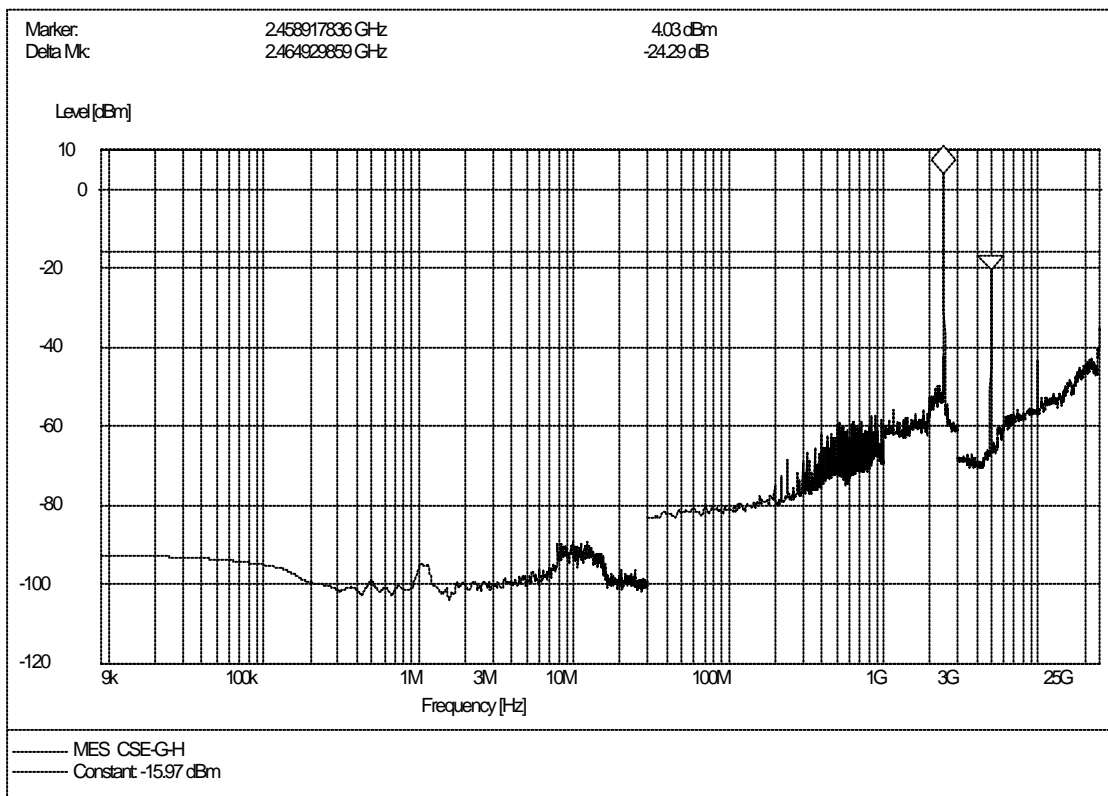
### 4. 802.11g Ch 1, 2412MHz



### 5. 802.11g Ch 6, 2437MHz



### 6. 802.11g Ch 11, 2462MHz



## 9 Peak Power Spectral Density

### 9.1 Requirement of the standard

According to FCC §15.247(d), For digitally modulated systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 9.2 Test Procedure

- The EUT was coupled to the spectrum analyzer. The loss of the cables the test system is calibrated to correct the reading.
- The spectrum analyzer was set to Maxpeak Detector function and Maximum Hold mode.
- According to KDB558074 requirement, The resolution bandwidth of the spectrum analyzer was comparable to the EUT emission bandwidth. RBW=3kHz, VBW=10kHz, SPAN=300kHz, sweep time=100s.
- Repeat the above procedure until the measurements for all frequencies are completed

