FCC15.247 Test Report

Applicant	:	Compex Systems Pte Ltd
Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Model No.	:	WLE200N2-23, MMS2N26E, MPS2N26E,MMJ2N26E, MML2N26E,MPE72N2-23,WPE72N2-23,MMS72N2-23, MPS72N2-23,MMJ72N2-23
Brand Name	:	COMPEX
FCC ID	:	TK4WLE200N2-23
Standards	:	FCC CFR Title 47 Part 15 Subpart C: 2012 ANSI C63.4: 2009 KDB558074
Test Date	:	May 26, 2013 ~ Jun 09, 2013

Reviewed By : Sunny Sun

(Engineer: Sunny Sun)

Approved By : Marlin Chen

(Manager: Marlin Chen)

Revision History

Report No.	Version	Description	Issue Date
1305RSU00201	Rev. 01	Initial report	2013-06-09
1305RSU00201	Rev. 02	Updated the manufacturer address	2013-06-17
1305RSU00201	Rev. 03	Updated the model no for EUT	2013-06-19

Test Summary

FCC Part Section(s)	Test Description	Test Result (Pass/Fail)	Reference
15.207	Conducted Emission	Pass	Section 3
15.205 15.209	Radiated Emission	Pass	Section 4
15.247(d)	RF Antenna Conducted Spurious	Pass	Section 5
15.247(d)	Radiated Emission Band Edge	Pass	Section 6
15.215©	Operation Frequency Range of 20dB Bandwidth	Pass	Section 7
15.247(a)(2)	Occupied Bandwidth	Pass	Section 8
15.247(b)(3)	Power Output	Pass	Section 9
15.247(e)	Power Spectral Density	Pass	Section 10

CONTENTS

Description Page

1. General Information

1.1. Applicant

Compex Systems Pte Ltd
135 Joo Seng Road #08-01 Singapore 368363.

1.2. Manufacturer

Compex Systems Pte Ltd
135 Joo Seng Road #08-01 Singapore 368363.

1.3. Feature of Product

Product Name	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Model No.	WLE200N2-23, MMS2N26E, MPS2N26E,MMJ2N26E, MML2N26E,MPE72N2-23,WPE72N2-23,MMS72N2-23, MPS72N2-23,MMJ72N2-23
Brand Name	COMPEX
EUT Voltage	DC 3.3V
Frequency Range	802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Type of Modulation	802.11b: DSSS
	802.11g/n: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps
	802.11b: 1/2/5.5/11 Mbps
	802.11n: up to 300 Mbps
Channel Control	Auto
Antenna Delivery	2*Tx + 2*Rx
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

Note:1: There are different plastic casings for selling between the Model No has showed in the report, and as the same with other configuration.
2: WLE200N2-23 for RF test.

For 2.4GHz Band

802.11b/g/n(20MHz) Working Frequency of Each Channel:					
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
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	N/A	N/A

802.11b/g/n Antenna List

Antenna	Manufacturer	Peak Gain
Dipole Antenna #1	**SmartAnt Telecom Co., Ltd.**	**4.5dBi for 2.4GHz**
Dipole Antenna #2	Kunshan Wavelink Electronic Co., Ltd.	2dBi for 2.4GHz
Panel Antenna #1	**Compex Systems Pte Ltd**	**14dBi for 2.4GHz**
Panel Antenna #2	Compex Systems Pte Ltd	6.5dBi for 2.4GHz
Panel Antenna #3	Compex Systems Pte Ltd	11dBi for 2.4GHz

1.4. Testing Facility

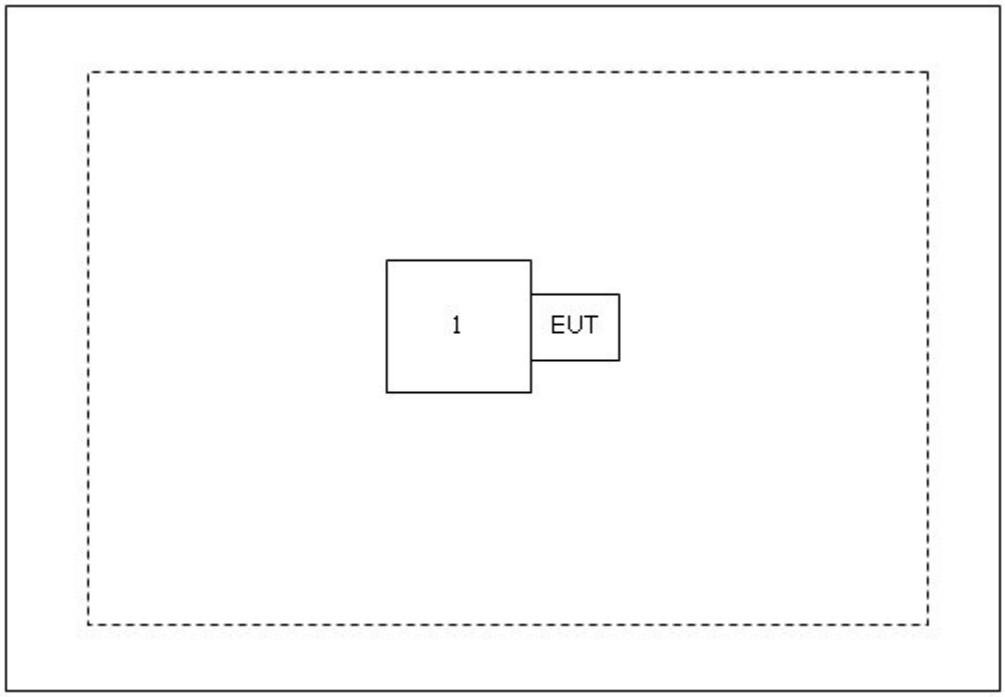
Test Site	QuieTek Technology (Suzhou) Co., Ltd.
Test Site Location	No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou, China
FCC Registration Number	800392

2. Test Configuration of Equipment Under Test

2.1. Test Mode

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)

2.2. Configuration of Tested System

Connection Diagram


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

2.3. Test 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	Notebook	Asus	N80V	8BN0AS226971468	Non-Shielded, 1.8m

2.4. Test Software

Turn on the power of all equipment, then run the RF test software “ART2” provided by applicant, and set the test mode and channel, then press OK to start continue transmit.

The test mode of the test software can support.			
Test Mode	Ant 100	Ant 010	Ant 110
802.11b	√	√	×
802.11g	√	√	×
802.11n(20MHz)	√	√	√
802.11n(40MHz)	√	√	√

Final Power Parameter Value of the test software					
Test Mode	Test Channel	Duty Cycle	Ant 100	Ant 010	Ant 110
802.11b	2412	99%	21.5	21.5	×
	2437	99%	21.5	21.5	×
	2462	99%	21.5	21.5	×
802.11g	2412	99%	19.0	20.0	×
	2437	99%	19.0	20.0	×
	2462	99%	19.0	20.0	×
802.11n(20MHz)	2412	99%	19.0	20.0	16.0
	2437	99%	19.0	20.0	16.0
	2462	99%	19.0	20.0	15.5
802.11n(40MHz)	2422	99%	19.5	20.5	16.0
	2437	99%	19.5	20.5	16.0
	2452	99%	19.5	20.5	16.0

3. Conducted Emission

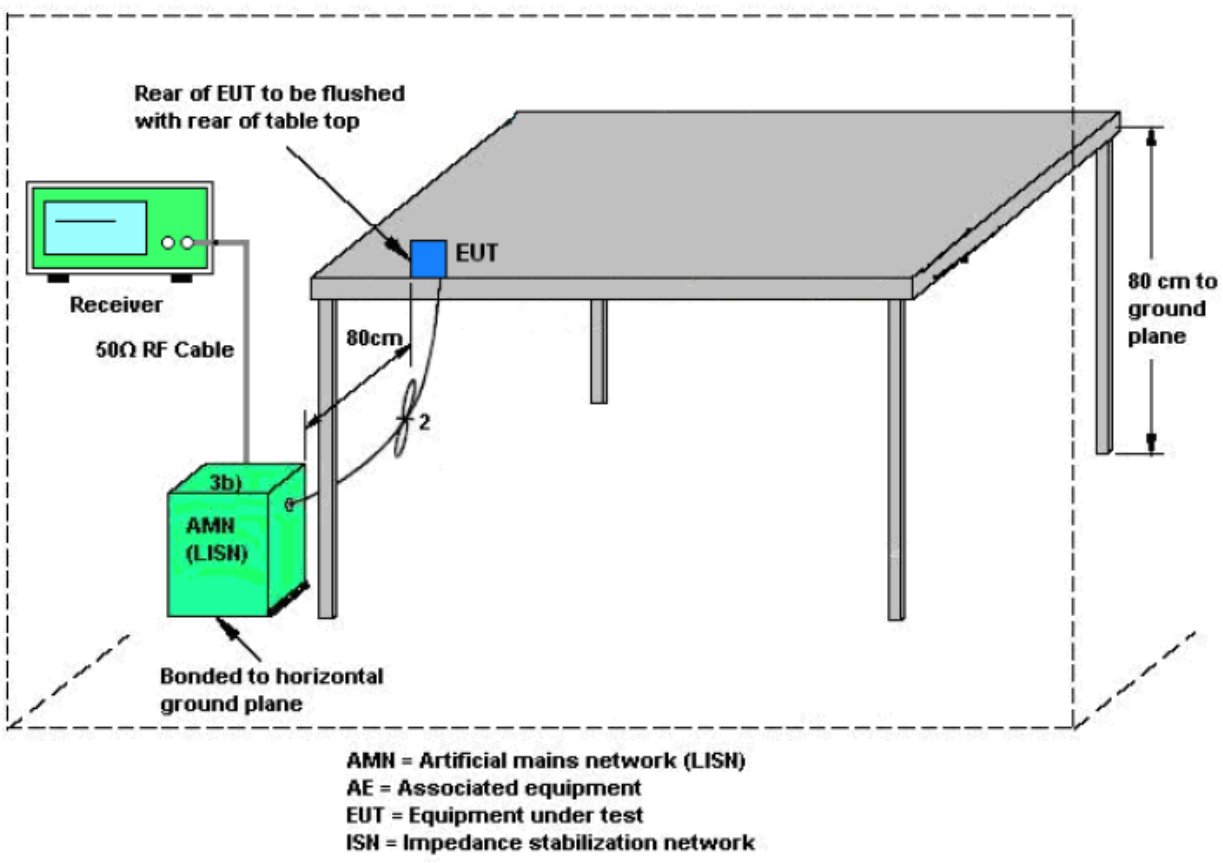
3.1. Limit of Conducted Emission

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 0.15MHz to 0.5MHz.

3.2. Test Setup



3.3. Test Procedure

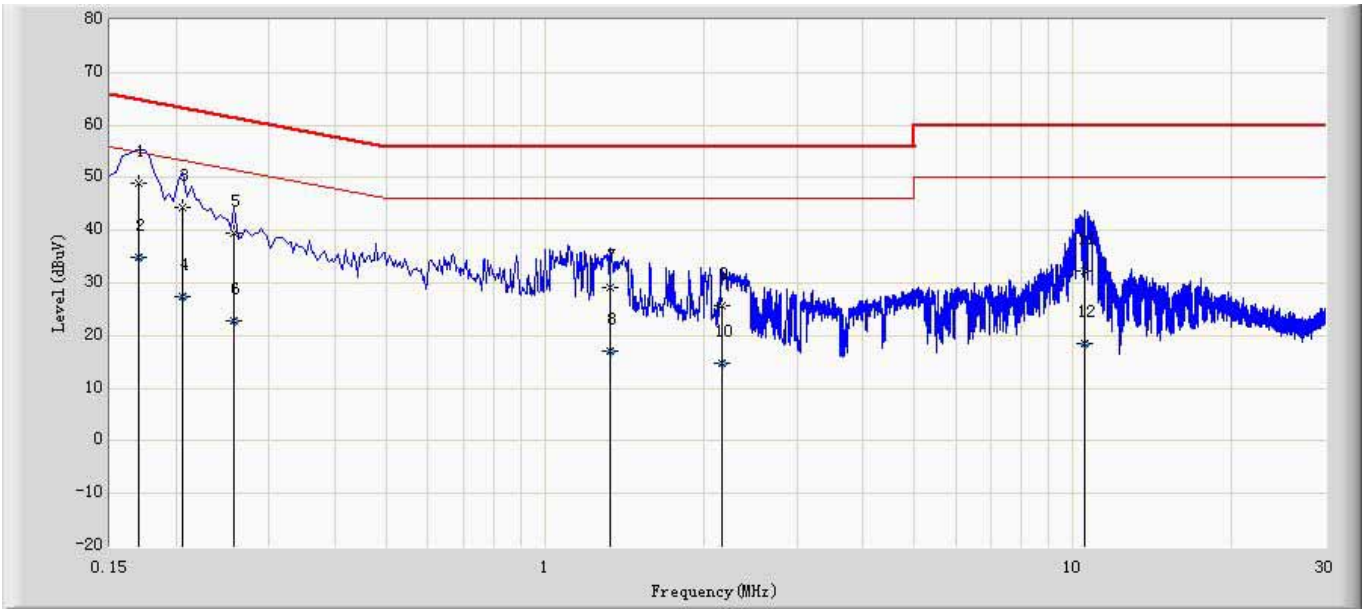
The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear 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 9 kHz.

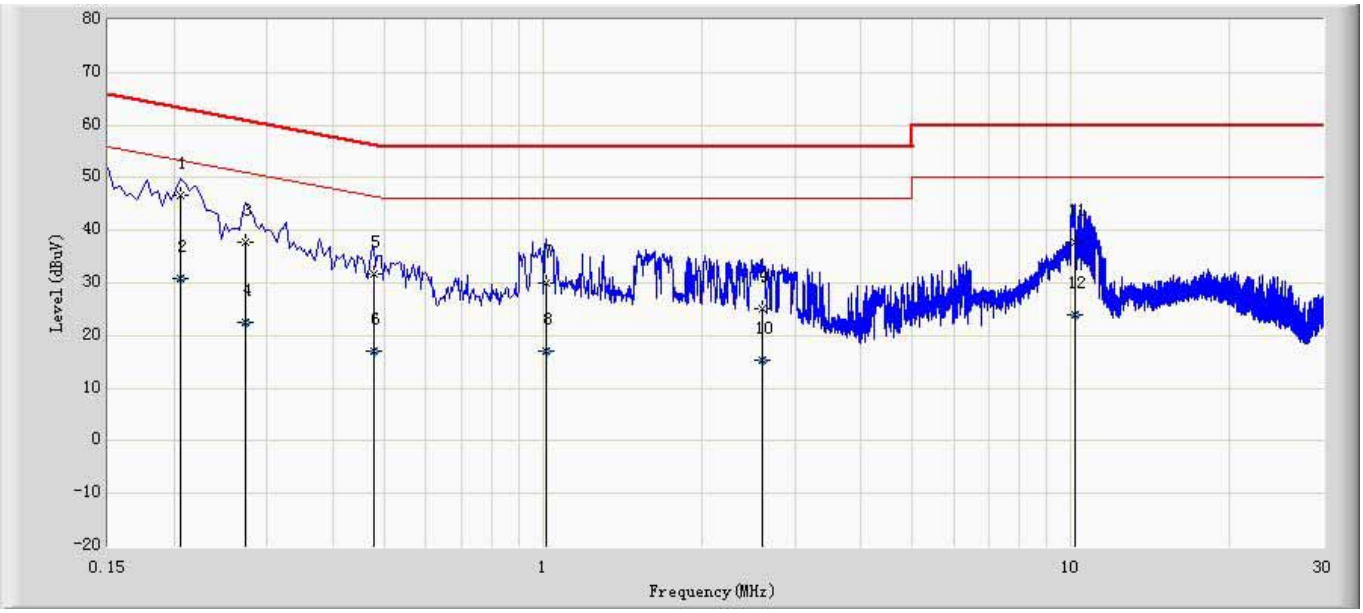
3.4. Test Result

Site: TR1	Time: 2013/05/28 - 17:53
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.170	48.908	39.057	-16.052	64.960	9.851	QP
2		0.170	34.793	24.942	-20.168	54.960	9.851	AV
3		0.206	44.485	34.624	-18.880	63.365	9.861	QP
4		0.206	27.307	17.446	-26.058	53.365	9.861	AV
5		0.258	39.513	29.645	-21.983	61.496	9.868	QP
6		0.258	22.788	12.920	-28.707	51.496	9.868	AV
7		1.330	29.245	19.448	-26.755	56.000	9.797	QP
8		1.330	17.182	7.385	-28.818	46.000	9.797	AV
9		2.158	25.803	16.012	-30.197	56.000	9.791	QP
10		2.158	14.717	4.926	-31.283	46.000	9.791	AV
11		10.534	32.287	22.272	-27.713	60.000	10.015	QP
12		10.534	18.507	8.492	-31.493	50.000	10.015	AV

Site: TR1	Time: 2013/05/28 - 17:58
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.206	46.688	36.771	-16.677	63.365	9.917	QP
2		0.206	30.816	20.900	-22.549	53.365	9.917	AV
3		0.274	37.702	27.766	-23.293	60.996	9.937	QP
4		0.274	22.516	12.579	-28.480	50.996	9.937	AV
5		0.478	31.638	21.589	-24.736	56.374	10.049	QP
6		0.478	16.934	6.885	-29.440	46.374	10.049	AV
7		1.014	30.041	20.004	-25.959	56.000	10.038	QP
8		1.014	17.184	7.146	-28.816	46.000	10.038	AV
9		2.594	25.154	15.175	-30.846	56.000	9.978	QP
10		2.594	15.481	5.503	-30.519	46.000	9.978	AV
11		10.170	37.698	27.319	-22.302	60.000	10.379	QP
12		10.170	23.943	13.564	-26.057	50.000	10.379	AV

4. Radiated Emission

4.1. 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

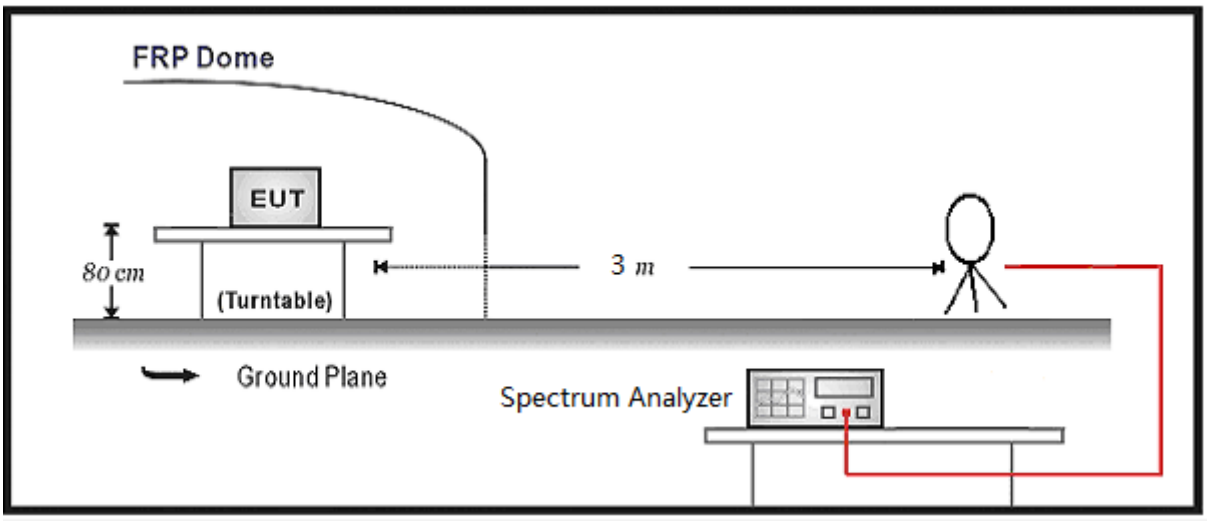
Note 1: The lower limit shall apply at the transition frequency.

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.

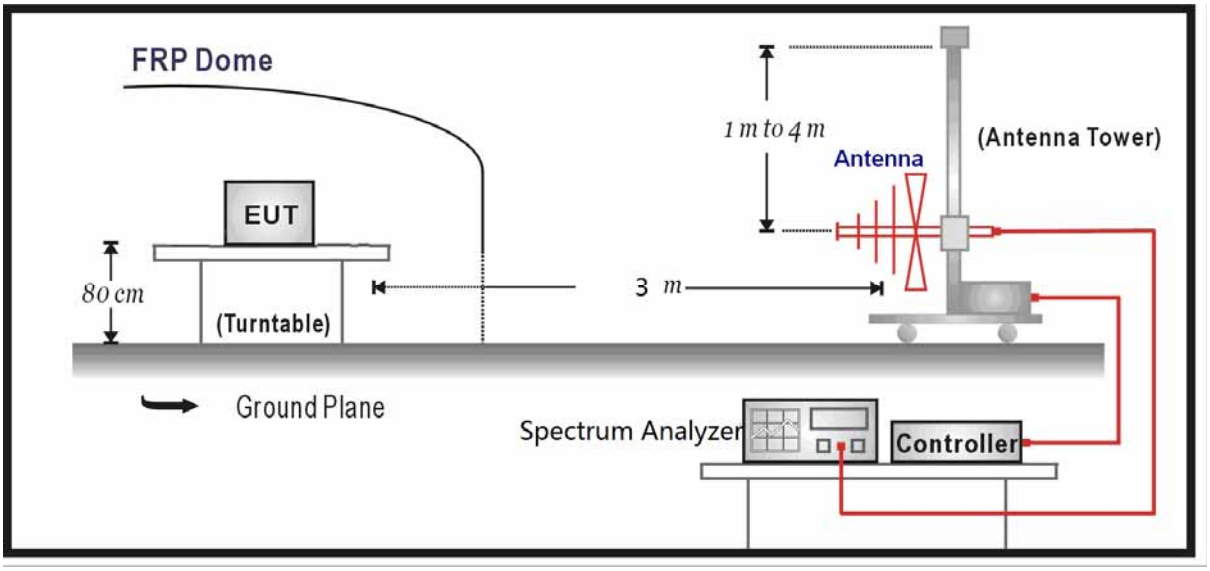
Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.2. Test Setup

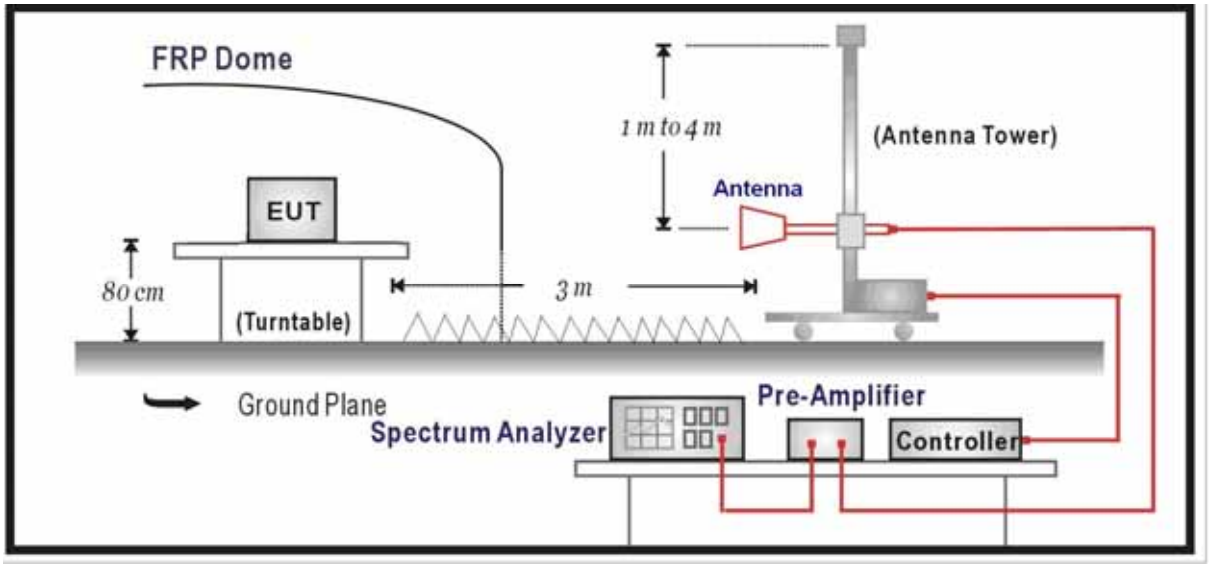
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 558074 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

C63.4:2009 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 doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

4.4. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:
Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;
Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.
Measure Level = Reading Level + Cable Loss + Antenna Factor - Preamplifier Gain

Test by Dipole Antenna #1

Mode1: Transmit by 802.11b

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3023.0	51.3	-10.8	40.5	54(note3)	-13.5	PK
		V	3125.0	50.9	-10.9	40.0	54(note3)	-14.0	PK
		H	4824.0	47.8	-34.5	13.3	54(note3)	-40.7	PK
		V	4825.0	49.0	-33.4	15.6	54(note3)	-38.4	PK
		H	7236.0	45.5	-31.9	13.6	54(note3)	-40.4	PK
		V	7236.0	44.4	-33.0	11.4	54(note3)	-42.6	PK
		H	9648.0	40.2	-31.2	9.0	54(note3)	-45.0	PK
		V	9648.0	39.9	-31.5	8.4	54(note3)	-45.6	PK
	6	H	3125.0	52.4	-10.6	41.8	54(note3)	-12.2	PK
		V	3116.5	50.9	-10.9	40.0	54(note3)	-14.0	PK
		H	4874.0	48.3	-34.0	14.3	54(note3)	-39.7	PK
		V	4874.0	48.7	-33.6	15.1	54(note3)	-38.9	PK
		H	7311.0	45.5	-31.8	13.7	54(note3)	-40.3	PK
		V	7311.0	45.0	-32.2	12.8	54(note3)	-41.2	PK
		H	9748.0	39.6	-31.8	7.8	54(note3)	-46.2	PK
		V	9748.0	39.1	-32.2	6.9	54(note3)	-47.1	PK
	11	H	3116.5	51.3	-10.6	40.7	54(note3)	-13.3	PK
		V	3159.0	51.2	-10.8	40.4	54(note3)	-13.6	PK
		H	4924.0	48.1	-34.3	13.8	54(note3)	-40.2	PK
		V	4924.0	49.6	-32.7	16.9	54(note3)	-37.1	PK
		H	7386.0	44.3	-32.7	11.6	54(note3)	-42.4	PK
		V	7386.0	44.9	-32.1	12.8	54(note3)	-41.2	PK
		H	9848.0	39.7	-31.2	8.5	54(note3)	-45.5	PK
		V	9848.0	39.3	-31.6	7.7	54(note3)	-46.3	PK

Ant 010	1	H	3040.0	51.5	-10.8	40.7	54(note3)	-13.3	PK
		V	3176.0	50.5	-10.7	39.8	54(note3)	-14.2	PK
		H	4825.0	48.8	-8.3	40.5	54(note3)	-13.5	PK
		V	4825.0	53.3	-8.4	44.9	54(note3)	-9.1	PK
		H	7236.0	42.9	-3.4	39.5	54(note3)	-14.5	PK
		V	7236.0	43.1	-3.4	39.7	54(note3)	-14.3	PK
		H	9648.0	37.8	2.6	40.4	54(note3)	-13.6	PK
		V	9648.0	38.3	2.6	40.9	54(note3)	-13.1	PK
	6	H	2955.0	50.6	-11.1	39.5	54(note3)	-14.5	PK
		V	3099.5	51.3	-11.0	40.3	54(note3)	-13.7	PK
		H	4874.0	46.5	-8.3	38.2	54(note3)	-15.8	PK
		V	4876.0	51.2	-8.3	42.9	54(note3)	-11.1	PK
		H	7311.0	43.3	-3.3	40.0	54(note3)	-14.0	PK
		V	7311.0	42.4	-3.3	39.1	54(note3)	-14.9	PK
		H	9748.0	37.5	2.7	40.2	54(note3)	-13.8	PK
		V	9748.0	37.4	2.8	40.2	54(note3)	-13.8	PK
	11	H	2980.5	51.1	-10.9	40.2	54(note3)	-13.8	PK
		V	3150.5	50.7	-10.8	39.9	54(note3)	-14.1	PK
		H	4924.0	46.8	-8.4	38.4	54(note3)	-15.6	PK
		V	4927.0	51.3	-8.3	43.0	54(note3)	-11.0	PK
		H	7386.0	42.3	-3.0	39.3	54(note3)	-14.7	PK
		V	7386.0	42.5	-3.0	39.5	54(note3)	-14.5	PK
		H	9848.0	37.2	3.1	40.3	54(note3)	-13.7	PK
		V	9848.0	37.0	3.2	40.2	54(note3)	-13.8	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode2: Transmit by 802.11g

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3048.5	51.2	-10.7	40.5	54(note3)	-13.5	PK
		V	3159.0	50.8	-10.8	40.0	54(note3)	-14.0	PK
		H	4824.0	47.5	-8.3	39.2	54(note3)	-14.8	PK
		V	4824.0	48.0	-8.4	39.6	54(note3)	-14.4	PK
		H	7236.0	44.9	-3.4	41.5	54(note3)	-12.5	PK
		V	7236.0	44.7	-3.4	41.3	54(note3)	-12.7	PK
		H	9648.0	39.8	2.6	42.3	54(note3)	-11.7	PK
		V	9648.0	40.5	2.6	43.2	54(note3)	-10.8	PK
	6	H	3125.0	53.3	-10.6	42.7	54(note3)	-11.3	PK
		V	3099.5	50.2	-11.0	39.2	54(note3)	-14.8	PK
		H	4874.0	47.8	-8.3	39.5	54(note3)	-14.5	PK
		V	4874.0	47.9	-8.3	39.6	54(note3)	-14.4	PK
		H	7311.0	44.7	-3.3	41.4	54(note3)	-12.6	PK
		V	7311.0	44.4	-3.3	41.1	54(note3)	-12.9	PK
		H	9748.0	39.4	2.7	42.1	54(note3)	-11.9	PK
		V	9748.0	39.7	2.8	42.5	54(note3)	-11.5	PK
	11	H	3125.0	51.9	-10.6	41.3	54(note3)	-12.7	PK
		V	3040.0	50.9	-11.1	39.8	54(note3)	-14.2	PK
		H	4924.0	47.8	-8.4	39.5	54(note3)	-14.5	PK
		V	4924.0	49.8	-8.3	41.5	54(note3)	-12.5	PK
		H	7386.0	44.7	-3.0	41.6	54(note3)	-12.4	PK
		V	7386.0	44.4	-3.0	41.4	54(note3)	-12.6	PK
		H	9848.0	39.1	3.1	42.2	54(note3)	-11.8	PK
		V	9848.0	39.0	3.2	42.1	54(note3)	-11.9	PK

Ant 010	1	H	3125.0	52.0	-10.6	41.4	54(note3)	-12.6	PK
		V	3159.0	50.8	-10.8	40.0	54(note3)	-14.0	PK
		H	4824.0	46.6	-8.3	38.3	54(note3)	-15.7	PK
		V	4824.0	46.2	-8.4	37.8	54(note3)	-16.2	PK
		H	7236.0	43.3	-3.4	40.0	54(note3)	-14.1	PK
		V	7236.0	43.0	-3.4	39.6	54(note3)	-14.4	PK
		H	9648.0	38.0	2.6	40.6	54(note3)	-13.4	PK
		V	9648.0	38.3	2.6	40.9	54(note3)	-13.1	PK
	6	H	3023.0	51.3	-10.8	40.5	54(note3)	-13.5	PK
		V	3048.5	50.7	-10.7	40.0	54(note3)	-14.0	PK
		H	4874.0	46.3	-8.3	38.1	54(note3)	-16.0	PK
		V	4874.0	46.2	-8.3	37.9	54(note3)	-16.1	PK
		H	7311.0	43.5	-3.3	40.3	54(note3)	-13.7	PK
		V	7311.0	43.0	-3.3	39.7	54(note3)	-14.3	PK
		H	9748.0	38.5	2.7	41.2	54(note3)	-12.8	PK
		V	9748.0	38.0	2.8	40.7	54(note3)	-13.3	PK
	11	H	3116.5	51.7	-10.6	41.0	54(note3)	-13.0	PK
		V	3125.0	50.8	-10.9	39.9	54(note3)	-14.1	PK
		H	4924.0	46.2	-8.4	37.8	54(note3)	-16.2	PK
		V	4924.0	46.2	-8.3	37.9	54(note3)	-16.1	PK
		H	7386.0	42.9	-3.0	39.8	54(note3)	-14.2	PK
		V	7386.0	42.8	-3.0	39.8	54(note3)	-14.2	PK
		H	9848.0	37.2	3.1	40.3	54(note3)	-13.7	PK
		V	9848.0	36.7	3.2	39.9	54(note3)	-14.1	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode3: Transmit by 802.11n(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3125.0	51.7	-10.6	41.1	54(note3)	-12.9	PK
		V	3116.5	51.7	-10.9	40.8	54(note3)	-13.2	PK
		H	4824.0	47.5	-8.3	39.2	54(note3)	-14.8	PK
		V	4824.0	47.7	-8.4	39.3	54(note3)	-14.7	PK
		H	7236.0	44.9	-3.4	41.5	54(note3)	-12.5	PK
		V	7236.0	44.4	-3.4	41.0	54(note3)	-13.0	PK
		H	9648.0	40.0	2.6	42.6	54(note3)	-11.4	PK
		V	9648.0	39.6	2.6	42.2	54(note3)	-11.8	PK
	6	H	3116.5	52.3	-10.6	41.7	54(note3)	-12.3	PK
		V	2989.0	51.2	-11.2	40.0	54(note3)	-14.0	PK
		H	4874.0	47.8	-8.3	39.5	54(note3)	-14.5	PK
		V	4874.0	48.2	-8.3	39.9	54(note3)	-14.1	PK
		H	7311.0	44.6	-3.3	41.3	54(note3)	-12.7	PK
		V	7311.0	44.6	-3.3	41.3	54(note3)	-12.7	PK
		H	9748.0	40.0	2.7	42.7	54(note3)	-11.3	PK
		V	9748.0	39.5	2.8	42.3	54(note3)	-11.7	PK
	11	H	3193.0	50.8	-10.5	40.3	54(note3)	-13.7	PK
		V	2921.0	49.3	-11.2	38.1	54(note3)	-15.9	PK
		H	4924.0	48.1	-8.4	39.7	54(note3)	-14.3	PK
		V	4924.0	49.4	-8.3	41.1	54(note3)	-12.9	PK
		H	7386.0	44.3	-3.0	41.3	54(note3)	-12.7	PK
		V	7386.0	45.0	-3.0	42.0	54(note3)	-12.0	PK
		H	9848.0	39.1	3.1	42.2	54(note3)	-11.8	PK
		V	9848.0	39.1	3.2	42.3	54(note3)	-11.7	PK

Ant 010	1	H	3040.0	50.7	-10.8	39.9	54(note3)	-14.1	PK
		V	3193.0	51.8	-10.7	41.1	54(note3)	-12.9	PK
		H	4824.0	45.9	-8.3	37.6	54(note3)	-16.4	PK
		V	4824.0	47.6	-8.4	39.2	54(note3)	-14.8	PK
		H	7236.0	42.8	-3.4	39.4	54(note3)	-14.6	PK
		V	7236.0	43.7	-3.4	40.3	54(note3)	-13.7	PK
		H	9648.0	37.5	2.6	40.1	54(note3)	-13.9	PK
		V	9648.0	37.6	2.6	40.2	54(note3)	-13.8	PK
	6	H	3116.5	51.5	-10.6	40.9	54(note3)	-13.1	PK
		V	2929.5	52.0	-11.2	40.8	54(note3)	-13.2	PK
		H	4874.0	45.7	-8.3	37.4	54(note3)	-16.6	PK
		V	4874.0	46.1	-8.3	37.8	54(note3)	-16.2	PK
		H	7311.0	42.7	-3.3	39.4	54(note3)	-14.6	PK
		V	7311.0	43.2	-3.3	39.9	54(note3)	-14.1	PK
		H	9748.0	37.6	2.7	40.3	54(note3)	-13.7	PK
		V	9748.0	37.5	2.8	40.3	54(note3)	-13.7	PK
	11	H	3065.5	50.3	-10.7	39.6	54(note3)	-14.4	PK
		V	3116.5	52.2	-10.9	41.3	54(note3)	-12.7	PK
		H	4924.0	45.9	-8.4	37.5	54(note3)	-16.5	PK
		V	4924.0	45.9	-8.3	37.6	54(note3)	-16.4	PK
		H	7386.0	42.8	-3.0	39.8	54(note3)	-14.2	PK
		V	7386.0	42.6	-3.0	39.6	54(note3)	-14.4	PK
		H	9848.0	37.6	3.1	40.7	54(note3)	-13.3	PK
		V	9848.0	37.2	3.2	40.4	54(note3)	-13.6	PK

