Test Report

Product Name	：	802.11A/B/G/N MINI-PCI MODULE
Model No.	：	62009015 MINI-PCI MODULE
FCC ID	：	UDX-62009015

Applicant	：	MERAKI INC.
Address	：	99 RHODE ISLAND ST., 2ND FLOOR, SAN FRANCISCO, CA UNITED STATES. 94103

Date of Receipt	：	2009/01/12
Issued Date	：	2009/02/23
Report No.	：	093S015-RF-US-P05V01

Test Report Certification

Issued Date : 2009/02/23
Report No. : 093S015-RF-US-P05V01

QuieTek

Product Name	:	802.11A/B/G/N MINI-PCI MODULE
Applicant	:	MERAKI INC.
Address	:	99 RHODE ISLAND ST., 2ND FLOOR, SAN FRANCISCO, CA UNITED STATES. 94103
Manufacturer	:	MERAKI INC.
Model No.	:	62009015 Mini-PCI Module
FCC ID	:	UDX-62009015
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	DC 3.3V
Trade Name	:	MERAKI
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C: 2007 ANSI C63.4: 2003
Test Result	:	Complied
Performed Location	:	SuZhou EMC laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392

Documented By : Lanny Jin
(Lanny Jin)

Reviewed By : Marlin Chen
(Marlin Chen)

Approved By : Gene Chang
(Gene Chang)

Laboratory Information

We , **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	**:**	**BSMI, DGT, CNLA**
Germany	**:**	**TUV Rheinland**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC, NVLAP**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://tw.quietek.com/modules/myalbum/
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

NVLAP Lab Code : 200347-0
1313

LinKou Testing Laboratory :
No. 5, 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

NVLAP Lab Code: 200533-0
0914

Suzhou Testing Laboratory :
No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0
1596

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	802.11A/B/G/N MINI-PCI MODULE
Trade Name	MERAKI
Model No.	62009015 MINI-PCI MODULE
FCC ID	UDX-62009015

WLAN	802.11A/B/G/N MINI-PCI MODULE
Working Voltage	DC 3.3V
Frequency Range	**For 2.4GHz Band** 802.11b/g/n(20MHz): 2412 - 2462 MHz 802.11n(40MHz): 2422 - 2452 MHz **For 5.0GHz Band** 802.11a/n(20MHz): 5180 - 5320 MHz, 5500 - 5700 MHz, 5745 - 5805MHz 802.11n(40MHz): 5190 - 5310 MHz, 5510 - 5670 MHz, 5755 - 5795 MHz
Channel Number	**For 2.4GHz Band** 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7 **For 5.0GHz Band** 802.11a/n(20MHz): 23 802.11n(40MHz): 11
Type of Modulation	802.11b: DSSS
	802.11a/g/n: OFDM
Data Rate	802.11b: 1/2/5.5/11 Mbps
	802.11a/g: 6/9/12/18/24/36/48/54 Mbps
	802.11n: up to 450 Mbps
Channel Control	Auto
Antenna Type	Omni Antenna
Antenna Gain	Refer to the “Antenna List”

For 2.4GHz Band

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A

802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

For 5.0GHz Band

802.11a/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260 MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz	N/A	N/A

802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	151	5755 MHz	159	5795 MHz	N/A	N/A

802.11a/b/g/n Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
Combined Antenna	Exceltek Electronics (Kunshan) Co.,Ltd	C0053-ANG0004	2.0 dBi

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11n (20MHz)
Mode 4: Transmit by 802.11n (40MHz)

Note:

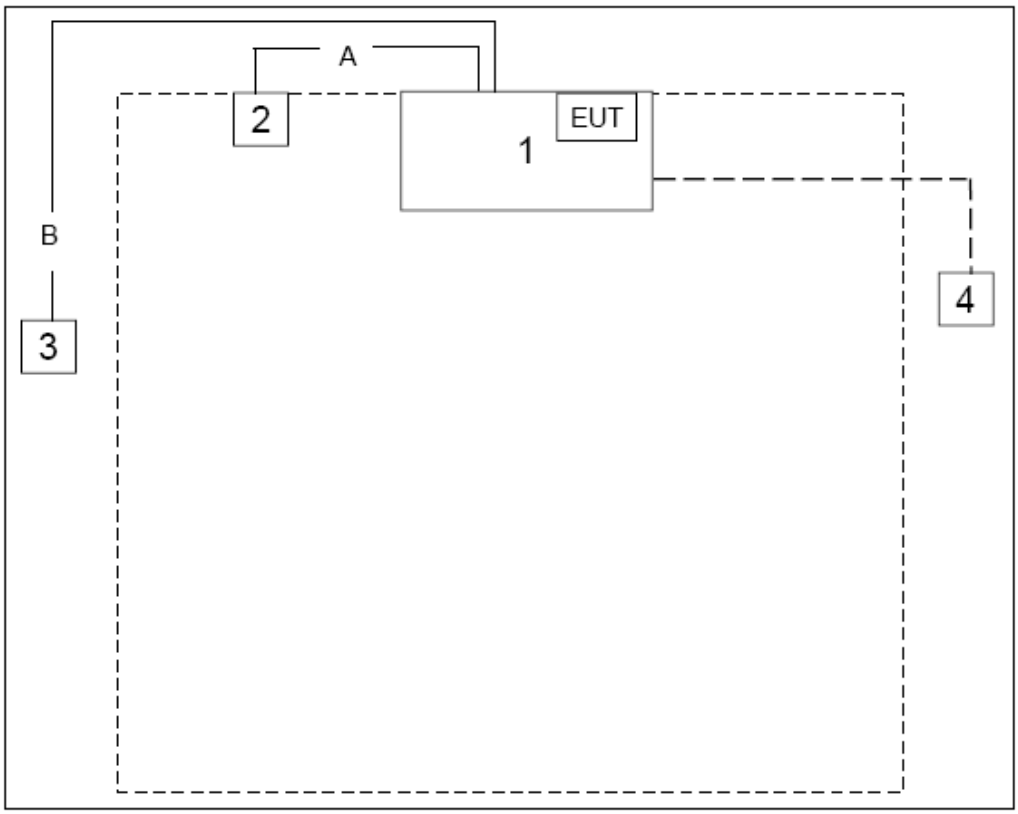
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Router Frame	Compex	B-543W	N/A	N/A
2	Adapter	DVE	DSA-15P-24	N/A	N/A
3	Notebook	DELL	PP19L	JH097 A01	Power by adapter
4	MacBook	Apple	MB061CH	W8732B4TZ5V	Power by adapter

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	Power Cable	Non-Shielded, 1.8m
B	LAN Cable	Non-Shielded, >10m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Execute the “brinks” software, then select test mode and test channel, press OK to transmit data with another Notebook P.C. by wireless.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.209	Yes	No
RF Antenna Conducted Spurious	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2007 15.247(d)	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2007 15.215(c)	Yes	No
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(a)(2)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(b)(3)	Yes	No
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(e)	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

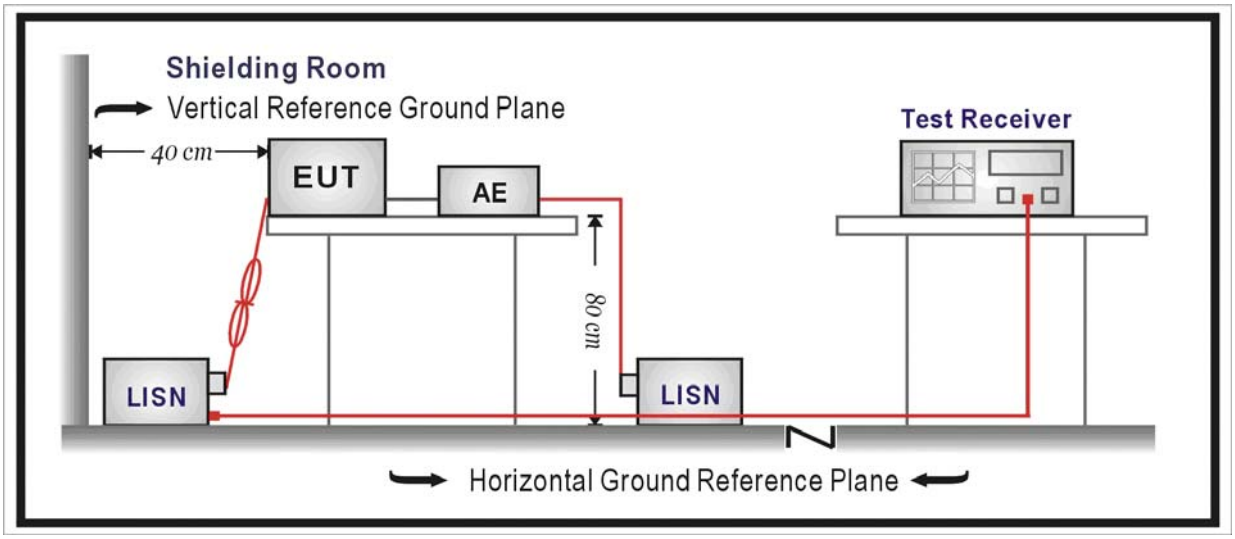
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2008/02/07
Two-Line V-Network	R&S	ENV216	100013	2007/11/15
Two-Line V-Network	R&S	ENV216	100014	2007/11/15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2007/11/25
50ohm Termination	SHX	TF2	07081401	2007/10/19
Coaxial Cable	Luthi	RG214	519358	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH004	2008/03/31

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

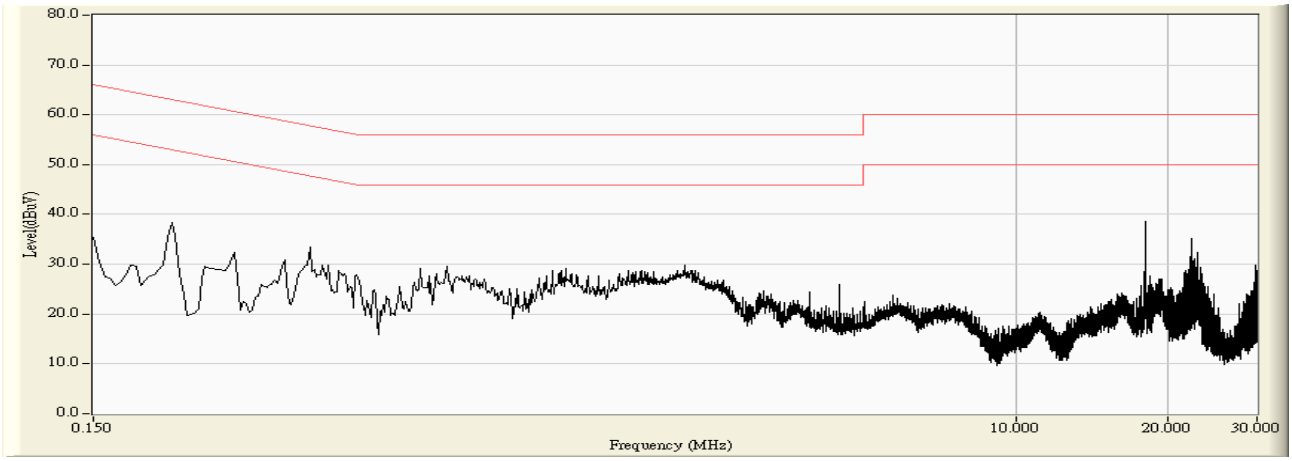
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

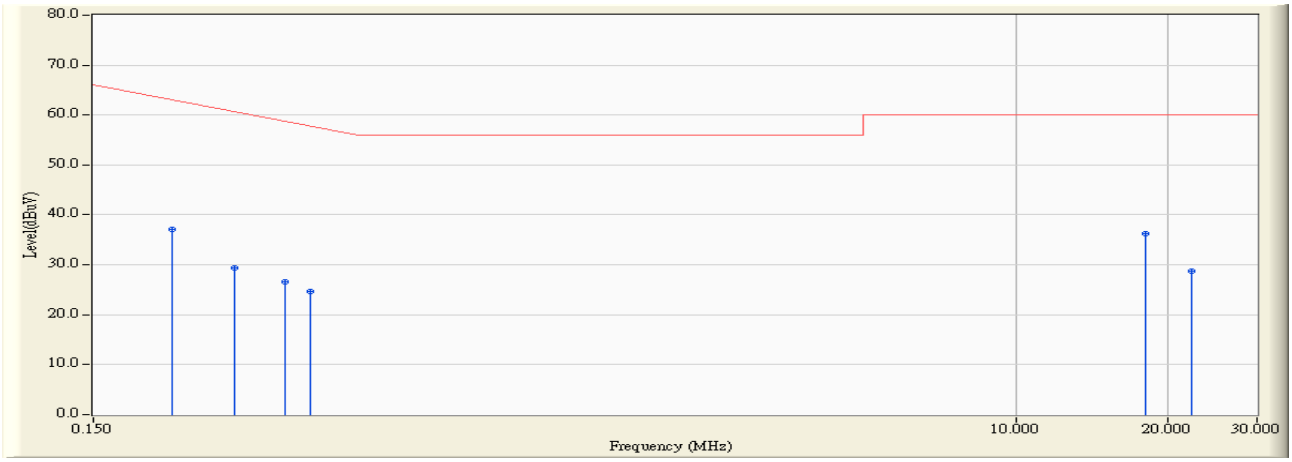
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:42**
Limit : FCC_SPartC_15.207_00M_QP	**Margin : 10**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:45**
Limit : FCC_SPartC_15.207_00M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**

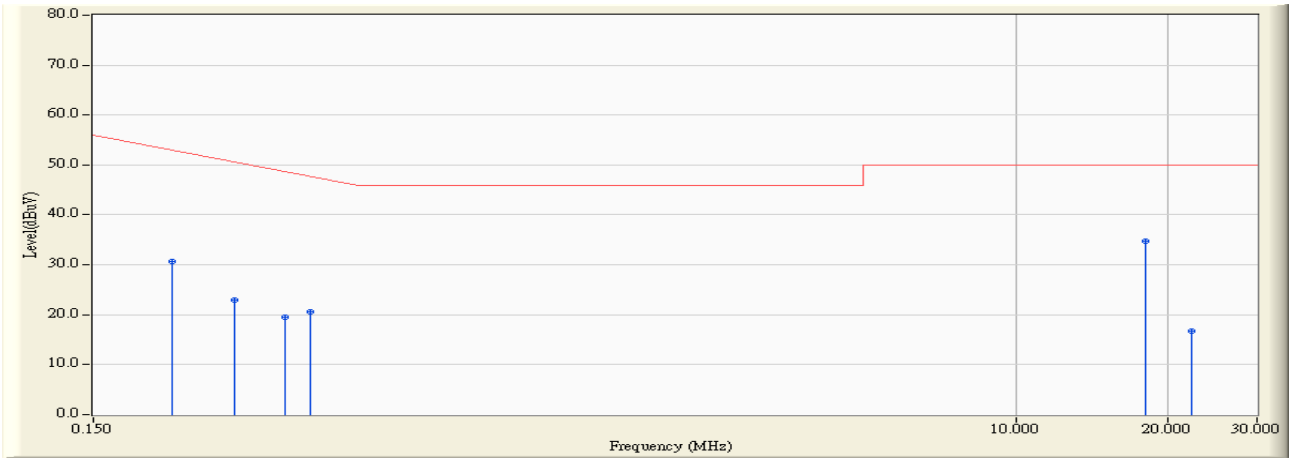


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.214	9.378	27.700	37.078	-27.093	64.171	QUASIPEAK
2		0.286	9.423	20.000	29.423	-32.691	62.114	QUASIPEAK
3		0.358	9.509	17.000	26.509	-33.548	60.057	QUASIPEAK
4		0.402	9.563	15.000	24.563	-34.237	58.800	QUASIPEAK
5	*	18.034	10.170	26.000	36.170	-23.830	60.000	QUASIPEAK
6		22.240	10.300	18.500	28.800	-31.200	60.000	QUASIPEAK

Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:45**
Limit : FCC_SPartC_15.207_00M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**

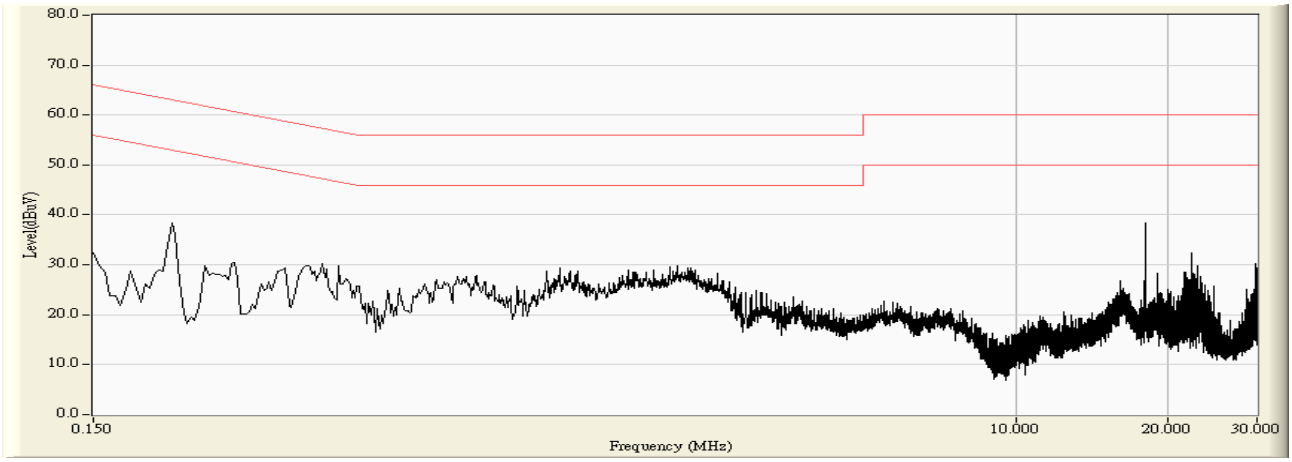


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.214	9.378	21.300	30.678	-23.493	54.171	AVERAGE
2		0.286	9.423	13.600	23.023	-29.091	52.114	AVERAGE
3		0.358	9.509	10.100	19.609	-30.448	50.057	AVERAGE
4		0.402	9.563	11.000	20.563	-28.237	48.800	AVERAGE
5	*	18.034	10.170	24.500	34.670	-15.330	50.000	AVERAGE
6		22.240	10.300	6.400	16.700	-33.300	50.000	AVERAGE

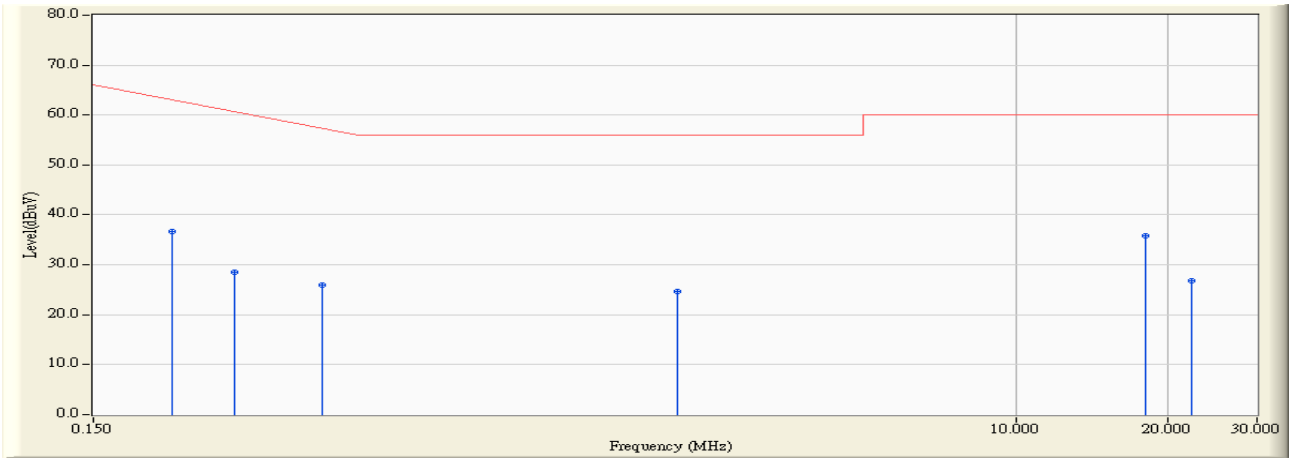
Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:46**
Limit : FCC_SPartC_15.207_00M_QP	**Margin : 10**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:48**
Limit : FCC_SPartC_15.207_00M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**

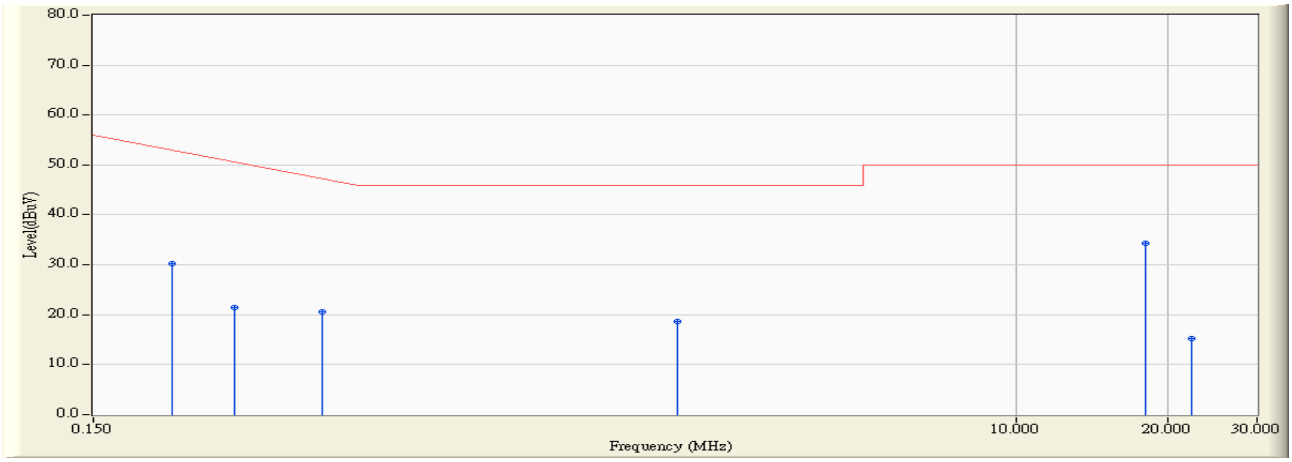


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.214	9.478	27.100	36.578	-27.593	64.171	QUASIPEAK
2		0.286	9.543	19.000	28.543	-33.571	62.114	QUASIPEAK
3		0.426	9.687	16.200	25.887	-32.227	58.114	QUASIPEAK
4		2.142	9.800	14.900	24.700	-31.300	56.000	QUASIPEAK
5	*	18.034	10.110	25.800	35.910	-24.090	60.000	QUASIPEAK
6		22.238	10.280	16.500	26.780	-33.220	60.000	QUASIPEAK

Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/10/09 - 16:48**
Limit : FCC_SPartC_15.207_00M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : ENV216_100013(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.214	9.478	20.700	30.178	-23.993	54.171	AVERAGE
2		0.286	9.543	11.800	21.343	-30.771	52.114	AVERAGE
3		0.426	9.687	11.000	20.687	-27.427	48.114	AVERAGE
4		2.142	9.800	8.900	18.700	-27.300	46.000	AVERAGE
5	*	18.034	10.110	24.300	34.410	-15.590	50.000	AVERAGE
6		22.238	10.280	4.900	15.180	-34.820	50.000	AVERAGE

Note:

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

Radiated Emission

3.7. Test Equipment

☐Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2008/06/28
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2008/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375/2510-60/11SS	SN9	2008/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2008/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2008/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

☒Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2008/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375/2510-60/11SS	SN9	2008/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2008/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2008/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25

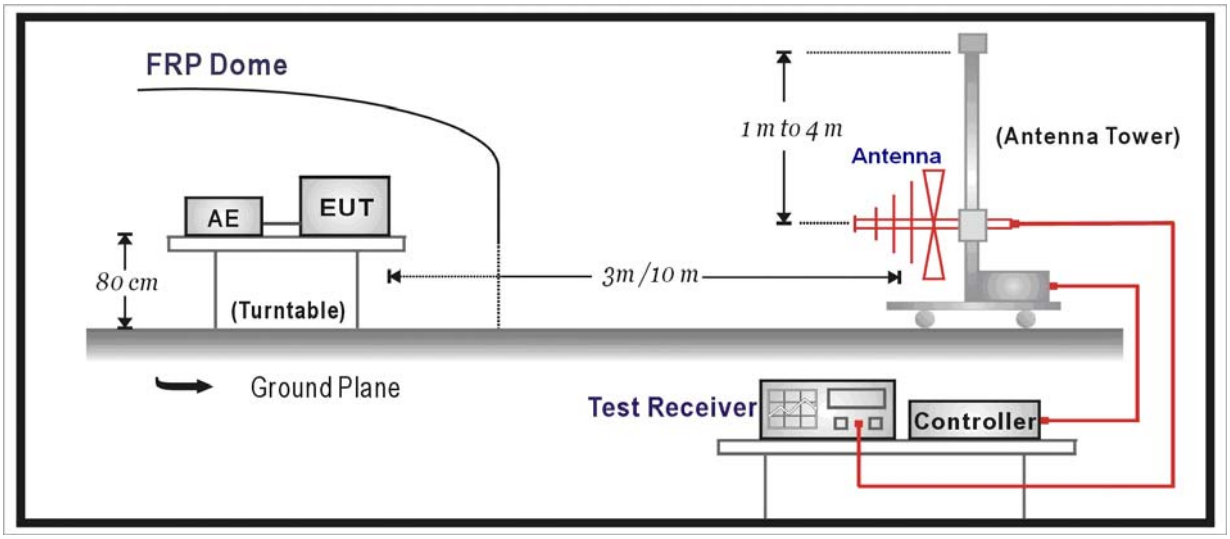
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

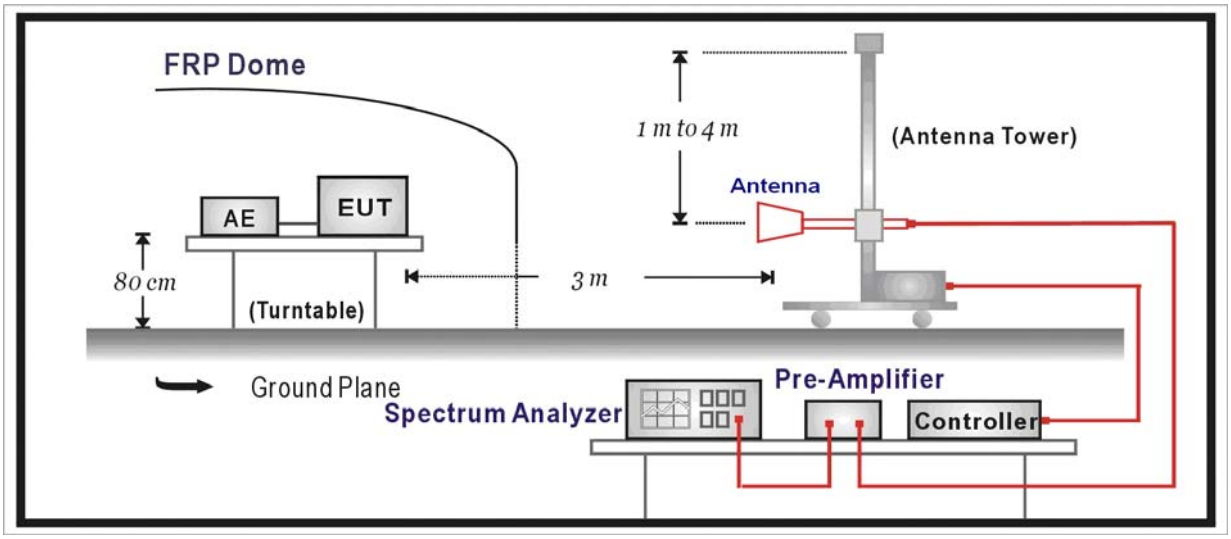
Note 2: The test instruments marked with “X” are used to measure the final test results.

3.8. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



3.9. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

3.10. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

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

The frequency range from 30MHz to 10th harmonic is checked.

Note: When measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

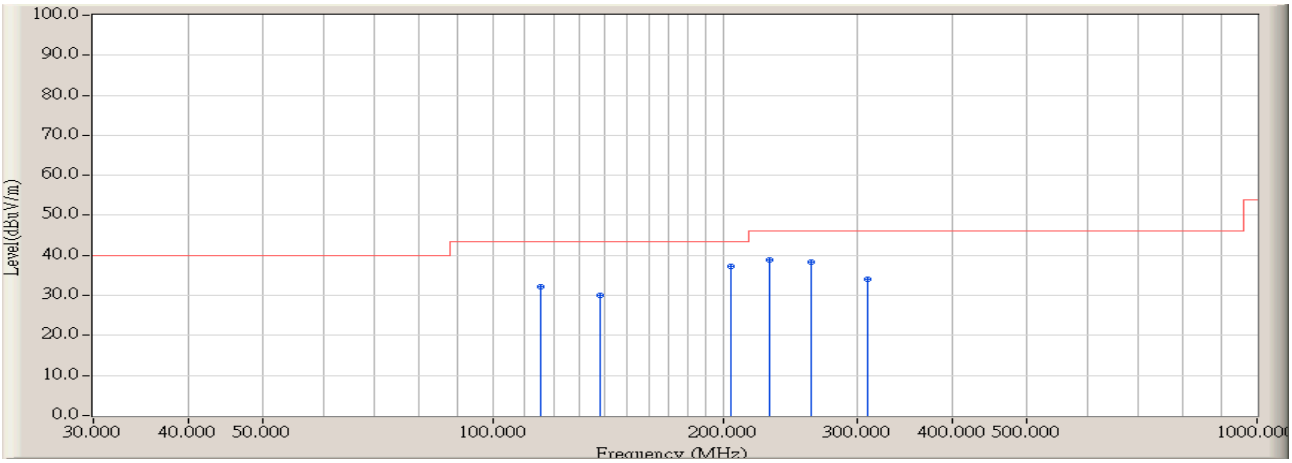
3.11. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

below 1G is defined as ± 3.8 dB

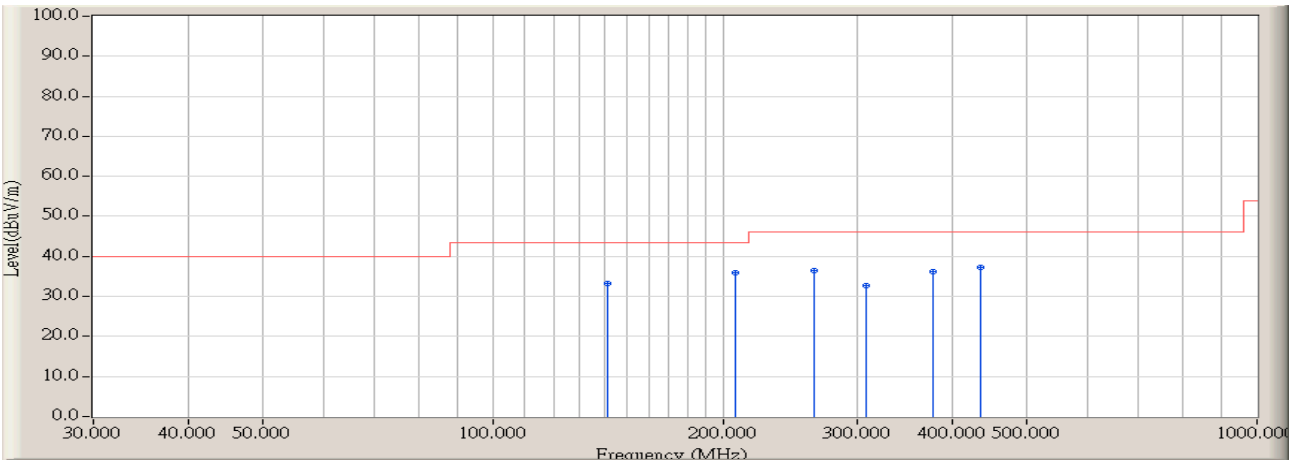
3.12. Test Result

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:49**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1:Transmit by 802.11n(20MHz) at channel 2412MHz**



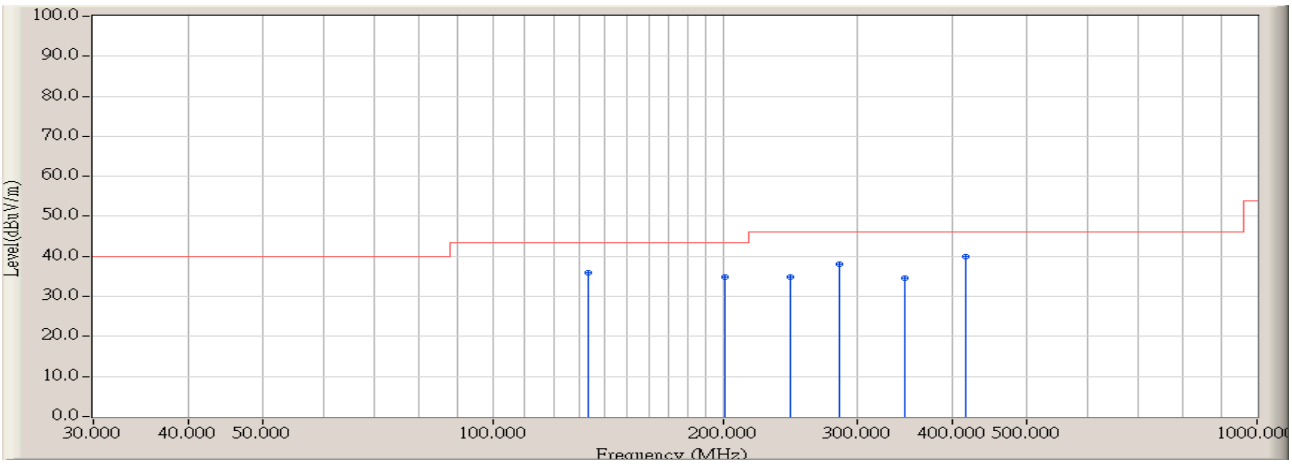
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		115.683	-10.272	42.566	32.294	-11.226	43.520	QUASIPEAK	100.000	205.800
2		138.317	-9.381	39.313	29.932	-13.588	43.520	QUASIPEAK	144.500	154.800
3	*	204.600	-10.514	47.780	37.266	-6.254	43.520	QUASIPEAK	100.000	108.500
4		230.467	-9.340	48.085	38.744	-7.276	46.020	QUASIPEAK	172.500	208.500
5		261.183	-8.586	47.054	38.467	-7.553	46.020	QUASIPEAK	100.000	93.800
6		309.683	-6.978	41.050	34.071	-11.949	46.020	QUASIPEAK	112.600	183.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:49**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1:Transmit by 802.11n(20MHz) at channel 2412MHz**



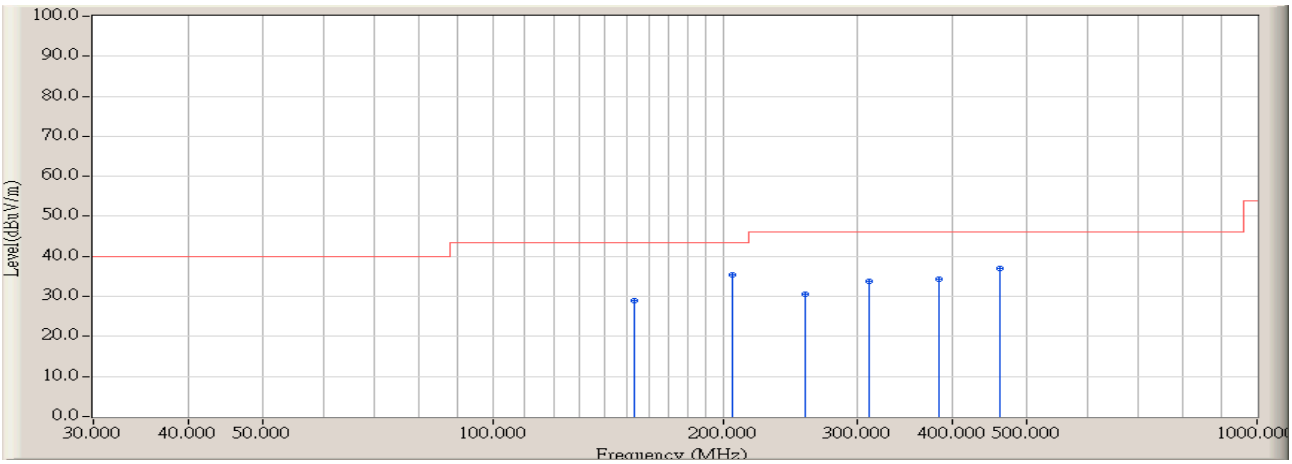
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		141.550	-9.223	42.555	33.332	-10.188	43.520	QUASIPEAK	100.000	206.000
2	*	207.833	-10.338	46.251	35.913	-7.607	43.520	QUASIPEAK	100.000	142.500
3		262.800	-8.580	44.991	36.411	-9.609	46.020	QUASIPEAK	100.000	75.300
4		308.067	-7.165	39.897	32.732	-13.288	46.020	QUASIPEAK	104.600	136.900
5		375.967	-5.866	41.987	36.121	-9.899	46.020	QUASIPEAK	114.600	204.800
6		434.167	-4.671	41.966	37.294	-8.726	46.020	QUASIPEAK	100.000	193.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:49**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11n(20MHz) at channel 2437MHz**



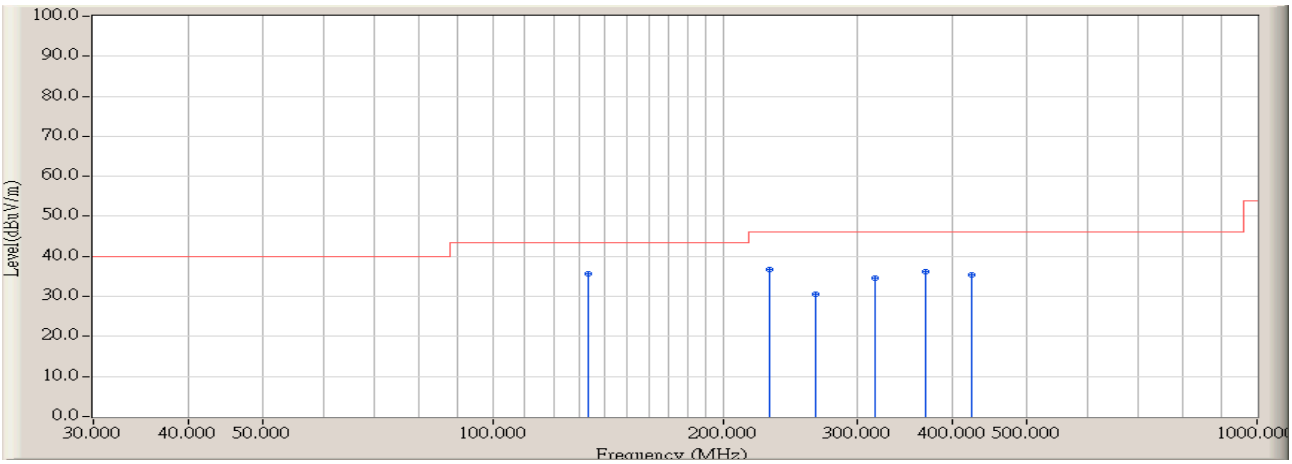
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		133.467	-9.432	45.392	35.961	-7.559	43.520	QUASIPEAK	100.000	68.900
2		201.367	-10.838	45.630	34.792	-8.728	43.520	QUASIPEAK	142.000	84.500
3		245.017	-9.118	43.941	34.822	-11.198	46.020	QUASIPEAK	112.000	177.500
4		283.817	-8.688	46.713	38.025	-7.995	46.020	QUASIPEAK	100.000	154.600
5		345.250	-6.199	40.753	34.554	-11.466	46.020	QUASIPEAK	100.000	148.500
6	*	416.383	-4.601	44.453	39.852	-6.168	46.020	QUASIPEAK	100.000	136.600

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:49**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11n(20MHz) at channel 2437MHz**



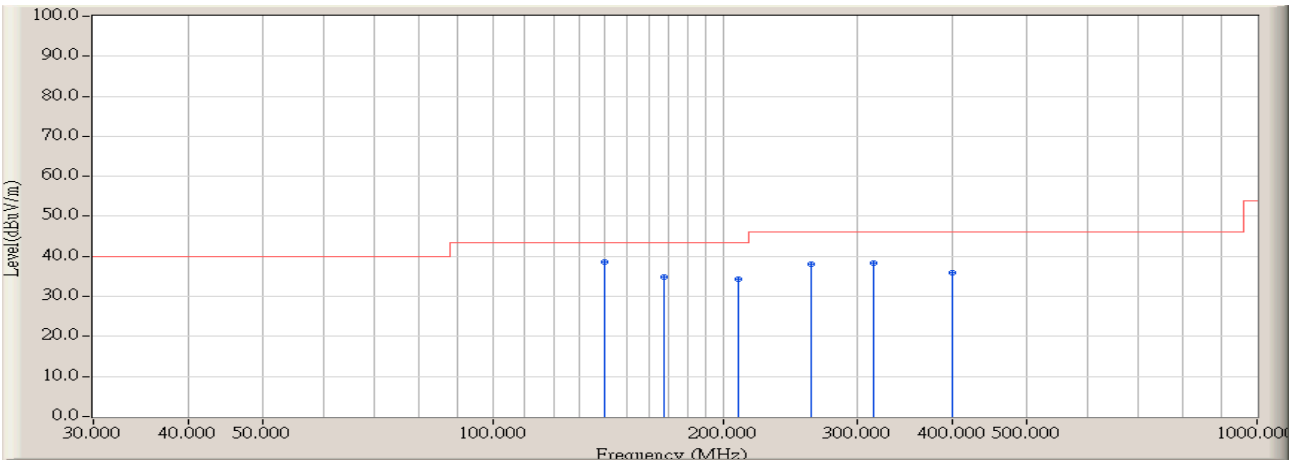
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		152.867	-9.523	38.354	28.831	-14.689	43.520	QUASIPEAK	100.000	74.600
2	*	206.217	-10.427	45.769	35.341	-8.179	43.520	QUASIPEAK	100.000	116.500
3		256.333	-8.611	39.114	30.503	-15.517	46.020	QUASIPEAK	106.500	44.800
4		311.300	-6.948	40.604	33.656	-12.364	46.020	QUASIPEAK	113.600	210.400
5		384.050	-5.600	39.945	34.345	-11.675	46.020	QUASIPEAK	102.600	95.000
6		460.033	-4.138	41.121	36.983	-9.037	46.020	QUASIPEAK	100.000	135.200

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:50**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11n(20MHz) at channel 2462MHz**



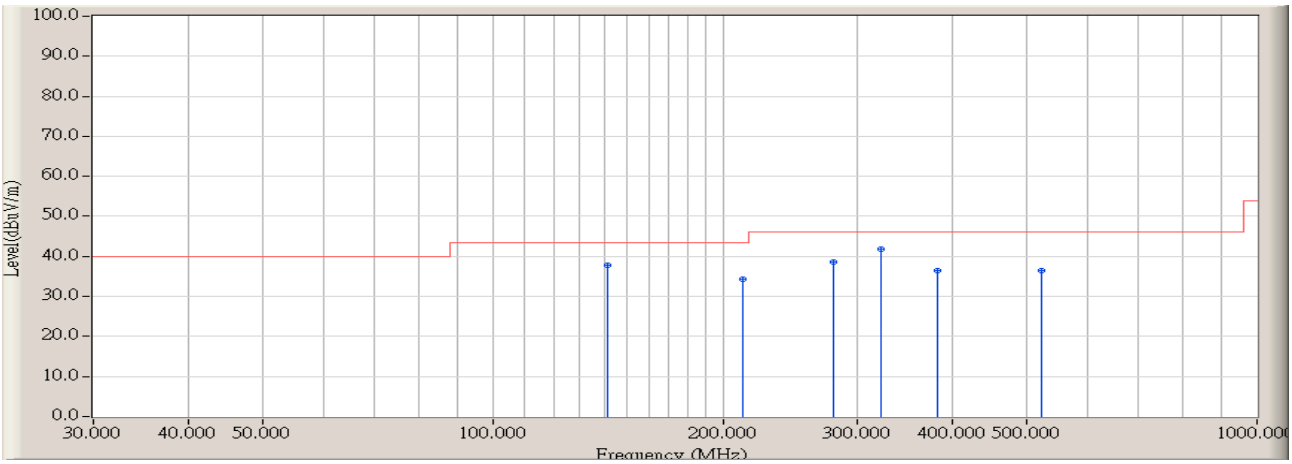
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	133.467	-9.432	45.156	35.725	-7.795	43.520	QUASIPEAK	100.000	215.000
2		230.467	-9.340	46.107	36.766	-9.254	46.020	QUASIPEAK	128.000	88.500
3		264.417	-8.570	39.154	30.584	-15.436	46.020	QUASIPEAK	100.000	274.000
4		316.150	-6.960	41.652	34.692	-11.328	46.020	QUASIPEAK	145.500	209.000
5		367.883	-6.080	42.289	36.209	-9.811	46.020	QUASIPEAK	177.500	93.800
6		422.850	-4.518	39.876	35.358	-10.662	46.020	QUASIPEAK	100.000	174.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:50**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11n(20MHz) at channel 2462MHz**



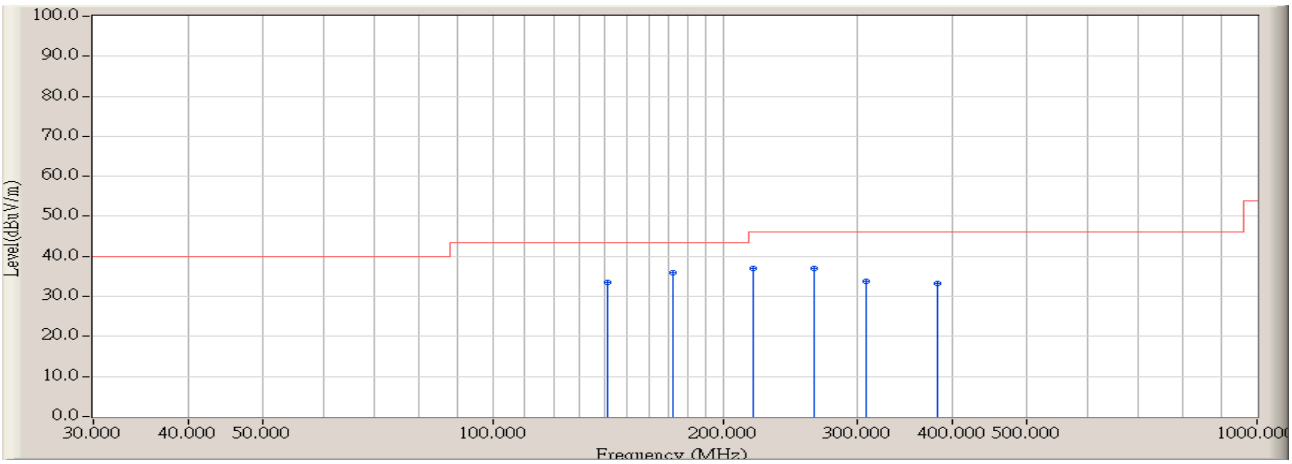
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	139.933	-9.327	47.952	38.625	-4.895	43.520	QUASIPEAK	100.000	248.000
2		167.417	-10.476	45.317	34.841	-8.679	43.520	QUASIPEAK	100.000	211.700
3		209.450	-10.244	44.464	34.220	-9.300	43.520	QUASIPEAK	105.600	225.000
4		261.183	-8.586	46.694	38.107	-7.913	46.020	QUASIPEAK	100.000	247.700
5		314.533	-7.027	45.365	38.338	-7.682	46.020	QUASIPEAK	125.500	48.600
6		398.600	-4.961	40.933	35.972	-10.048	46.020	QUASIPEAK	100.000	287.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:50**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2422MHz**



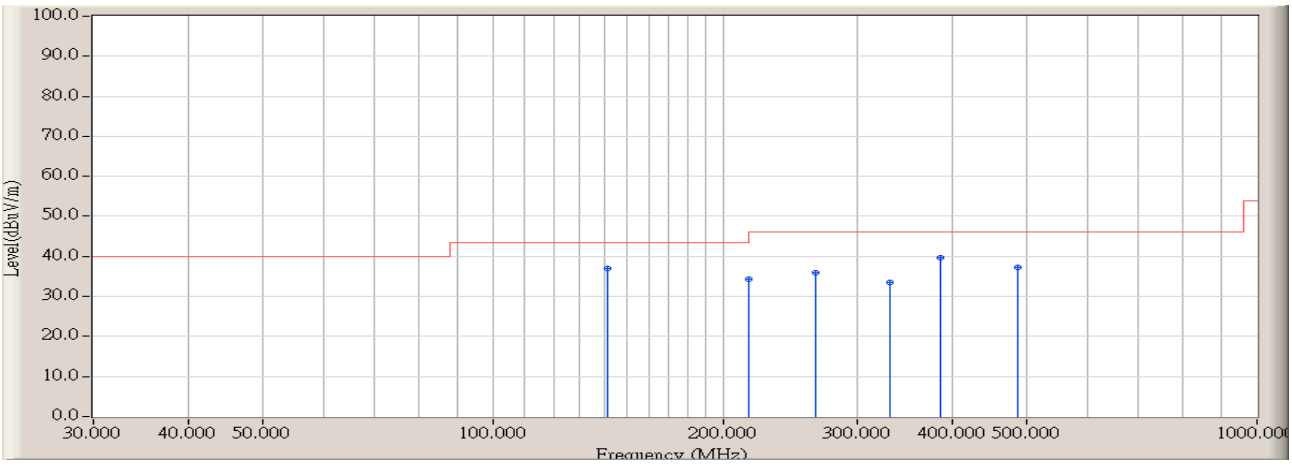
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		141.550	-9.223	47.140	37.917	-5.603	43.520	QUASIPEAK	100.000	68.900
2		212.683	-9.946	44.380	34.434	-9.086	43.520	QUASIPEAK	142.000	84.500
3		278.967	-8.729	47.246	38.517	-7.503	46.020	QUASIPEAK	112.000	177.500
4	*	322.617	-7.030	48.895	41.865	-4.155	46.020	QUASIPEAK	100.000	154.600
5		382.433	-5.681	42.181	36.500	-9.520	46.020	QUASIPEAK	100.000	148.500
6		521.467	-3.230	39.822	36.592	-9.428	46.020	QUASIPEAK	100.000	136.600

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:50**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2422MHz**



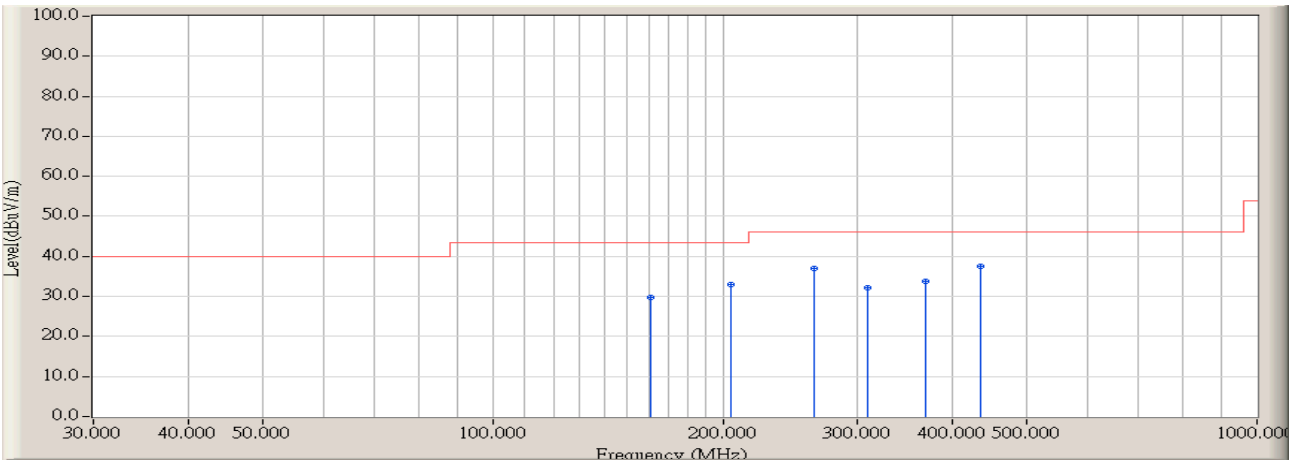
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		141.550	-9.223	42.701	33.478	-10.042	43.520	QUASIPEAK	100.000	74.600
2	*	172.267	-10.932	46.780	35.848	-7.672	43.520	QUASIPEAK	100.000	116.500
3		219.150	-9.037	46.031	36.994	-9.026	46.020	QUASIPEAK	106.500	44.800
4		262.800	-8.580	45.679	37.099	-8.921	46.020	QUASIPEAK	113.600	210.400
5		308.067	-7.165	40.861	33.696	-12.324	46.020	QUASIPEAK	102.600	95.000
6		382.433	-5.681	38.942	33.261	-12.759	46.020	QUASIPEAK	100.000	135.200

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:51**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2437MHz**



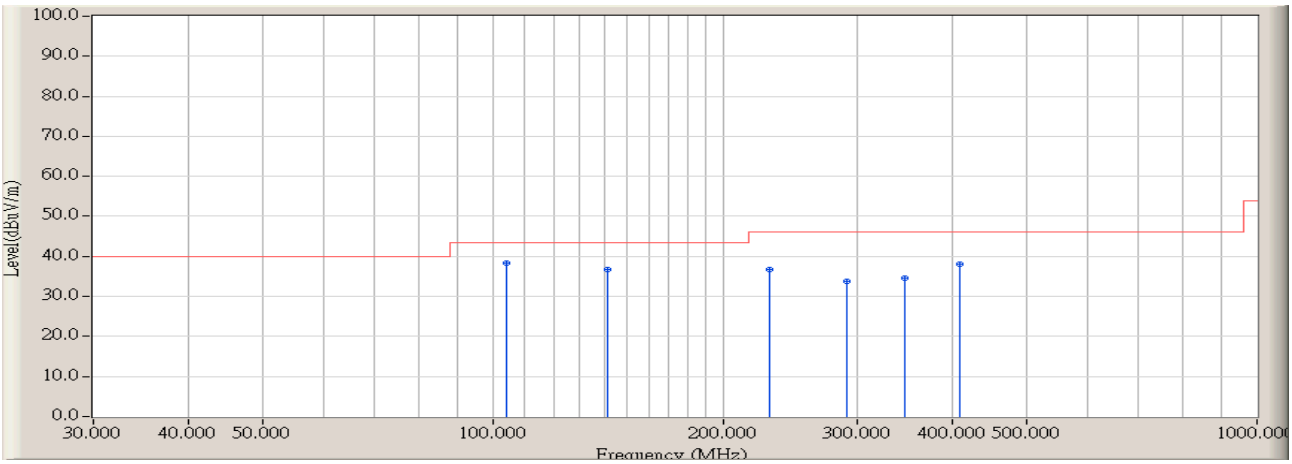
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		141.550	-9.223	46.093	36.870	-6.650	43.520	QUASIPEAK	100.000	95.800
2		215.917	-9.515	43.752	34.237	-9.283	43.520	QUASIPEAK	122.500	174.500
3		264.417	-8.570	44.492	35.922	-10.098	46.020	QUASIPEAK	105.200	96.500
4		330.700	-6.732	40.134	33.402	-12.618	46.020	QUASIPEAK	100.000	65.800
5	*	385.667	-5.526	45.199	39.674	-6.346	46.020	QUASIPEAK	100.000	214.000
6		485.900	-3.483	40.645	37.162	-8.858	46.020	QUASIPEAK	206.000	155.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:51**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2437MHz**



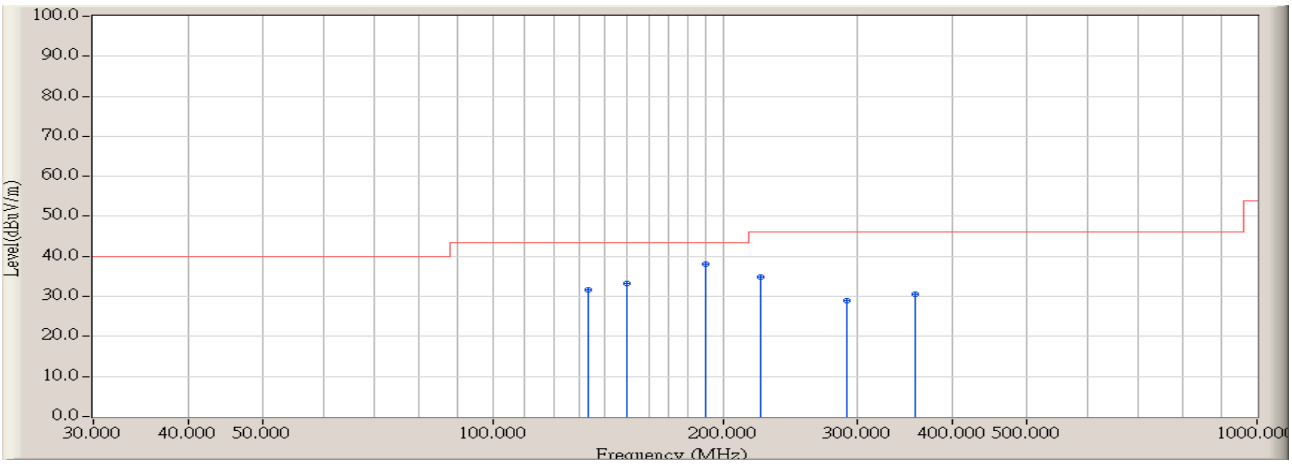
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		160.950	-9.895	39.547	29.652	-13.868	43.520	QUASIPEAK	100.000	88.900
2		204.600	-10.514	43.589	33.075	-10.445	43.520	QUASIPEAK	100.000	226.000
3		262.800	-8.580	45.658	37.078	-8.942	46.020	QUASIPEAK	112.600	65.900
4		309.683	-6.978	39.121	32.142	-13.878	46.020	QUASIPEAK	106.000	147.500
5		367.883	-6.080	39.977	33.897	-12.123	46.020	QUASIPEAK	100.000	145.300
6	*	434.167	-4.671	42.200	37.528	-8.492	46.020	QUASIPEAK	100.000	36.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:51**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2452MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	104.367	-11.021	49.284	38.262	-5.258	43.520	QUASIPEAK	100.000	118.500
2		141.550	-9.223	45.905	36.682	-6.838	43.520	QUASIPEAK	114.600	45.800
3		230.467	-9.340	46.032	36.691	-9.329	46.020	QUASIPEAK	100.000	315.000
4		290.283	-8.504	42.364	33.860	-12.160	46.020	QUASIPEAK	100.000	188.000
5		345.250	-6.199	40.675	34.476	-11.544	46.020	QUASIPEAK	105.600	325.000
6		408.300	-4.618	42.615	37.997	-8.023	46.020	QUASIPEAK	100.000	156.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/22 - 10:52**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11n(40MHz) at channel 2452MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		133.467	-9.432	41.015	31.584	-11.936	43.520	QUASIPEAK	100.000	185.000
2		149.633	-9.443	42.641	33.197	-10.323	43.520	QUASIPEAK	120.000	163.000
3	*	190.050	-11.318	49.304	37.986	-5.534	43.520	QUASIPEAK	113.600	154.000
4		224.000	-8.608	43.466	34.858	-11.162	46.020	QUASIPEAK	122.500	96.500
5		290.283	-8.504	37.424	28.920	-17.100	46.020	QUASIPEAK	100.000	85.900
6		356.567	-6.112	36.644	30.532	-15.488	46.020	QUASIPEAK	105.200	93.500

Mode 1: 802.11b (Chain 100)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	49.05	74	-24.95	PK	120.50	65.80
3011.667	H	36.12	54	-17.88	AV	120.50	65.80
4853.333	V	51.29	74	-22.71	PK	114.20	144.80
4853.333	V	38.10	54	-15.90	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	48.63	74	-25.37	PK	100.00	165.20
3011.667	H	37.35	54	-16.65	AV	100.00	165.20
4881.667	V	51.99	74	-22.01	PK	100.00	205.00
4881.667	V	38.24	54	-15.76	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.30	74	-25.70	PK	100.00	187.00
3011.667	H	35.73	54	-18.27	AV	100.00	187.00
4938.333	V	48.67	74	-25.33	PK	106.00	328.00
4938.333	V	37.84	54	-16.16	AV	106.00	328.00
Mode 1: 802.11b (Chain 010)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	48.12	74	-25.88	PK	120.50	65.80
3011.667	H	35.15	54	-18.85	AV	120.50	65.80
4853.333	V	47.69	74	-26.31	PK	114.20	144.80
4853.333	V	36.94	54	-17.06	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	48.51	74	-25.49	PK	100.00	165.20
3011.667	H	36.14	54	-17.86	AV	100.00	165.20
4881.667	V	50.20	74	-23.80	PK	100.00	205.00
4881.667	V	38.35	54	-15.65	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.52	74	-25.48	PK	100.00	187.00
3011.667	H	35.26	54	-18.74	AV	100.00	187.00
4938.333	V	49.69	74	-24.31	PK	106.00	328.00

4938.333	V	37.72	54	-16.28	AV	106.00	328.00

Mode 2: 802.11g (Chain 100)

Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	48.61	74	-25.39	PK	120.50	65.80
3011.667	H	36.53	54	-17.47	AV	120.50	65.80
4853.333	V	50.17	74	-23.83	PK	114.20	144.80
4853.333	V	37.91	54	-16.09	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	48.77	74	-25.23	PK	100.00	165.20
3011.667	H	35.59	54	-18.41	AV	100.00	165.20
4881.667	V	48.66	74	-25.34	PK	100.00	205.00
4881.667	V	35.14	54	-18.86	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.18	74	-25.82	PK	100.00	187.00
3011.667	H	34.03	54	-19.97	AV	100.00	187.00
4938.333	V	49.64	74	-24.36	PK	106.00	328.00
4938.333	V	35.05	54	-18.95	AV	106.00	328.00

Mode 2: 802.11g (Chain 010)

Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	48.79	74	-25.21	PK	120.50	65.80
3011.667	H	35.37	54	-18.63	AV	120.50	65.80
4853.333	V	52.14	74	-21.86	PK	114.20	144.80
4853.333	V	39.80	54	-14.20	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	48.44	74	-25.56	PK	100.00	165.20
3011.667	H	36.59	54	-17.41	AV	100.00	165.20
4881.667	V	51.02	74	-22.98	PK	100.00	205.00
4881.667	V	38.48	54	-15.52	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.21	74	-25.79	PK	100.00	187.00
3011.667	H	36.48	54	-17.52	AV	100.00	187.00

4938.333	V	49.48	74	-24.52	PK	106.00	328.00
4938.333	V	38.36	54	-15.64	AV	106.00	328.00
Mode 3: 802.11n (20MHz Bandwidth) (Chain 010)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	47.21	74	-26.79	PK	120.50	65.80
3011.667	H	34.95	54	-19.05	AV	120.50	65.80
3011.667	V	48.53	74	-25.47	PK	114.20	144.80
3011.667	V	36.17	54	-17.83	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	47.66	74	-26.34	PK	100.00	165.20
3011.667	H	35.49	54	-18.51	AV	100.00	165.20
3011.667	V	48.07	74	-25.93	PK	100.00	205.00
3011.667	V	37.36	54	-16.64	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.85	74	-25.15	PK	100.00	187.00
3011.667	H	36.39	54	-17.61	AV	100.00	187.00
3011.667	V	48.03	74	-25.97	PK	106.00	328.00
3011.667	V	37.14	54	-16.86	AV	106.00	328.00
Mode 3: 802.11n (20MHz Bandwidth) (Chain 110)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
3011.667	H	48.21	74	-25.79	PK	120.50	65.80
3011.667	H	36.37	54	-17.63	AV	120.50	65.80
3011.667	V	49.24	74	-24.76	PK	114.20	144.80
3011.667	V	38.47	54	-15.53	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	47.96	74	-26.04	PK	100.00	165.20
3011.667	H	34.18	54	-19.82	AV	100.00	165.20
3011.667	V	48.92	74	-25.08	PK	100.00	205.00
3011.667	V	36.58	54	-17.42	AV	100.00	205.00
Channel 11 (2462MHz)							
3011.667	H	48.41	74	-25.59	PK	100.00	187.00

3011.667	H	36.28	54	-17.72	AV	100.00	187.00
3011.667	V	48.42	74	-25.58	PK	106.00	328.00
3011.667	V	36.94	54	-17.06	AV	106.00	328.00
Mode 4: 802.11n (40MHz Bandwidth) (Chain 100)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 3 (2422MHz)							
3011.667	H	48.55	74	-25.45	PK	120.50	65.80
3011.667	H	36.35	54	-17.65	AV	120.50	65.80
3011.667	V	49.03	74	-24.97	PK	114.20	144.80
3011.667	V	37.02	54	-16.98	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	47.22	74	-26.78	PK	100.00	165.20
3011.667	H	33.31	54	-20.69	AV	100.00	165.20
3011.667	V	50.27	74	-23.73	PK	100.00	205.00
3011.667	V	36.84	54	-17.16	AV	100.00	205.00
Channel 9 (2452MHz)							
3011.667	H	46.85	74	-27.15	PK	100.00	187.00
3011.667	H	32.39	54	-21.61	AV	100.00	187.00
3011.667	V	48.27	74	-25.73	PK	106.00	328.00
3011.667	V	35.58	54	-18.42	AV	106.00	328.00
Mode 4: 802.11n (40MHz Bandwidth) (Chain 010)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 3 (2422MHz)							
3011.667	H	47.55	74	-26.45	PK	120.50	65.80
3011.667	H	32.35	54	-21.65	AV	120.50	65.80
3011.667	V	49.03	74	-24.97	PK	114.20	144.80
3011.667	V	35.02	54	-18.98	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	47.22	74	-26.78	PK	100.00	165.20
3011.667	H	33.31	54	-20.69	AV	100.00	165.20
3011.667	V	50.27	74	-23.73	PK	100.00	205.00
3011.667	V	36.84	54	-17.16	AV	100.00	205.00
Channel 9 (2452MHz)							

3011.667	H	46.85	74	-27.15	PK	100.00	187.00
3011.667	H	32.39	54	-21.61	AV	100.00	187.00
3011.667	V	48.27	74	-25.73	PK	106.00	328.00
3011.667	V	35.58	54	-18.42	AV	106.00	328.00
Mode 4: 802.11n (40MHz Bandwidth) (Chain 110)							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 3 (2422MHz)							
3011.667	H	47.55	74	-26.45	PK	120.50	65.80
3011.667	H	34.35	54	-19.65	AV	120.50	65.80
3011.667	V	49.03	74	-24.97	PK	114.20	144.80
3011.667	V	36.02	54	-17.98	AV	114.20	144.80
Channel 6 (2437MHz)							
3011.667	H	47.22	74	-26.78	PK	100.00	165.20
3011.667	H	33.31	54	-20.69	AV	100.00	165.20
3011.667	V	50.27	74	-23.73	PK	100.00	205.00
3011.667	V	37.84	54	-16.16	AV	100.00	205.00
Channel 9 (2452MHz)							
3011.667	H	46.85	74	-27.15	PK	100.00	187.00
3011.667	H	34.39	54	-19.61	AV	100.00	187.00
3011.667	V	48.27	74	-25.73	PK	106.00	328.00
3011.667	V	36.58	54	-17.42	AV	106.00	328.00

4. RF Antenna Conducted Spurious

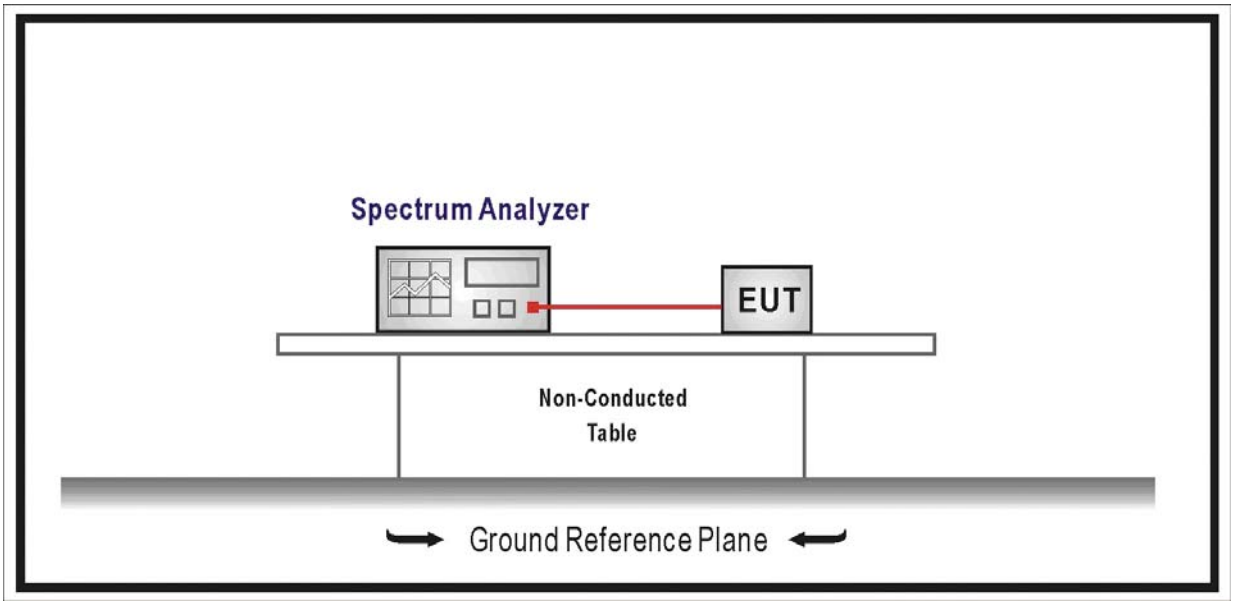
4.1. Test Equipment

RF Antenna Conducted Spurious / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

4.2. Test Setup



4.3. Limit

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.