### 9.3 Test Setup

Same as 5.3

### 9.4 EUT Setup and Operating Conditions

Same as 5.4

### 9.5 Test Results

802.11b

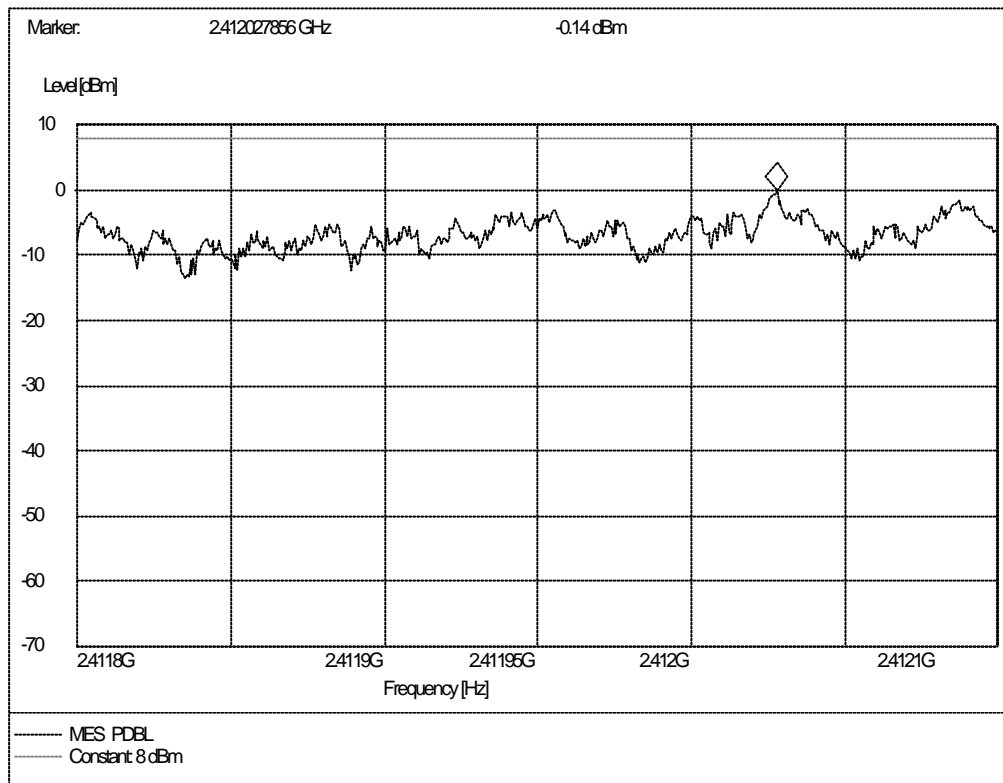
Operating Frequency ( MHz )	Peak Power Spectral Density (dBm)	Limit (dBm)
2412	-11.14	8
2437	-5.39	8
2462	-4.8	8

802.11g

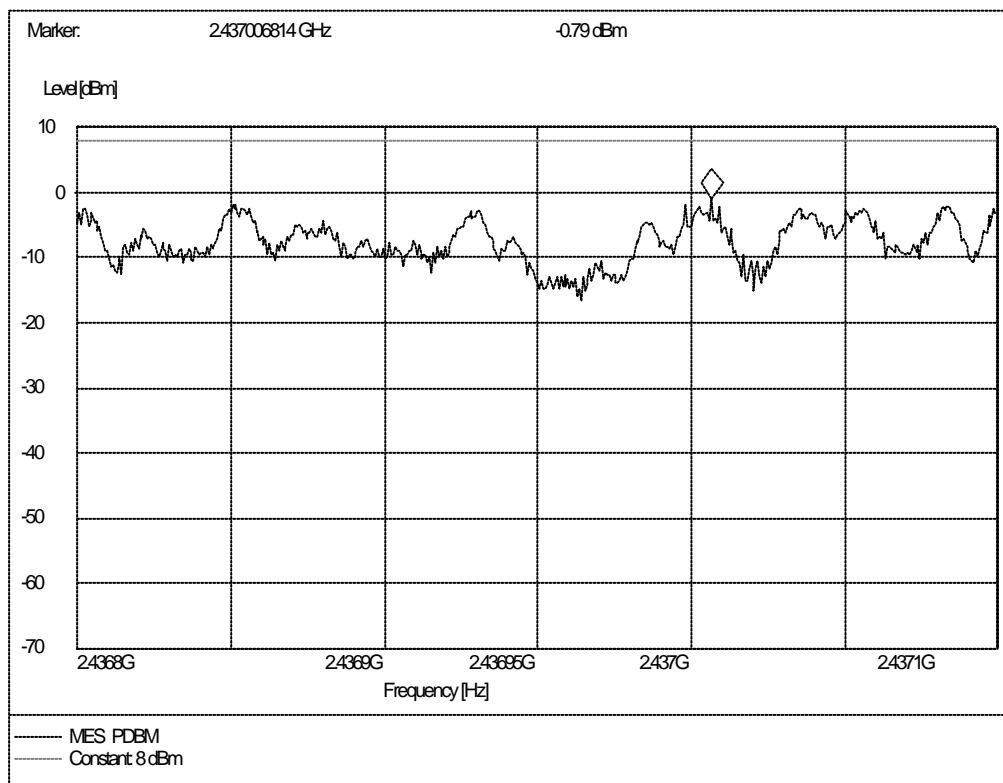
Operating Frequency ( MHz )	Peak Output Power (dBm)	Limit (W)
2412	-11.15	8
2437	-12.57	8
2462	-11.56	8