Ant 110	1	H	3014.5	50.8	-10.8	40.0	54(note3)	-14.0	PK
		V	2989.0	51.2	-11.2	40.0	54(note3)	-14.0	PK
		H	4824.0	48.0	-8.3	39.7	54(note3)	-14.3	PK
		V	4824.0	48.8	-8.4	40.4	54(note3)	-13.6	PK
		H	7236.0	43.2	-3.4	39.8	54(note3)	-14.2	PK
		V	7236.0	42.8	-3.4	39.4	54(note3)	-14.6	PK
		H	9648.0	39.9	2.6	42.5	54(note3)	-11.5	PK
		V	9648.0	39.3	2.6	41.9	54(note3)	-12.1	PK
	6	H	3006.0	50.9	-10.8	40.1	54(note3)	-13.9	PK
		V	3159.0	50.8	-10.8	40.0	54(note3)	-14.0	PK
		H	4874.0	47.4	-8.3	39.1	54(note3)	-14.9	PK
		V	4874.0	48.8	-8.3	40.5	54(note3)	-13.5	PK
		H	7311.0	43.2	-3.3	39.9	54(note3)	-14.1	PK
		V	7311.0	44.3	-3.3	41.0	54(note3)	-13.0	PK
		H	9748.0	39.5	2.7	42.2	54(note3)	-11.8	PK
		V	9748.0	39.1	2.8	41.9	54(note3)	-12.1	PK
	11	H	3125.0	51.0	-10.6	40.4	54(note3)	-13.6	PK
		V	3040.0	50.9	-11.1	39.8	54(note3)	-14.2	PK
		H	4924.0	48.1	-8.4	39.7	54(note3)	-14.3	PK
		V	4924.0	48.1	-8.3	39.8	54(note3)	-14.2	PK
		H	7386.0	43.3	-3.0	40.3	54(note3)	-13.7	PK
		V	7386.0	44.0	-3.0	41.0	54(note3)	-13.0	PK
		H	9848.0	38.8	3.1	41.9	54(note3)	-12.1	PK
		V	9848.0	39.0	3.2	42.2	54(note3)	-11.8	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode4: Transmit by 802.11n(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	3	H	3125.0	50.6	-10.6	40.0	54(note3)	-14.0	PK
		V	3108.0	51.1	-11.0	40.1	54(note3)	-13.9	PK
		H	4844.0	48.4	-8.3	40.1	54(note3)	-13.9	PK
		V	4844.0	49.1	-8.4	40.7	54(note3)	-13.3	PK
		H	7266.0	44.9	-3.3	41.6	54(note3)	-12.4	PK
		V	7266.0	45.2	-3.3	41.9	54(note3)	-12.1	PK
		H	9688.0	41.0	2.7	43.7	54(note3)	-10.3	PK
		V	9688.0	38.9	2.8	41.7	54(note3)	-12.3	PK
	6	H	3116.5	51.9	-10.6	41.3	54(note3)	-12.7	PK
		V	3014.5	51.1	-11.2	39.9	54(note3)	-14.1	PK
		H	4874.0	48.8	-8.3	40.5	54(note3)	-13.5	PK
		V	4874.0	48.0	-8.3	39.7	54(note3)	-14.3	PK
		H	7311.0	45.2	-3.3	41.9	54(note3)	-12.1	PK
		V	7311.0	44.7	-3.3	41.4	54(note3)	-12.6	PK
		H	9748.0	40.3	2.7	43.0	54(note3)	-11.0	PK
		V	9748.0	39.6	2.8	42.4	54(note3)	-11.6	PK
	9	H	3091.0	50.7	-10.7	40.0	54(note3)	-14.0	PK
		V	3031.5	50.7	-11.1	39.6	54(note3)	-14.4	PK
		H	4904.0	48.6	-8.3	40.3	54(note3)	-13.7	PK
		V	4904.0	47.9	-8.3	39.6	54(note3)	-14.4	PK
		H	7356.0	44.4	-3.1	41.3	54(note3)	-12.7	PK
		V	7356.0	44.5	-3.1	41.4	54(note3)	-12.6	PK
		H	9808.0	39.4	3.0	42.4	54(note3)	-11.6	PK
		V	9808.0	38.6	3.0	41.6	54(note3)	-12.4	PK

Ant 010	3	H	2980.5	50.5	-10.9	39.6	54(note3)	-14.4	PK
		V	3142.0	51.8	-10.8	41.0	54(note3)	-13.0	PK
		H	4844.0	47.2	-8.3	38.9	54(note3)	-15.1	PK
		V	4844.0	47.0	-8.4	38.6	54(note3)	-15.4	PK
		H	7266.0	42.6	-3.3	39.3	54(note3)	-14.7	PK
		V	7266.0	43.2	-3.3	39.9	54(note3)	-14.1	PK
		H	9688.0	39.1	2.7	41.8	54(note3)	-12.2	PK
		V	9688.0	38.9	2.8	41.7	54(note3)	-12.3	PK
	6	H	2997.5	50.6	-10.9	39.7	54(note3)	-14.3	PK
		V	3116.5	51.0	-10.9	40.1	54(note3)	-13.9	PK
		H	4924.0	46.9	-8.4	38.5	54(note3)	-15.5	PK
		V	4924.0	47.1	-8.3	38.8	54(note3)	-15.2	PK
		H	7311.0	43.9	-3.3	40.6	54(note3)	-13.4	PK
		V	7311.0	43.5	-3.3	40.2	54(note3)	-13.8	PK
		H	9748.0	39.0	2.7	41.7	54(note3)	-12.3	PK
		V	9748.0	39.1	2.8	41.9	54(note3)	-12.1	PK
	9	H	2997.5	50.3	-10.9	39.4	54(note3)	-14.6	PK
		V	3006.0	50.8	-11.2	39.6	54(note3)	-14.4	PK
		H	4904.0	47.3	-8.3	39.0	54(note3)	-15.0	PK
		V	4904.0	47.7	-8.3	39.4	54(note3)	-14.6	PK
		H	7356.0	43.8	-3.1	40.7	54(note3)	-13.3	PK
		V	7356.0	43.5	-3.1	40.4	54(note3)	-13.6	PK
		H	9808.0	38.7	3.0	41.7	54(note3)	-12.3	PK
		V	9808.0	38.8	3.0	41.8	54(note3)	-12.2	PK

Ant 110	3	H	3006.0	51.1	-10.8	40.3	54(note3)	-13.7	PK
		V	3031.5	50.7	-11.1	39.6	54(note3)	-14.4	PK
		H	4844.0	47.6	-8.3	39.3	54(note3)	-14.7	PK
		V	4844.0	47.9	-8.4	39.5	54(note3)	-14.5	PK
		H	7266.0	43.1	-3.3	39.8	54(note3)	-14.2	PK
		V	7266.0	43.6	-3.3	40.3	54(note3)	-13.7	PK
		H	9688.0	38.8	2.7	41.5	54(note3)	-12.5	PK
		V	9688.0	38.6	2.8	41.4	54(note3)	-12.6	PK
	6	H	3116.5	51.3	-10.6	40.7	54(note3)	-13.3	PK
		V	3014.5	51.1	-11.2	39.9	54(note3)	-14.1	PK
		H	4874.0	47.0	-8.3	38.7	54(note3)	-15.3	PK
		V	4874.0	47.4	-8.3	39.1	54(note3)	-14.9	PK
		H	7311.0	43.5	-3.3	40.2	54(note3)	-13.8	PK
		V	7311.0	43.8	-3.3	40.5	54(note3)	-13.5	PK
		H	9748.0	39.0	2.7	41.7	54(note3)	-12.3	PK
		V	9748.0	39.0	2.8	41.8	54(note3)	-12.2	PK
	9	H	2989.0	50.4	-10.9	39.5	54(note3)	-14.5	PK
		V	3108.0	51.1	-11.0	40.1	54(note3)	-13.9	PK
		H	4904.0	47.4	-8.3	39.1	54(note3)	-14.9	PK
		V	4904.0	47.1	-8.3	38.8	54(note3)	-15.2	PK
		H	7356.0	44.4	-3.1	41.3	54(note3)	-12.7	PK
		V	7356.0	44.6	-3.1	41.5	54(note3)	-12.5	PK
		H	9808.0	38.6	3.0	41.6	54(note3)	-12.4	PK
		V	9808.0	39.1	3.0	42.1	54(note3)	-11.9	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Test by Panel Antenna #1

Mode1: Transmit by 802.11b

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3023.0	51.3	-10.8	40.5	54(note3)	-13.5	PK
		V	3125.0	50.9	-10.9	40.0	54(note3)	-14.0	PK
		H	4824.0	47.8	-34.5	13.3	54(note3)	-40.7	PK
		V	4825.0	49.0	-33.4	15.6	54(note3)	-38.4	PK
		H	7236.0	45.5	-31.9	13.6	54(note3)	-40.4	PK
		V	7236.0	44.4	-33.0	11.4	54(note3)	-42.6	PK
		H	9648.0	40.2	-31.2	9.0	54(note3)	-45.0	PK
		V	9648.0	39.9	-31.5	8.4	54(note3)	-45.6	PK
	6	H	3125.0	52.4	-10.6	41.8	54(note3)	-12.2	PK
		V	3116.5	50.9	-10.9	40.0	54(note3)	-14.0	PK
		H	4874.0	48.3	-34.0	14.3	54(note3)	-39.7	PK
		V	4874.0	48.7	-33.6	15.1	54(note3)	-38.9	PK
		H	7311.0	45.5	-31.8	13.7	54(note3)	-40.3	PK
		V	7311.0	45.0	-32.2	12.8	54(note3)	-41.2	PK
		H	9748.0	39.6	-31.8	7.8	54(note3)	-46.2	PK
		V	9748.0	39.1	-32.2	6.9	54(note3)	-47.1	PK
	11	H	3116.5	51.3	-10.6	40.7	54(note3)	-13.3	PK
		V	3159.0	51.2	-10.8	40.4	54(note3)	-13.6	PK
		H	4924.0	48.1	-34.3	13.8	54(note3)	-40.2	PK
		V	4924.0	49.6	-32.7	16.9	54(note3)	-37.1	PK
		H	7386.0	44.3	-32.7	11.6	54(note3)	-42.4	PK
		V	7386.0	44.9	-32.1	12.8	54(note3)	-41.2	PK
		H	9848.0	39.7	-31.2	8.5	54(note3)	-45.5	PK
		V	9848.0	39.3	-31.6	7.7	54(note3)	-46.3	PK

Ant 010	1	H	3040.0	51.5	-10.8	40.7	54(note3)	-13.3	PK
		V	3176.0	50.5	-10.7	39.8	54(note3)	-14.2	PK
		H	4825.0	48.8	-8.3	40.5	54(note3)	-13.5	PK
		V	4825.0	53.3	-8.4	44.9	54(note3)	-9.1	PK
		H	7236.0	42.9	-3.4	39.5	54(note3)	-14.5	PK
		V	7236.0	43.1	-3.4	39.7	54(note3)	-14.3	PK
		H	9648.0	37.8	2.6	40.4	54(note3)	-13.6	PK
		V	9648.0	38.3	2.6	40.9	54(note3)	-13.1	PK
	6	H	2955.0	50.6	-11.1	39.5	54(note3)	-14.5	PK
		V	3099.5	51.3	-11.0	40.3	54(note3)	-13.7	PK
		H	4874.0	46.5	-8.3	38.2	54(note3)	-15.8	PK
		V	4876.0	51.2	-8.3	42.9	54(note3)	-11.1	PK
		H	7311.0	43.3	-3.3	40.0	54(note3)	-14.0	PK
		V	7311.0	42.4	-3.3	39.1	54(note3)	-14.9	PK
		H	9748.0	37.5	2.7	40.2	54(note3)	-13.8	PK
		V	9748.0	37.4	2.8	40.2	54(note3)	-13.8	PK
	11	H	2980.5	51.1	-10.9	40.2	54(note3)	-13.8	PK
		V	3150.5	50.7	-10.8	39.9	54(note3)	-14.1	PK
		H	4924.0	46.8	-8.4	38.4	54(note3)	-15.6	PK
		V	4927.0	51.3	-8.3	43.0	54(note3)	-11.0	PK
		H	7386.0	42.3	-3.0	39.3	54(note3)	-14.7	PK
		V	7386.0	42.5	-3.0	39.5	54(note3)	-14.5	PK
		H	9848.0	37.2	3.1	40.3	54(note3)	-13.7	PK
		V	9848.0	37.0	3.2	40.2	54(note3)	-13.8	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode2: Transmit by 802.11g

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3048.5	51.2	-10.7	40.5	54(note3)	-13.5	PK
		V	3159.0	50.8	-10.8	40.0	54(note3)	-14.0	PK
		H	4824.0	47.5	-8.3	39.2	54(note3)	-14.8	PK
		V	4824.0	48.0	-8.4	39.6	54(note3)	-14.4	PK
		H	7236.0	44.9	-3.4	41.5	54(note3)	-12.5	PK
		V	7236.0	44.7	-3.4	41.3	54(note3)	-12.7	PK
		H	9648.0	39.8	2.6	42.3	54(note3)	-11.7	PK
		V	9648.0	40.5	2.6	43.2	54(note3)	-10.8	PK
	6	H	3125.0	53.3	-10.6	42.7	54(note3)	-11.3	PK
		V	3099.5	50.2	-11.0	39.2	54(note3)	-14.8	PK
		H	4874.0	47.8	-8.3	39.5	54(note3)	-14.5	PK
		V	4874.0	47.9	-8.3	39.6	54(note3)	-14.4	PK
		H	7311.0	44.7	-3.3	41.4	54(note3)	-12.6	PK
		V	7311.0	44.4	-3.3	41.1	54(note3)	-12.9	PK
		H	9748.0	39.4	2.7	42.1	54(note3)	-11.9	PK
		V	9748.0	39.7	2.8	42.5	54(note3)	-11.5	PK
	11	H	3125.0	51.9	-10.6	41.3	54(note3)	-12.7	PK
		V	3040.0	50.9	-11.1	39.8	54(note3)	-14.2	PK
		H	4924.0	47.8	-8.4	39.5	54(note3)	-14.5	PK
		V	4924.0	49.8	-8.3	41.5	54(note3)	-12.5	PK
		H	7386.0	44.7	-3.0	41.6	54(note3)	-12.4	PK
		V	7386.0	44.4	-3.0	41.4	54(note3)	-12.6	PK
		H	9848.0	39.1	3.1	42.2	54(note3)	-11.8	PK
		V	9848.0	39.0	3.2	42.1	54(note3)	-11.9	PK

Ant 010	1	H	3125.0	52.0	-10.6	41.4	54(note3)	-12.6	PK
		V	3159.0	50.8	-10.8	40.0	54(note3)	-14.0	PK
		H	4824.0	46.6	-8.3	38.3	54(note3)	-15.7	PK
		V	4824.0	46.2	-8.4	37.8	54(note3)	-16.2	PK
		H	7236.0	43.3	-3.4	40.0	54(note3)	-14.1	PK
		V	7236.0	43.0	-3.4	39.6	54(note3)	-14.4	PK
		H	9648.0	38.0	2.6	40.6	54(note3)	-13.4	PK
		V	9648.0	38.3	2.6	40.9	54(note3)	-13.1	PK
	6	H	3023.0	51.3	-10.8	40.5	54(note3)	-13.5	PK
		V	3048.5	50.7	-10.7	40.0	54(note3)	-14.0	PK
		H	4874.0	46.3	-8.3	38.1	54(note3)	-16.0	PK
		V	4874.0	46.2	-8.3	37.9	54(note3)	-16.1	PK
		H	7311.0	43.5	-3.3	40.3	54(note3)	-13.7	PK
		V	7311.0	43.0	-3.3	39.7	54(note3)	-14.3	PK
		H	9748.0	38.5	2.7	41.2	54(note3)	-12.8	PK
		V	9748.0	38.0	2.8	40.7	54(note3)	-13.3	PK
	11	H	3116.5	51.7	-10.6	41.0	54(note3)	-13.0	PK
		V	3125.0	50.8	-10.9	39.9	54(note3)	-14.1	PK
		H	4924.0	46.2	-8.4	37.8	54(note3)	-16.2	PK
		V	4924.0	46.2	-8.3	37.9	54(note3)	-16.1	PK
		H	7386.0	42.9	-3.0	39.8	54(note3)	-14.2	PK
		V	7386.0	42.8	-3.0	39.8	54(note3)	-14.2	PK
		H	9848.0	37.2	3.1	40.3	54(note3)	-13.7	PK
		V	9848.0	36.7	3.2	39.9	54(note3)	-14.1	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode3: Transmit by 802.11n(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	1	H	3125.0	51.7	-10.6	41.1	54(note3)	-12.9	PK
		V	3116.5	51.7	-10.9	40.8	54(note3)	-13.2	PK
		H	4824.0	47.5	-8.3	39.2	54(note3)	-14.8	PK
		V	4824.0	47.7	-8.4	39.3	54(note3)	-14.7	PK
		H	7236.0	44.9	-3.4	41.5	54(note3)	-12.5	PK
		V	7236.0	44.4	-3.4	41.0	54(note3)	-13.0	PK
		H	9648.0	40.0	2.6	42.6	54(note3)	-11.4	PK
		V	9648.0	39.6	2.6	42.2	54(note3)	-11.8	PK
	6	H	3116.5	52.3	-10.6	41.7	54(note3)	-12.3	PK
		V	2989.0	51.2	-11.2	40.0	54(note3)	-14.0	PK
		H	4874.0	47.8	-8.3	39.5	54(note3)	-14.5	PK
		V	4874.0	48.2	-8.3	39.9	54(note3)	-14.1	PK
		H	7311.0	44.6	-3.3	41.3	54(note3)	-12.7	PK
		V	7311.0	44.6	-3.3	41.3	54(note3)	-12.7	PK
		H	9748.0	40.0	2.7	42.7	54(note3)	-11.3	PK
		V	9748.0	39.5	2.8	42.3	54(note3)	-11.7	PK
	11	H	3193.0	50.8	-10.5	40.3	54(note3)	-13.7	PK
		V	2921.0	49.3	-11.2	38.1	54(note3)	-15.9	PK
		H	4924.0	48.1	-8.4	39.7	54(note3)	-14.3	PK
		V	4924.0	49.4	-8.3	41.1	54(note3)	-12.9	PK
		H	7386.0	44.3	-3.0	41.3	54(note3)	-12.7	PK
		V	7386.0	45.0	-3.0	42.0	54(note3)	-12.0	PK
		H	9848.0	39.1	3.1	42.2	54(note3)	-11.8	PK
		V	9848.0	39.1	3.2	42.3	54(note3)	-11.7	PK

Ant 010	1	H	3040.0	50.7	-10.8	39.9	54(note3)	-14.1	PK
		V	3193.0	51.8	-10.7	41.1	54(note3)	-12.9	PK
		H	4824.0	45.9	-8.3	37.6	54(note3)	-16.4	PK
		V	4824.0	47.6	-8.4	39.2	54(note3)	-14.8	PK
		H	7236.0	42.8	-3.4	39.4	54(note3)	-14.6	PK
		V	7236.0	43.7	-3.4	40.3	54(note3)	-13.7	PK
		H	9648.0	37.5	2.6	40.1	54(note3)	-13.9	PK
		V	9648.0	37.6	2.6	40.2	54(note3)	-13.8	PK
	6	H	3116.5	51.5	-10.6	40.9	54(note3)	-13.1	PK
		V	2929.5	52.0	-11.2	40.8	54(note3)	-13.2	PK
		H	4874.0	45.7	-8.3	37.4	54(note3)	-16.6	PK
		V	4874.0	46.1	-8.3	37.8	54(note3)	-16.2	PK
		H	7311.0	42.7	-3.3	39.4	54(note3)	-14.6	PK
		V	7311.0	43.2	-3.3	39.9	54(note3)	-14.1	PK
		H	9748.0	37.6	2.7	40.3	54(note3)	-13.7	PK
		V	9748.0	37.5	2.8	40.3	54(note3)	-13.7	PK
	11	H	3065.5	50.3	-10.7	39.6	54(note3)	-14.4	PK
		V	3116.5	52.2	-10.9	41.3	54(note3)	-12.7	PK
		H	4924.0	45.9	-8.4	37.5	54(note3)	-16.5	PK
		V	4924.0	45.9	-8.3	37.6	54(note3)	-16.4	PK
		H	7386.0	42.8	-3.0	39.8	54(note3)	-14.2	PK
		V	7386.0	42.6	-3.0	39.6	54(note3)	-14.4	PK
		H	9848.0	37.6	3.1	40.7	54(note3)	-13.3	PK
		V	9848.0	37.2	3.2	40.4	54(note3)	-13.6	PK

Ant 110	1	H	3014.5	50.8	-10.8	40.0	54(note16)	-14.0	PK
		V	2989.0	51.2	-11.2	40.0	54(note17)	-14.0	PK
		H	4824.0	48.0	-8.3	39.7	54(note18)	-14.3	PK
		V	4824.0	48.8	-8.4	40.4	54(note19)	-13.6	PK
		H	7236.0	43.2	-3.4	39.8	54(note20)	-14.2	PK
		V	7236.0	42.8	-3.4	39.4	54(note21)	-14.6	PK
		H	9648.0	39.9	2.6	42.5	54(note22)	-11.5	PK
		V	9648.0	39.3	2.6	41.9	54(note23)	-12.1	PK
	6	H	3006.0	50.9	-10.8	40.1	54(note24)	-13.9	PK
		V	3159.0	50.8	-10.8	40.0	54(note25)	-14.0	PK
		H	4874.0	47.4	-8.3	39.1	54(note26)	-14.9	PK
		V	4874.0	48.8	-8.3	40.5	54(note27)	-13.5	PK
		H	7311.0	43.2	-3.3	39.9	54(note28)	-14.1	PK
		V	7311.0	44.3	-3.3	41.0	54(note29)	-13.0	PK
		H	9748.0	39.5	2.7	42.2	54(note30)	-11.8	PK
		V	9748.0	39.1	2.8	41.9	54(note31)	-12.1	PK
	11	H	3125.0	51.0	-10.6	40.4	54(note32)	-13.6	PK
		V	3040.0	50.9	-11.1	39.8	54(note33)	-14.2	PK
		H	4924.0	48.1	-8.4	39.7	54(note34)	-14.3	PK
		V	4924.0	48.1	-8.3	39.8	54(note35)	-14.2	PK
		H	7386.0	43.3	-3.0	40.3	54(note36)	-13.7	PK
		V	7386.0	44.0	-3.0	41.0	54(note37)	-13.0	PK
		H	9848.0	38.8	3.1	41.9	54(note38)	-12.1	PK
		V	9848.0	39.0	3.2	42.2	54(note39)	-11.8	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode4: Transmit by 802.11n(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 100	3	H	3125.0	50.6	-10.6	40.0	54(note3)	-14.0	PK
		V	3108.0	51.1	-11.0	40.1	54(note3)	-13.9	PK
		H	4844.0	48.4	-8.3	40.1	54(note3)	-13.9	PK
		V	4844.0	49.1	-8.4	40.7	54(note3)	-13.3	PK
		H	7266.0	44.9	-3.3	41.6	54(note3)	-12.4	PK
		V	7266.0	45.2	-3.3	41.9	54(note3)	-12.1	PK
		H	9688.0	41.0	2.7	43.7	54(note3)	-10.3	PK
		V	9688.0	38.9	2.8	41.7	54(note3)	-12.3	PK
	6	H	3116.5	51.9	-10.6	41.3	54(note3)	-12.7	PK
		V	3014.5	51.1	-11.2	39.9	54(note3)	-14.1	PK
		H	4874.0	48.8	-8.3	40.5	54(note3)	-13.5	PK
		V	4874.0	48.0	-8.3	39.7	54(note3)	-14.3	PK
		H	7311.0	45.2	-3.3	41.9	54(note3)	-12.1	PK
		V	7311.0	44.7	-3.3	41.4	54(note3)	-12.6	PK
		H	9748.0	40.3	2.7	43.0	54(note3)	-11.0	PK
		V	9748.0	39.6	2.8	42.4	54(note3)	-11.6	PK
	9	H	3091.0	50.7	-10.7	40.0	54(note3)	-14.0	PK
		V	3031.5	50.7	-11.1	39.6	54(note3)	-14.4	PK
		H	4904.0	48.6	-8.3	40.3	54(note3)	-13.7	PK
		V	4904.0	47.9	-8.3	39.6	54(note3)	-14.4	PK
		H	7356.0	44.4	-3.1	41.3	54(note3)	-12.7	PK
		V	7356.0	44.5	-3.1	41.4	54(note3)	-12.6	PK
		H	9808.0	39.4	3.0	42.4	54(note3)	-11.6	PK
		V	9808.0	38.6	3.0	41.6	54(note3)	-12.4	PK

Ant 010	3	H	2980.5	50.5	-10.9	39.6	54(note3)	-14.4	PK
		V	3142.0	51.8	-10.8	41.0	54(note3)	-13.0	PK
		H	4844.0	47.2	-8.3	38.9	54(note3)	-15.1	PK
		V	4844.0	47.0	-8.4	38.6	54(note3)	-15.4	PK
		H	7266.0	42.6	-3.3	39.3	54(note3)	-14.7	PK
		V	7266.0	43.2	-3.3	39.9	54(note3)	-14.1	PK
		H	9688.0	39.1	2.7	41.8	54(note3)	-12.2	PK
		V	9688.0	38.9	2.8	41.7	54(note3)	-12.3	PK
	6	H	2997.5	50.6	-10.9	39.7	54(note3)	-14.3	PK
		V	3116.5	51.0	-10.9	40.1	54(note3)	-13.9	PK
		H	4924.0	46.9	-8.4	38.5	54(note3)	-15.5	PK
		V	4924.0	47.1	-8.3	38.8	54(note3)	-15.2	PK
		H	7311.0	43.9	-3.3	40.6	54(note3)	-13.4	PK
		V	7311.0	43.5	-3.3	40.2	54(note3)	-13.8	PK
		H	9748.0	39.0	2.7	41.7	54(note3)	-12.3	PK
		V	9748.0	39.1	2.8	41.9	54(note3)	-12.1	PK
	9	H	2997.5	50.3	-10.9	39.4	54(note3)	-14.6	PK
		V	3006.0	50.8	-11.2	39.6	54(note3)	-14.4	PK
		H	4904.0	47.3	-8.3	39.0	54(note3)	-15.0	PK
		V	4904.0	47.7	-8.3	39.4	54(note3)	-14.6	PK
		H	7356.0	43.8	-3.1	40.7	54(note3)	-13.3	PK
		V	7356.0	43.5	-3.1	40.4	54(note3)	-13.6	PK
		H	9808.0	38.7	3.0	41.7	54(note3)	-12.3	PK
		V	9808.0	38.8	3.0	41.8	54(note3)	-12.2	PK

Ant 110	3	H	3006.0	51.1	-10.8	40.3	54(note3)	-13.7	PK
		V	3031.5	50.7	-11.1	39.6	54(note3)	-14.4	PK
		H	4844.0	47.6	-8.3	39.3	54(note3)	-14.7	PK
		V	4844.0	47.9	-8.4	39.5	54(note3)	-14.5	PK
		H	7266.0	43.1	-3.3	39.8	54(note3)	-14.2	PK
		V	7266.0	43.6	-3.3	40.3	54(note3)	-13.7	PK
		H	9688.0	38.8	2.7	41.5	54(note3)	-12.5	PK
		V	9688.0	38.6	2.8	41.4	54(note3)	-12.6	PK
	6	H	3116.5	51.3	-10.6	40.7	54(note3)	-13.3	PK
		V	3014.5	51.1	-11.2	39.9	54(note3)	-14.1	PK
		H	4874.0	47.0	-8.3	38.7	54(note3)	-15.3	PK
		V	4874.0	47.4	-8.3	39.1	54(note3)	-14.9	PK
		H	7311.0	43.5	-3.3	40.2	54(note3)	-13.8	PK
		V	7311.0	43.8	-3.3	40.5	54(note3)	-13.5	PK
		H	9748.0	39.0	2.7	41.7	54(note3)	-12.3	PK
		V	9748.0	39.0	2.8	41.8	54(note3)	-12.2	PK
	9	H	2989.0	50.4	-10.9	39.5	54(note3)	-14.5	PK
		V	3108.0	51.1	-11.0	40.1	54(note3)	-13.9	PK
		H	4904.0	47.4	-8.3	39.1	54(note3)	-14.9	PK
		V	4904.0	47.1	-8.3	38.8	54(note3)	-15.2	PK
		H	7356.0	44.4	-3.1	41.3	54(note3)	-12.7	PK
		V	7356.0	44.6	-3.1	41.5	54(note3)	-12.5	PK
		H	9808.0	38.6	3.0	41.6	54(note3)	-12.4	PK
		V	9808.0	39.1	3.0	42.1	54(note3)	-11.9	PK

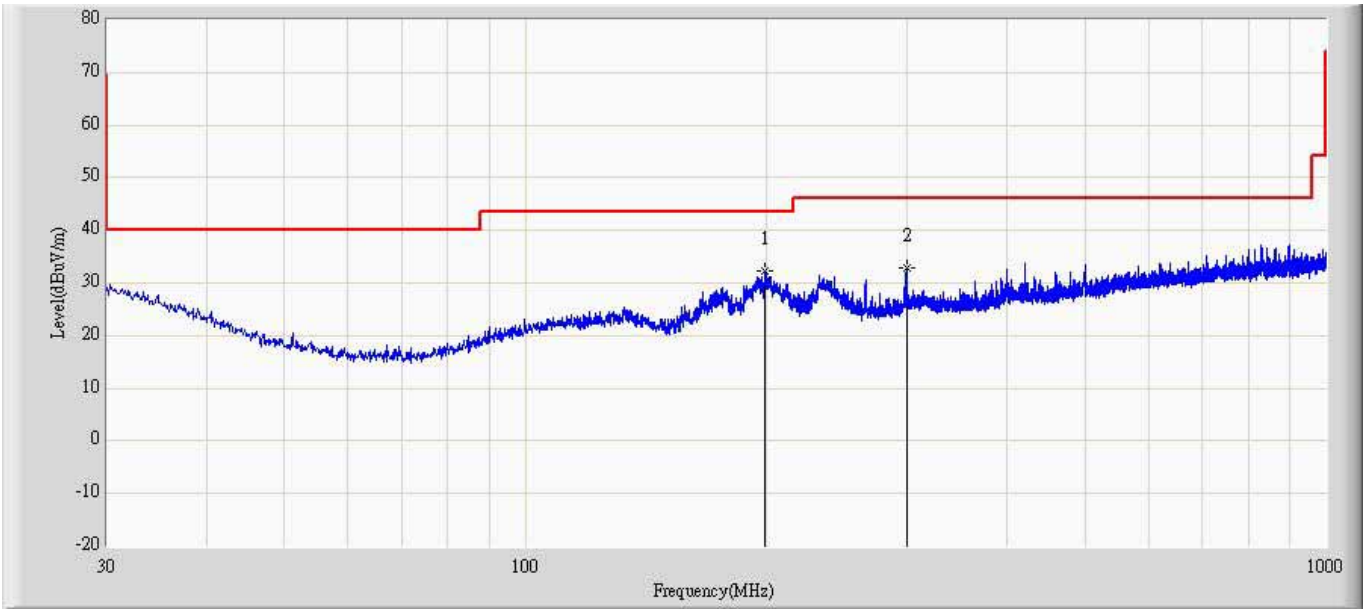
Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

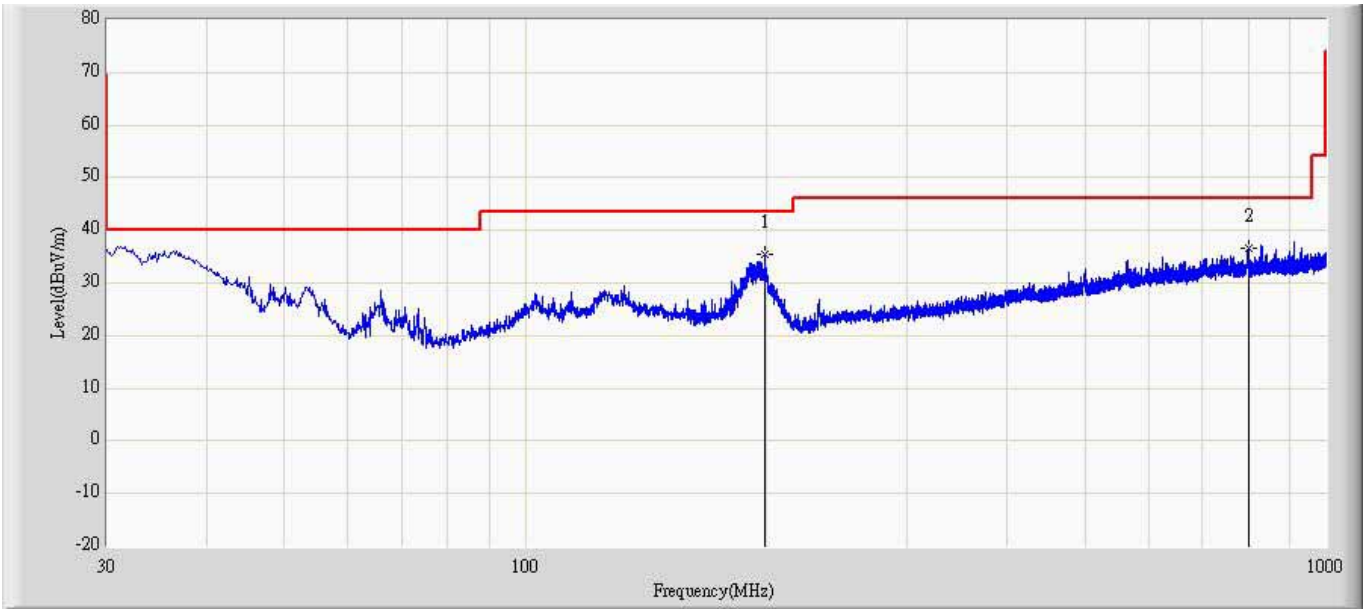
The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2013/05/20 - 11:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode1: Transmit at channel 2412MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	199.386	32.337	16.238	-11.163	43.500	16.099	QP
2		299.781	32.757	12.294	-13.243	46.000	20.463	QP

Site: AC2	Time: 2013/05/20 - 11:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode1: Transmit at channel 2412MHz by 802.11b	



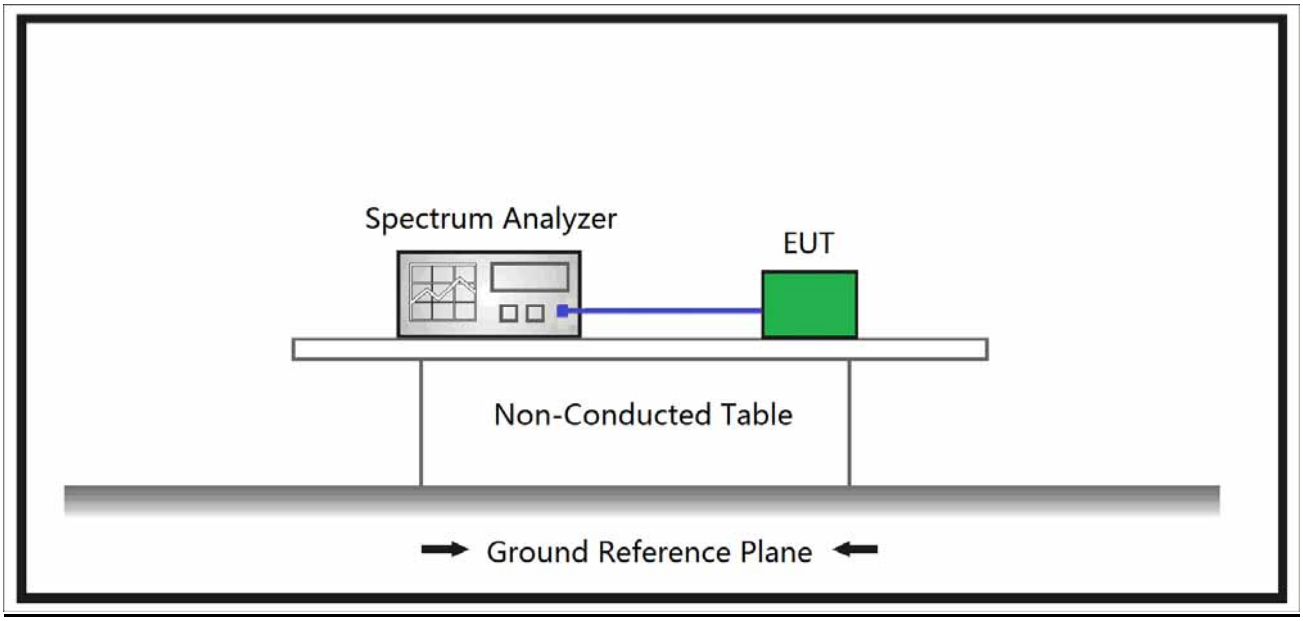
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	199.023	35.516	19.430	-7.984	43.500	16.087	QP
2		799.331	36.490	7.921	-9.510	46.000	28.569	QP

5. RF Antenna Conducted Spurious

5.1. 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.