4.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

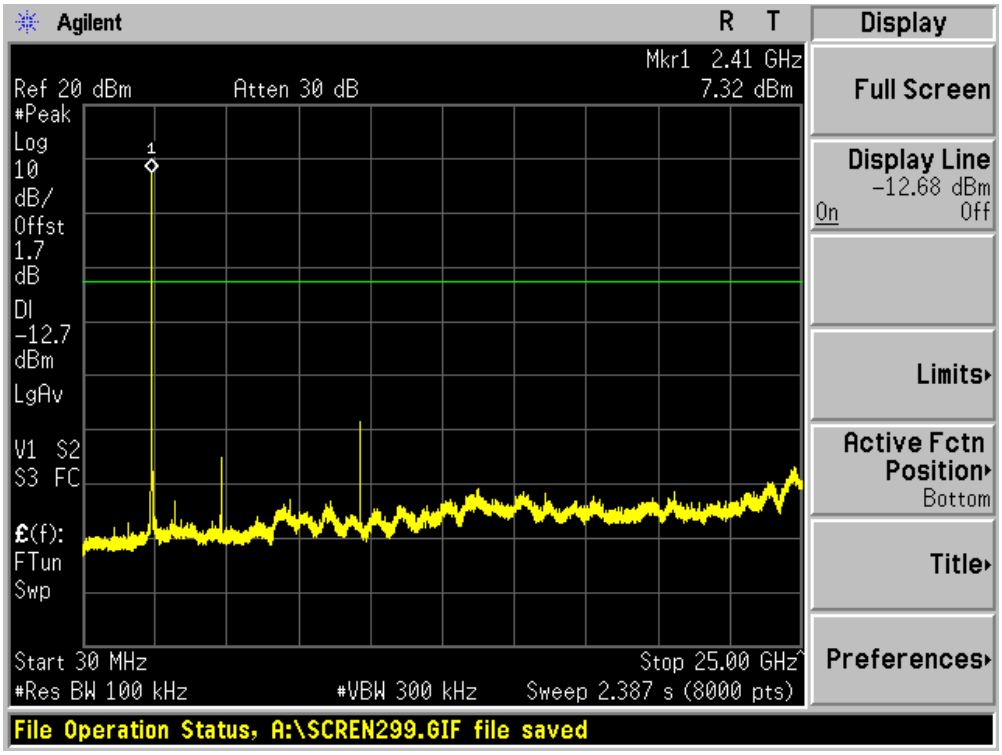
4.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

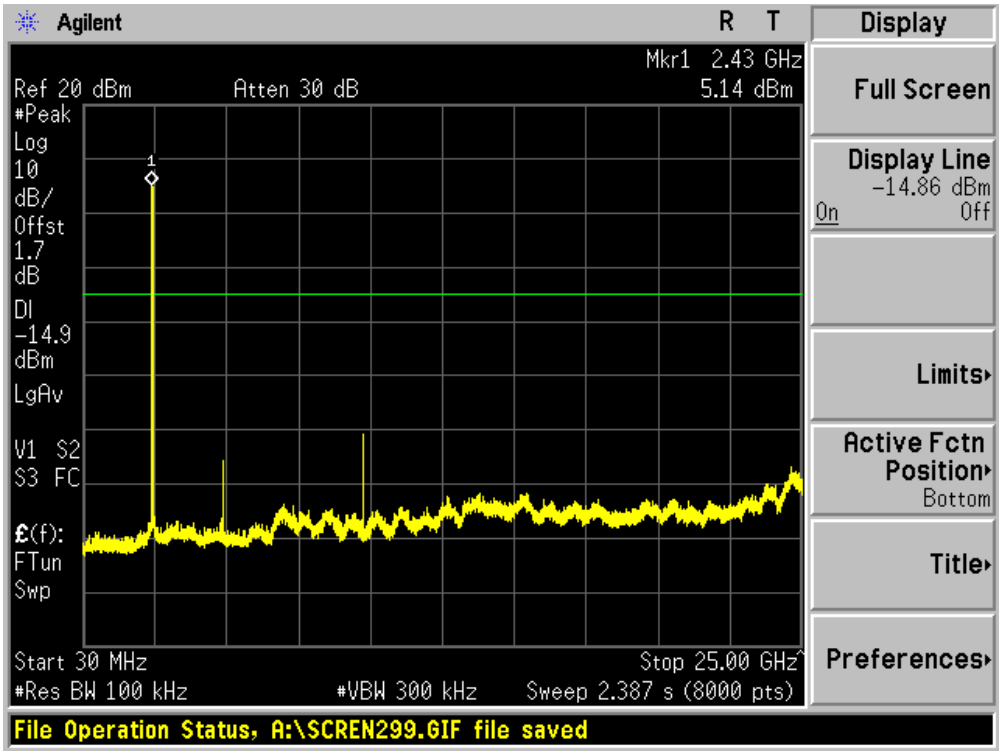
4.6. Test Result

Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 010

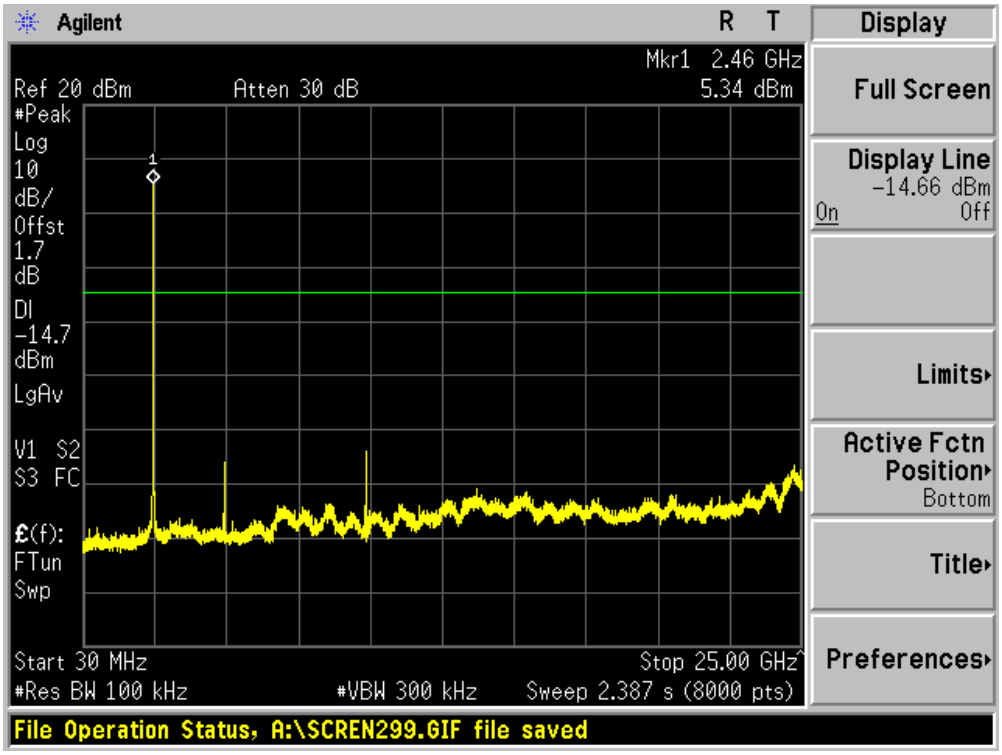
Channel 01 (2412MHz)



Channel 06 (2437MHz)

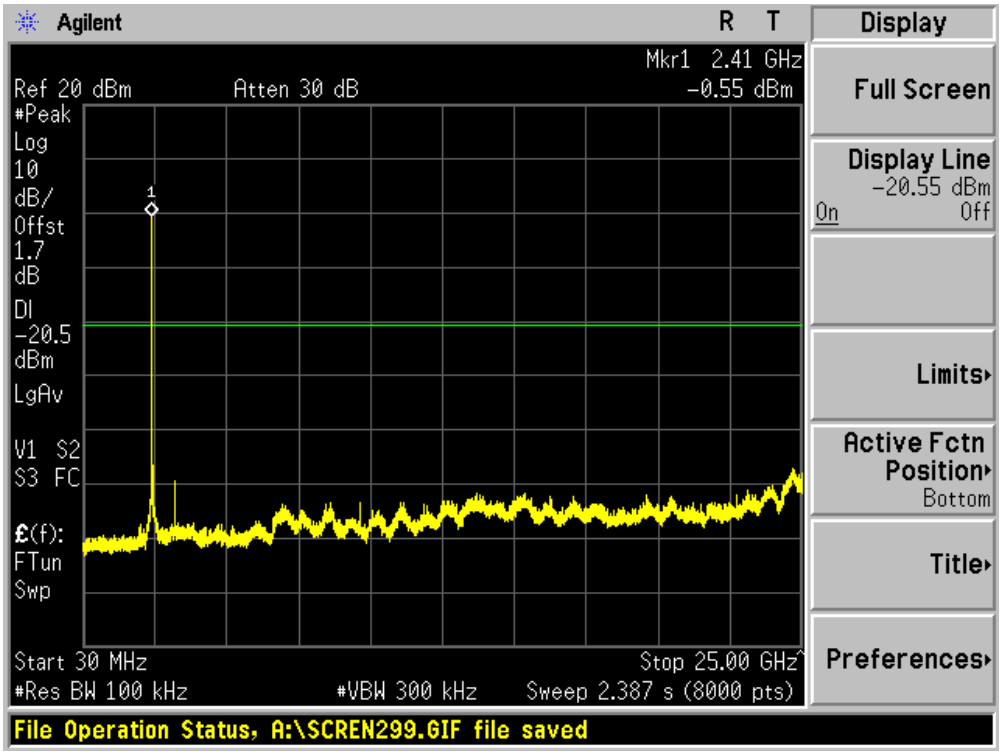


Channel 11 (2462MHz)

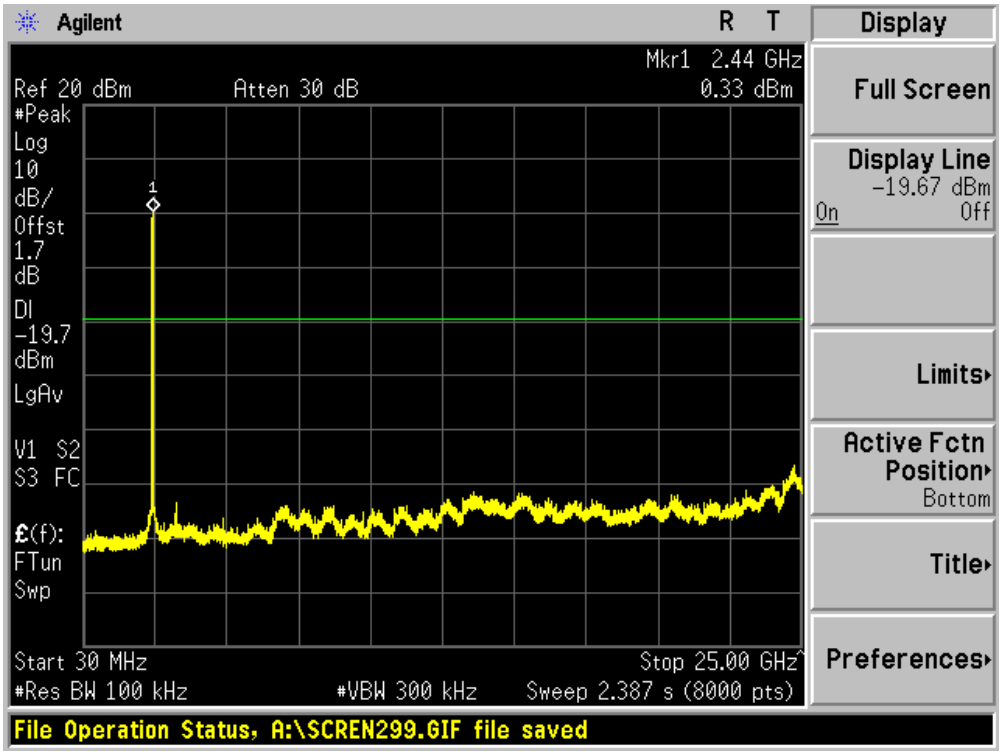


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

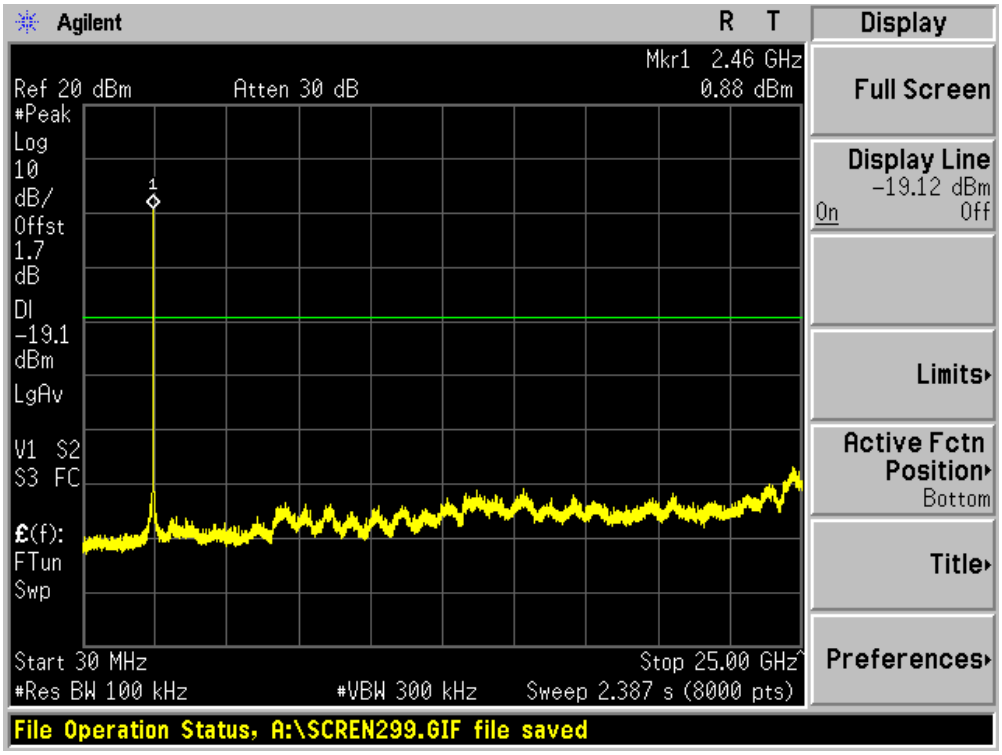
Channel 01 (2412MHz)



Channel 06 (2437MHz)

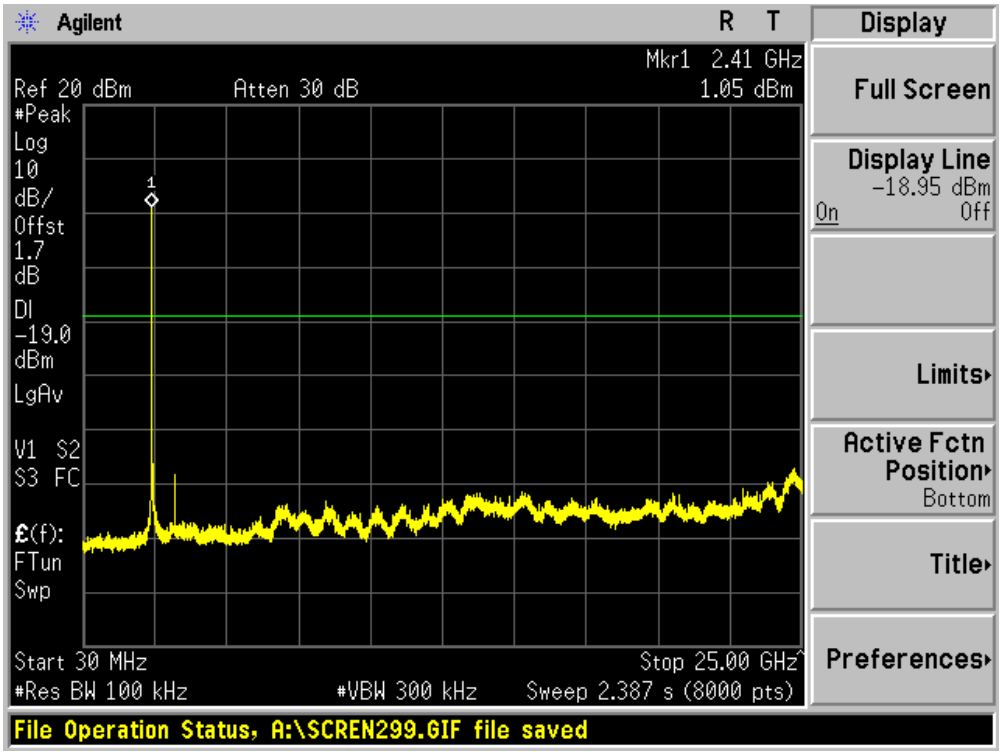


Channel 11 (2462MHz)

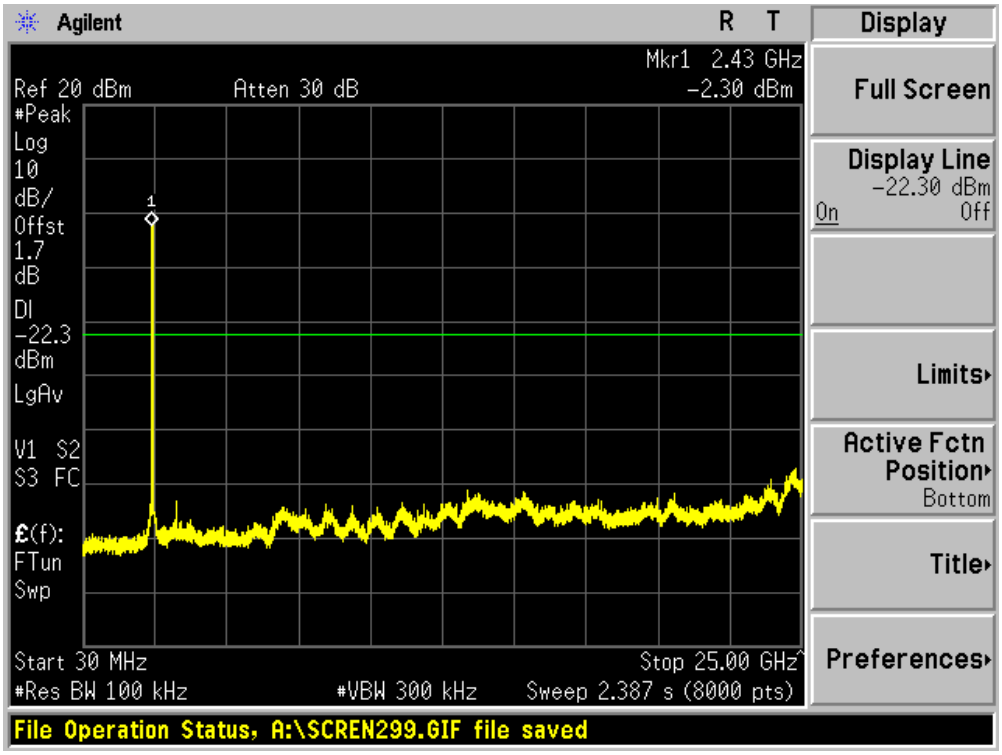


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 010

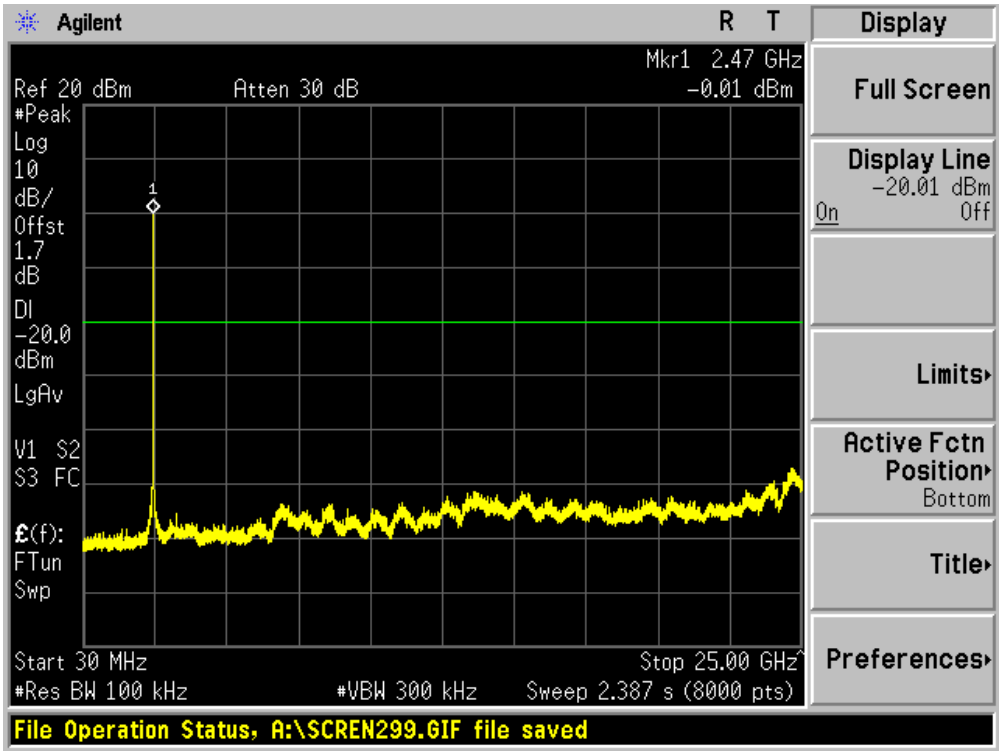
Channel 01 (2412MHz)



Channel 06 (2437MHz)

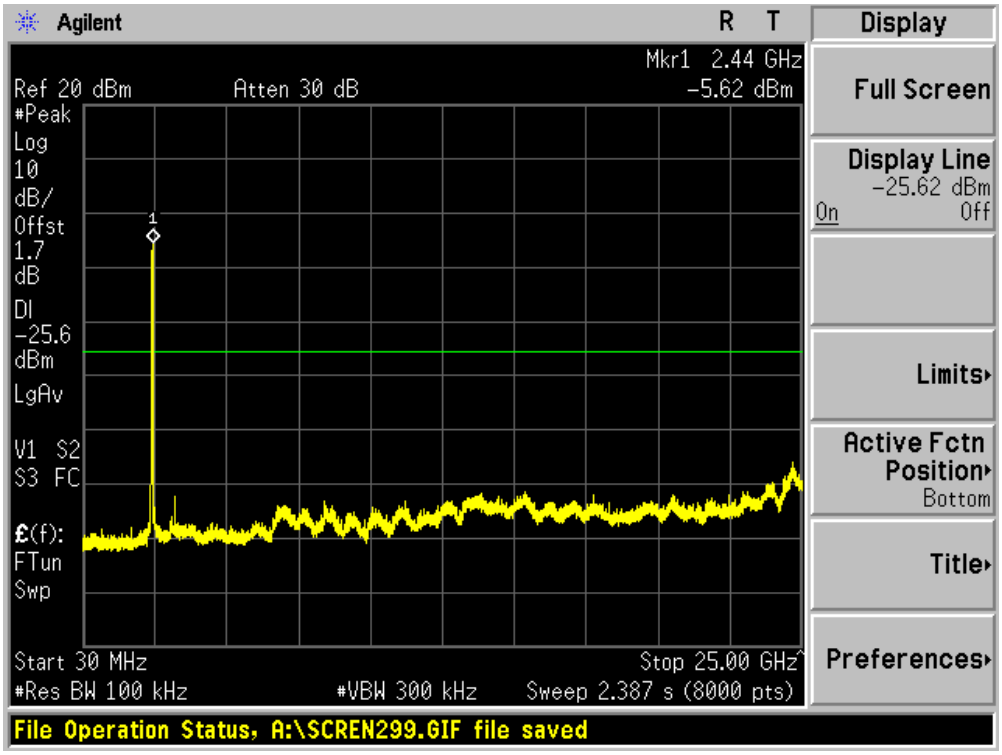


Channel 11 (2462MHz)

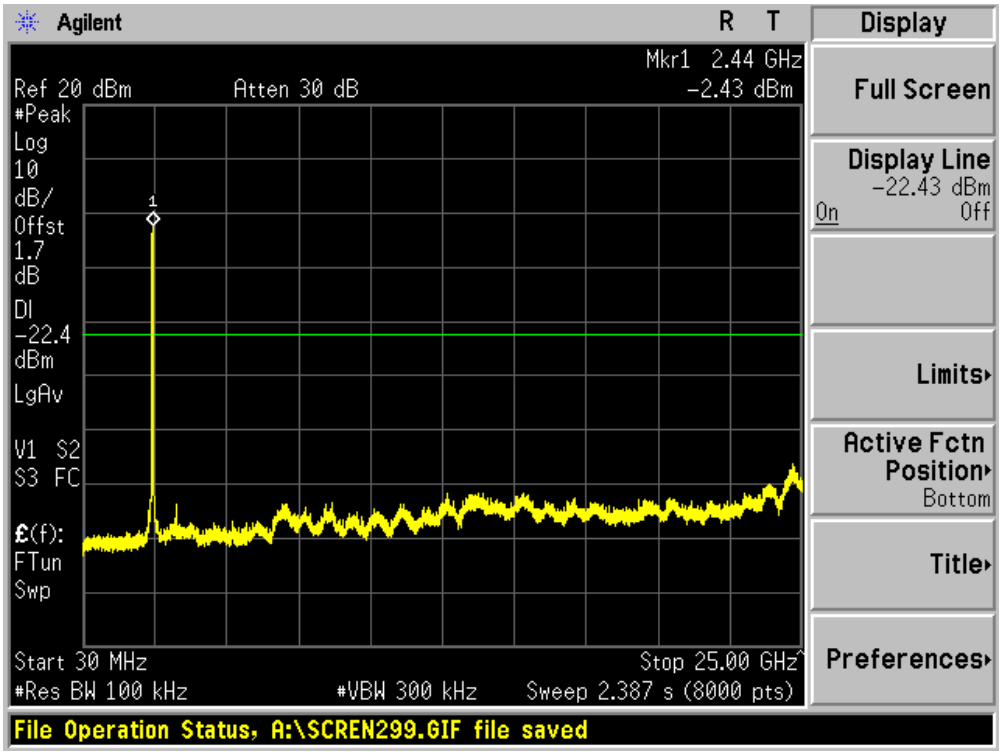


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 010

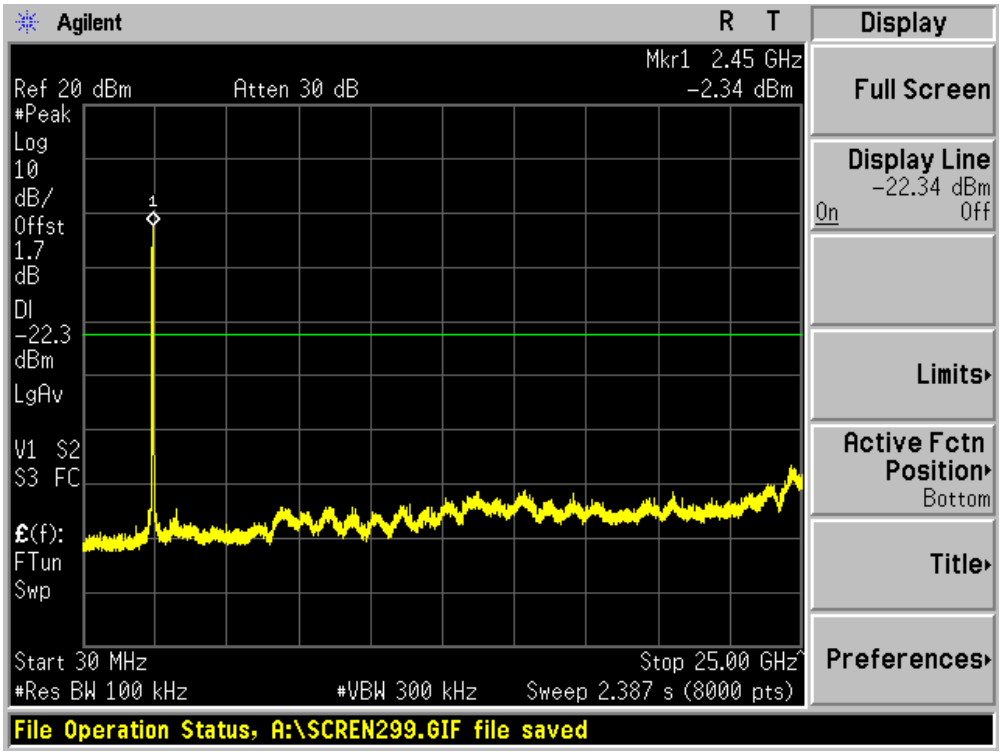
Channel 01 (2422MHz)



Channel 06 (2437MHz)

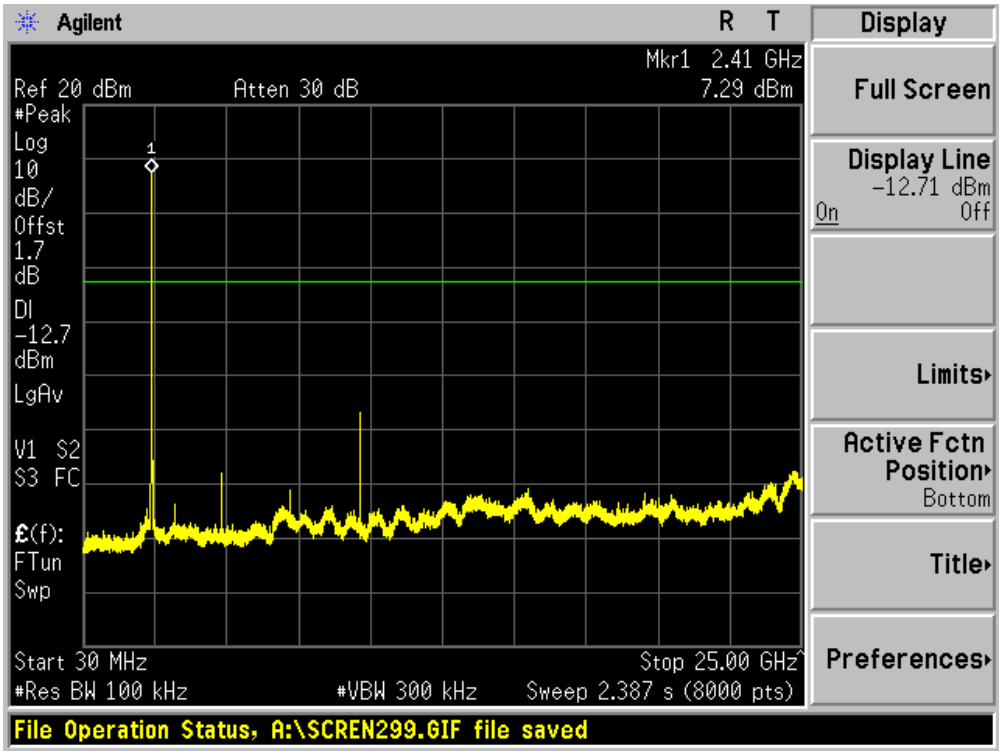


Channel 11 (2452MHz)

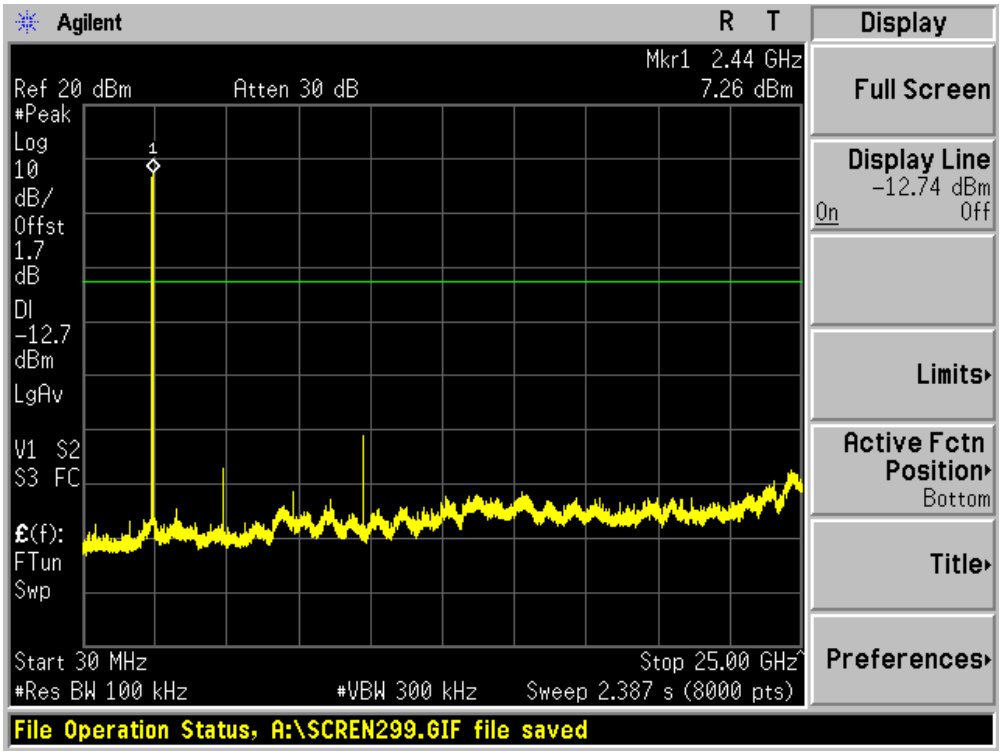


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 100

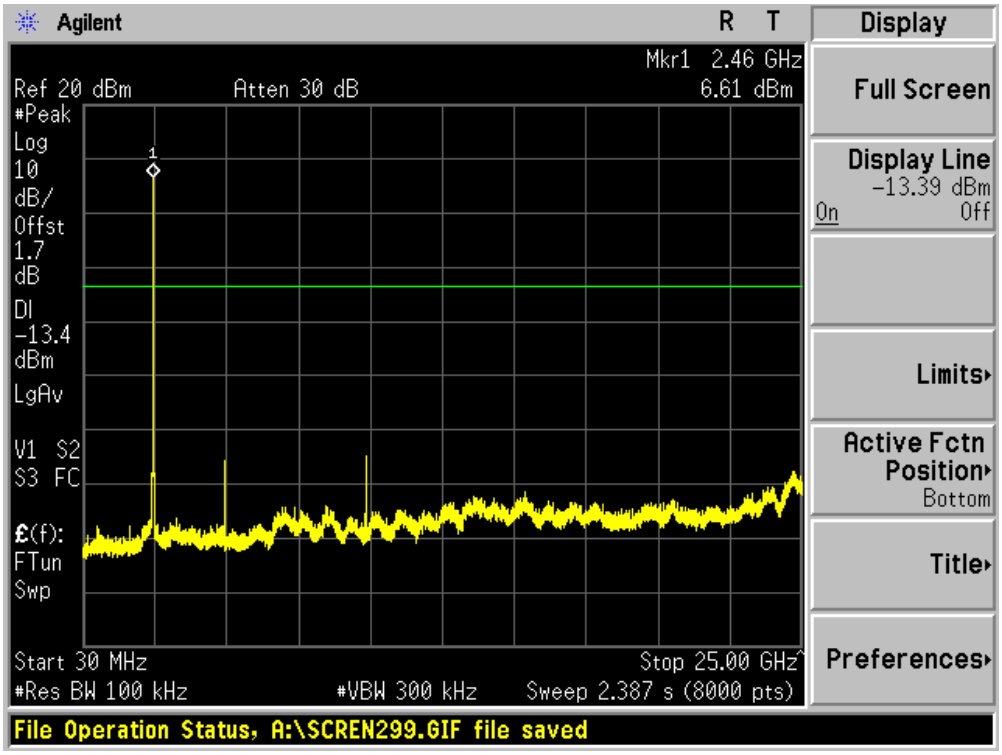
Channel 01 (2412MHz)



Channel 06 (2437MHz)

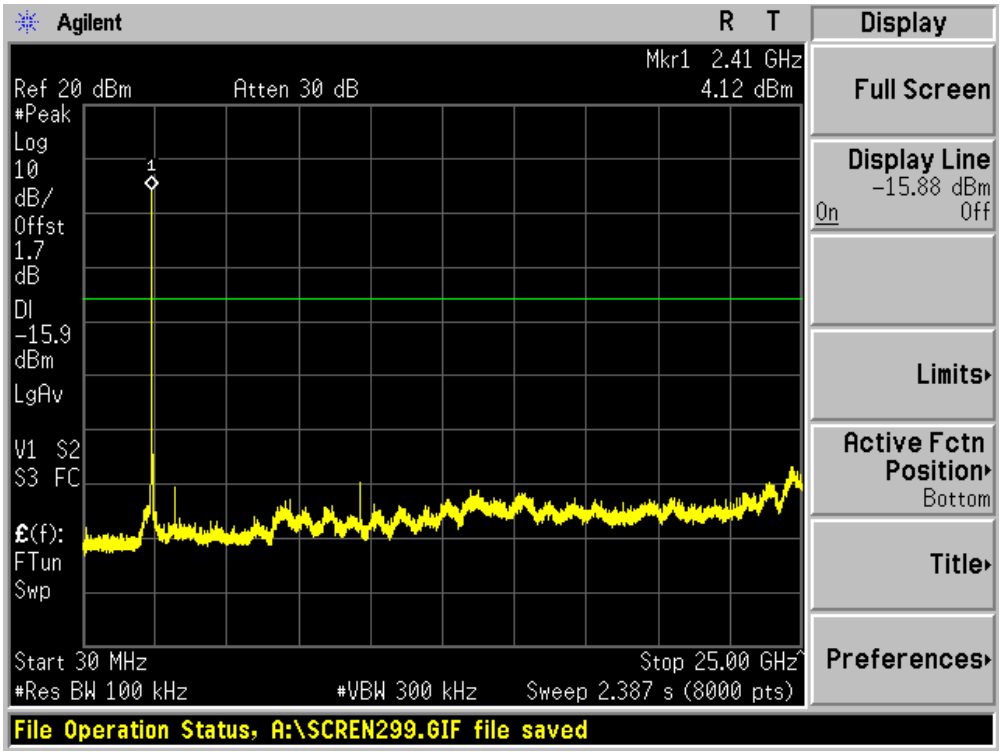


Channel 11 (2462MHz)

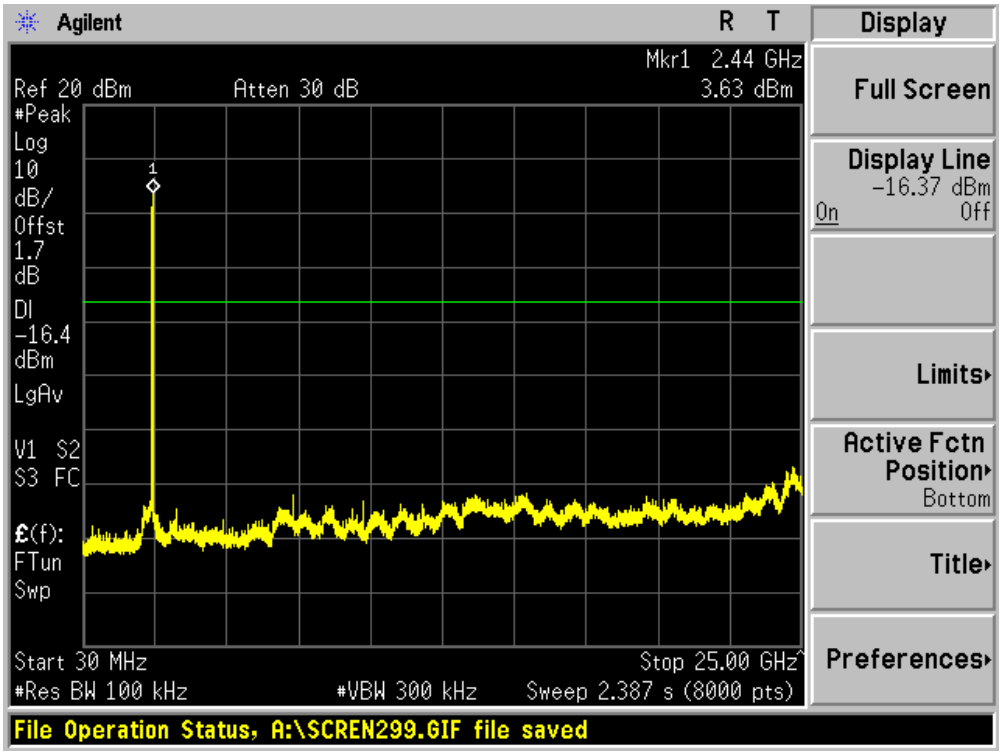


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 100

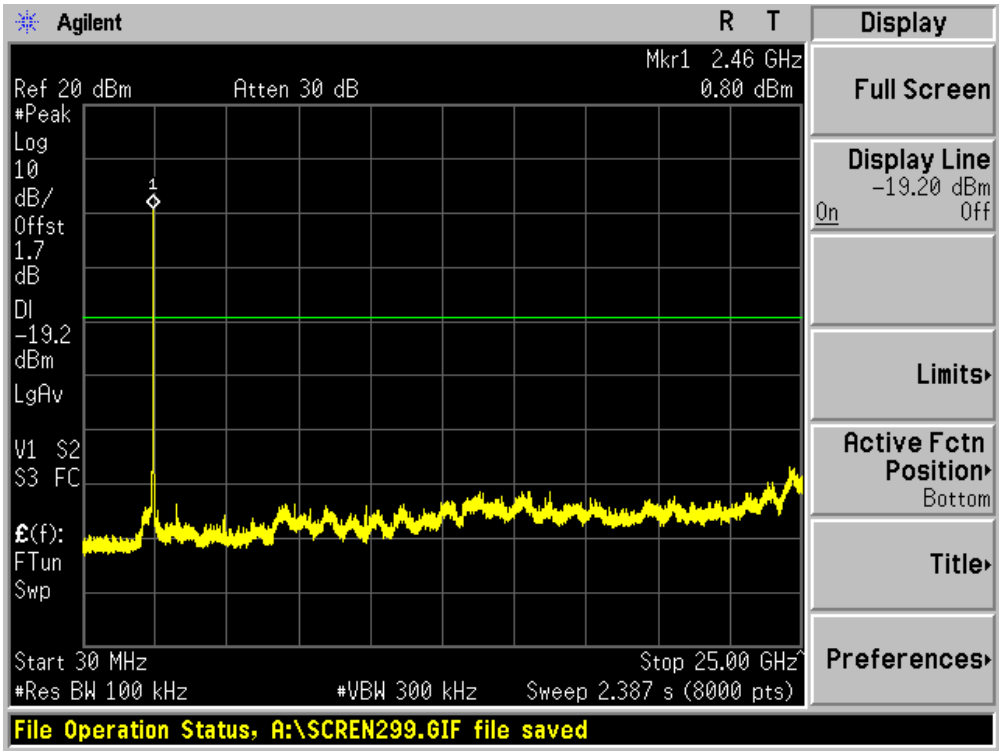
Channel 01 (2412MHz)



Channel 06 (2437MHz)

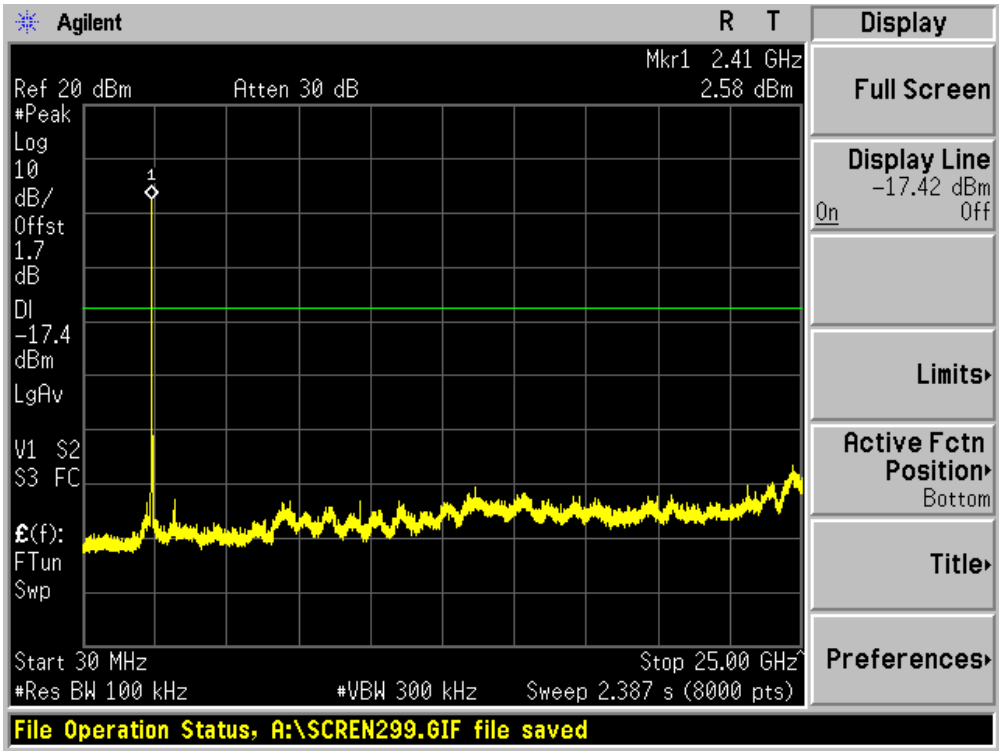


Channel 11 (2462MHz)

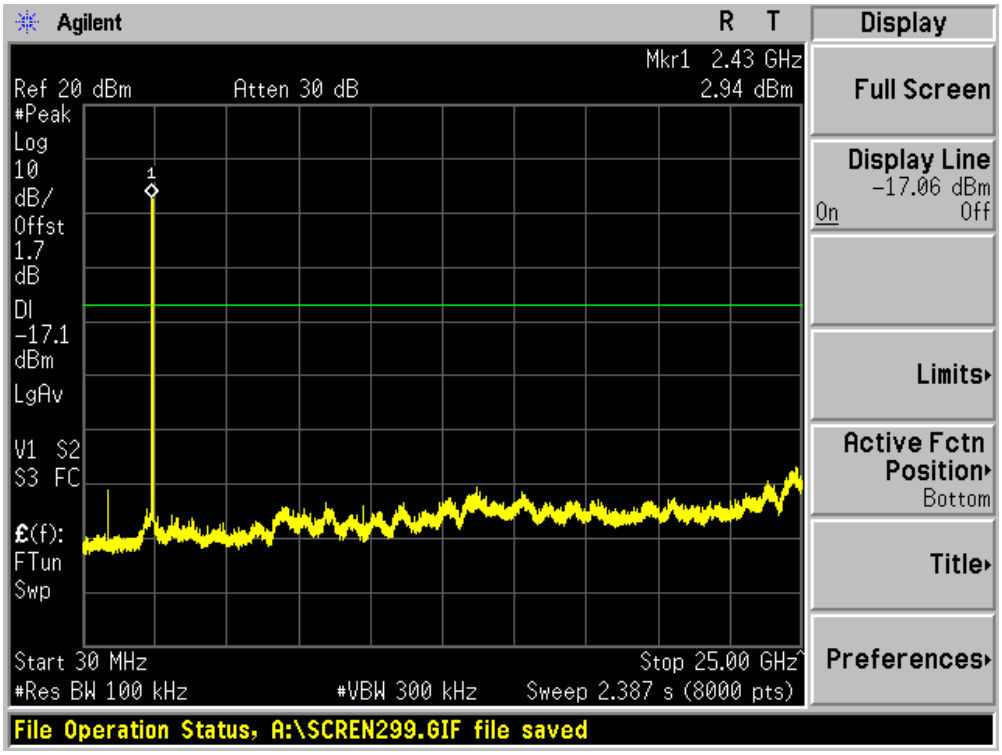


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 100

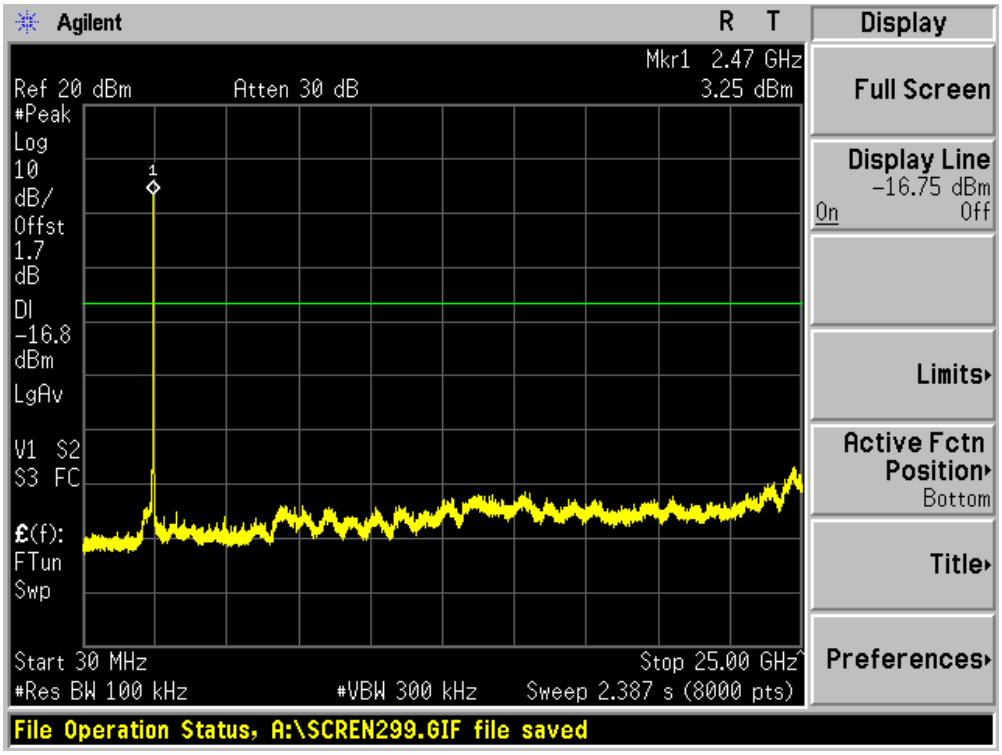
Channel 01 (2412MHz)



Channel 06 (2437MHz)

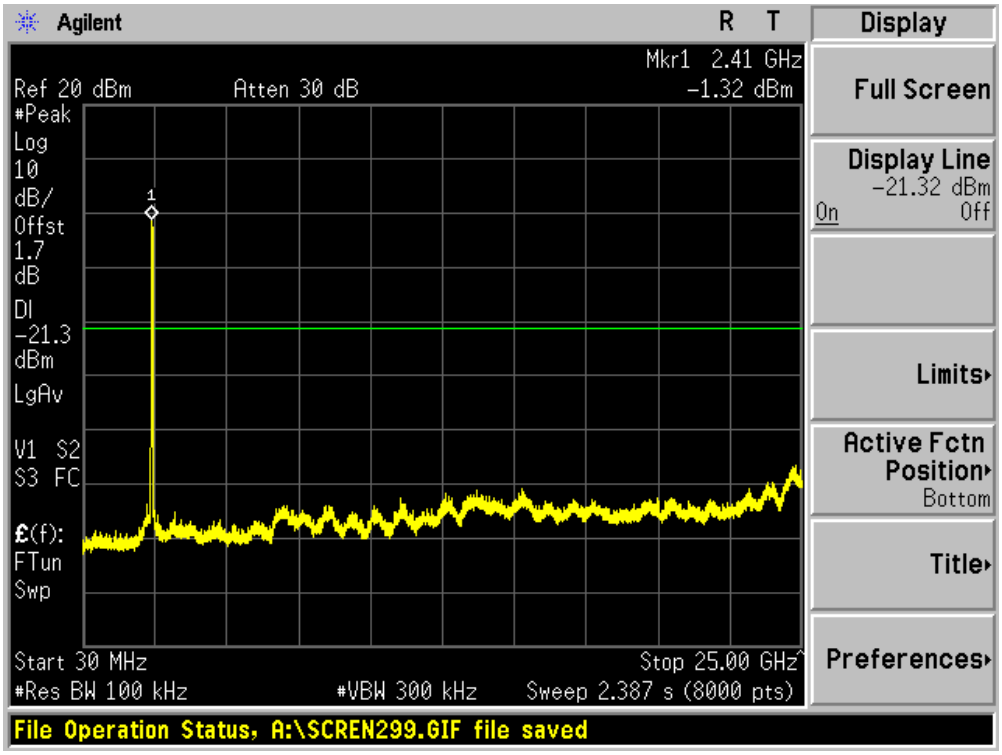


Channel 11 (2462MHz)

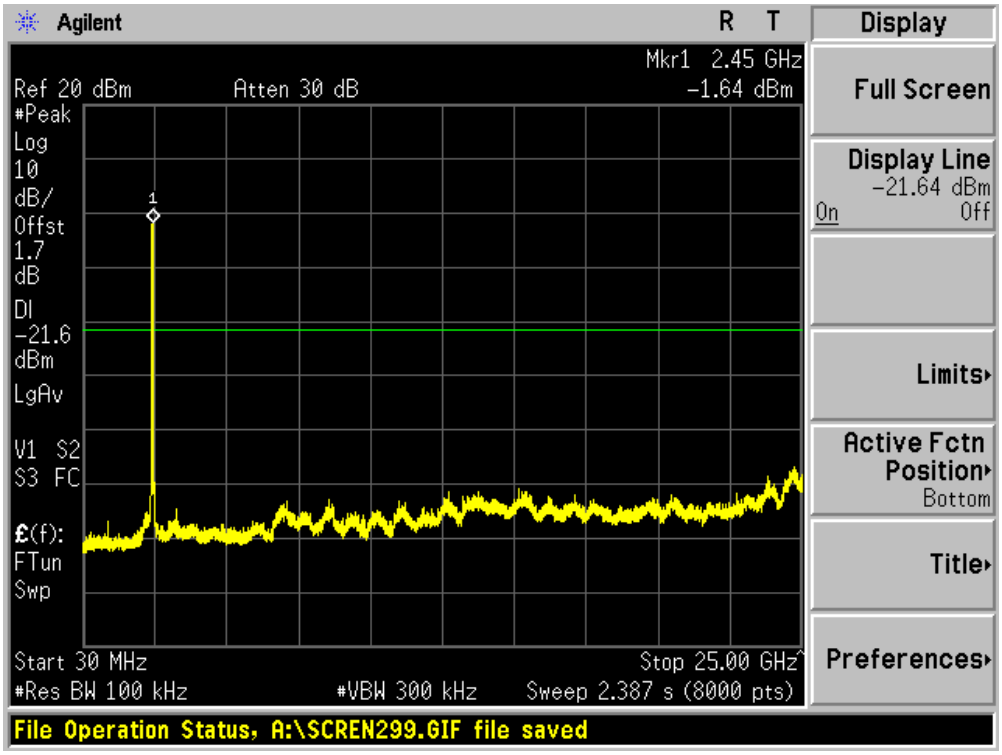


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 100

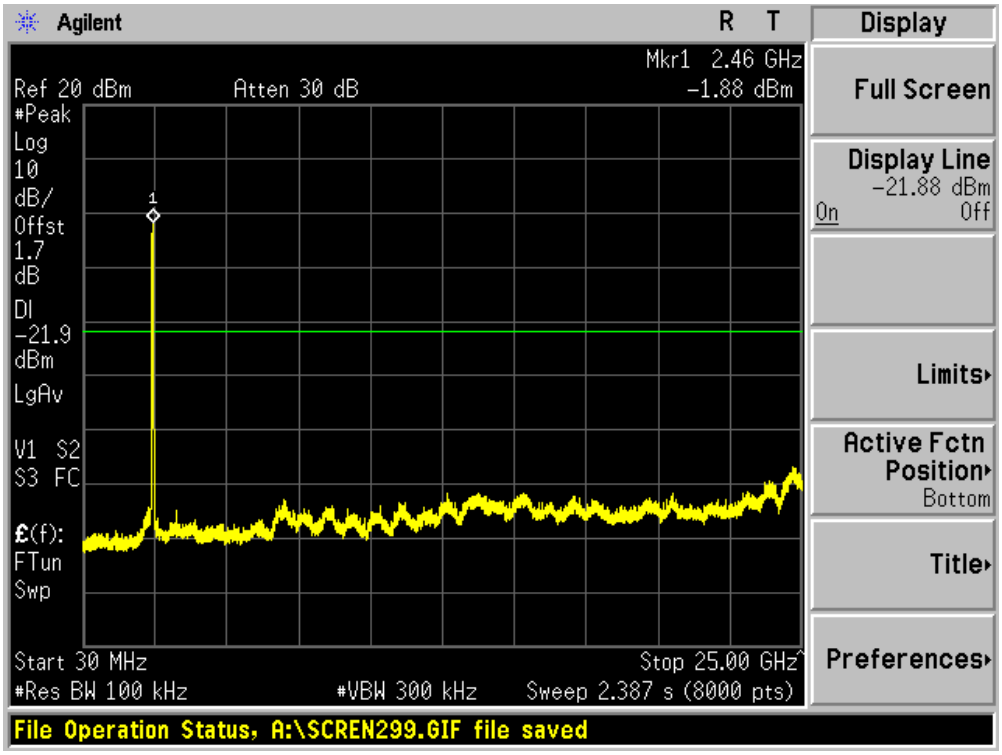
Channel 01 (2422MHz)



Channel 06 (2437MHz)



Channel 11 (2452MHz)



5. Radiated Emission Band Edge

5.1. Test Equipment

☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2008/06/28
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

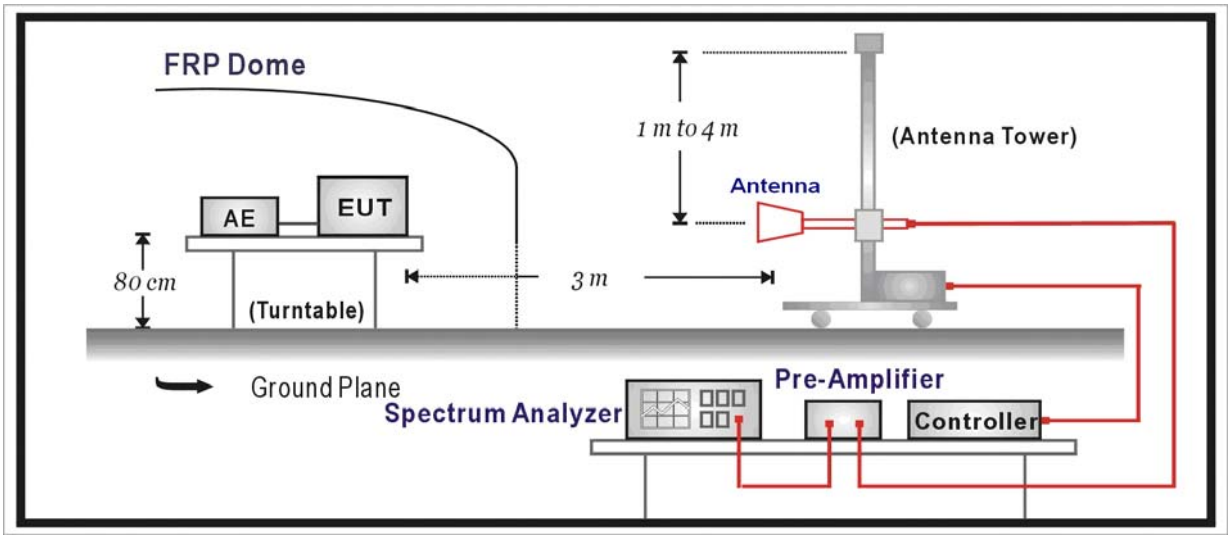
☐Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Note 2: The test instruments marked with “X” are used to measure the final test results.

5.2. Test Setup



5.3. Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

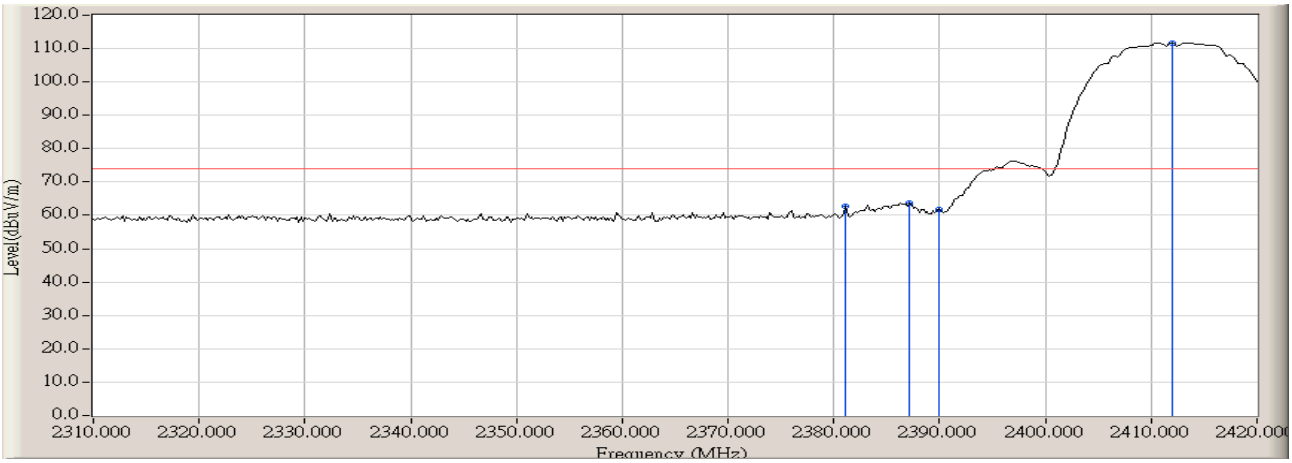
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

5.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

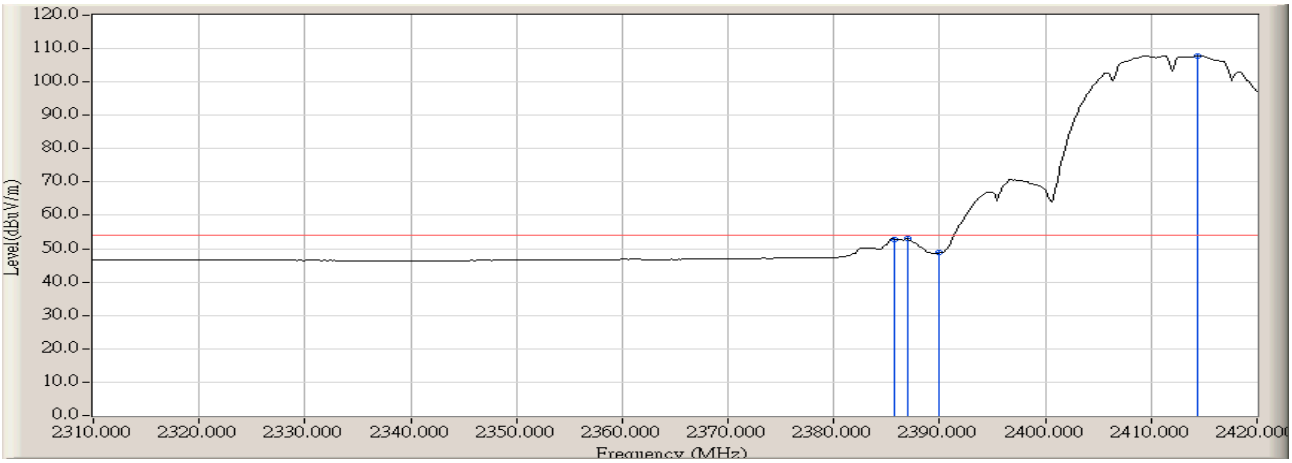
5.6. Test Result

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz – chain 010**



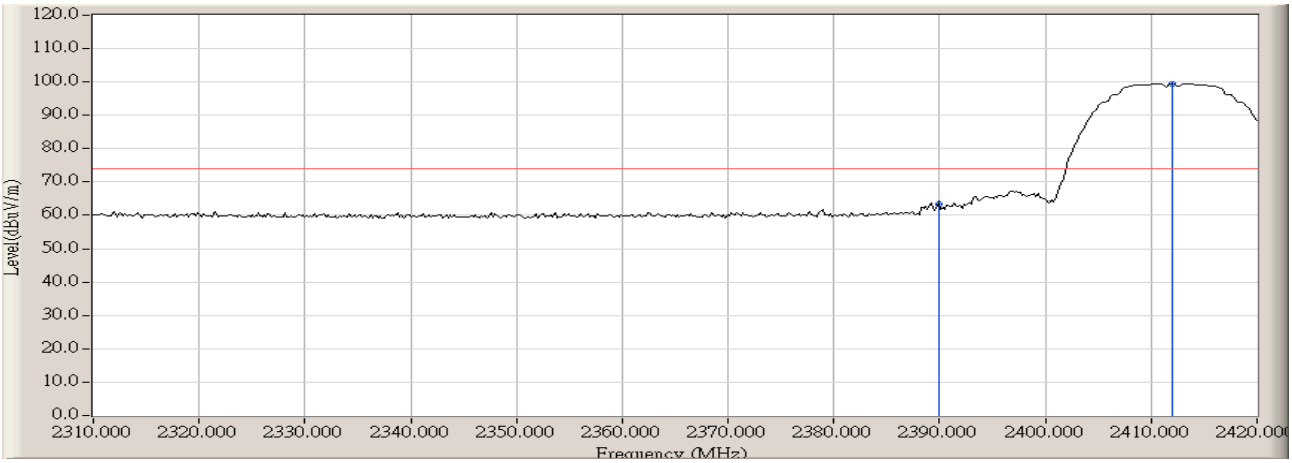
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2381.133	32.728	29.944	62.672	-11.298	73.970	PEAK
2		2387.183	32.724	31.070	63.794	-10.176	73.970	PEAK
3		2390.000	32.722	29.178	61.900	-12.070	73.970	PEAK
4	*	2411.933	32.731	78.965	111.697	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:15**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz – chain 010**



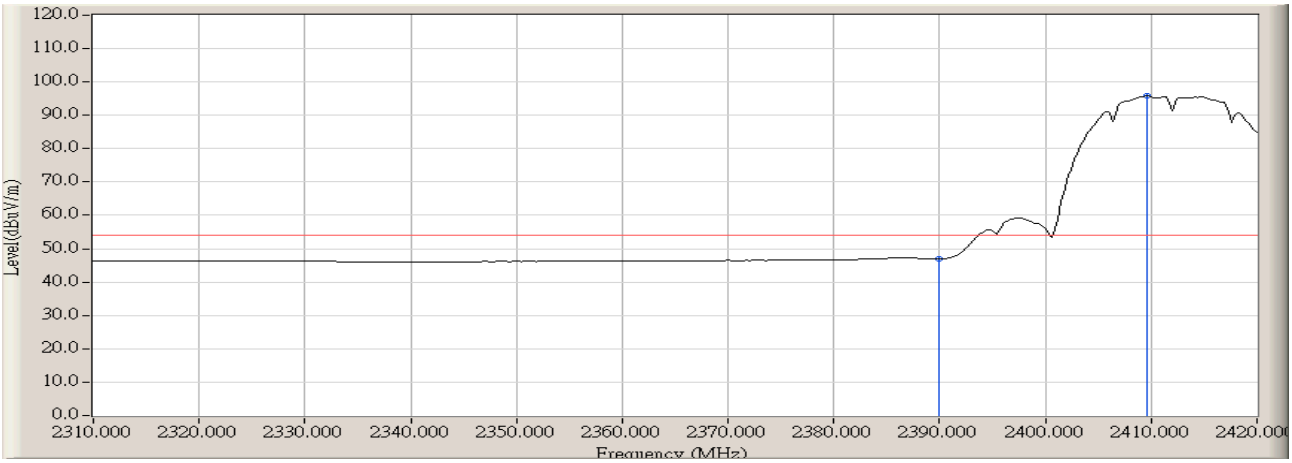
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2385.717	32.725	20.129	52.854	-1.116	53.970	AVERAGE
2		2387.000	32.724	20.276	53.000	-0.970	53.970	AVERAGE
3		2390.000	32.722	16.022	48.744	-5.226	53.970	AVERAGE
4	*	2414.317	32.736	75.101	107.837	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:21**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz – chain 010**



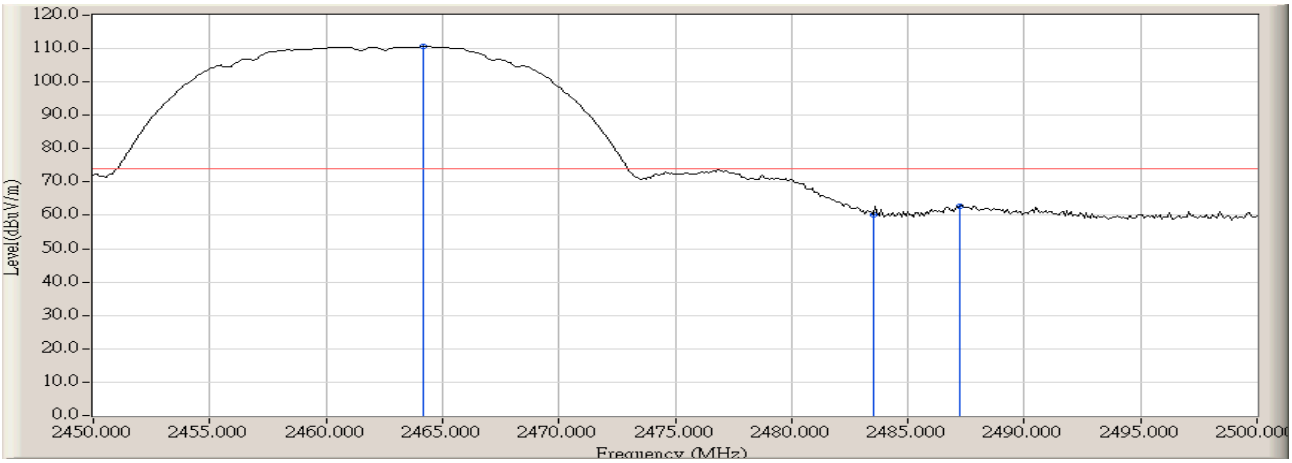
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.671	63.393	-10.577	73.970	PEAK
2	*	2411.933	32.731	66.830	99.562	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:22**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz – chain 010**



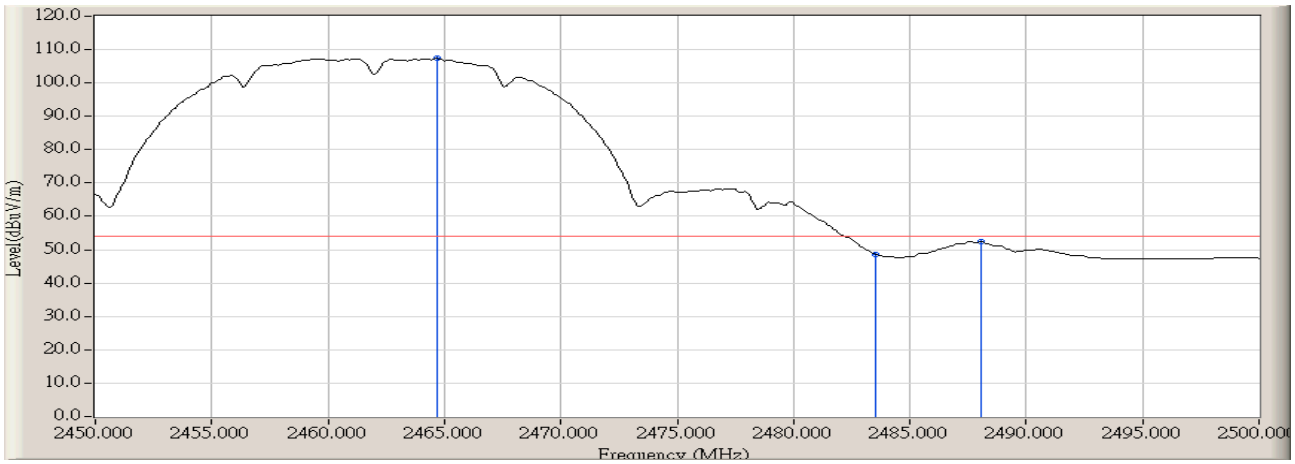
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	14.179	46.901	-7.069	53.970	AVERAGE
2	*	2409.550	32.729	63.193	95.922	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz – chain 010**



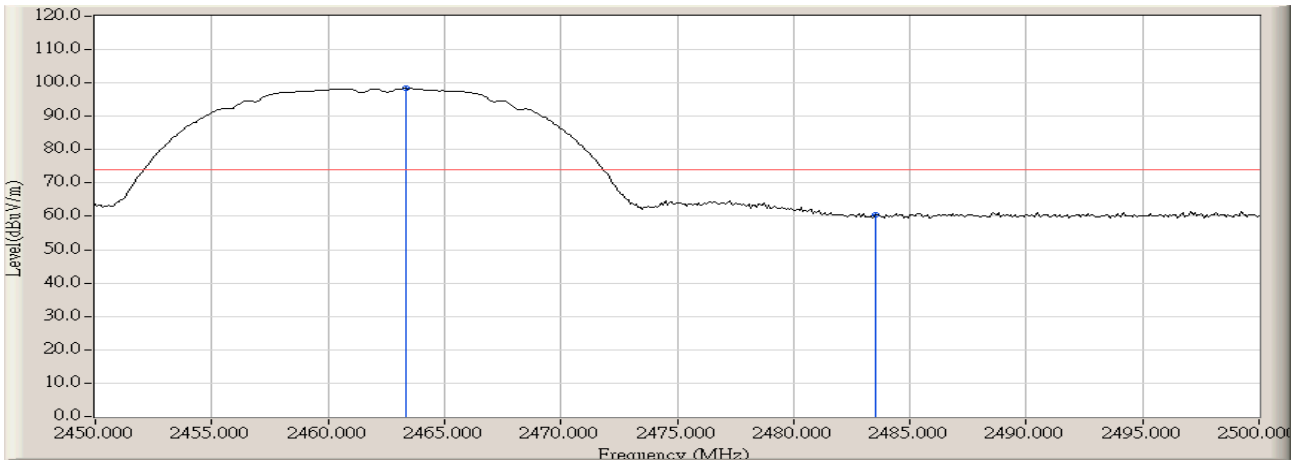
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.167	32.790	77.814	110.604	N/A	N/A	PEAK
2		2483.500	32.787	27.270	60.057	-13.913	73.970	PEAK
3		2487.250	32.785	30.053	62.838	-11.132	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz – chain 010**



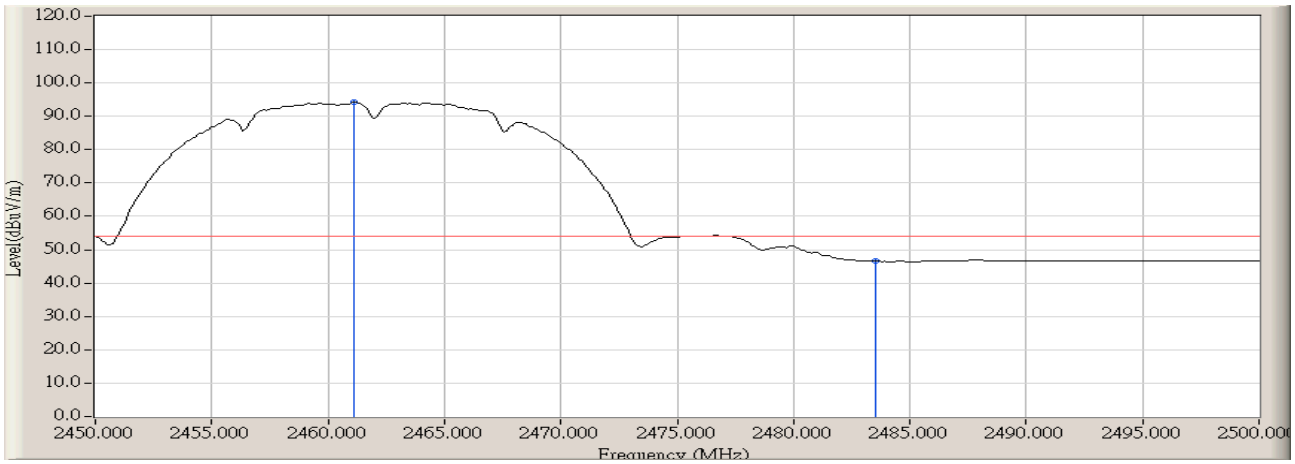
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.667	32.790	74.553	107.343	N/A	N/A	AVERAGE
2		2483.500	32.787	15.889	48.676	-5.294	53.970	AVERAGE
3		2488.083	32.785	19.594	52.379	-1.591	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz – chain 010**