## Test Plots

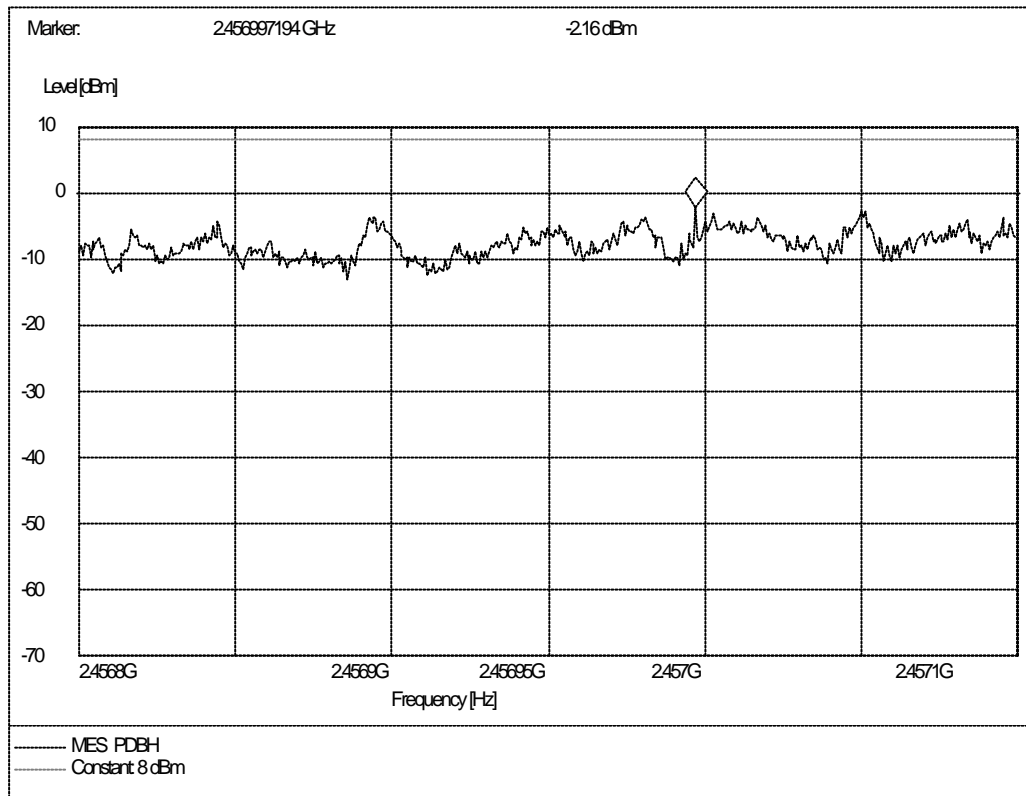
## 802.11b Ch 1



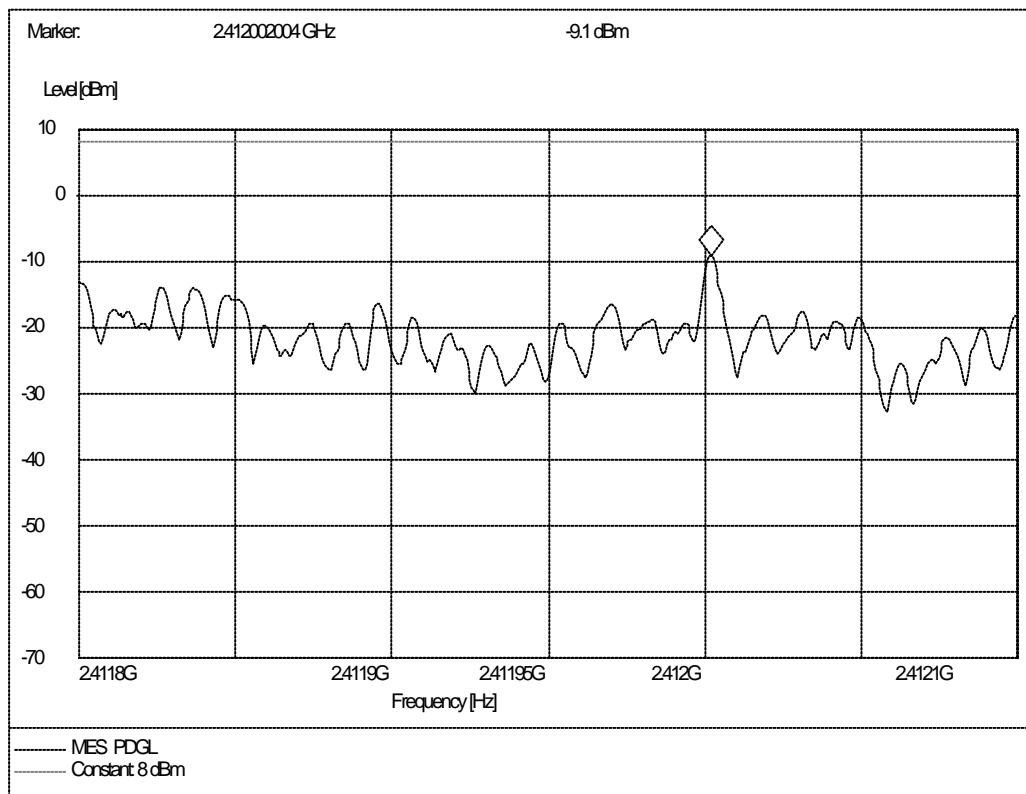