5.2. Test Setup



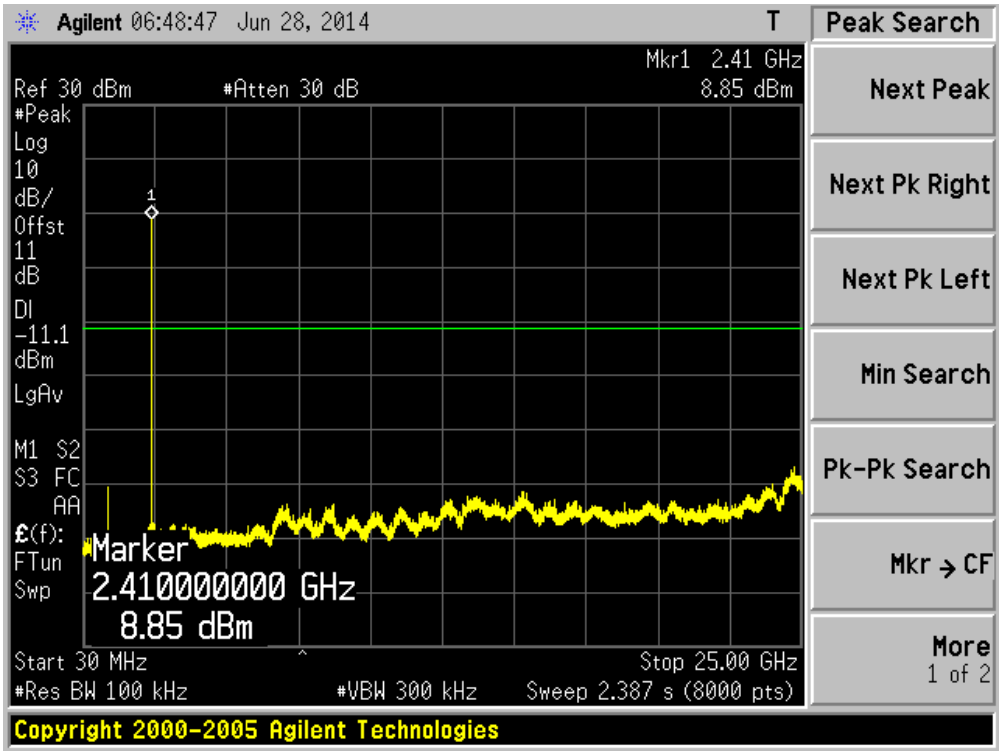
5.3. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

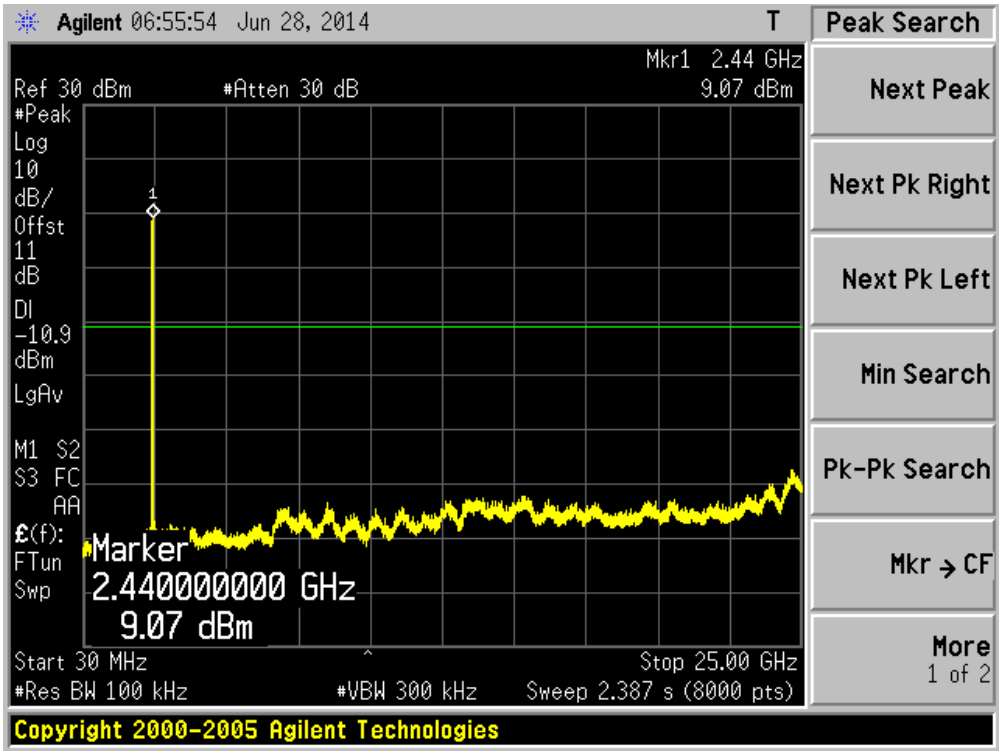
5.4. Test Result

Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 100)

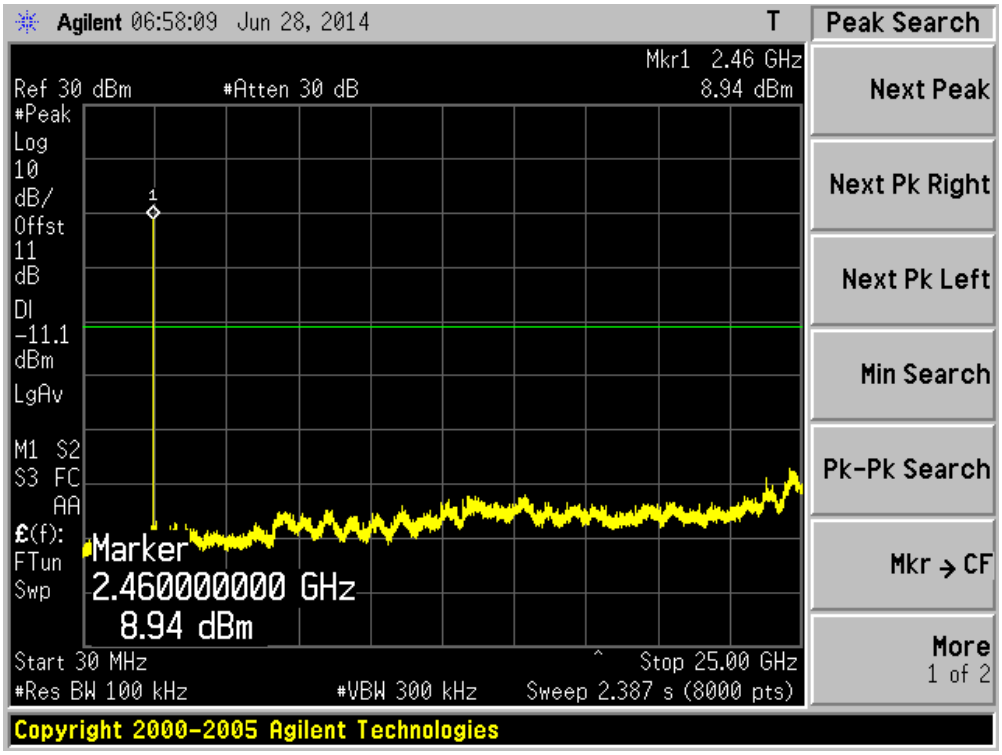
Channel 01 (2412MHz)



Channel 06 (2437MHz)

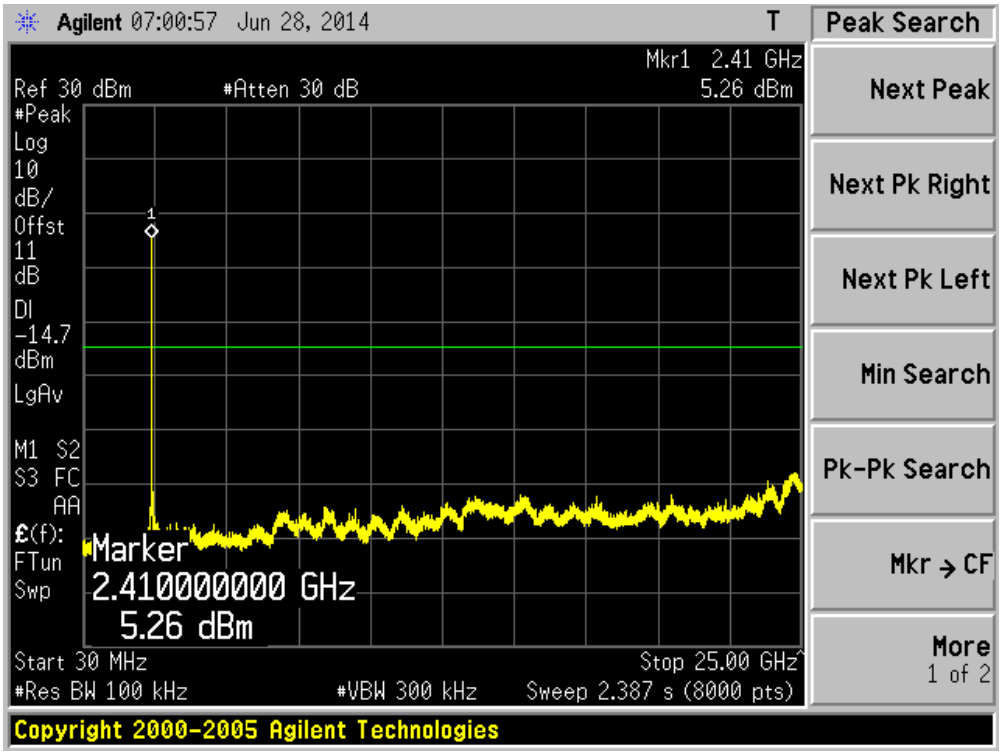


Channel 11 (2462MHz)

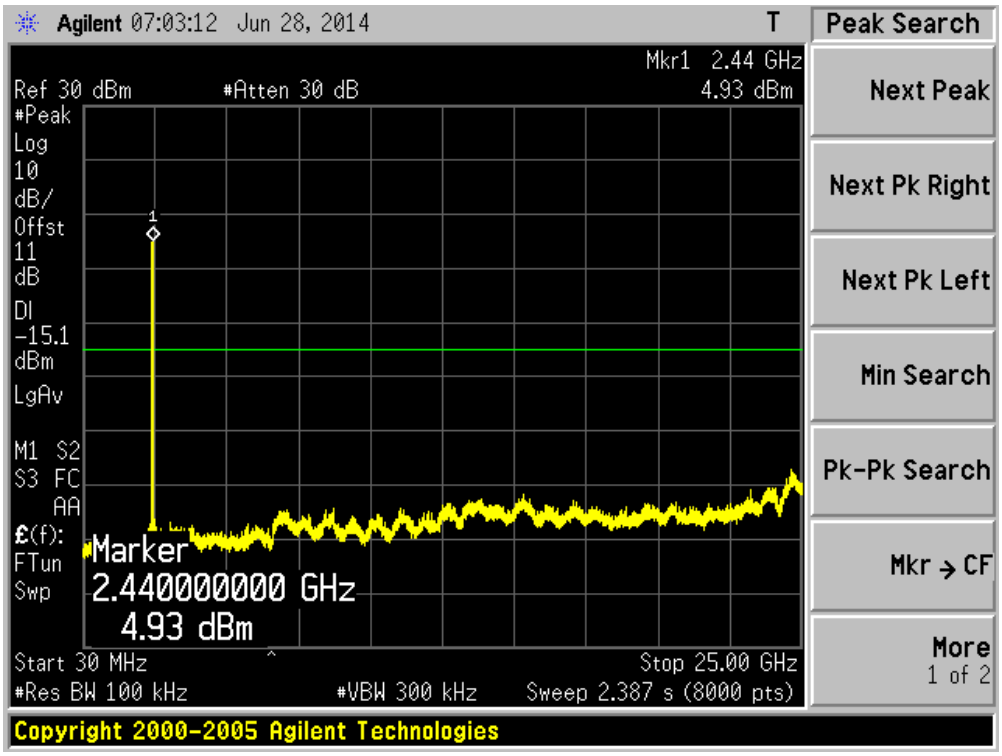


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 100)

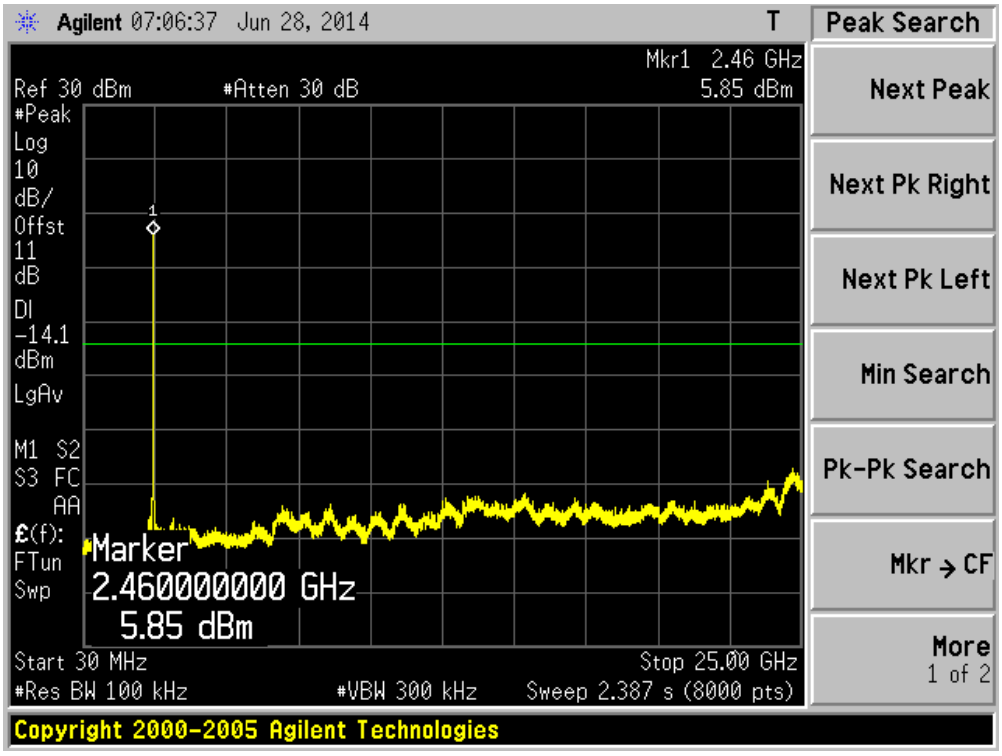
Channel 01 (2412MHz)



Channel 06 (2437MHz)

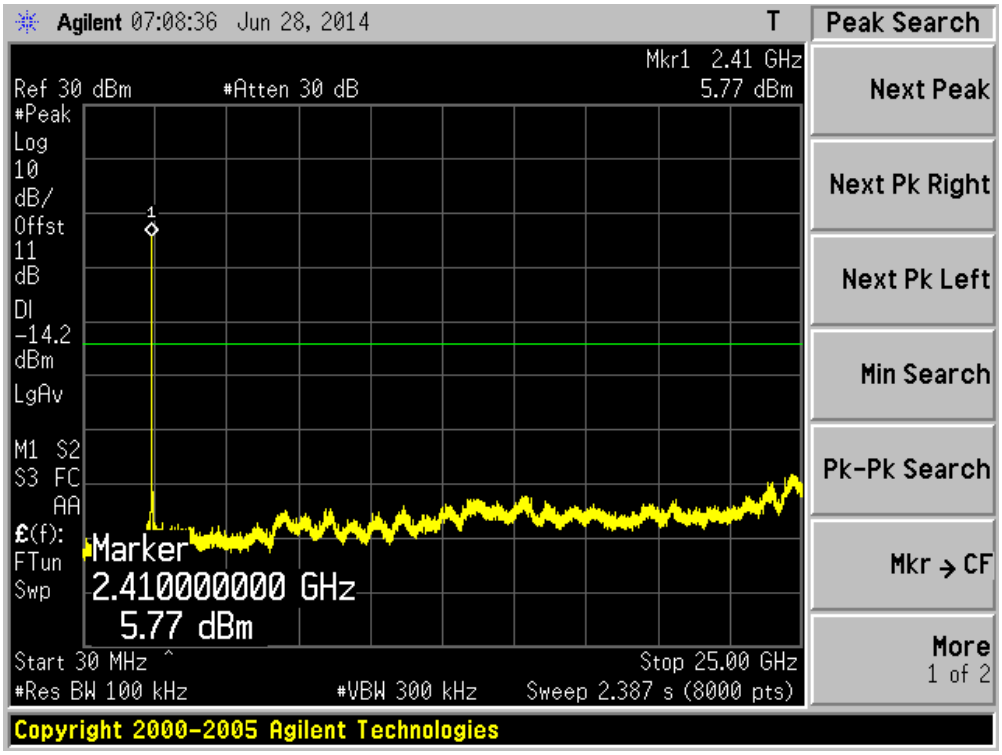


Channel 11 (2462MHz)

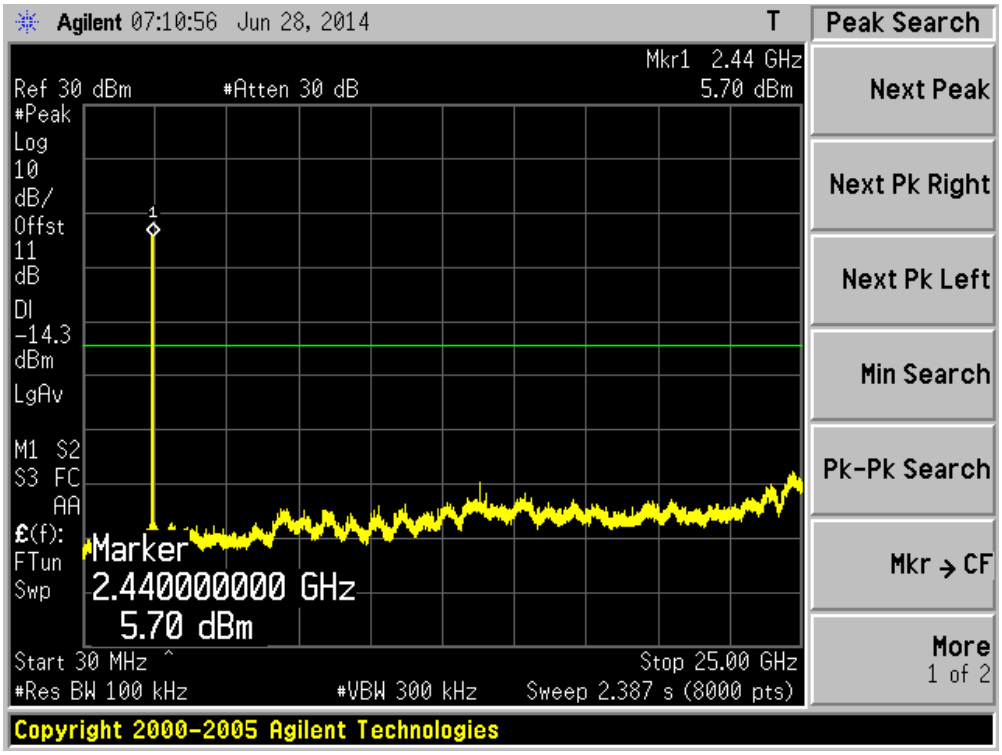


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 100)

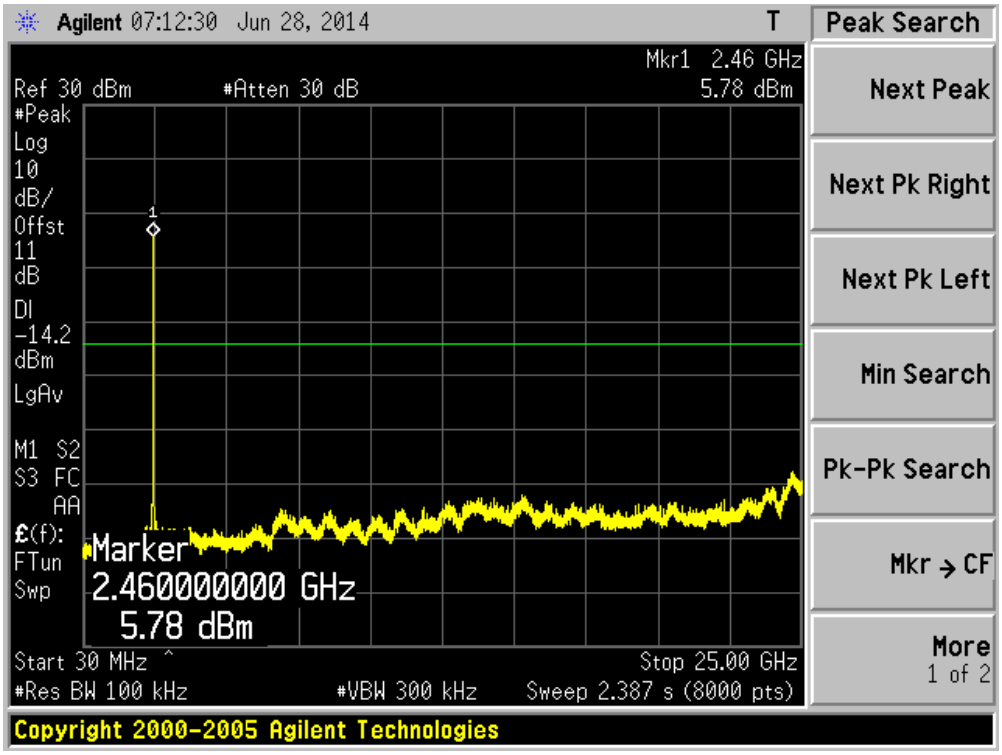
Channel 01 (2412MHz)



Channel 06 (2437MHz)

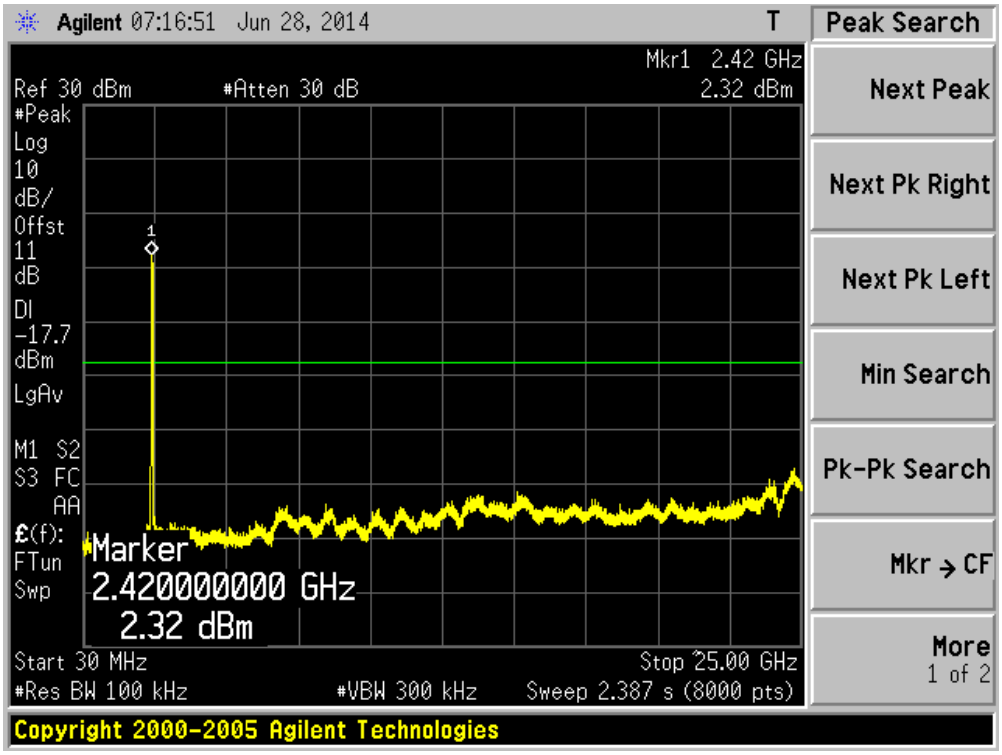


Channel 11 (2462MHz)

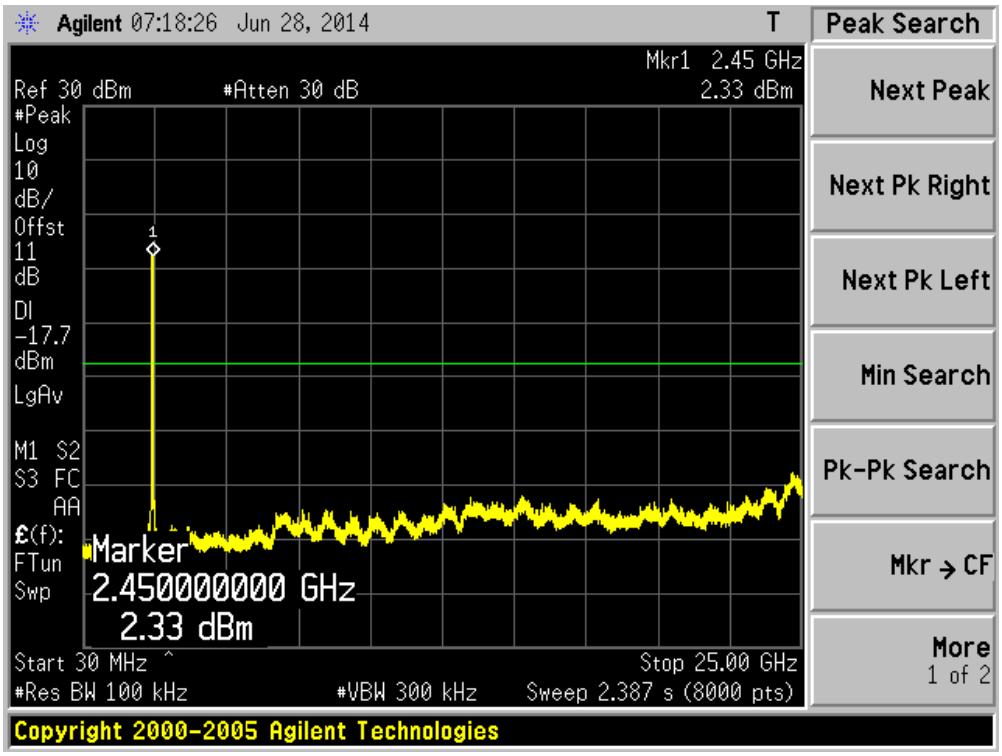


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 100)

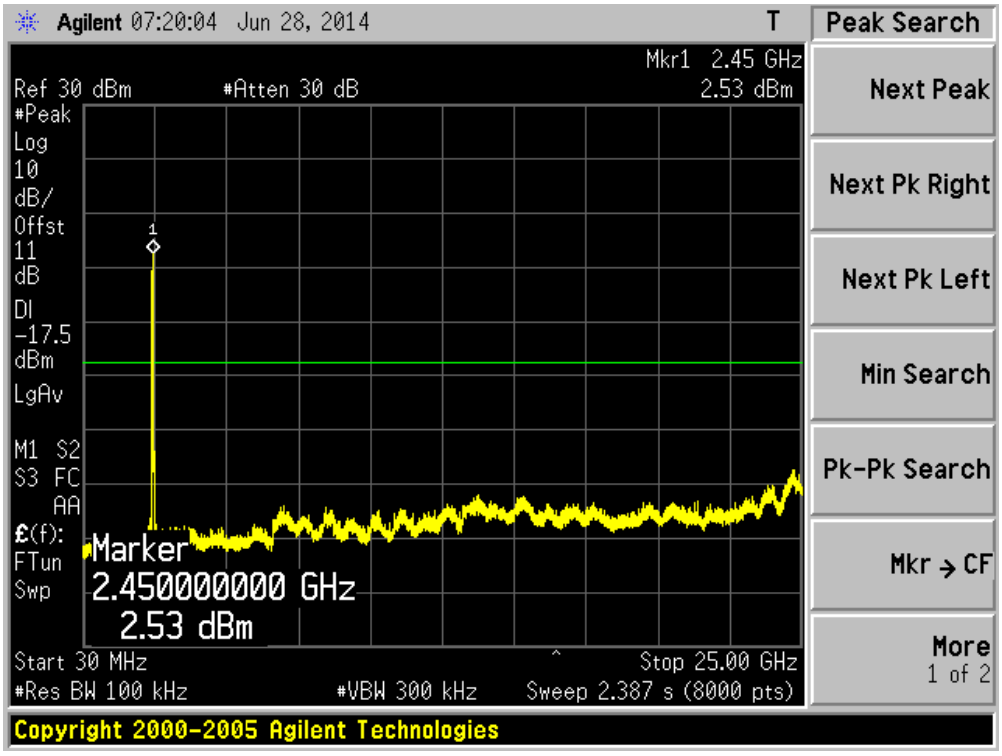
Channel 03 (2422MHz)



Channel 06 (2437MHz)

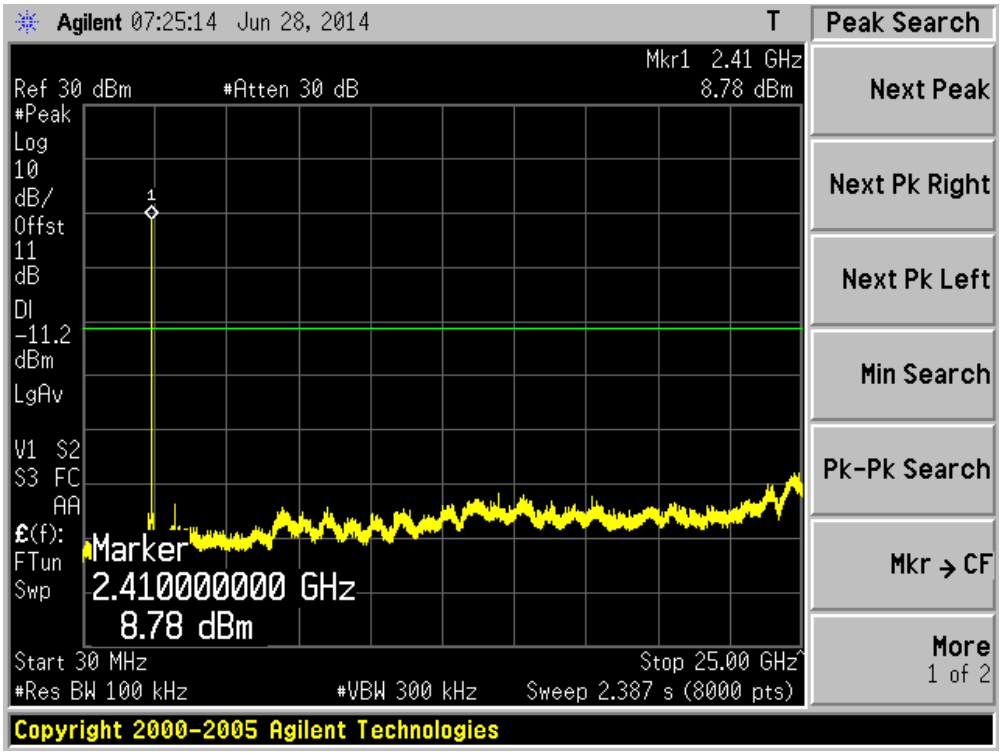


Channel 09 (2452MHz)

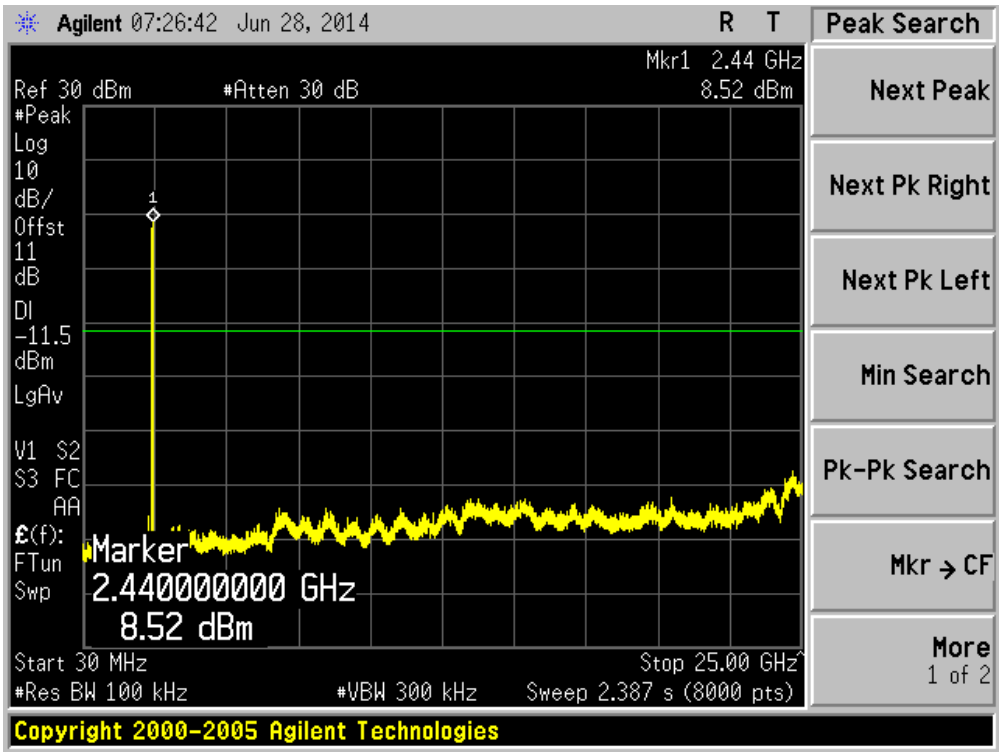


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 010)