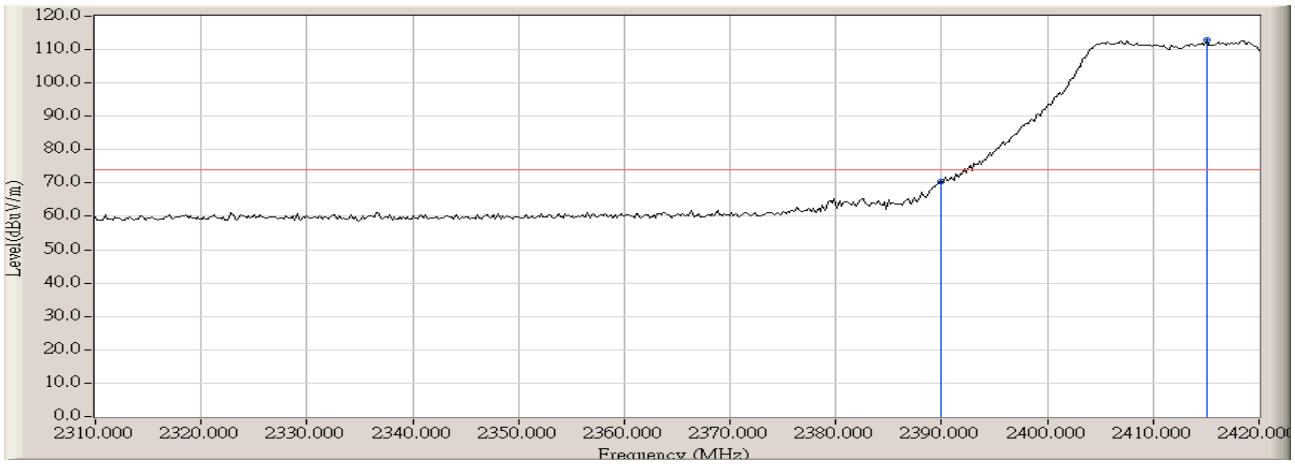
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.333	32.790	65.514	98.304	N/A	N/A	PEAK
2		2483.500	32.787	27.551	60.338	-13.632	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:35**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz – chain 010**



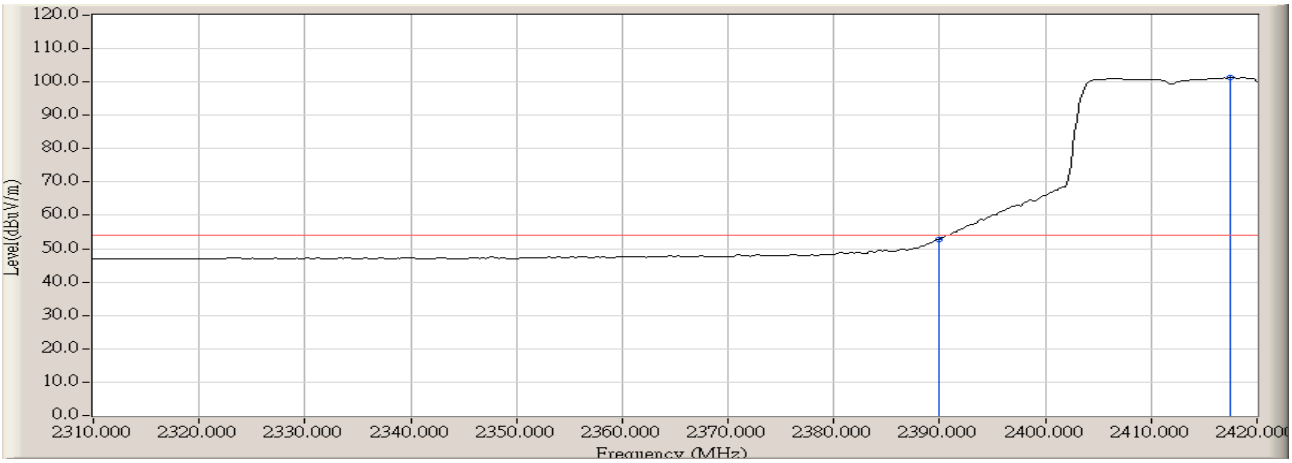
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.083	32.789	61.405	94.194	N/A	N/A	AVERAGE
2		2483.500	32.787	13.727	46.514	-7.456	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:45**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz – chain 010**



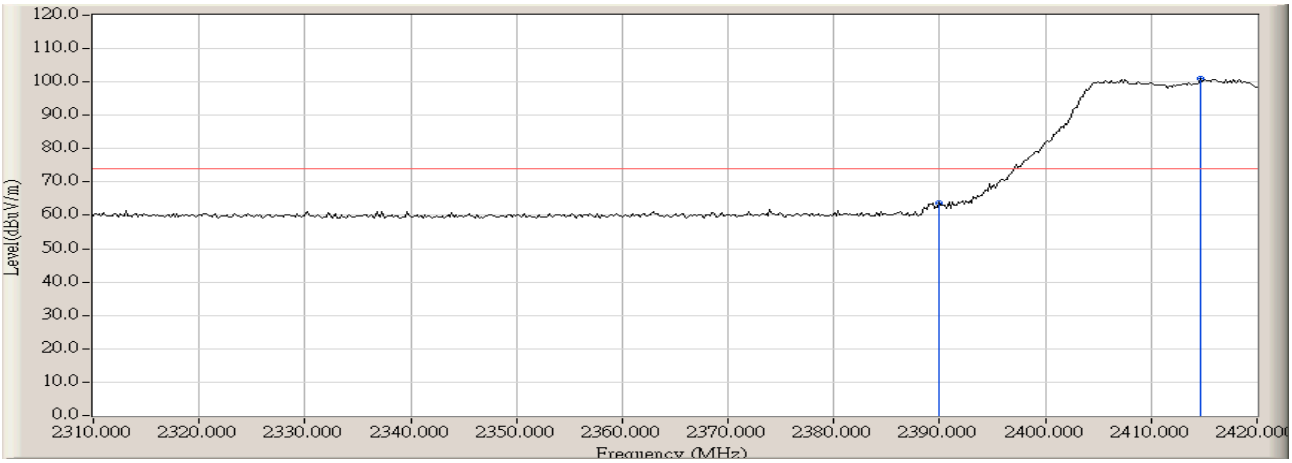
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	37.835	70.557	-3.413	73.970	PEAK
2	*	2415.050	32.738	80.336	113.073	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:44**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz – chain 010**



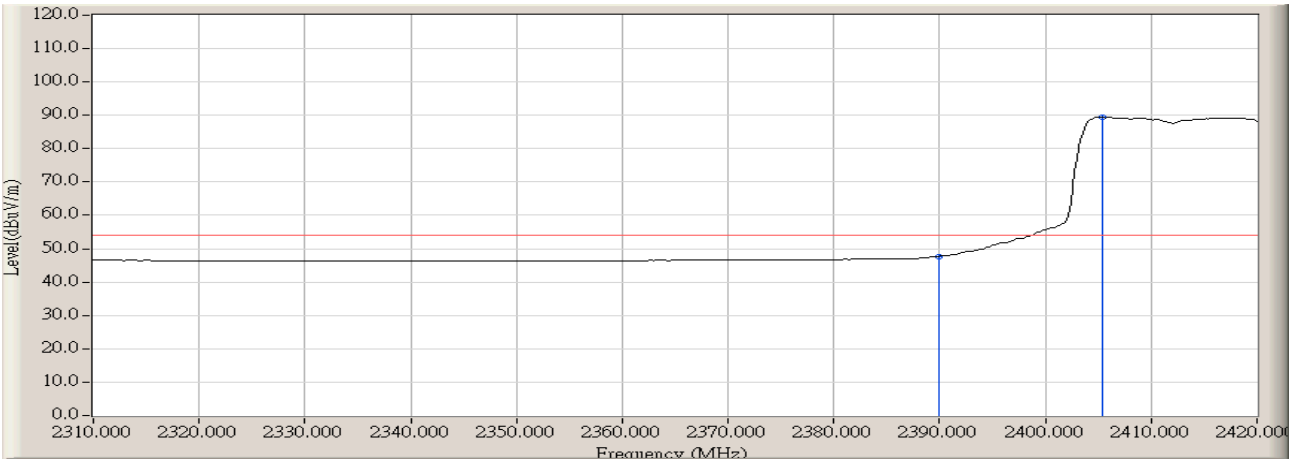
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.175	52.897	-1.073	53.970	AVERAGE
2	*	2417.433	32.741	68.530	101.271	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:48**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz – chain 010**



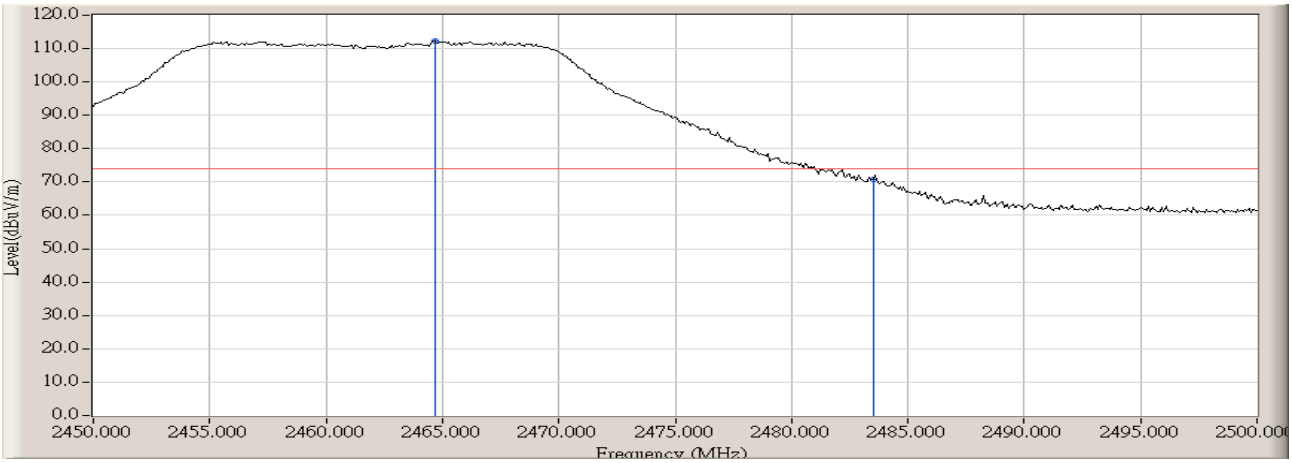
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.932	63.654	-10.316	73.970	PEAK
2	*	2414.683	32.737	68.442	101.179	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 16:49**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz – chain 010**



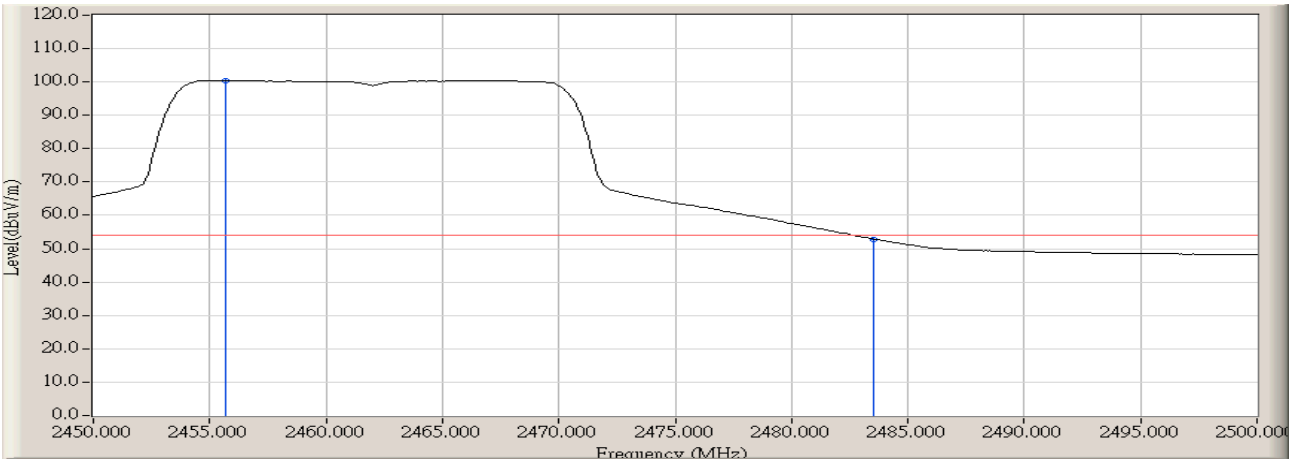
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	14.974	47.696	-6.274	53.970	AVERAGE
2	*	2405.333	32.726	56.762	89.489	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz – chain 010**



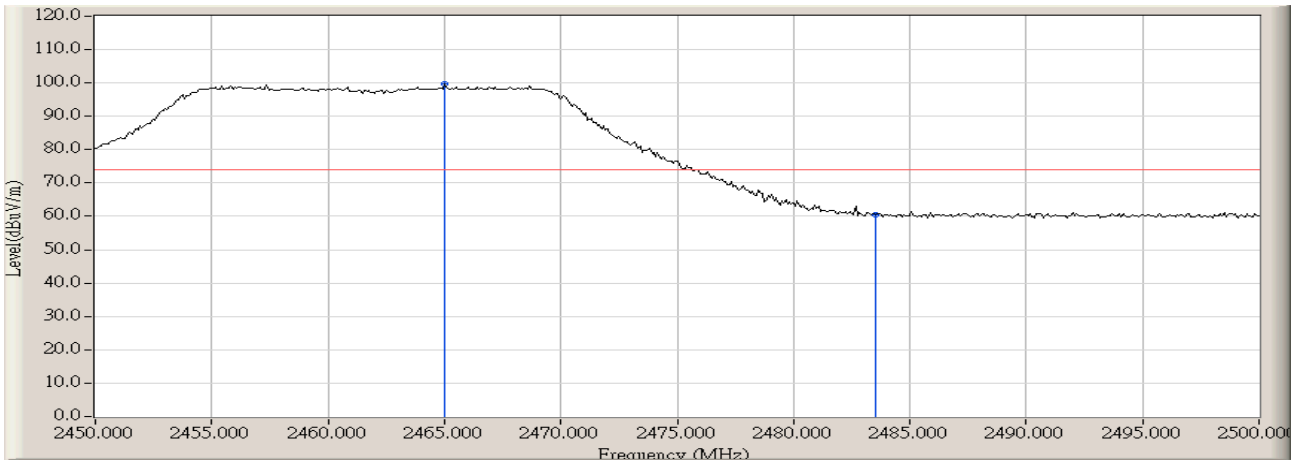
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.667	32.790	79.617	112.407	N/A	N/A	PEAK
2		2483.500	32.787	37.854	70.641	-3.329	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:00**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz – chain 010**



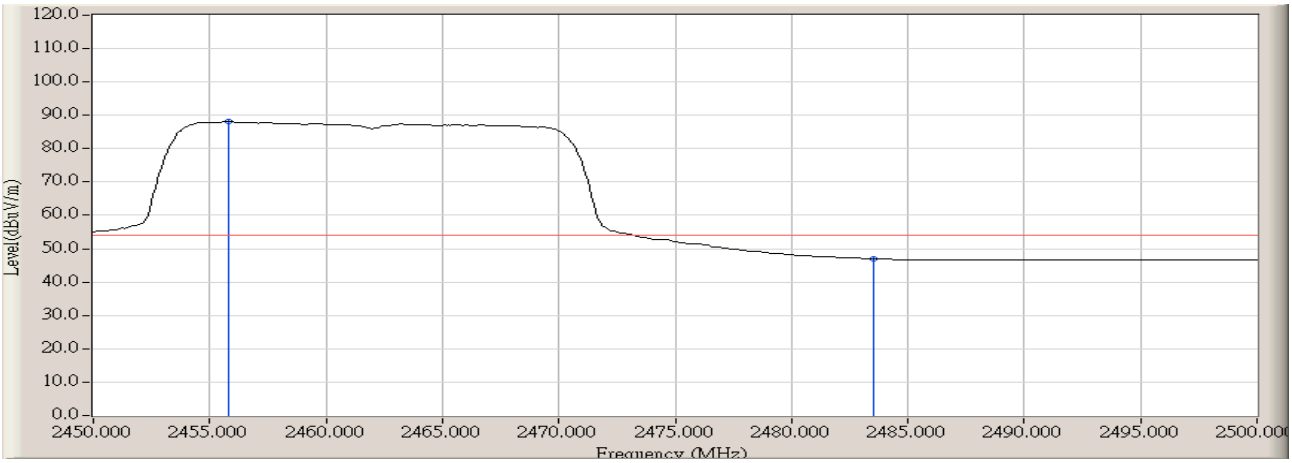
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.667	32.786	67.678	100.464	N/A	N/A	AVERAGE
2		2483.500	32.787	20.129	52.916	-1.054	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:05**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz – chain 010**



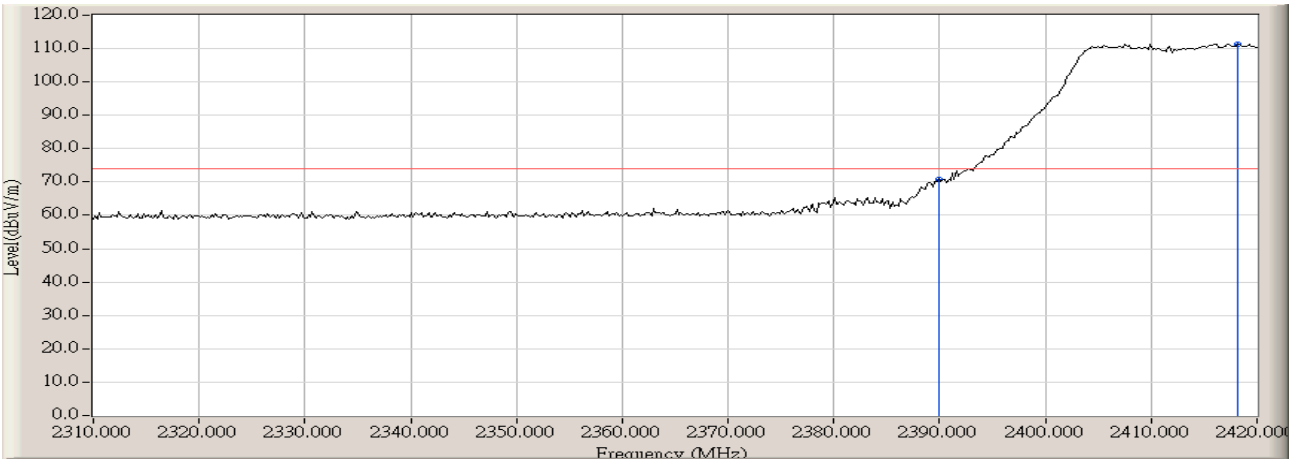
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.000	32.790	67.082	99.872	N/A	N/A	PEAK
2		2483.500	32.787	27.607	60.394	-13.576	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:06**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz – chain 010**



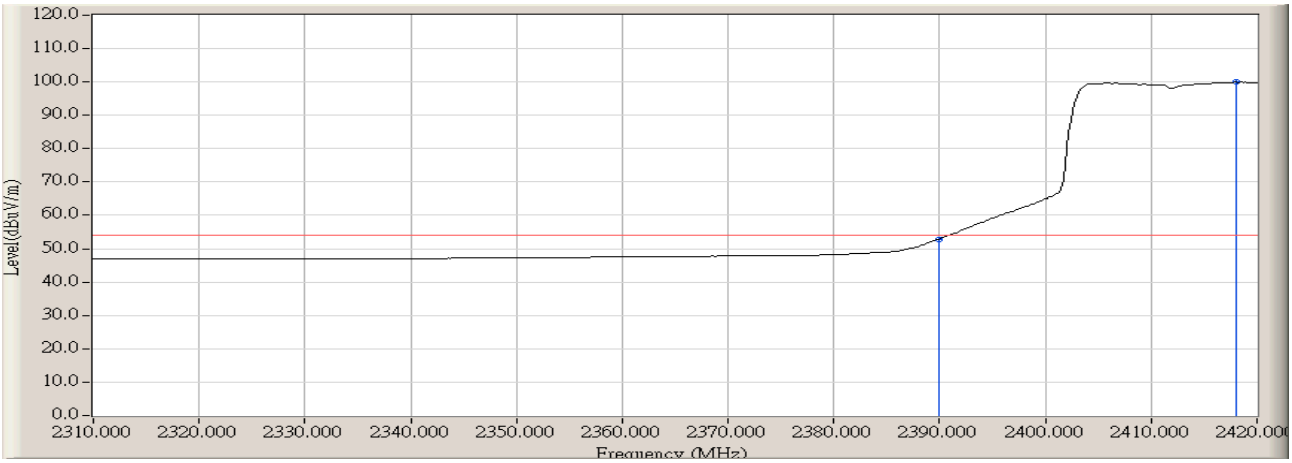
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.833	32.786	55.392	88.178	N/A	N/A	AVERAGE
2		2483.500	32.787	14.192	46.979	-6.991	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz – chain 010**



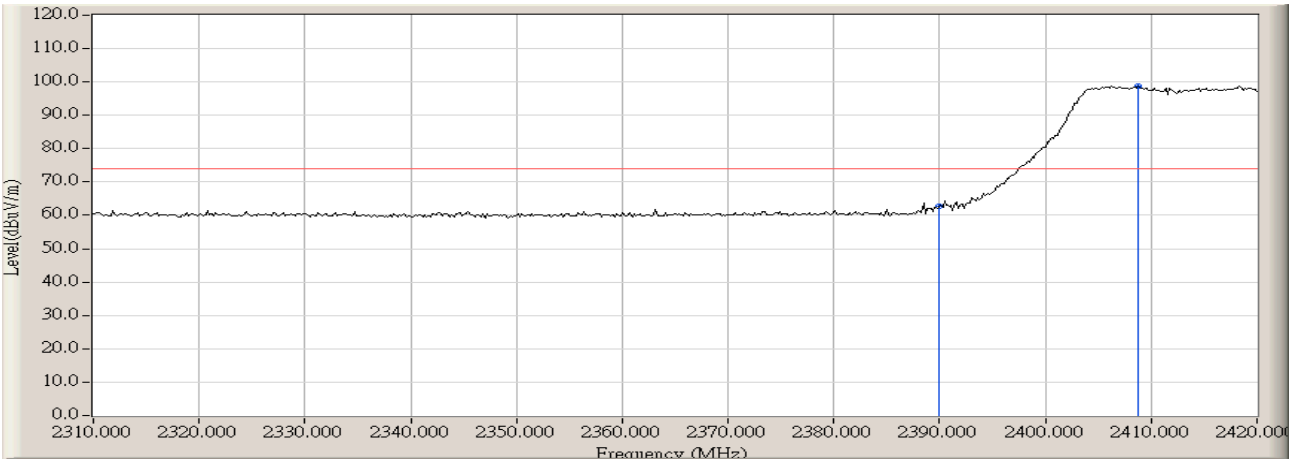
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	37.932	70.654	-3.316	73.970	PEAK
2	*	2418.167	32.743	78.667	111.410	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz – chain 010**



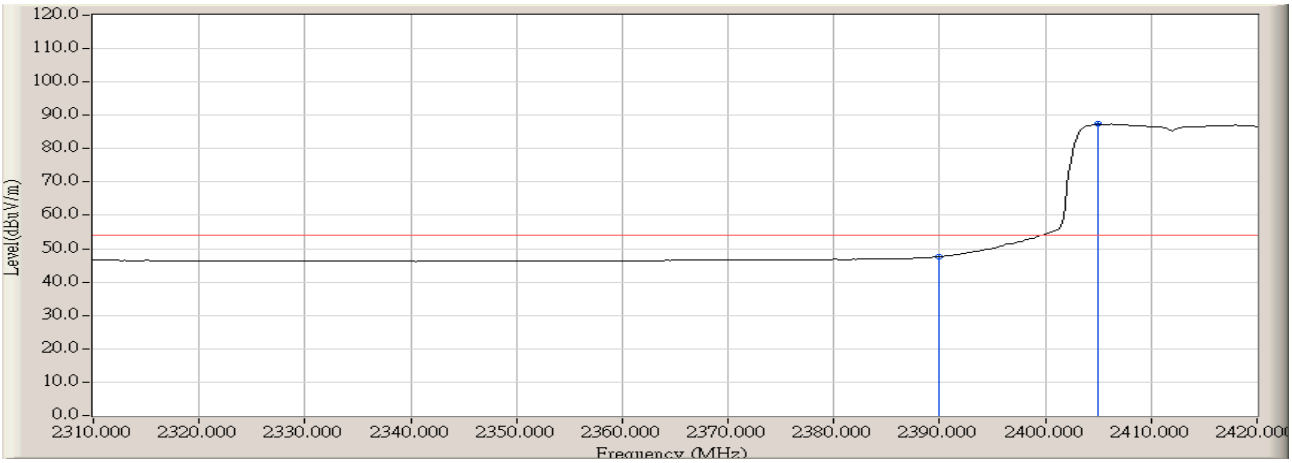
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.193	52.915	-1.055	53.970	AVERAGE
2	*	2417.983	32.742	67.163	99.905	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:27**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz – chain 010**



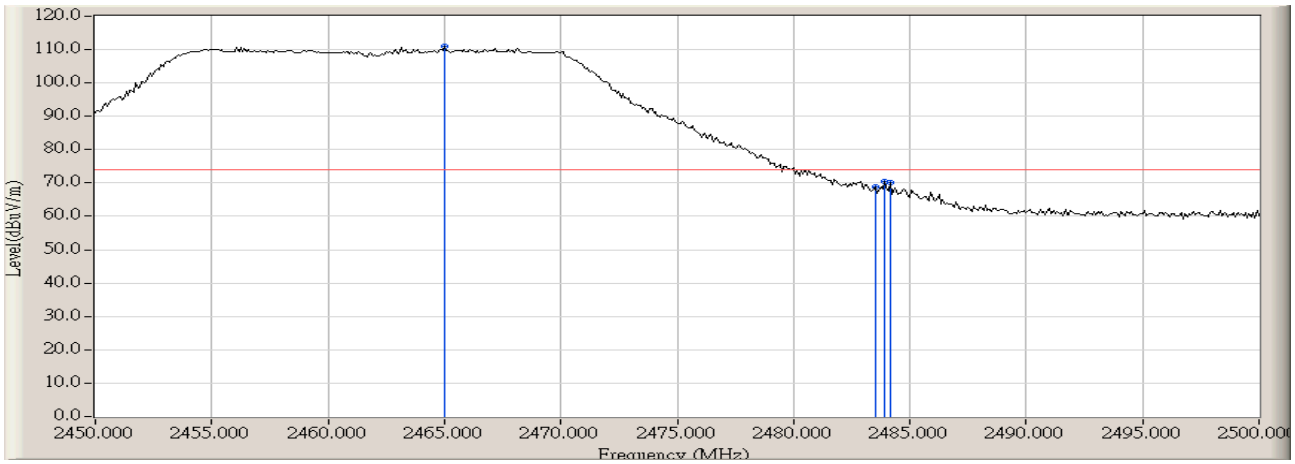
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.062	62.784	-11.186	73.970	PEAK
2	*	2408.817	32.728	66.167	98.896	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:27**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz – chain 010**



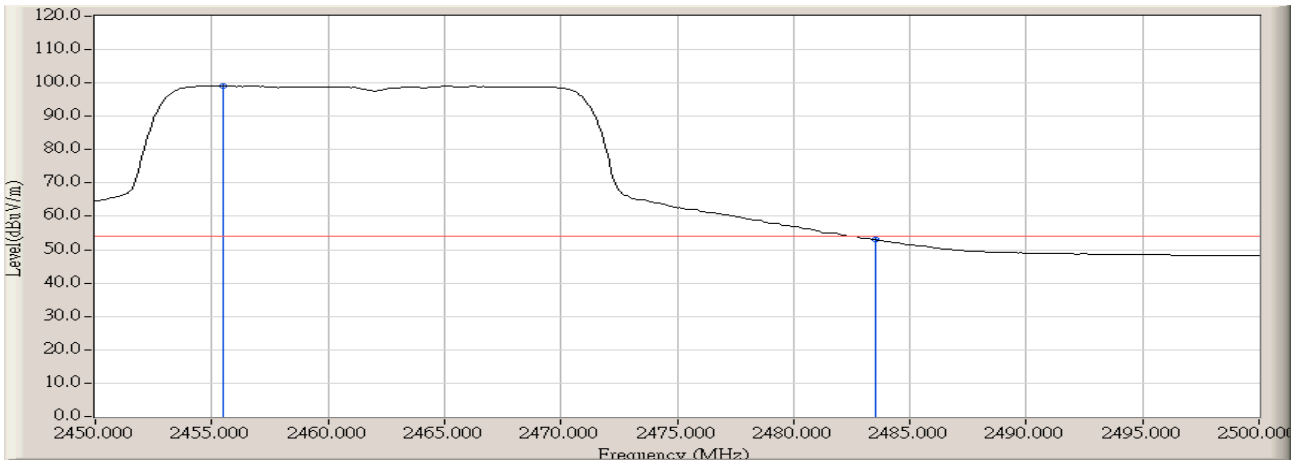
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	14.980	47.702	-6.268	53.970	AVERAGE
2	*	2404.967	32.727	54.666	87.392	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:34**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz – chain 010**



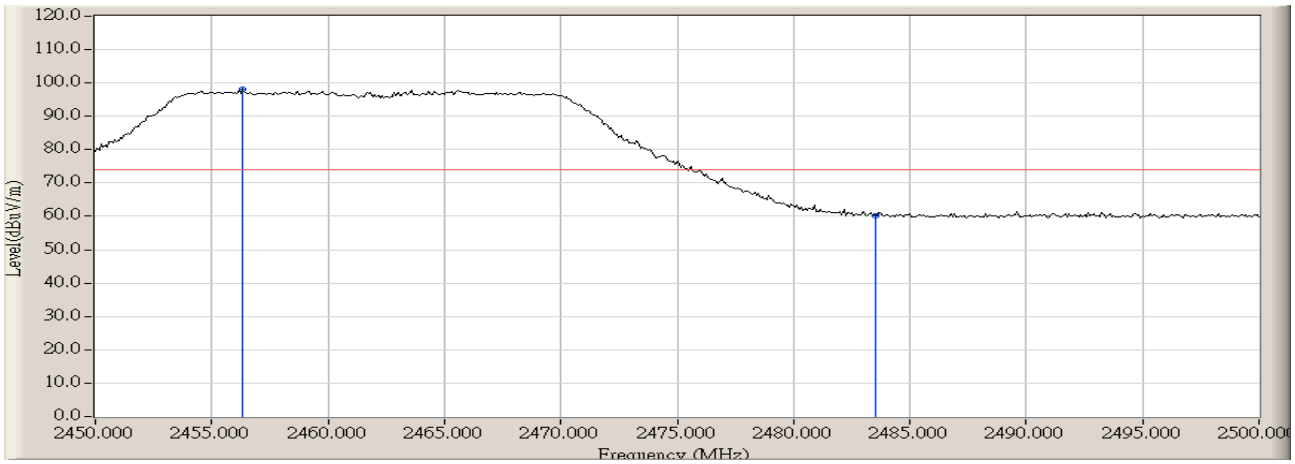
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.000	32.790	78.245	111.035	N/A	N/A	PEAK
2		2483.500	32.787	35.982	68.769	-5.201	73.970	PEAK
3		2483.917	32.787	37.638	70.425	-3.545	73.970	PEAK
4		2484.167	32.787	37.505	70.292	-3.678	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:34**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz – chain 010**



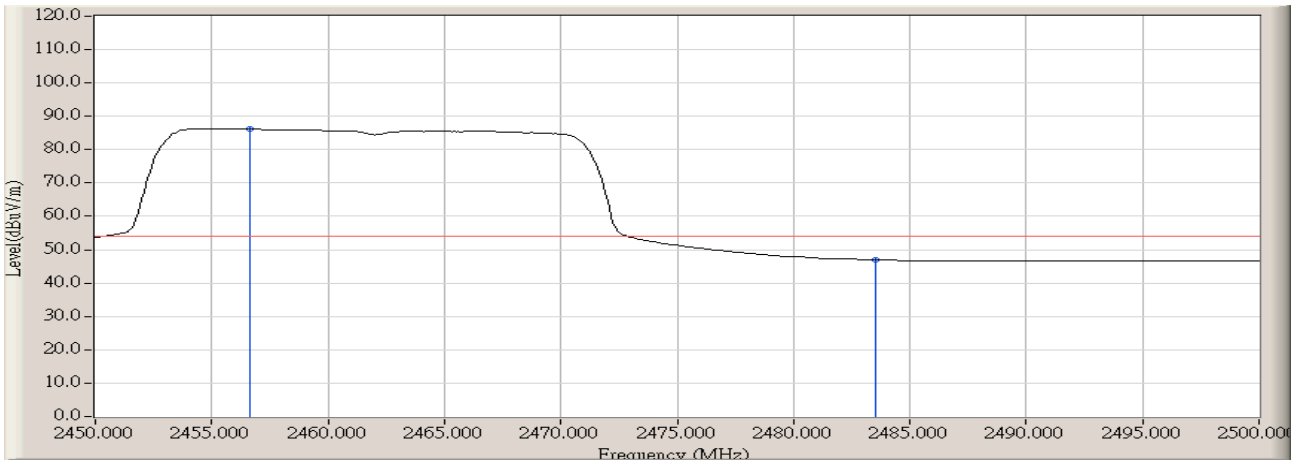
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.500	32.786	66.315	99.101	N/A	N/A	AVERAGE
2		2483.500	32.787	20.147	52.934	-1.036	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:39**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz – chain 010**



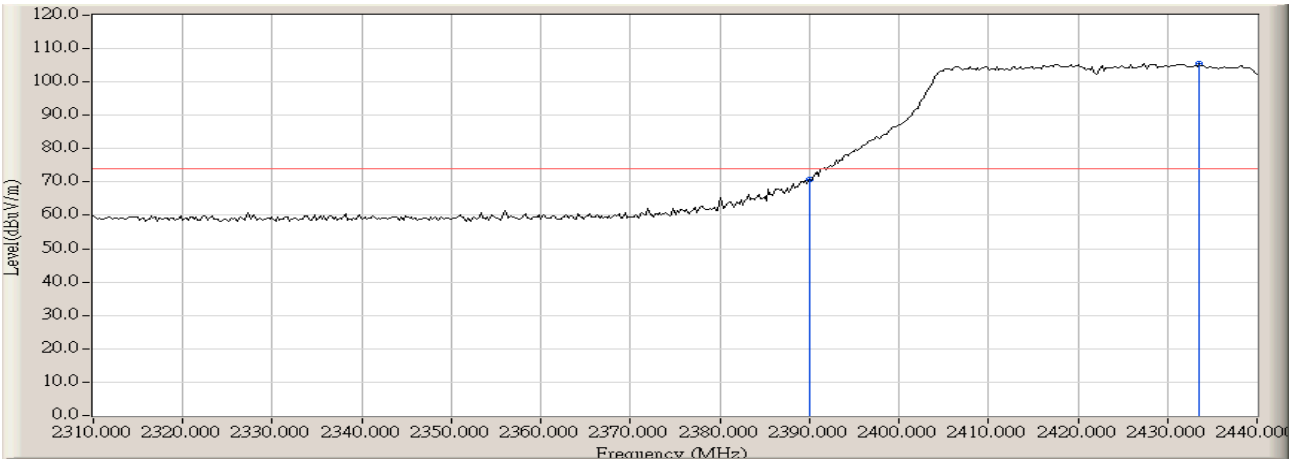
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.333	32.787	65.245	98.032	N/A	N/A	PEAK
2		2483.500	32.787	27.482	60.269	-13.701	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:39**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz – chain 010**



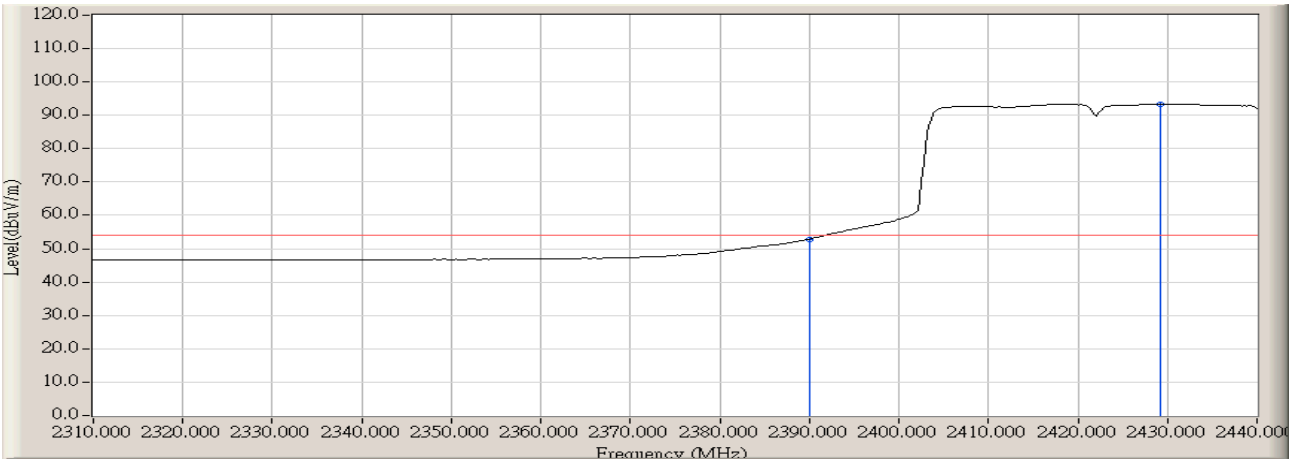
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.667	32.787	53.584	86.371	N/A	N/A	AVERAGE
2		2483.500	32.787	14.189	46.976	-6.994	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:51**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz – chain 010**



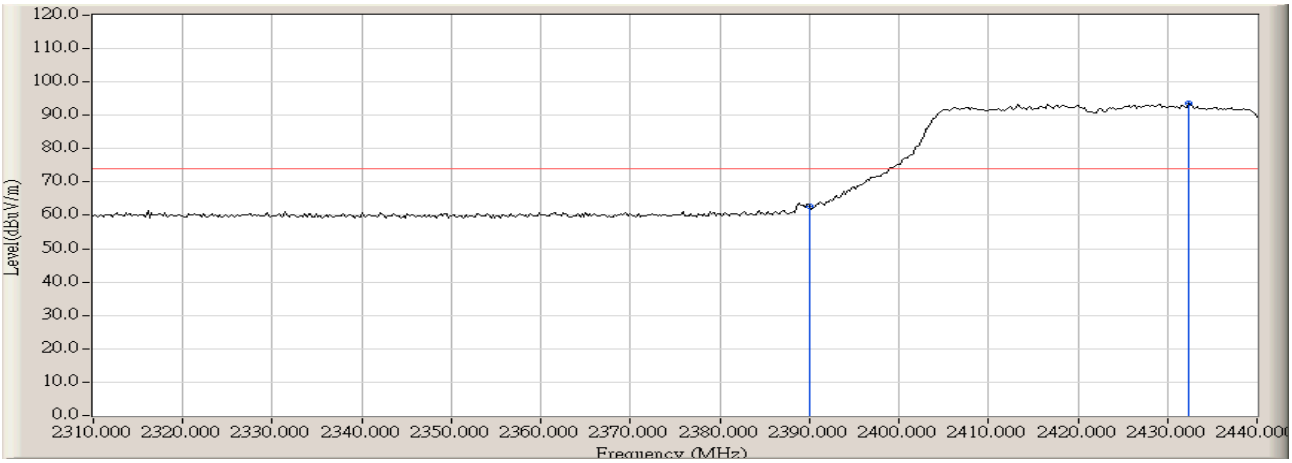
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	38.056	70.778	-3.192	73.970	PEAK
2	*	2433.500	32.767	72.730	105.496	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz – chain 010**



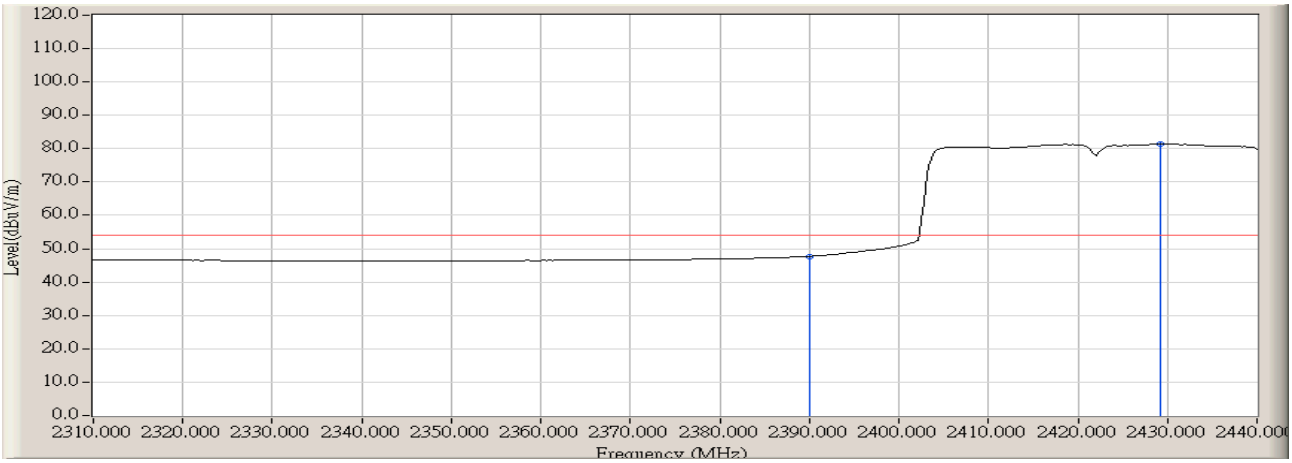
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.180	52.902	-1.068	53.970	AVERAGE
2	*	2429.167	32.761	60.668	93.429	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz – chain 010**



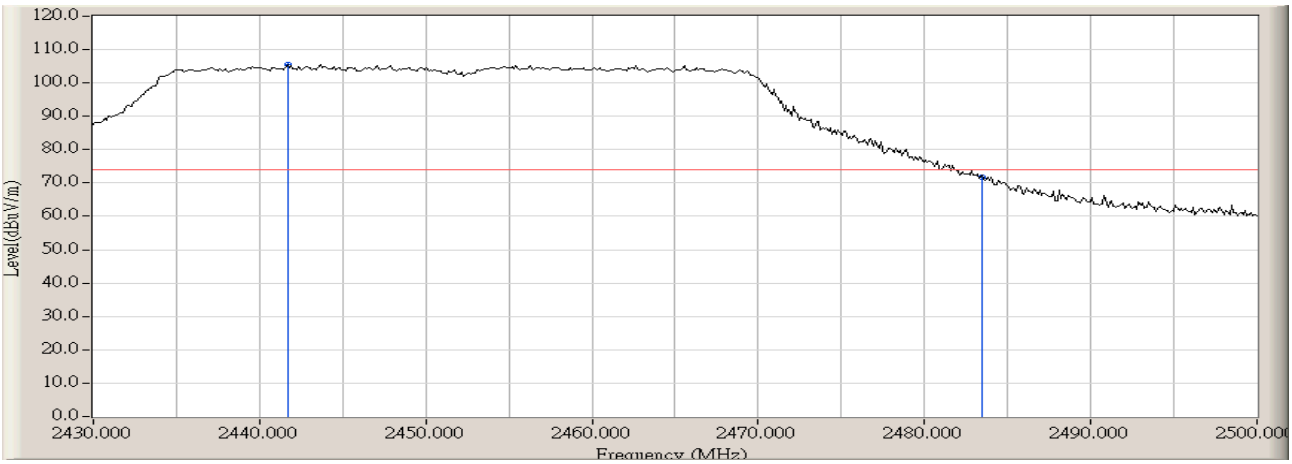
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.112	62.834	-11.136	73.970	PEAK
2	*	2432.417	32.765	60.861	93.626	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 17:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz – chain 010**



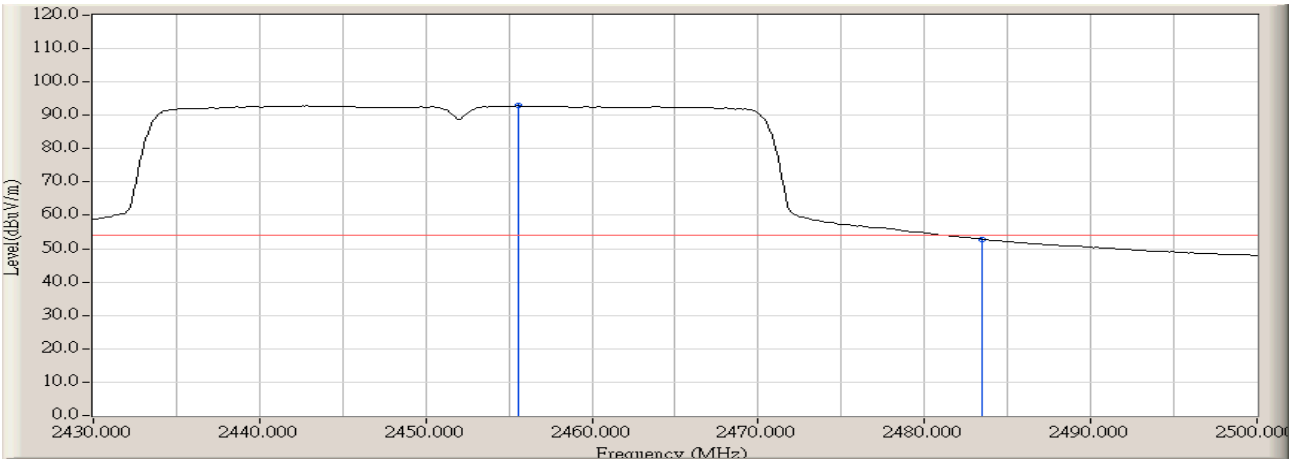
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	14.984	47.706	-6.264	53.970	AVERAGE
2	*	2429.167	32.761	48.649	81.410	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 18:05**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 010**



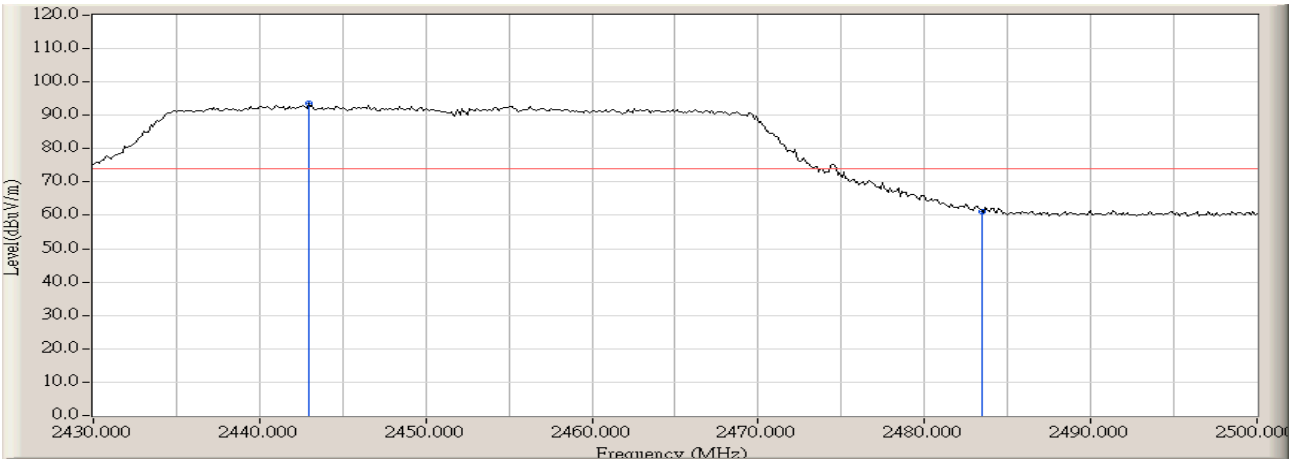
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2441.667	32.776	72.753	105.529	N/A	N/A	PEAK
2		2483.500	32.787	39.068	71.855	-2.115	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 18:05**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 010**



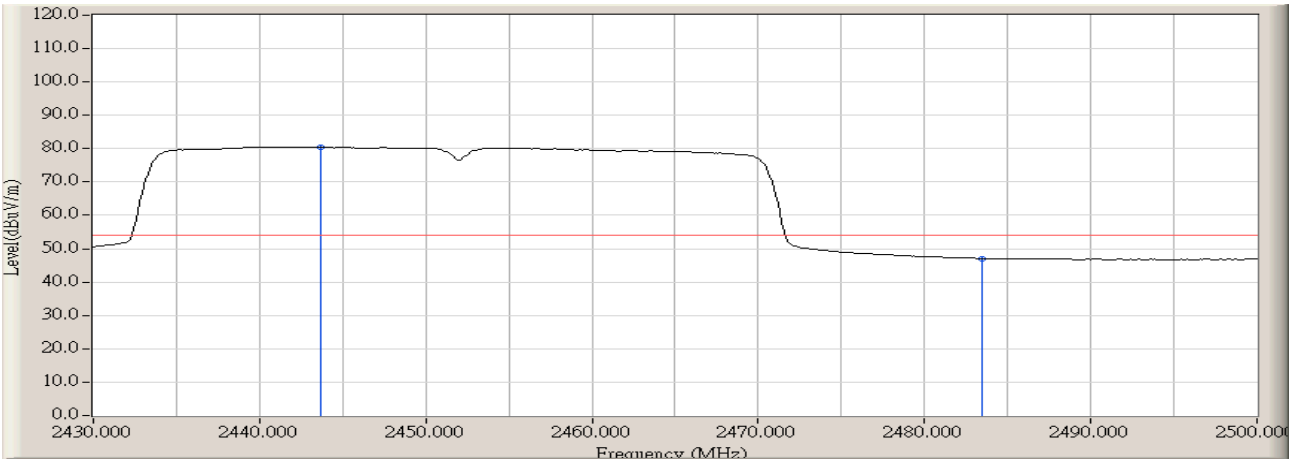
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.550	32.786	60.050	92.836	N/A	N/A	AVERAGE
2		2483.500	32.787	19.979	52.766	-1.204	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 18:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 010**



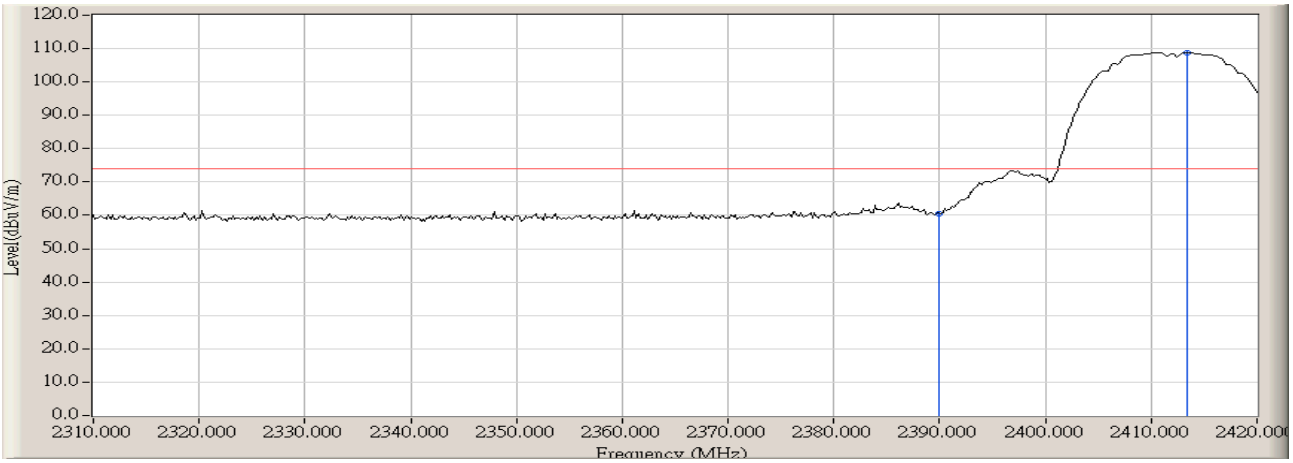
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2442.950	32.777	60.830	93.608	N/A	N/A	PEAK
2		2483.500	32.787	28.197	60.984	-12.986	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 18:11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 010**



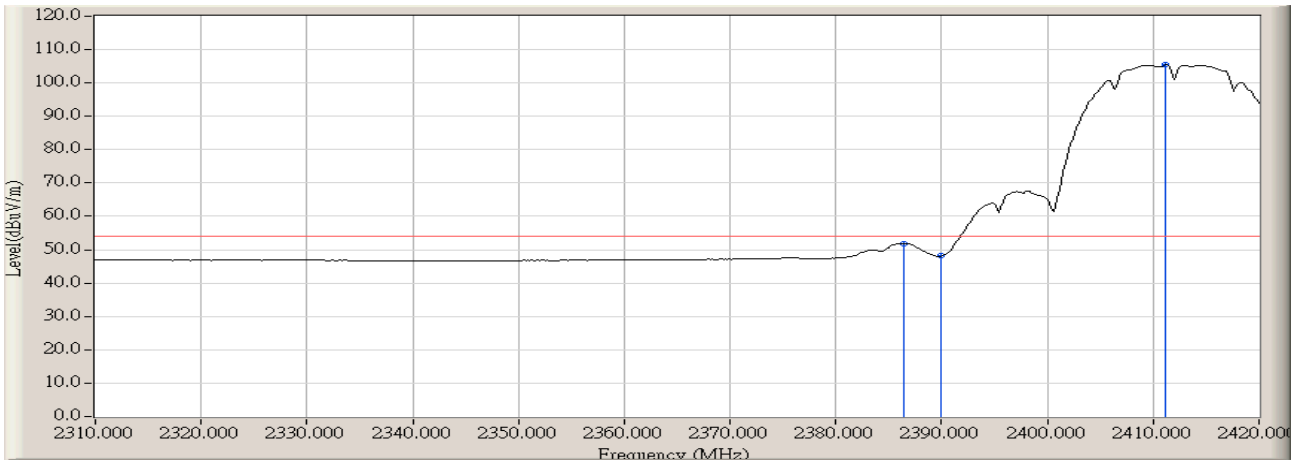
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2443.650	32.779	47.809	80.587	N/A	N/A	AVERAGE
2		2483.500	32.787	14.300	47.087	-6.883	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 11:40**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz– chain 100**



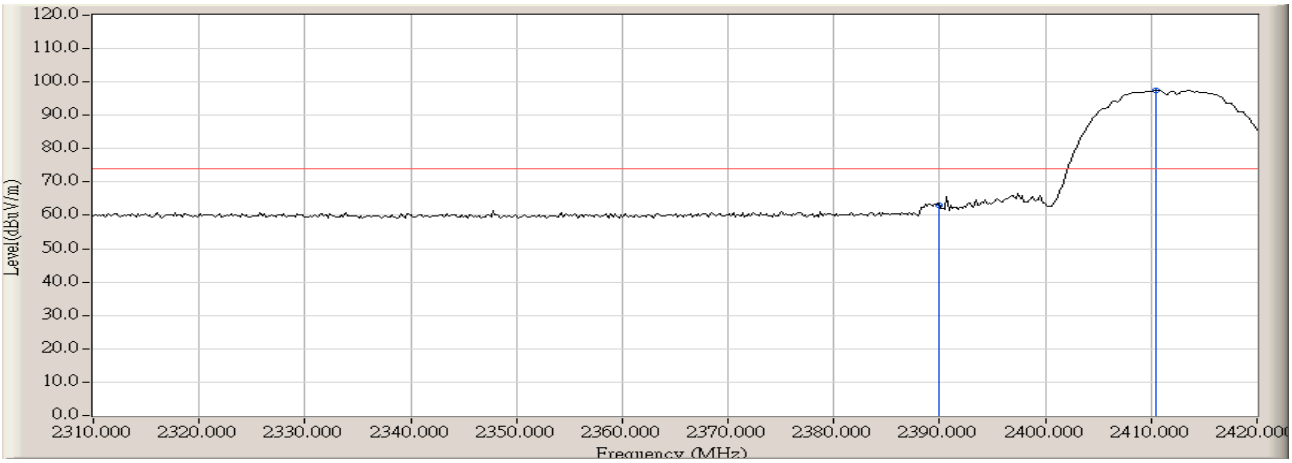
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	27.900	60.622	-13.348	73.970	PEAK
2	*	2413.400	32.735	76.031	108.765	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 11:38**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412 MHz– chain 100**



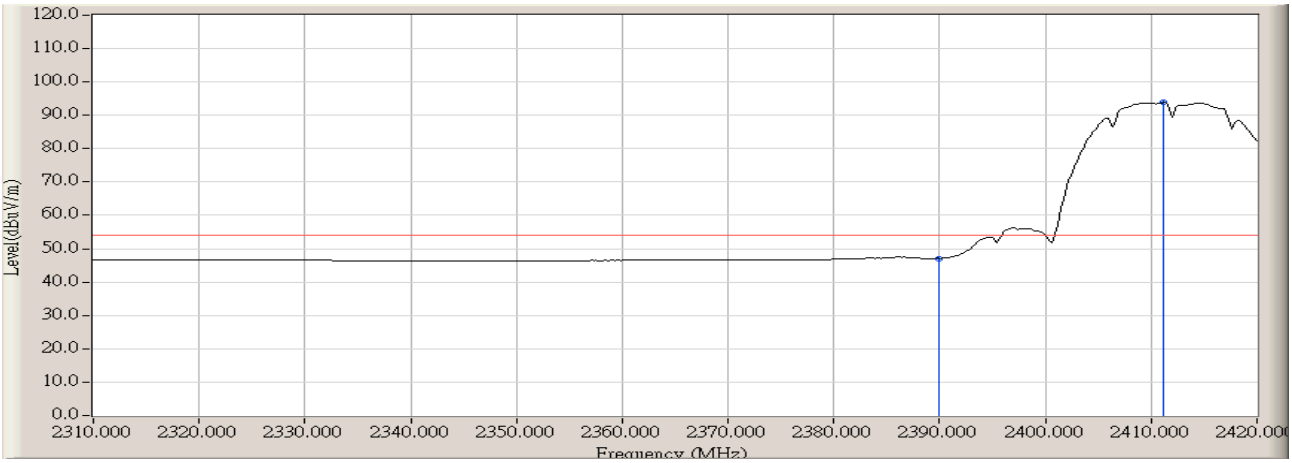
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.450	32.724	19.114	51.838	-2.132	53.970	AVERAGE
2		2390.000	32.722	15.412	48.134	-5.836	53.970	AVERAGE
3	*	2411.200	32.730	72.666	105.396	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 11:43**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412 MHz– chain 100**



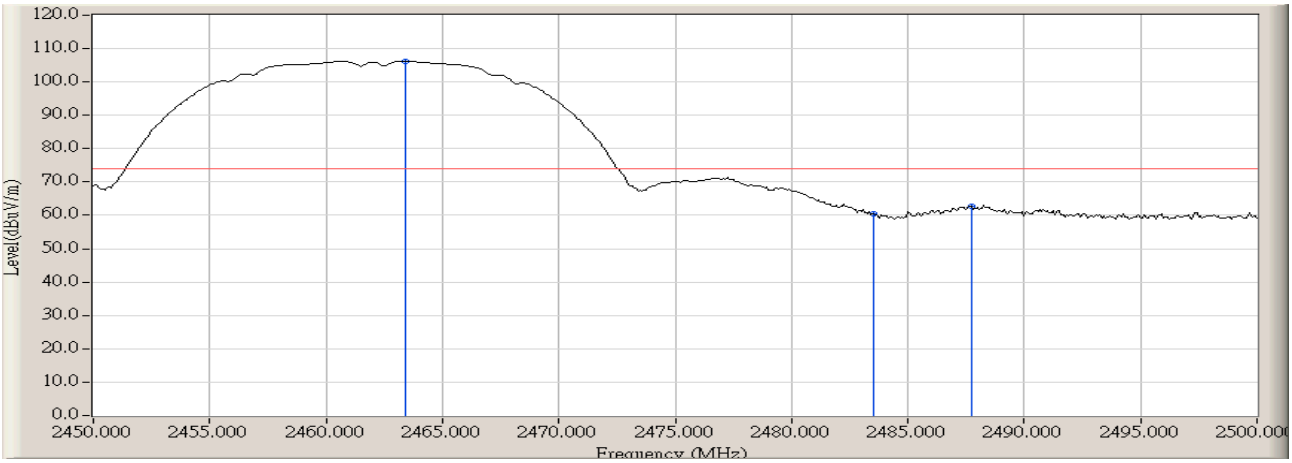
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.255	62.977	-10.993	73.970	PEAK
2	*	2410.467	32.729	64.660	97.390	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 11:44**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412 MHz– chain 100**



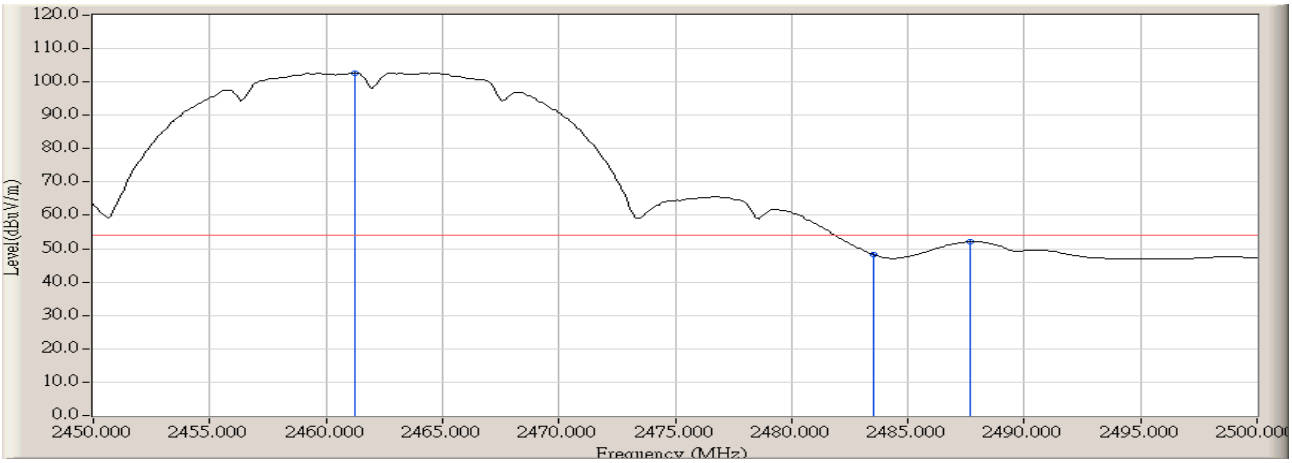
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	14.404	47.126	-6.844	53.970	AVERAGE
2	*	2411.200	32.730	61.060	93.790	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 12:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462 MHz– chain 100**



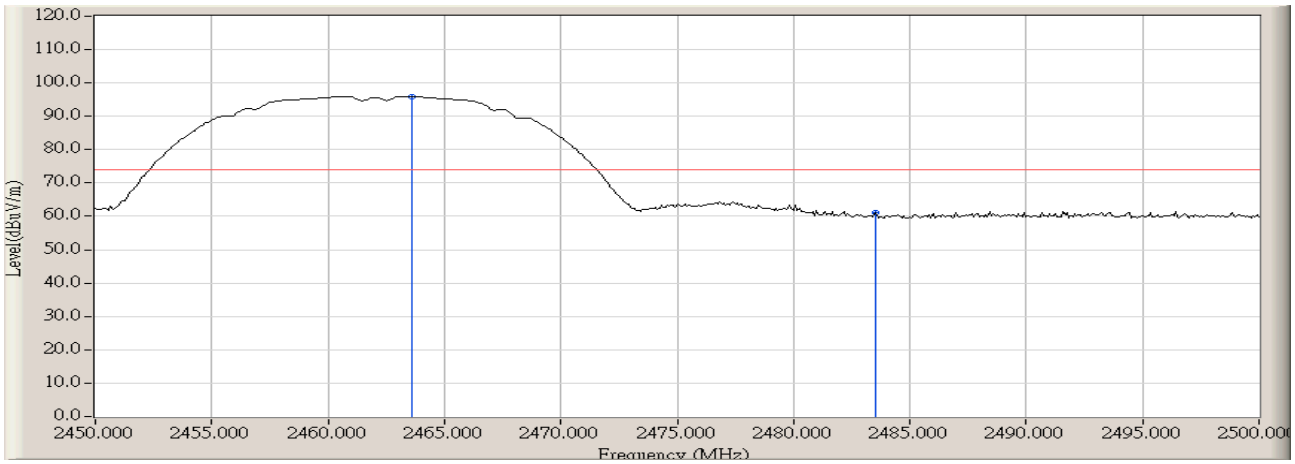
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.417	32.790	73.335	106.125	N/A	N/A	PEAK
2		2483.500	32.787	27.549	60.336	-13.634	73.970	PEAK
3		2487.750	32.785	30.048	62.833	-11.137	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 12:01**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462 MHz– chain 100**



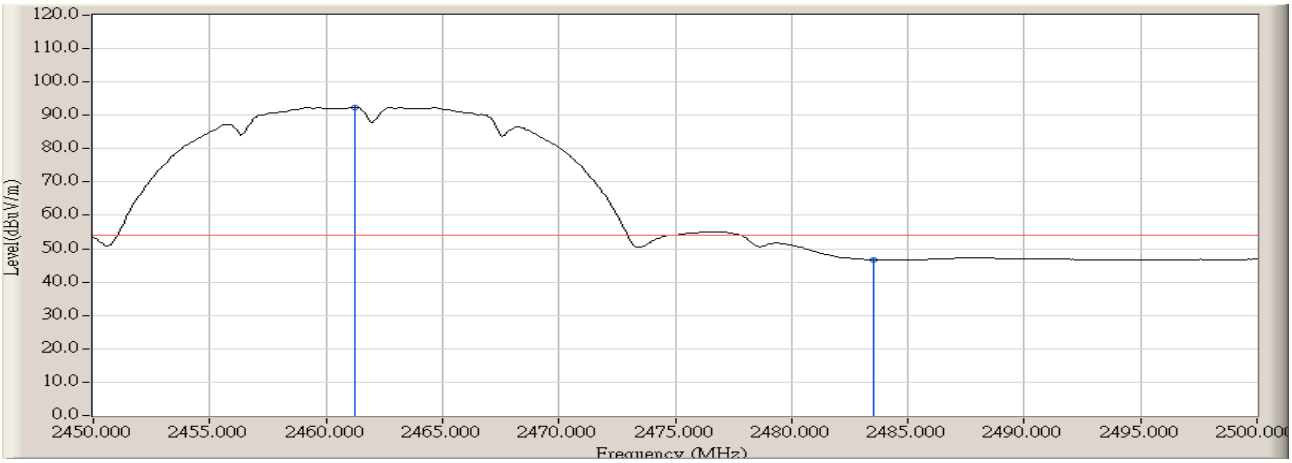
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	32.790	69.972	102.762	N/A	N/A	AVERAGE
2		2483.500	32.787	15.431	48.218	-5.752	53.970	AVERAGE
3		2487.667	32.785	19.292	52.077	-1.893	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 12:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462 MHz– chain 100**



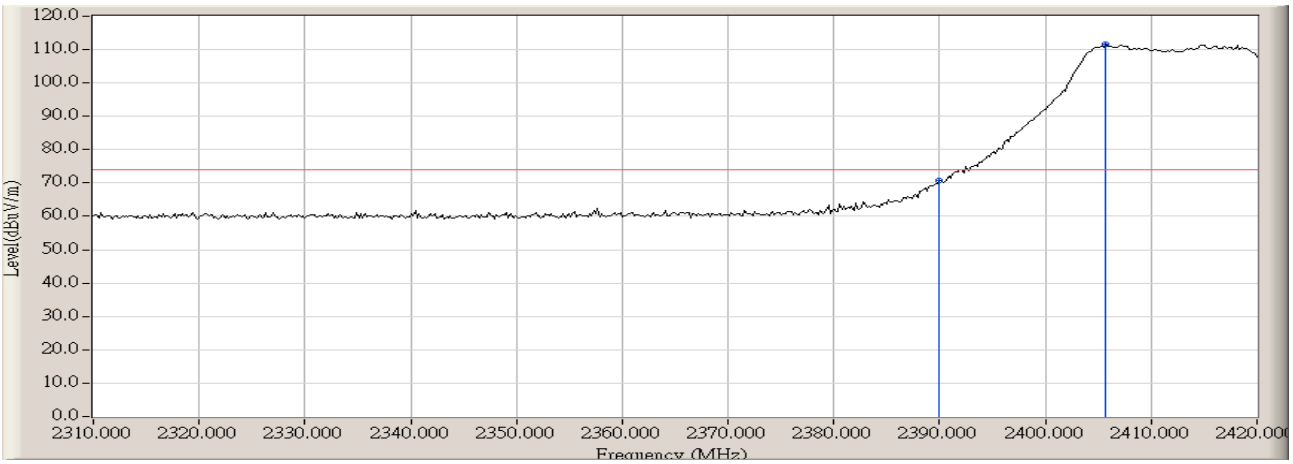
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.583	32.790	63.186	95.976	N/A	N/A	PEAK
2		2483.500	32.787	28.280	61.067	-12.903	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 12:05**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462 MHz– chain 100**



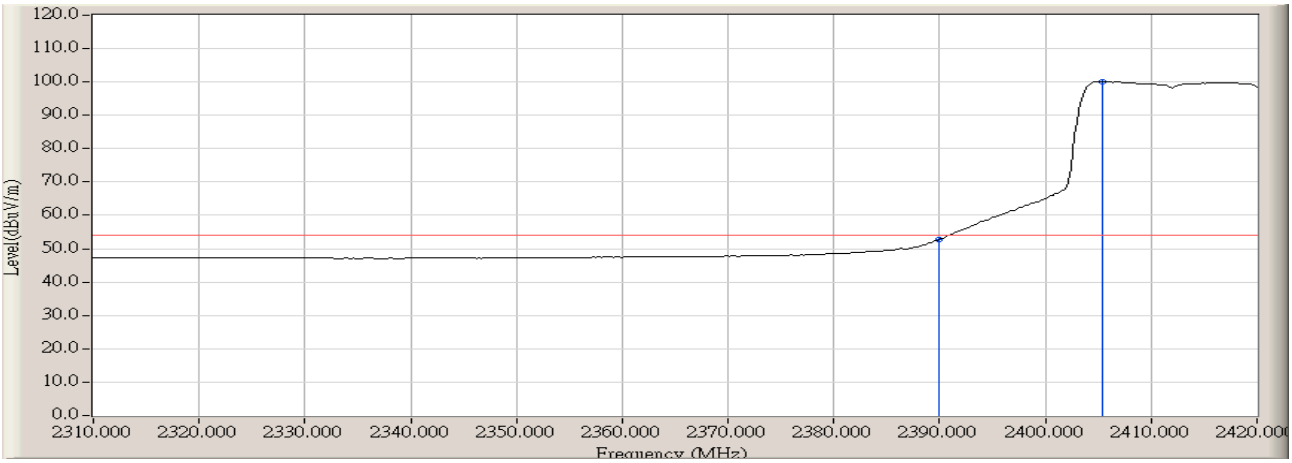
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	32.790	59.693	92.483	N/A	N/A	AVERAGE
2		2483.500	32.787	13.900	46.687	-7.283	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412 MHz– chain 100**



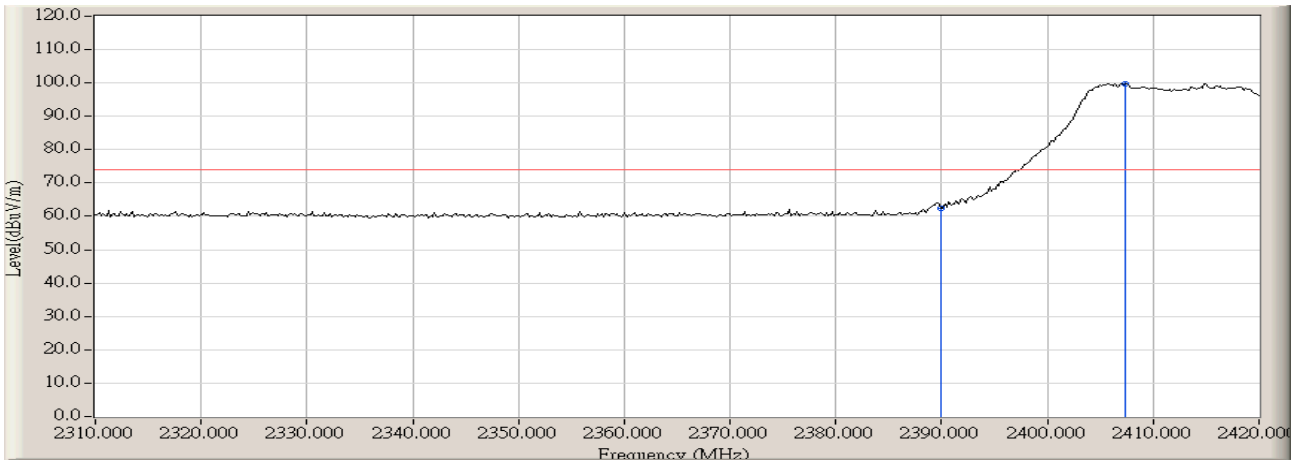
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	37.939	70.661	-3.309	73.970	PEAK
2	*	2405.700	32.727	78.753	111.480	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412 MHz– chain 100**