## 802.11b Ch 6



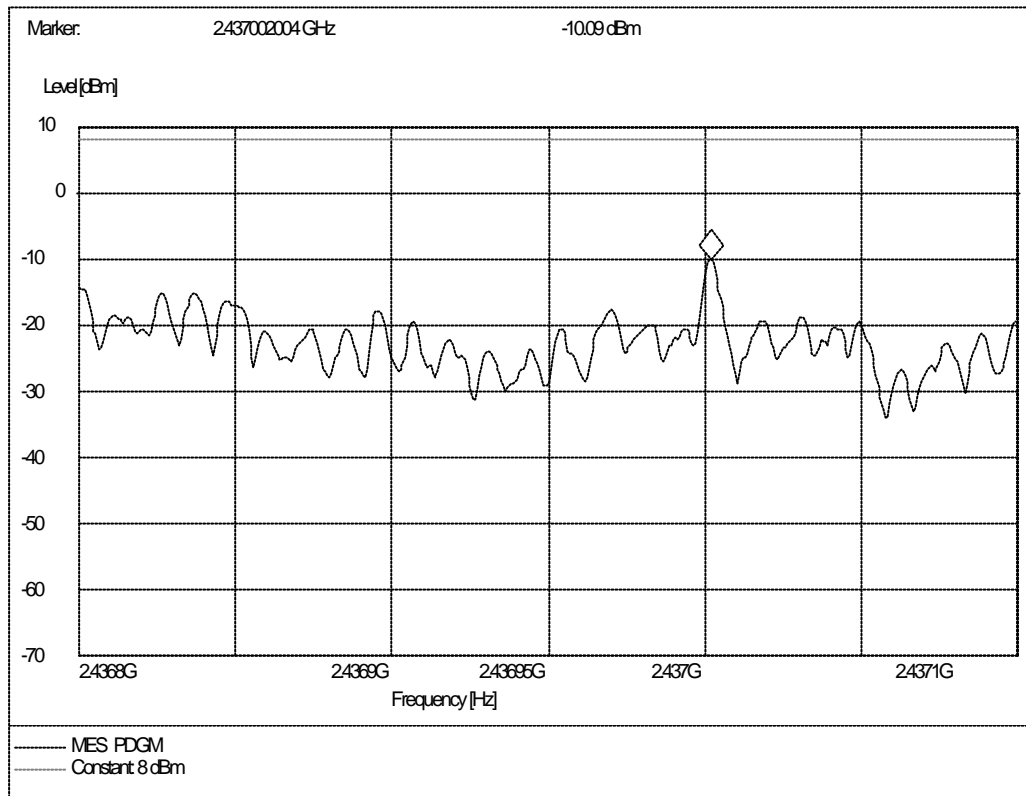
## 802.11b Ch 11



## 802.11g Ch 1



## 802.11b Ch 6



## 802.11g Ch 11