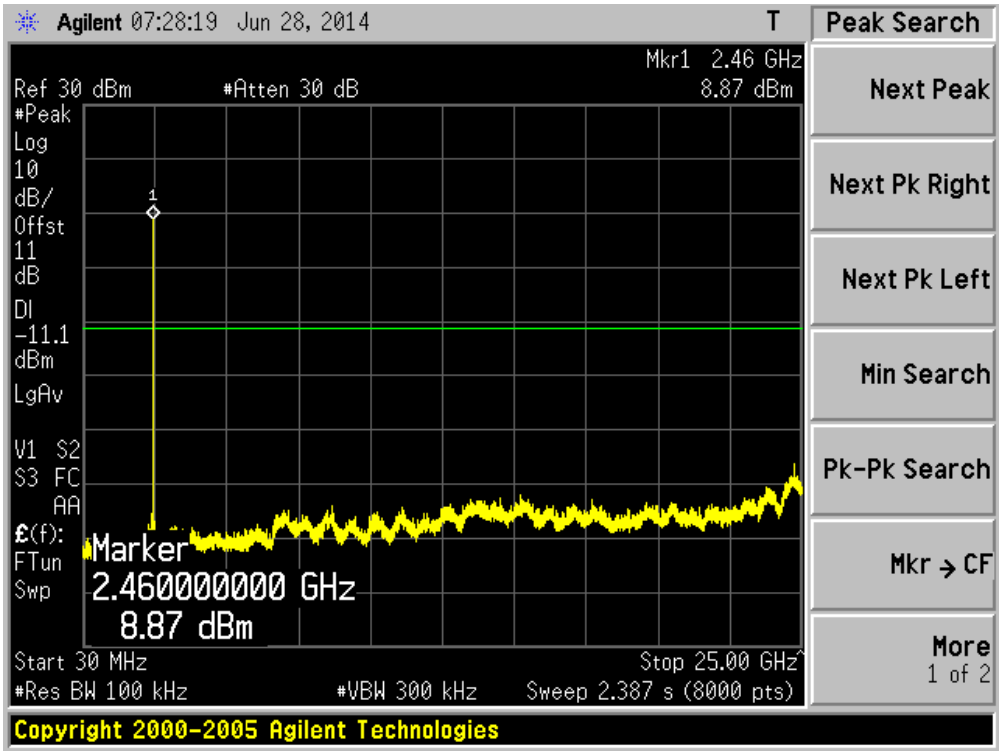
Channel 01 (2412MHz)



Channel 06 (2437MHz)

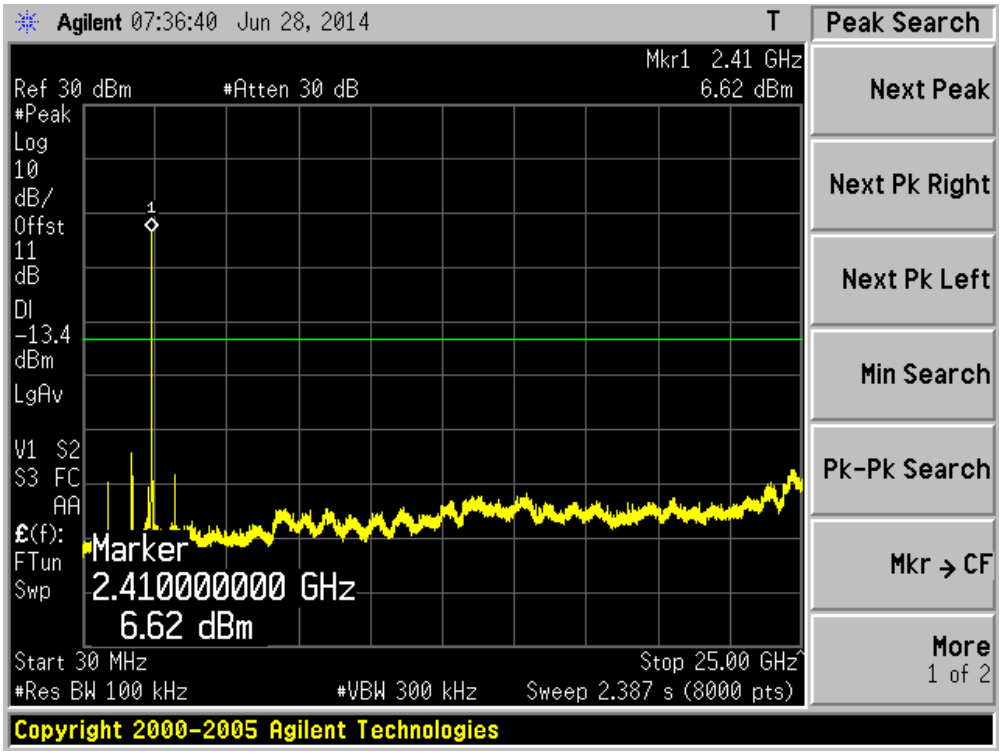


Channel 11 (2462MHz)

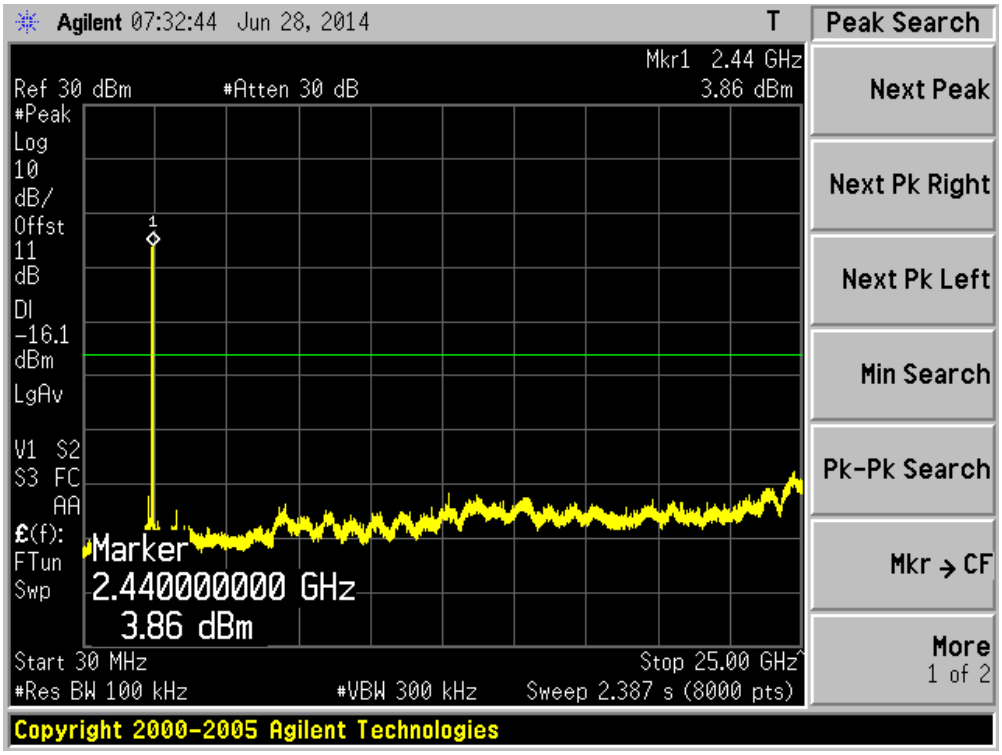


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 010)

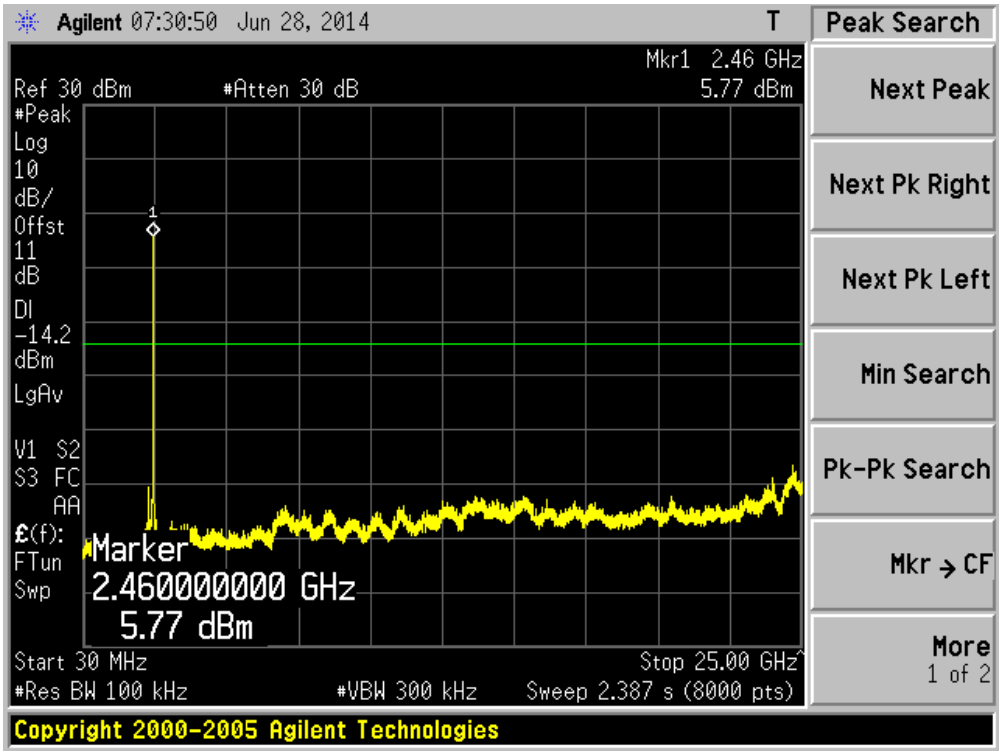
Channel 01 (2412MHz)



Channel 06 (2437MHz)

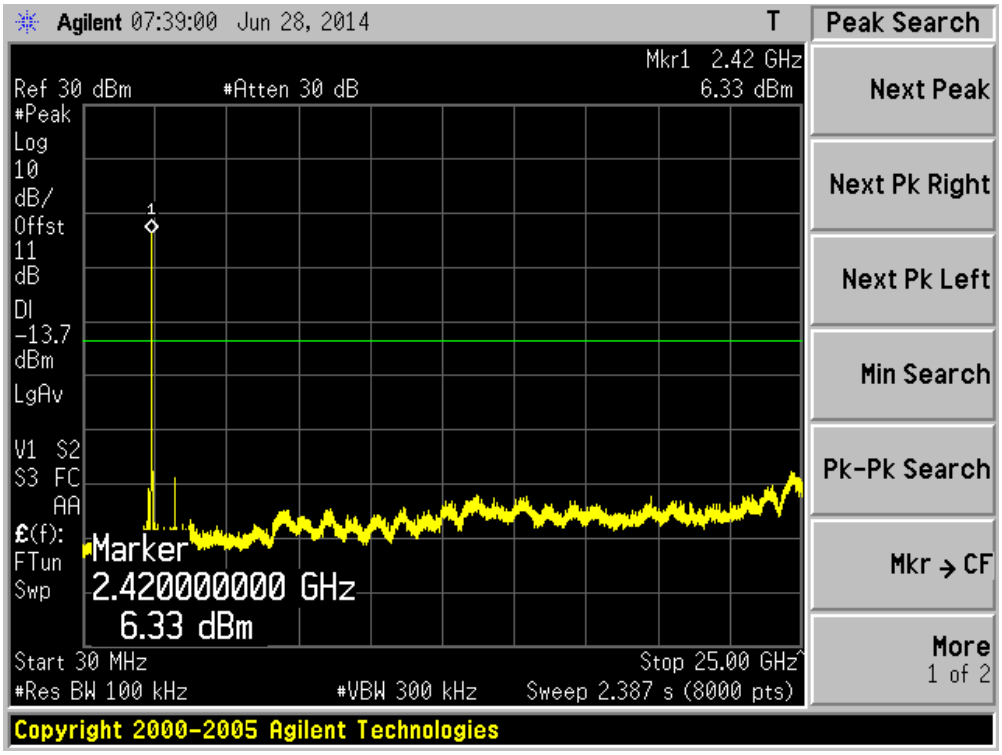


Channel 11 (2462MHz)

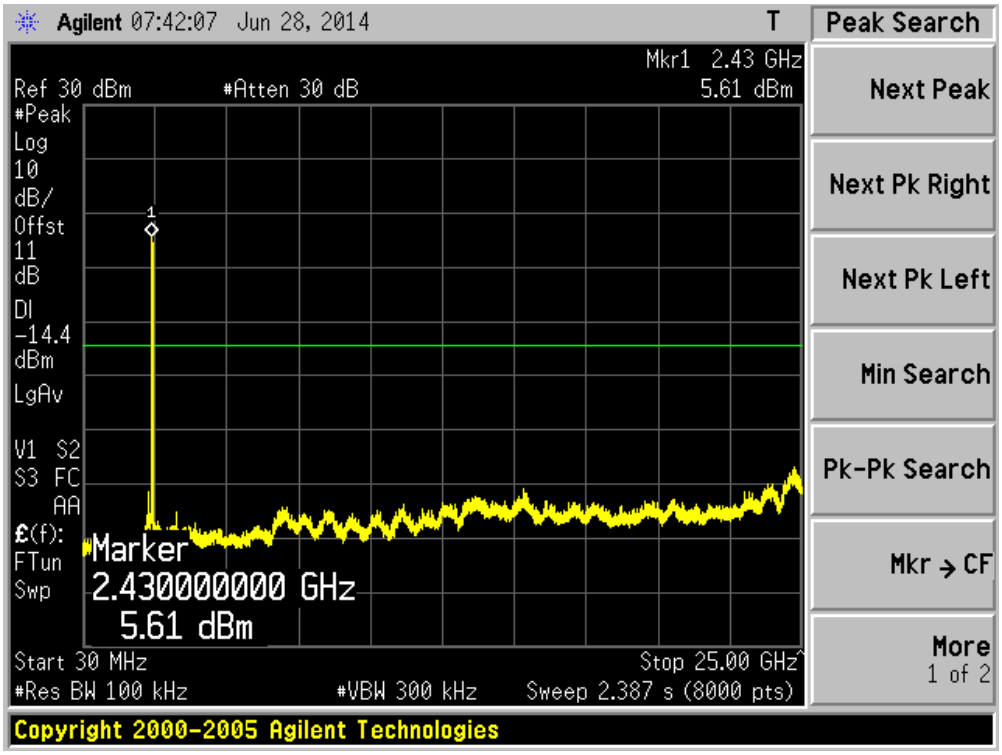


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz) (Ant 010)

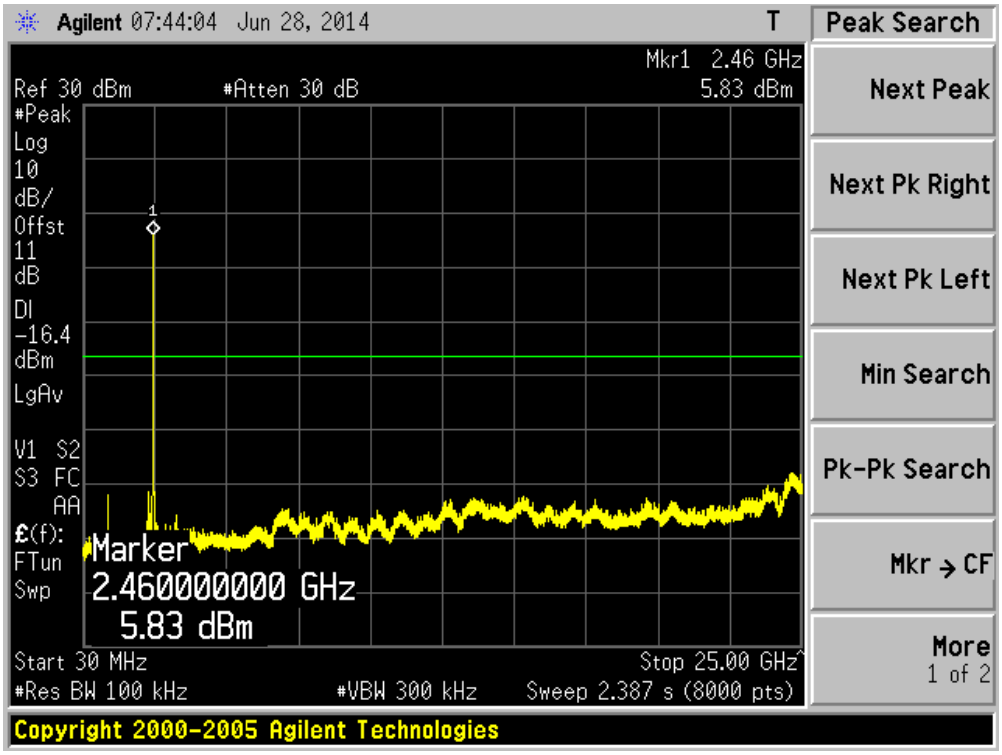
Channel 01 (2412MHz)



Channel 06 (2437MHz)

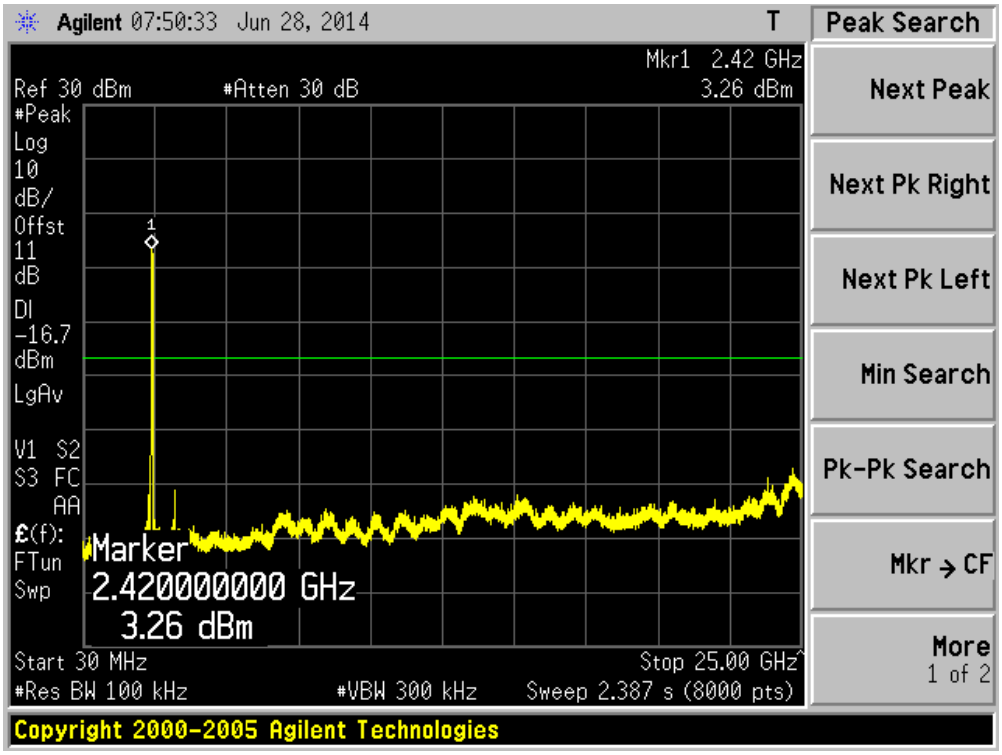


Channel 11 (2462MHz)

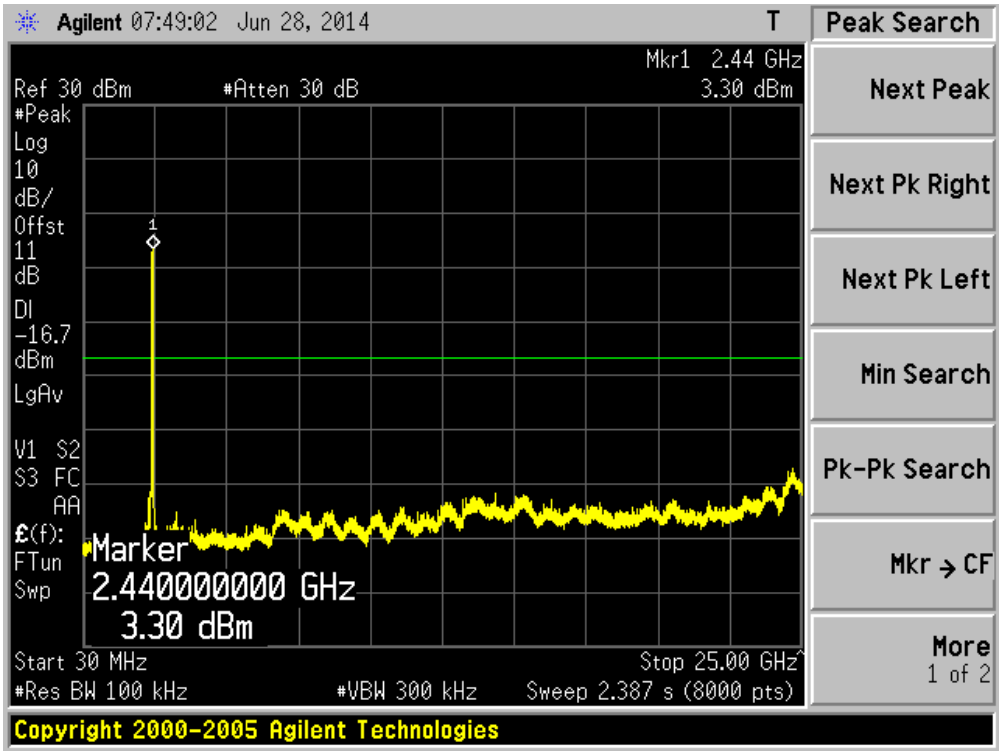


Product	:	WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz) (Ant 010)

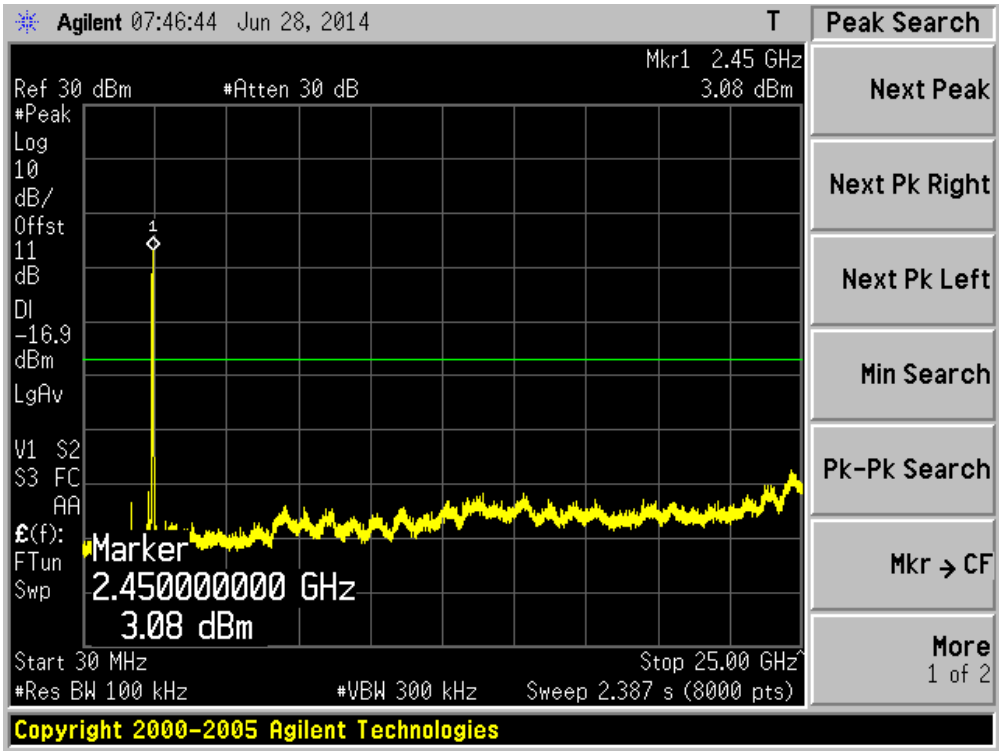
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)

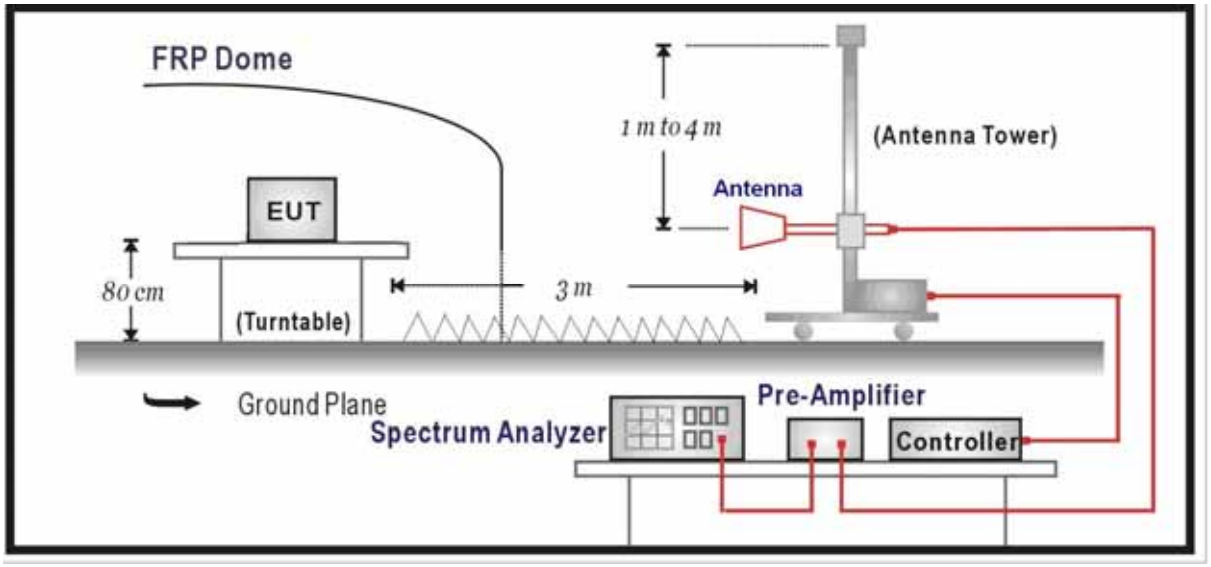


6. Radiated Emission Band Edge

6.1. 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)).

6.2. Test Setup



6.3. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

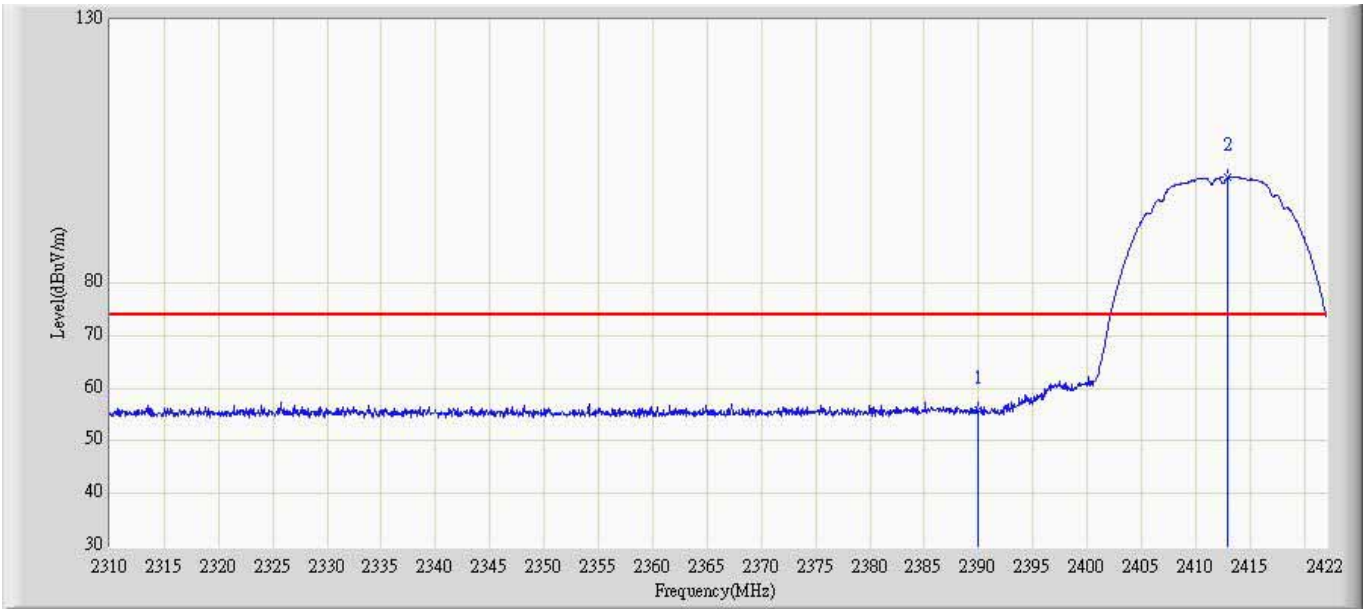
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from Antenna to the EUT was 3 meters.

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: 2009 on radiated measurement.

6.4. Test Result

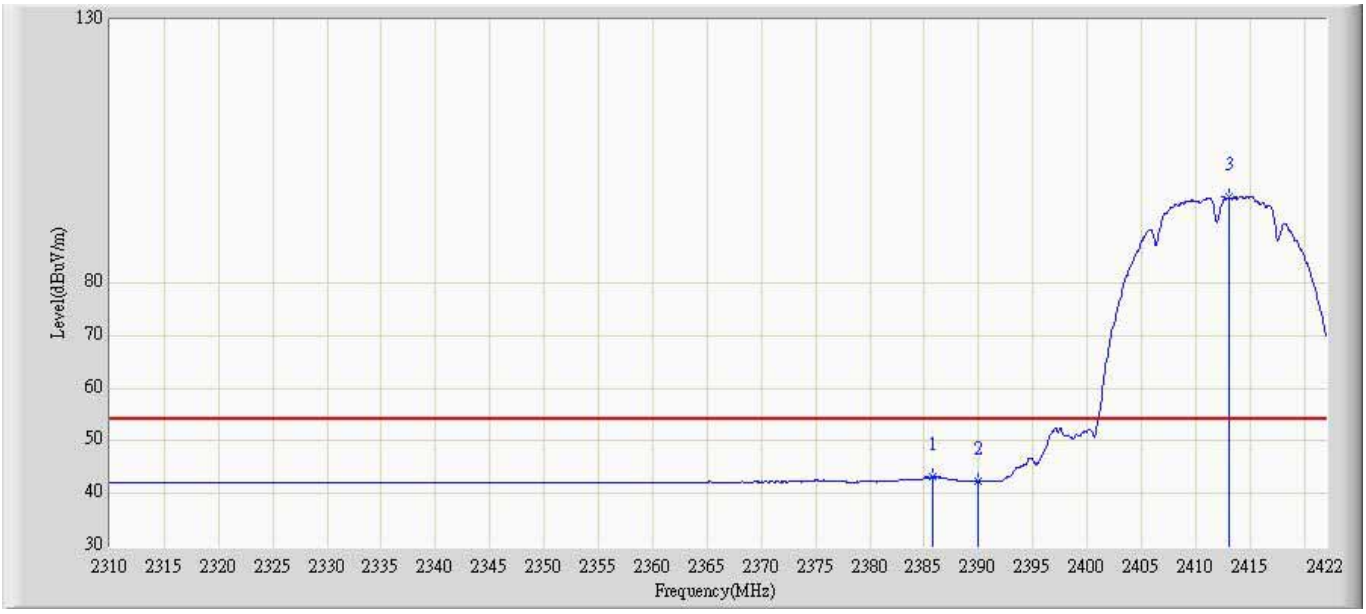
Test by Dipole Antenna #1

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 10:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



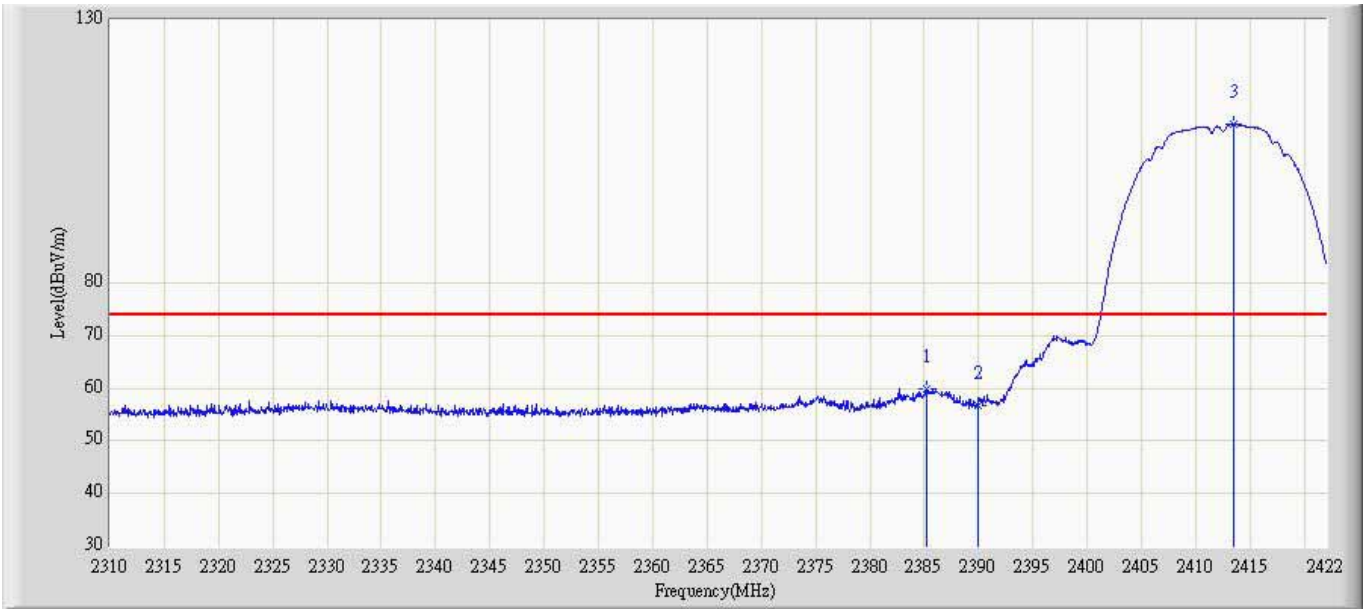
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.800	24.712	-18.200	74.000	31.088	PK
2	*	2412.984	100.038	68.799	N/A	N/A	31.239	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



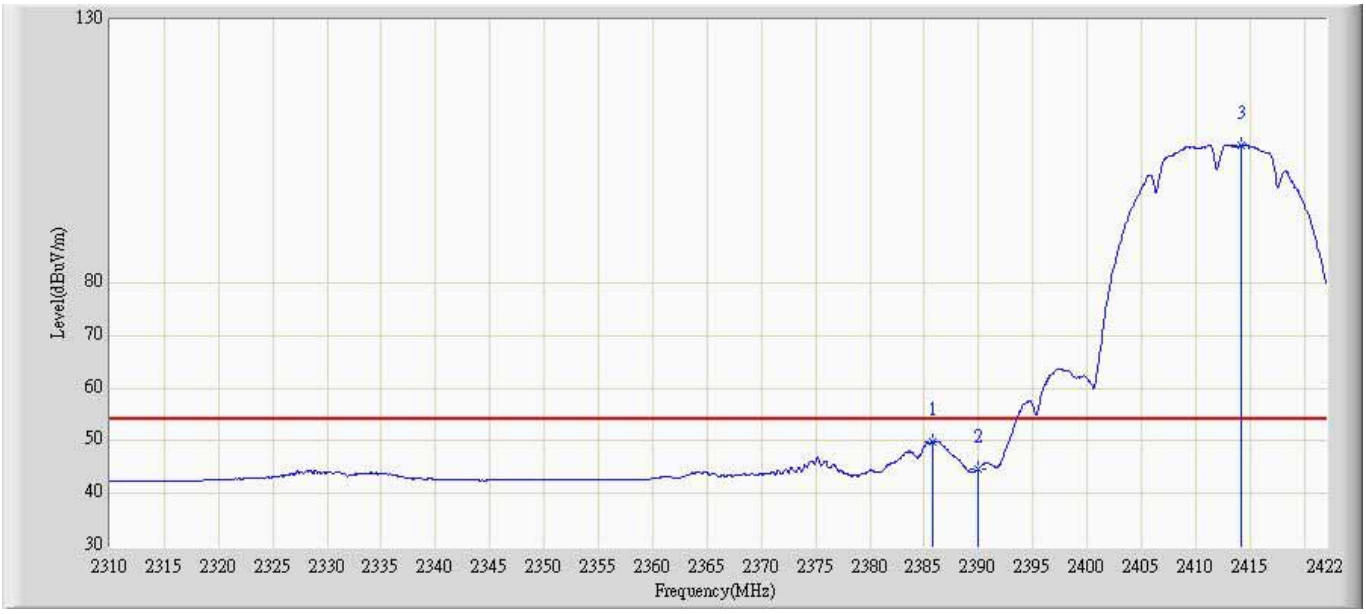
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.824	43.080	12.005	-10.920	54.000	31.075	AV
2		2390.000	42.333	11.245	-11.667	54.000	31.088	AV
3	*	2413.040	96.312	65.072	N/A	N/A	31.240	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