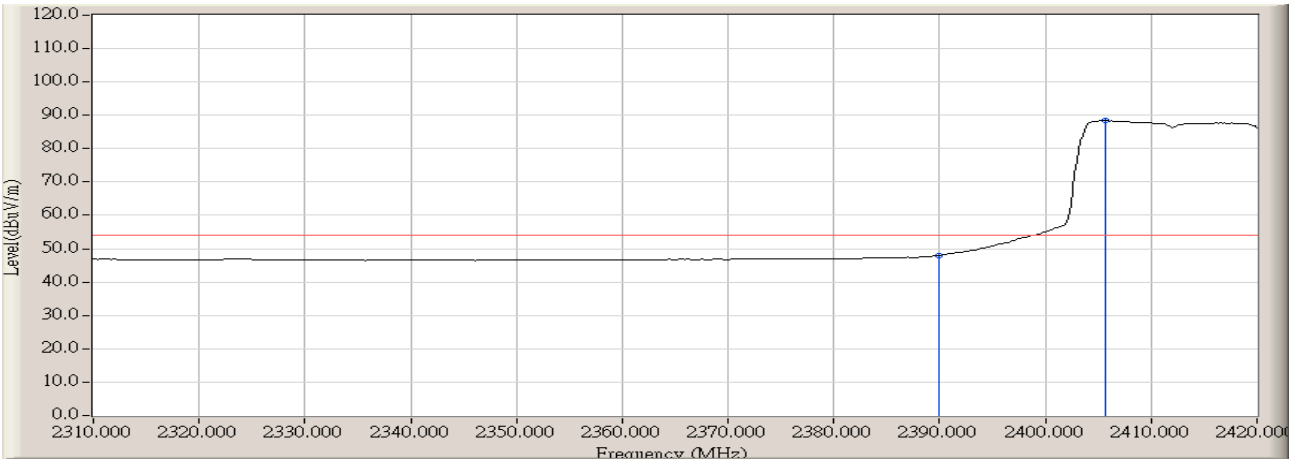
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.173	52.895	-1.075	53.970	AVERAGE
2	*	2405.333	32.726	67.424	100.151	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:12**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412 MHz– chain 100**



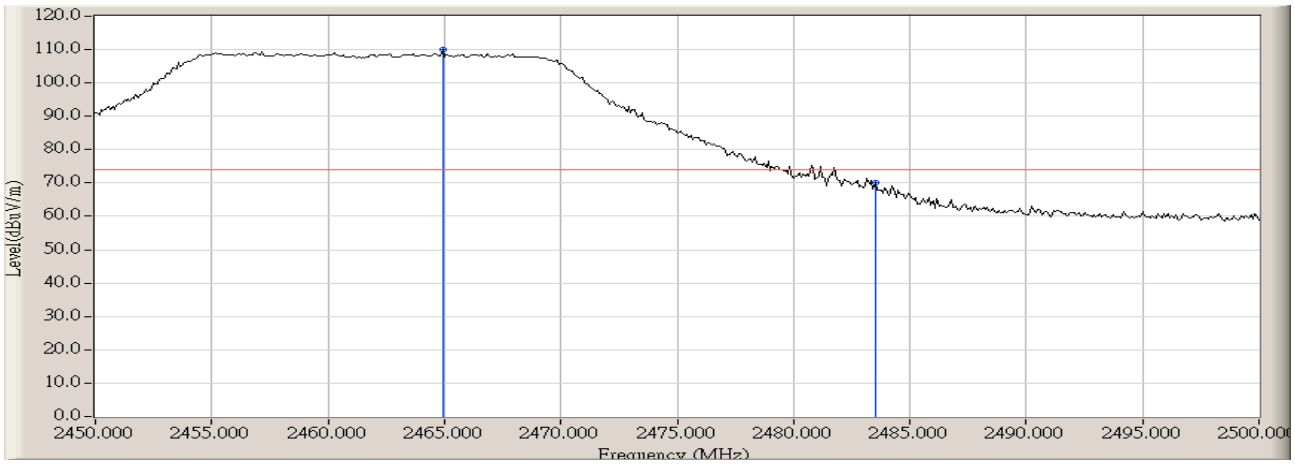
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	29.712	62.434	-11.536	73.970	PEAK
2	*	2407.350	32.728	67.015	99.743	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:13**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412 MHz– chain 100**



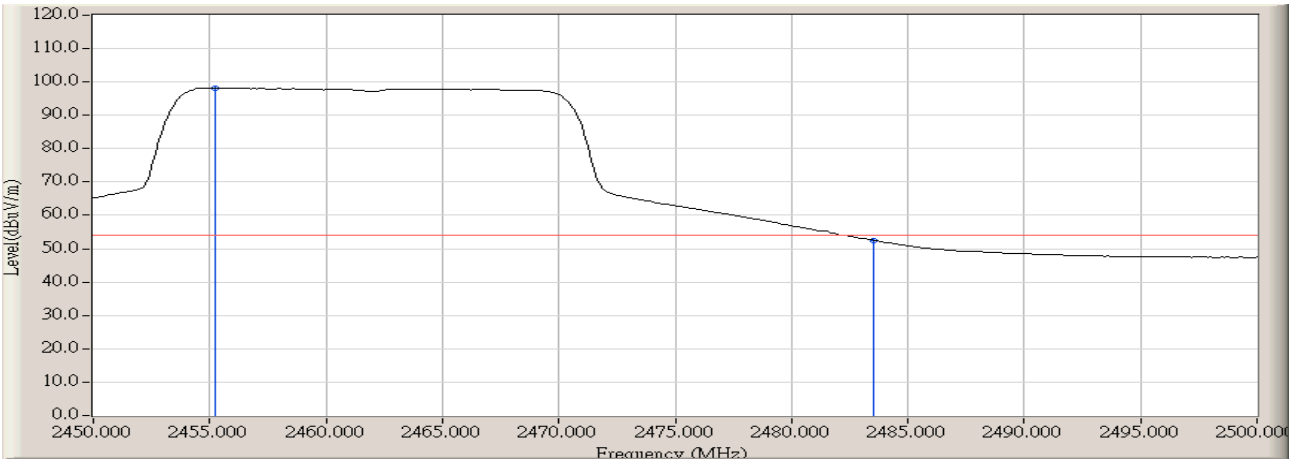
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	15.302	48.024	-5.946	53.970	AVERAGE
2	*	2405.700	32.727	55.699	88.426	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462 MHz– chain 100**



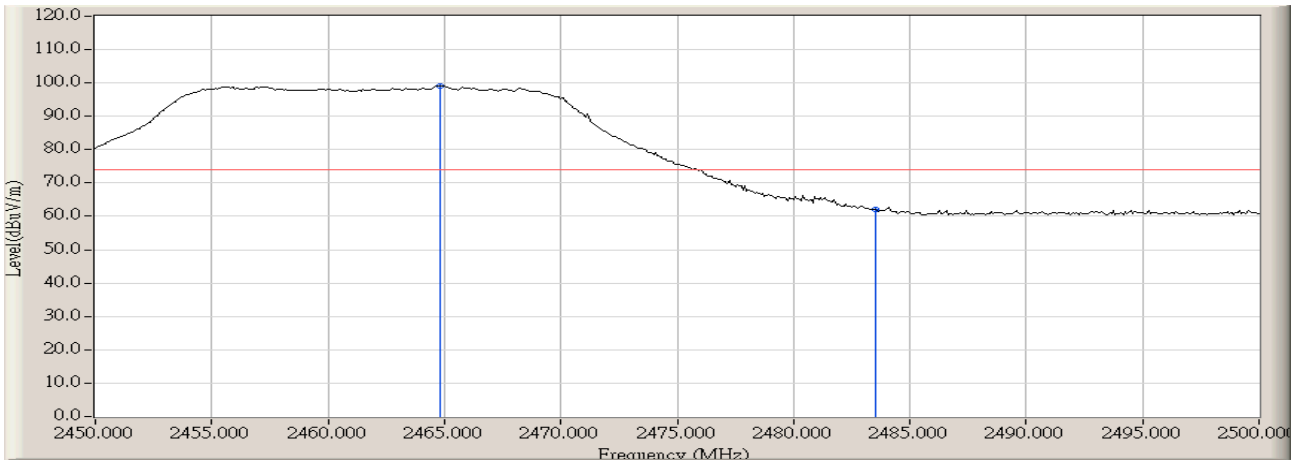
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.917	32.790	77.124	109.914	N/A	N/A	PEAK
2		2483.500	32.787	37.275	70.062	-3.908	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462 MHz– chain 100**



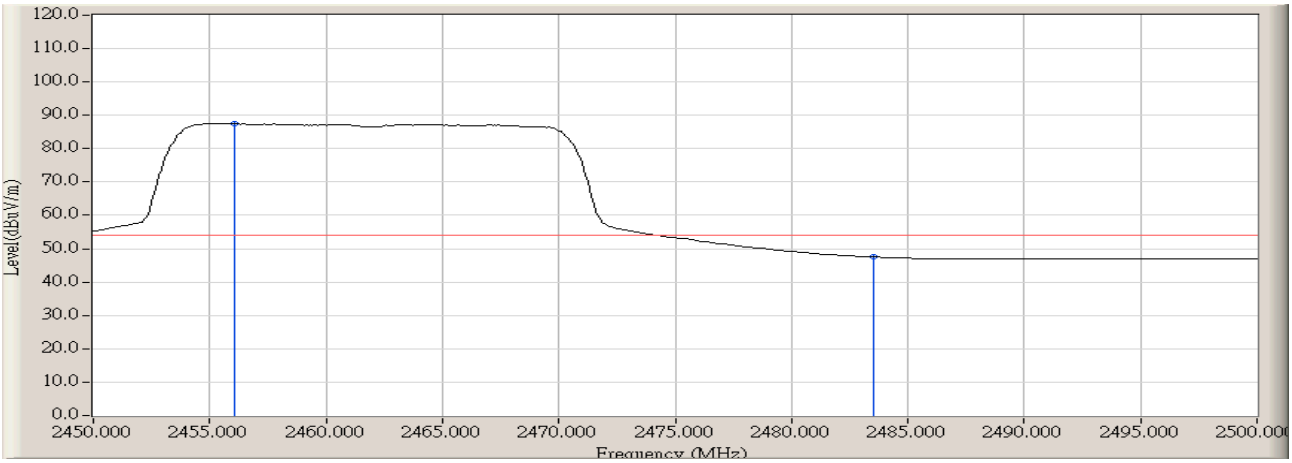
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.250	32.786	65.400	98.186	N/A	N/A	AVERAGE
2		2483.500	32.787	19.744	52.531	-1.439	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:53**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462 MHz– chain 100**



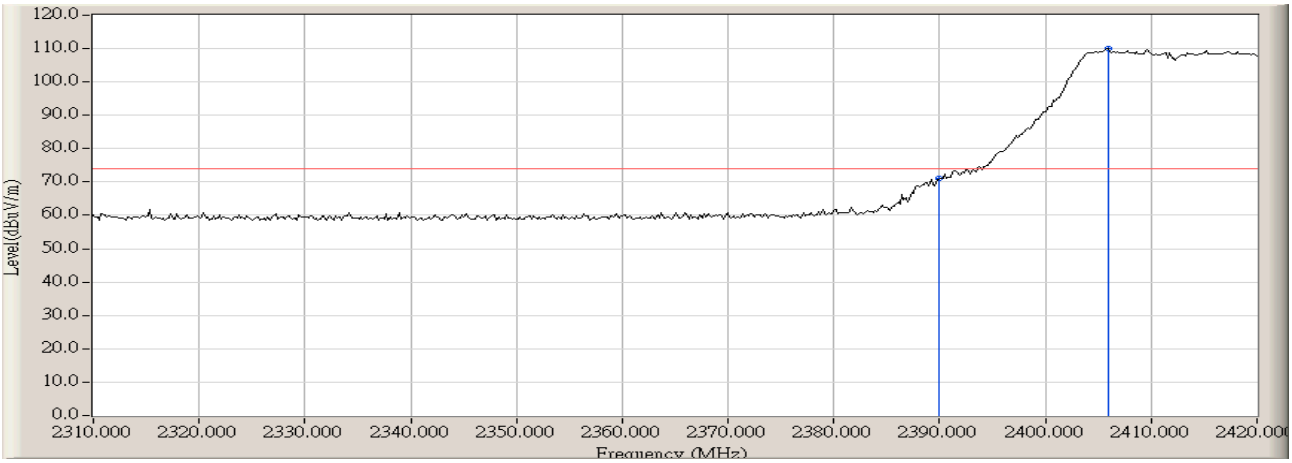
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.833	32.790	66.280	99.070	N/A	N/A	PEAK
2		2483.500	32.787	29.365	62.152	-11.818	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 13:53**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462 MHz– chain 100**



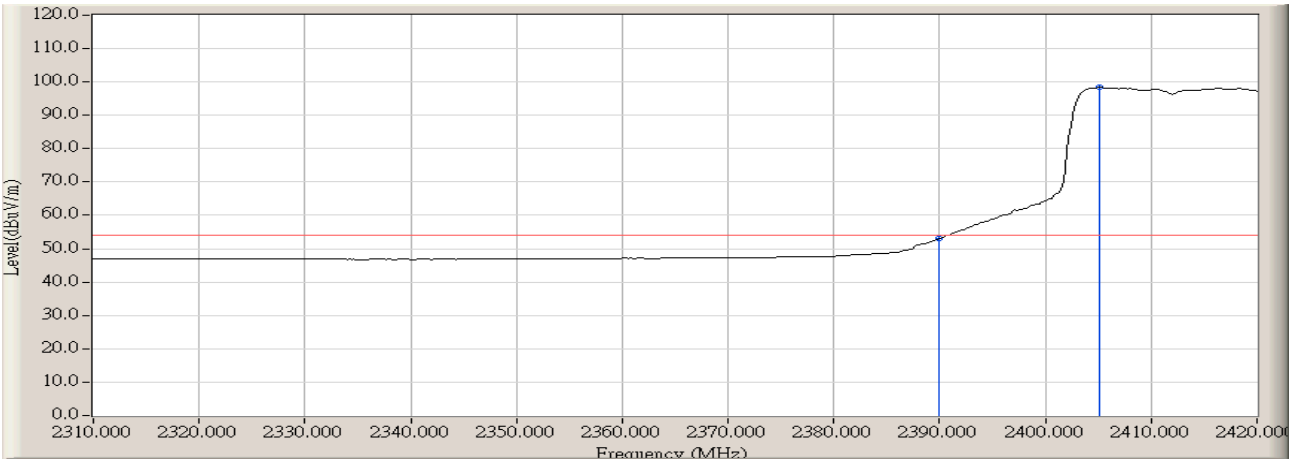
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.083	32.787	54.808	87.595	N/A	N/A	AVERAGE
2		2483.500	32.787	14.767	47.554	-6.416	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412 MHz– chain 100**



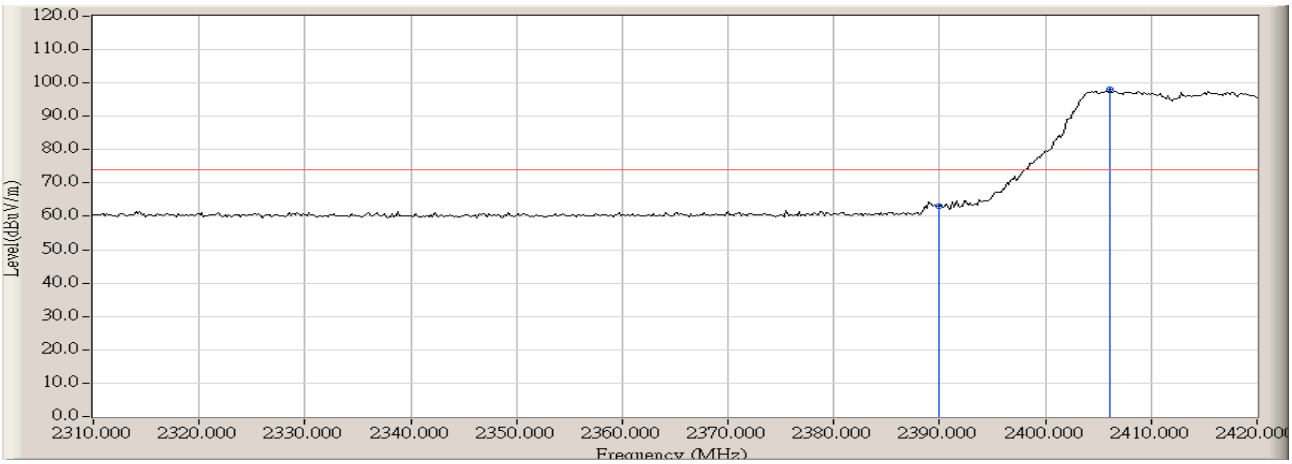
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	38.248	70.970	-3.000	73.970	PEAK
2	*	2405.883	32.727	77.164	109.891	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:03**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412 MHz– chain 100**



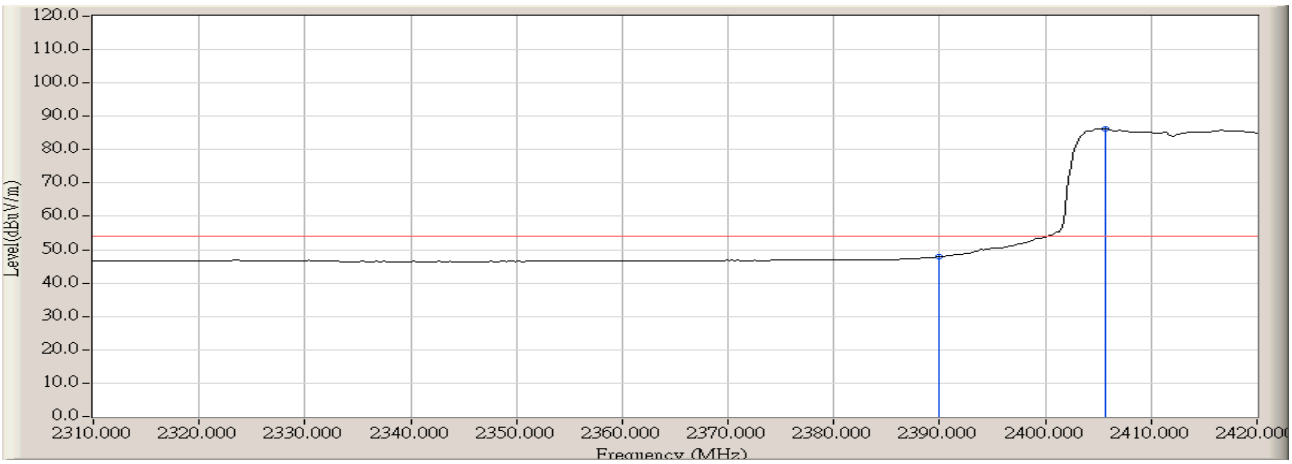
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.305	53.027	-0.943	53.970	AVERAGE
2	*	2405.150	32.726	65.748	98.475	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412 MHz– chain 100**



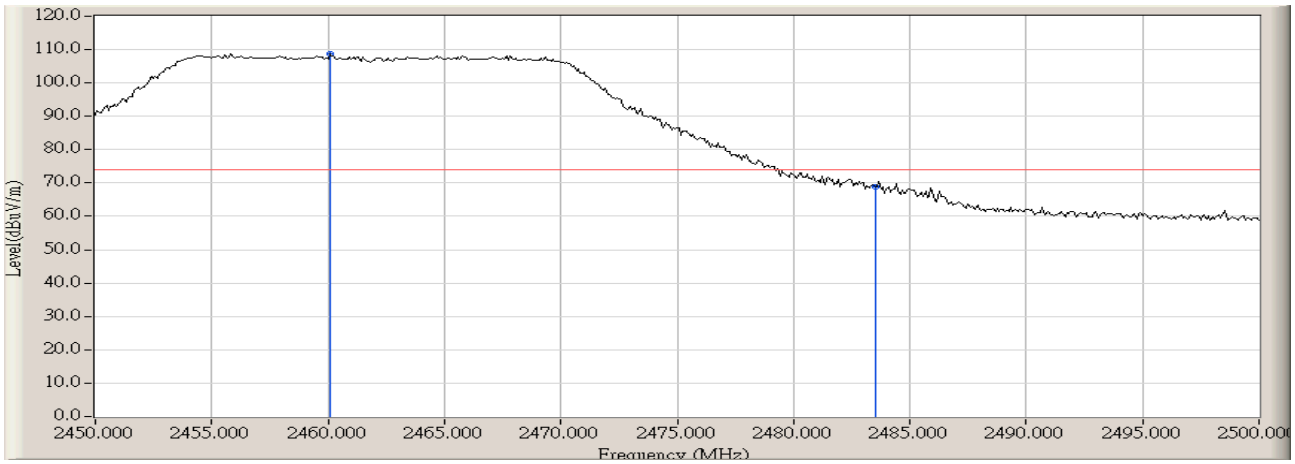
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	30.473	63.195	-10.775	73.970	PEAK
2	*	2406.067	32.727	65.407	98.134	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:13**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412 MHz– chain 100**



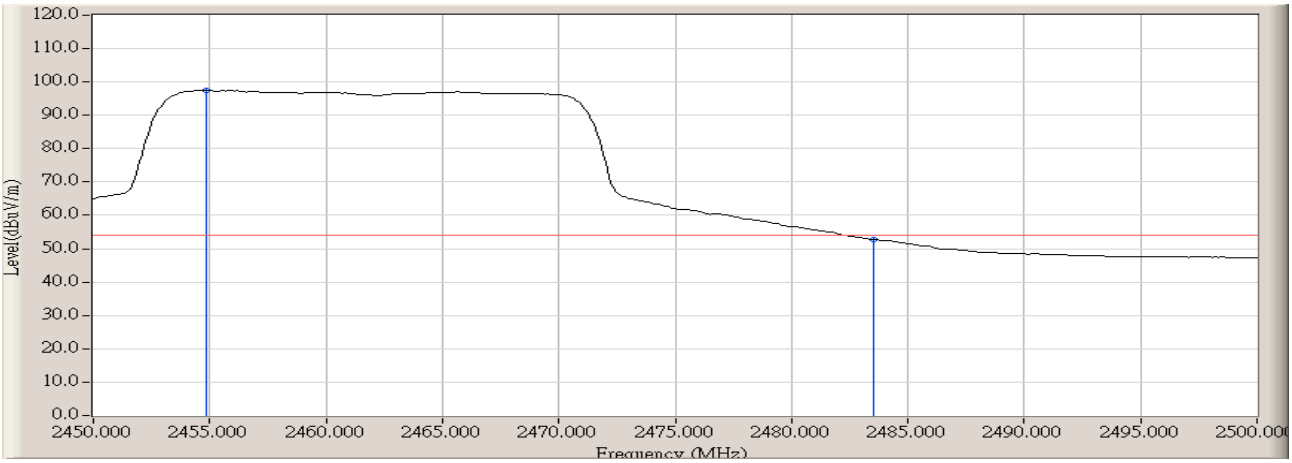
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	15.192	47.914	-6.056	53.970	AVERAGE
2	*	2405.700	32.727	53.651	86.378	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:31**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462 MHz– chain 100**



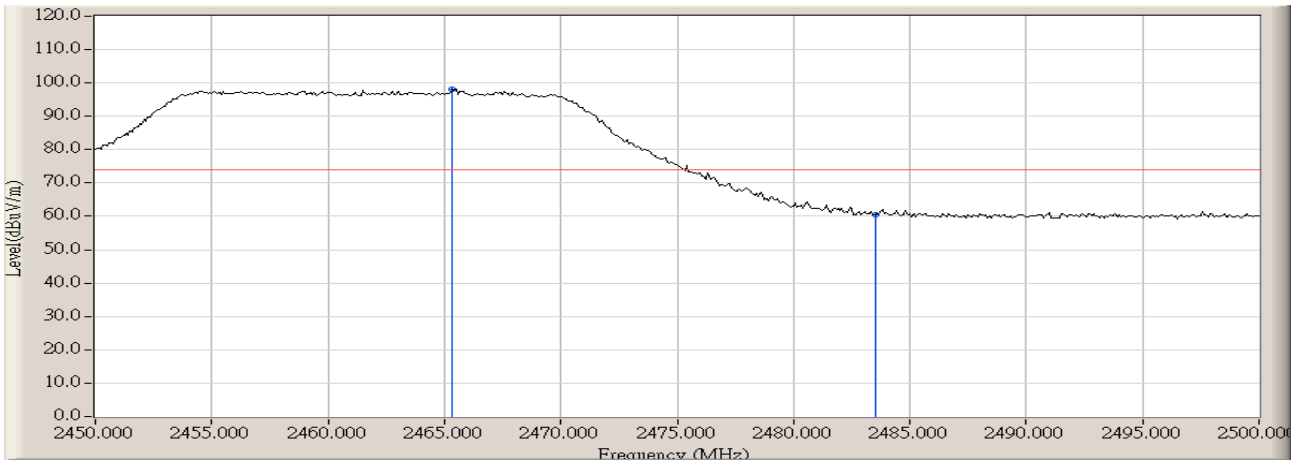
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.083	32.789	75.814	108.603	N/A	N/A	PEAK
2		2483.500	32.787	35.959	68.746	-5.224	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462 MHz– chain 100**



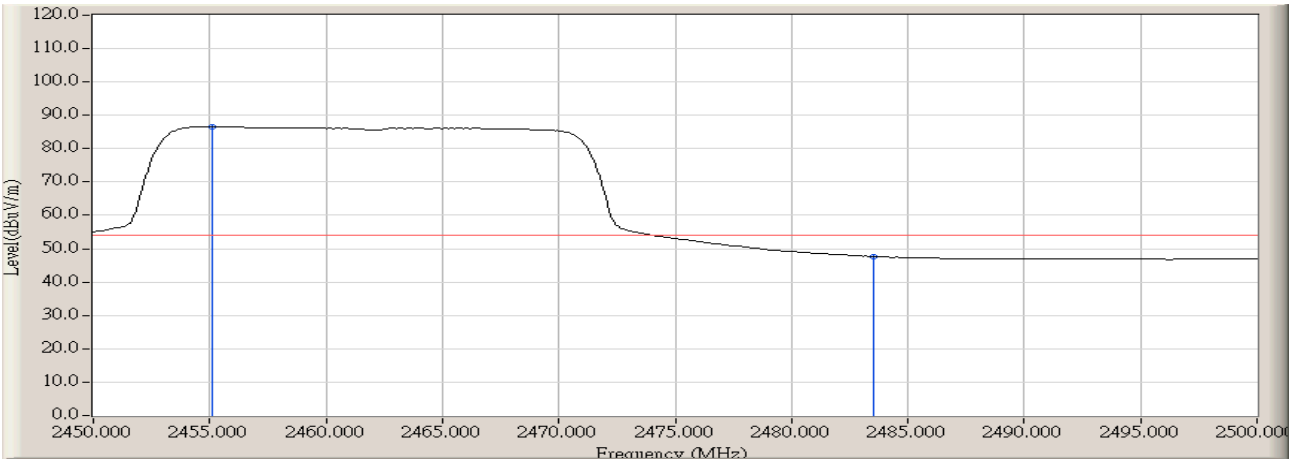
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2454.833	32.786	64.668	97.454	N/A	N/A	AVERAGE
2		2483.500	32.787	19.920	52.707	-1.263	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:34**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462 MHz– chain 100**



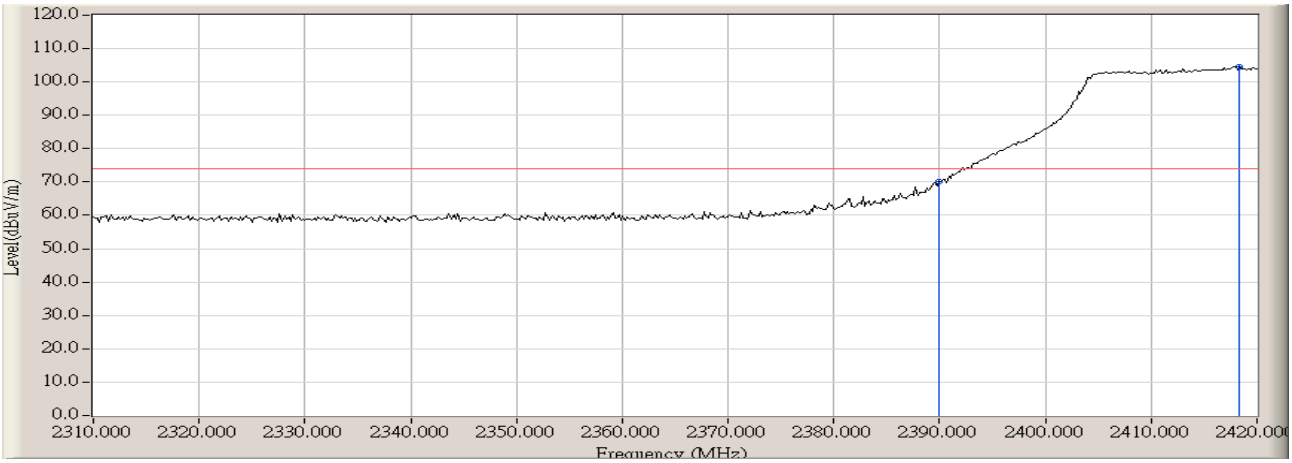
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.333	32.790	65.335	98.125	N/A	N/A	PEAK
2		2483.500	32.787	27.771	60.558	-13.412	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/21 - 14:34**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462 MHz– chain 100**



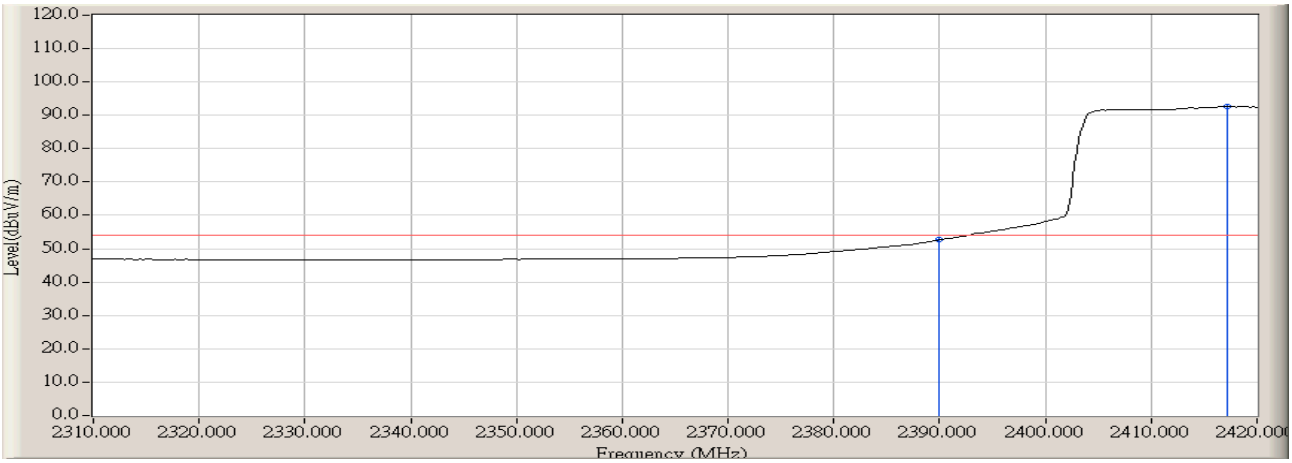
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.083	32.786	53.889	86.675	N/A	N/A	AVERAGE
2		2483.500	32.787	14.877	47.664	-6.306	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 100**



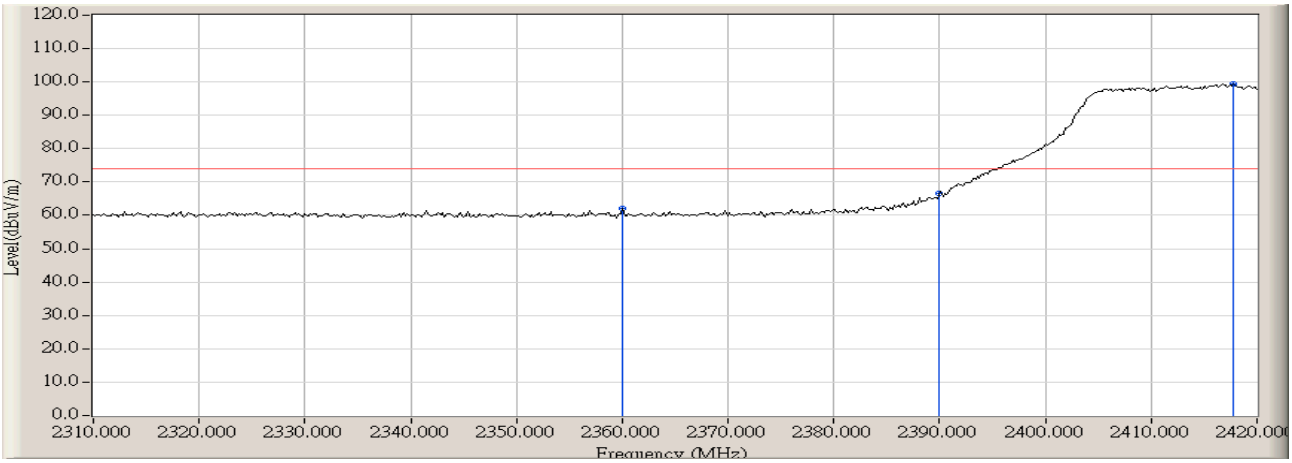
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	37.471	70.193	-3.777	73.970	PEAK
2	*	2418.350	32.743	71.864	104.607	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 100**



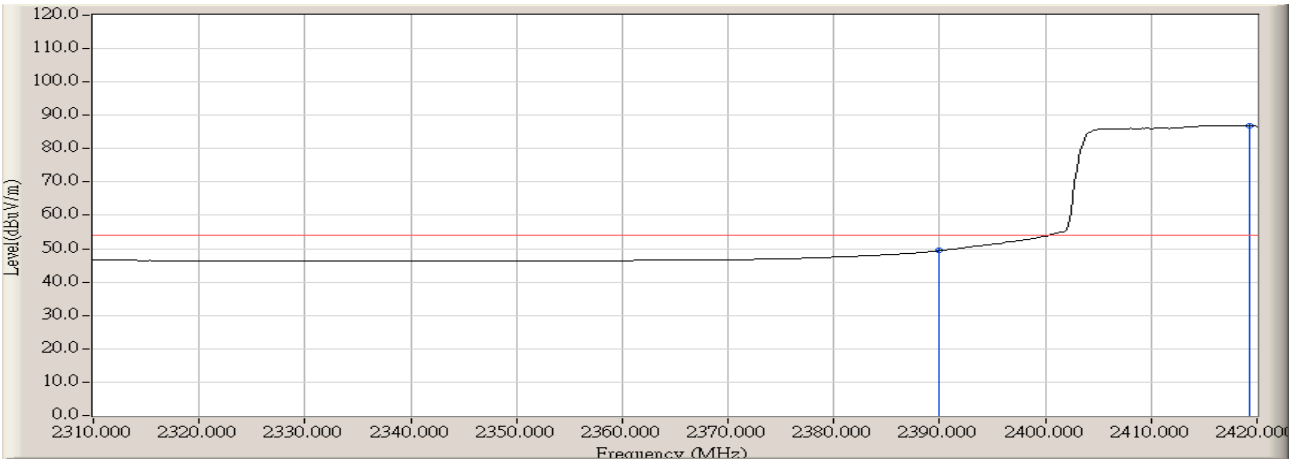
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	19.944	52.666	-1.304	53.970	AVERAGE
2	*	2417.250	32.741	59.905	92.646	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 100**



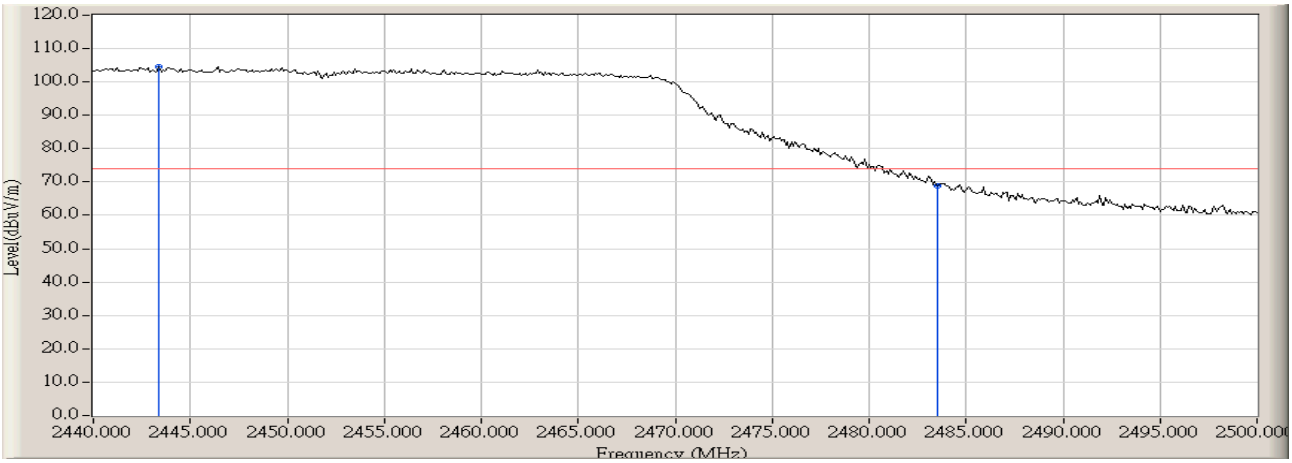
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2360.050	32.750	29.277	62.027	-11.943	73.970	PEAK
2		2390.000	32.722	33.733	66.455	-7.515	73.970	PEAK
3	*	2417.800	32.742	66.588	99.330	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:35**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 100**



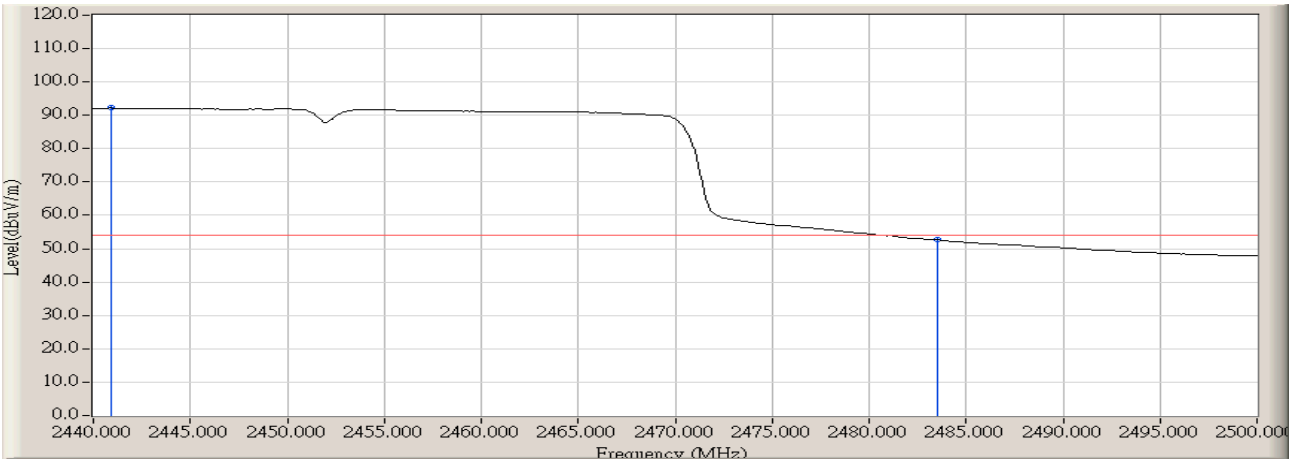
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	16.744	49.466	-4.504	53.970	AVERAGE
2	*	2419.267	32.744	54.202	86.947	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:45**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 100**



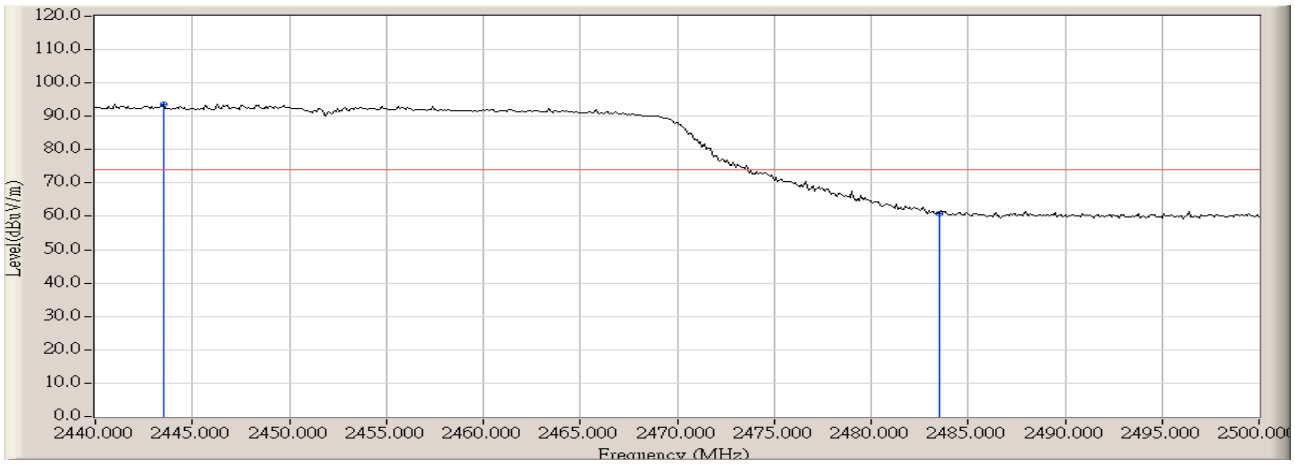
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2443.400	32.778	71.771	104.549	N/A	N/A	PEAK
2		2483.500	32.787	36.067	68.854	-5.116	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:44**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 100**



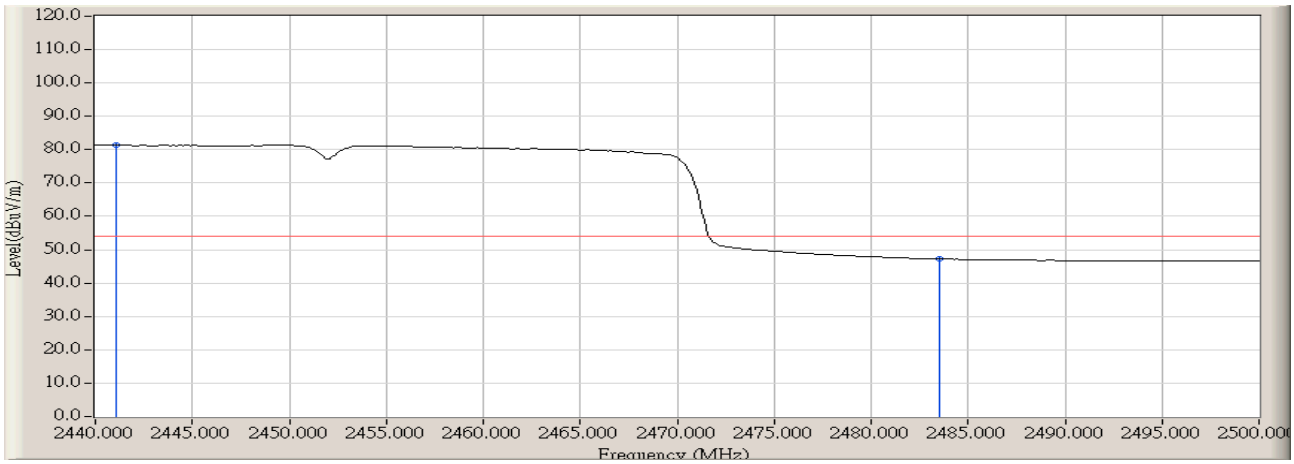
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2440.900	32.775	59.404	92.179	N/A	N/A	AVERAGE
2		2483.500	32.787	19.886	52.673	-1.297	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:48**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 100**



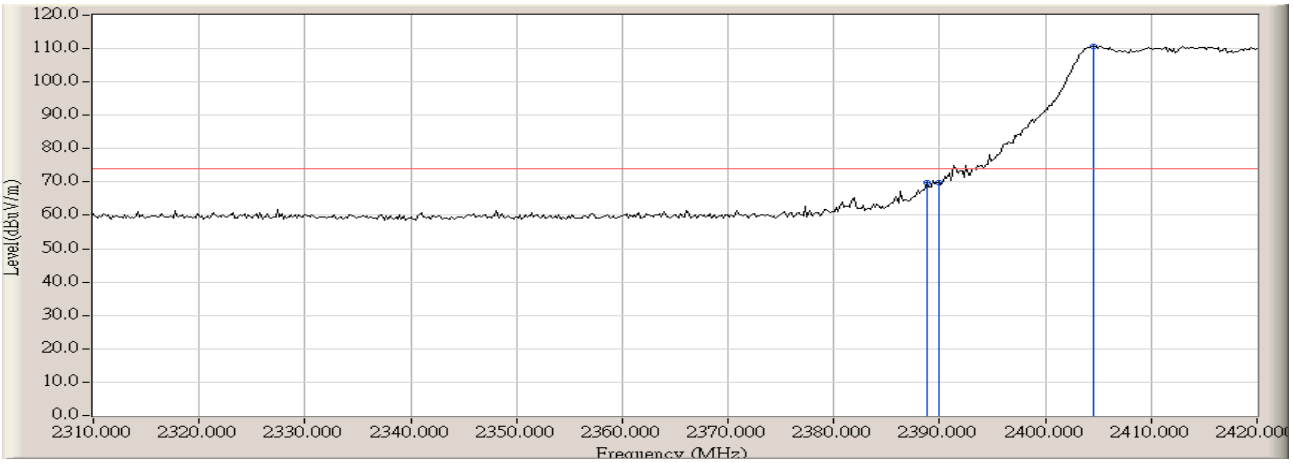
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2443.500	32.778	60.864	93.642	N/A	N/A	PEAK
2		2483.500	32.787	27.890	60.677	-13.293	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/22 - 10:49**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 100**



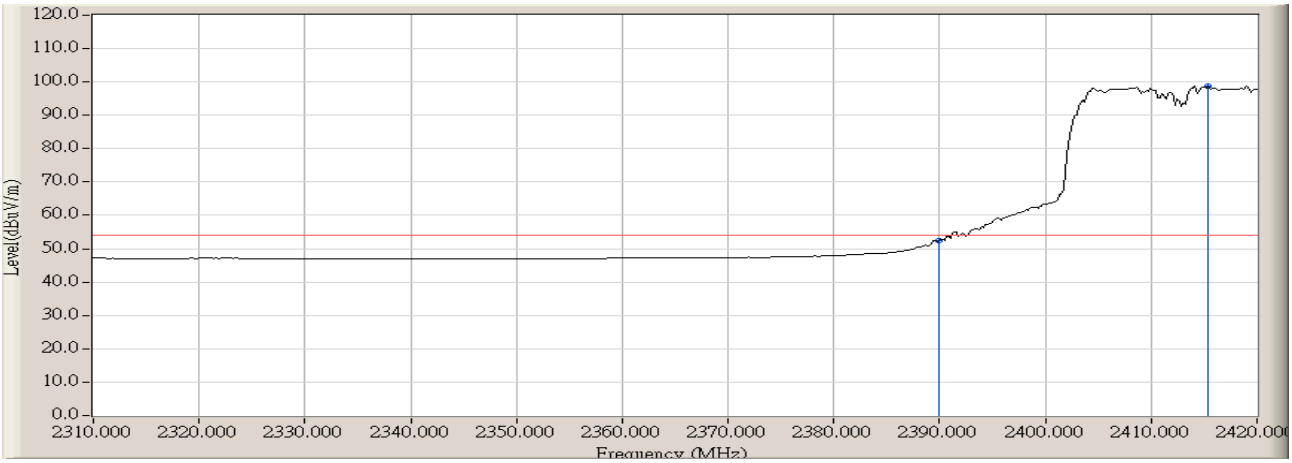
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2441.100	32.775	48.634	81.409	N/A	N/A	AVERAGE
2		2483.500	32.787	14.454	47.241	-6.729	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:03**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz– chain 110**



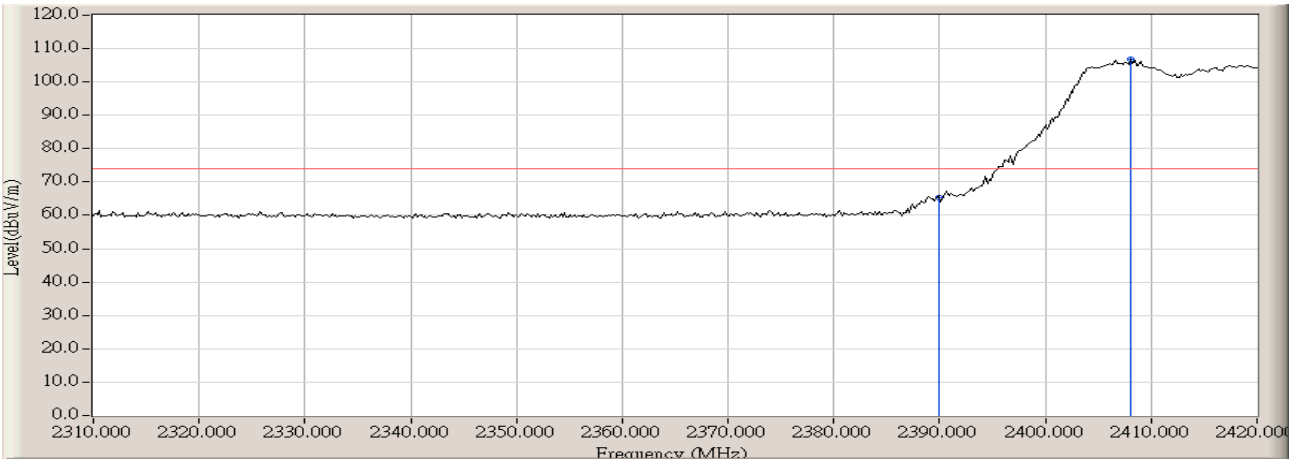
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2388.833	32.723	37.061	69.784	-4.186	73.970	PEAK
2		2390.000	32.722	37.158	69.880	-4.090	73.970	PEAK
3	*	2404.600	32.726	78.000	110.726	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz– chain 110**



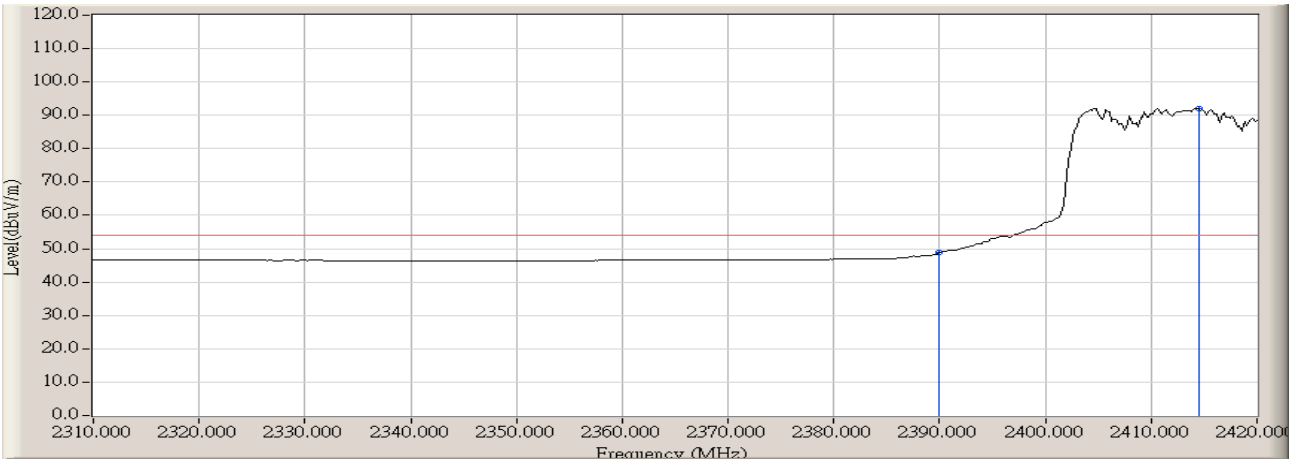
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	19.852	52.574	-1.396	53.970	AVERAGE
2	*	2415.417	32.737	65.952	98.690	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz– chain 110**



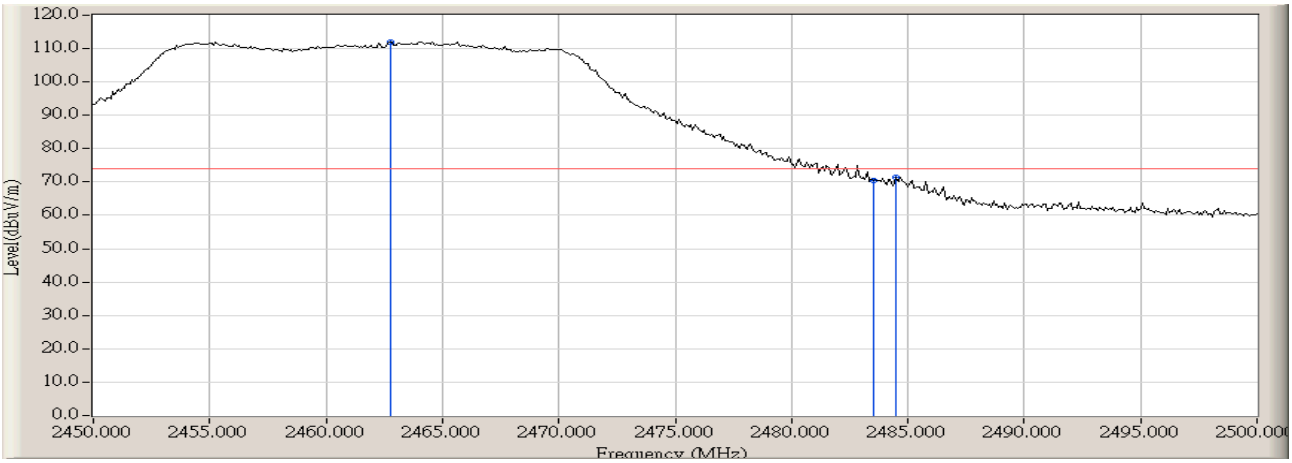
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	32.479	65.201	-8.769	73.970	PEAK
2	*	2408.083	32.729	73.946	106.674	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz– chain 110**



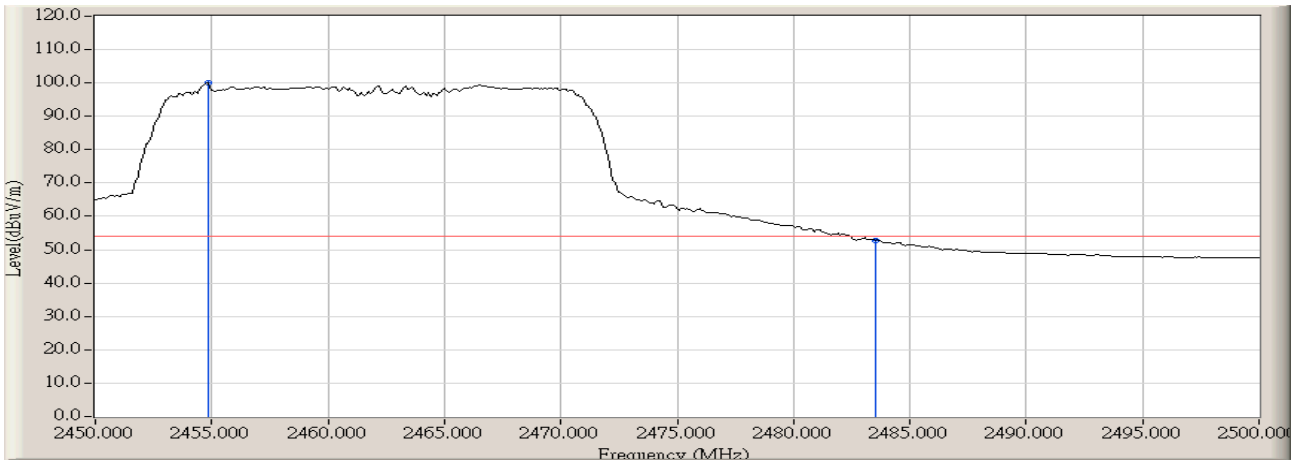
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	16.127	48.849	-5.121	53.970	AVERAGE
2	*	2414.500	32.736	59.387	92.123	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz– chain 110**



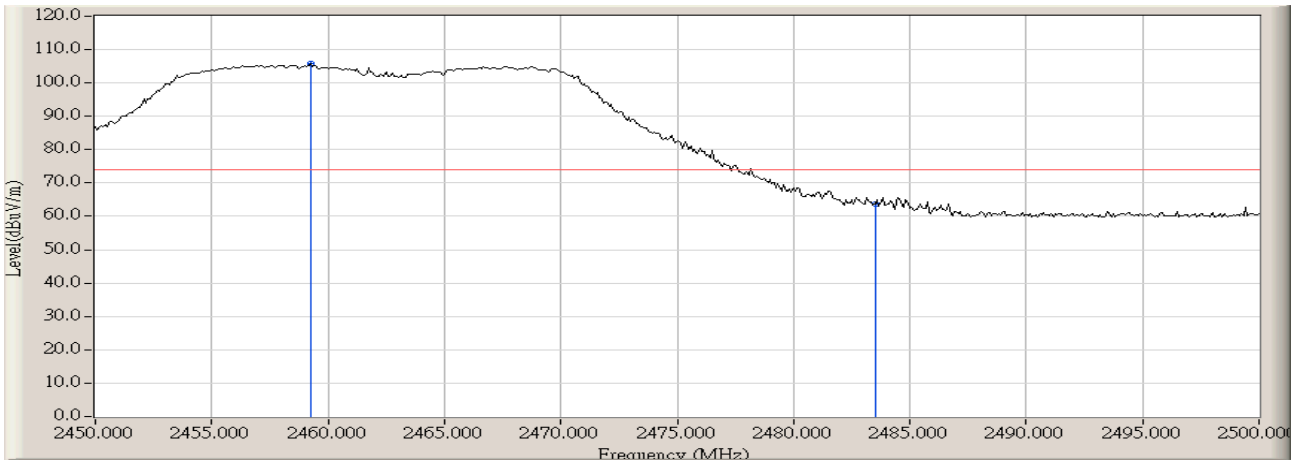
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2462.750	32.790	79.285	112.075	N/A	N/A	PEAK
2		2483.500	32.787	37.748	70.535	-3.435	73.970	PEAK
3		2484.500	32.787	38.486	71.273	-2.697	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:16**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz– chain 110**



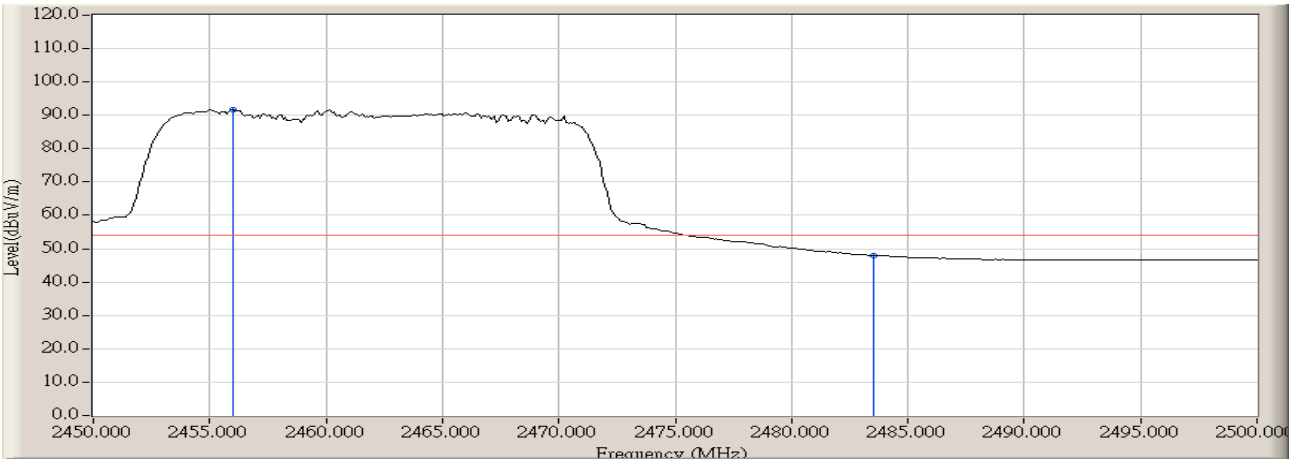
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2454.833	32.786	67.129	99.915	N/A	N/A	AVERAGE
2		2483.500	32.787	20.095	52.882	-1.088	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:22**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz– chain 110**



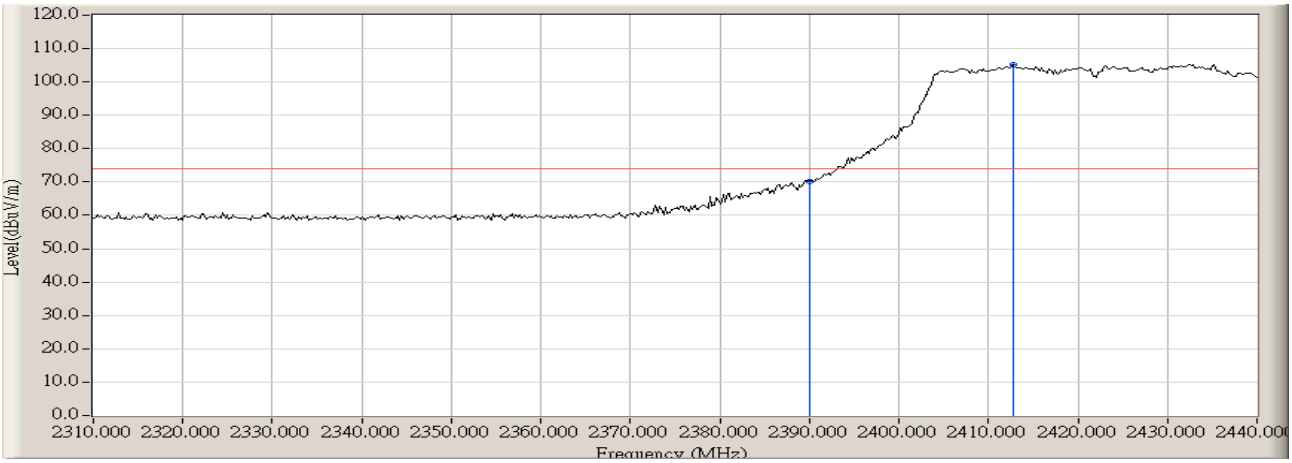
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.250	32.788	73.012	105.800	N/A	N/A	PEAK
2		2483.500	32.787	30.913	63.700	-10.270	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:23**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz– chain 110**



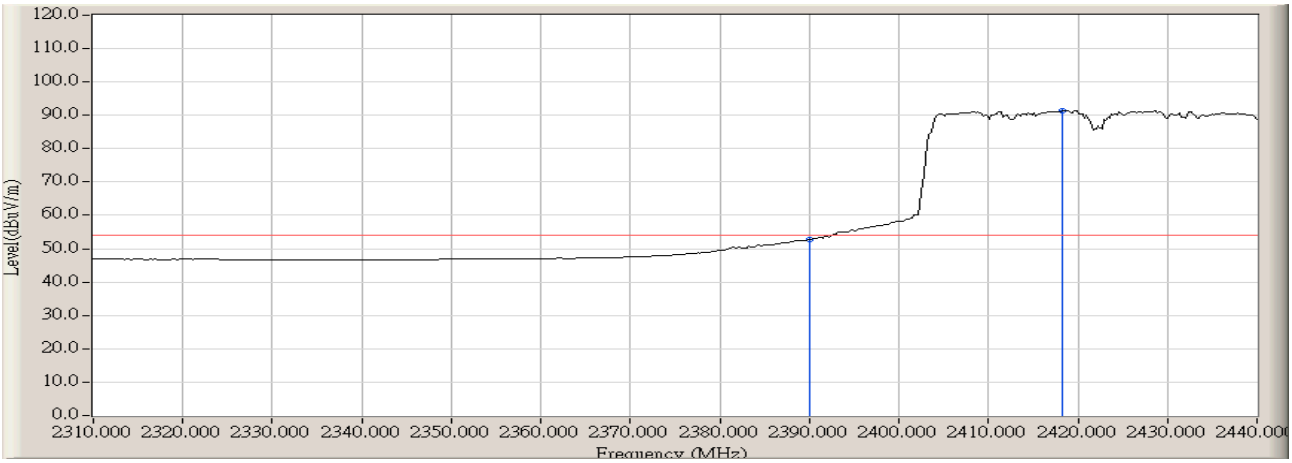
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.000	32.786	58.956	91.742	N/A	N/A	AVERAGE
2		2483.500	32.787	15.195	47.982	-5.988	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 110**



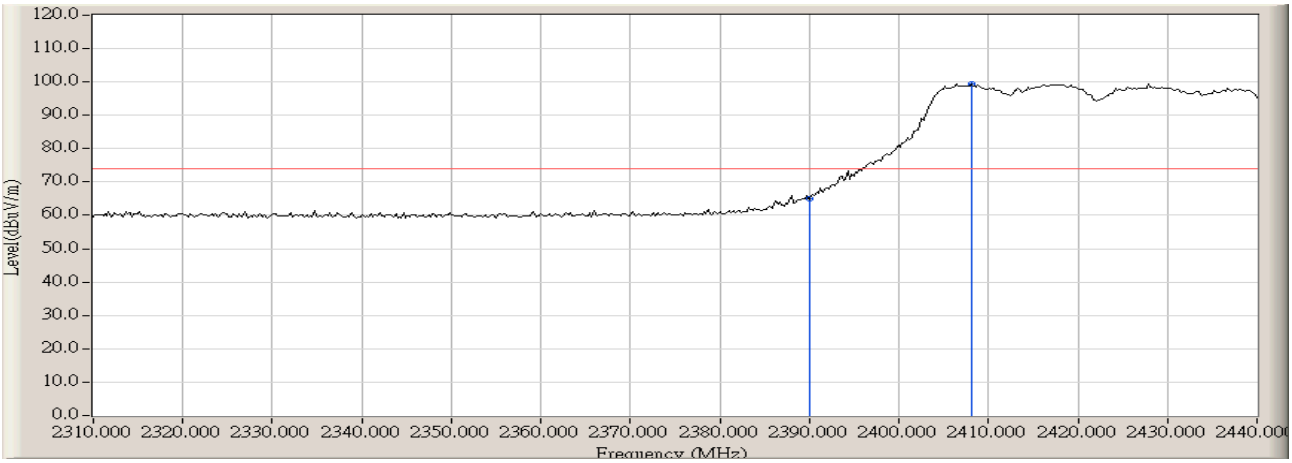
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	37.383	70.105	-3.865	73.970	PEAK
2	*	2412.700	32.733	72.387	105.120	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:34**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 110**



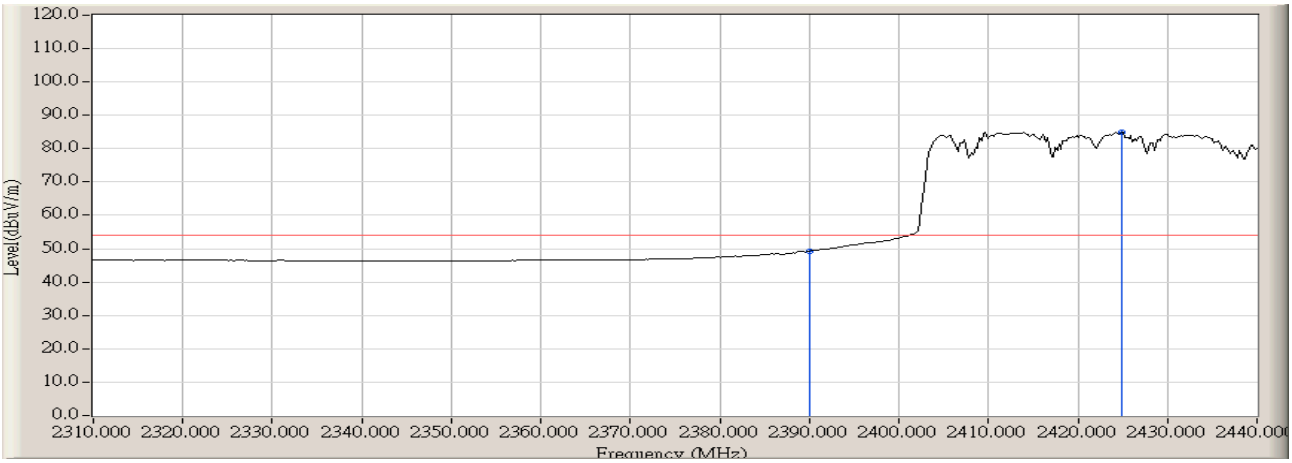
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	20.065	52.787	-1.183	53.970	AVERAGE
2	*	2418.333	32.743	58.600	91.343	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:40**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 110**



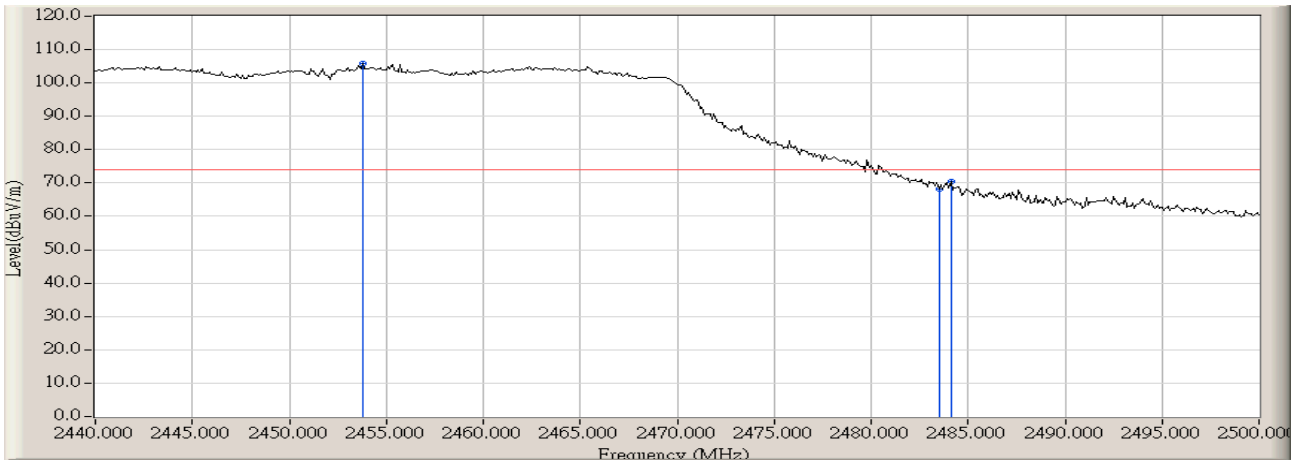
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	32.204	64.926	-9.044	73.970	PEAK
2	*	2408.150	32.729	66.770	99.498	N/A	N/A	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:41**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz– chain 110**



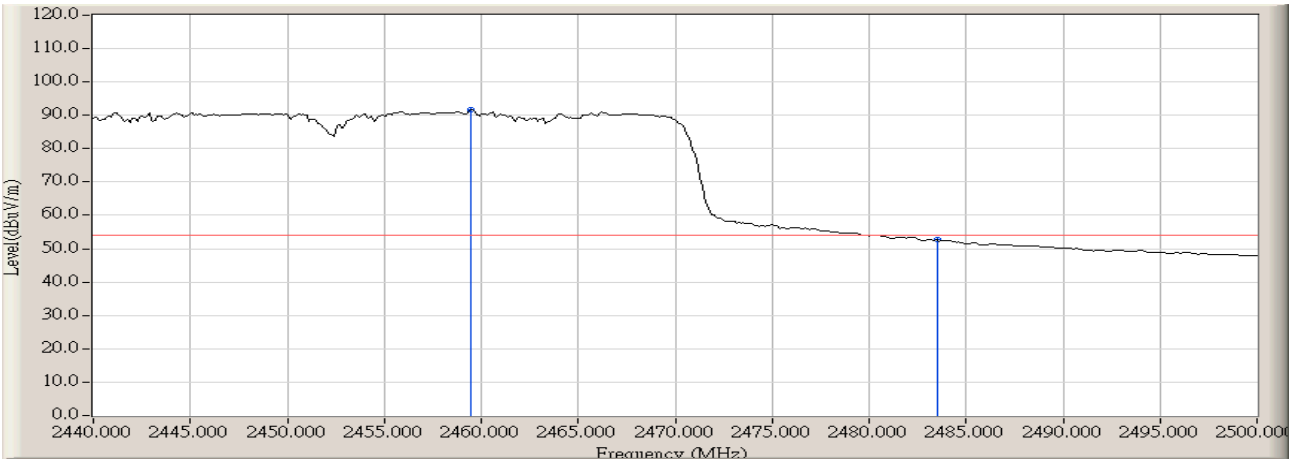
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	16.569	49.291	-4.679	53.970	AVERAGE
2	*	2424.833	32.755	52.327	85.081	N/A	N/A	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:52**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 110**



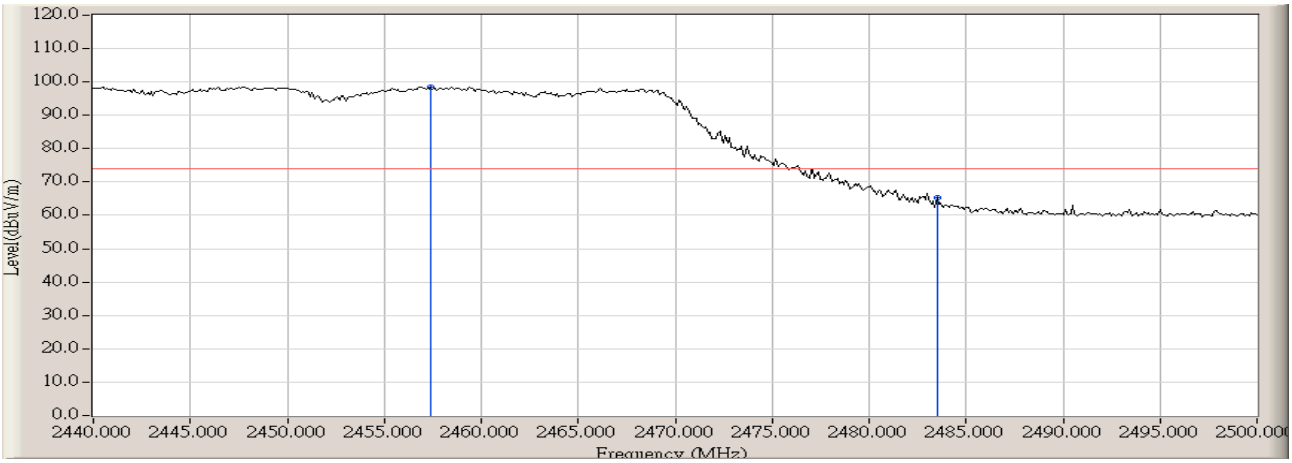
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2453.800	32.785	72.991	105.776	N/A	N/A	PEAK
2		2483.500	32.787	35.440	68.227	-5.743	73.970	PEAK
3		2484.100	32.787	37.646	70.433	-3.537	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:51**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 110**



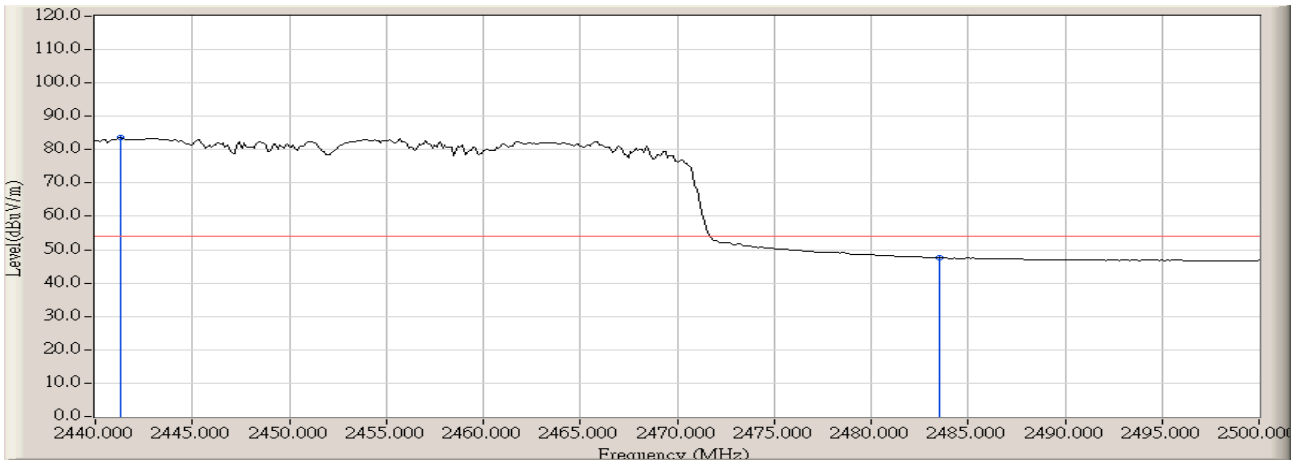
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.500	32.789	58.768	91.557	N/A	N/A	AVERAGE
2		2483.500	32.787	19.999	52.786	-1.184	53.970	AVERAGE

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz– chain 110**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.400	32.787	65.714	98.501	N/A	N/A	PEAK
2		2483.500	32.787	32.377	65.164	-8.806	73.970	PEAK

Engineer : Sky	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/09/23 - 17:56**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 802.11A/B/G/N MINI-PCI MODULE	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz – chain 110**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2441.300	32.775	50.912	83.688	N/A	N/A	AVERAGE
2		2483.500	32.787	14.760	47.547	-6.423	53.970	AVERAGE

6. Operation Frequency Range of 20dB Bandwidth

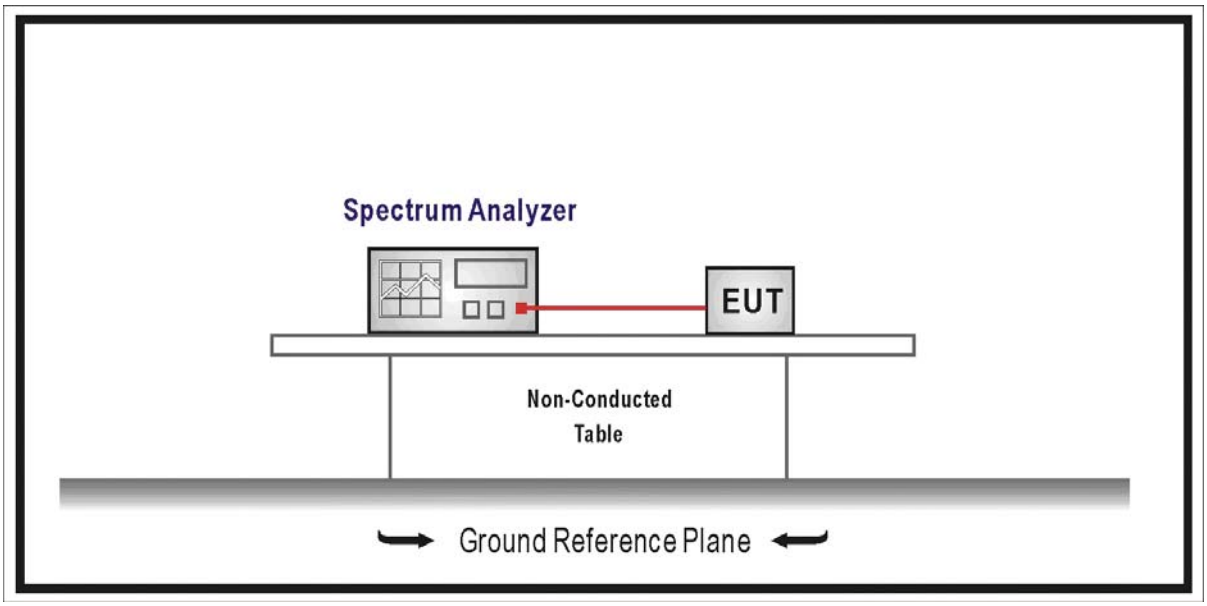
6.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

6.2. Test Setup



6.3. Limit

20 dB bandwidth of the emission is contained within the operation frequency band.