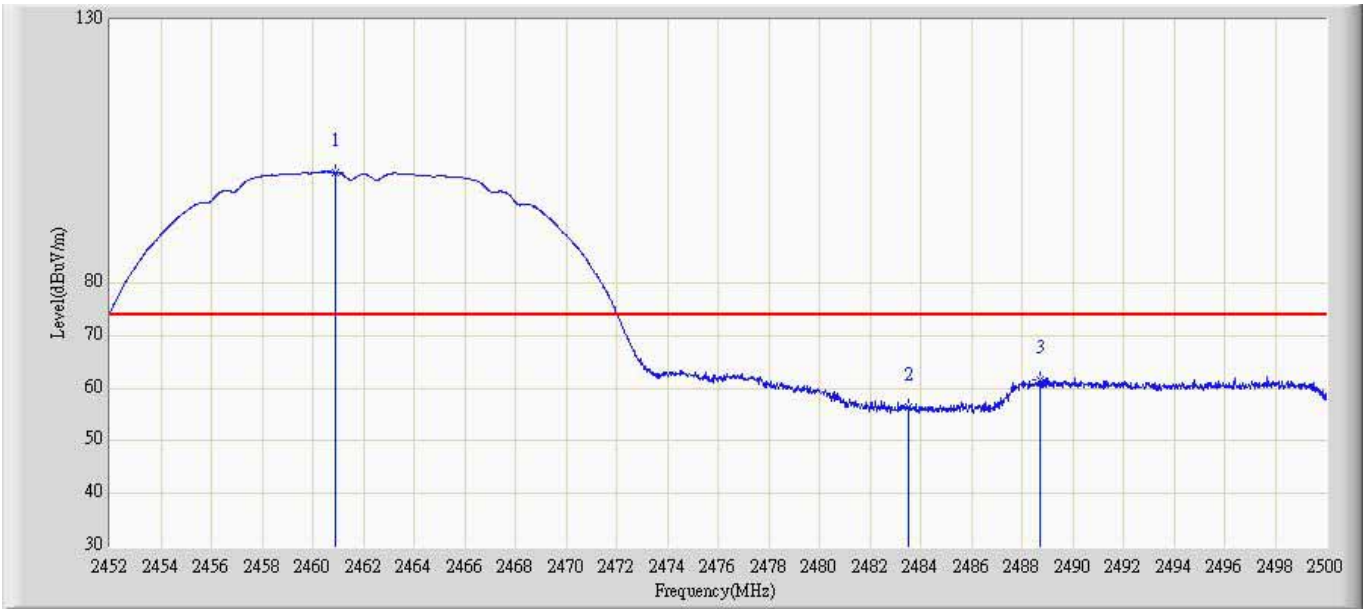
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.208	59.975	28.902	-14.025	74.000	31.073	PK
2		2390.000	56.865	25.777	-17.135	74.000	31.088	PK
3	*	2413.544	110.106	78.862	N/A	N/A	31.245	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.768	49.723	18.648	-4.277	54.000	31.075	AV
2		2390.000	44.759	13.671	-9.241	54.000	31.088	AV
3	*	2414.160	106.247	74.997	N/A	N/A	31.250	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

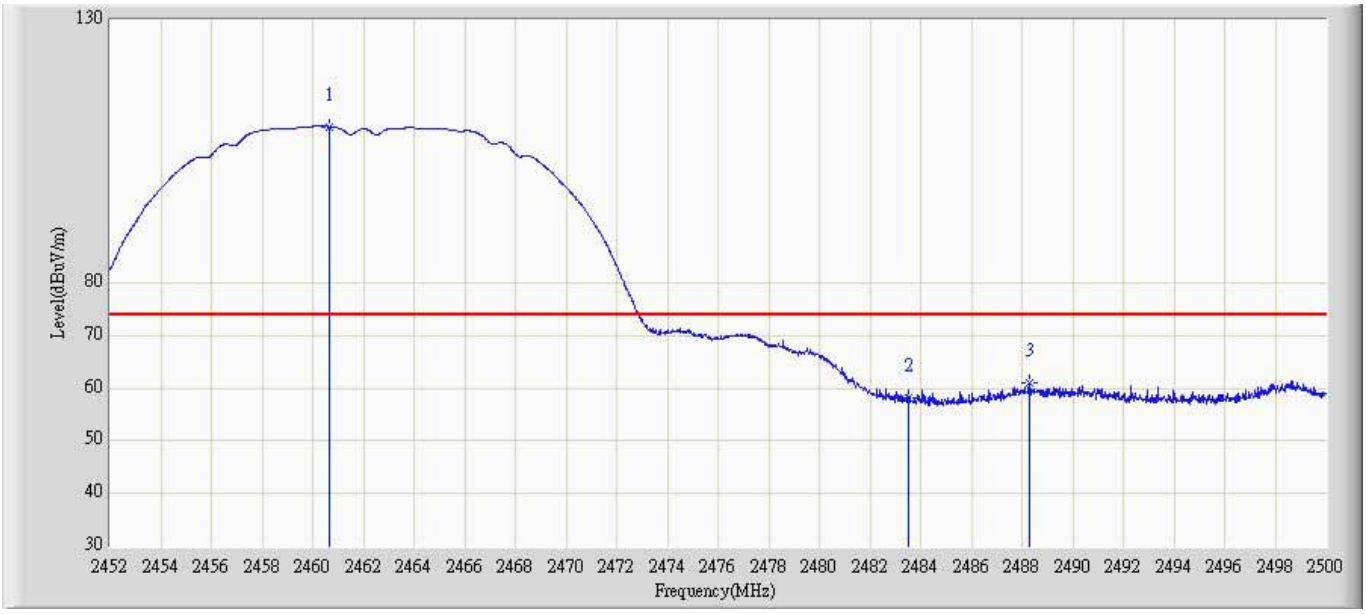


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.904	101.018	69.430	N/A	N/A	31.588	PK
2		2483.500	56.542	24.929	-17.458	74.000	31.613	PK
3		2488.696	61.659	30.040	-12.341	74.000	31.619	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.704	97.547	65.963	N/A	N/A	31.584	AV
2		2483.500	43.386	11.772	-10.614	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

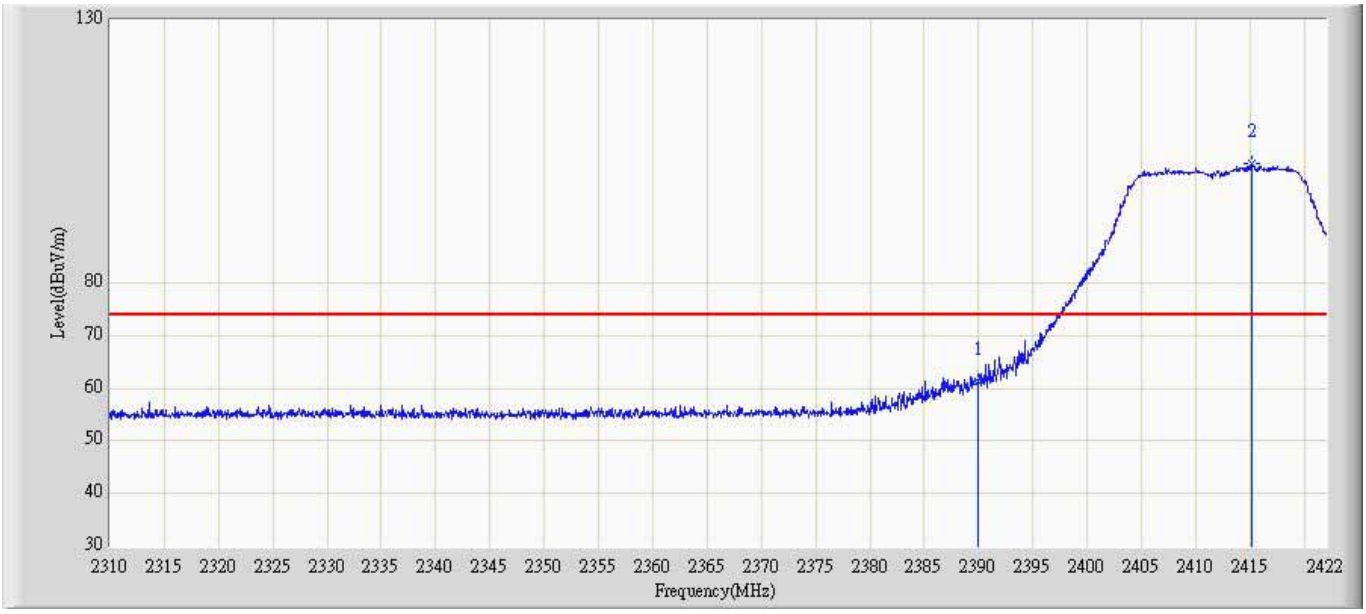


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.640	109.659	78.072	N/A	N/A	31.588	PK
2		2483.500	58.029	26.415	-15.971	74.000	31.613	PK
3		2488.312	61.117	29.499	-12.883	74.000	31.619	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

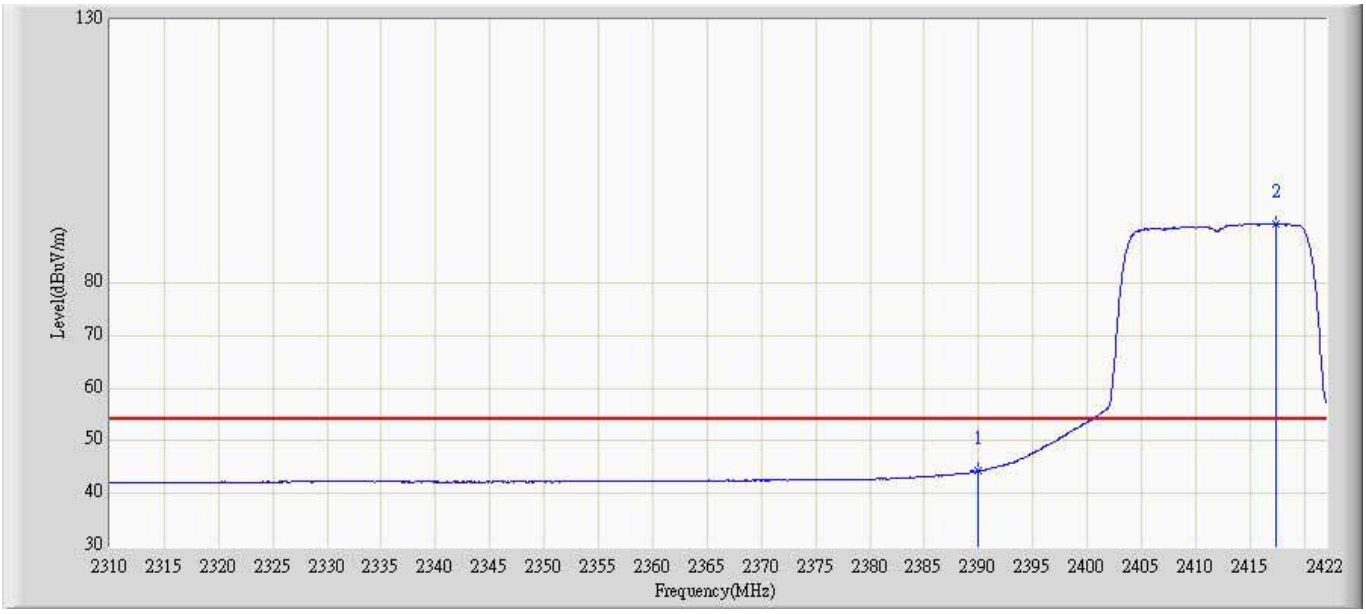
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.360	105.938	74.348	N/A	N/A	31.590	AV
2		2483.500	45.306	13.692	-8.694	54.000	31.613	AV
3		2488.408	47.253	15.635	-6.747	54.000	31.618	AV
4		2499.376	48.559	16.914	-5.441	54.000	31.645	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



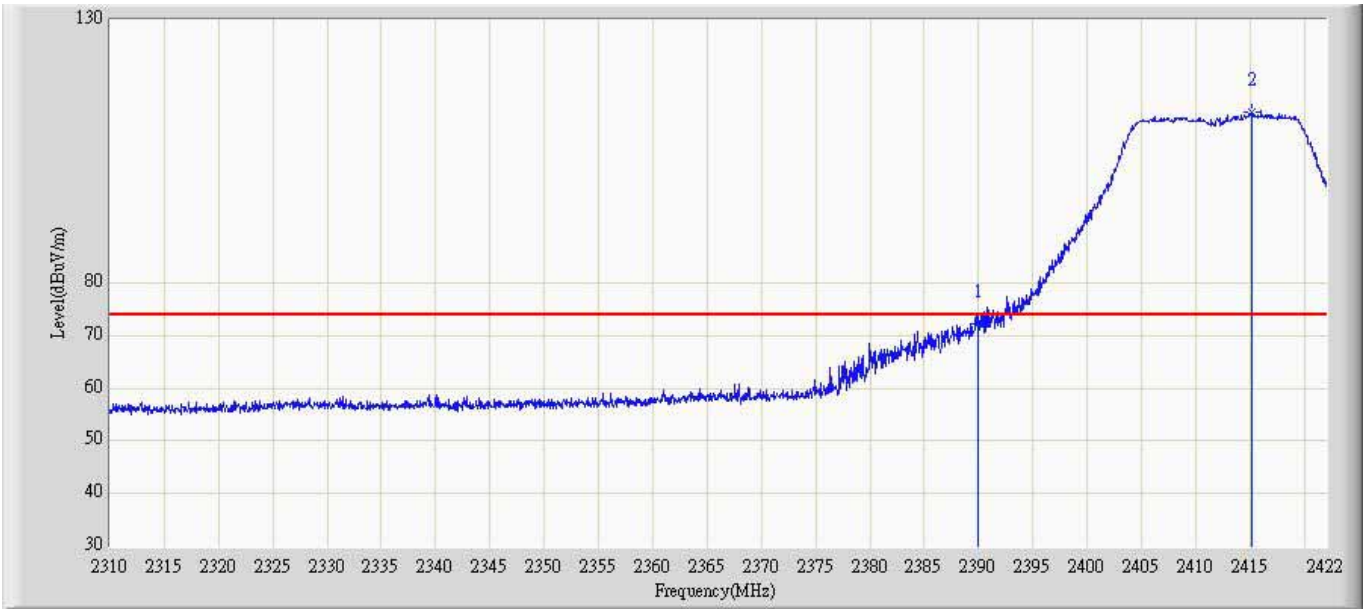
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.383	30.295	-12.617	74.000	31.088	PK
2	*	2415.112	102.650	71.391	N/A	N/A	31.258	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



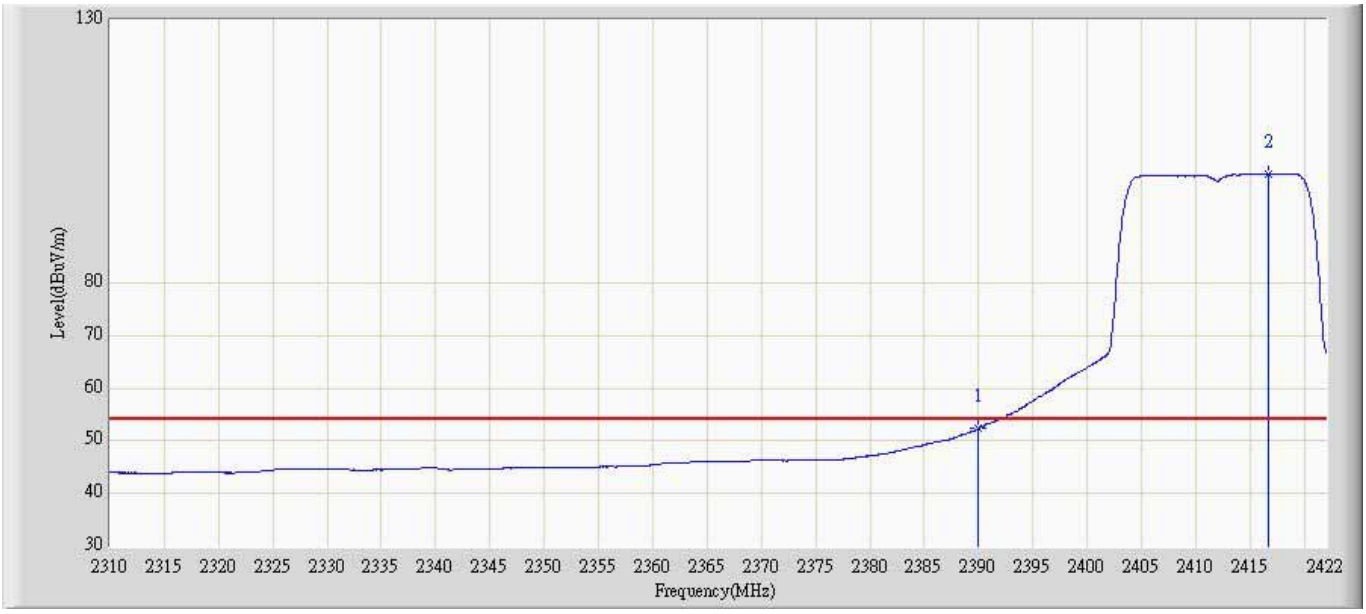
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.301	13.213	-9.699	54.000	31.088	AV
2	*	2417.408	91.218	59.938	N/A	N/A	31.280	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



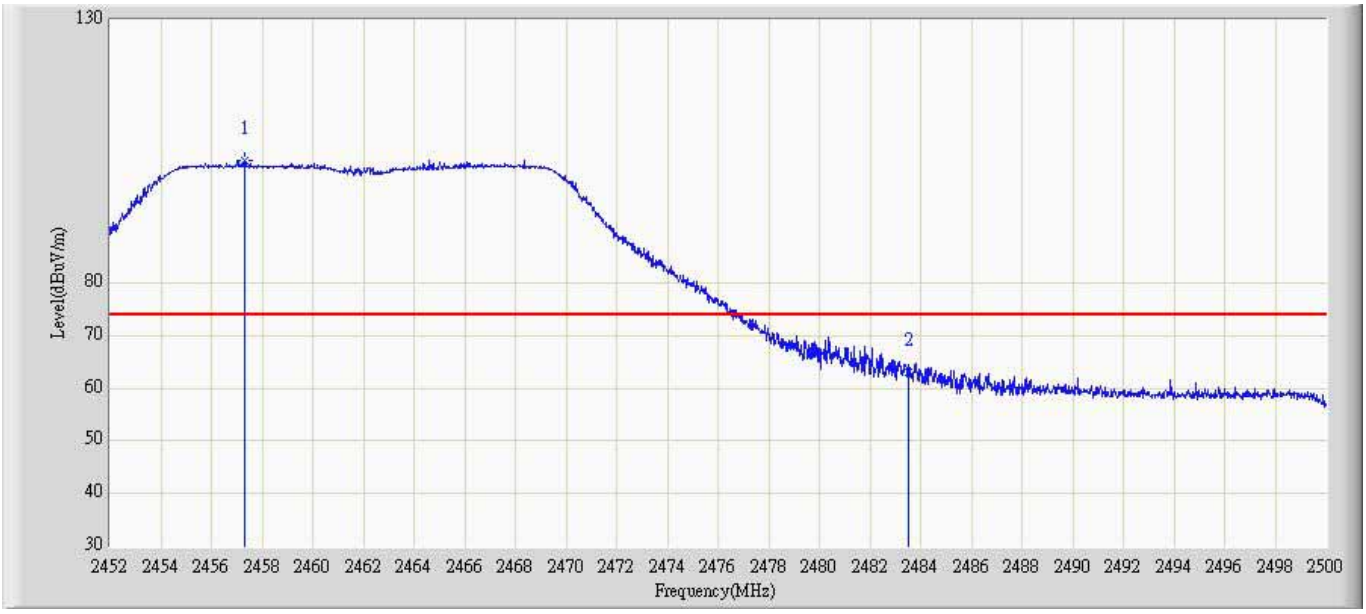
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	72.172	41.084	-1.828	74.000	31.088	PK
2	*	2415.168	112.584	81.325	N/A	N/A	31.260	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



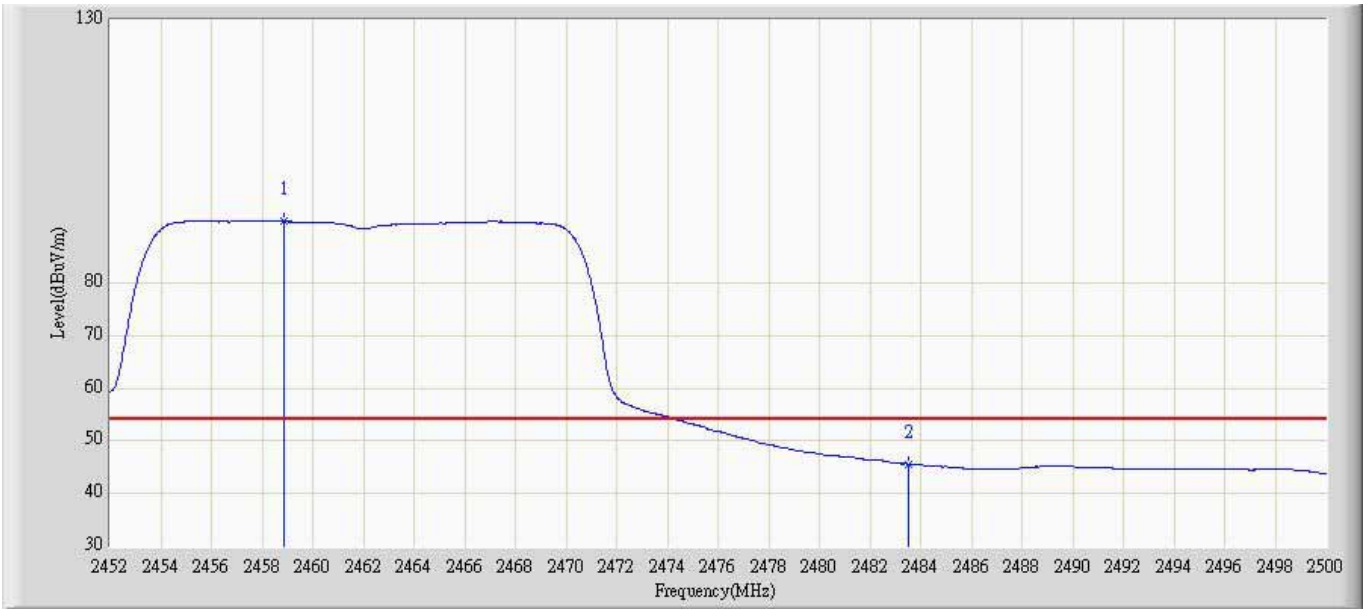
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.389	21.301	-1.611	54.000	31.088	AV
2	*	2416.680	100.728	69.455	N/A	N/A	31.273	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



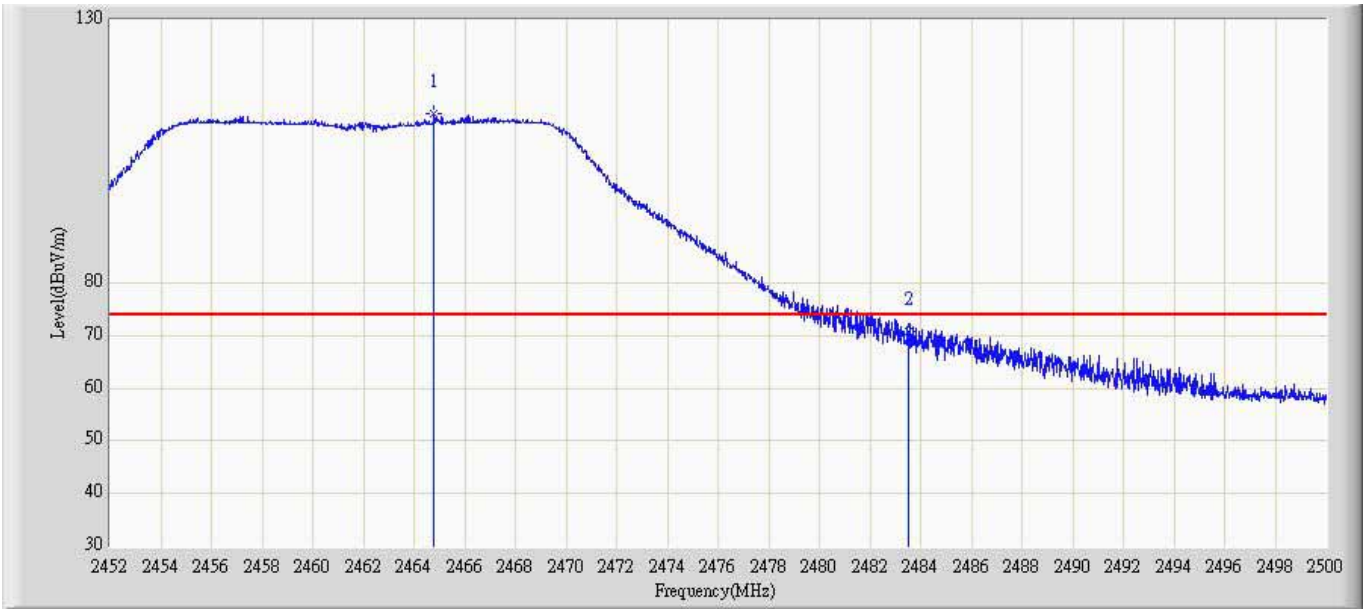
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.304	103.356	71.780	N/A	N/A	31.576	PK
2		2483.500	63.179	31.566	-10.821	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



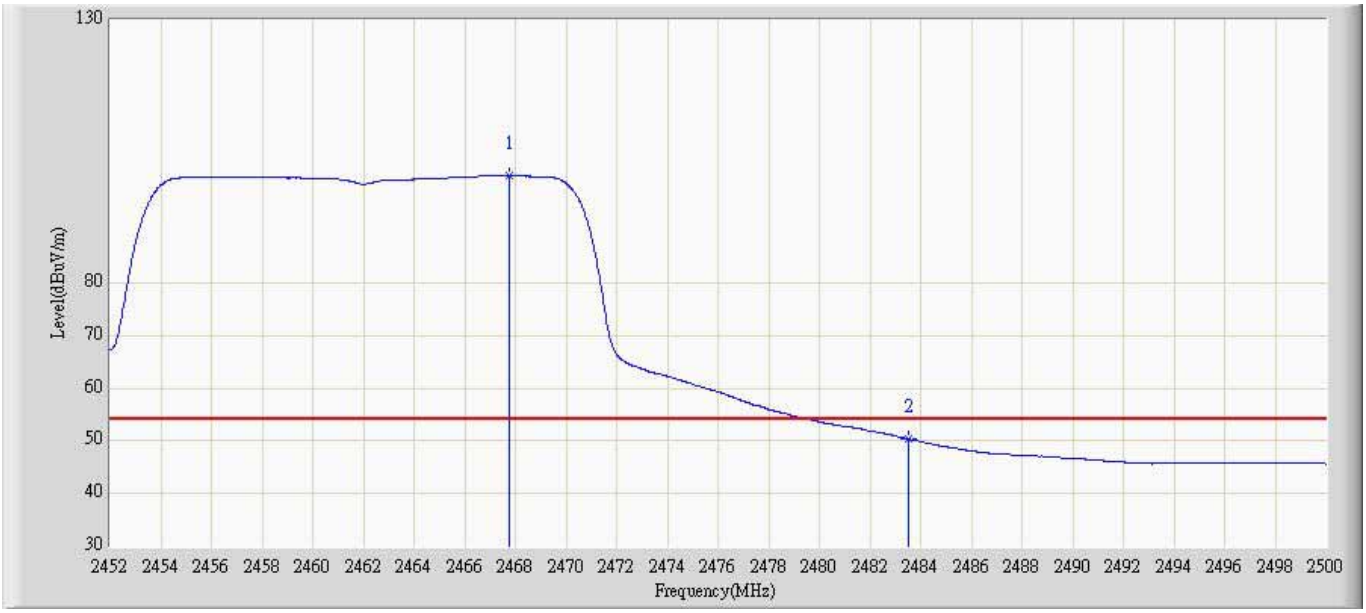
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.888	91.652	60.071	N/A	N/A	31.581	AV
2		2483.500	45.596	13.983	-8.404	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



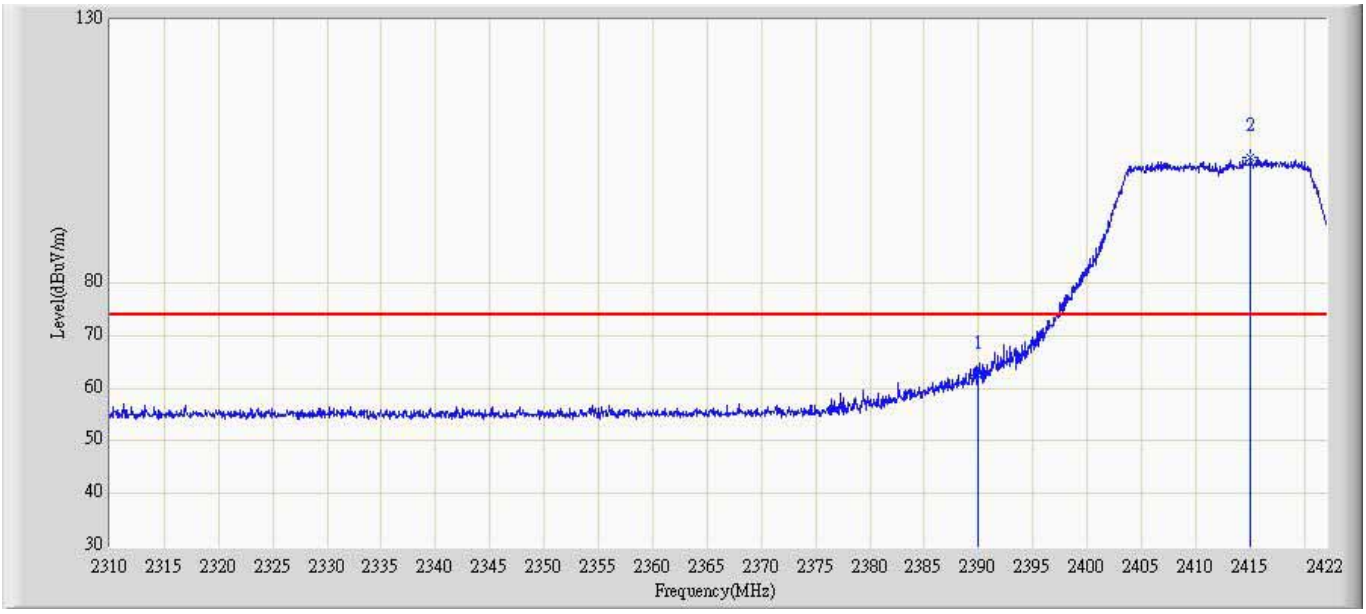
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.792	112.101	80.506	N/A	N/A	31.595	PK
2		2483.500	70.674	39.060	-3.326	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



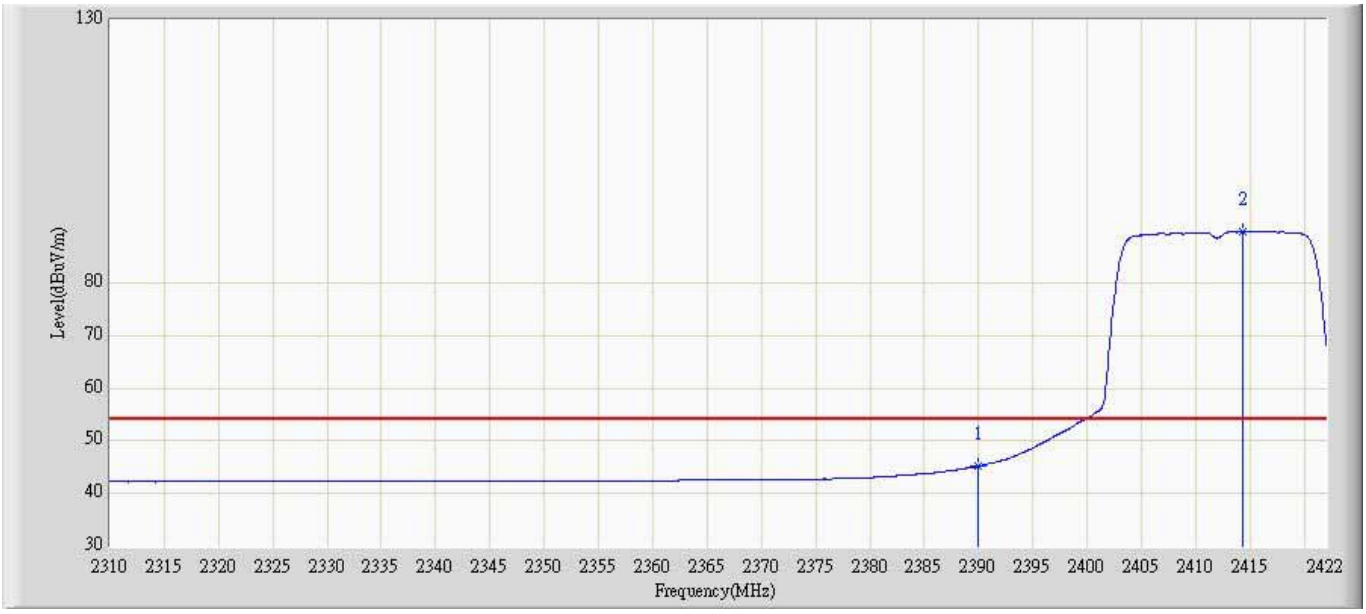
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.768	100.354	68.756	N/A	N/A	31.598	AV
2		2483.500	50.343	18.730	-3.657	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



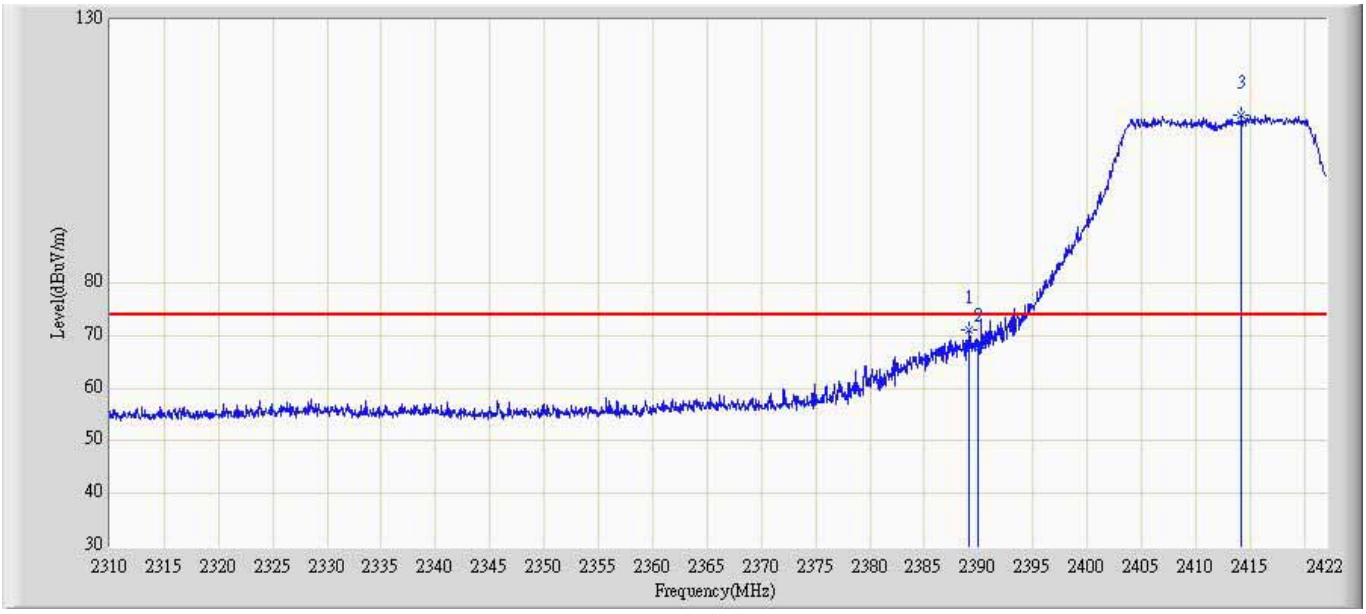
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.348	31.260	-11.652	74.000	31.088	PK
2	*	2415.056	103.880	72.622	N/A	N/A	31.258	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



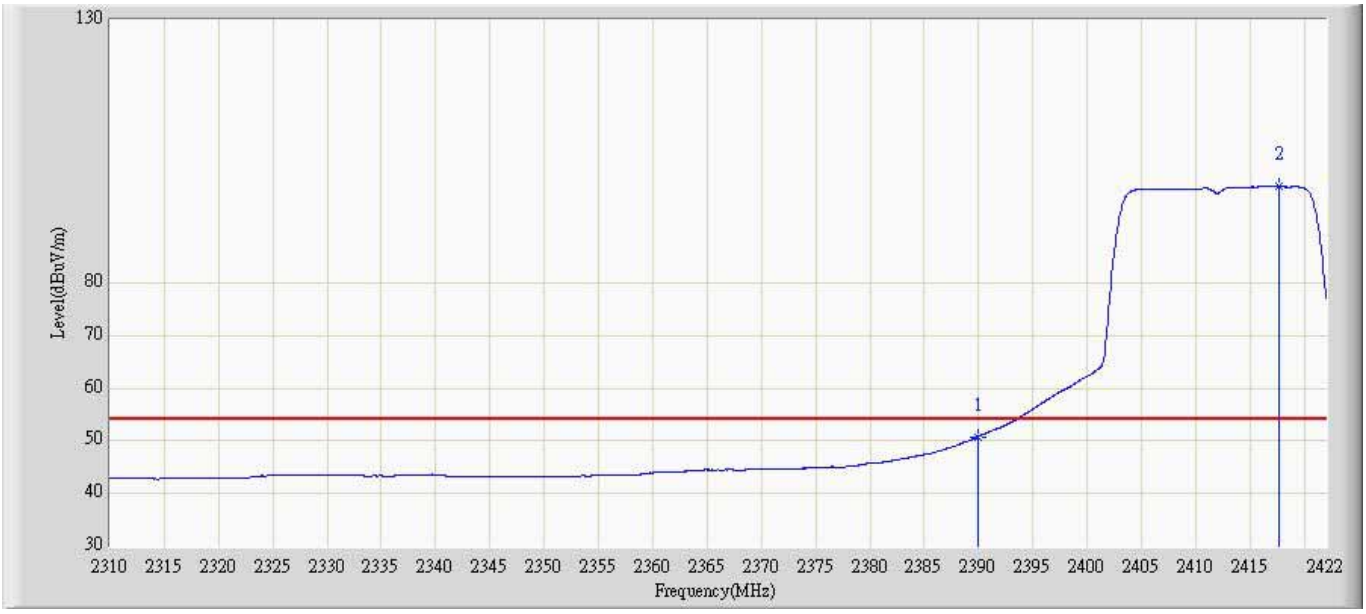
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.184	14.096	-8.816	54.000	31.088	AV
2	*	2414.384	89.704	58.452	N/A	N/A	31.252	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



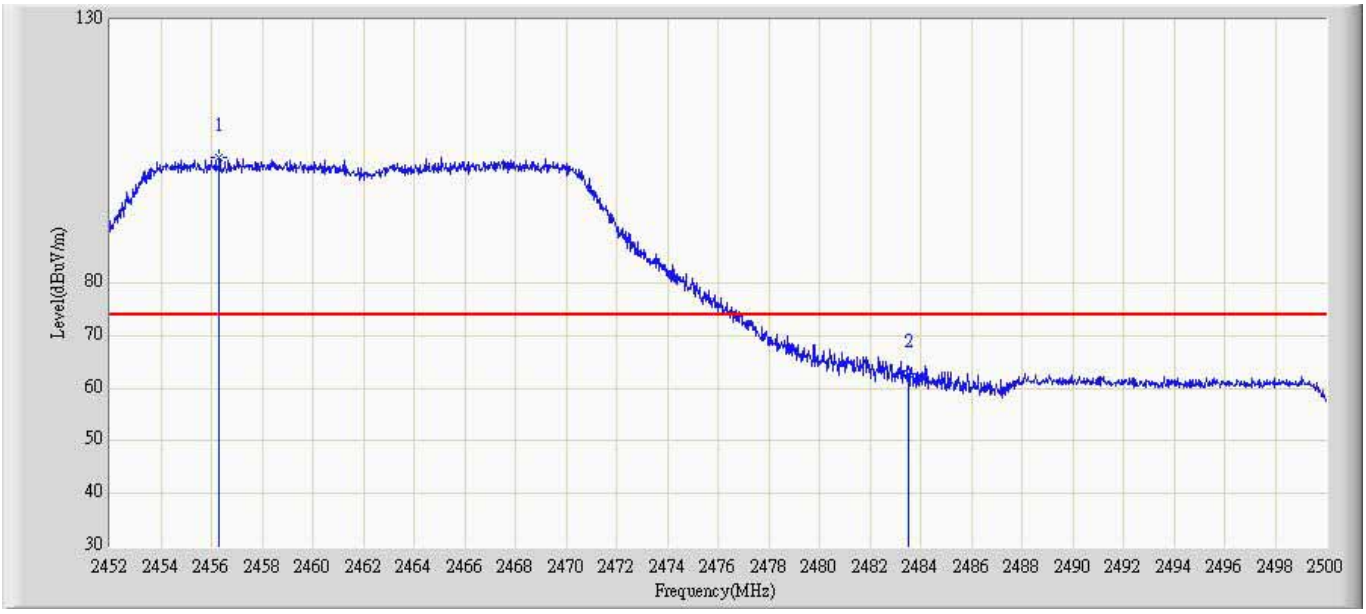
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2389.184	71.007	39.921	-2.993	74.000	31.086	PK
2		2390.000	67.714	36.626	-6.286	74.000	31.088	PK
3	*	2414.216	111.942	80.691	N/A	N/A	31.250	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 11:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



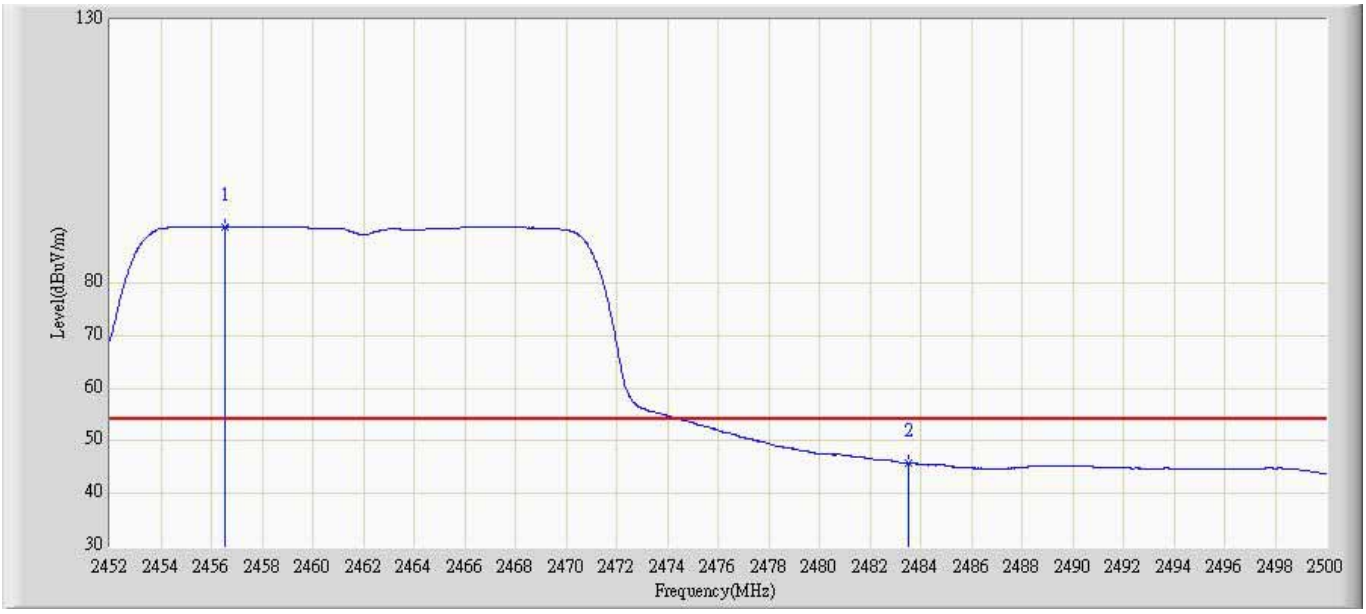
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.822	19.734	-3.178	54.000	31.088	AV
2	*	2417.744	98.318	67.035	N/A	N/A	31.282	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 100	



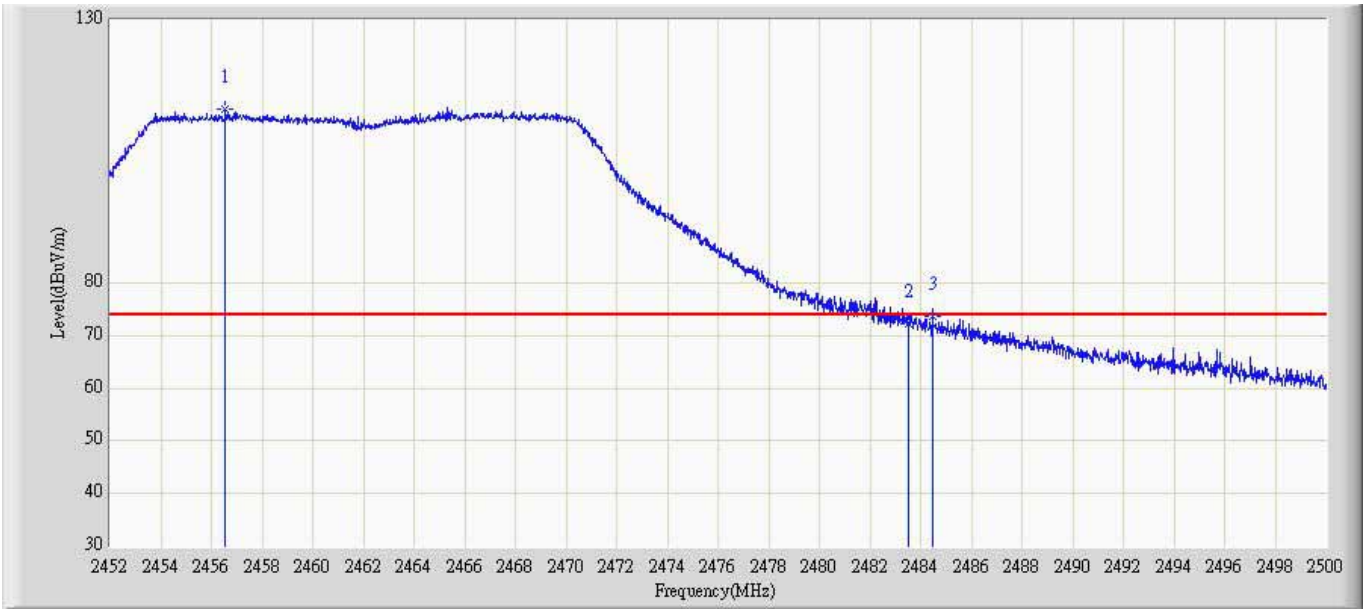
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.296	103.924	72.351	N/A	N/A	31.572	PK
2		2483.500	62.898	31.284	-11.102	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 100	



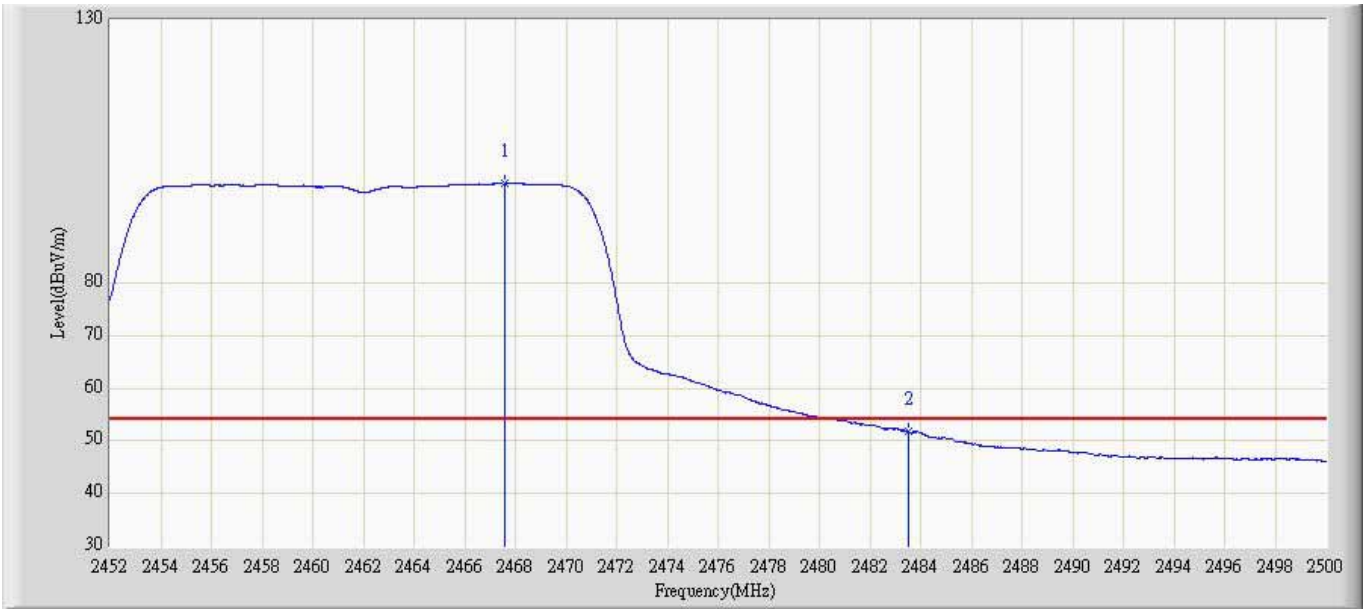
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.560	90.760	59.187	N/A	N/A	31.573	AV
2		2483.500	45.866	14.253	-8.134	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 100	



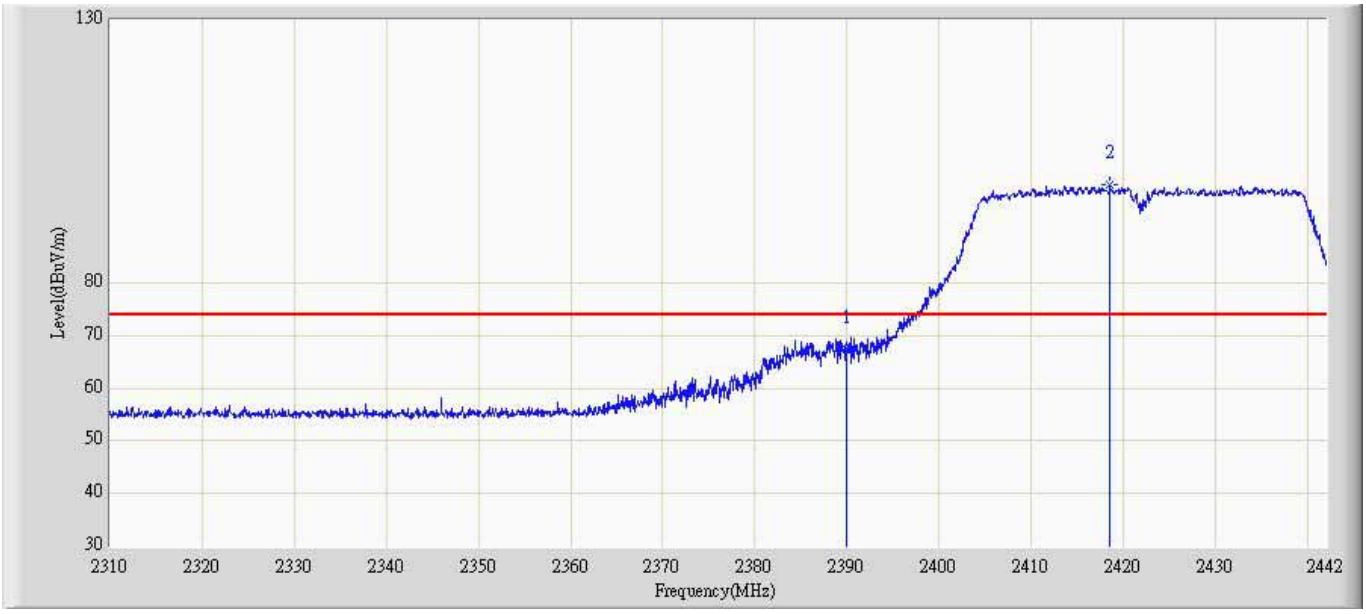
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.536	113.055	81.482	N/A	N/A	31.573	PK
2		2483.500	72.213	40.599	-1.787	74.000	31.613	PK
3		2484.472	73.778	42.164	-0.222	74.000	31.615	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 100	



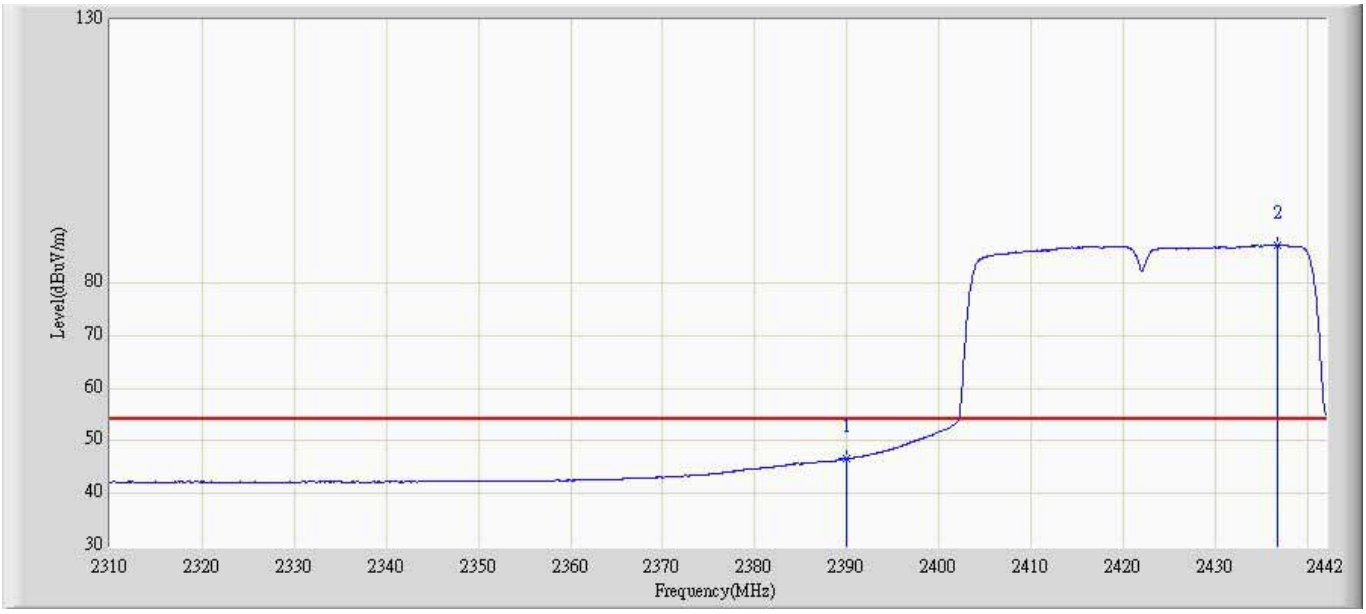
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.600	98.887	67.289	N/A	N/A	31.598	AV
2		2483.500	51.720	20.106	-2.280	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 100	



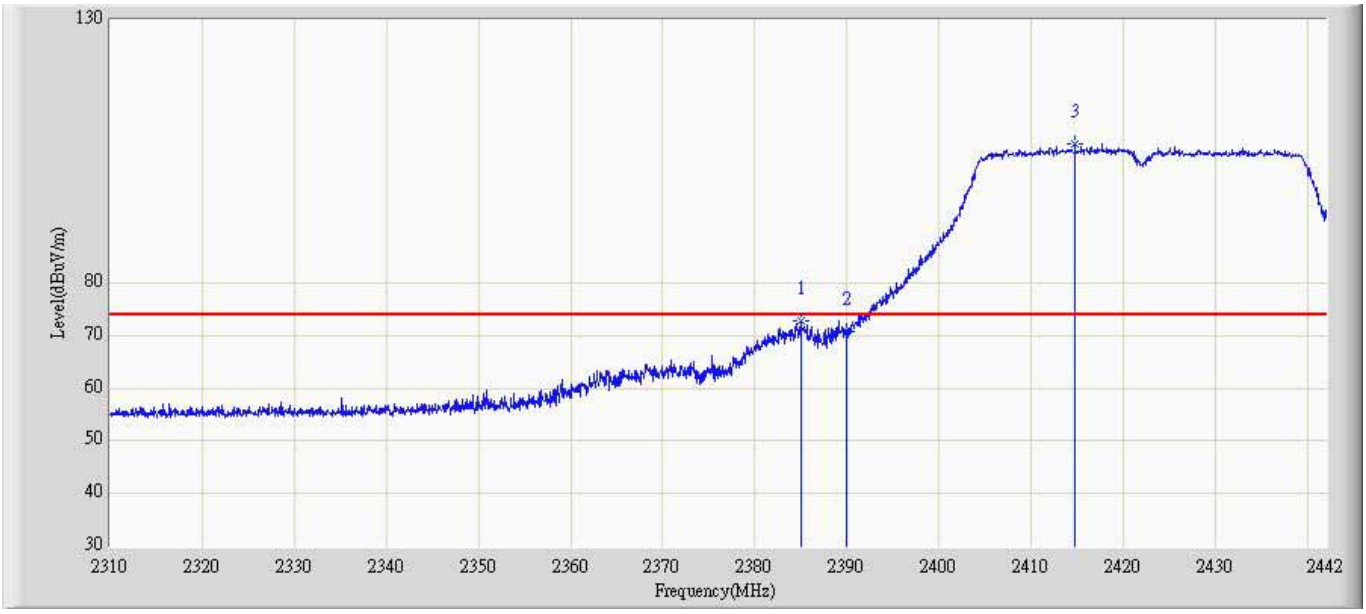
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.351	36.263	-6.649	74.000	31.088	PK
2	*	2418.570	98.763	67.473	N/A	N/A	31.290	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 100	



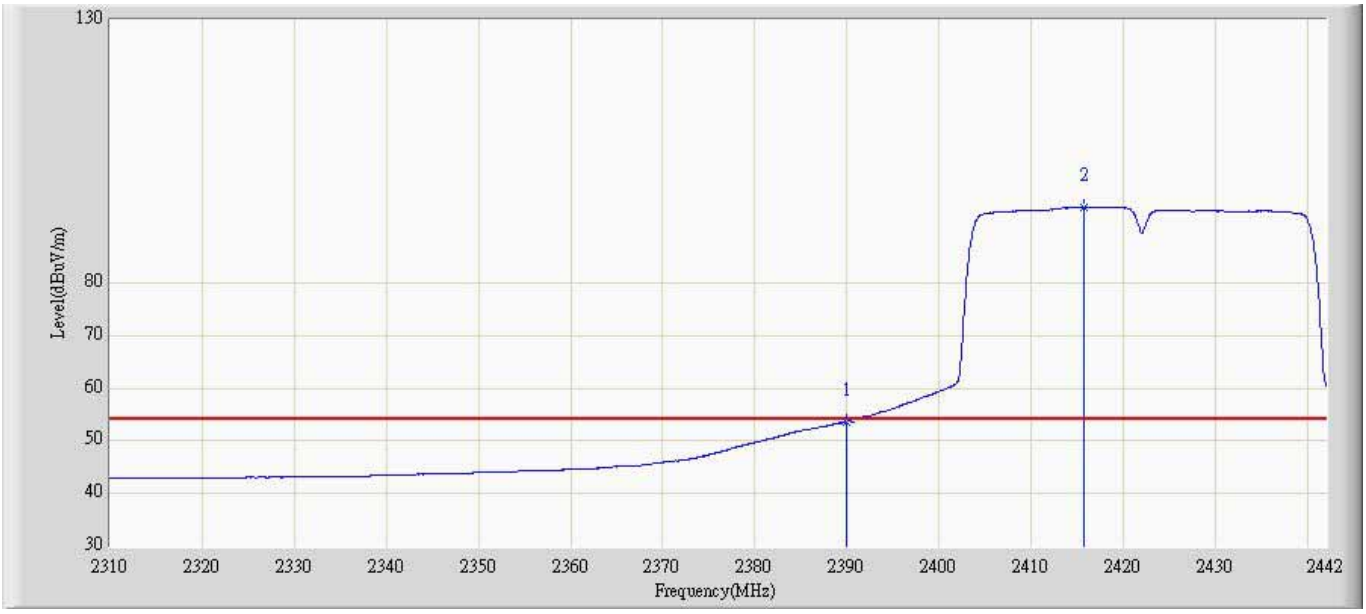
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.569	15.481	-7.431	54.000	31.088	AV
2	*	2436.786	87.113	55.655	N/A	N/A	31.459	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 100	



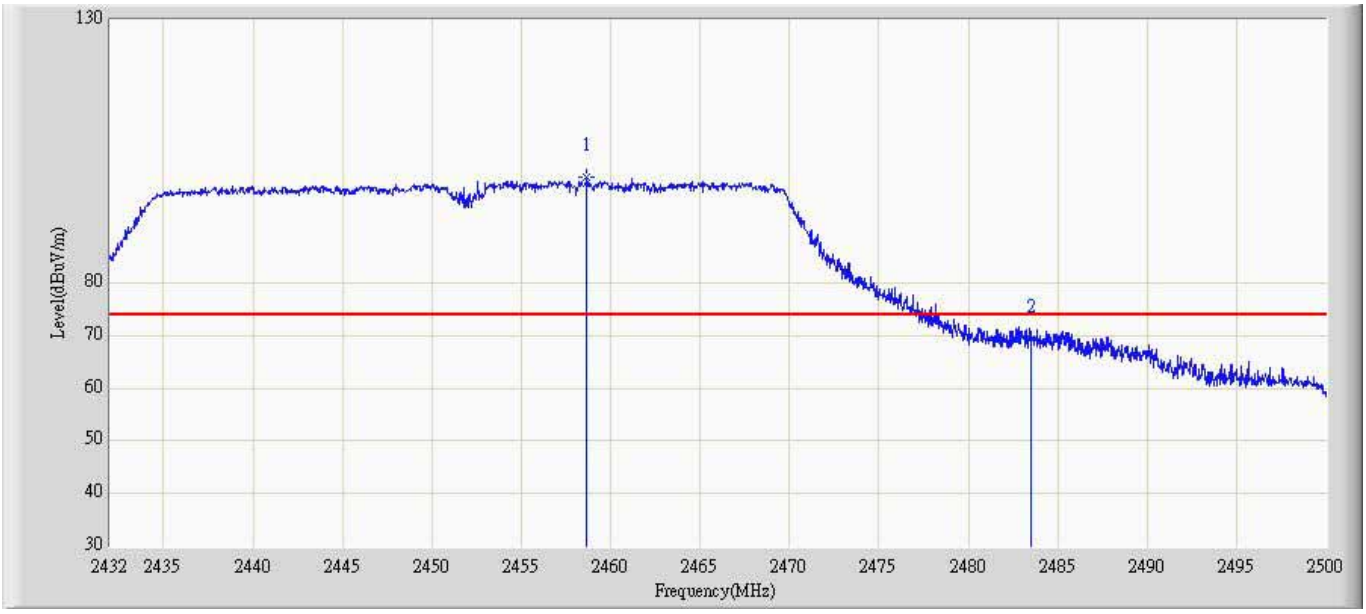
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.042	72.721	41.648	-1.279	74.000	31.072	PK
2		2390.000	70.829	39.741	-3.171	74.000	31.088	PK
3	*	2414.742	106.366	75.111	N/A	N/A	31.255	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 100	



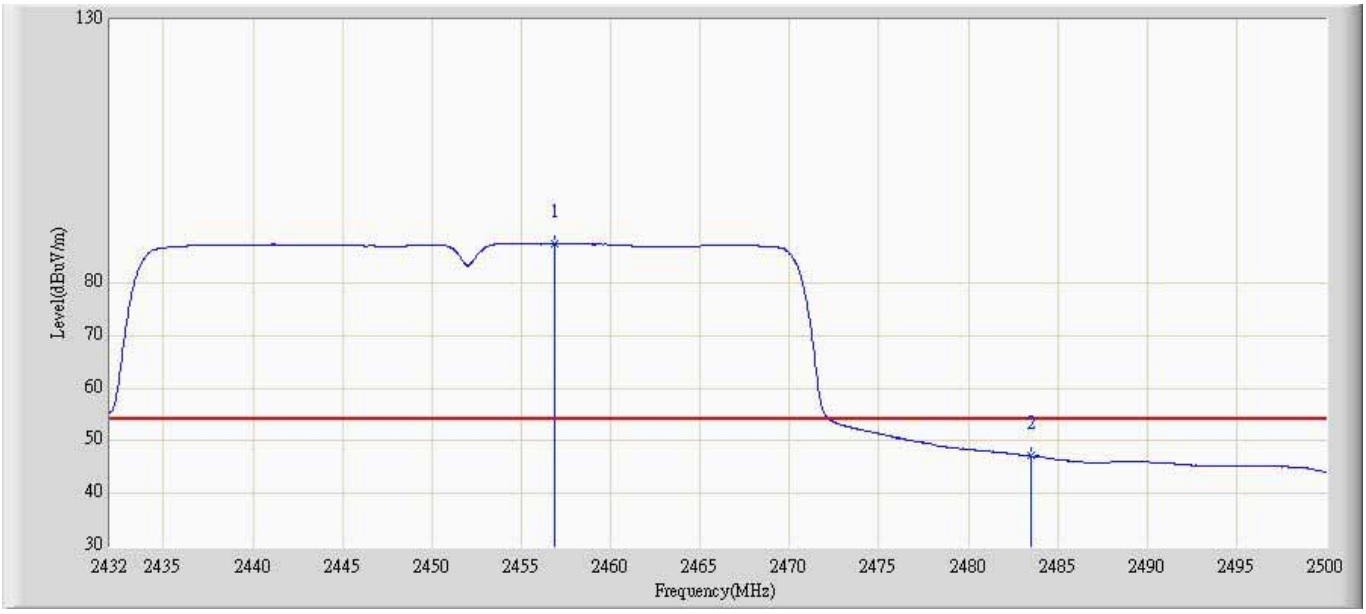
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.698	22.610	-0.302	54.000	31.088	AV
2	*	2415.666	94.343	63.079	N/A	N/A	31.264	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 100	



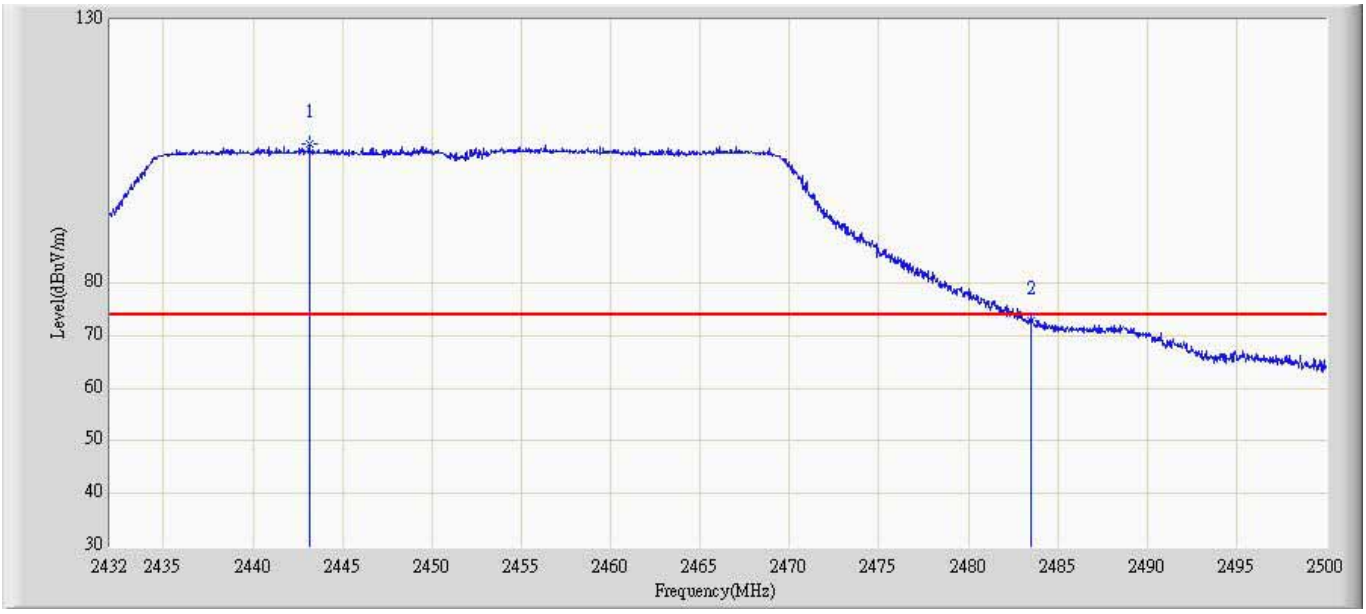
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.656	100.107	68.526	N/A	N/A	31.580	PK
2		2483.500	69.332	37.718	-4.668	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 100	



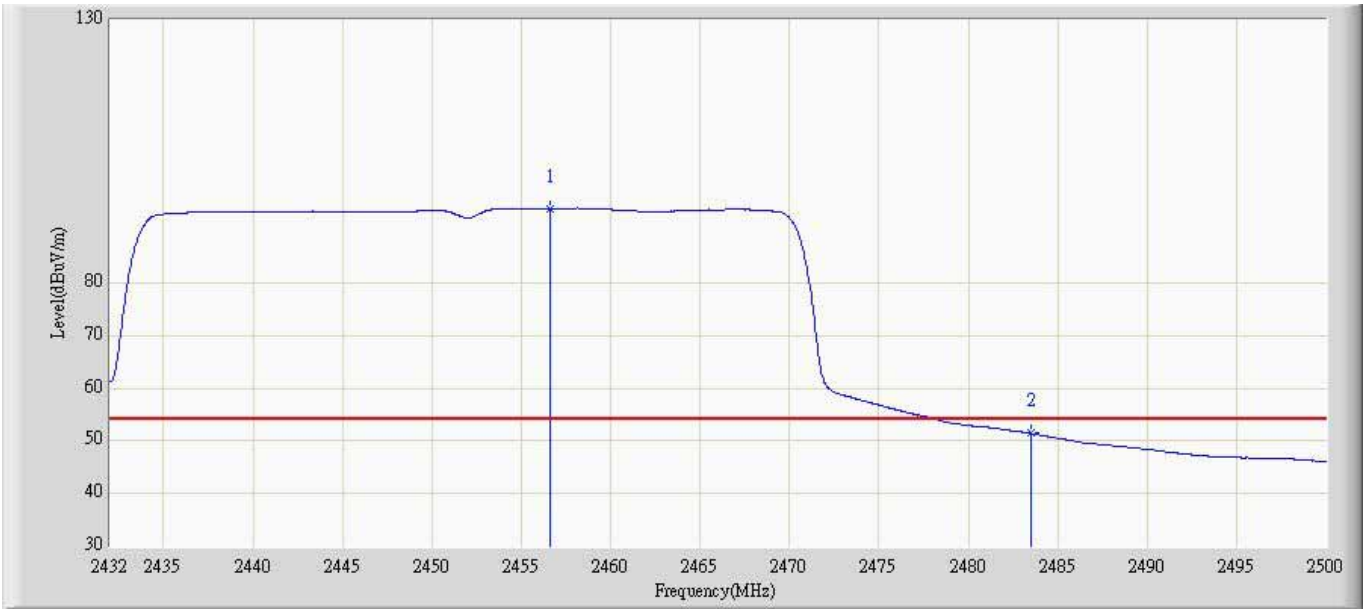
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.854	87.382	55.808	N/A	N/A	31.574	AV
2		2483.500	47.127	15.514	-6.873	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 100	