6.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

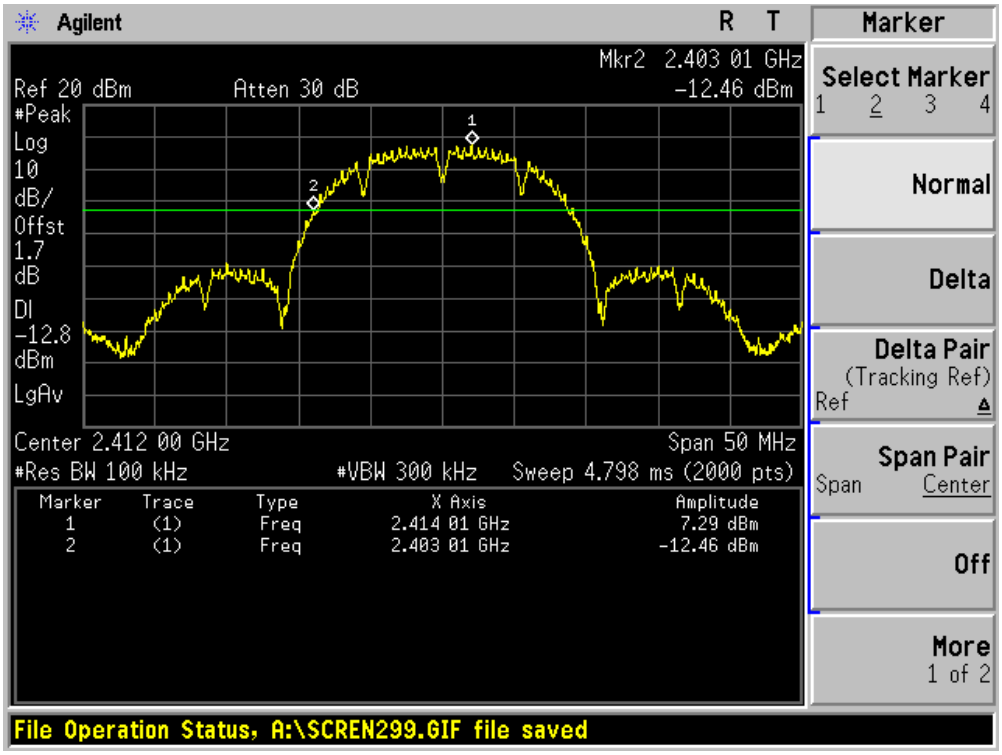
6.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

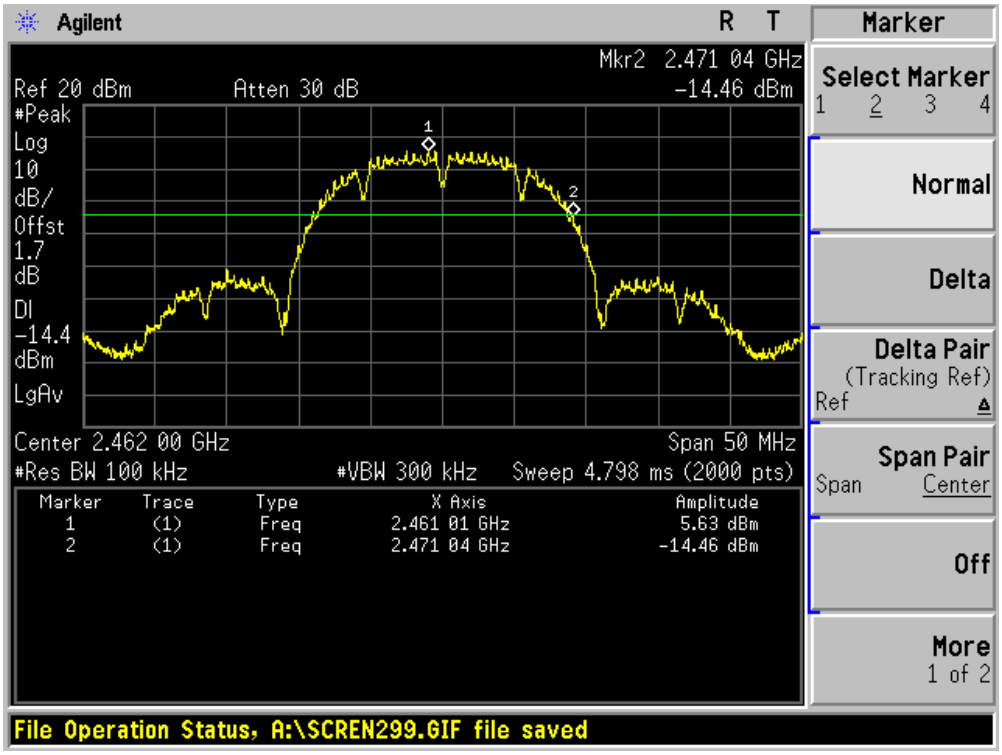
6.6. Test Result

Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 010

Channel 01 (2412MHz)

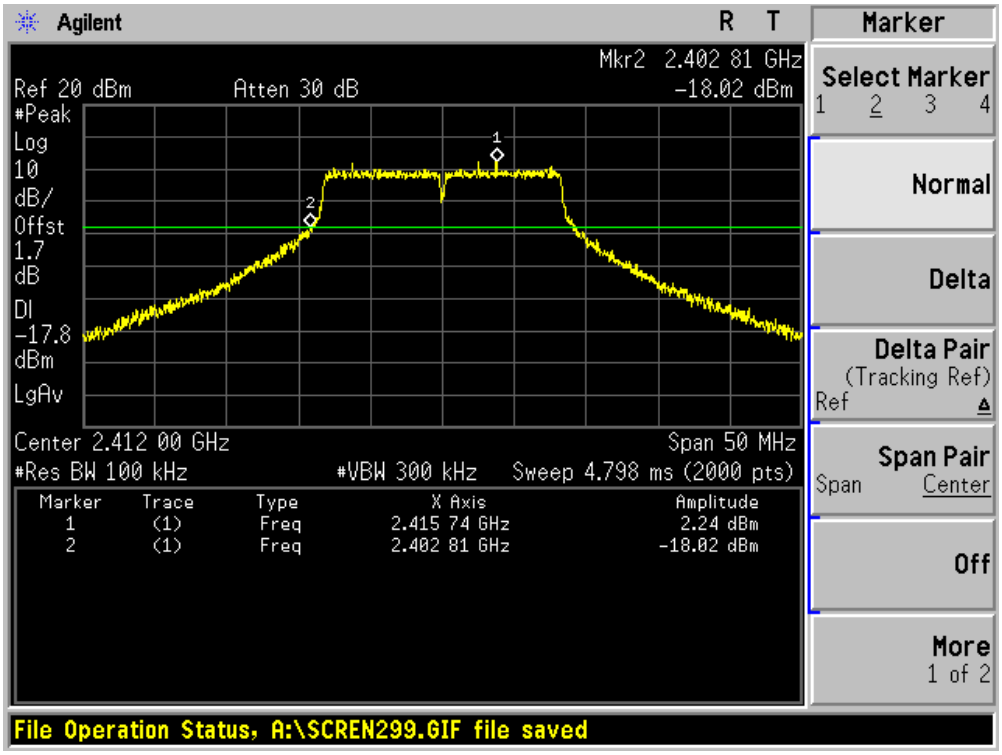


Channel 11 (2462MHz)

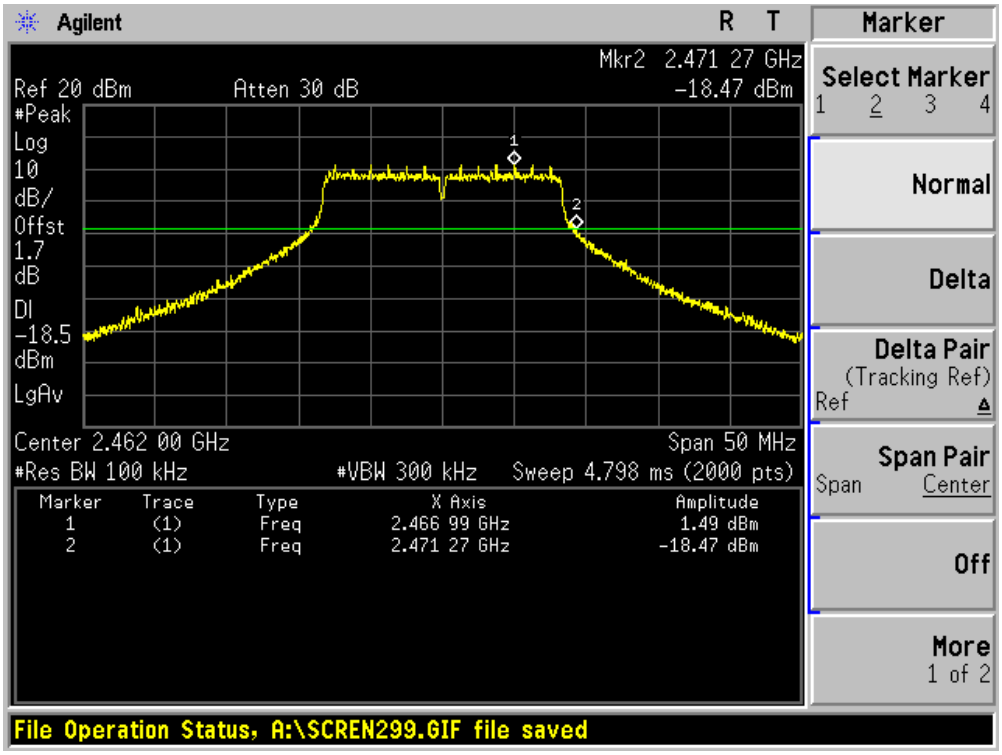


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

Channel 01 (2412MHz)

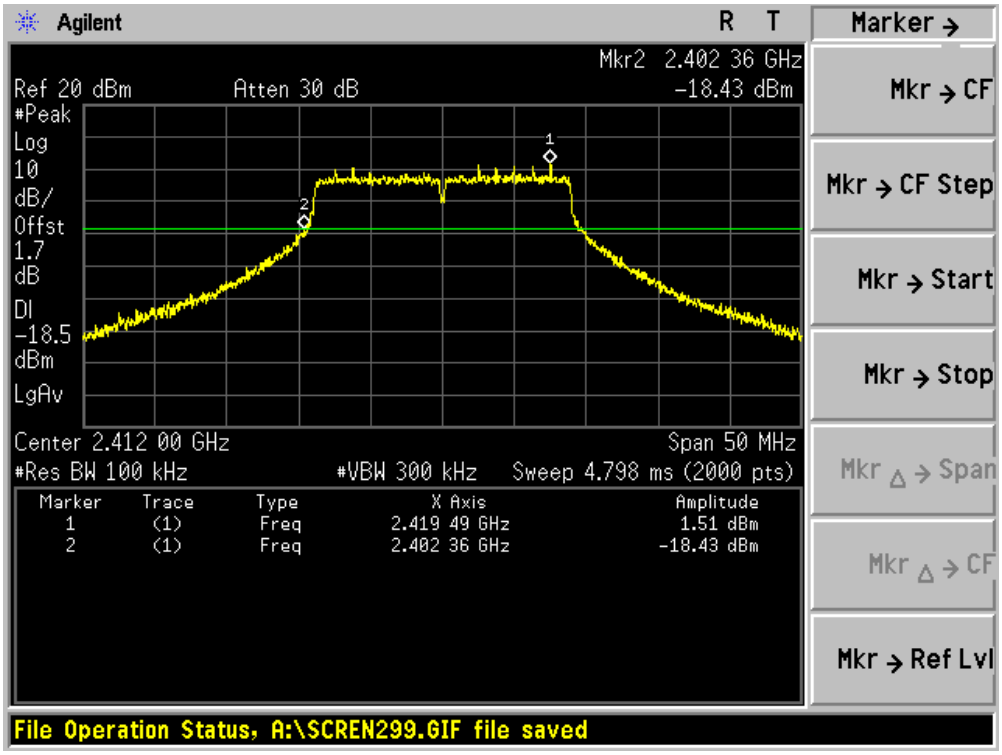


Channel 11 (2462MHz)

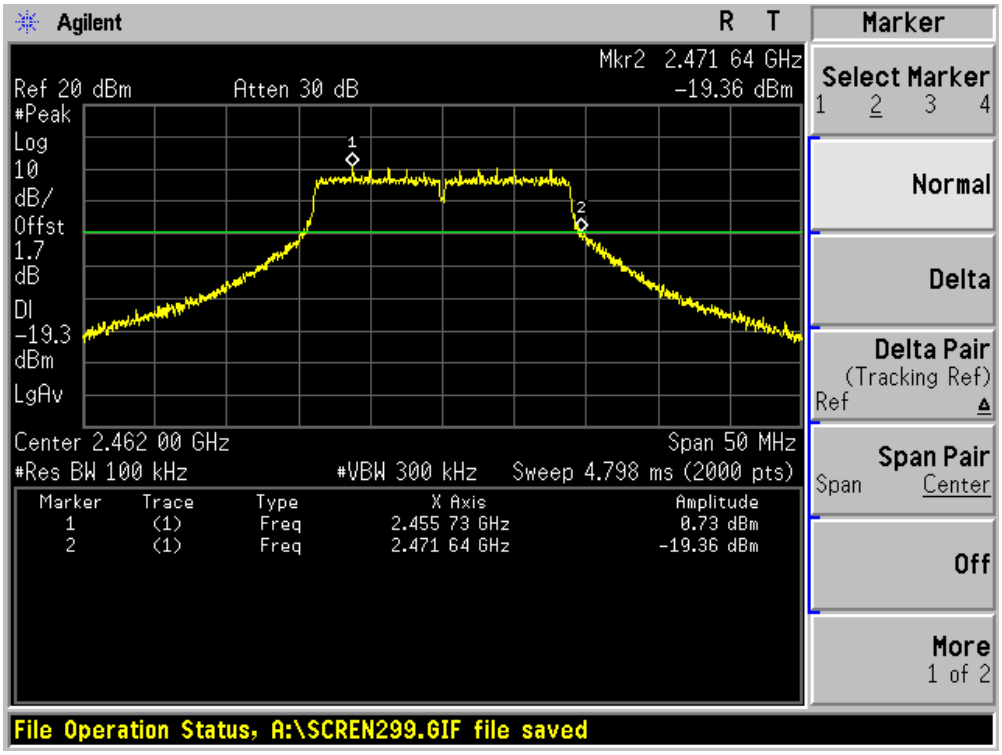


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 010

Channel 01 (2412MHz)

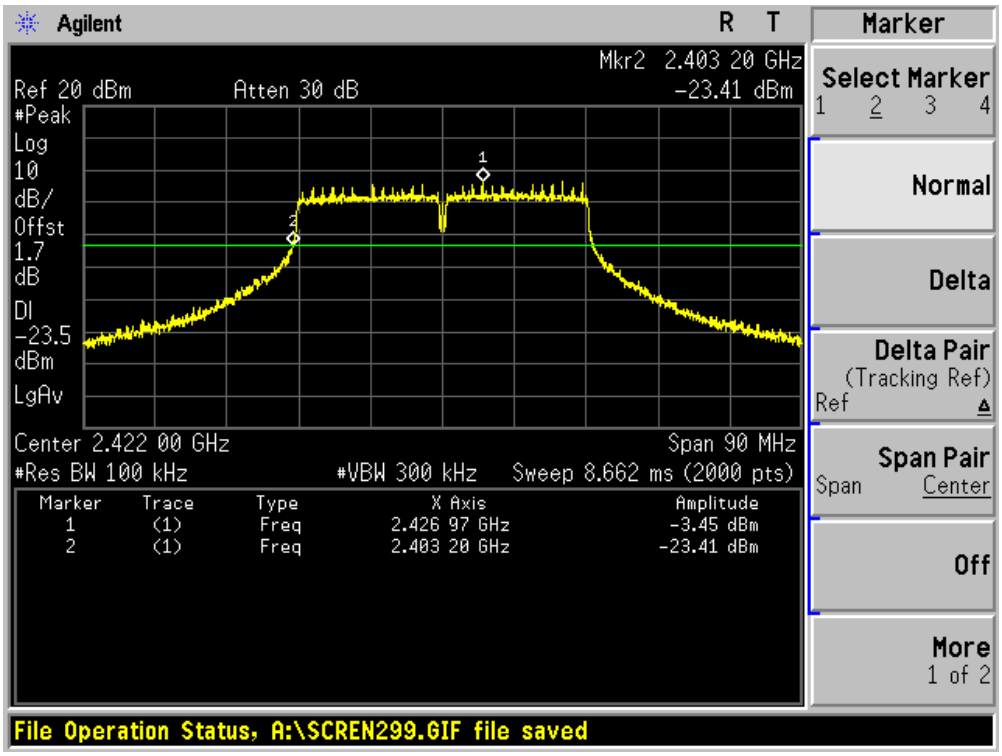


Channel 11 (2462MHz)

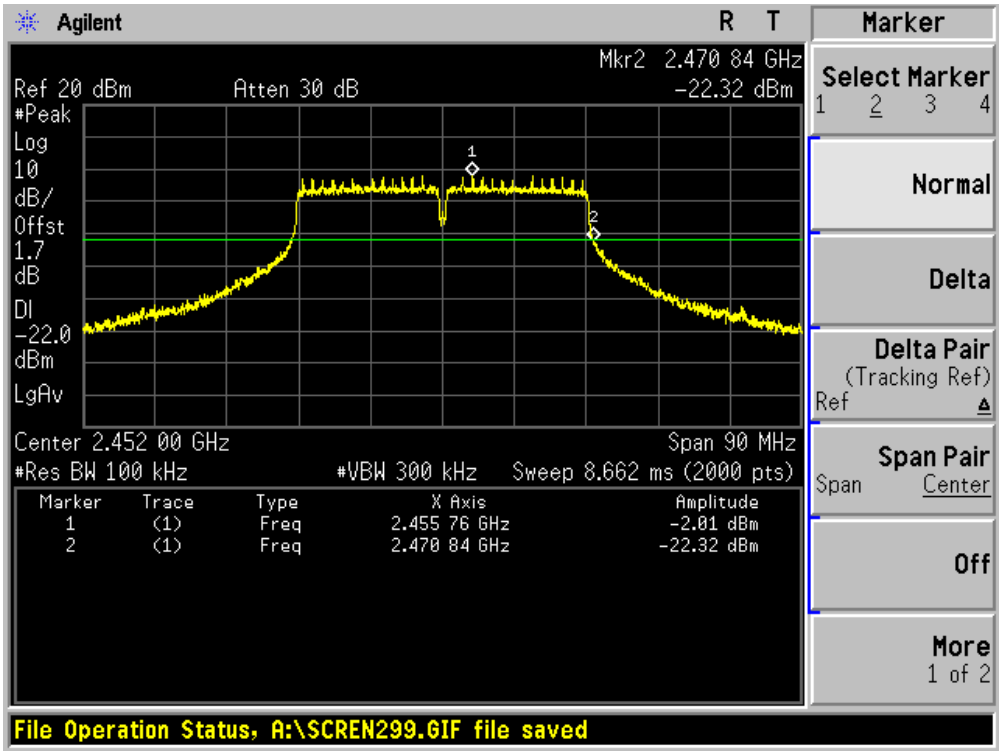


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 010

Channel 01 (2422MHz)

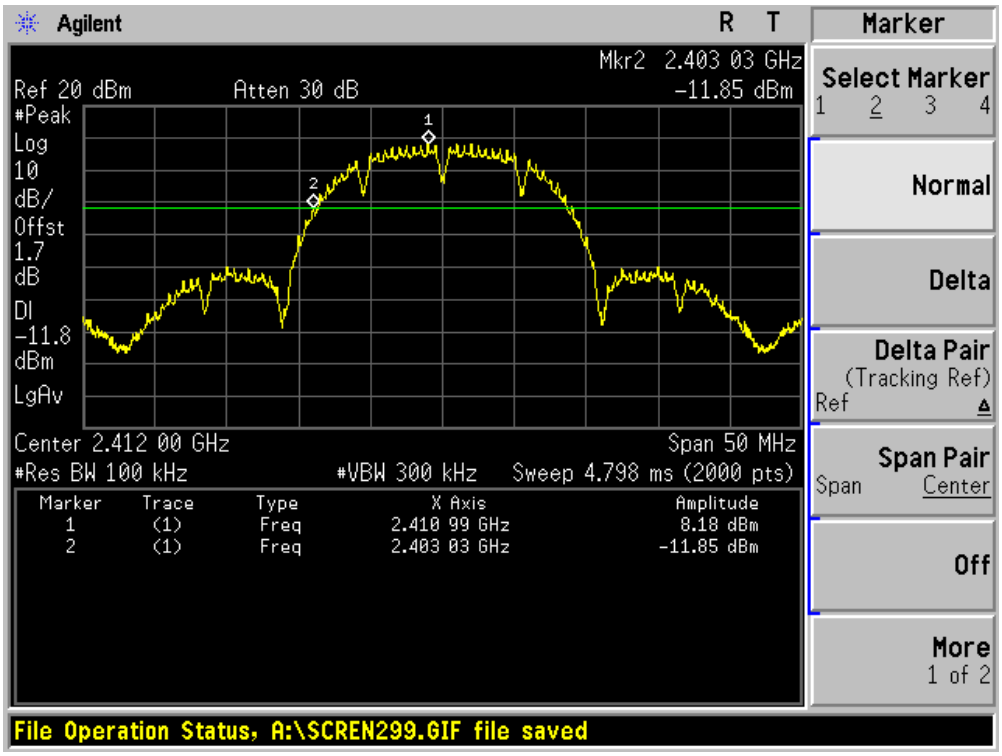


Channel 11 (2452MHz)

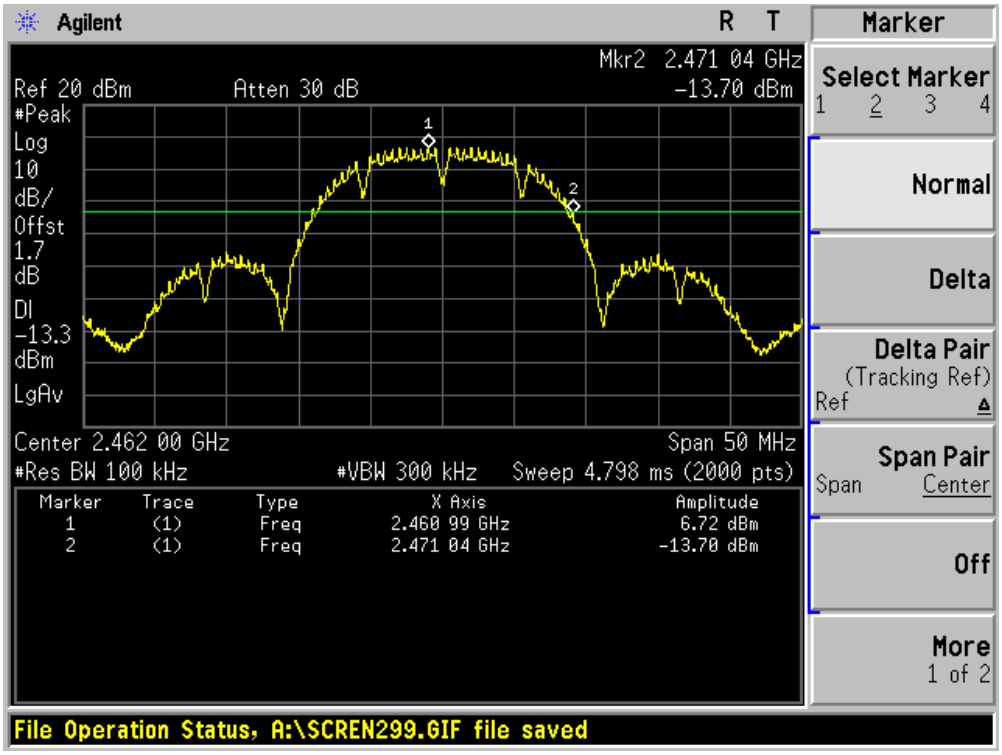


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 100

Channel 01 (2412MHz)

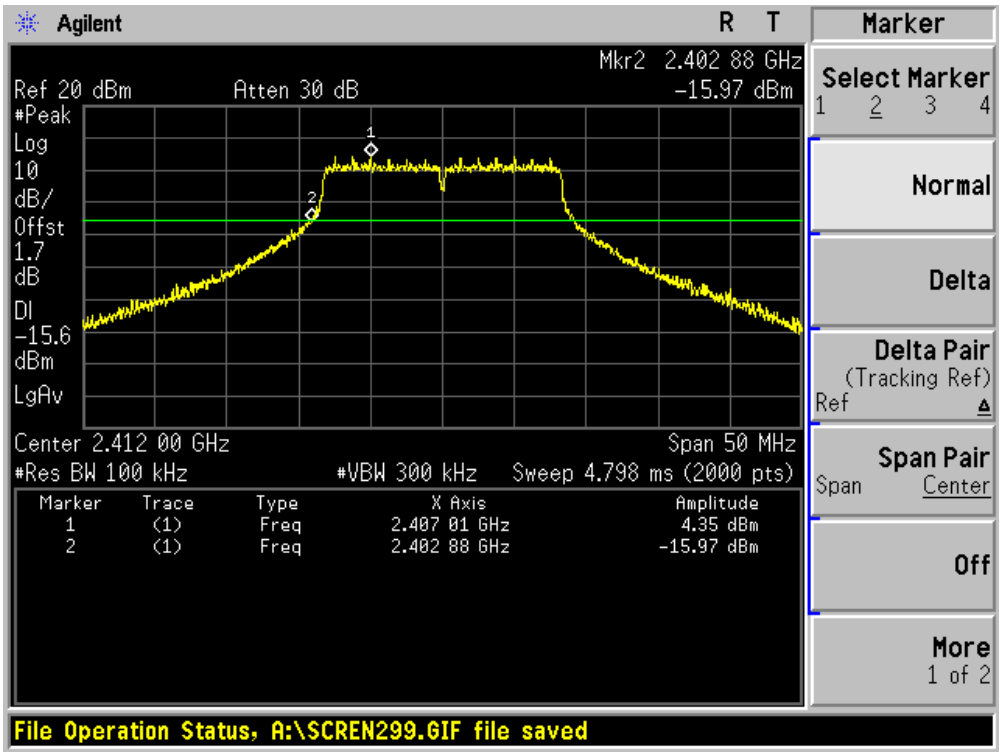


Channel 11 (2462MHz)

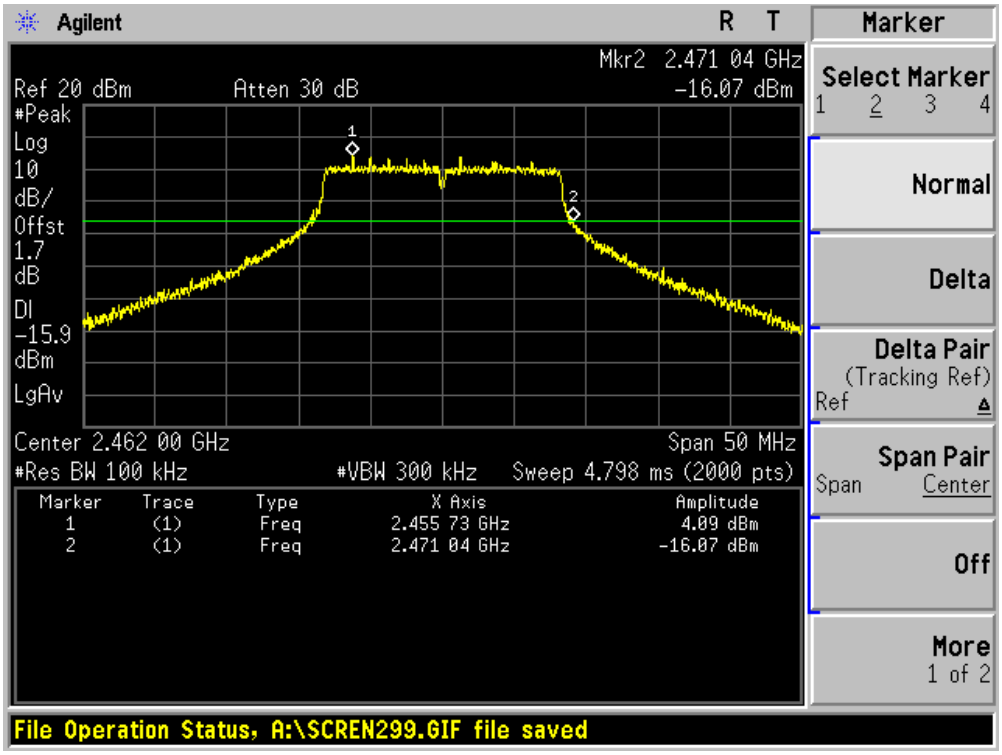


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 100

Channel 01 (2412MHz)

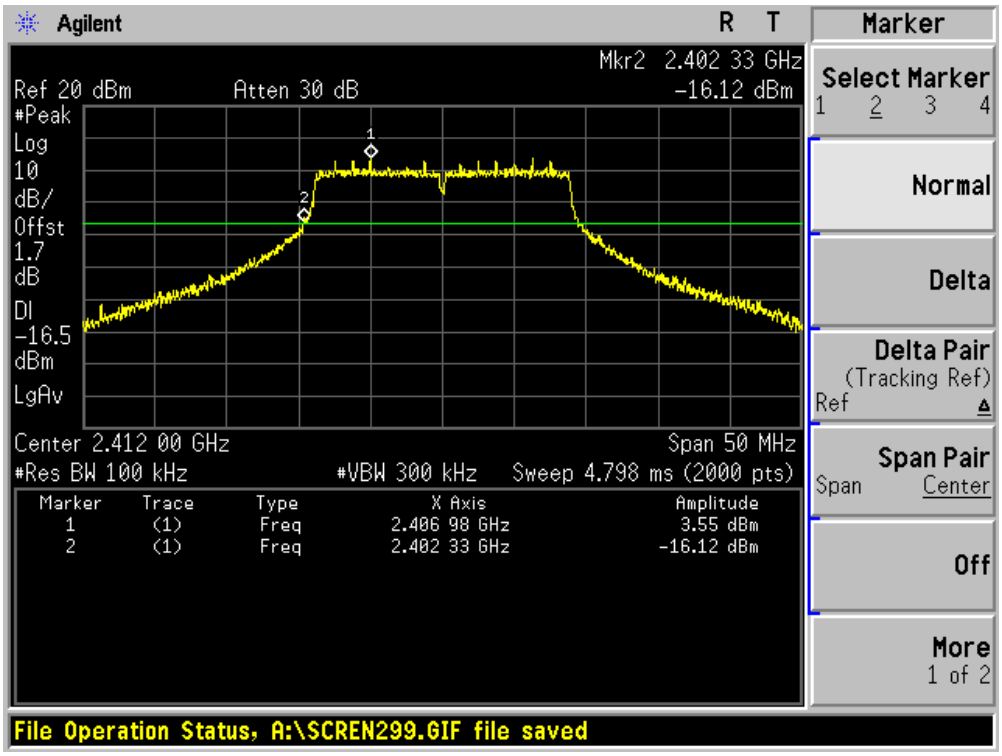


Channel 11 (2462MHz)

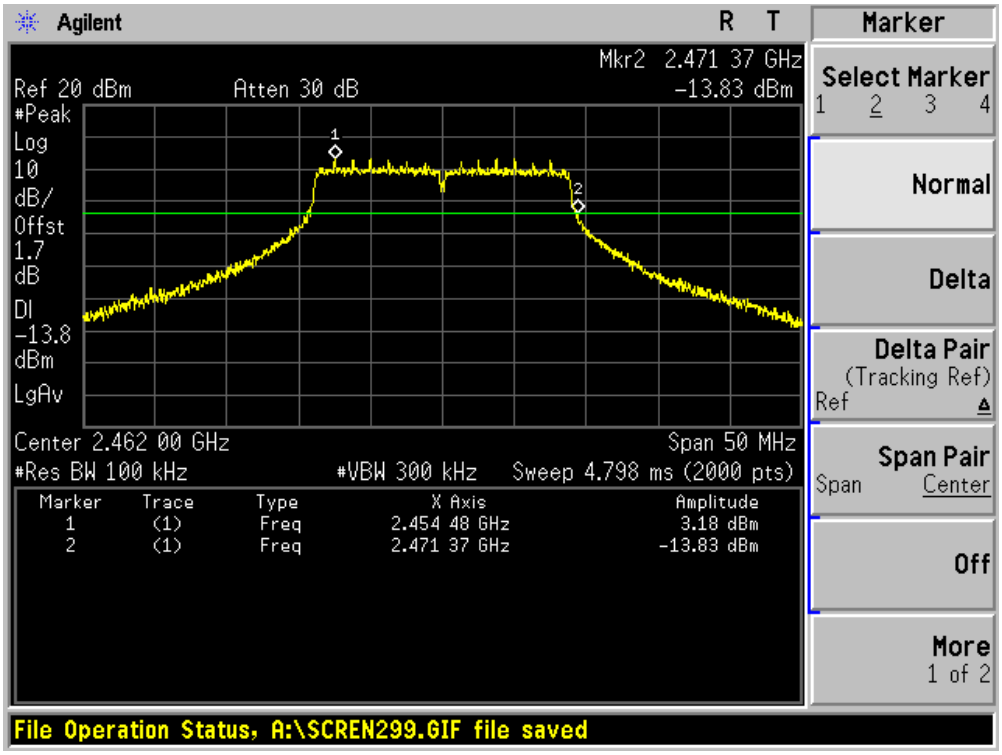


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 100

Channel 01 (2412MHz)

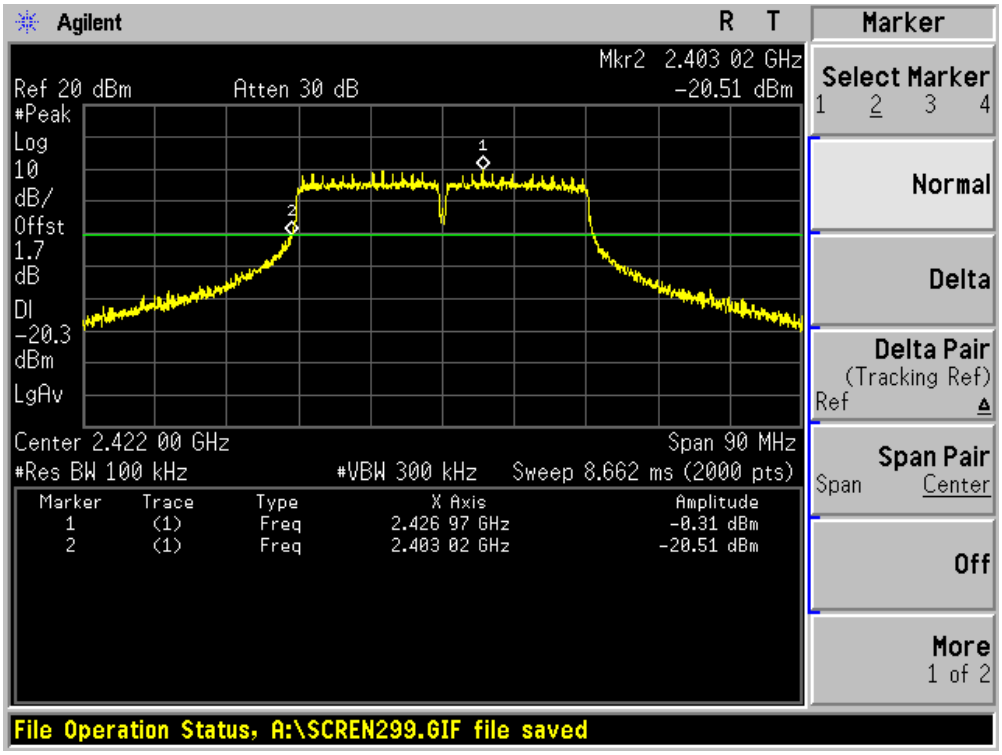


Channel 11 (2462MHz)

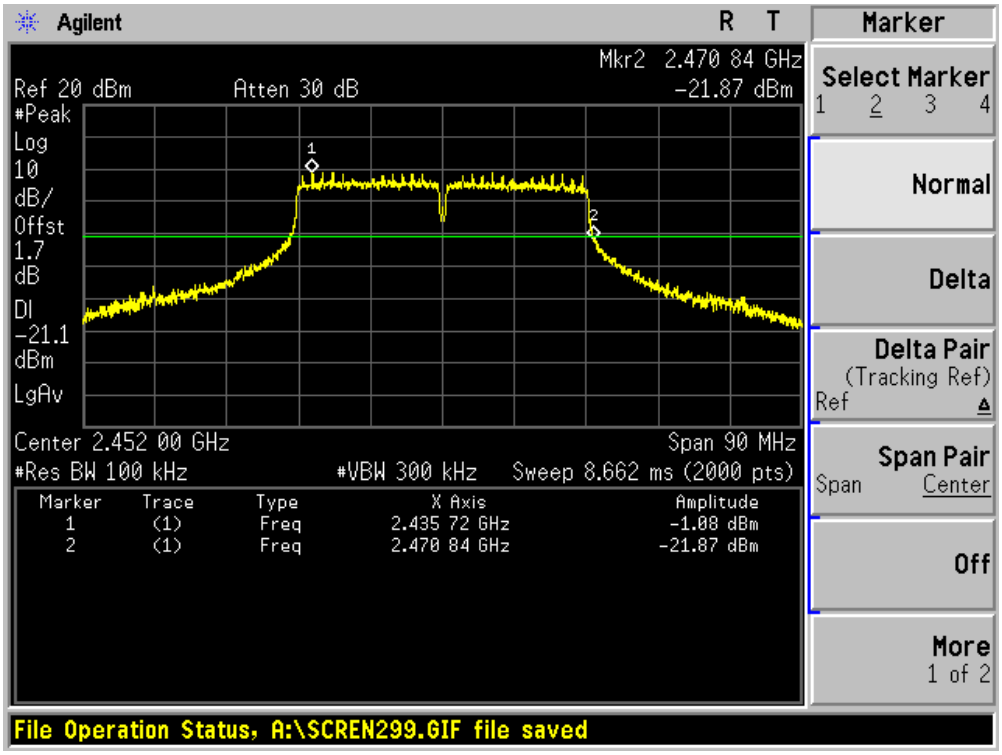


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 100

Channel 01 (2422MHz)



Channel 11 (2452MHz)



7. Occupied Bandwidth

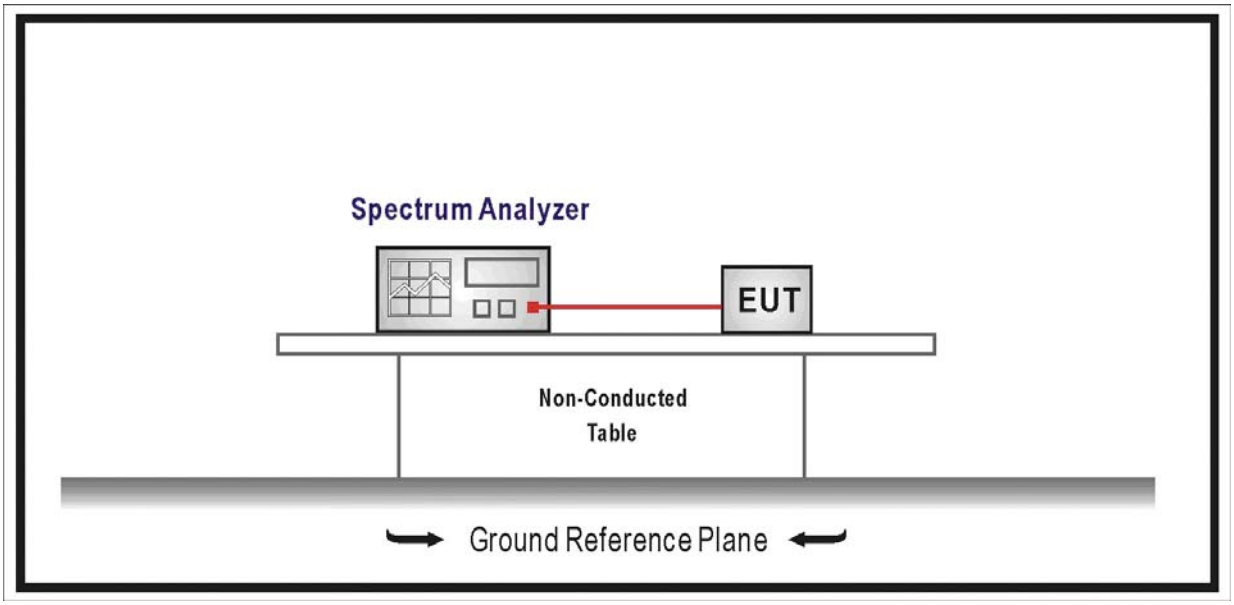
7.1. Test Equipment

Occupied Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

The minimum 6 dB bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

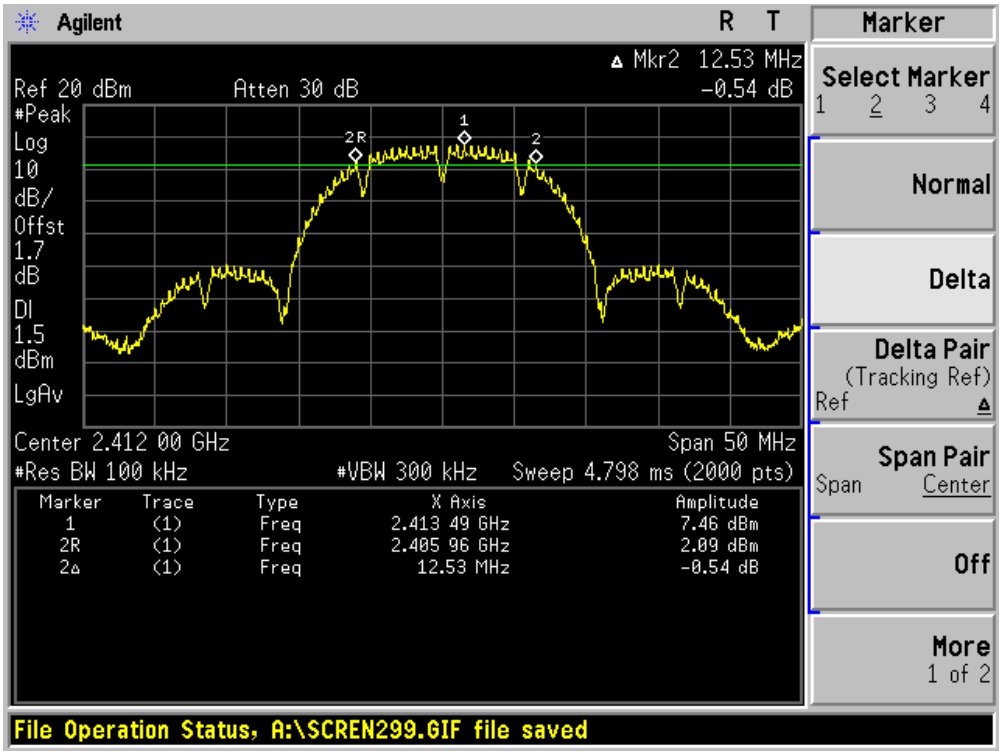
The measurement uncertainty is defined as ± 1 kHz

7.6. Test Result

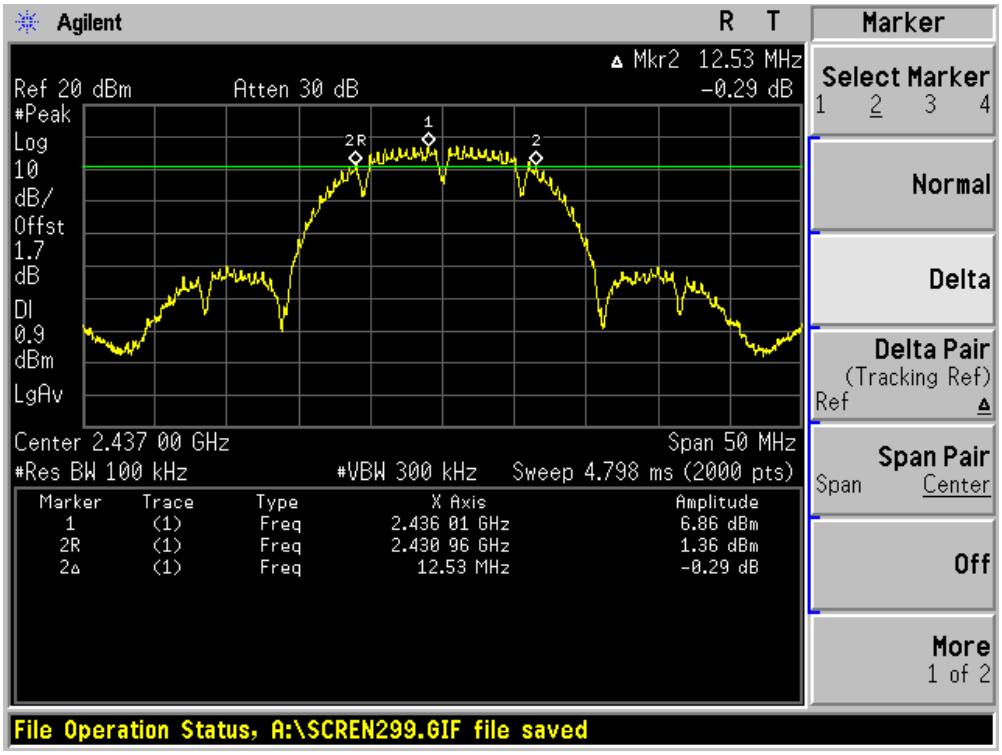
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 010

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12530	500	Pass
06	2437	12530	500	Pass
11	2462	13010	500	Pass

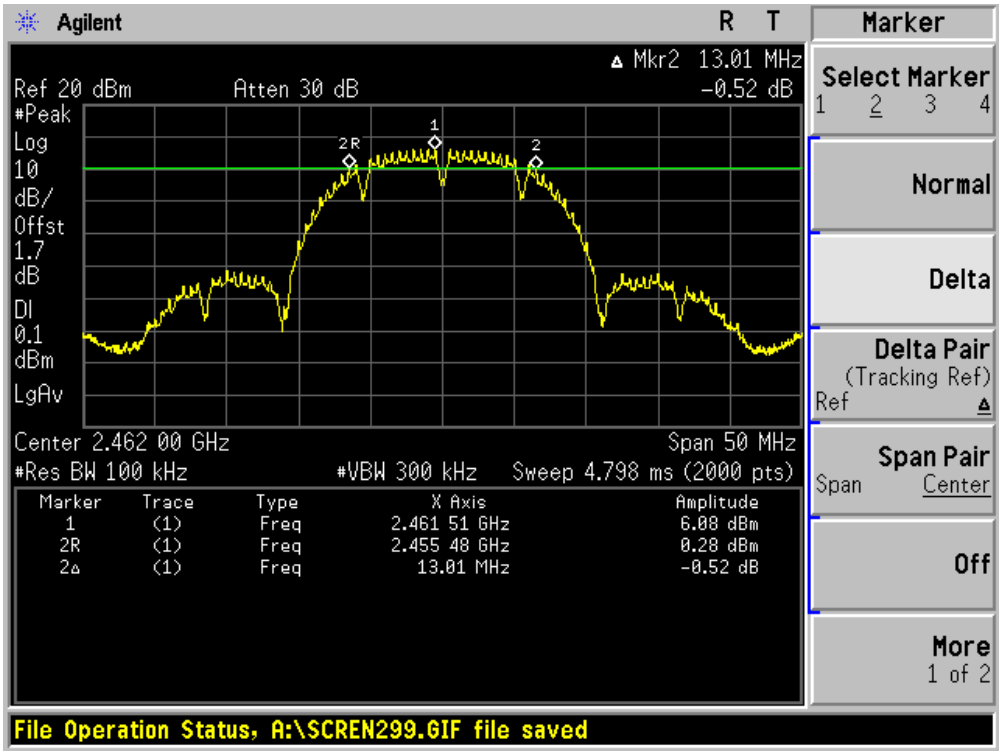
Channel 01 (2412MHz)



Channel 06 (2437MHz)



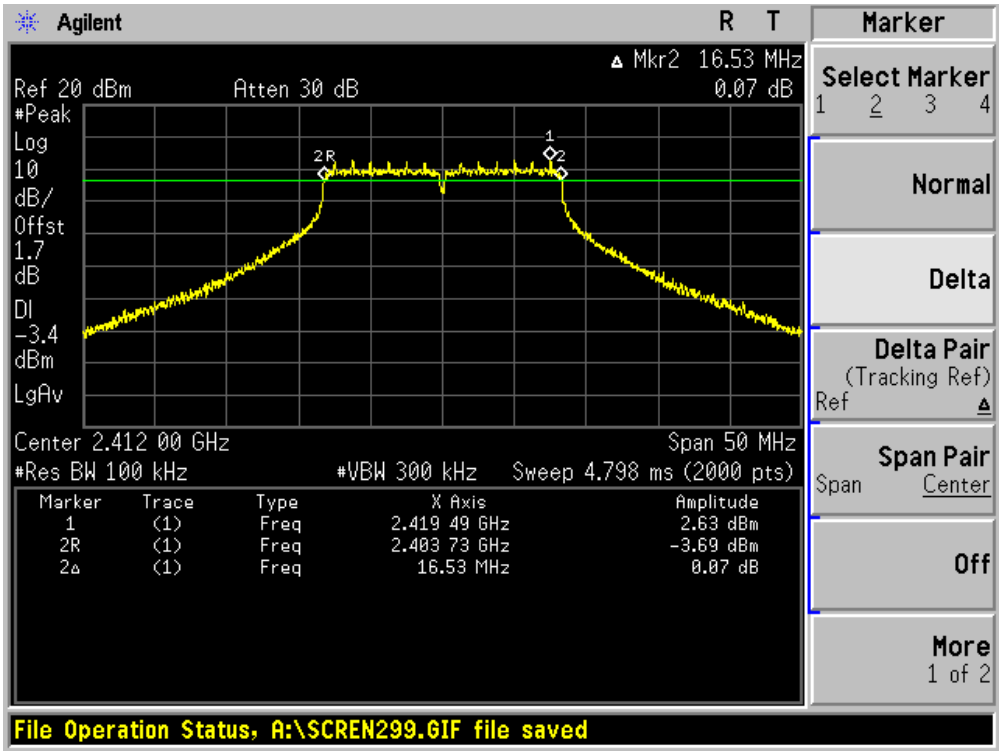
Channel 11 (2462MHz)



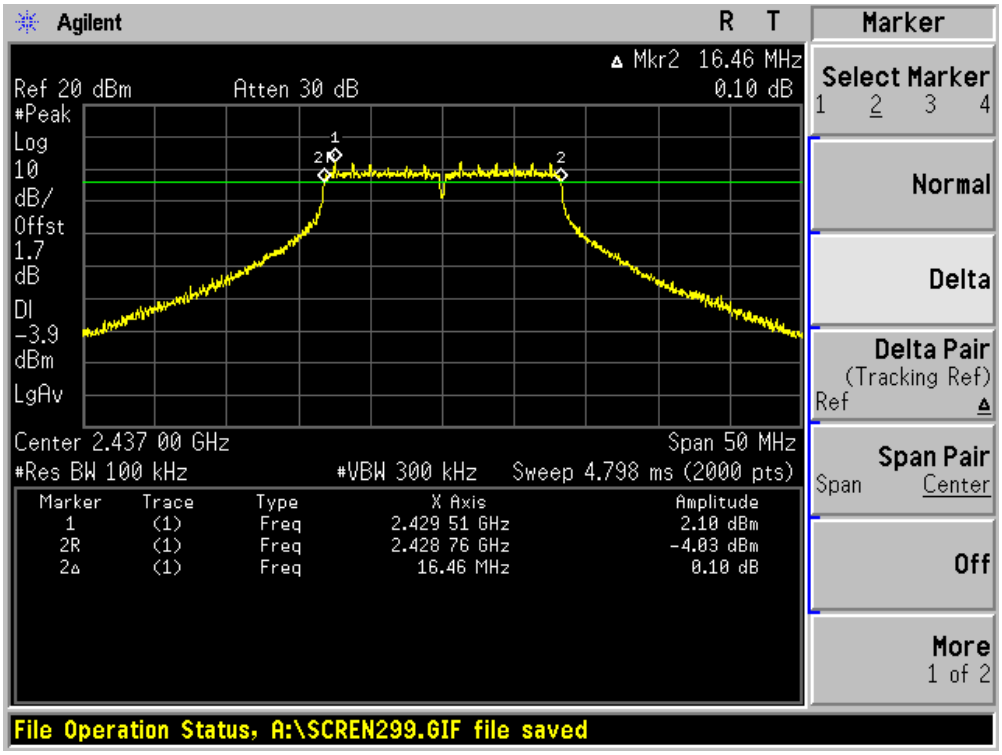
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16530	500	Pass
06	2437	16460	500	Pass
11	2462	16460	500	Pass

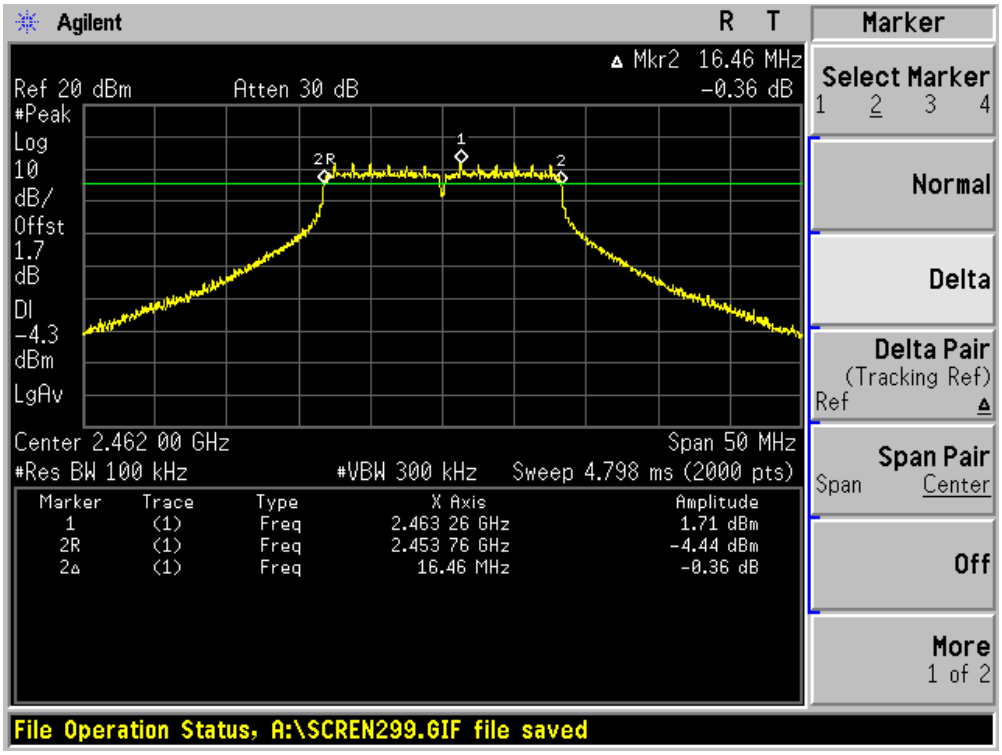
Channel 01 (2412MHz)



Channel 06 (2437MHz)



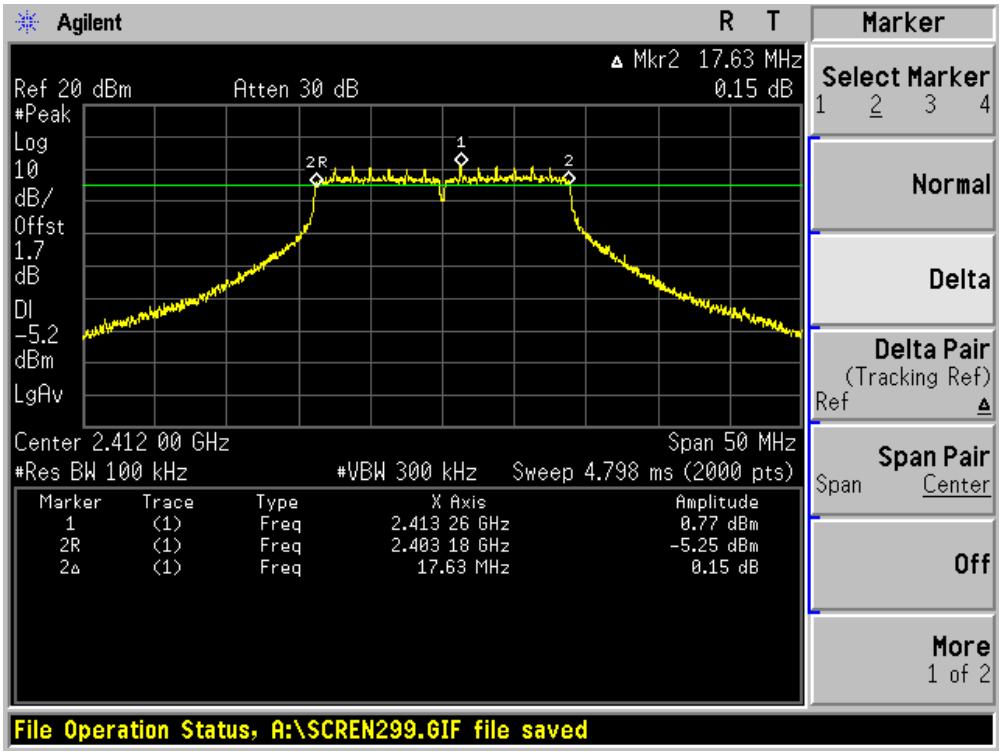
Channel 11 (2462MHz)



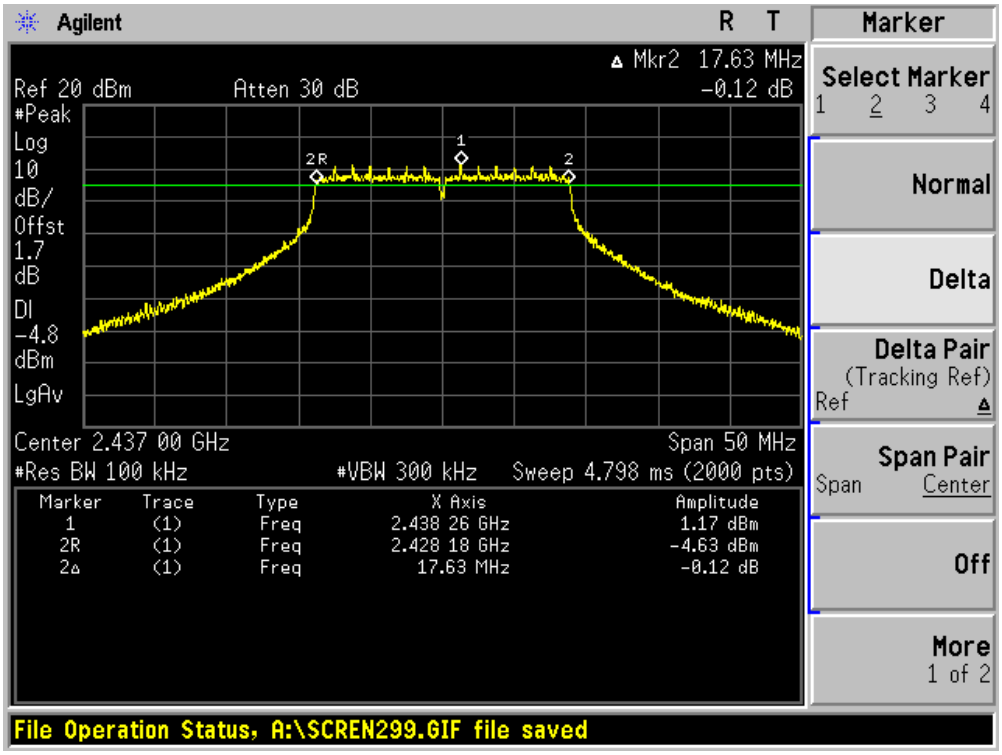
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 010

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17630	500	Pass
06	2437	17630	500	Pass
11	2462	17630	500	Pass

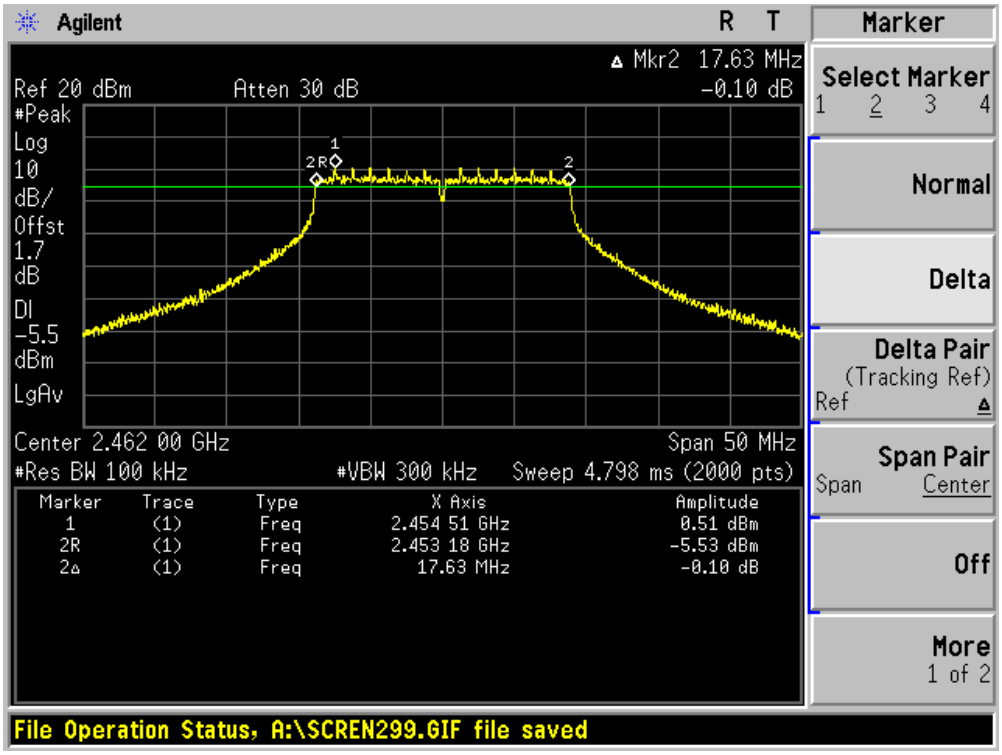
Channel 01 (2412MHz)



Channel 06 (2437MHz)



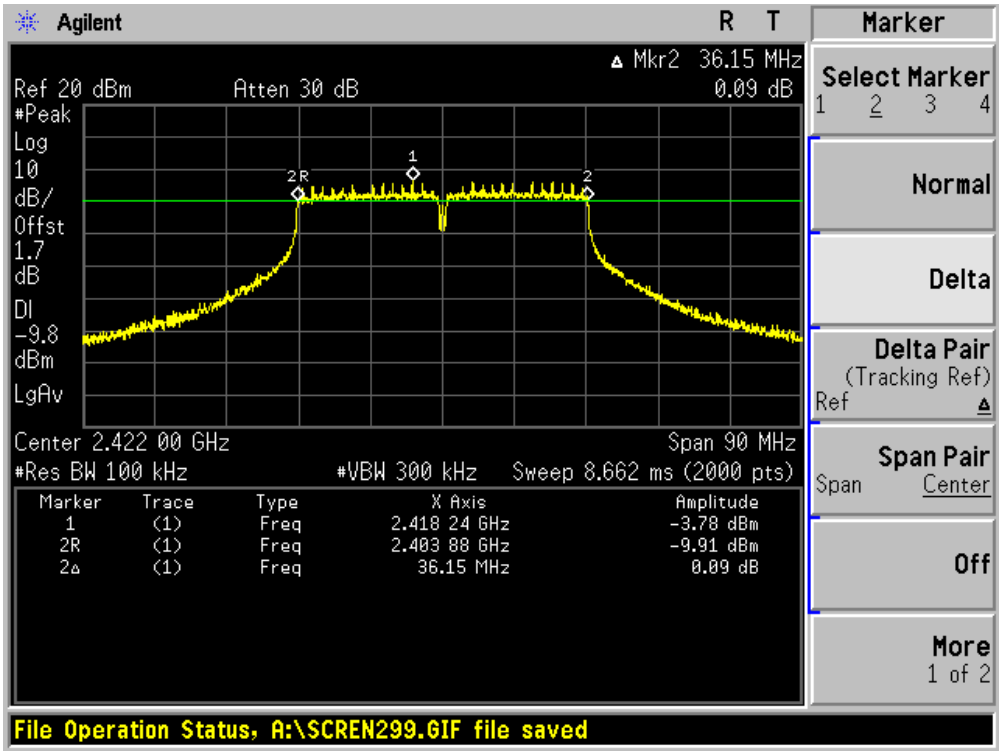
Channel 11 (2462MHz)



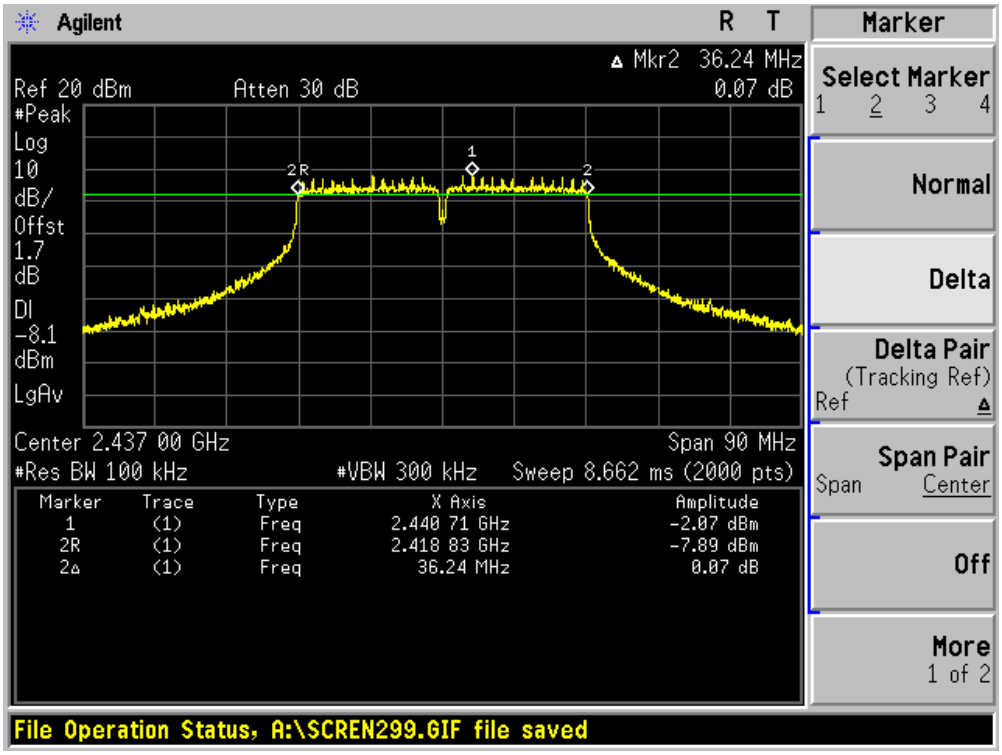
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 010

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36220	500	Pass
06	2437	36220	500	Pass
09	2452	36270	500	Pass

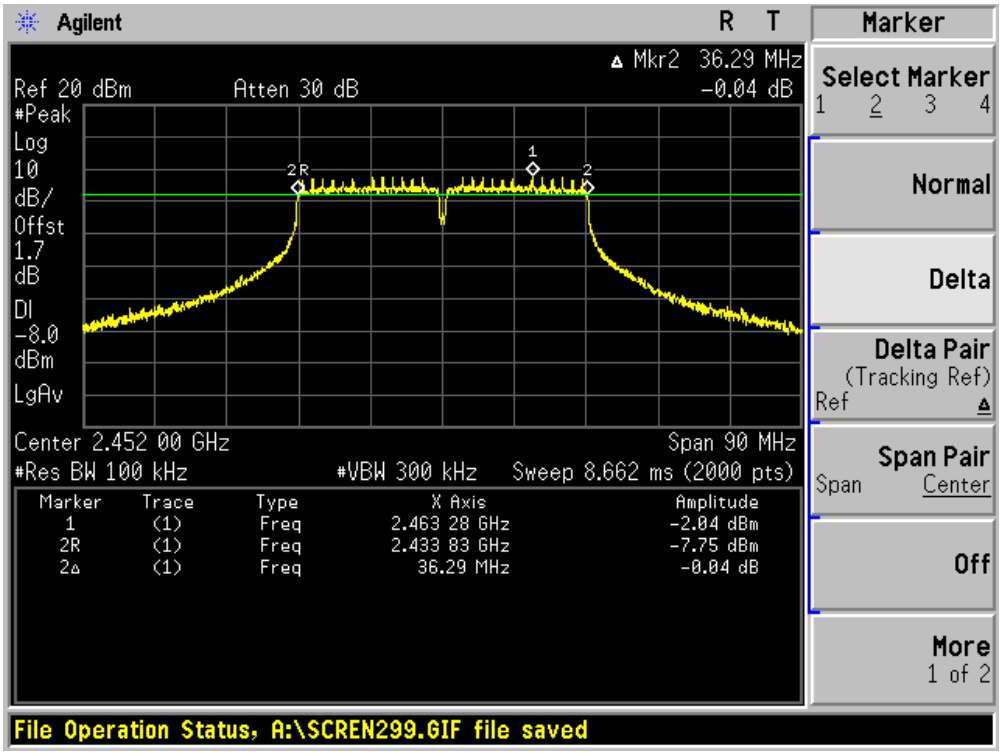
Channel 01 (2422MHz)



Channel 06 (2437MHz)



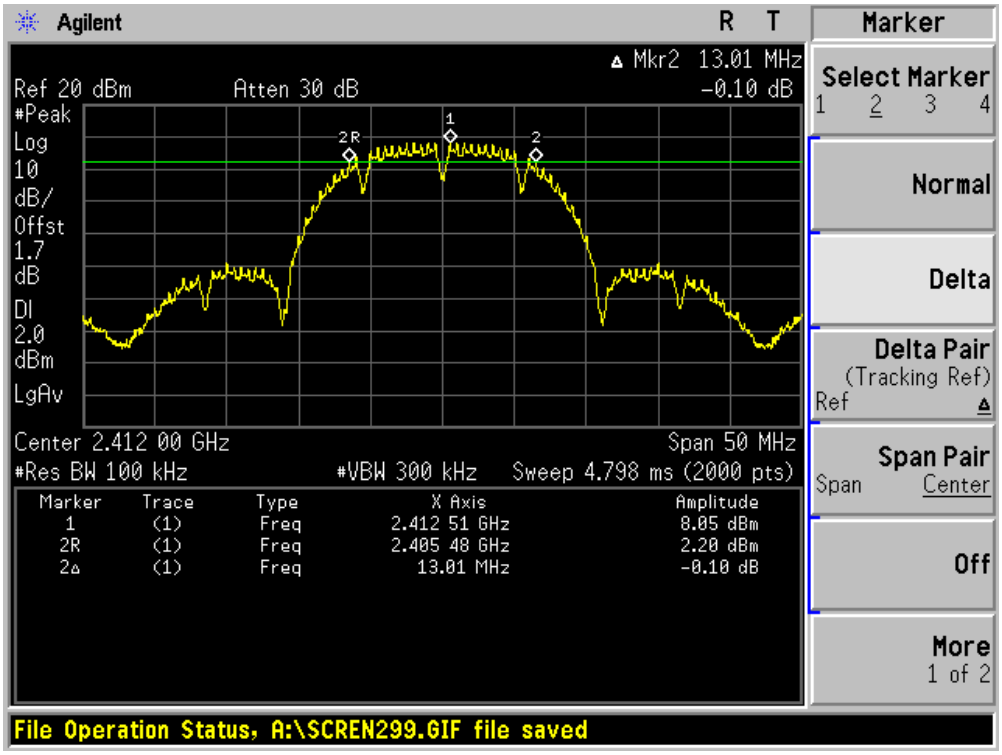
Channel 11 (2452MHz)



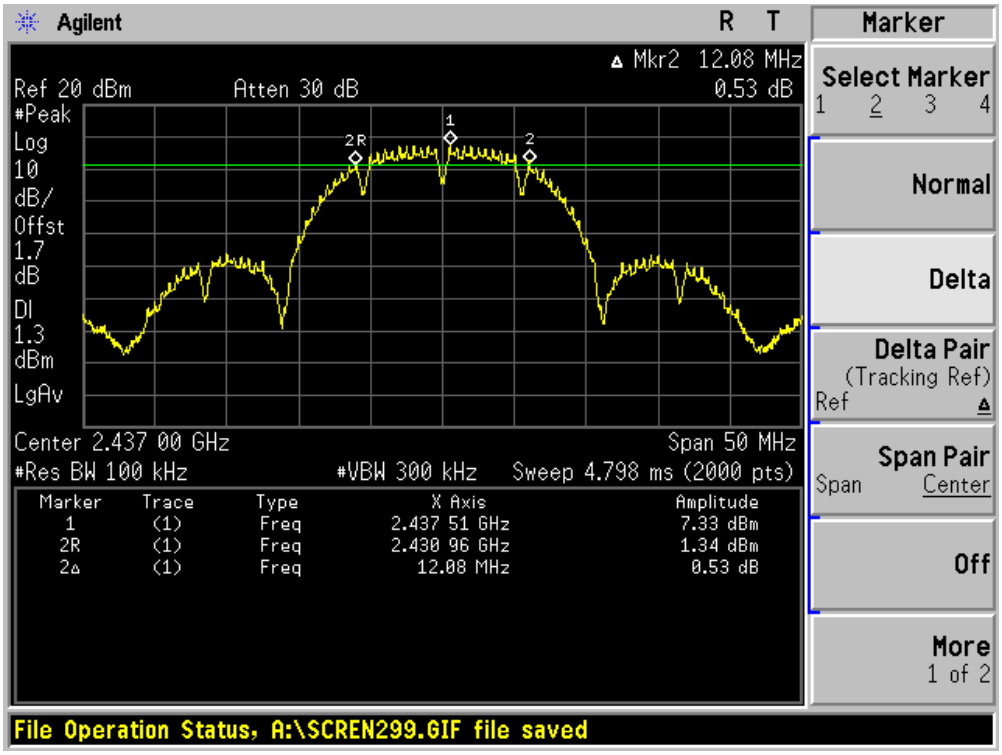
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 100

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	13010	500	Pass
06	2437	12080	500	Pass
11	2462	13010	500	Pass

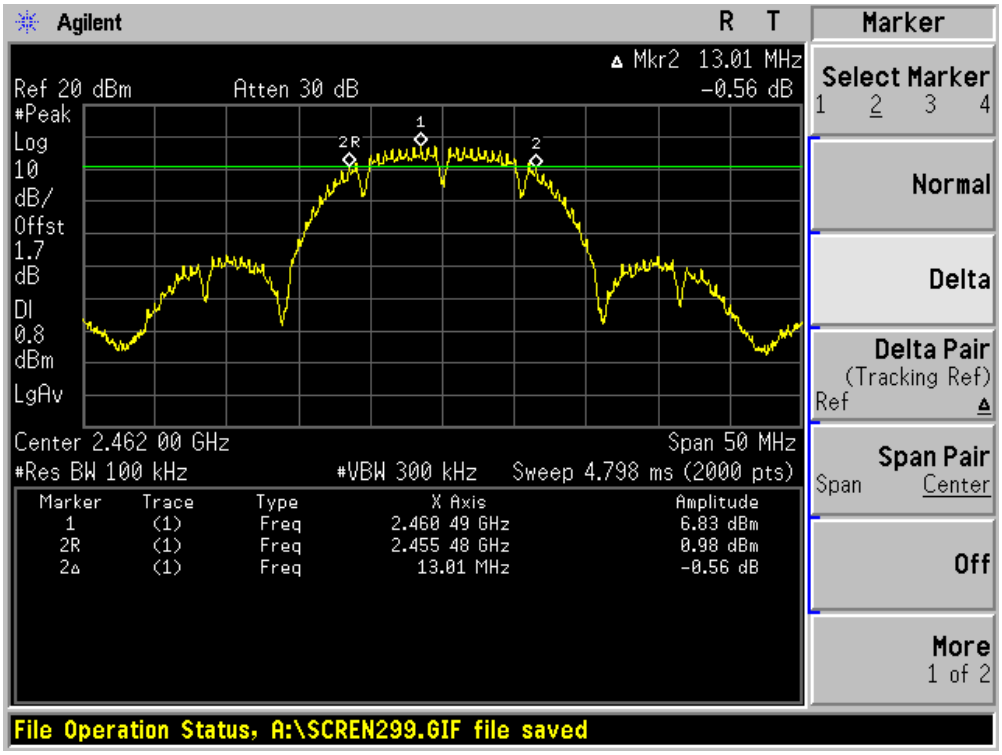
Channel 01 (2412MHz)



Channel 06 (2437MHz)



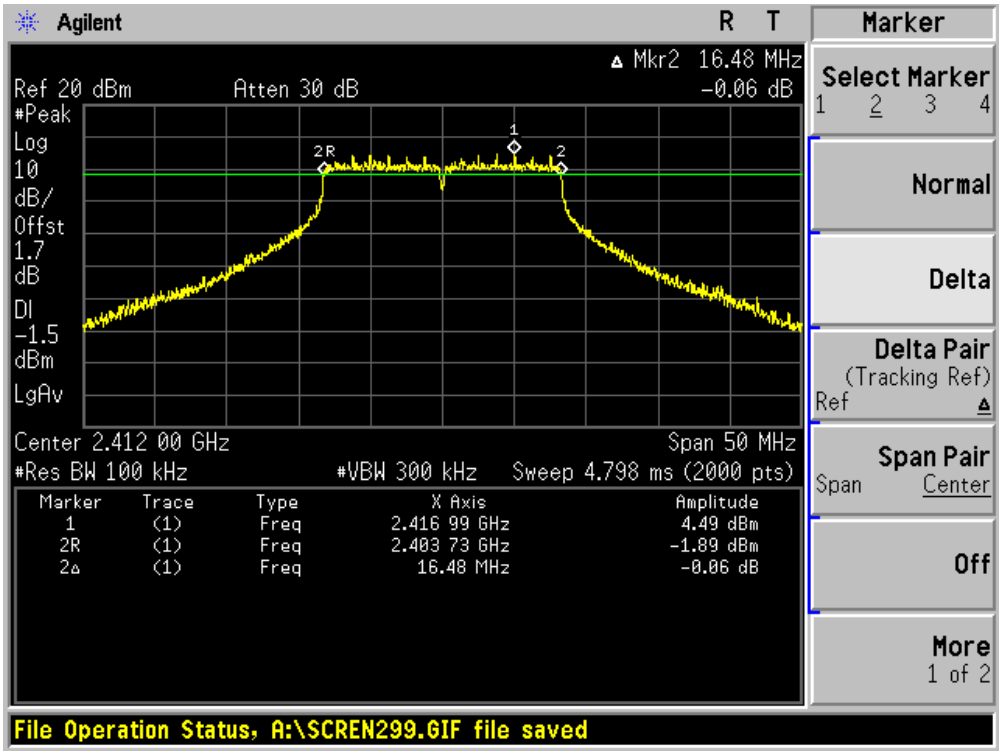
Channel 11 (2462MHz)



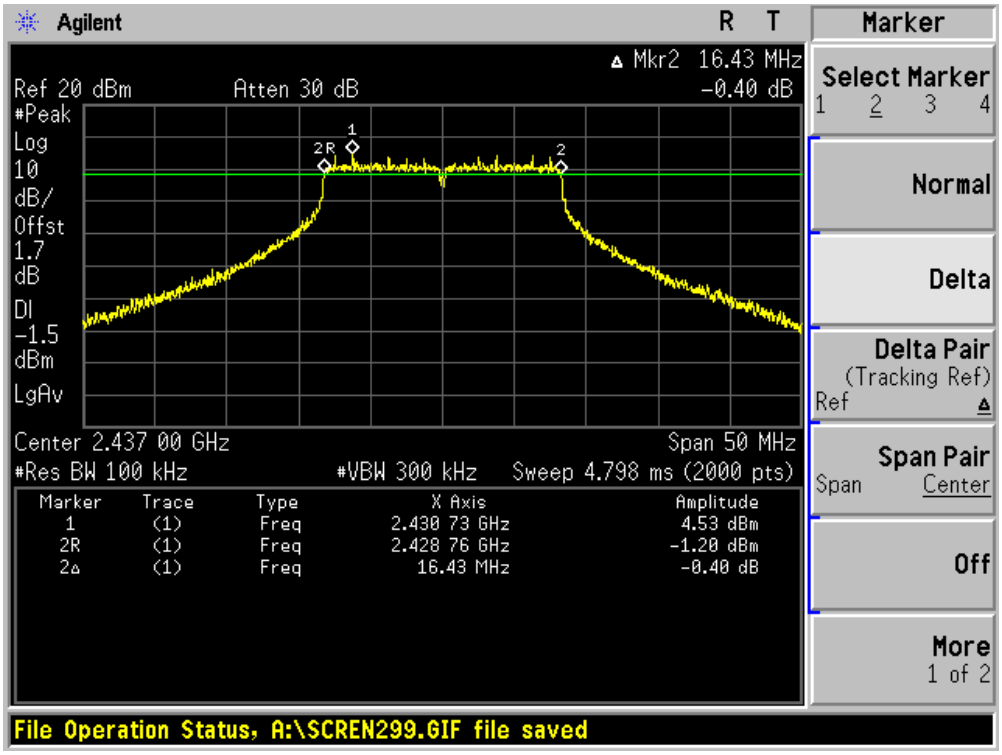
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 100

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16480	500	Pass
06	2437	16430	500	Pass
11	2462	16410	500	Pass

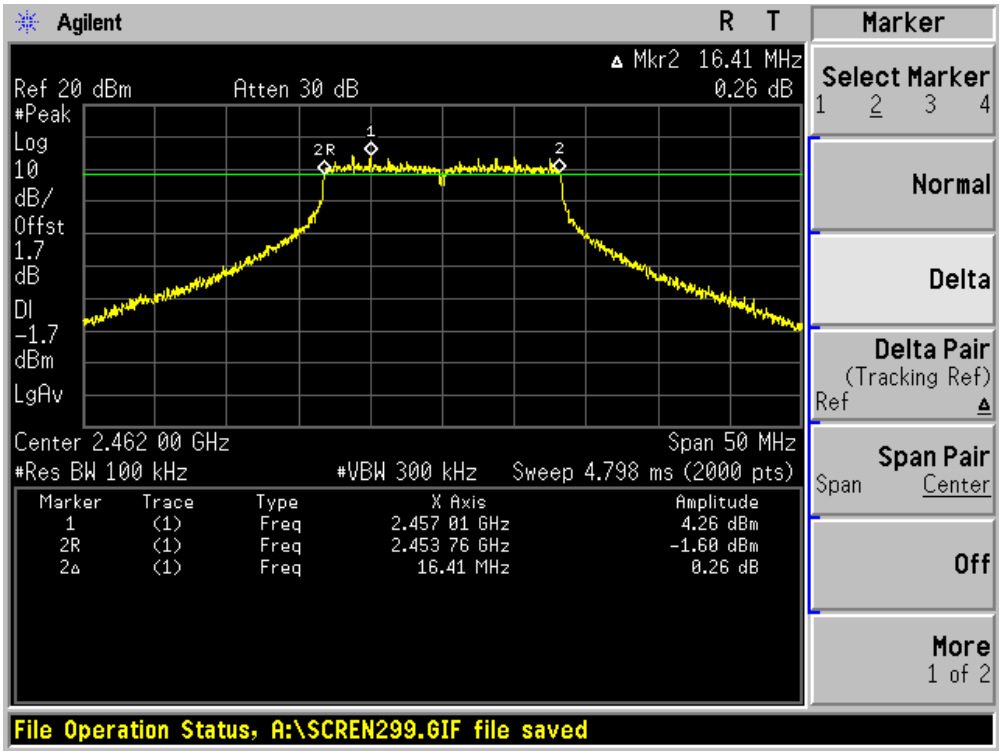
Channel 01 (2412MHz)



Channel 06 (2437MHz)



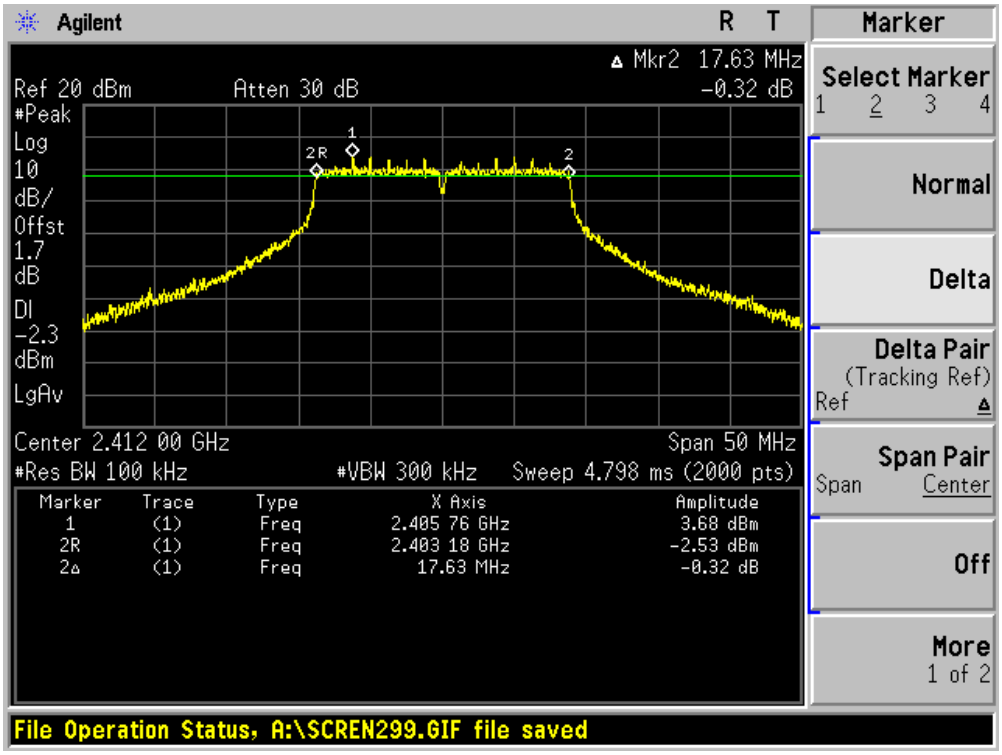
Channel 11 (2462MHz)



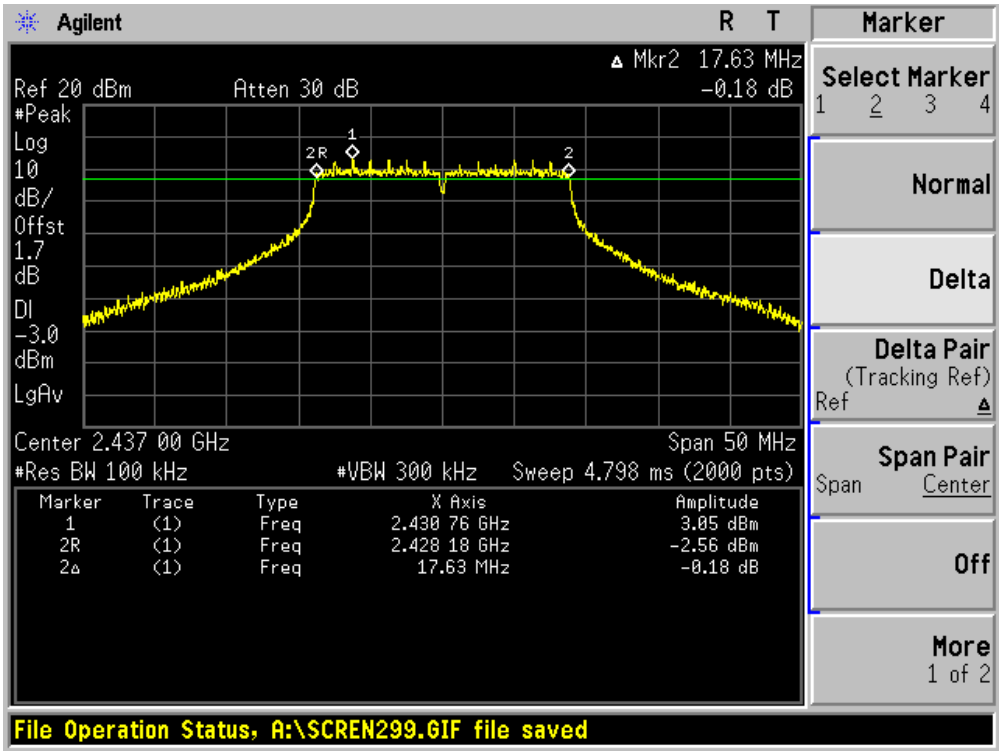
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 100

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17630	500	Pass
06	2437	17630	500	Pass
11	2462	17660	500	Pass

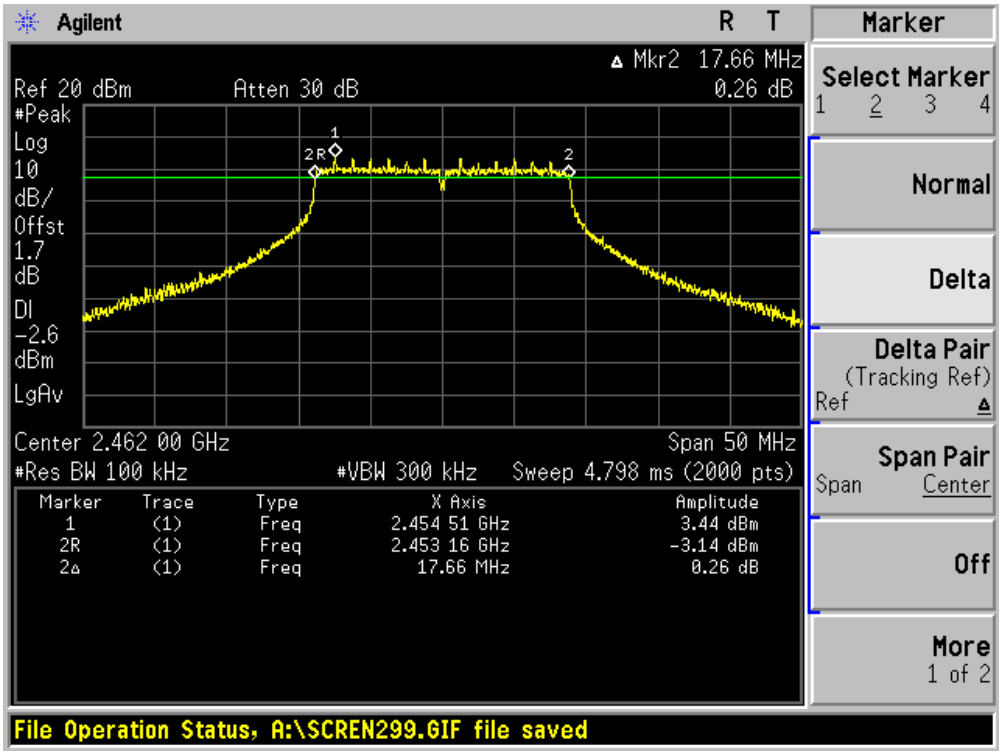
Channel 01 (2412MHz)



Channel 06 (2437MHz)



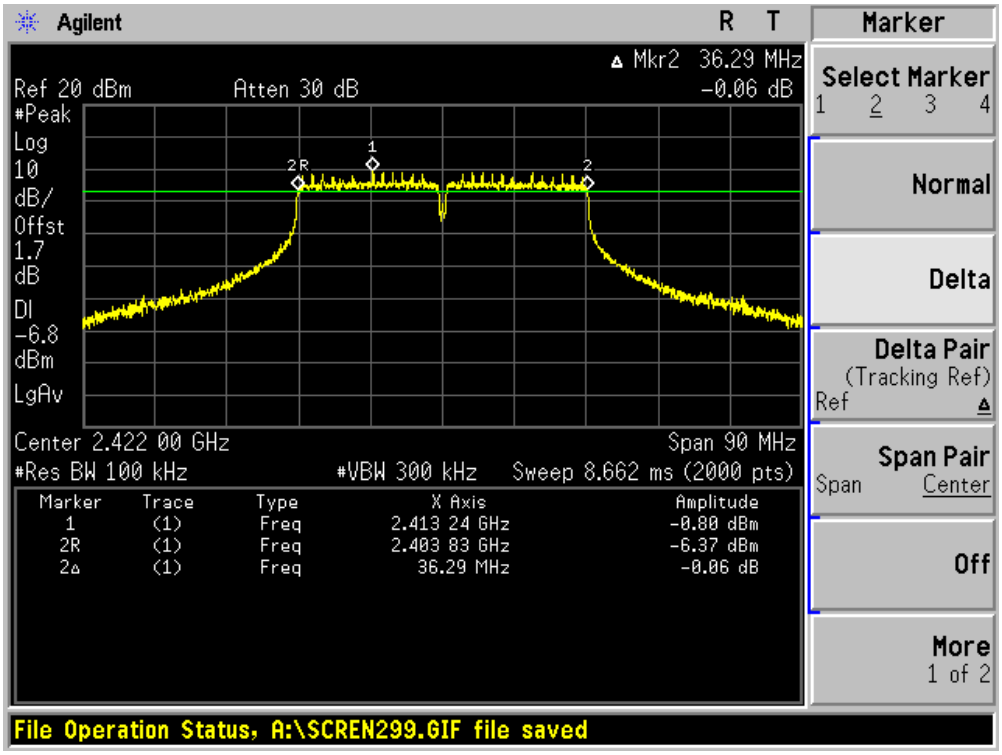
Channel 11 (2462MHz)



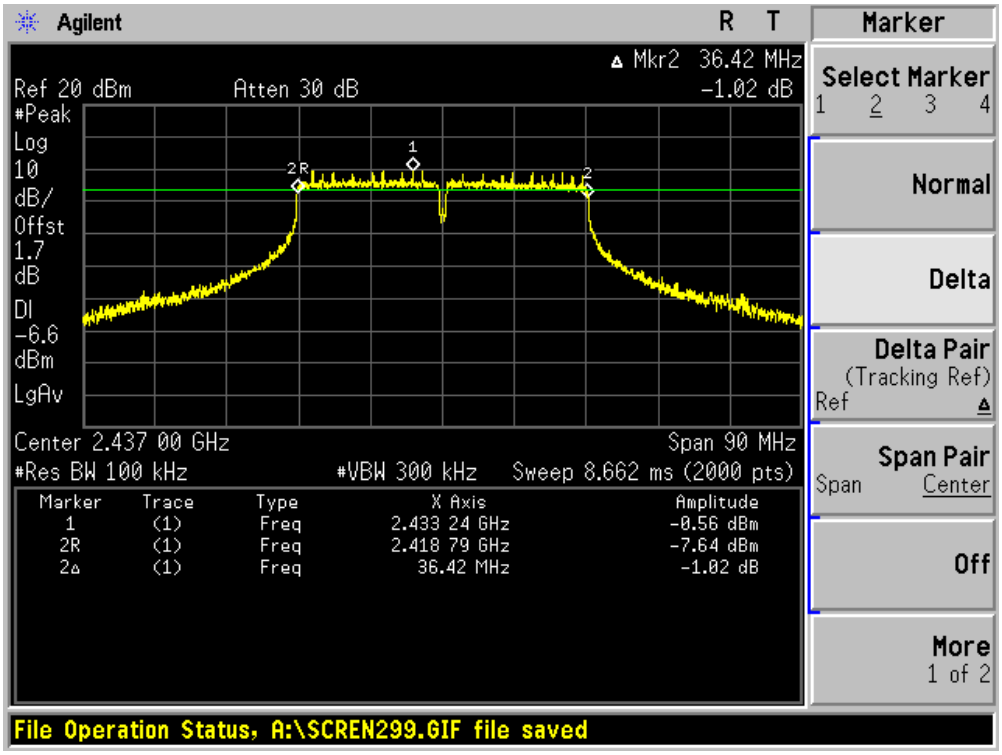
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 100

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36290	500	Pass
06	2437	36420	500	Pass
09	2452	36380	500	Pass

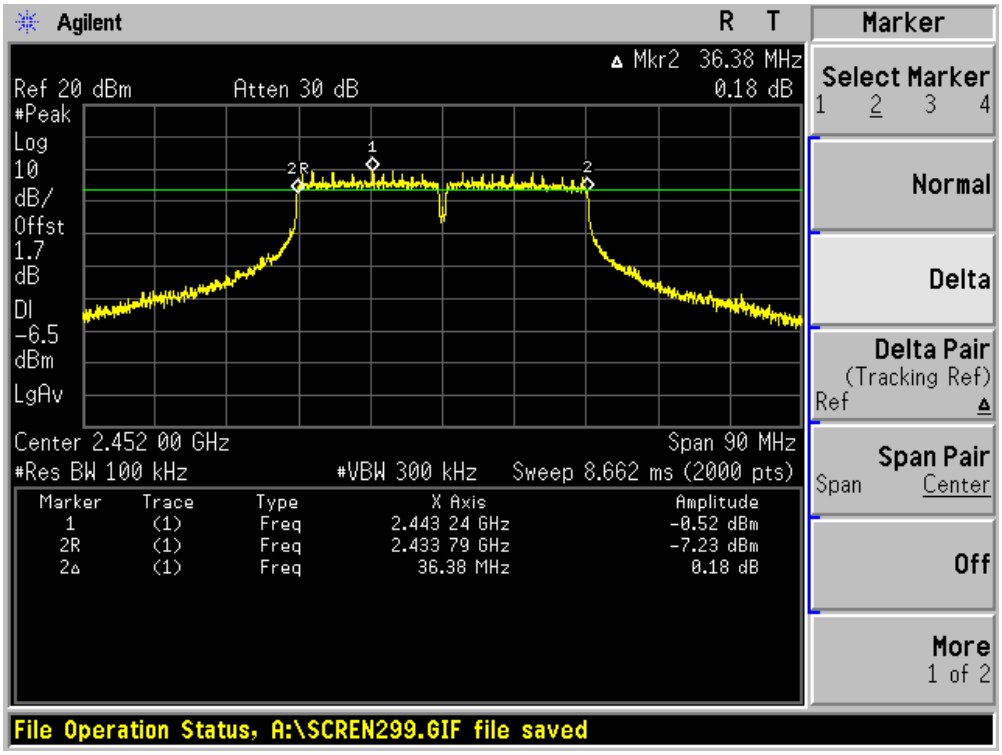
Channel 01 (2422MHz)



Channel 06 (2437MHz)



Channel 11 (2452MHz)



8. Power Output

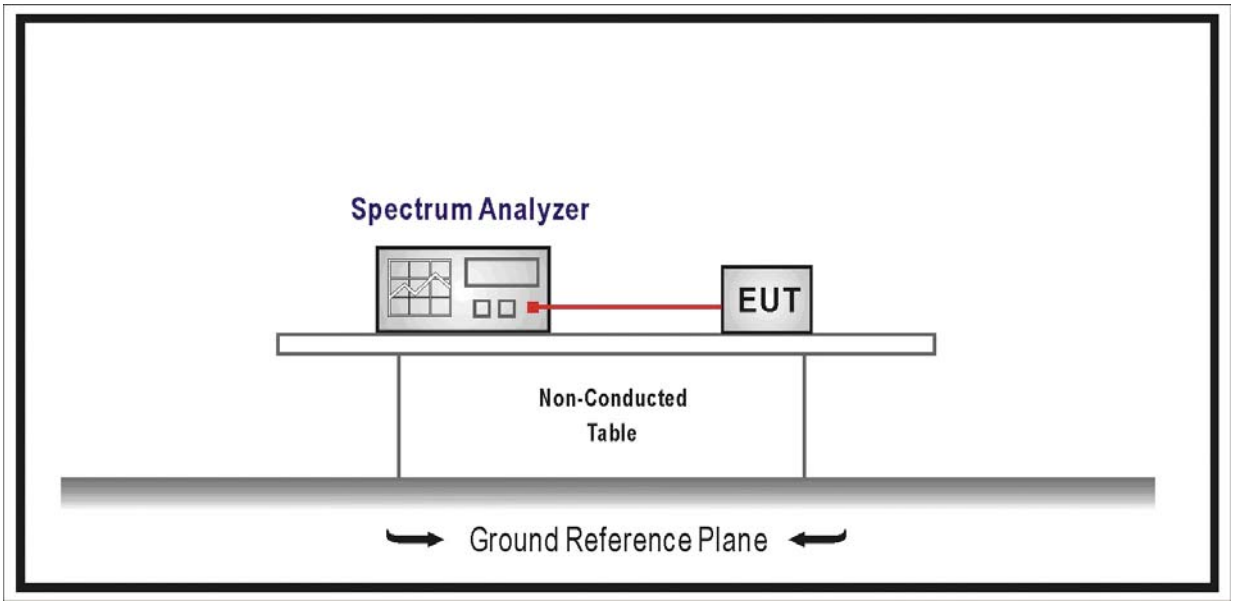
8.1. Test Equipment

Power Output / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

8.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Power output measurement allowed per Section 15.247(b)(3).
In the following, “T” is the transmission pulse duration over which the transmitter is on and transmitting at its maximum power control level. Measurements are performed with a spectrum analyzer. Three methods are provided to accommodate measurement limitations of the spectrum analyzer depending on signal parameters. Set resolution bandwidth (RBW) = 1 MHz. Set span to encompass the entire emission bandwidth (EBW) of the signal. Use automatic setting for analyzer sweep time.

As “T” ≧ sweep time, the test procedure will be used as following:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW ≧ 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to “free run”.
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer’s band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

8.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

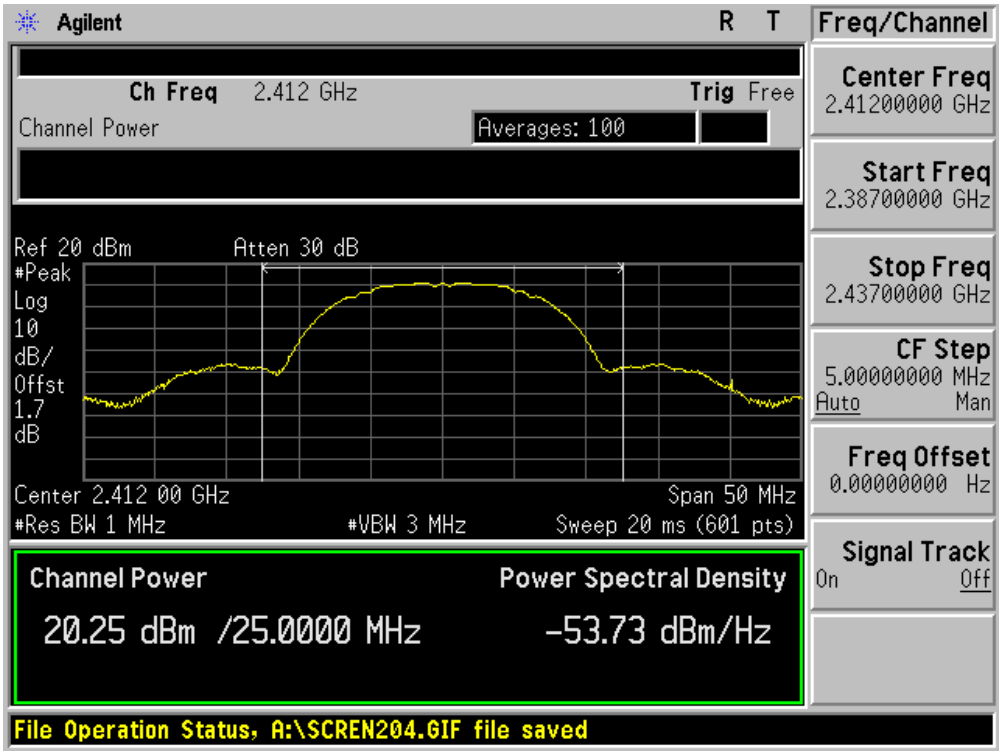
8.6. Test Result

Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 010

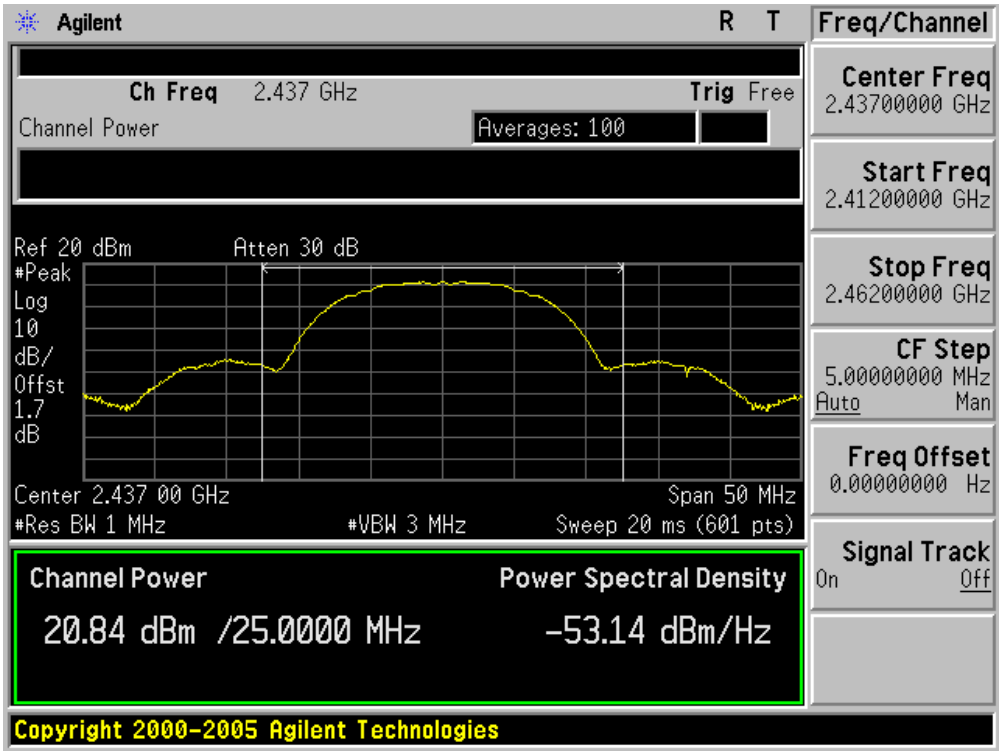
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	20.25	N/A	20.25	30.00	Pass
6	2437	20.84	N/A	20.84	30.00	Pass
11	2462	19.94	N/A	19.94	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

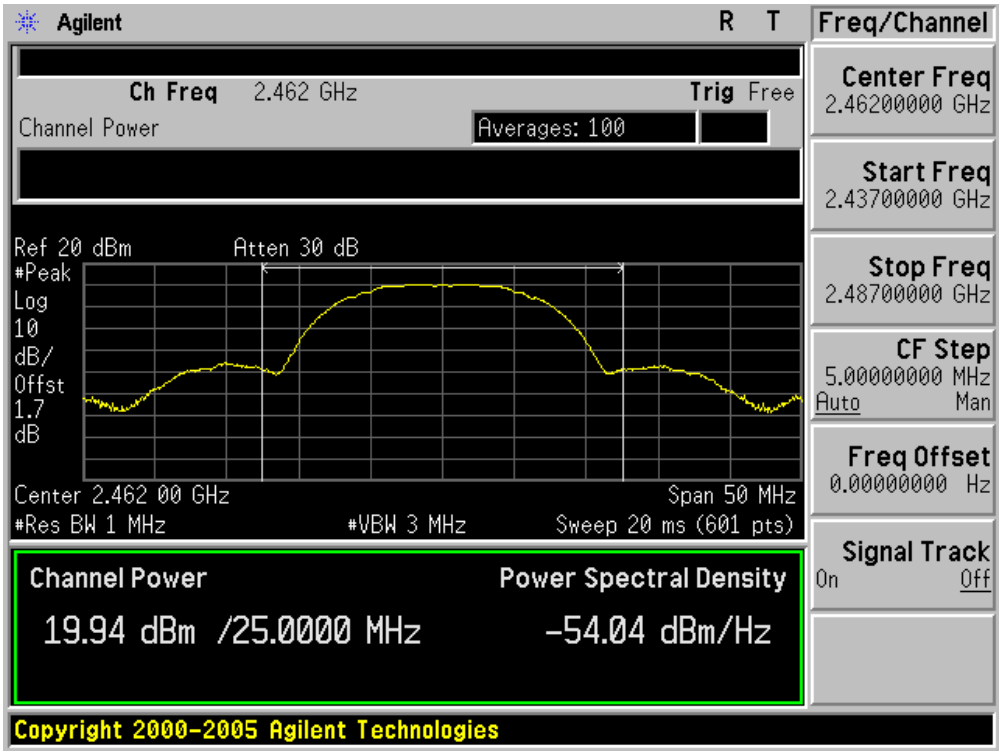
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

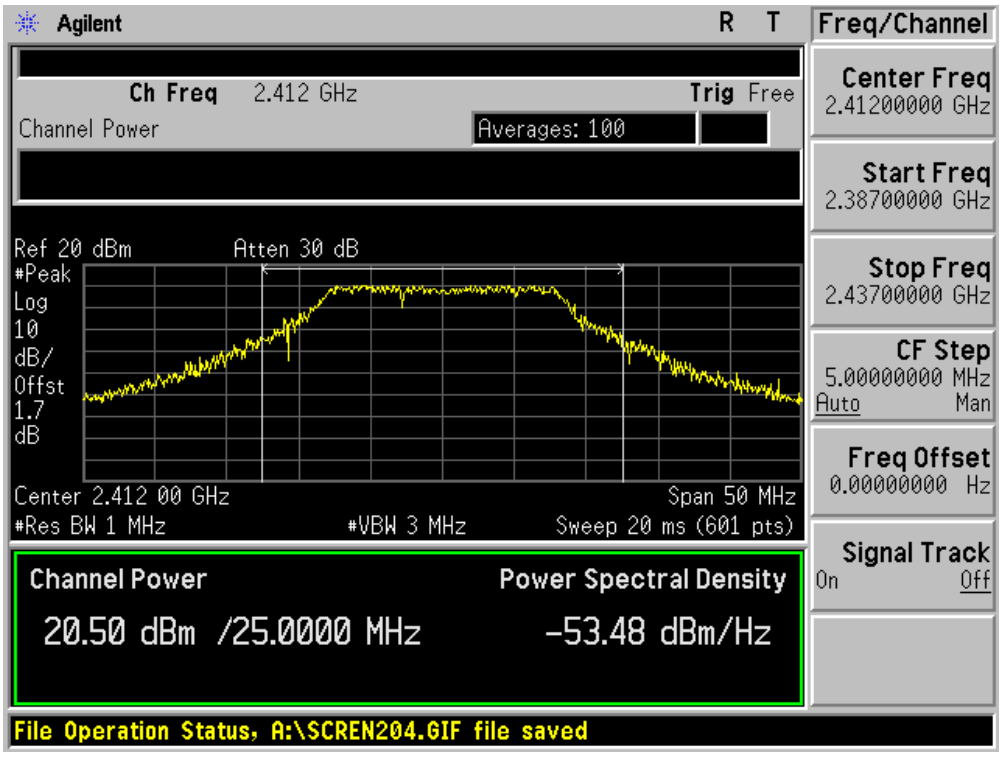


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

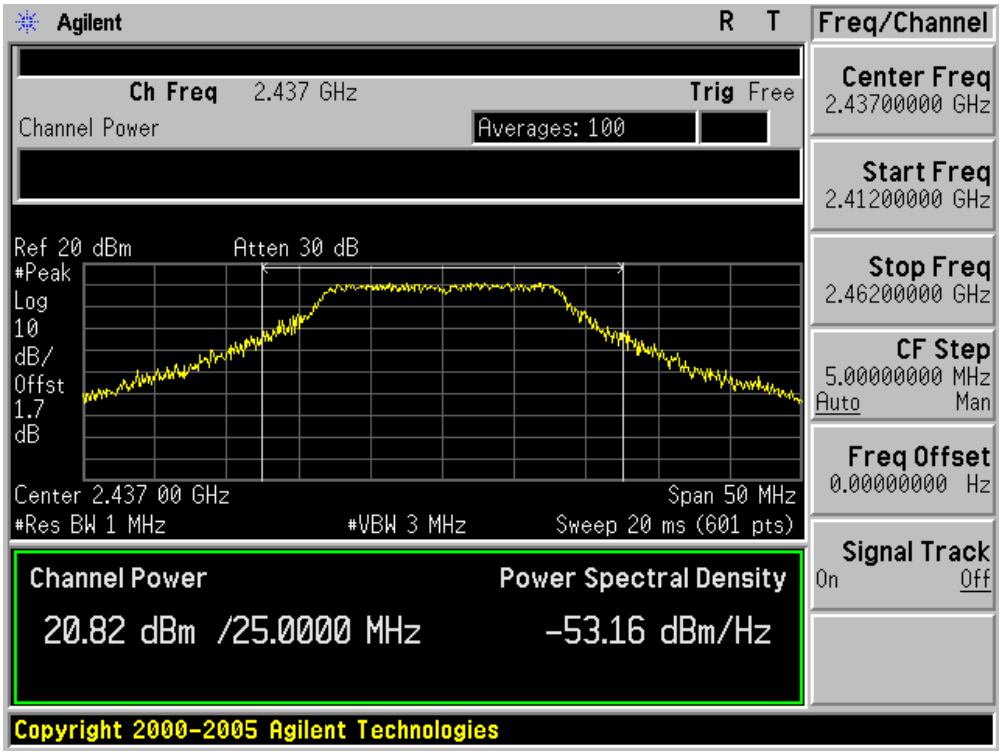
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	20.50	N/A	20.50	30.00	Pass
6	2437	20.82	N/A	20.82	30.00	Pass
11	2462	19.28	N/A	19.28	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

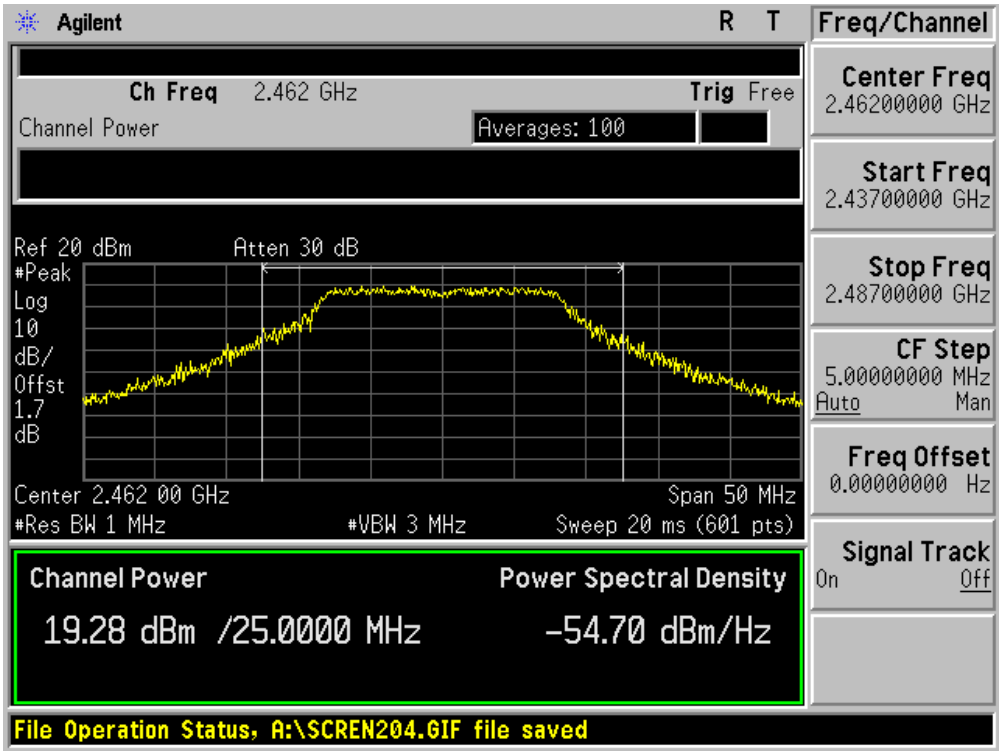
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

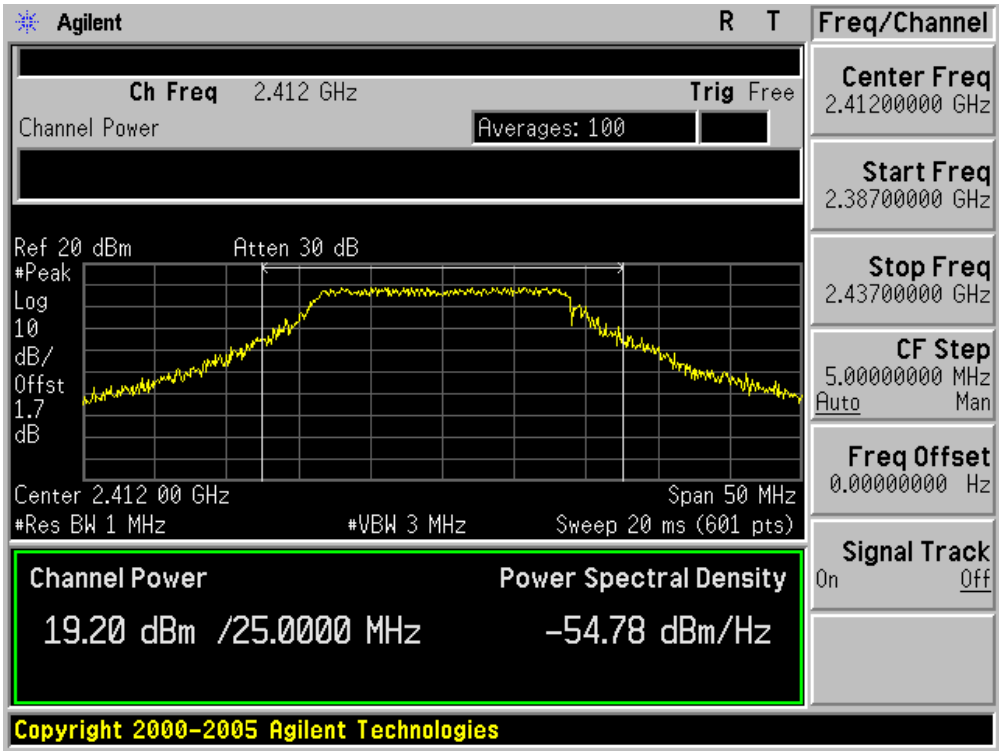


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 010

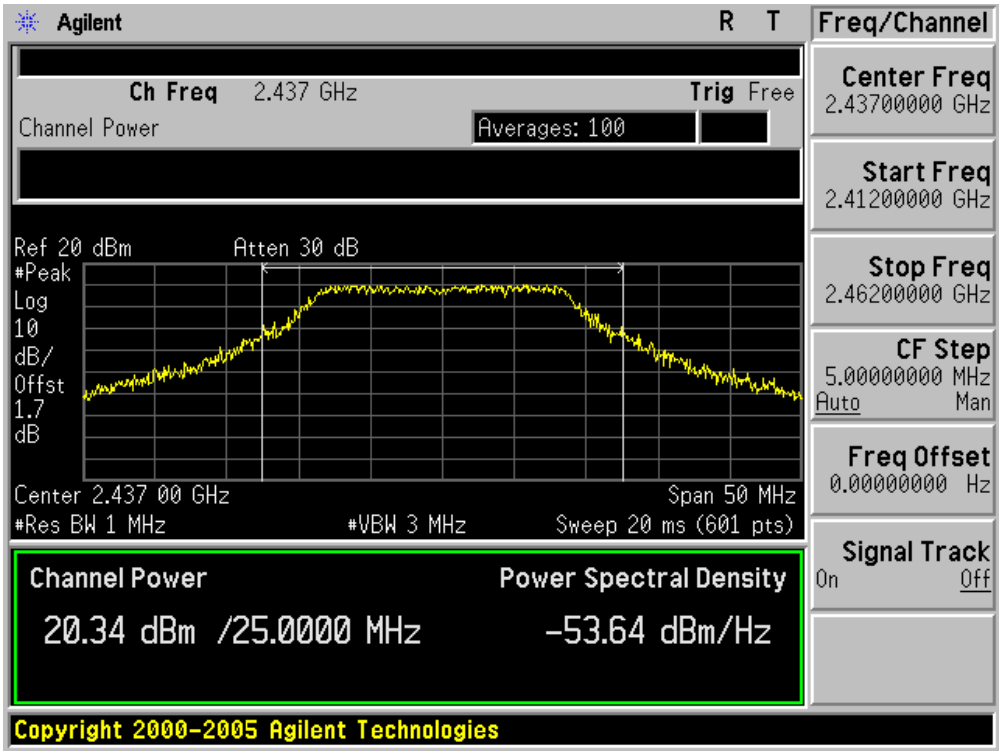
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	19.20	N/A	19.20	30.00	Pass
6	2437	20.34	N/A	20.34	30.00	Pass
11	2462	19.19	N/A	19.19	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

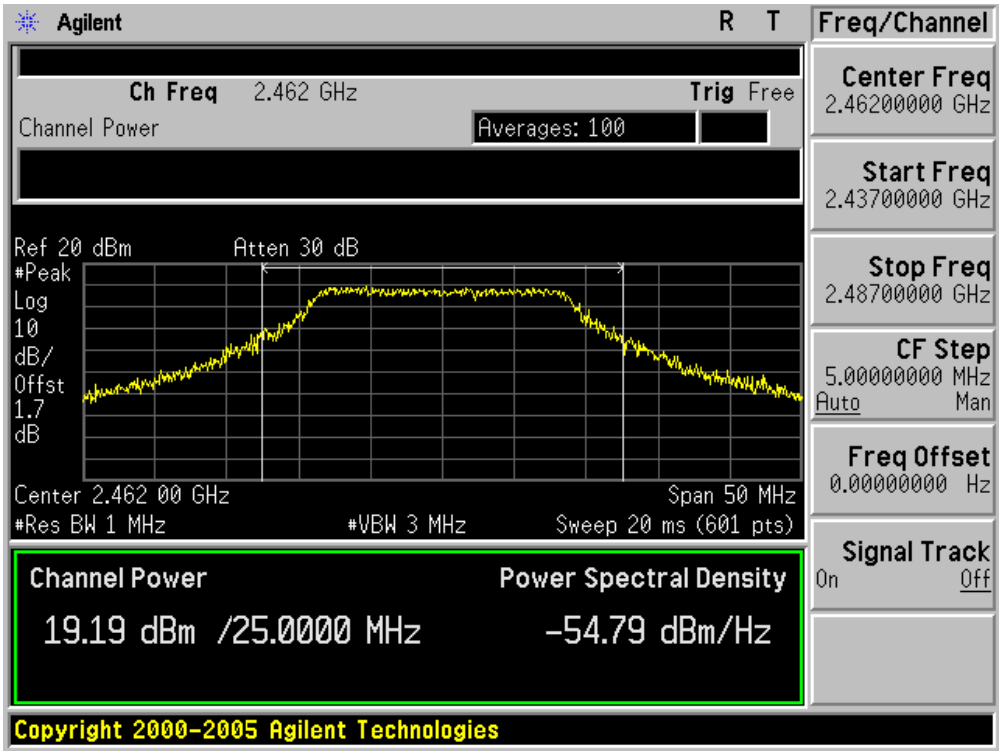
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

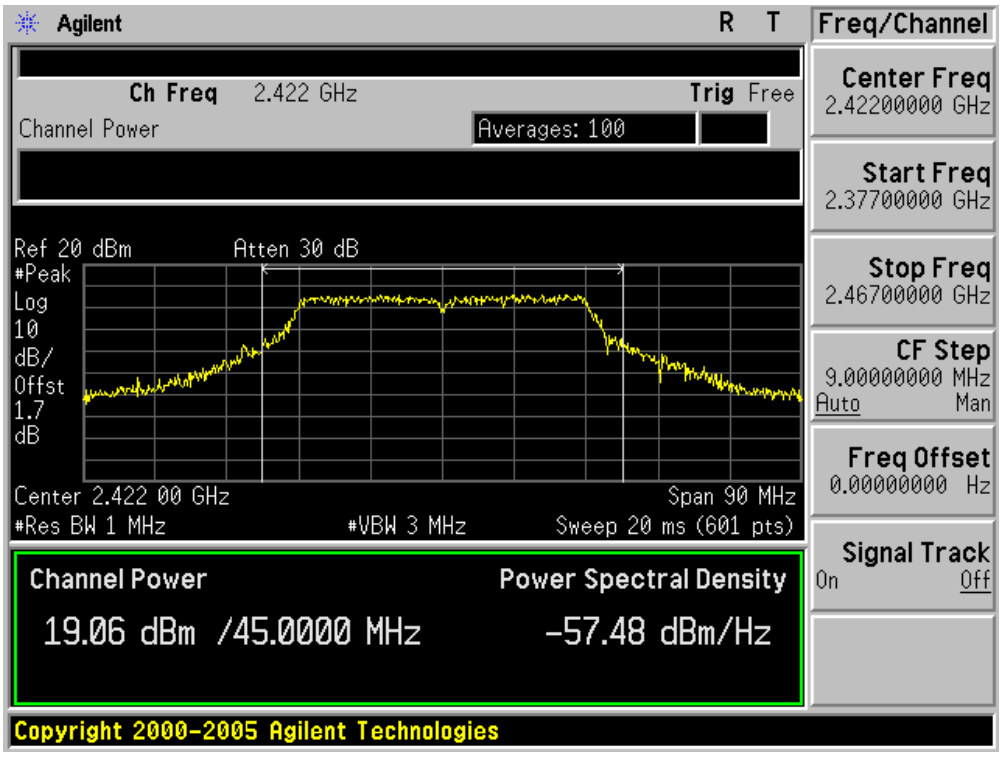


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 010

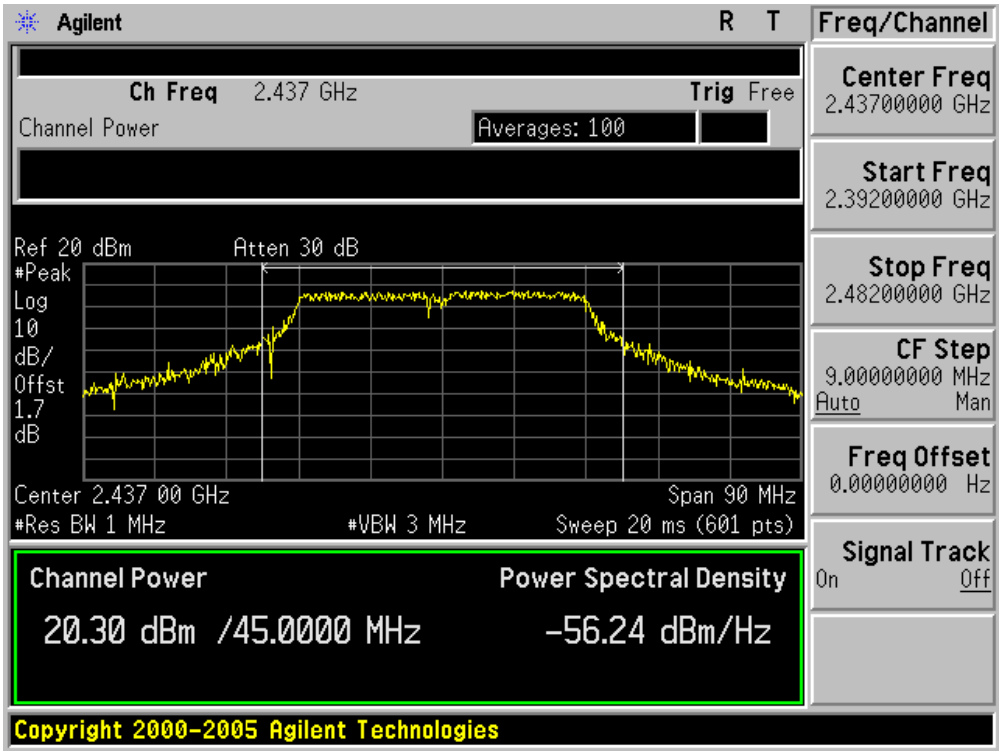
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
3	2422	19.06	N/A	19.06	30.00	Pass
6	2437	20.30	N/A	20.30	30.00	Pass
9	2452	19.15	N/A	19.15	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

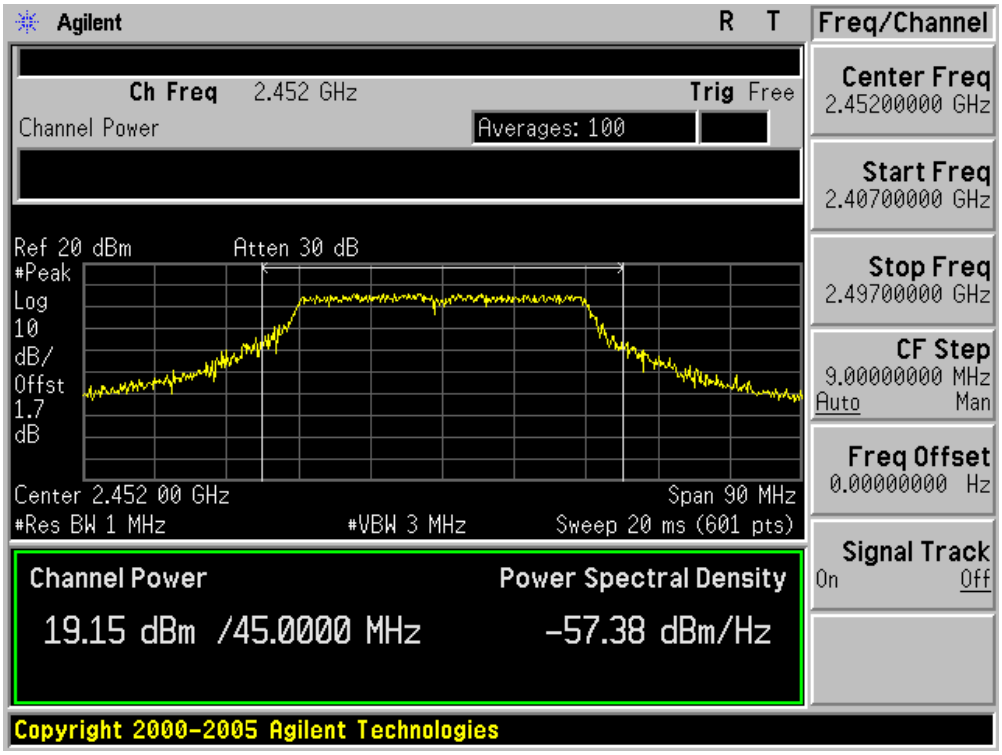
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)

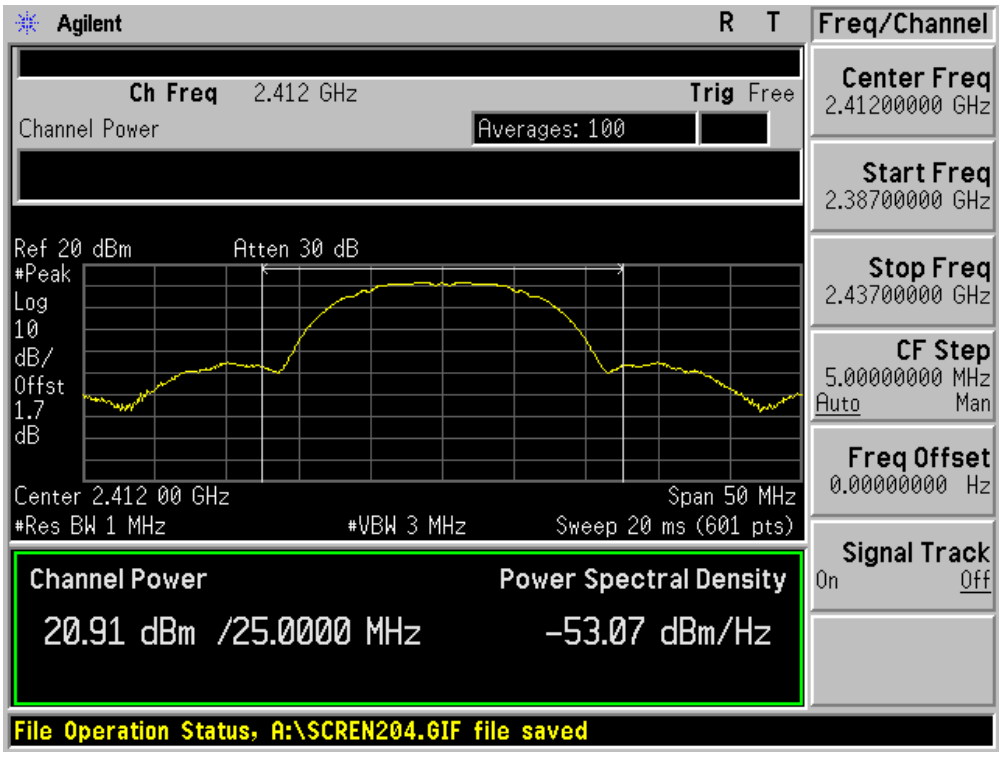


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 100

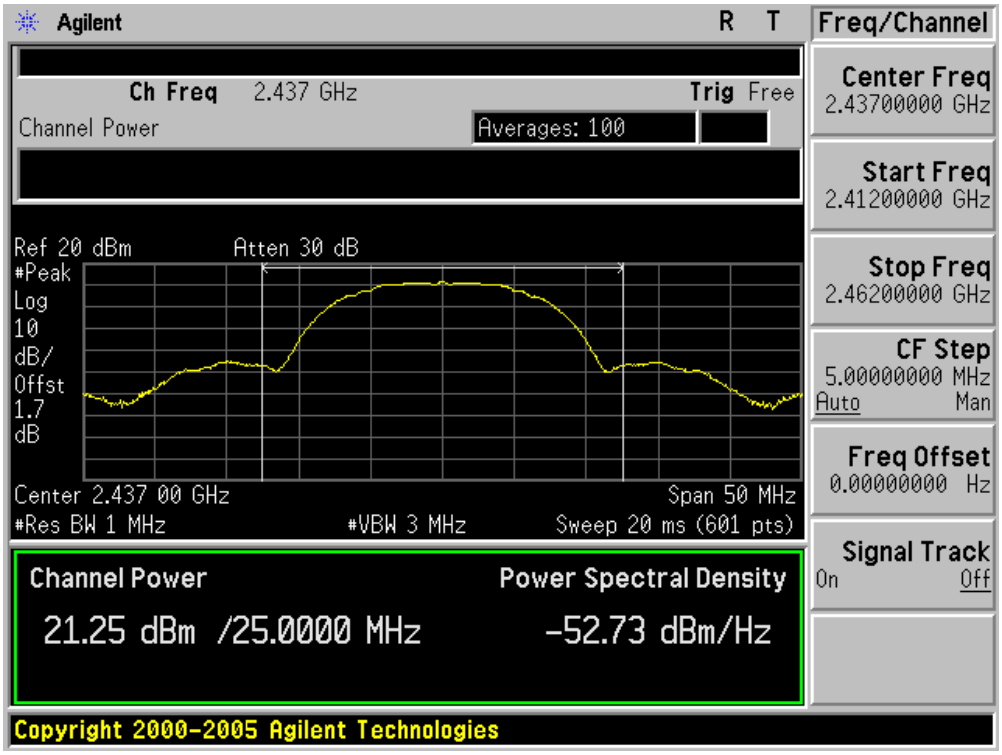
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	N/A	20.91	20.91	30.00	Pass
6	2437	N/A	21.25	21.25	30.00	Pass
11	2462	N/A	19.47	19.47	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

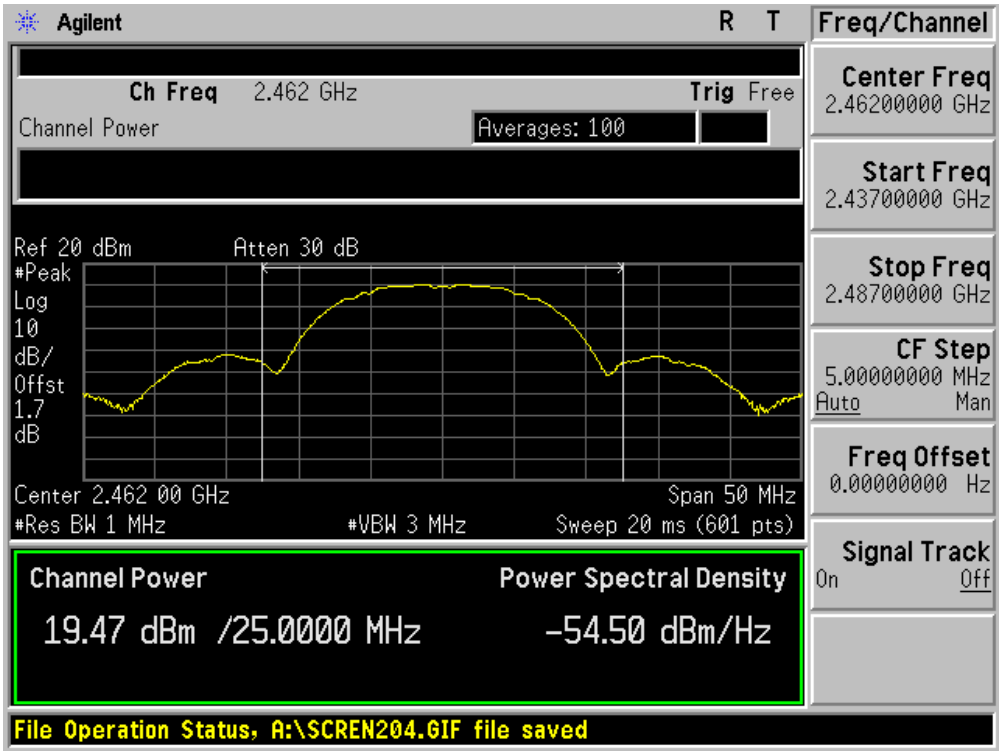
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