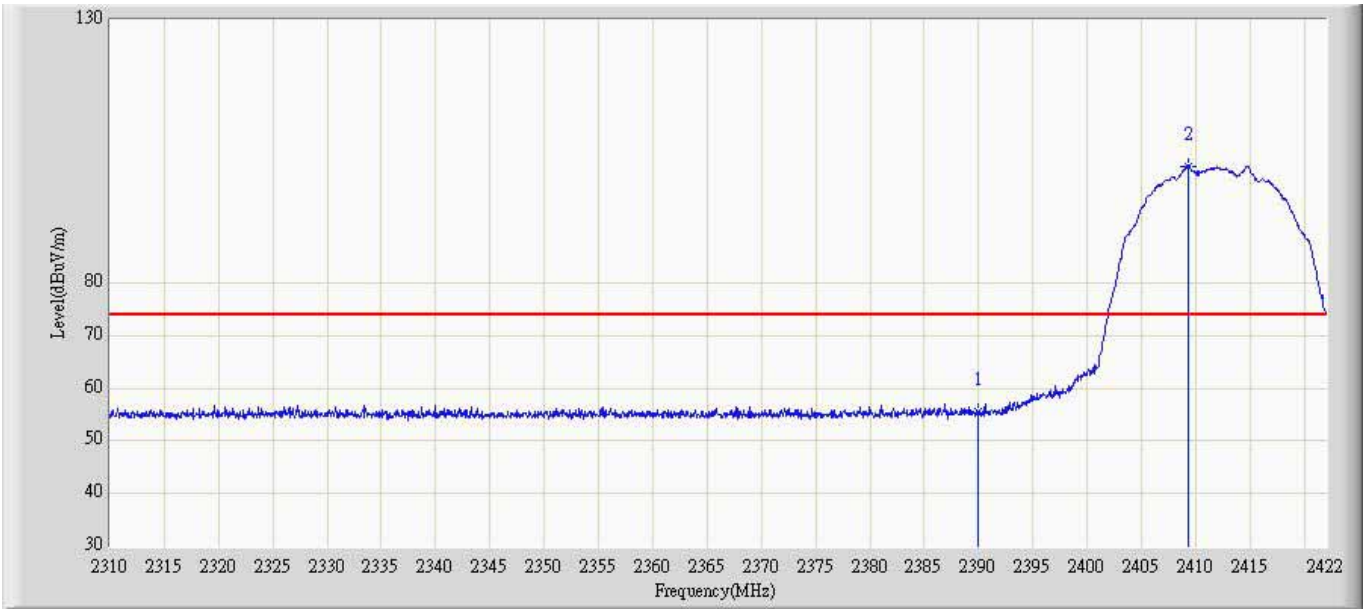
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2443.152	106.381	74.864	N/A	N/A	31.517	PK
2		2483.500	72.873	41.259	-1.127	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 100	



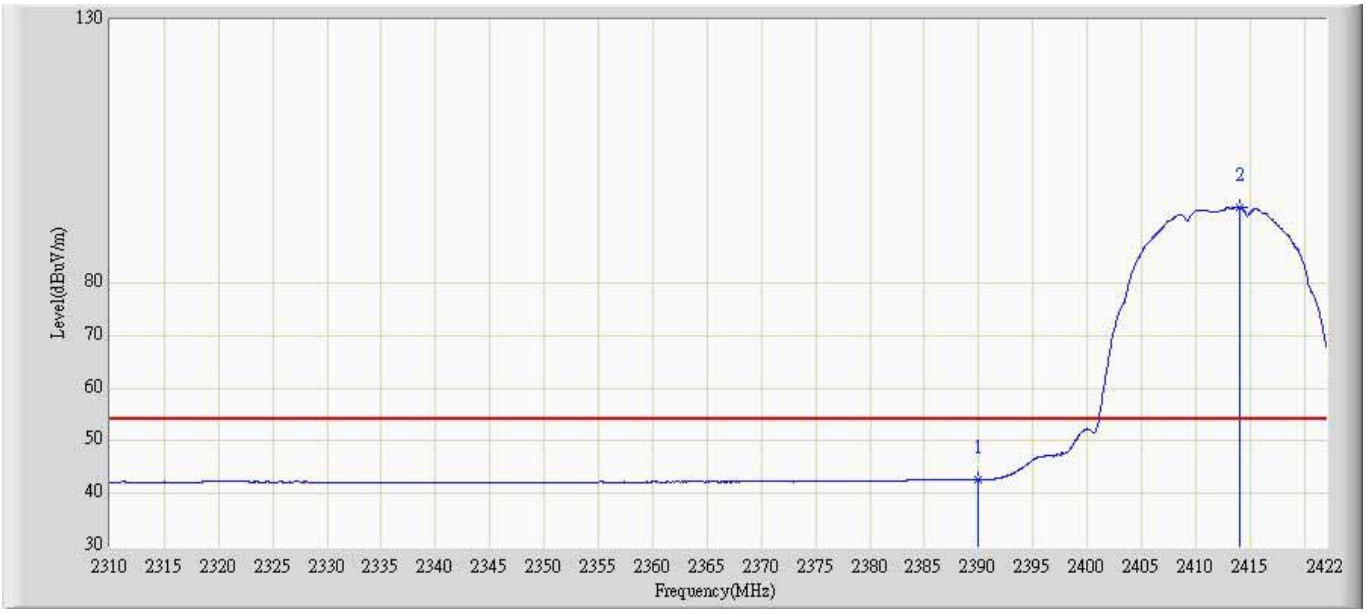
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.650	94.140	62.566	N/A	N/A	31.574	AV
2		2483.500	51.432	19.819	-2.568	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 010	



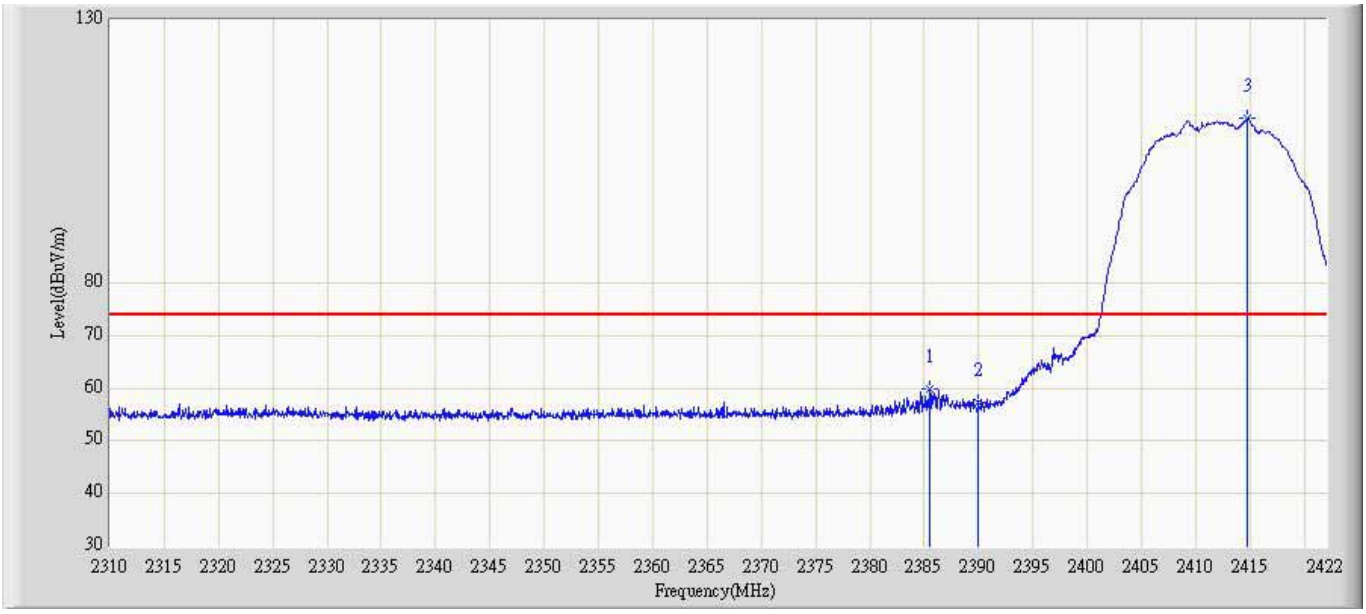
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.665	24.577	-18.335	74.000	31.088	PK
2	*	2409.344	102.263	71.054	N/A	N/A	31.210	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 010	



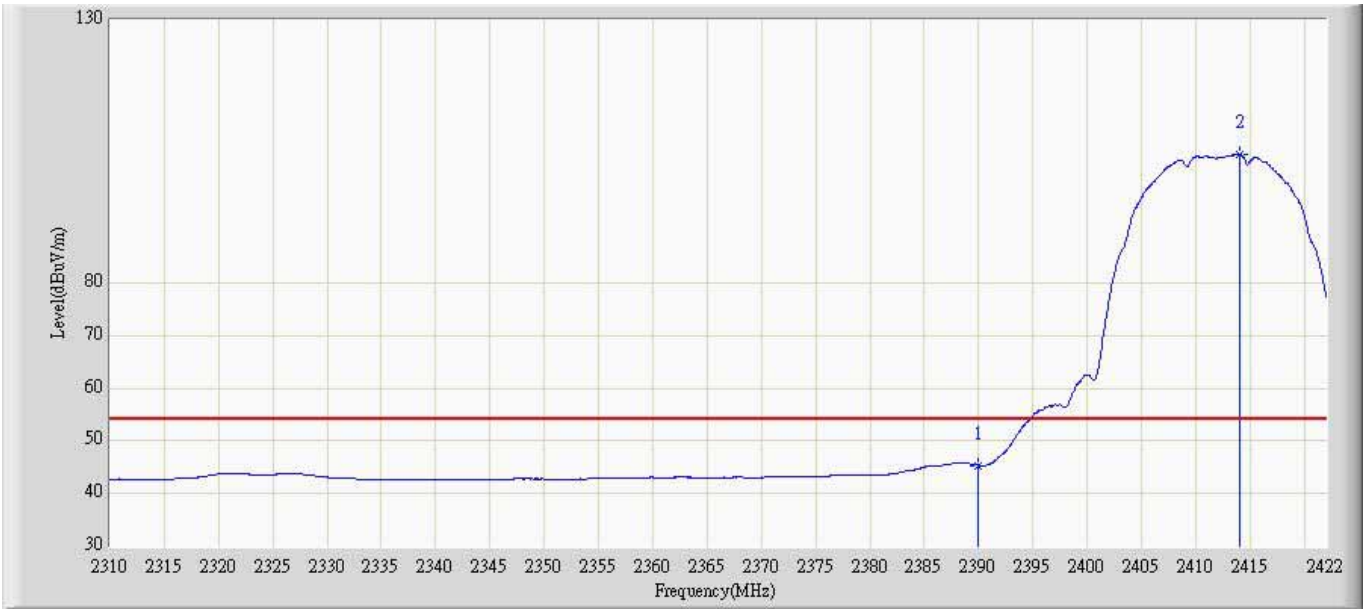
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	42.617	11.529	-11.383	54.000	31.088	AV
2	*	2414.048	94.479	63.230	N/A	N/A	31.248	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 010	



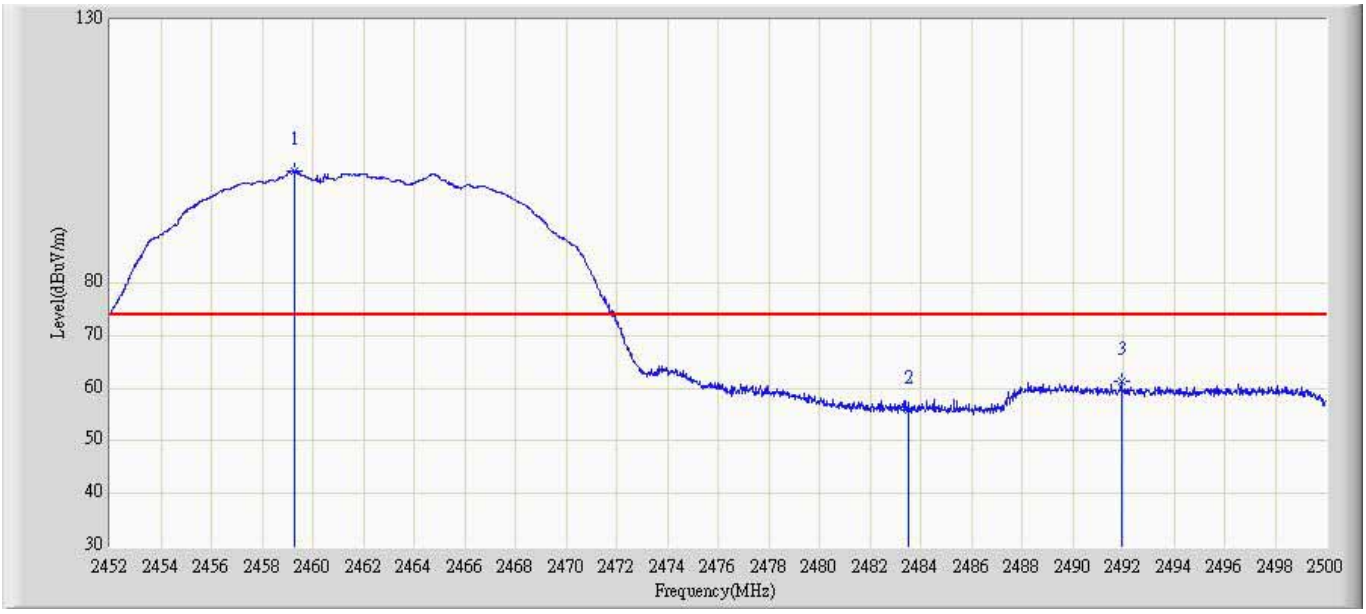
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.544	59.803	28.729	-14.197	74.000	31.074	PK
2		2390.000	57.405	26.317	-16.595	74.000	31.088	PK
3	*	2414.776	111.294	80.038	N/A	N/A	31.255	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 010	



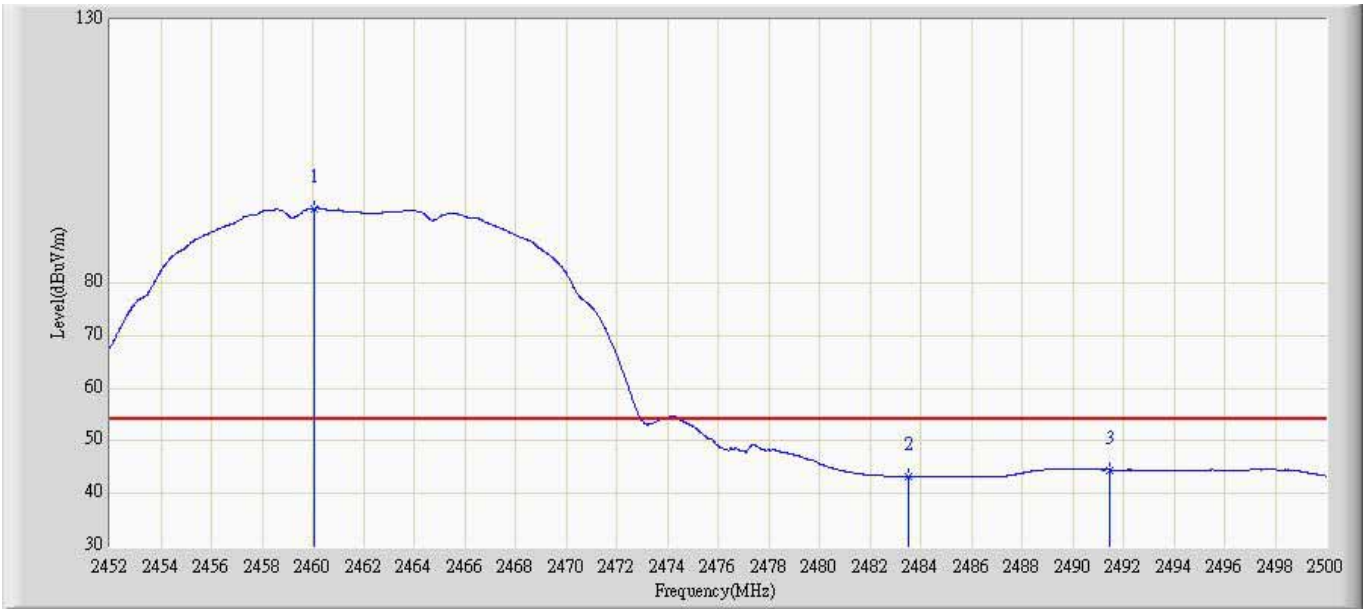
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.349	14.261	-8.651	54.000	31.088	AV
2	*	2414.048	104.395	73.146	N/A	N/A	31.248	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 010	



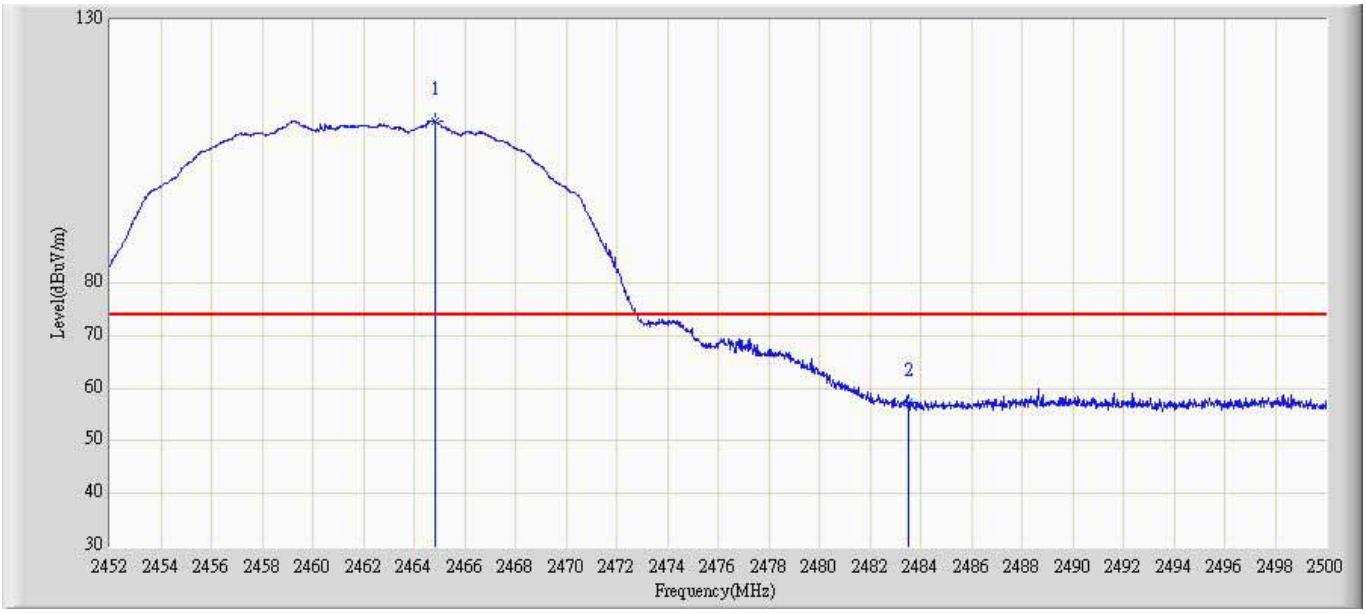
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.272	101.341	69.758	N/A	N/A	31.583	PK
2		2483.500	55.896	24.283	-18.104	74.000	31.613	PK
3		2491.912	61.324	29.702	-12.676	74.000	31.622	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 010	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.040	94.147	62.562	N/A	N/A	31.586	AV
2		2483.500	43.262	11.649	-10.738	54.000	31.613	AV
3		2491.480	44.505	12.884	-9.495	54.000	31.622	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 010	

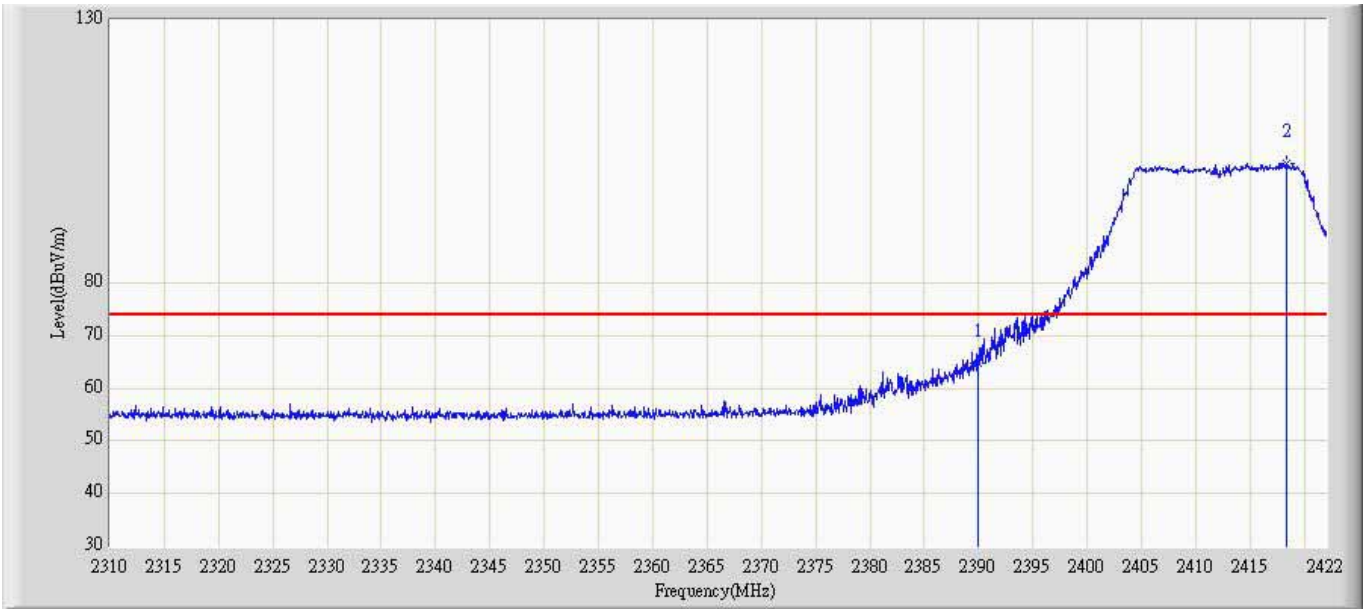


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.816	110.711	79.116	N/A	N/A	31.595	PK
2		2483.500	57.381	25.768	-16.619	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 13:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 010	

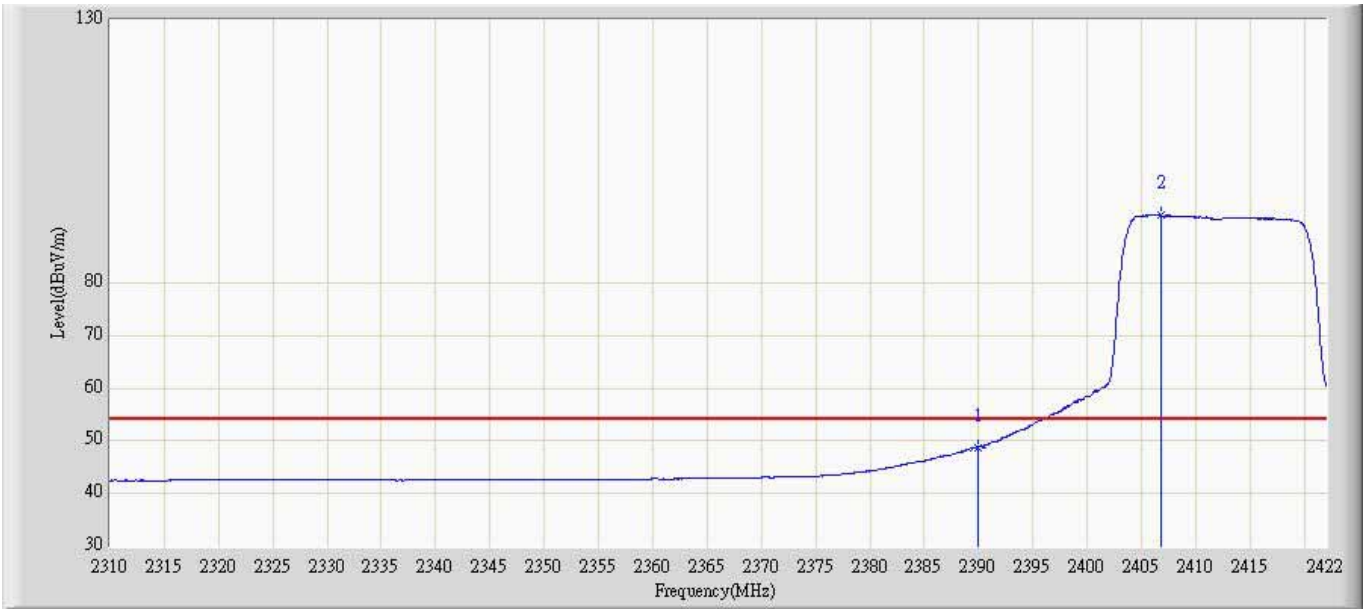
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.016	103.599	72.014	N/A	N/A	31.585	AV
2		2483.500	44.425	12.811	-9.575	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 010	



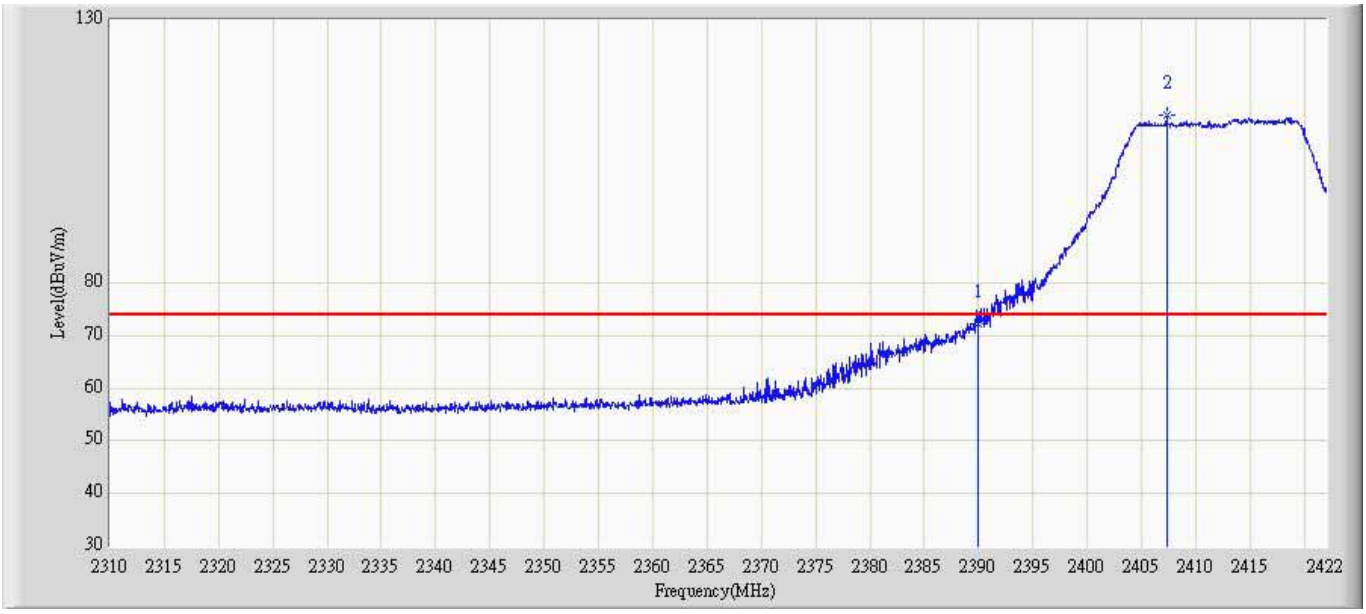
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	64.807	33.719	-9.193	74.000	31.088	PK
2	*	2418.360	102.738	71.449	N/A	N/A	31.289	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 010	



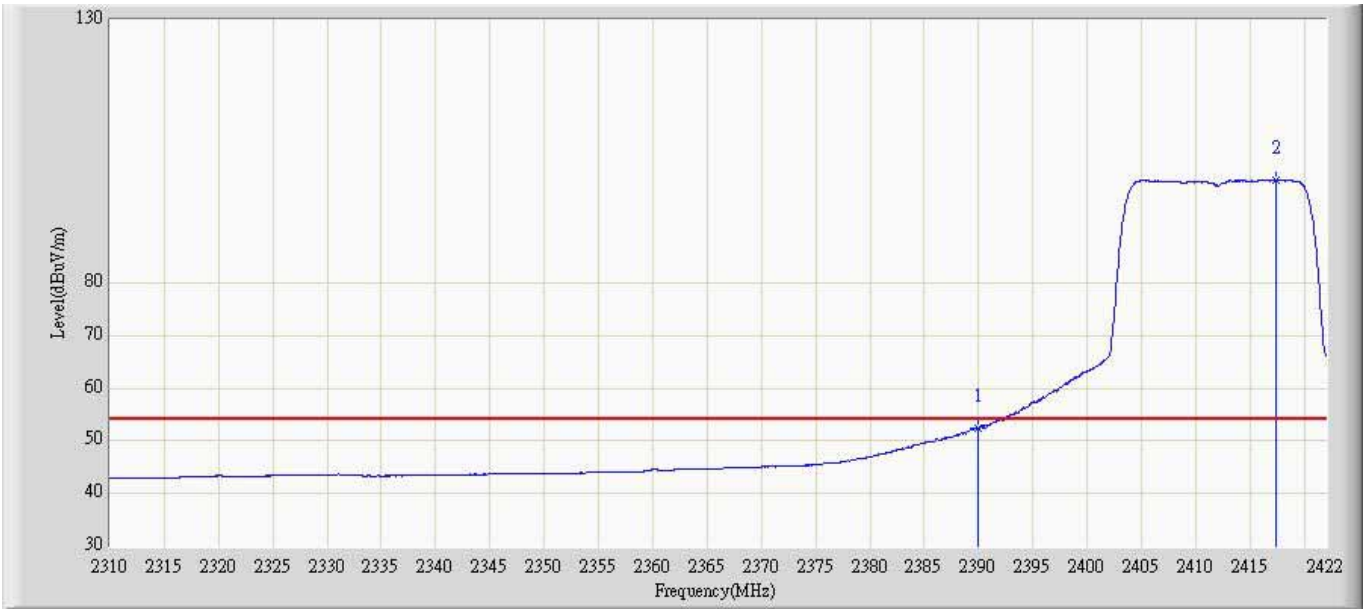
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.777	17.689	-5.223	54.000	31.088	AV
2	*	2406.880	92.815	61.623	N/A	N/A	31.192	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 010	



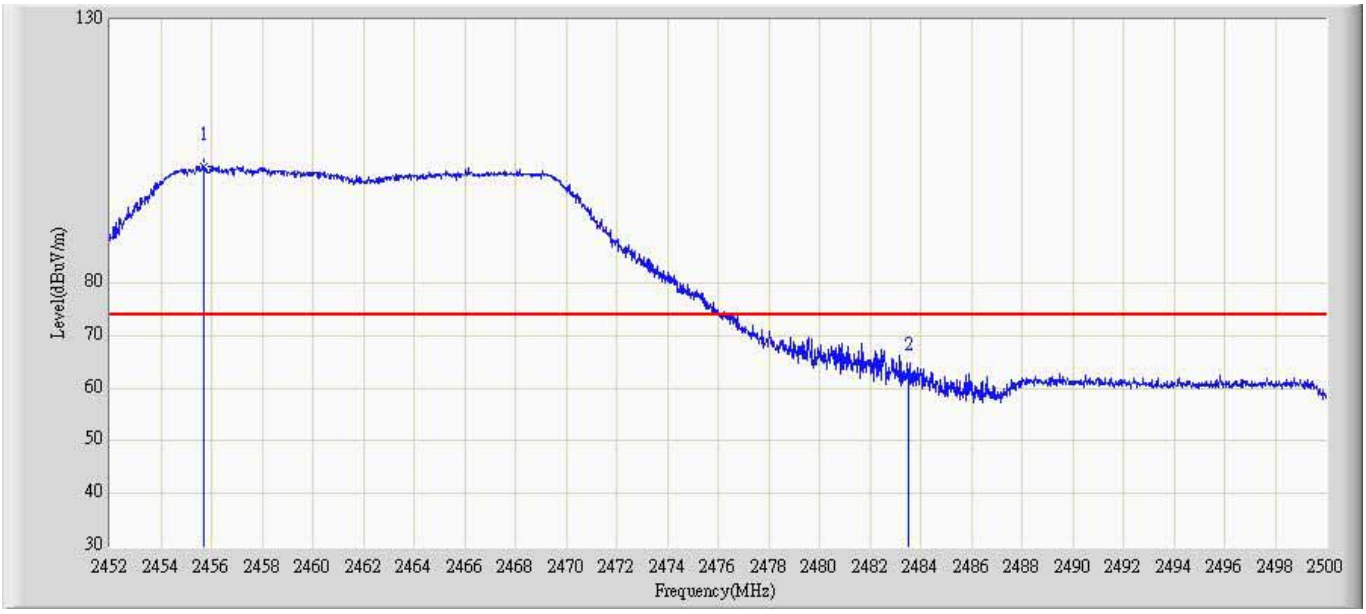
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	72.112	41.024	-1.888	74.000	31.088	PK
2	*	2407.328	111.789	80.594	N/A	N/A	31.195	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 010	



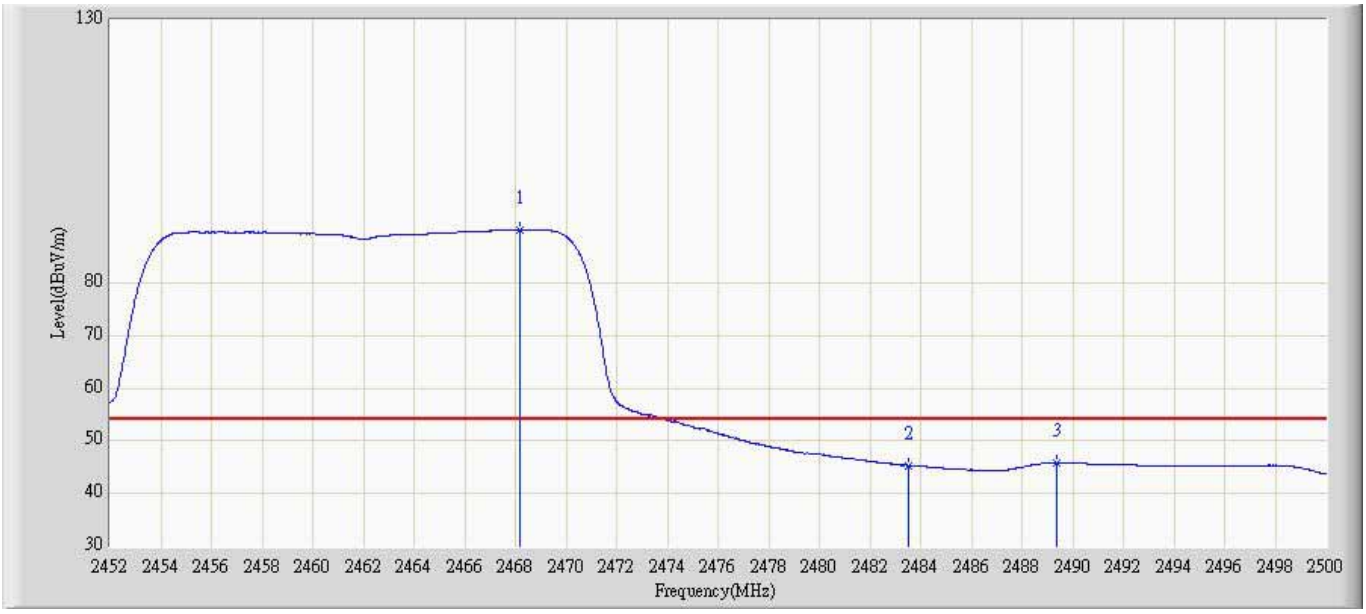
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.528	21.440	-1.472	54.000	31.088	AV
2	*	2417.408	99.588	68.308	N/A	N/A	31.280	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 010	