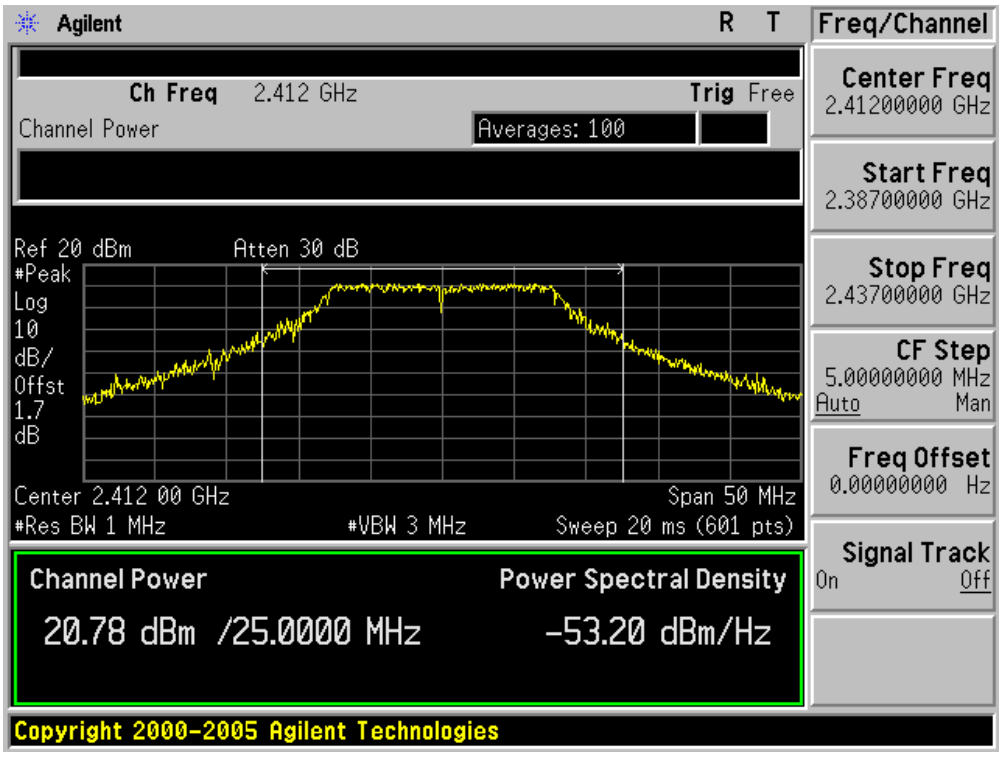


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 100

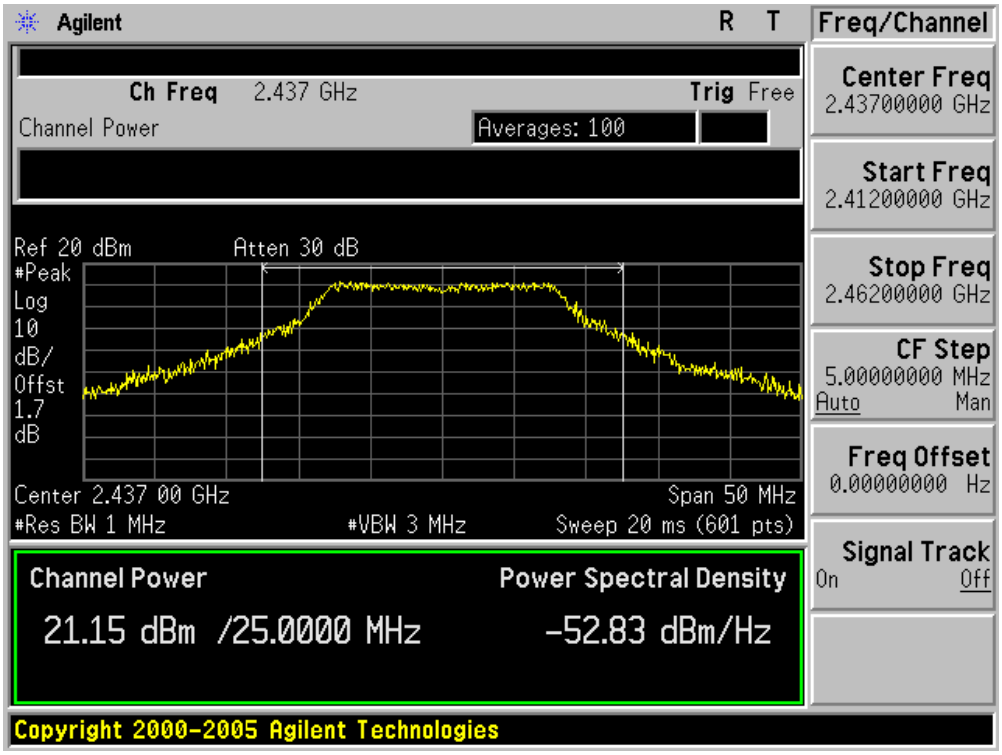
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	N/A	20.78	20.78	30.00	Pass
6	2437	N/A	21.15	21.15	30.00	Pass
11	2462	N/A	20.91	20.91	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

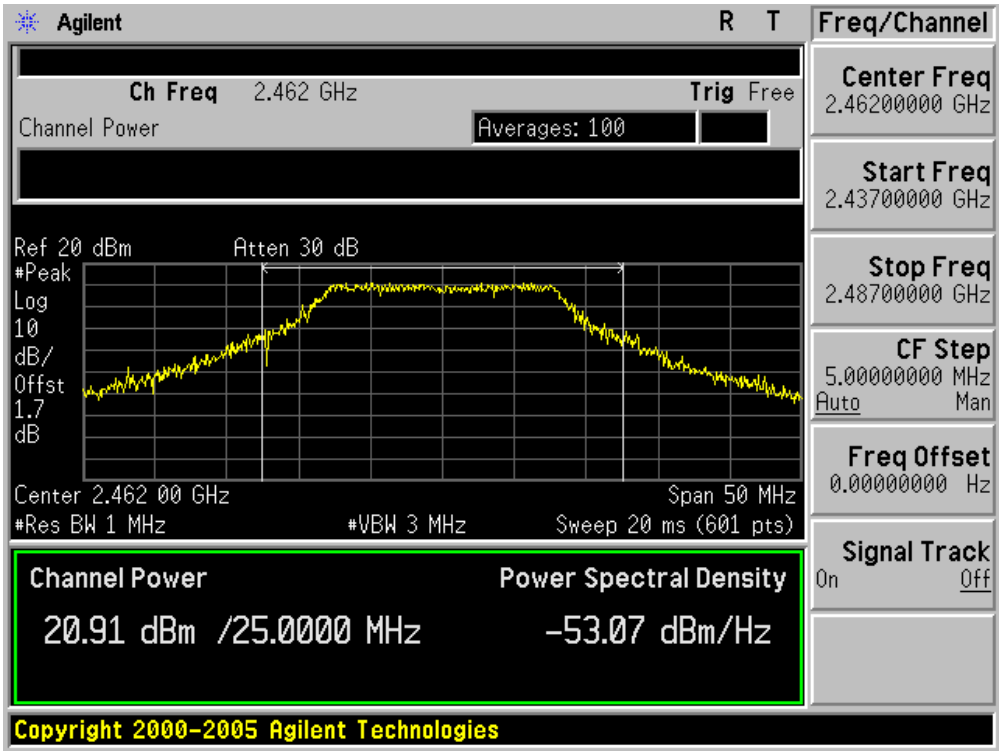
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

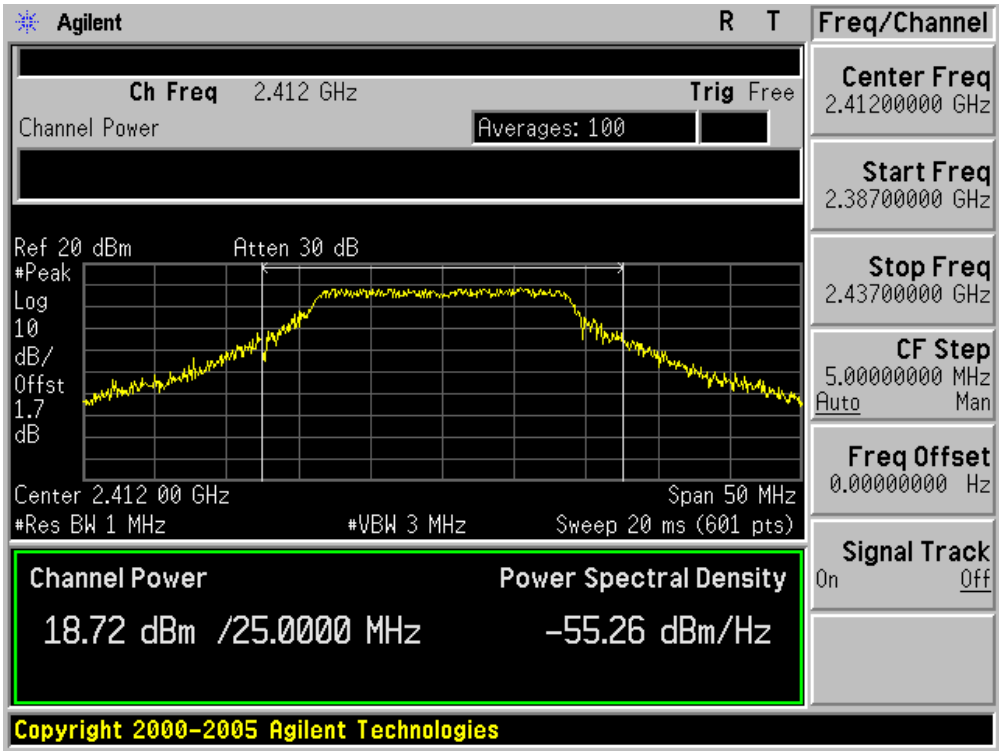


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 110

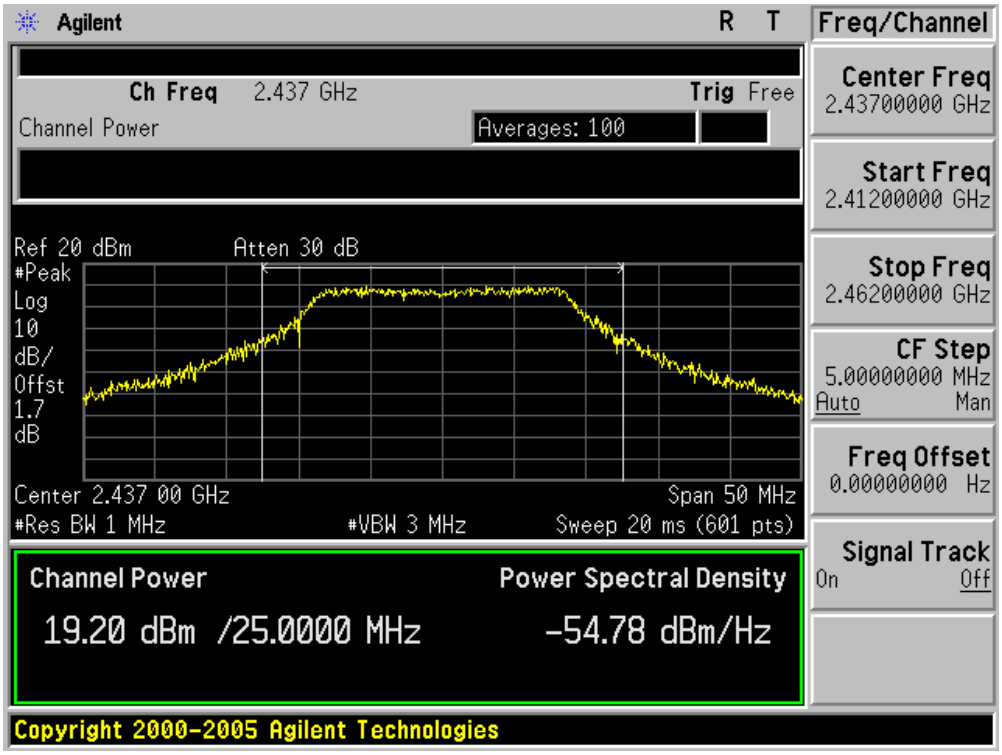
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	N/A	19.20	19.20	30.00	Pass
6	2437	N/A	20.34	20.34	30.00	Pass
11	2462	N/A	19.19	19.19	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

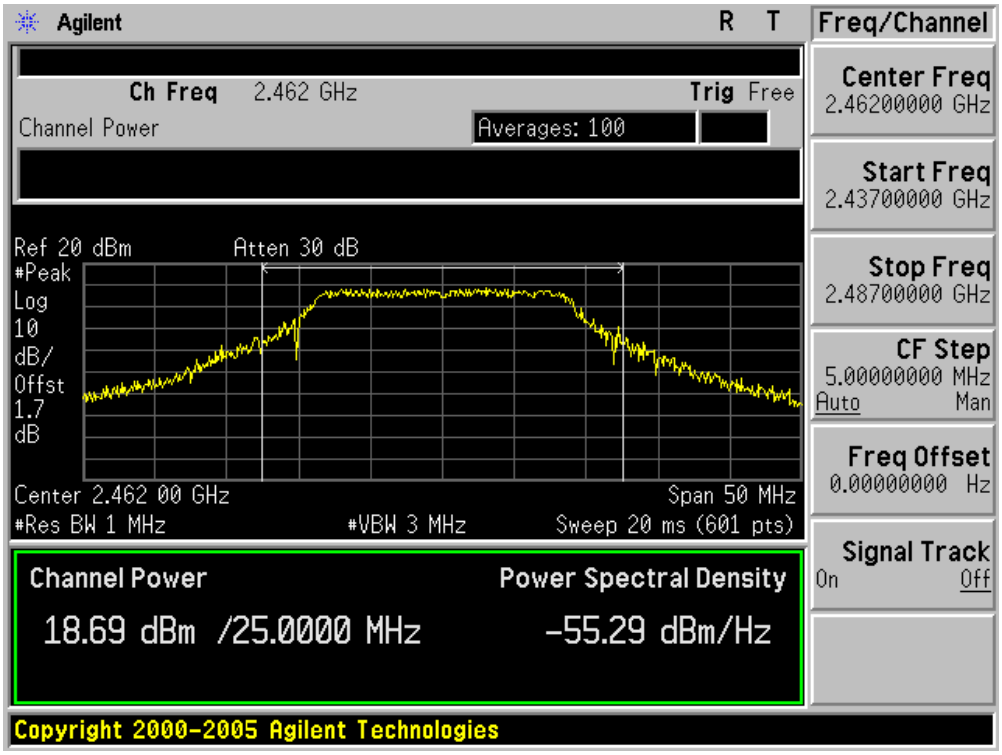
Channel 01 (2412MHz) – chain 010



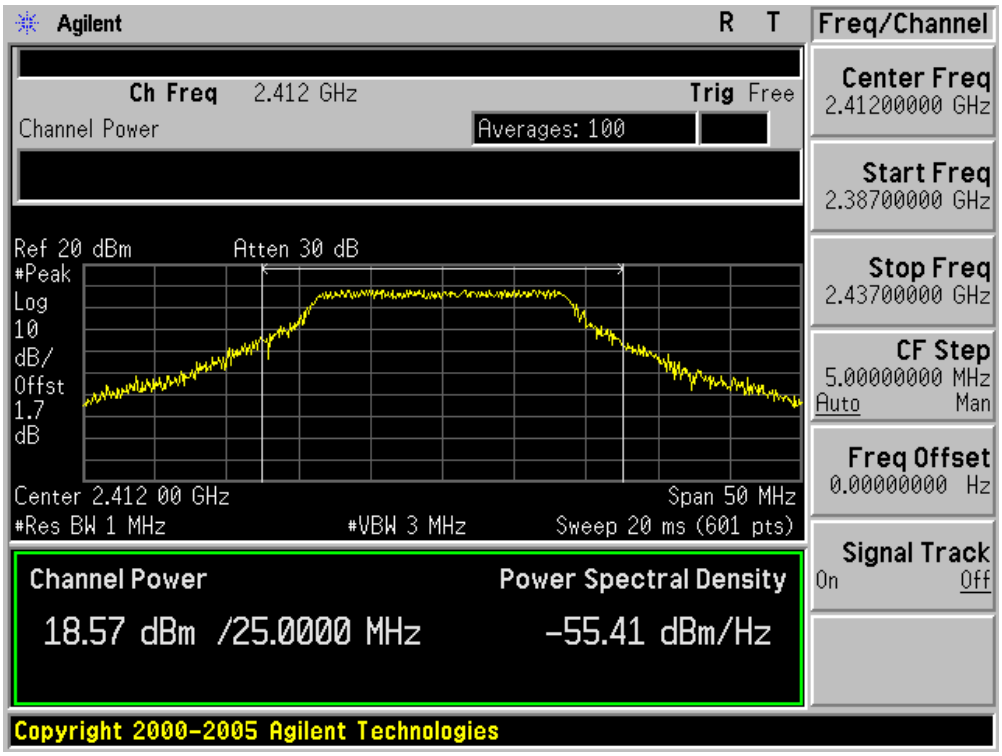
Channel 06 (2437MHz) – chain 010



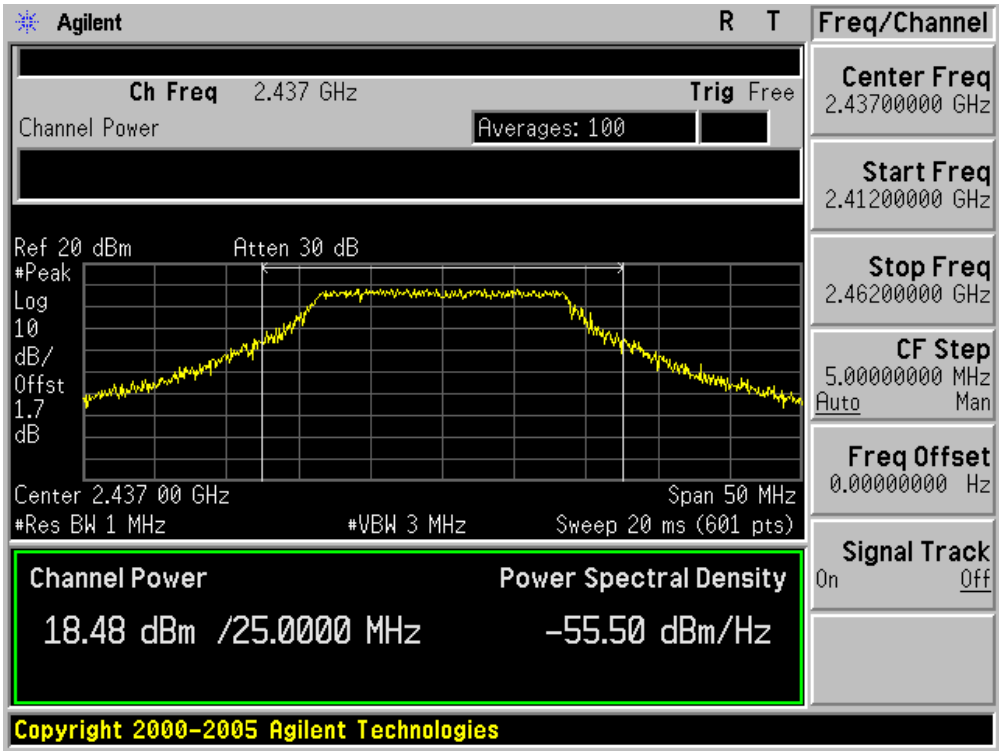
Channel 11 (2462MHz) – chain 010



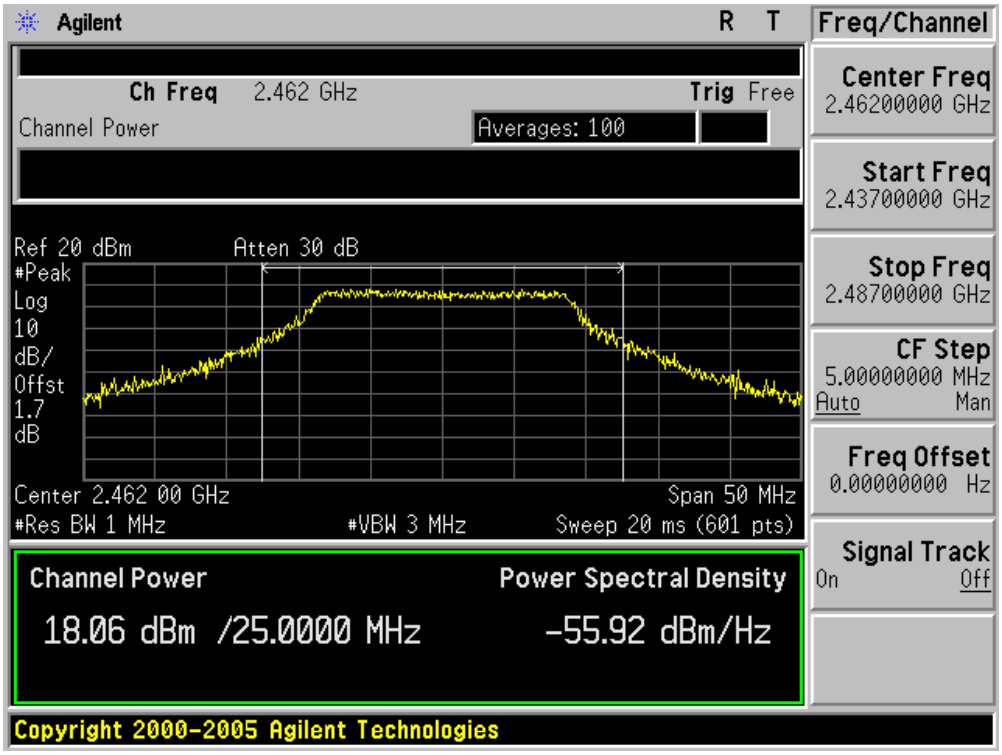
Channel 01 (2412MHz) – chain 100



Channel 06 (2437MHz) – chain 100



Channel 11 (2462MHz) – chain 100

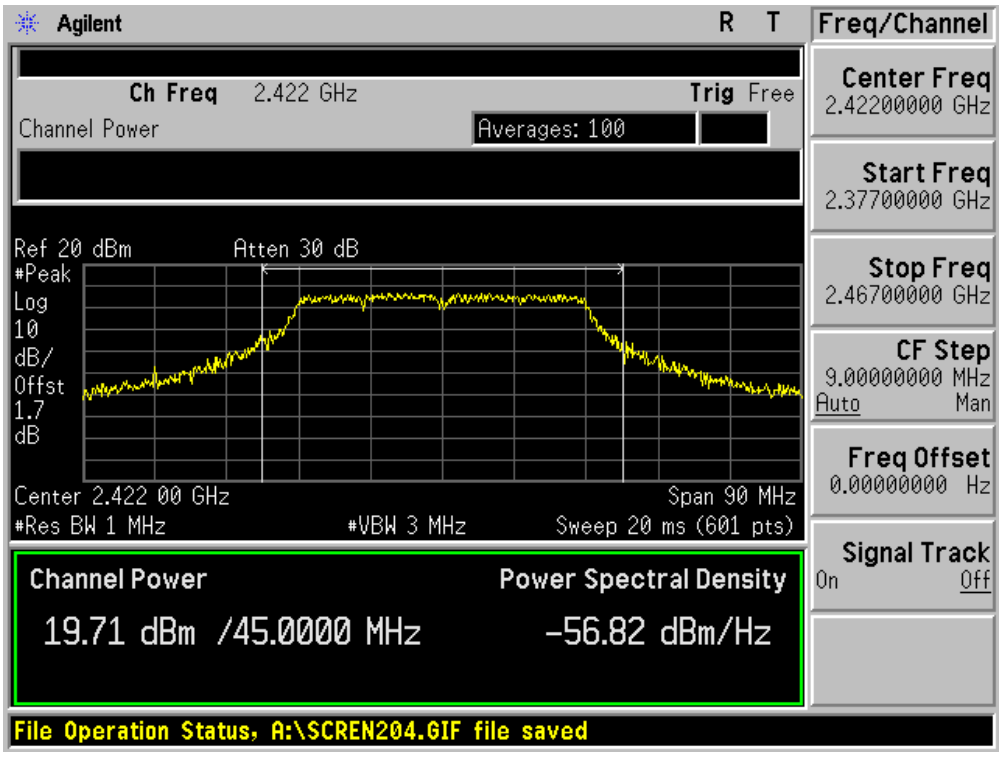


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 100

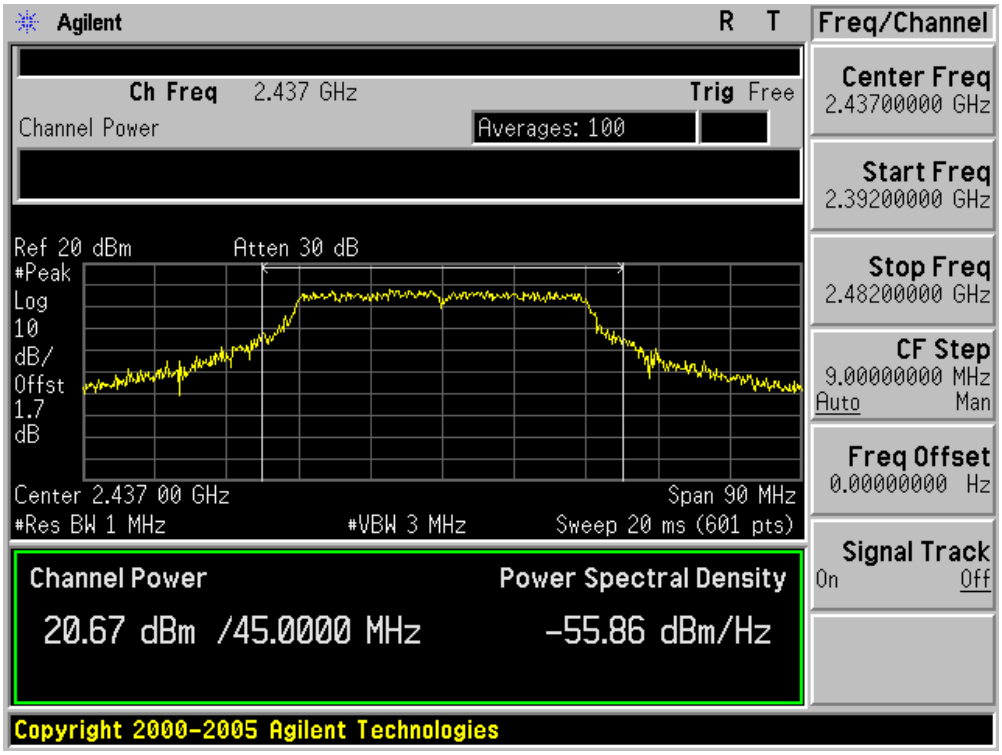
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
3	2422	N/A	19.71	19.71	30.00	Pass
6	2437	N/A	20.67	20.67	30.00	Pass
9	2452	N/A	19.55	19.55	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

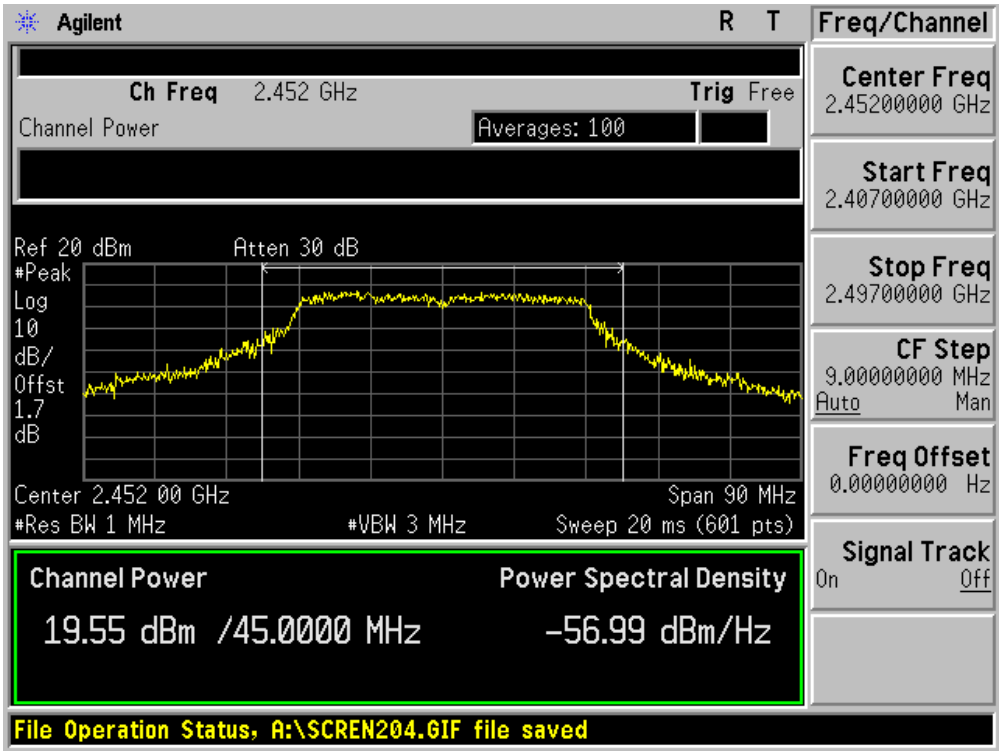
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)

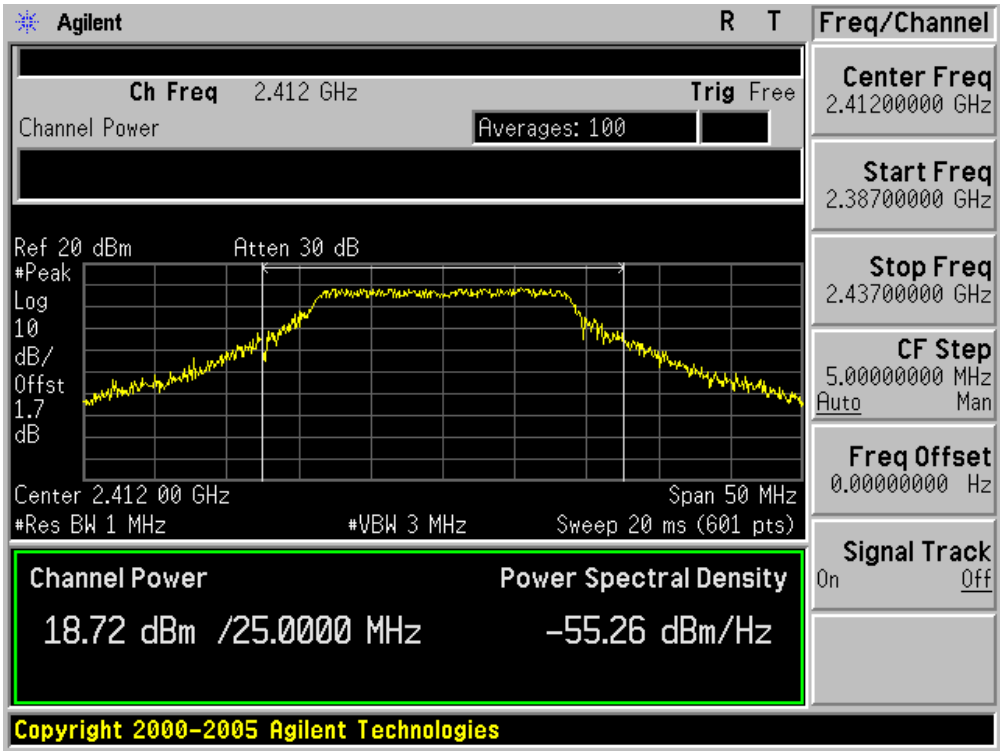


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 110

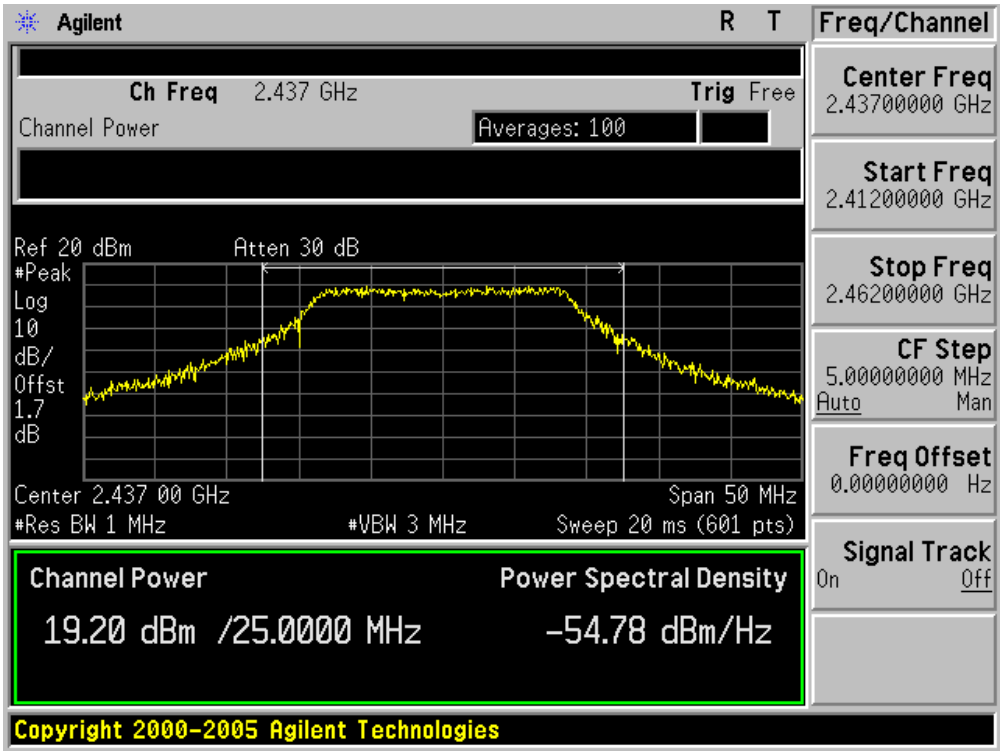
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
1	2412	18.72	18.57	21.66	30.00	Pass
6	2437	19.20	18.48	21.87	30.00	Pass
11	2462	18.69	18.06	21.40	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

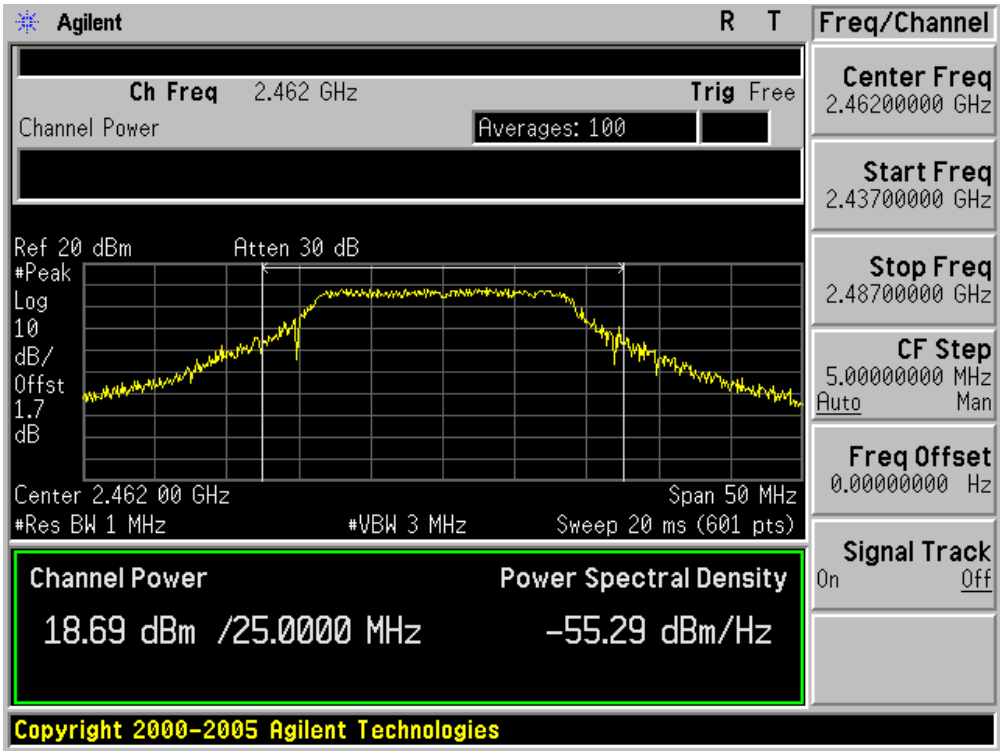
Channel 01 (2412MHz) – Chain 010



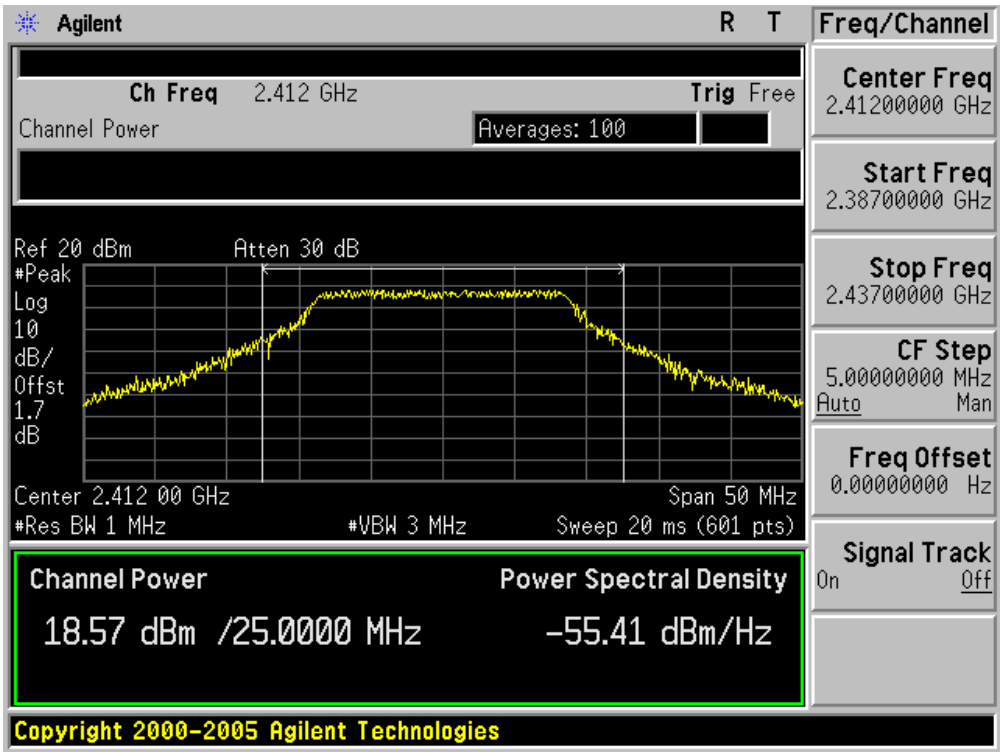
Channel 06 (2437MHz) – Chain 010



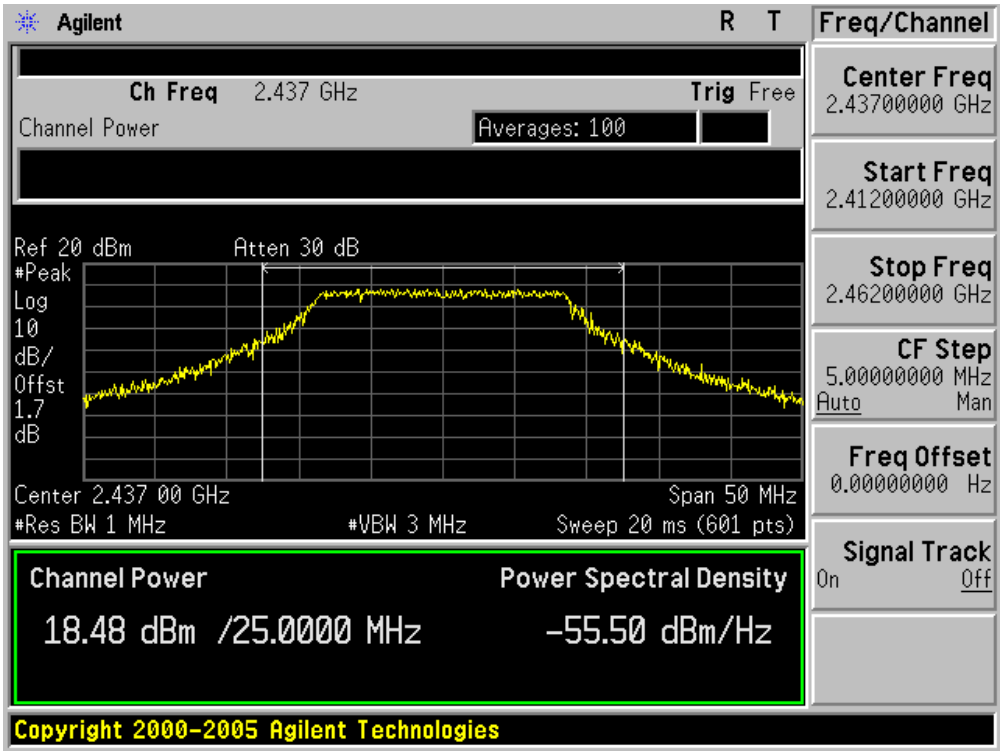
Channel 11 (2462MHz) – Chain 010



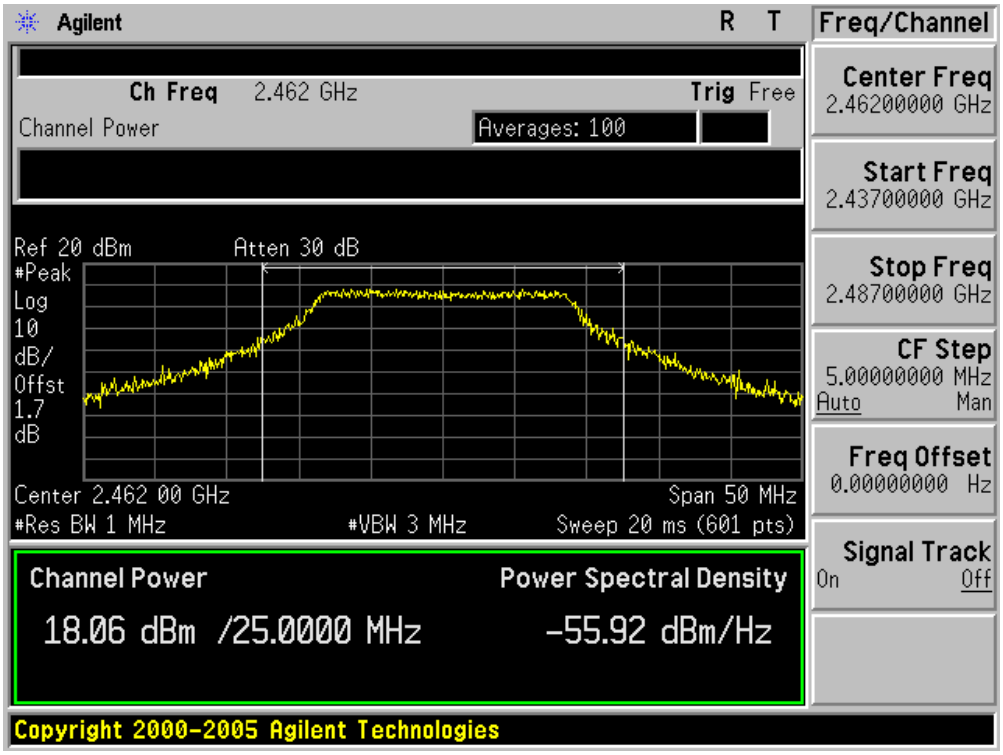
Channel 01 (2412MHz) – Chain 100



Channel 06 (2437MHz) – Chain 100



Channel 11 (2462MHz) – Chain 100

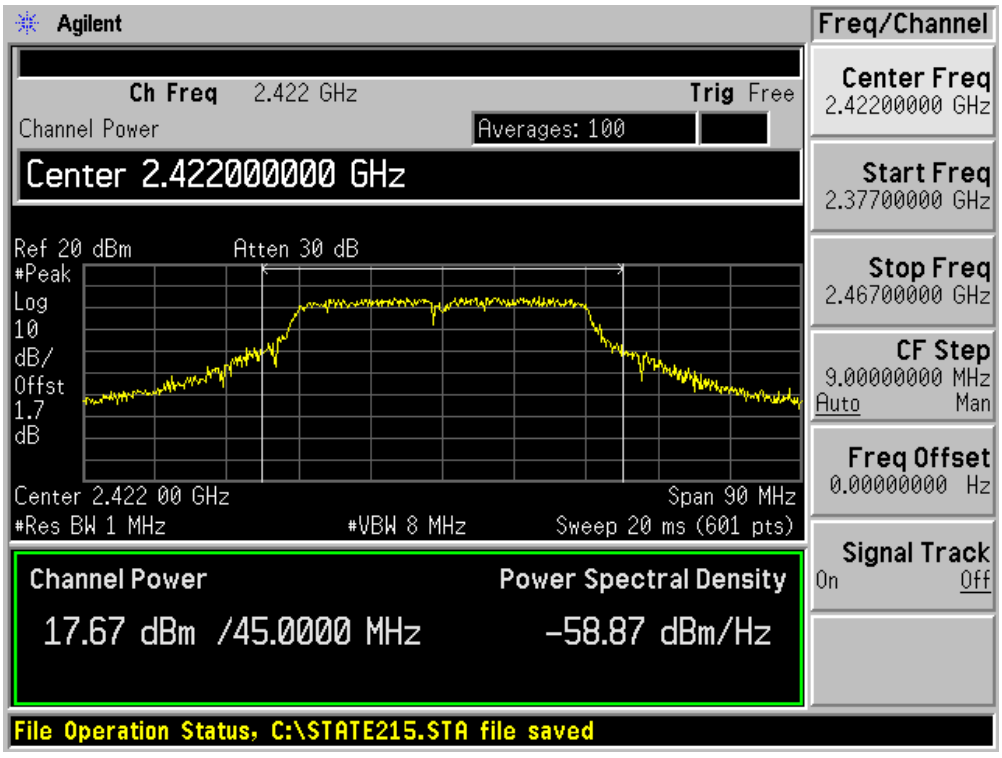


Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 110

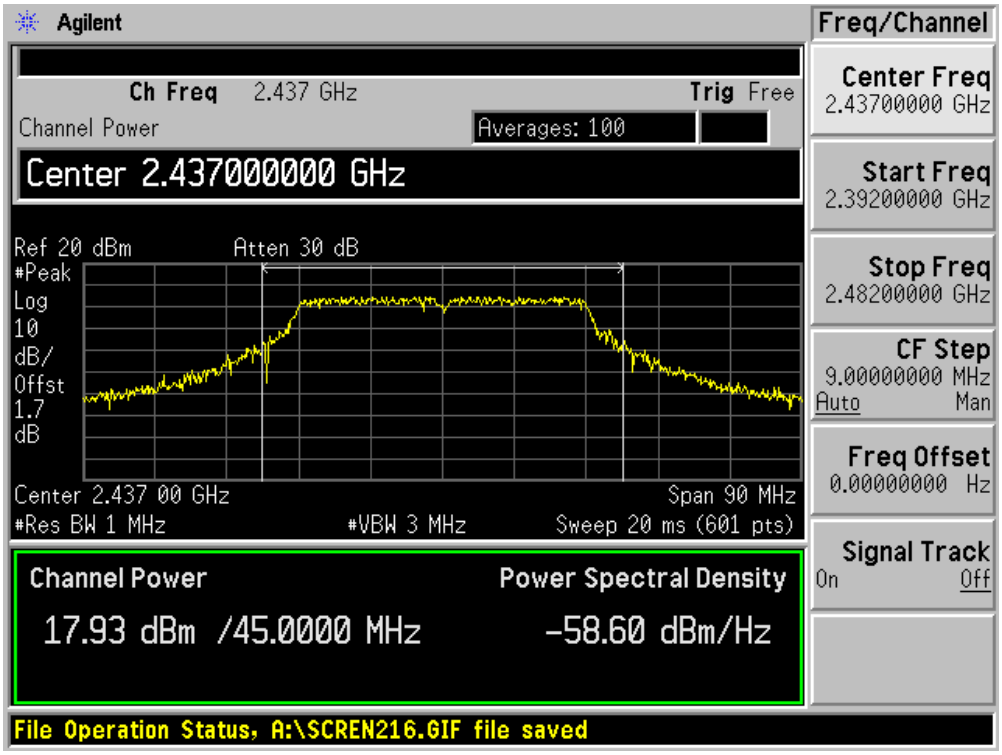
Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
3	2422	17.67	17.05	20.38	30.00	Pass
6	2437	17.93	16.77	20.40	30.00	Pass
9	2452	17.18	16.75	19.98	30.00	Pass

Note: The antenna gain of transmitter is less than 6dBi and other than fixed point-to-point operation, therefore the limit is 30dBm.

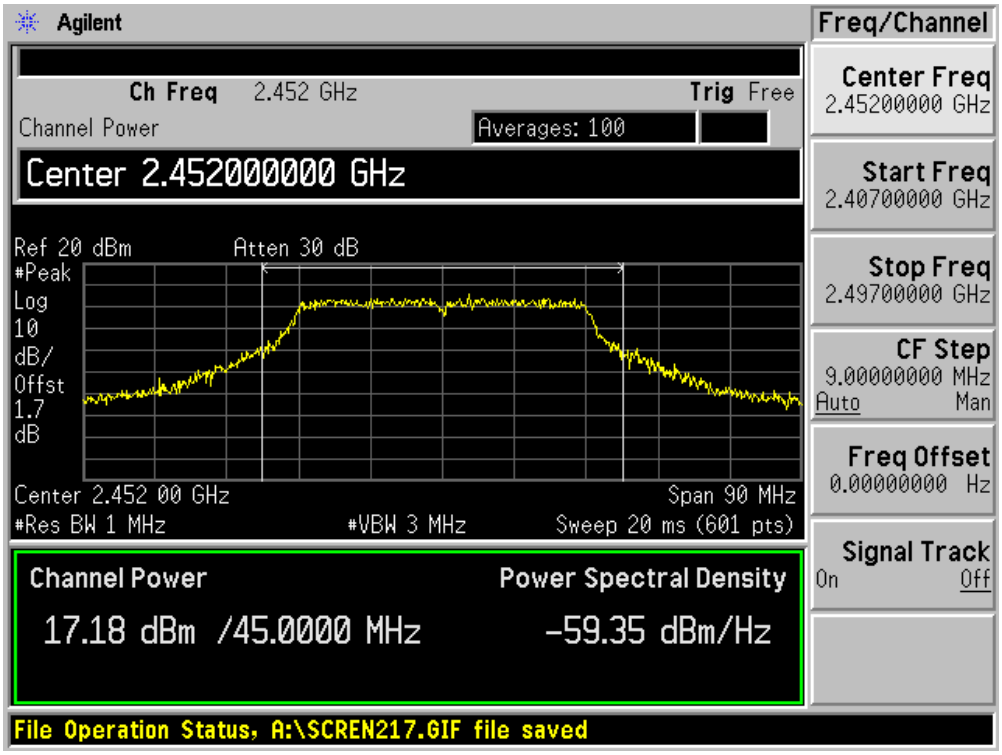
Channel 03 (2422MHz) – chain 010



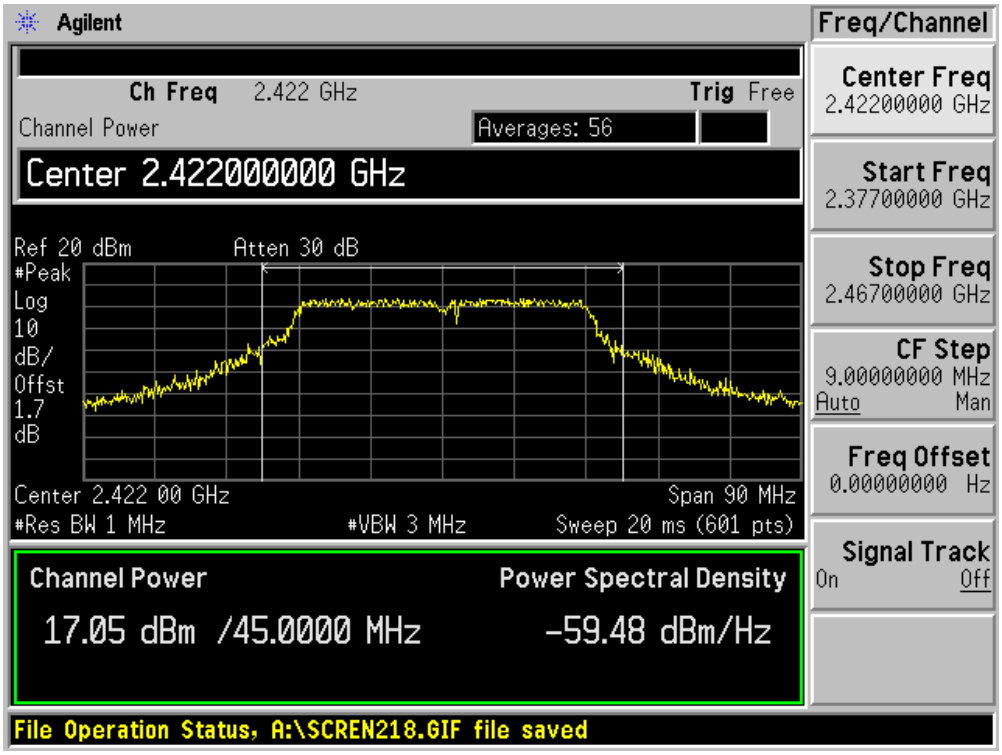
Channel 06 (2437MHz) – chain 010



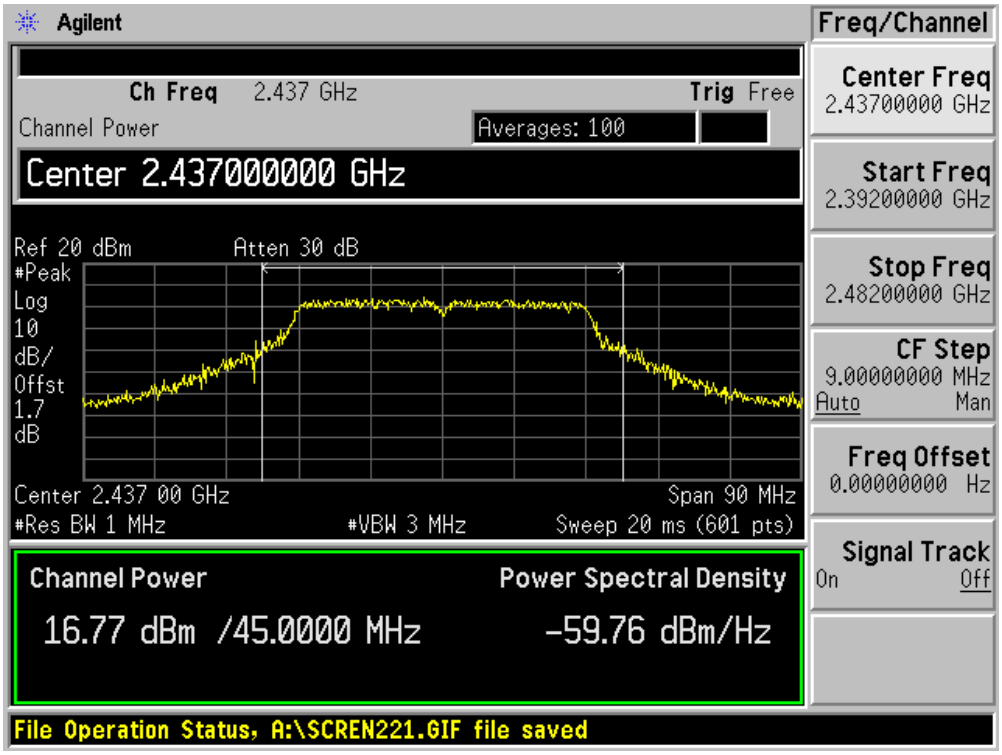
Channel 09 (2452MHz) – chain 010



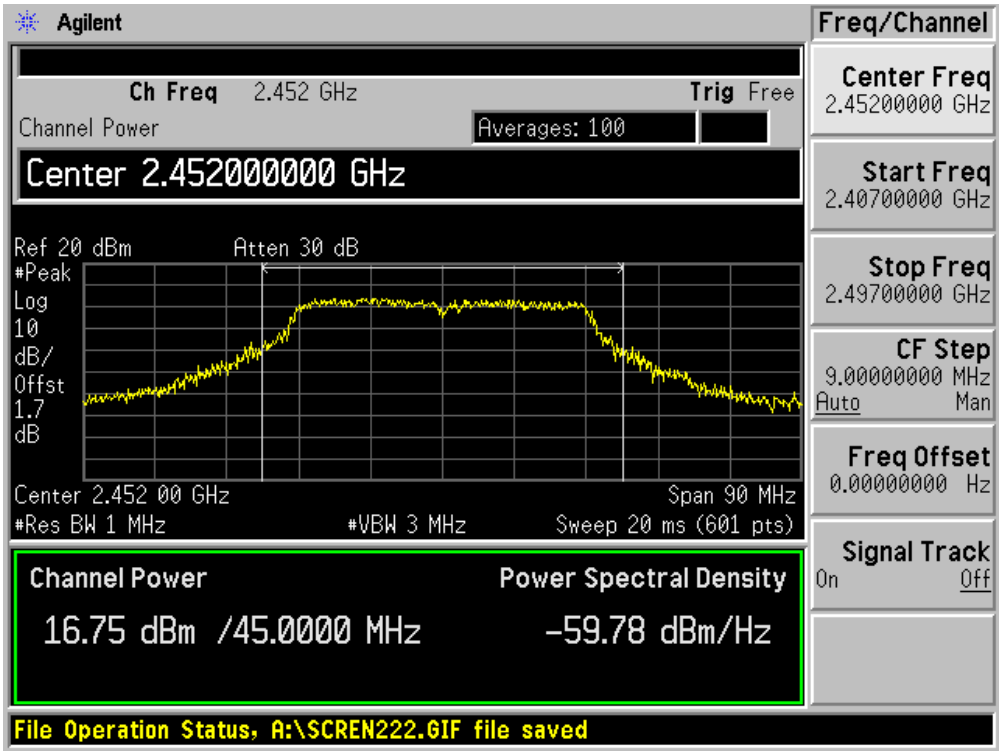
Channel 03 (2422MHz) – chain 100



Channel 06 (2437MHz) – chain 100



Channel 09 (2452MHz) – chain 100



9. Power Spectral Density

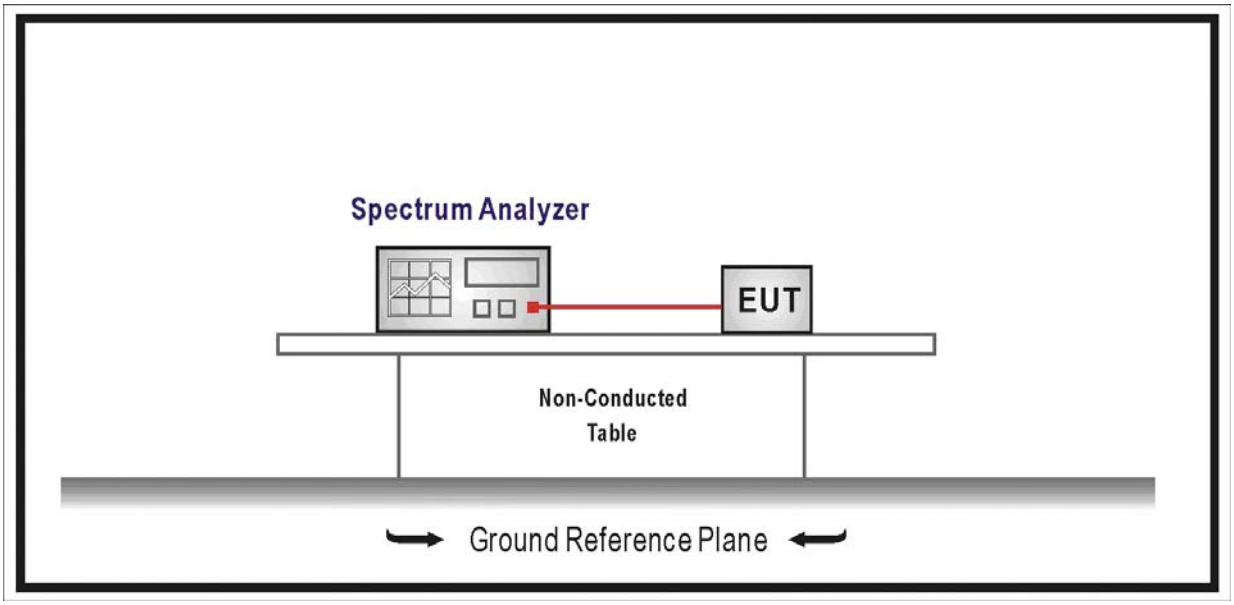
9.1. Test Equipment

Power Spectral Density / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiated to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

9.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, Set VBW≧ 9 kHz, Sweep time=Auto, Set detector=Peak detector.

9.5. Uncertainty

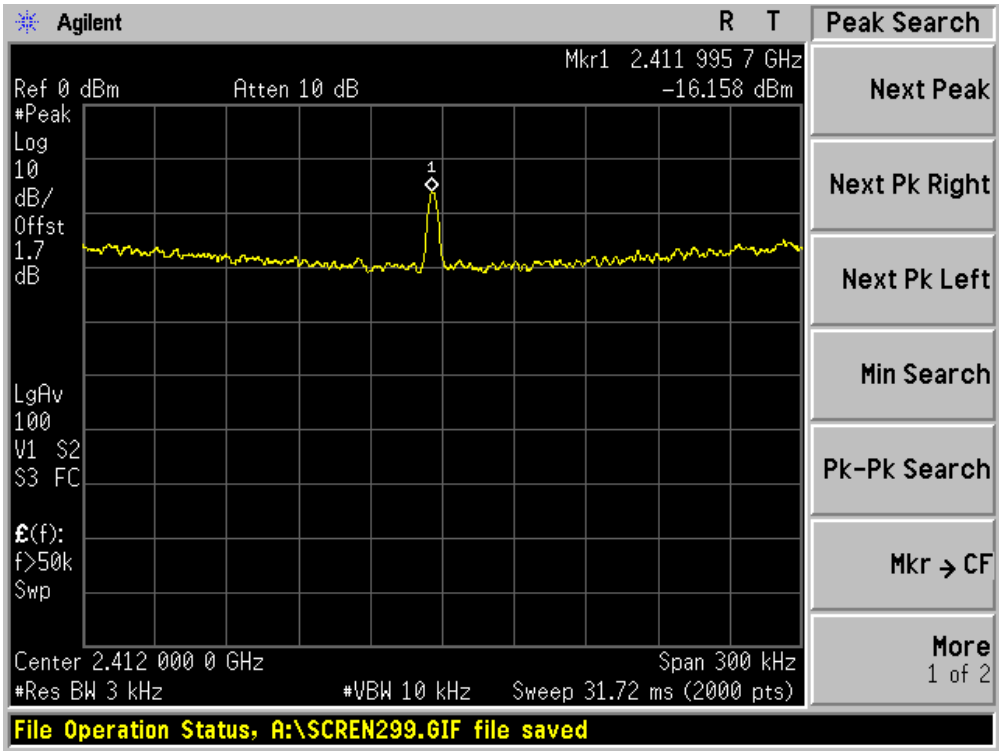
The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

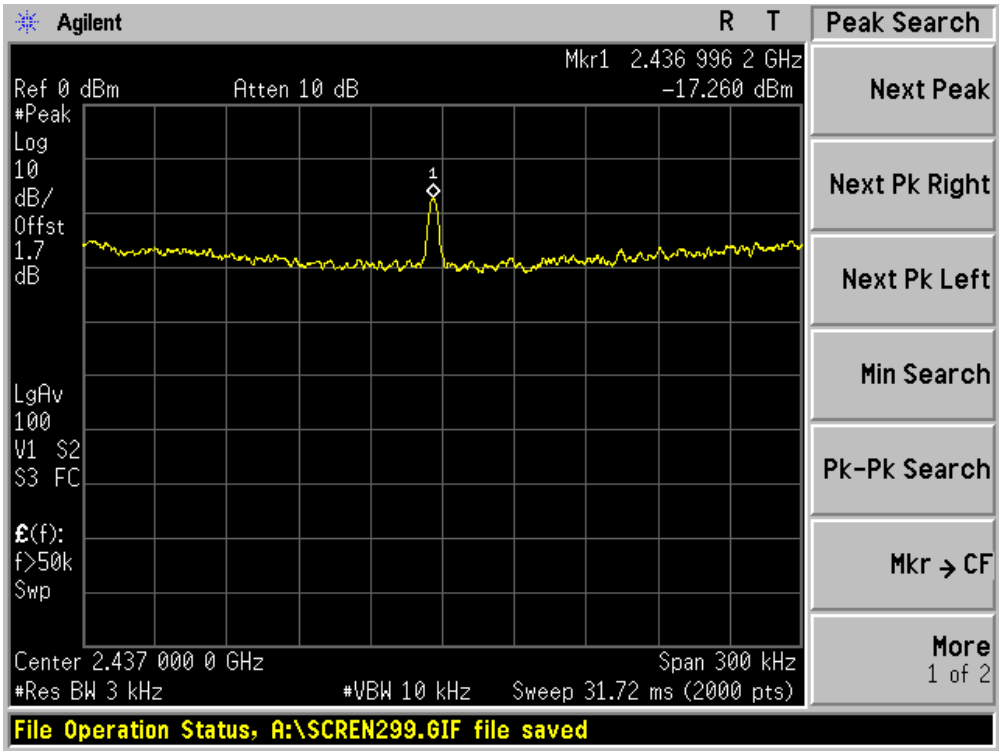
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 010

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	-16.158	N/A	-16.158	8	Pass
06	2437	-17.260	N/A	-17.260	8	Pass
11	2462	-18.054	N/A	-18.054	8	Pass

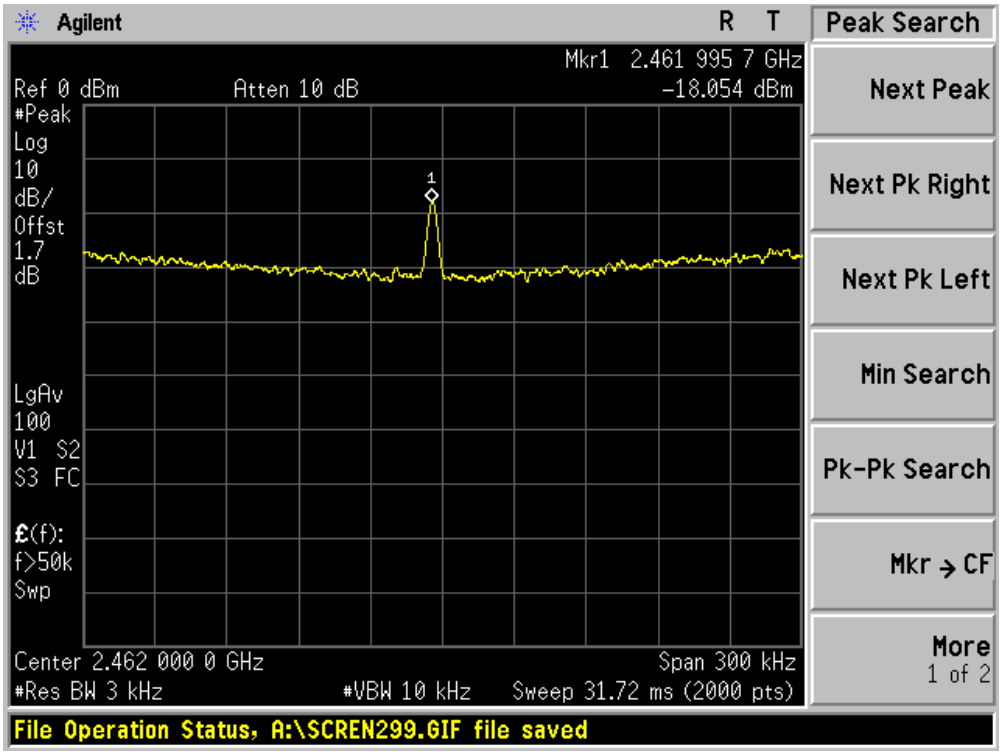
Channel 01 (2412MHz)



Channel 06 (2437MHz)



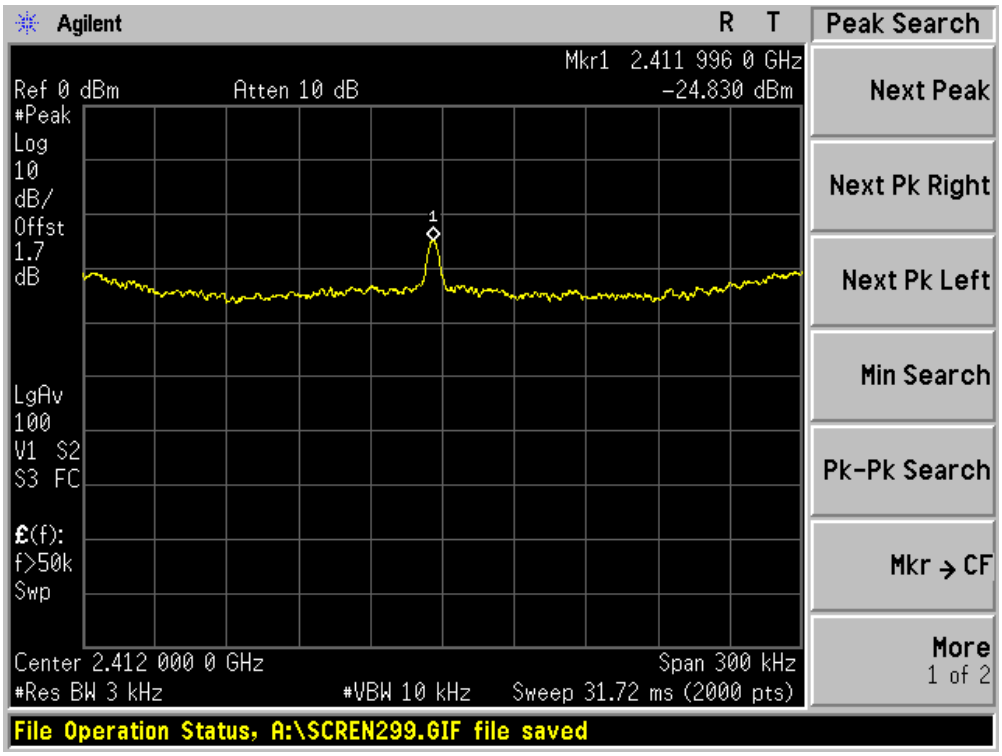
Channel 11 (2462MHz)



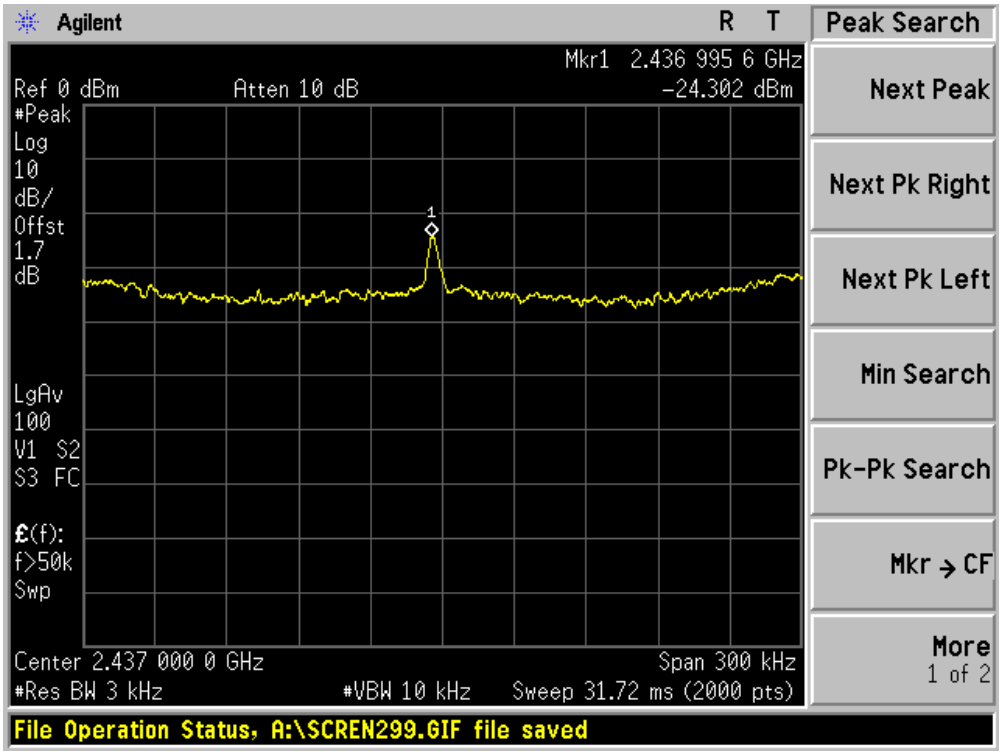
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	-24.830	N/A	-24.830	8	Pass
06	2437	-24.302	N/A	-24.302	8	Pass
11	2462	-28.940	N/A	-28.940	8	Pass

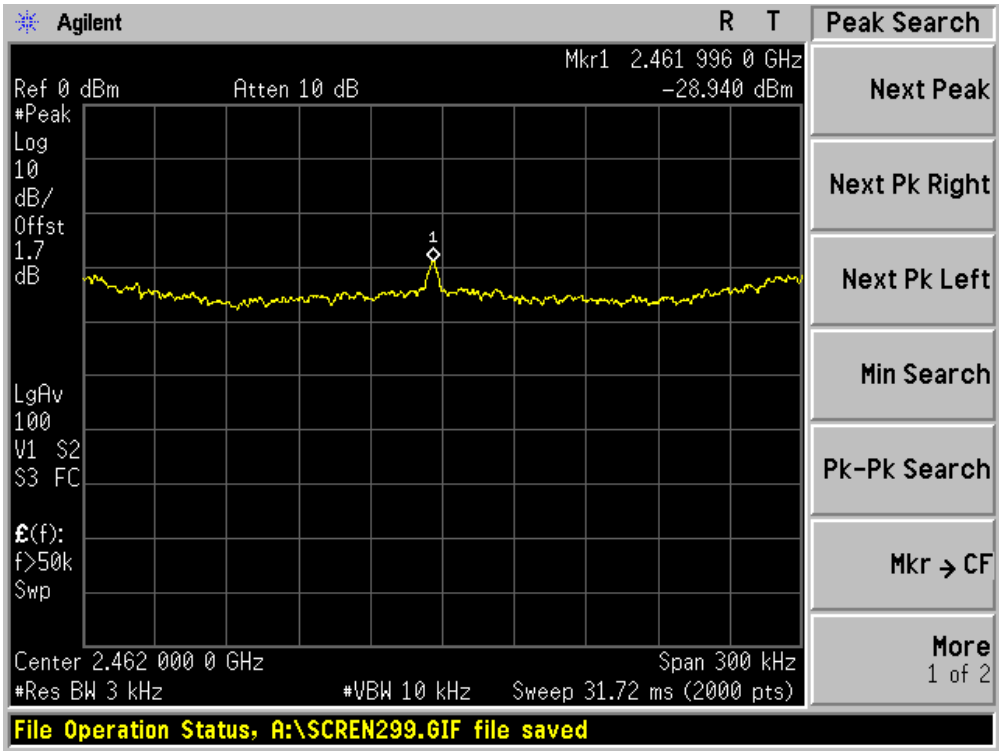
Channel 01 (2412MHz)



Channel 06 (2437MHz)



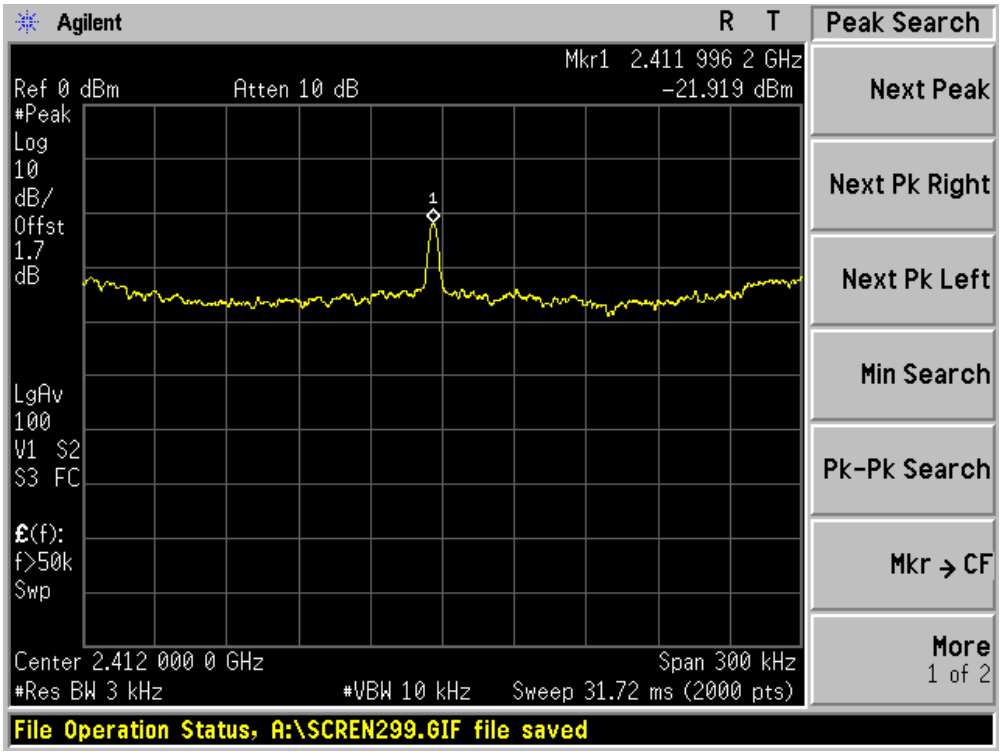
Channel 11 (2462MHz)



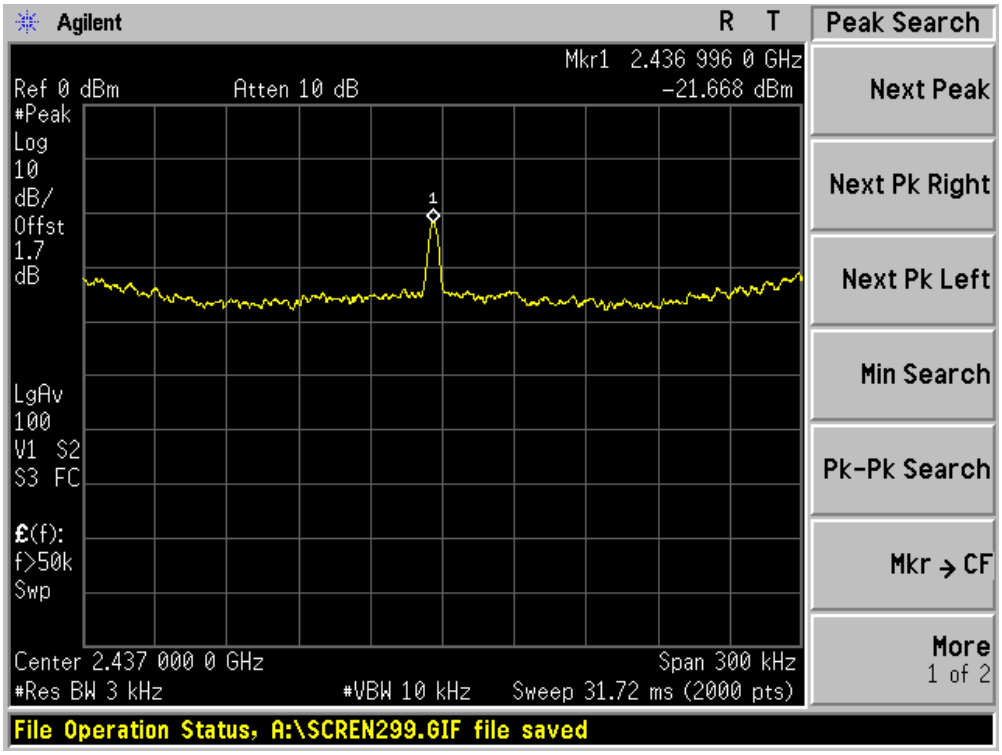
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 010

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	-21.919	N/A	-21.919	8	Pass
06	2437	-21.668	N/A	-21.668	8	Pass
11	2462	-20.270	N/A	-20.270	8	Pass

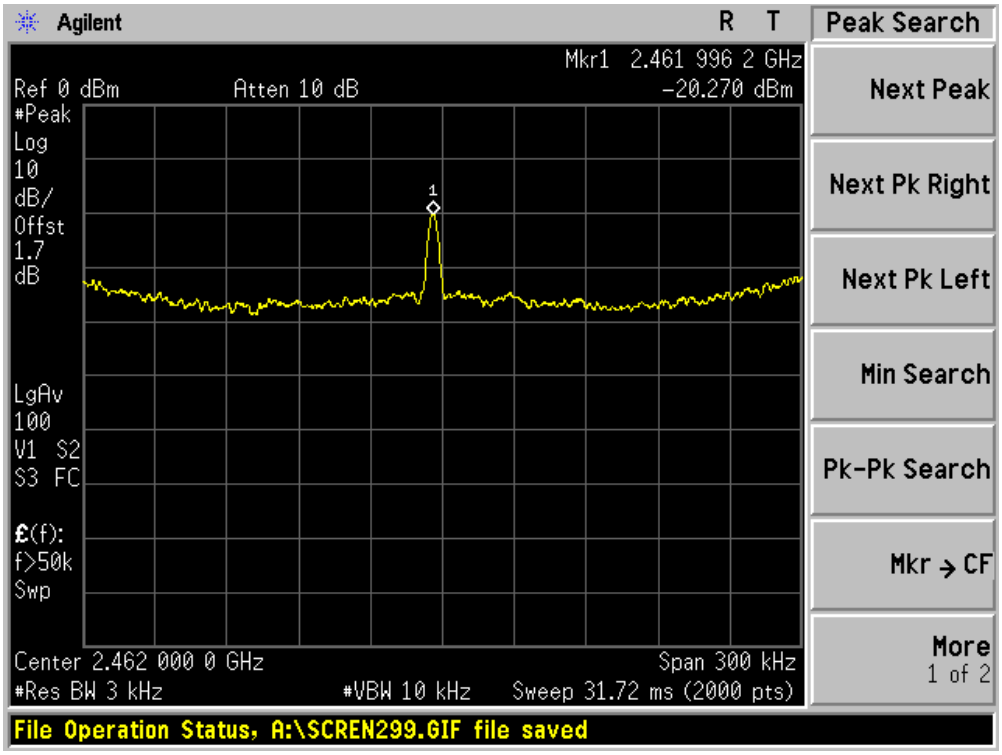
Channel 01 (2412MHz)



Channel 06 (2437MHz)



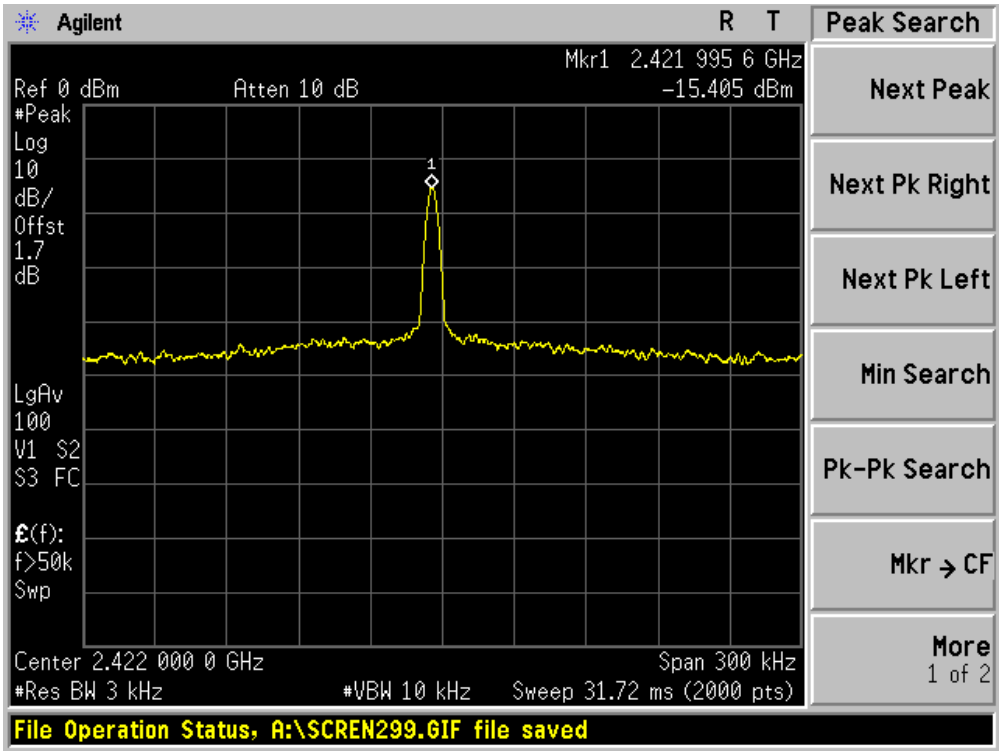
Channel 11 (2462MHz)



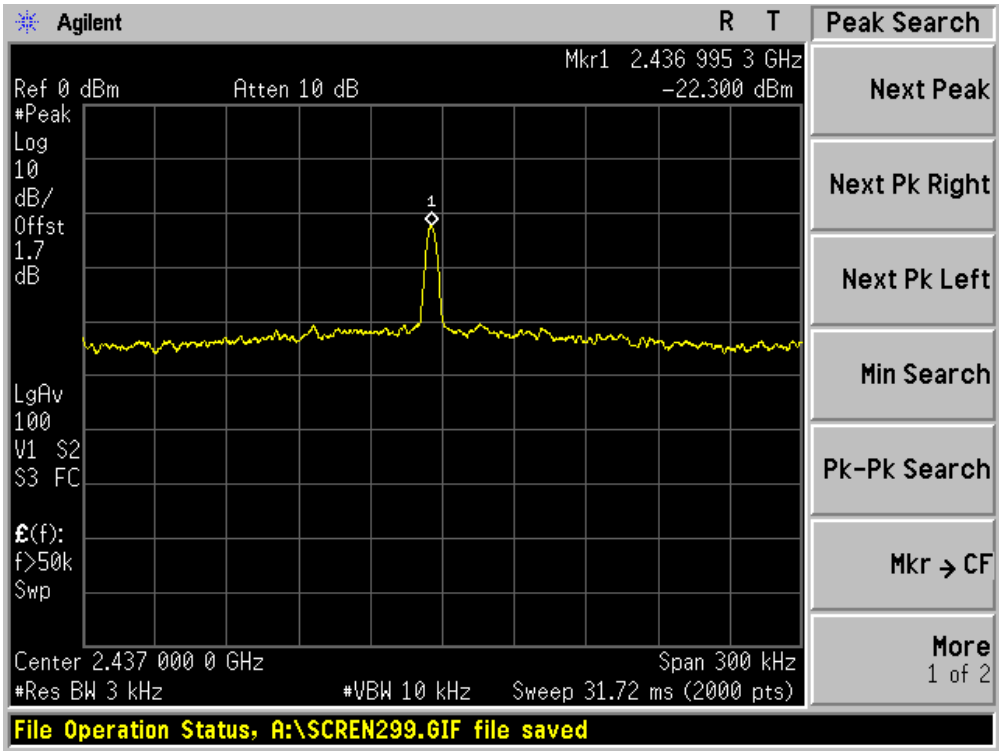
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 010

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
03	2422	-15.405	N/A	-15.405	8	Pass
06	2437	-22.300	N/A	-22.300	8	Pass
09	2452	-23.641	N/A	-23.641	8	Pass

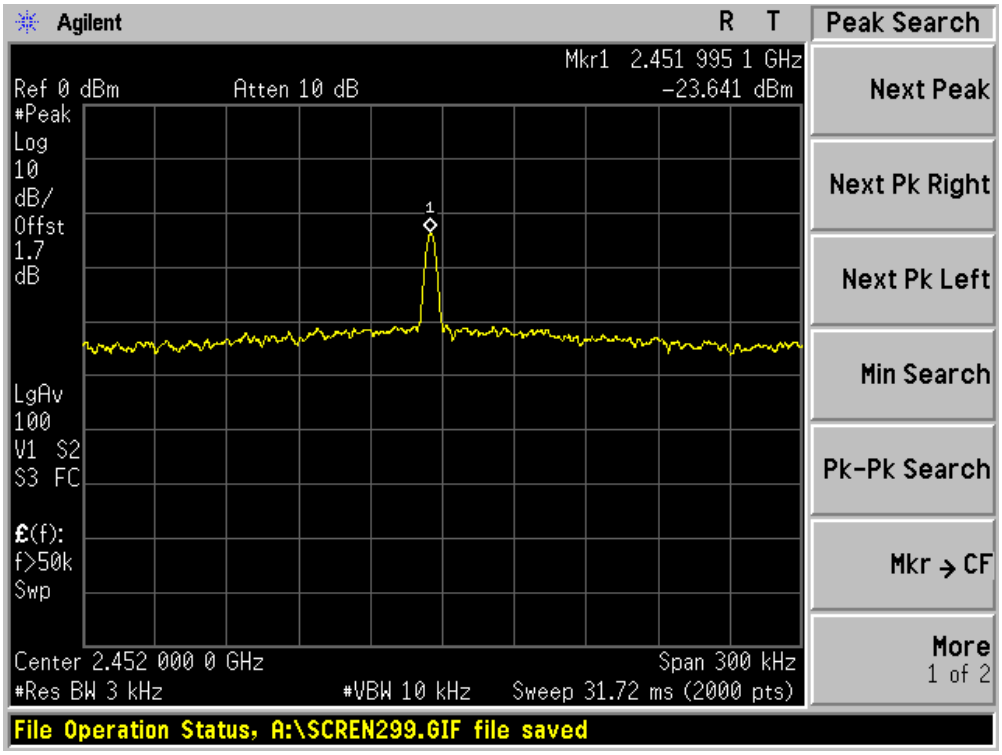
Channel 03 (2422MHz)



Channel 06 (2437MHz)



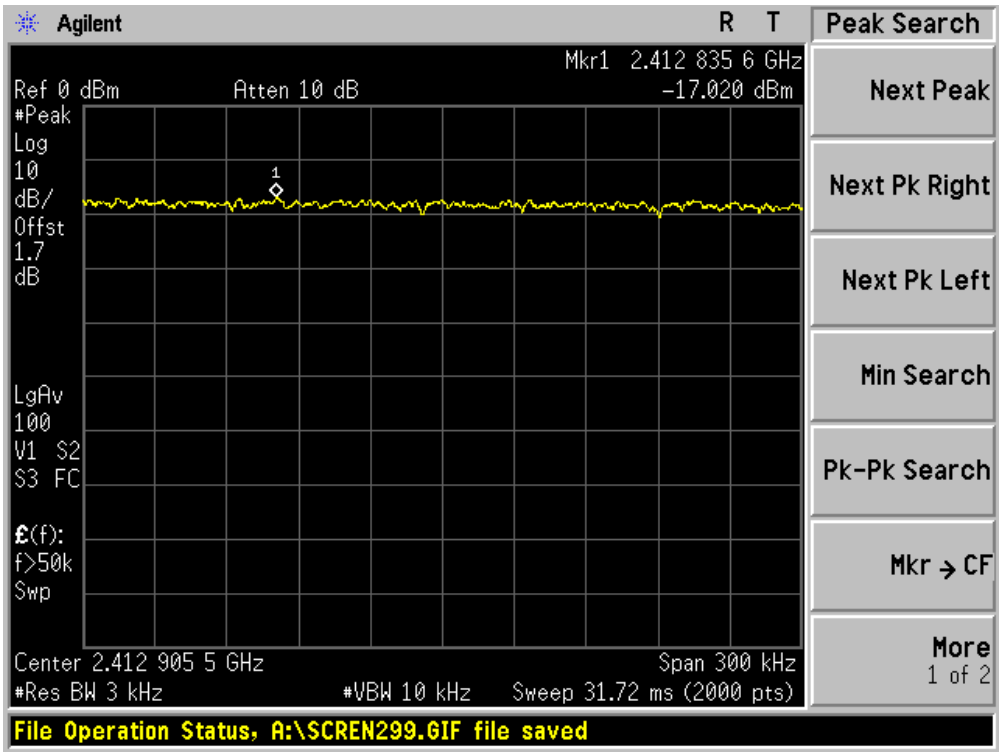
Channel 09 (2452MHz)



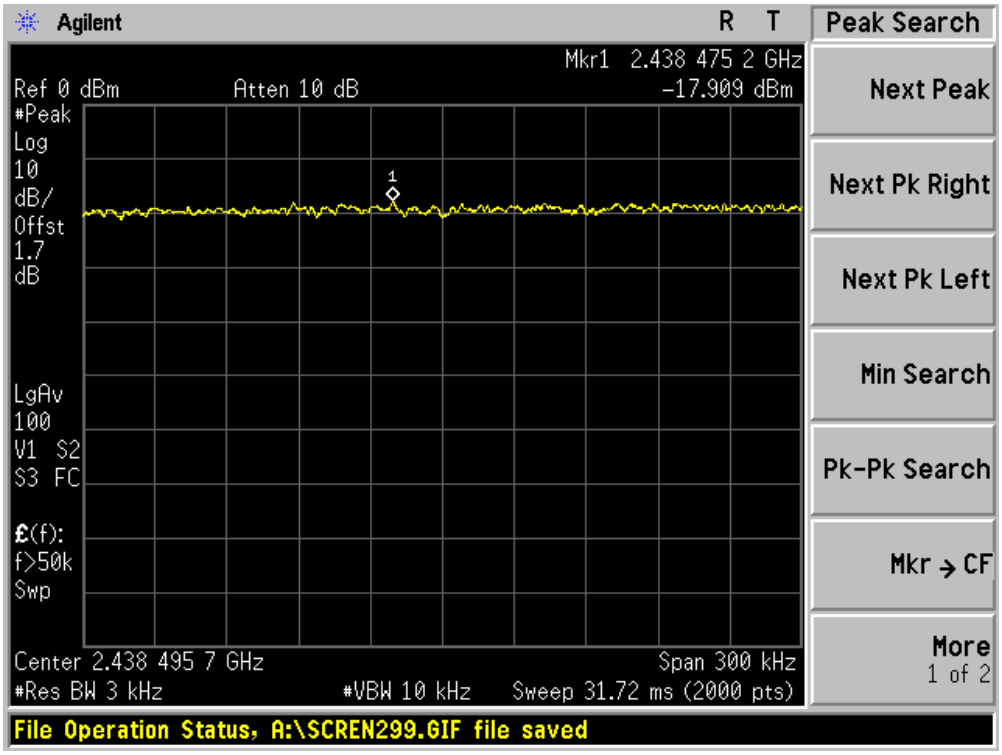
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b – chain 100

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	N/A	-17.020	-17.020	8	Pass
06	2437	N/A	-17.909	-17.909	8	Pass
11	2462	N/A	-18.489	-18.489	8	Pass

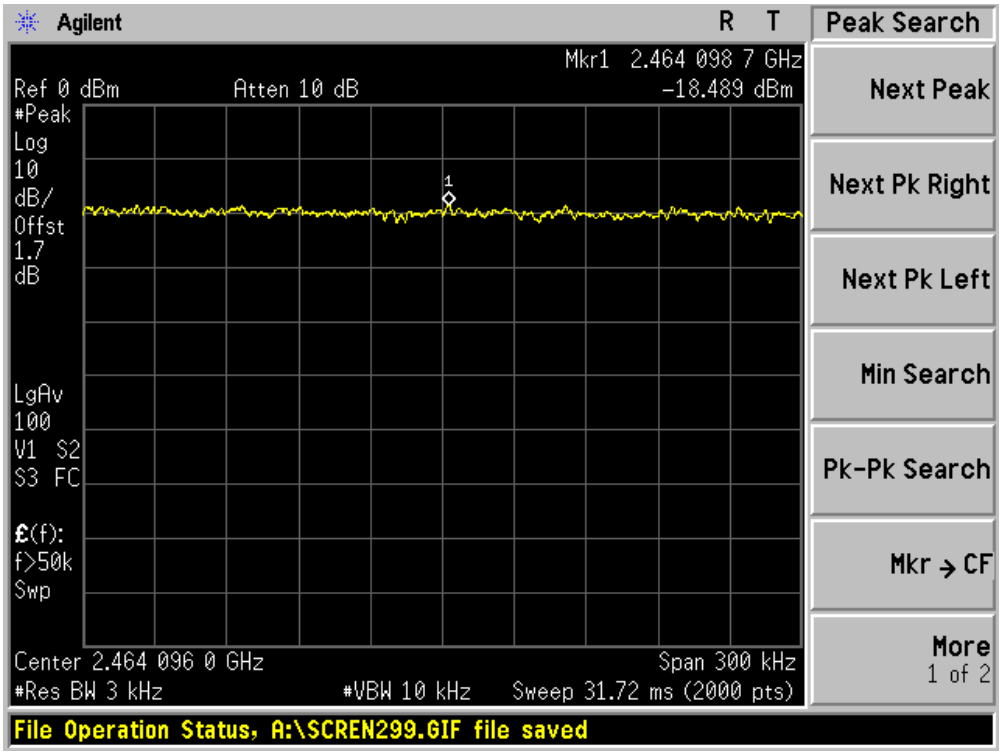
Channel 01 (2412MHz)



Channel 06 (2437MHz)



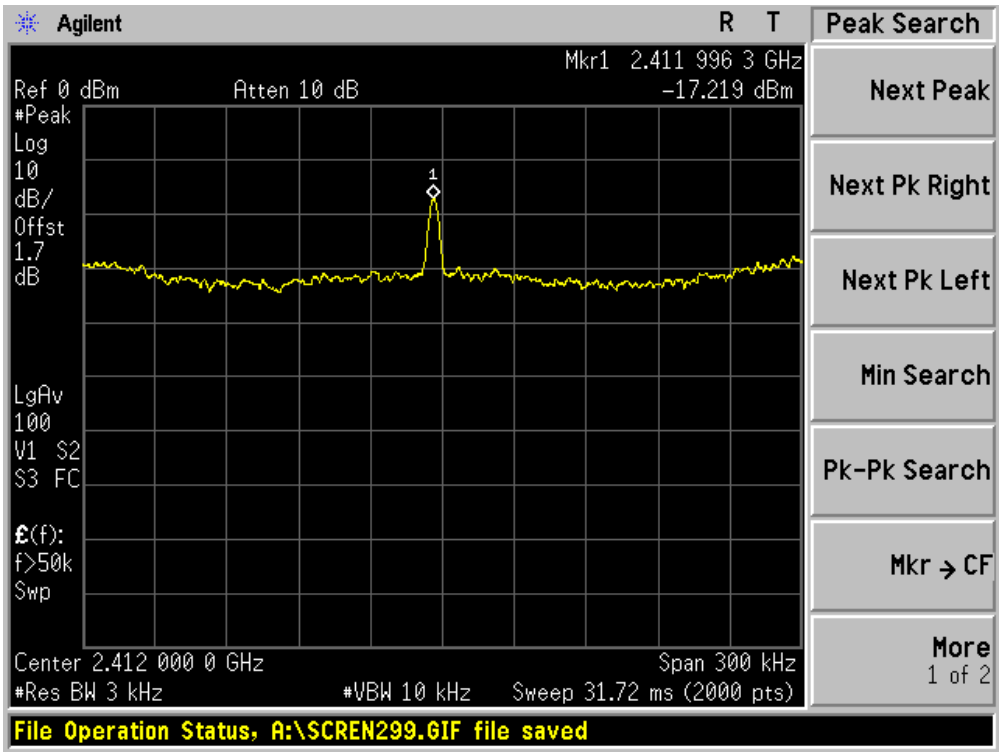
Channel 11 (2462MHz)



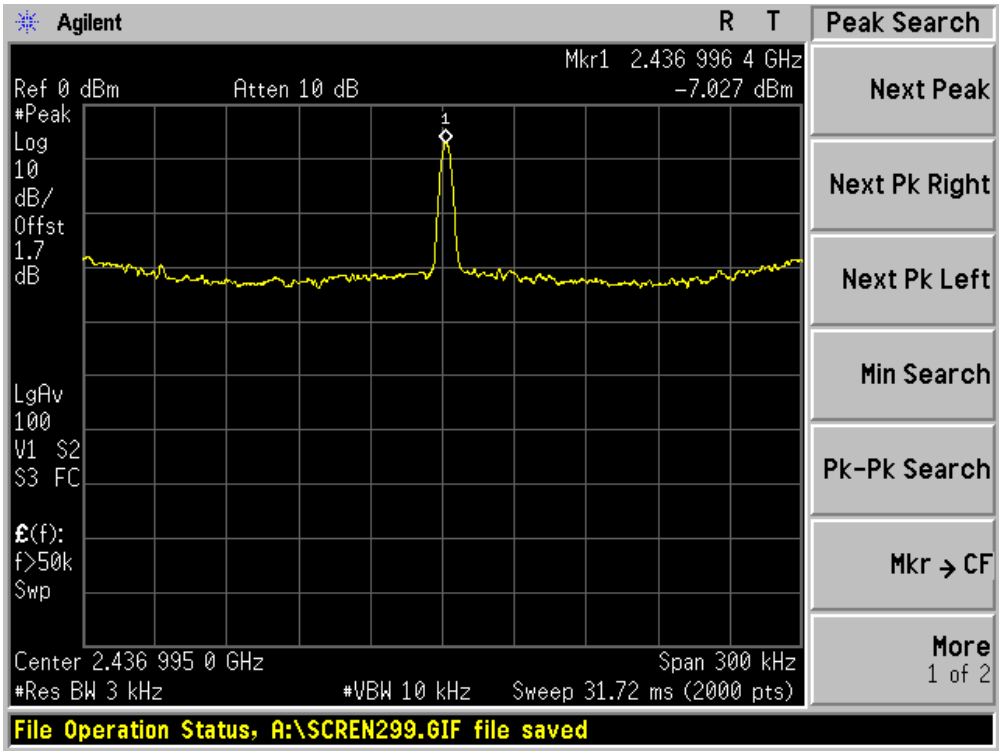
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g – chain 010

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	N/A	-17.219	-17.219	8	Pass
06	2437	N/A	-7.027	-7.027	8	Pass
11	2462	N/A	-8.243	-8.243	8	Pass

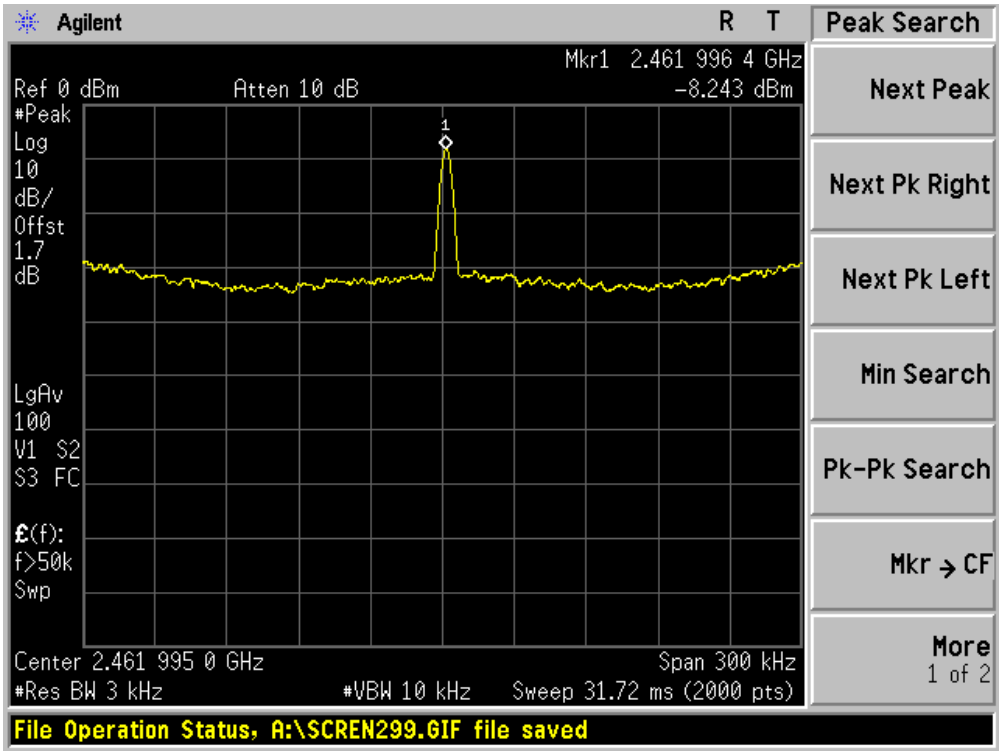
Channel 01 (2412MHz)



Channel 06 (2437MHz)



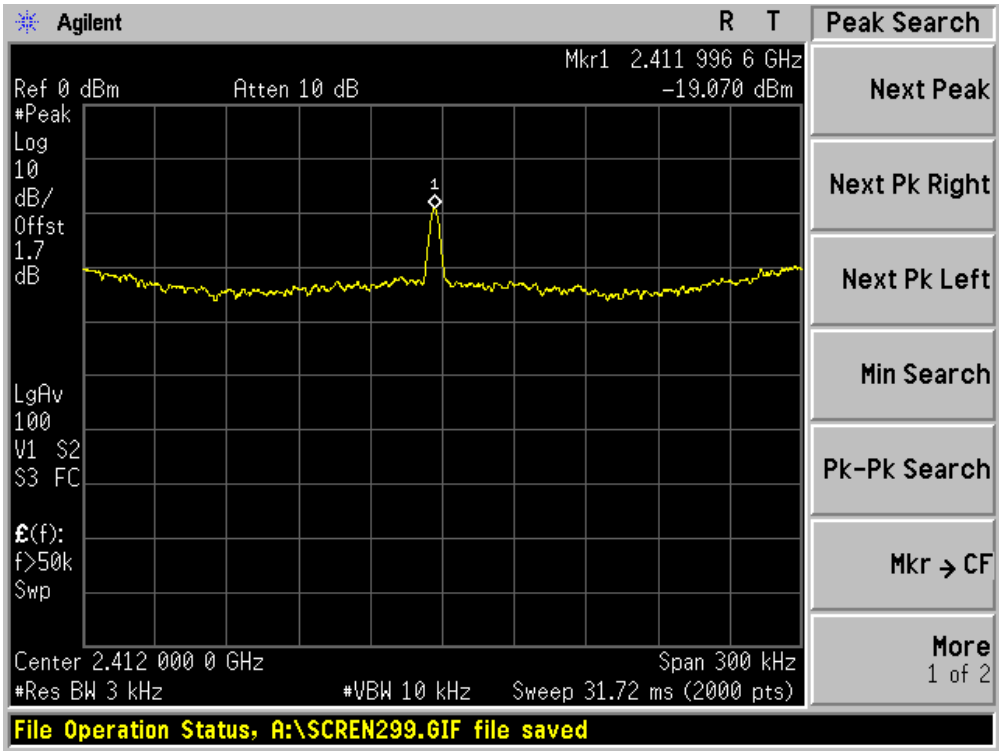
Channel 11 (2462MHz)



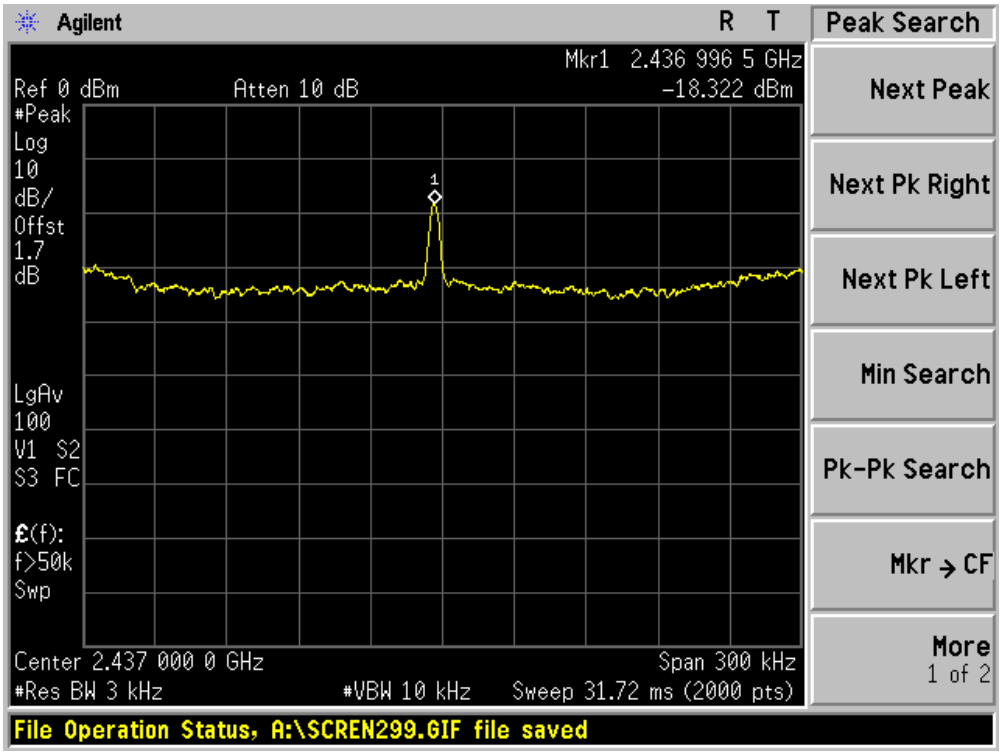
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 100

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	N/A	-19.070	-19.070	8	Pass
06	2437	N/A	-18.322	-18.322	8	Pass
11	2462	N/A	-19.374	-19.374	8	Pass

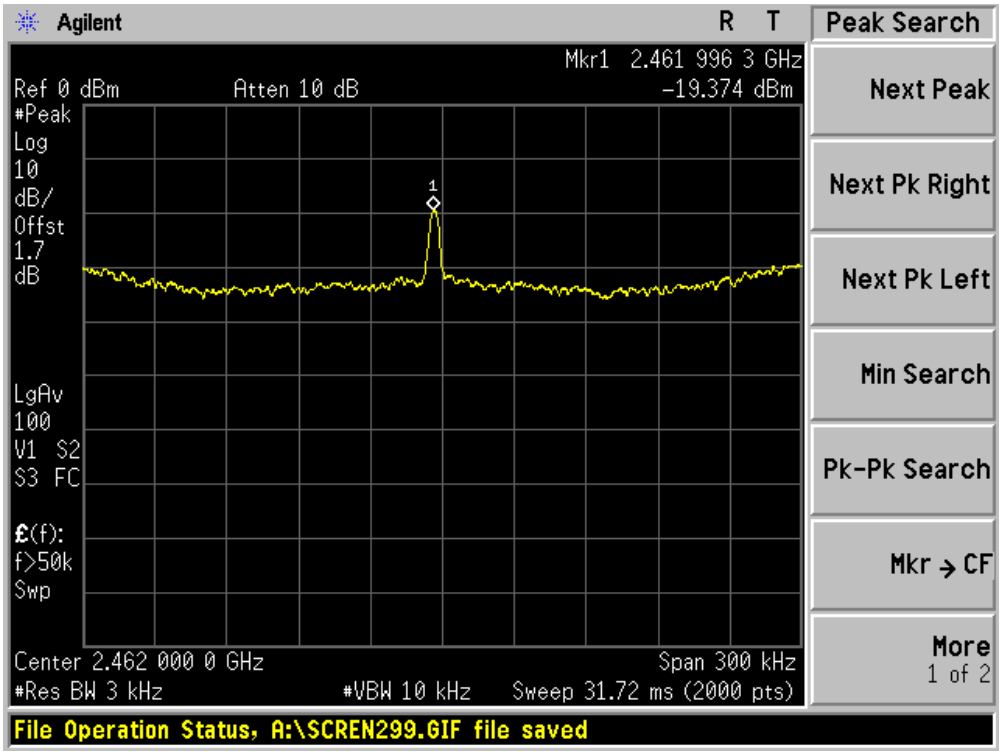
Channel 01 (2412MHz)



Channel 06 (2437MHz)



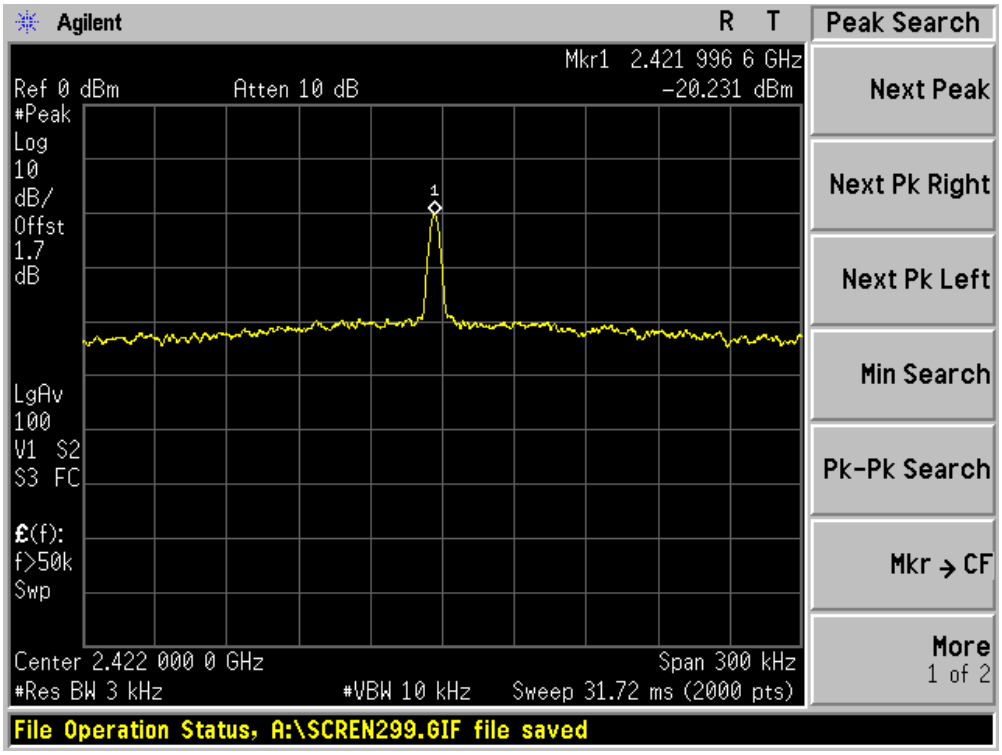
Channel 11 (2462MHz)



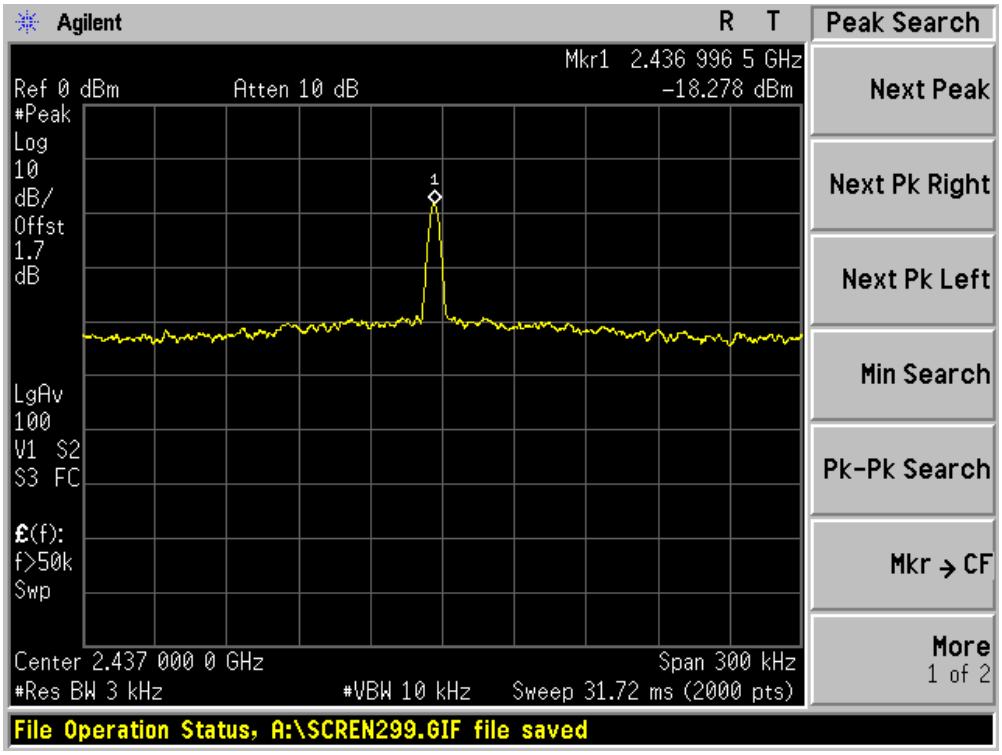
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 100

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
03	2422	N/A	-20.231	-20.231	8	Pass
06	2437	N/A	-18.278	-18.278	8	Pass
09	2452	N/A	-19.069	-19.069	8	Pass

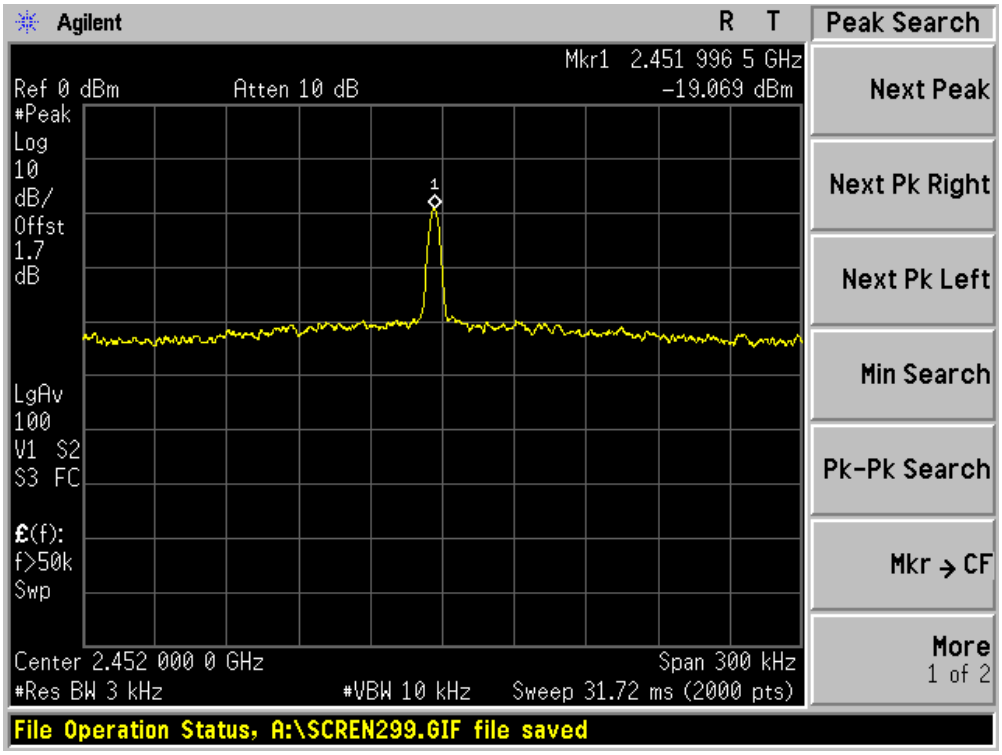
Channel 03 (2422MHz)



Channel 06 (2437MHz)



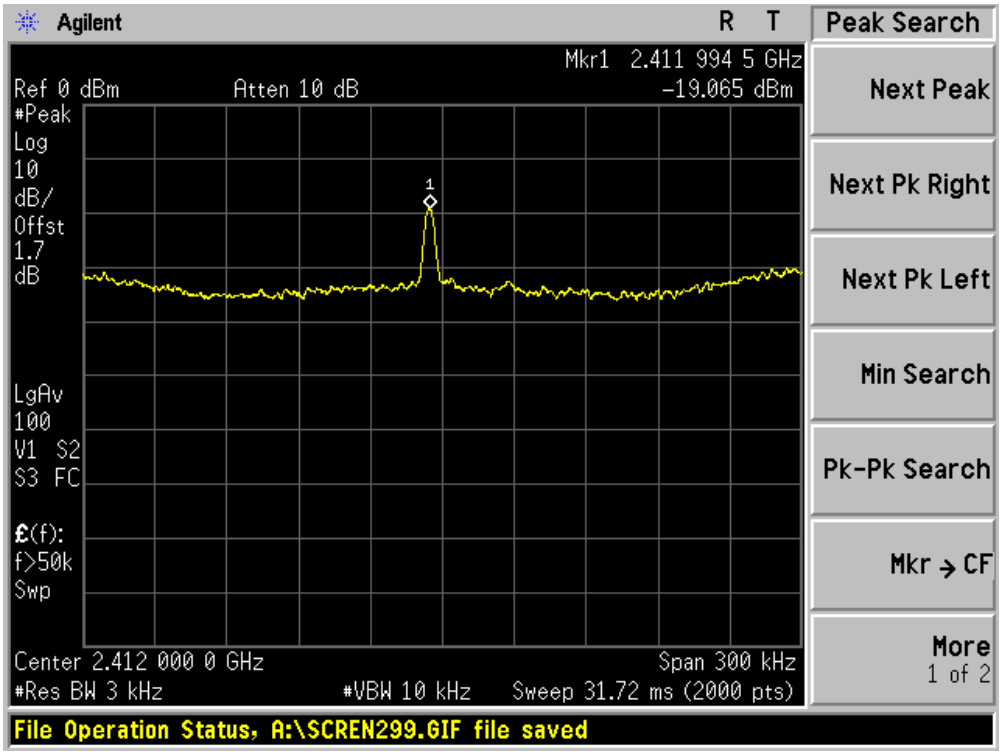
Channel 09 (2452MHz)



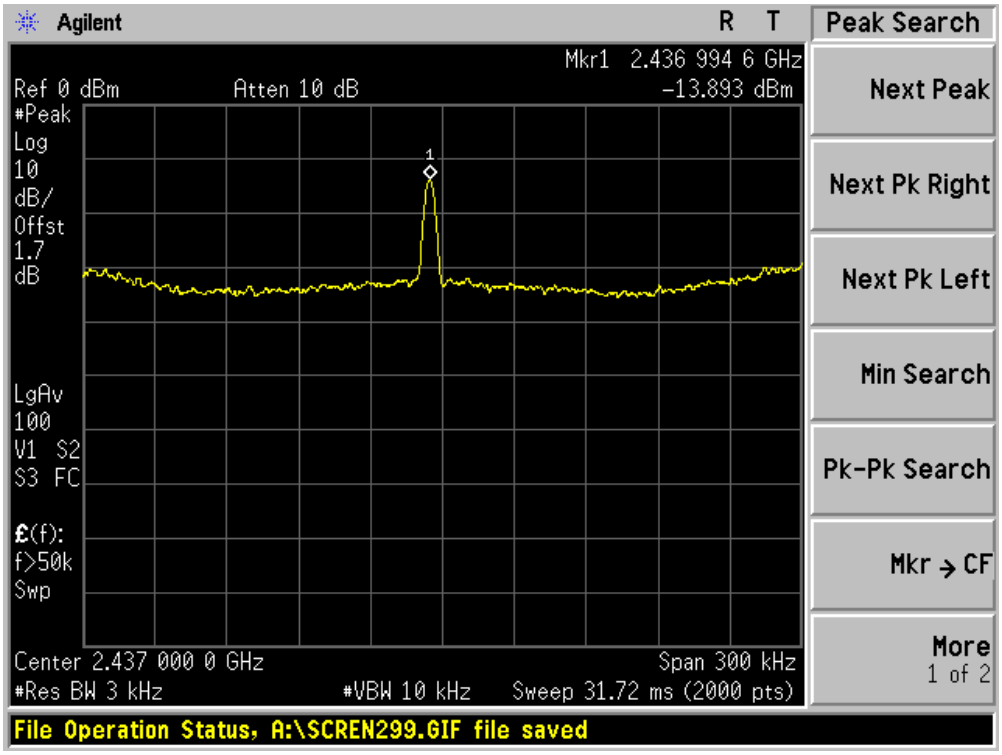
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz) – chain 110

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
01	2412	-19.065	-19.575	-16.30	8	Pass
06	2437	-13.893	-22.859	-13.37	8	Pass
11	2462	-9.818	-19.731	-9.40	8	Pass

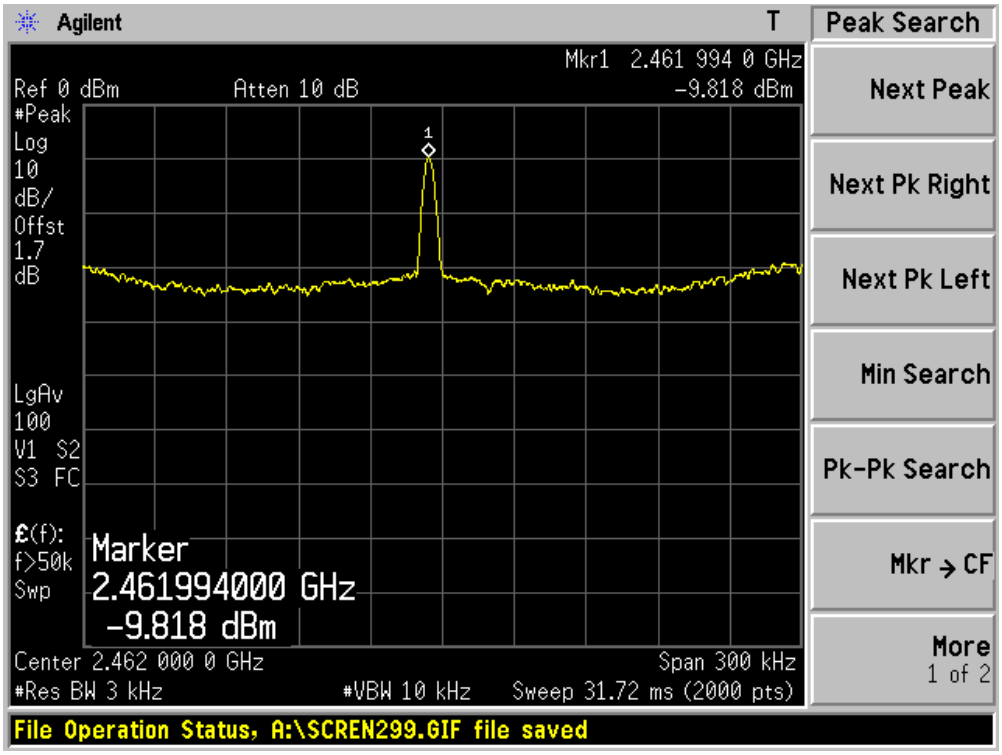
Channel 01 (2412MHz) – chain 010



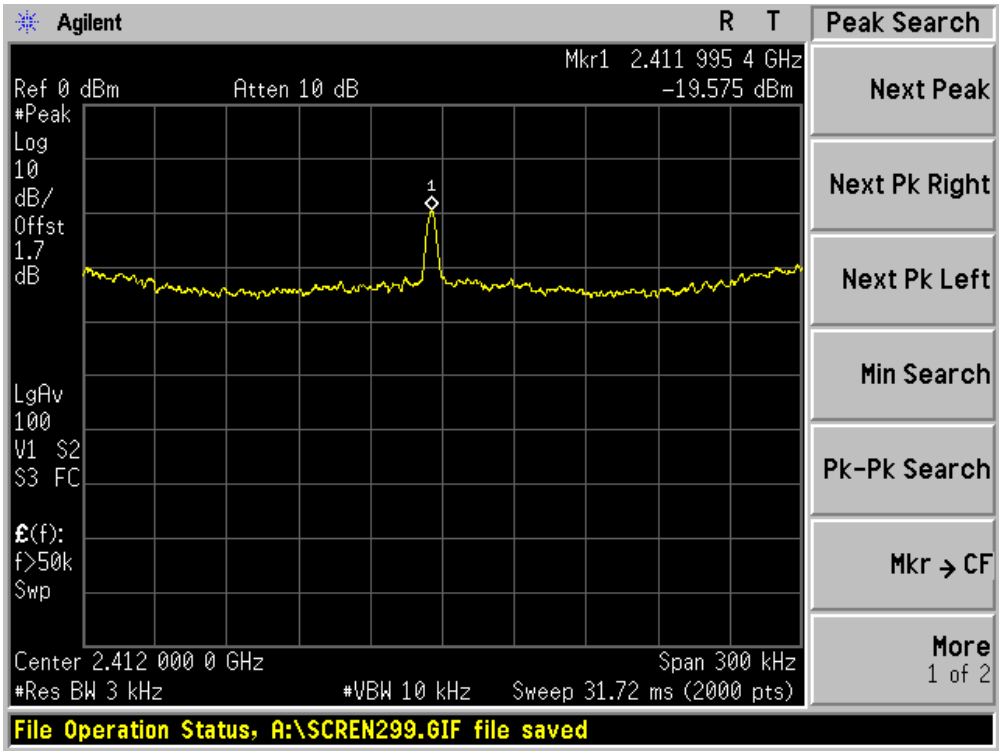
Channel 06 (2437MHz) – chain 010



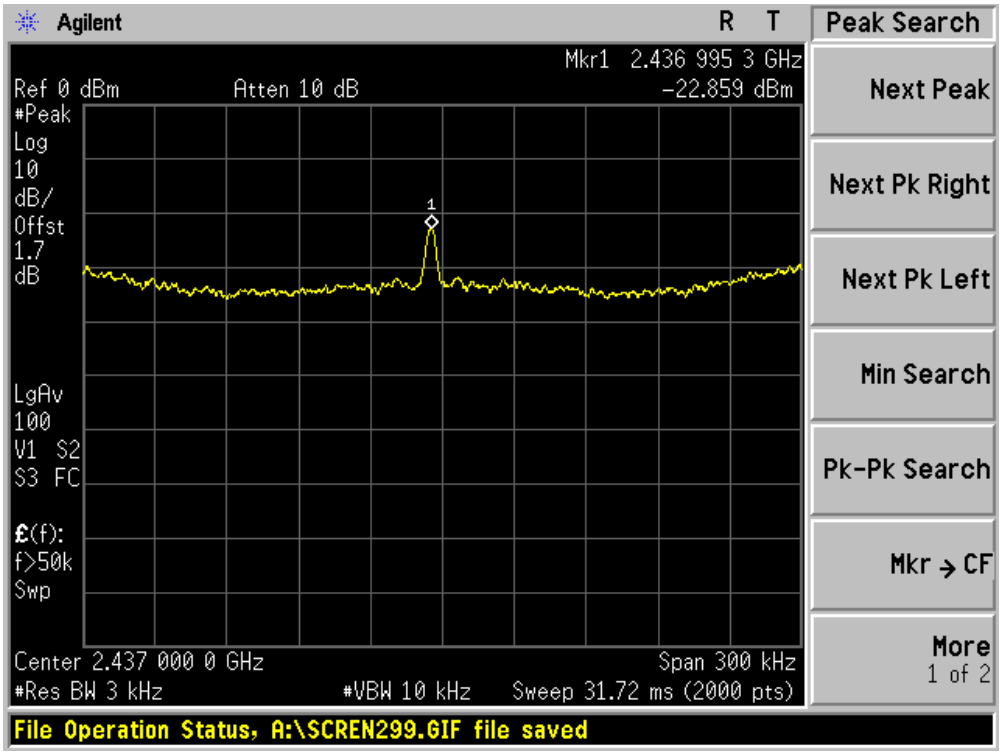
Channel 11 (2462MHz) – chain 010



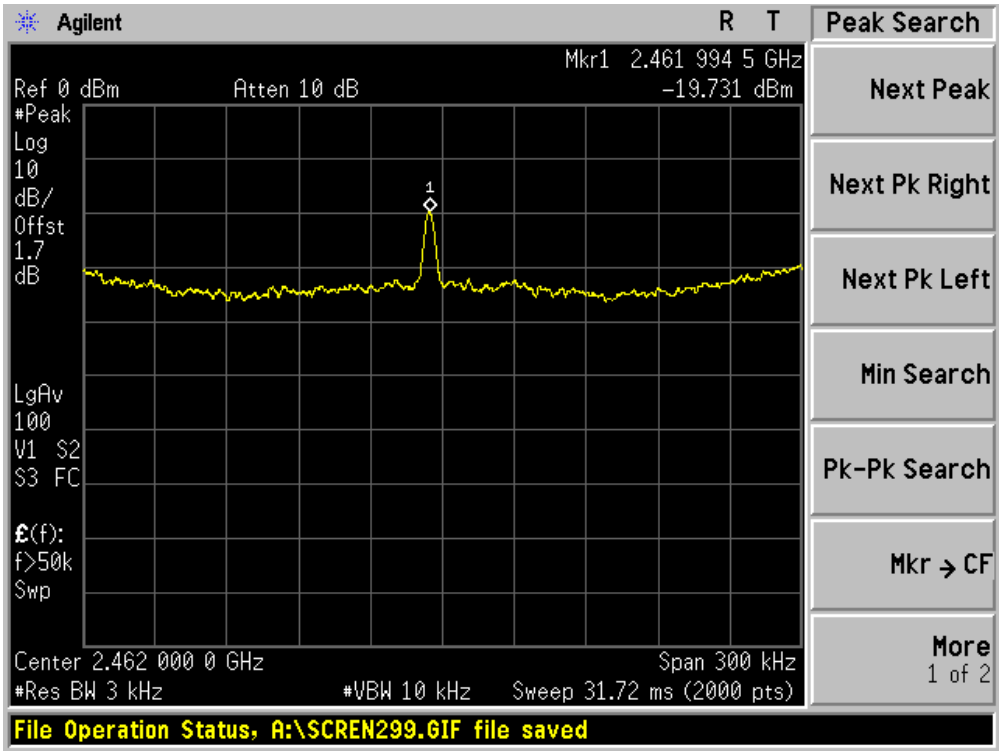
Channel 01 (2412MHz) – chain 100



Channel 06 (2437MHz) – chain 100



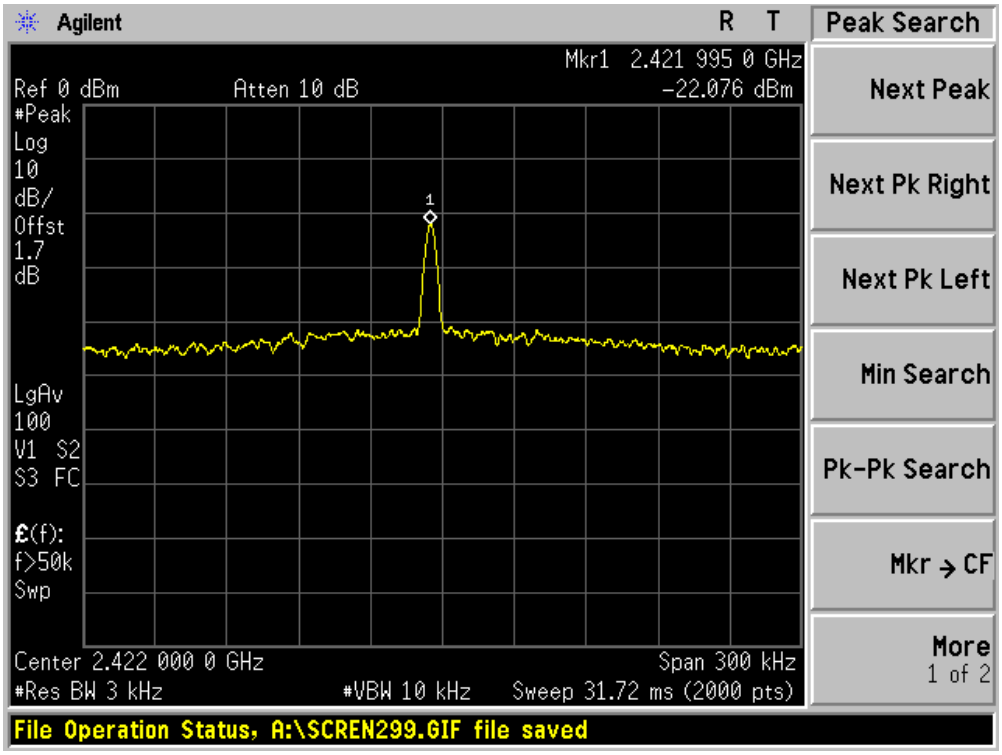
Channel 11 (2462MHz) – chain 100



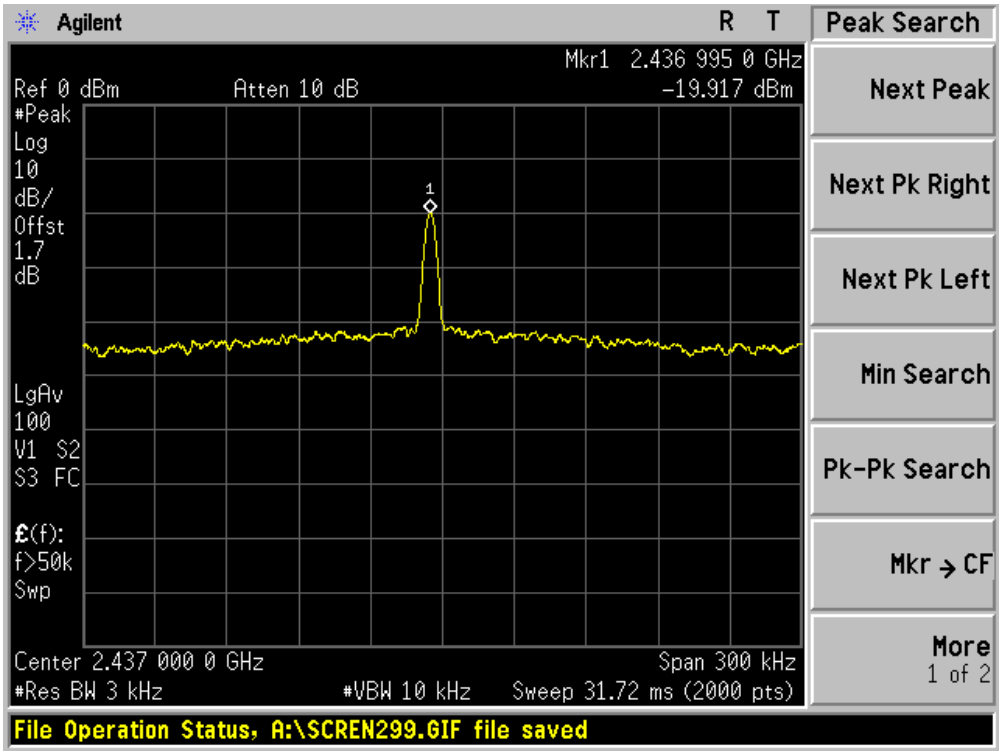
Product	:	802.11A/B/G/N MINI-PCI MODULE
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz) – chain 110

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Chain 010	Chain 100			
03	2422	-22.076	-21.335	-17.65	8	Pass
06	2437	-19.917	-21.654	-17.69	8	Pass
09	2452	-20.602	-22.950	-18.61	8	Pass

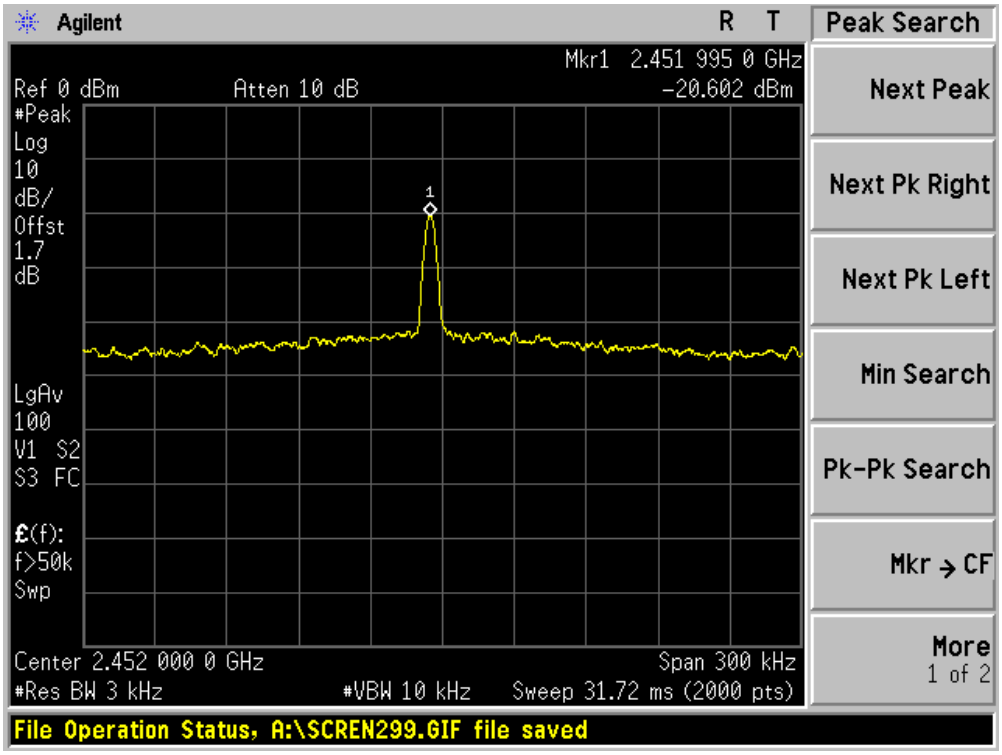
Channel 03 (2422MHz) – chain 010



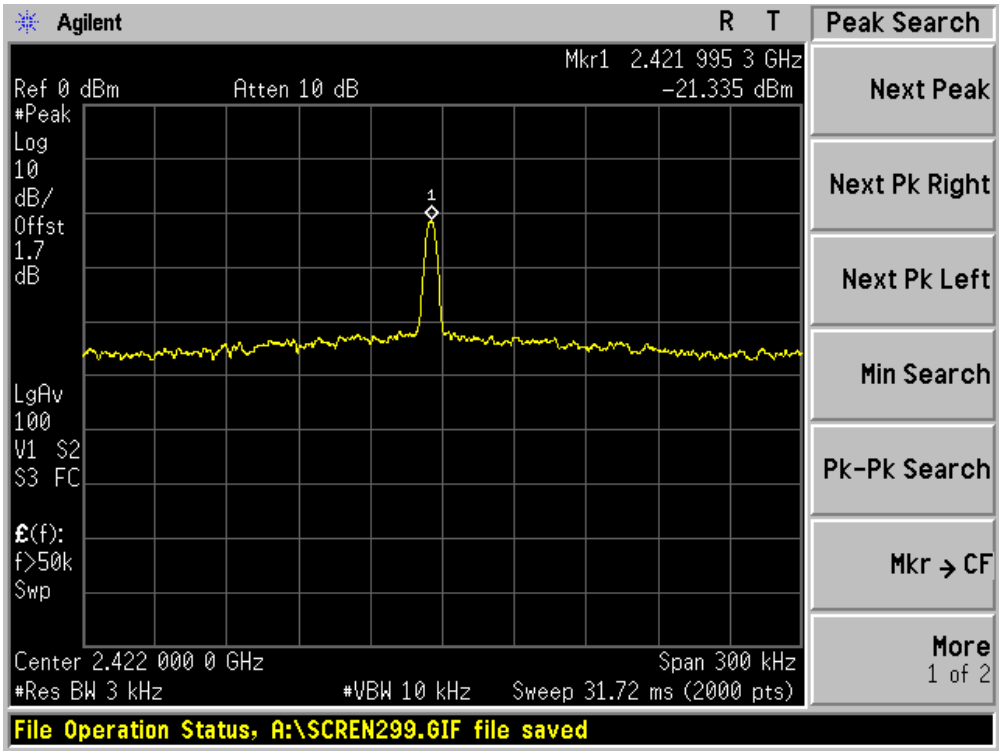
Channel 06 (2437MHz) – chain 010



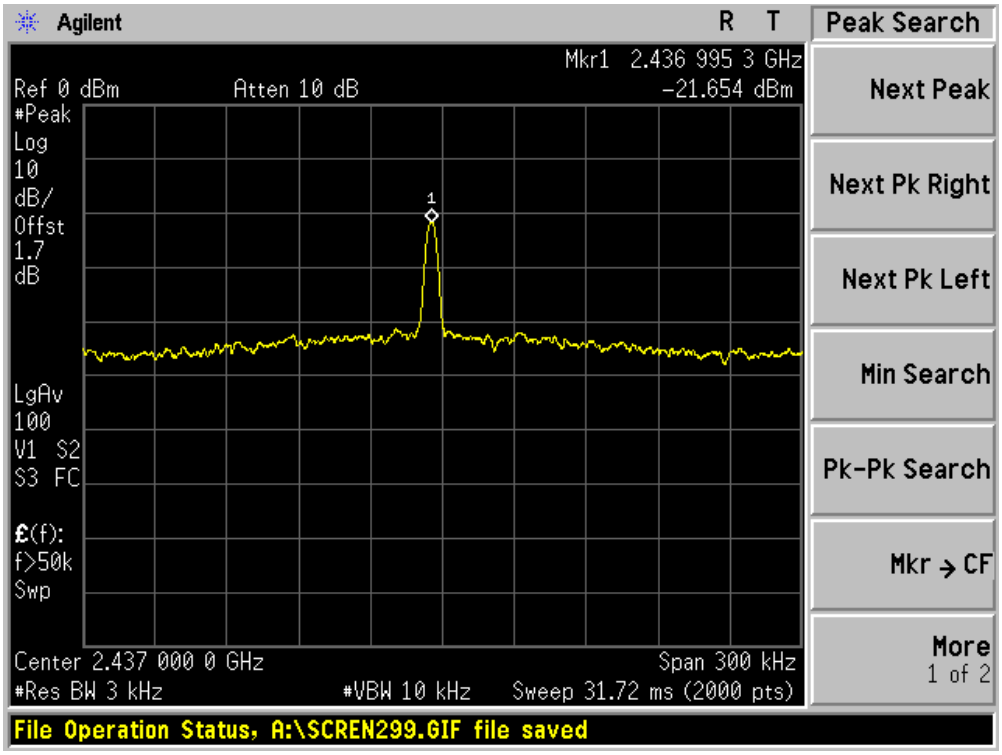
Channel 09 (2452MHz) – chain 010



Channel 03 (2422MHz) – chain 100



Channel 06 (2437MHz) – chain 100



Channel 09 (2452MHz) – chain 100