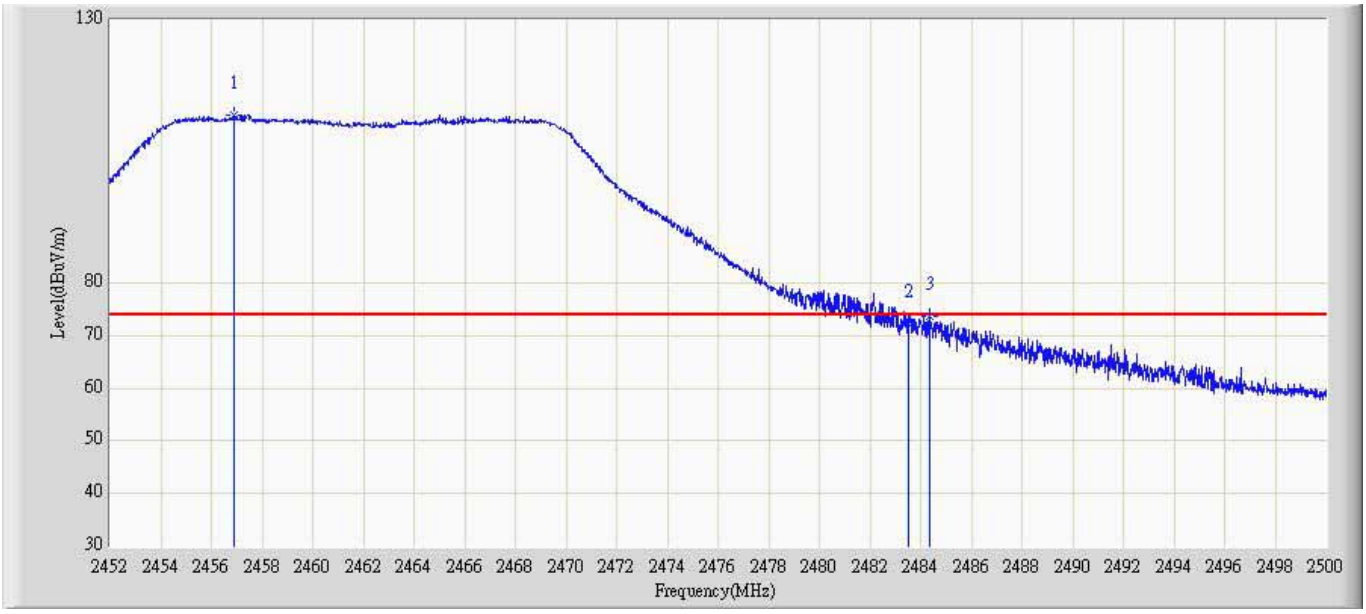
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.672	102.008	70.438	N/A	N/A	31.571	PK
2		2483.500	62.300	30.687	-11.700	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 010	



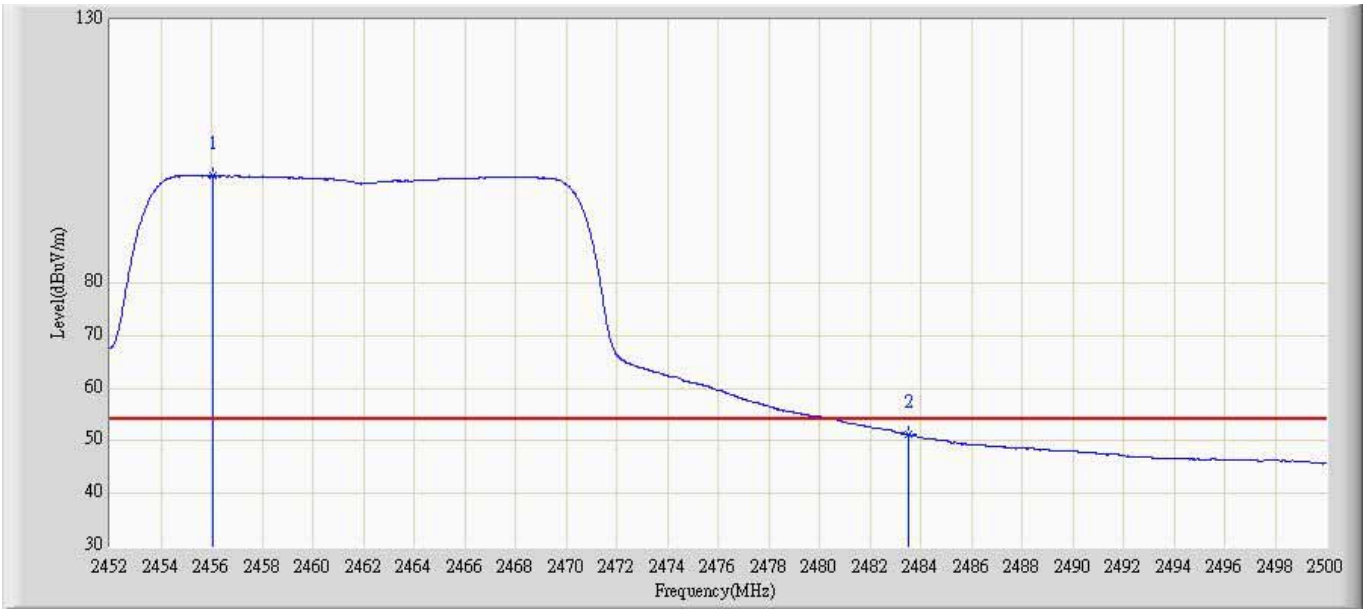
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.152	90.105	58.507	N/A	N/A	31.598	AV
2		2483.500	45.325	13.712	-8.675	54.000	31.613	AV
3		2489.392	45.777	14.158	-8.223	54.000	31.620	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 010	



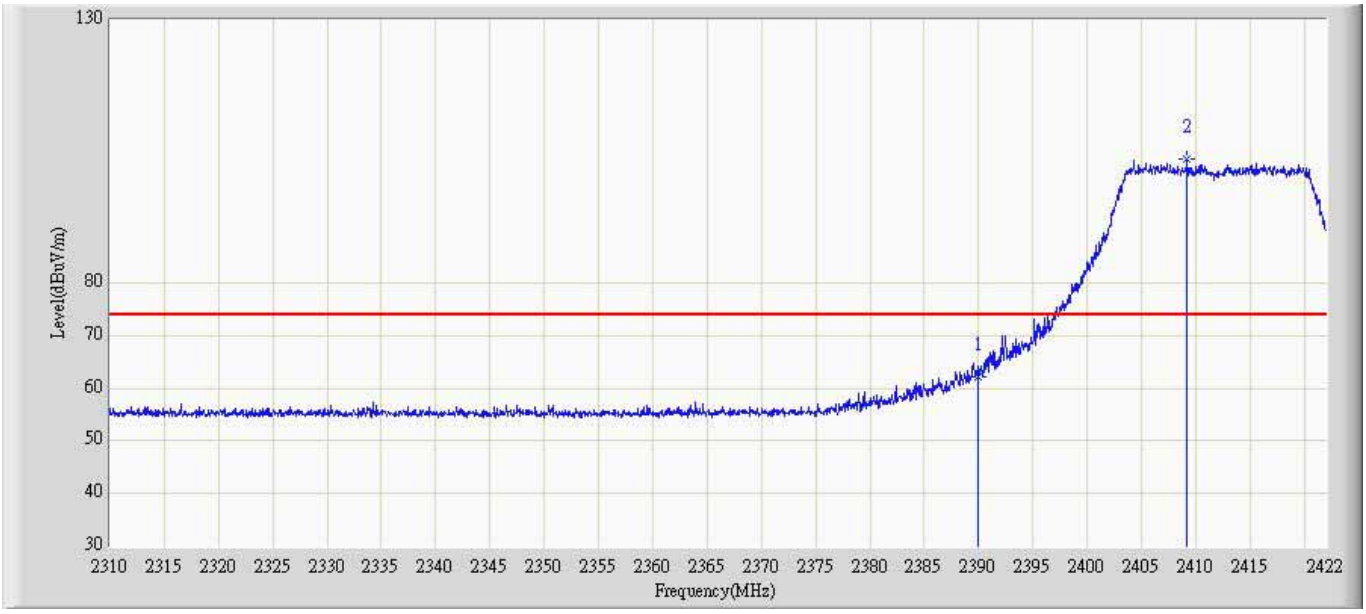
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.920	111.919	80.344	N/A	N/A	31.575	PK
2		2483.500	72.336	40.722	-1.664	74.000	31.613	PK
3		2484.376	73.659	42.045	-0.341	74.000	31.615	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 010	



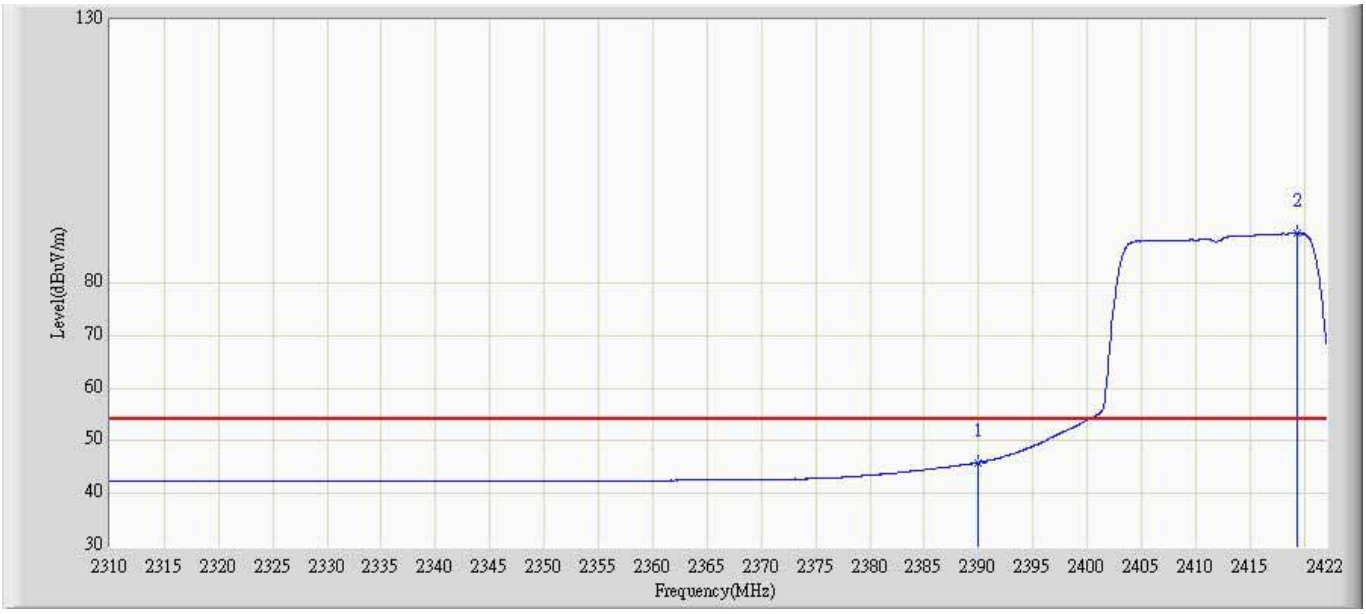
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.080	100.363	68.791	N/A	N/A	31.571	AV
2		2483.500	51.256	19.643	-2.744	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 010	



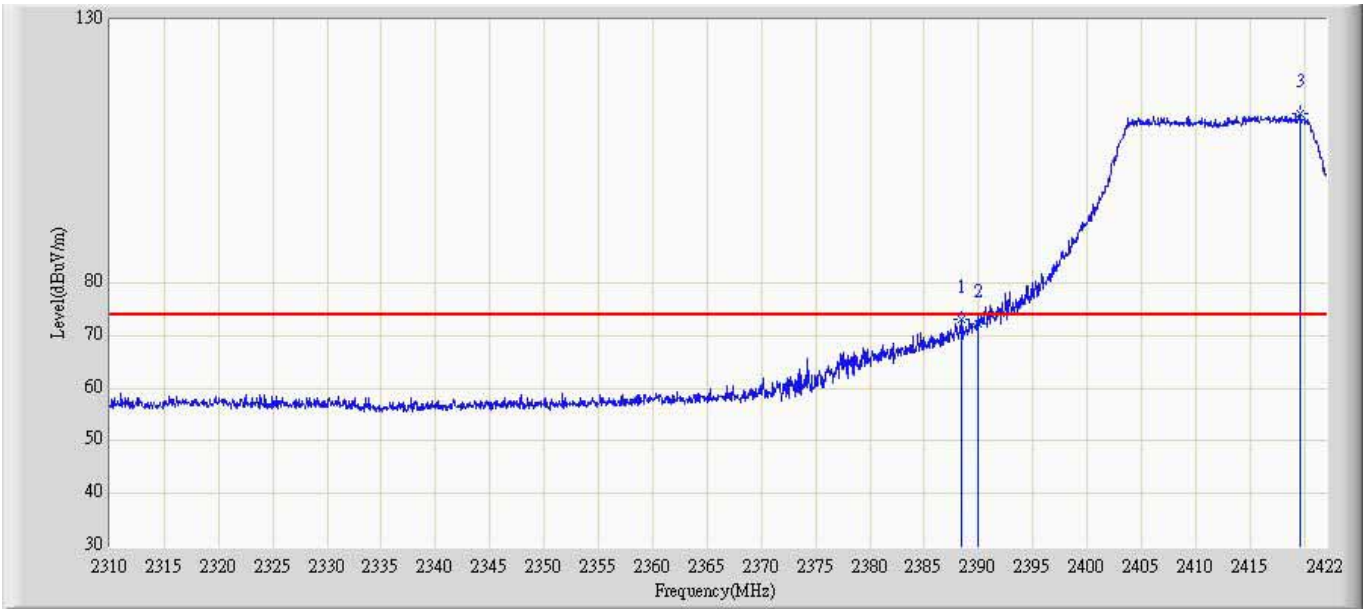
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.239	31.151	-11.761	74.000	31.088	PK
2	*	2409.232	103.461	72.252	N/A	N/A	31.208	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 010	



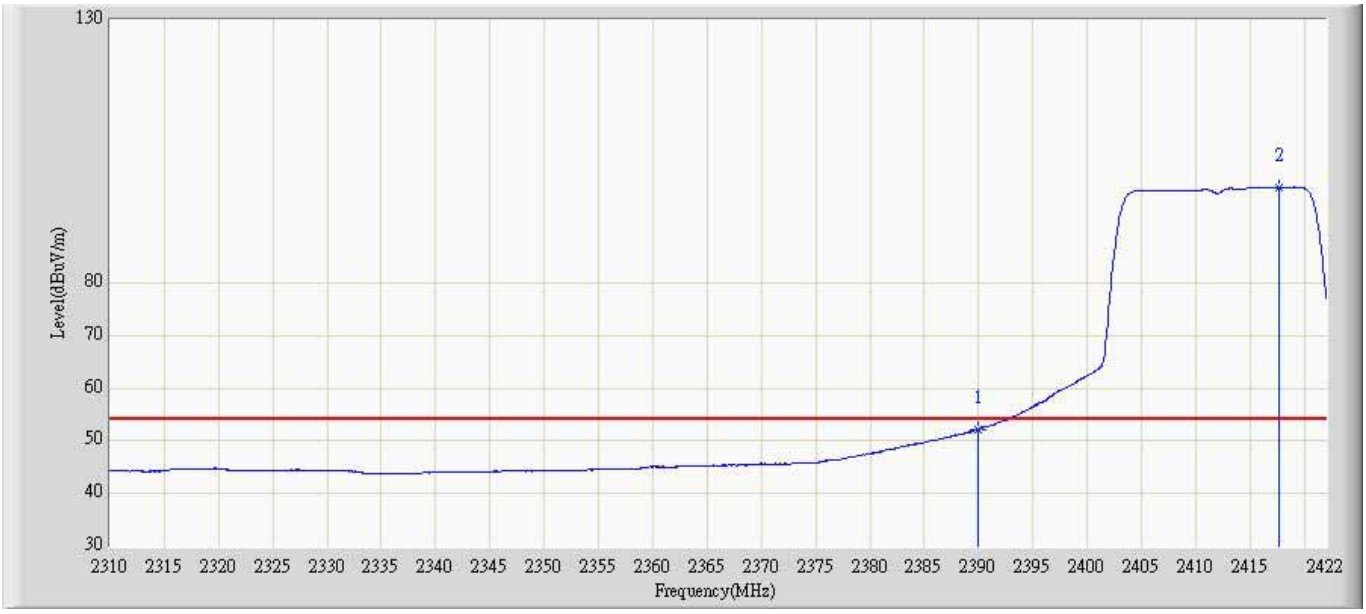
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.889	14.801	-8.111	54.000	31.088	AV
2	*	2419.368	89.473	58.175	N/A	N/A	31.298	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 010	



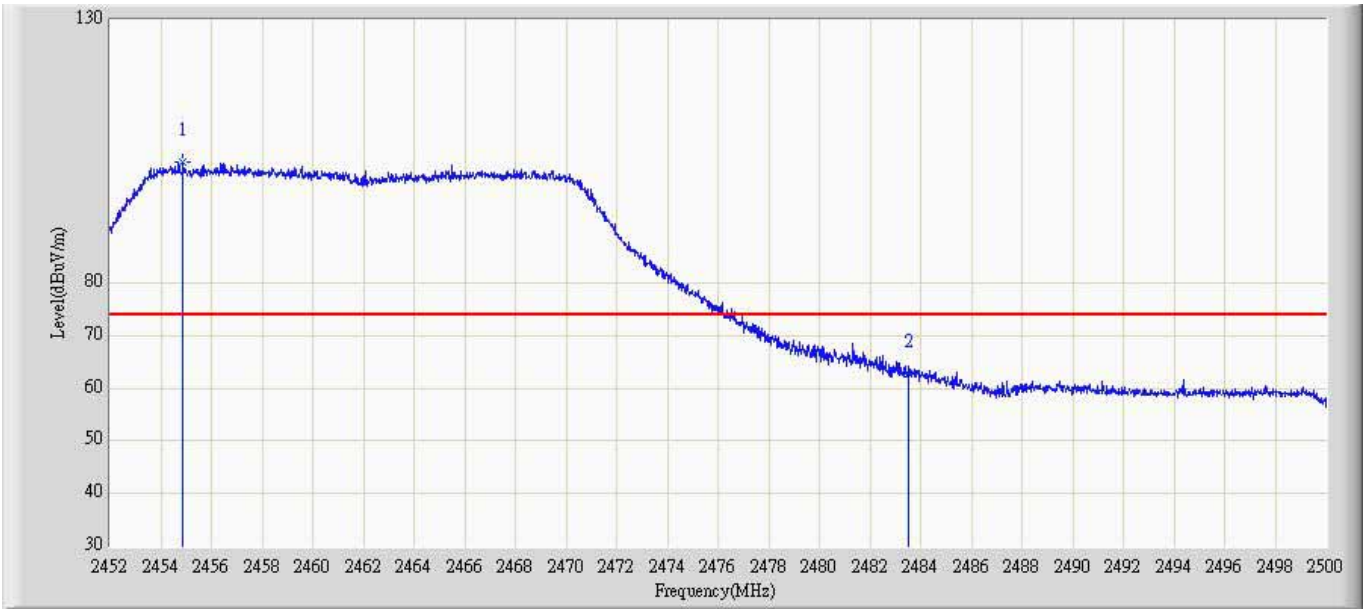
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.456	73.177	42.094	-0.823	74.000	31.083	PK
2		2390.000	72.352	41.264	-1.648	74.000	31.088	PK
3	*	2419.592	112.162	80.862	N/A	N/A	31.299	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 010	



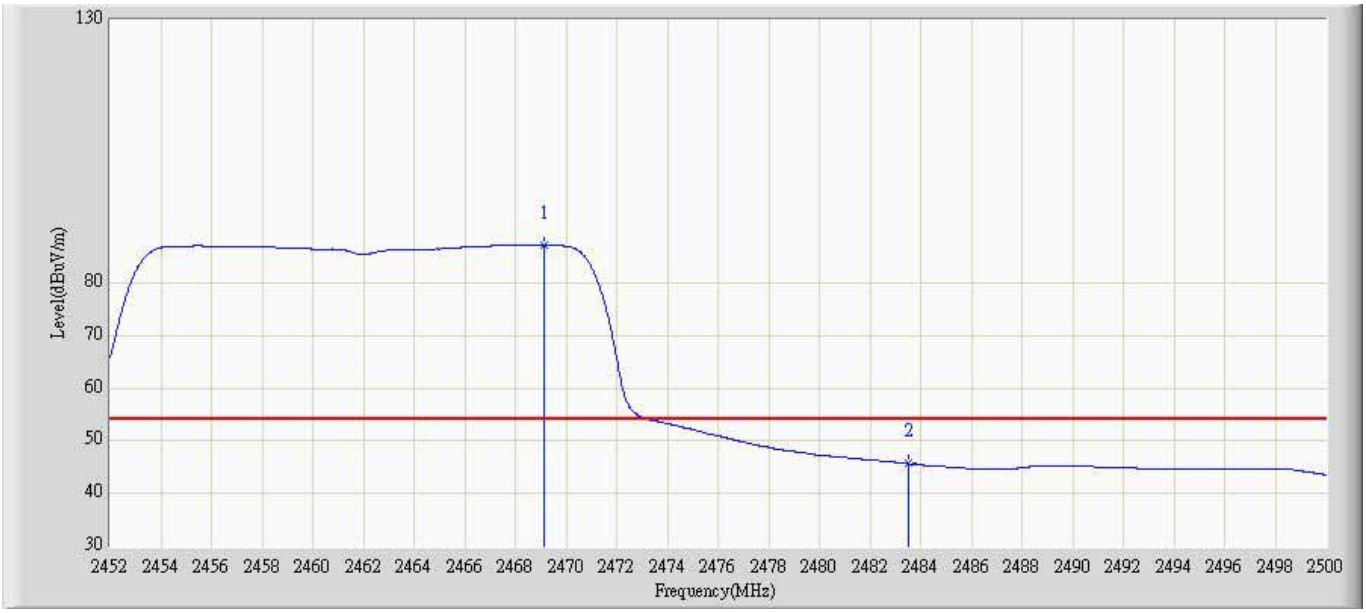
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.182	21.094	-1.818	54.000	31.088	AV
2	*	2417.632	98.193	66.911	N/A	N/A	31.282	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 010	



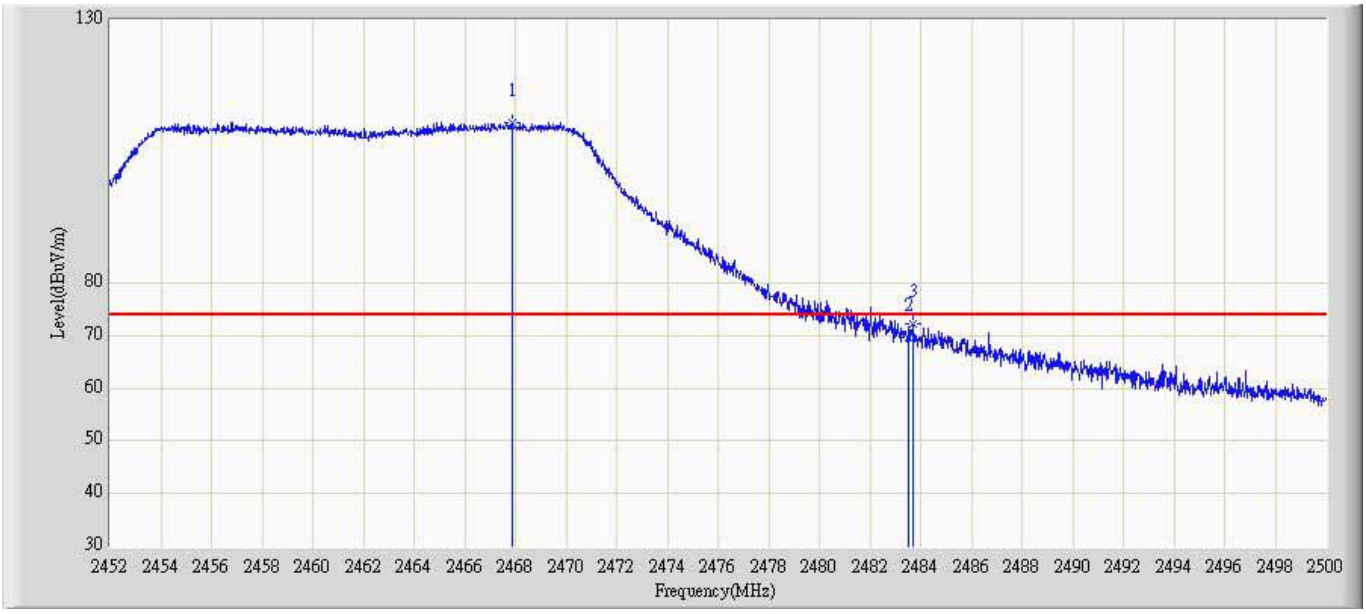
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.880	102.876	71.308	N/A	N/A	31.568	PK
2		2483.500	62.691	31.077	-11.309	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 010	



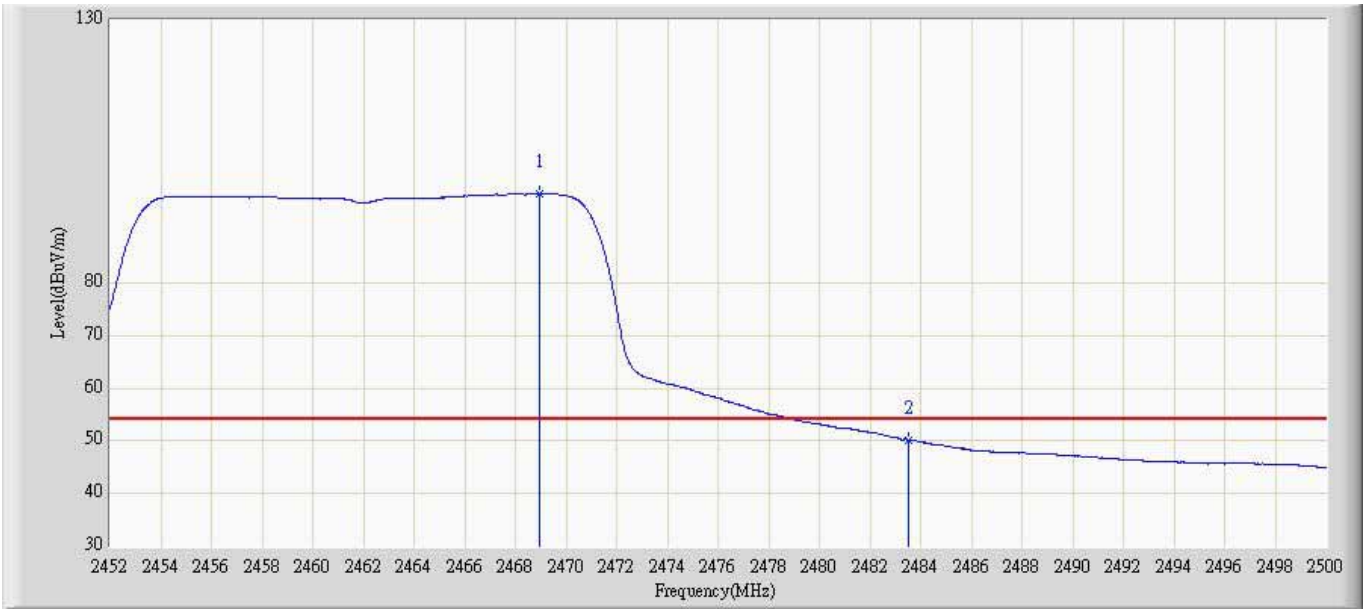
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.160	87.303	55.704	N/A	N/A	31.599	AV
2		2483.500	45.681	14.068	-8.319	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 010	



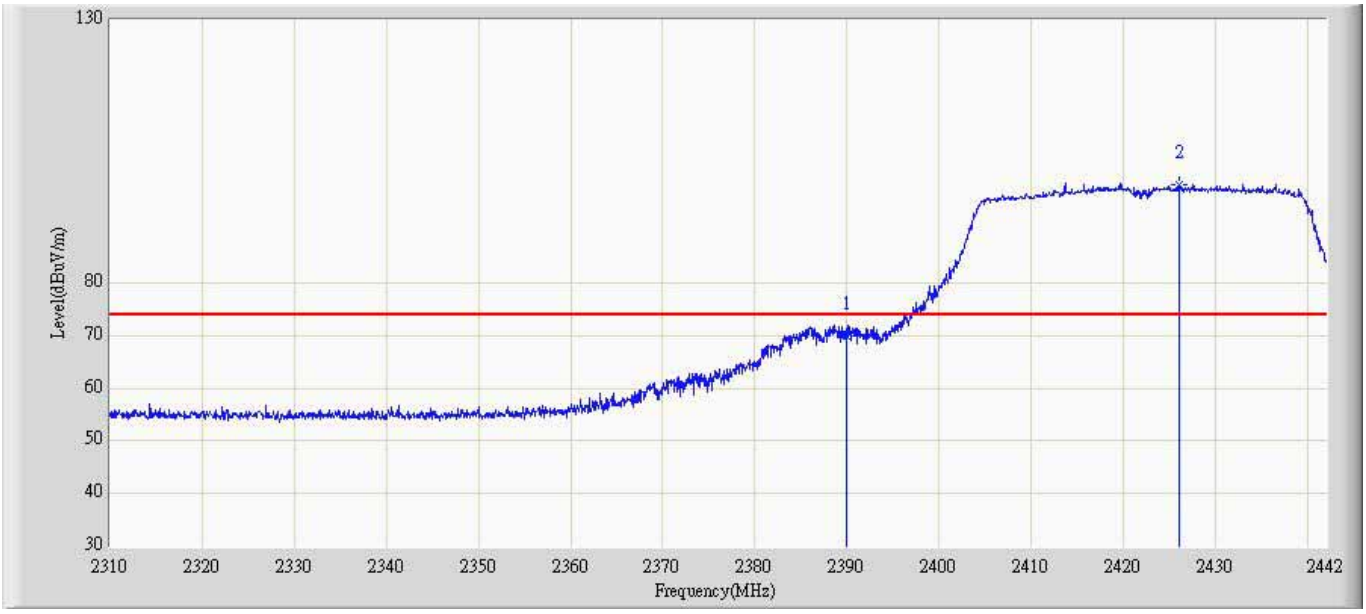
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.888	110.502	78.904	N/A	N/A	31.598	PK
2		2483.500	69.645	38.031	-4.355	74.000	31.613	PK
3		2483.680	72.147	40.533	-1.853	74.000	31.614	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2462MHz by 802.11n20MHz Ant 010	



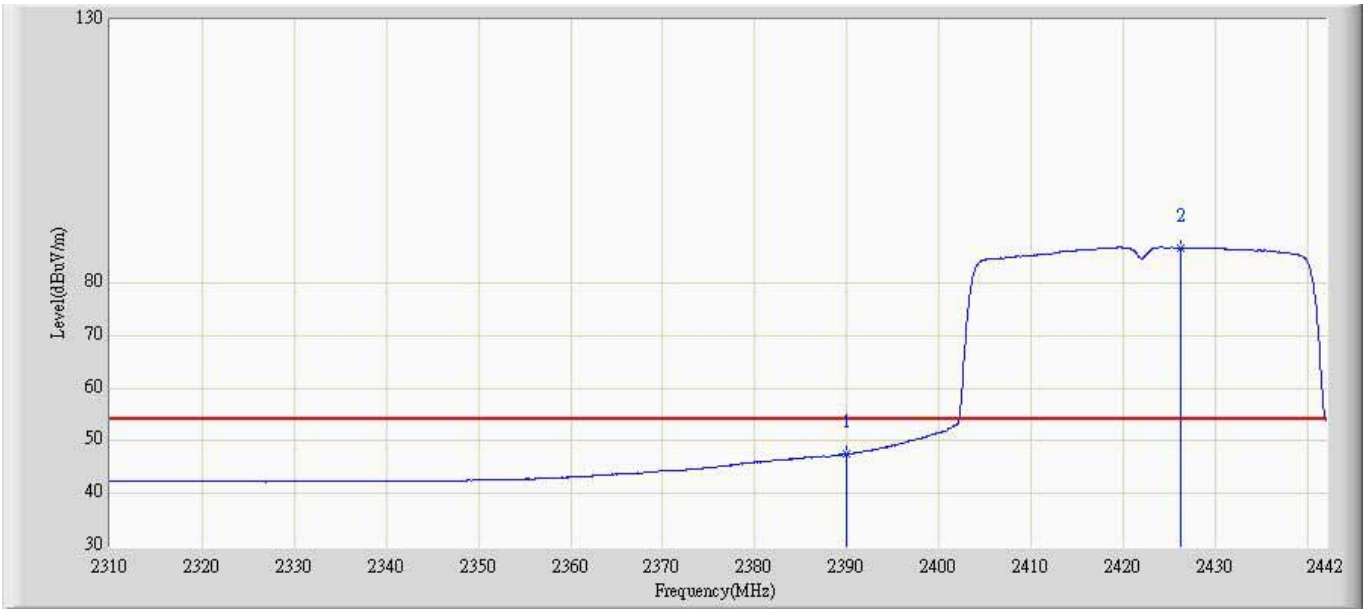
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.944	96.862	65.263	N/A	N/A	31.599	AV
2		2483.500	50.199	18.586	-3.801	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 010	



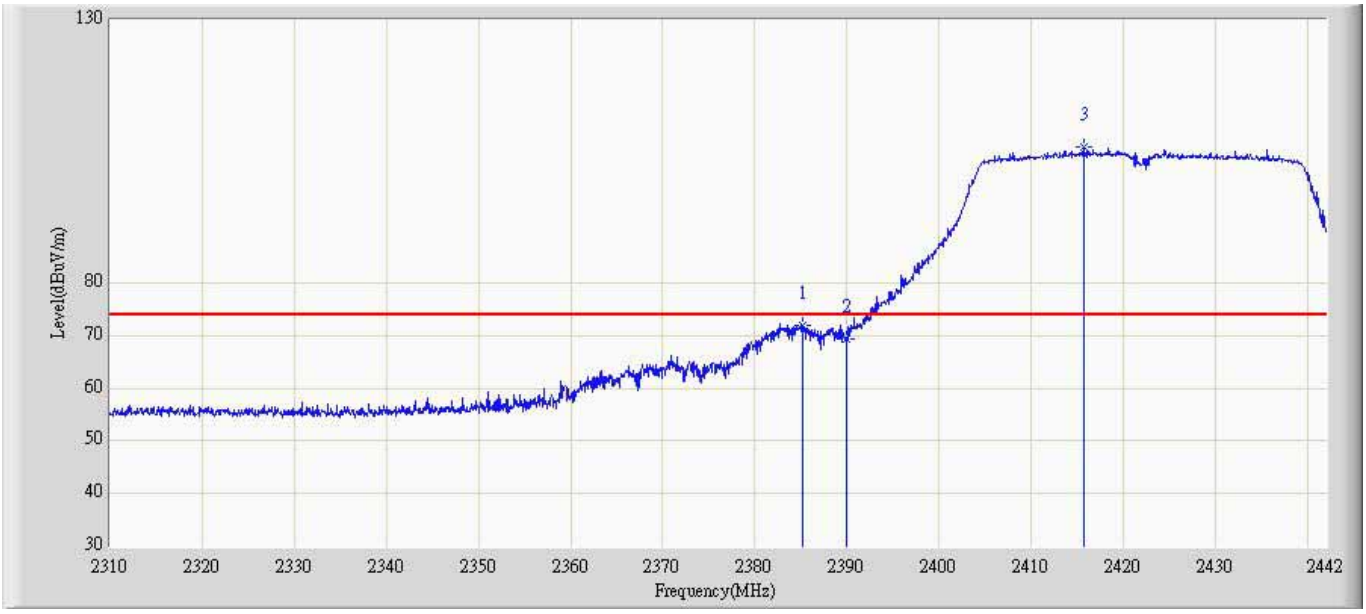
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	69.888	38.800	-4.112	74.000	31.088	PK
2	*	2426.094	98.697	67.337	N/A	N/A	31.360	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 010	



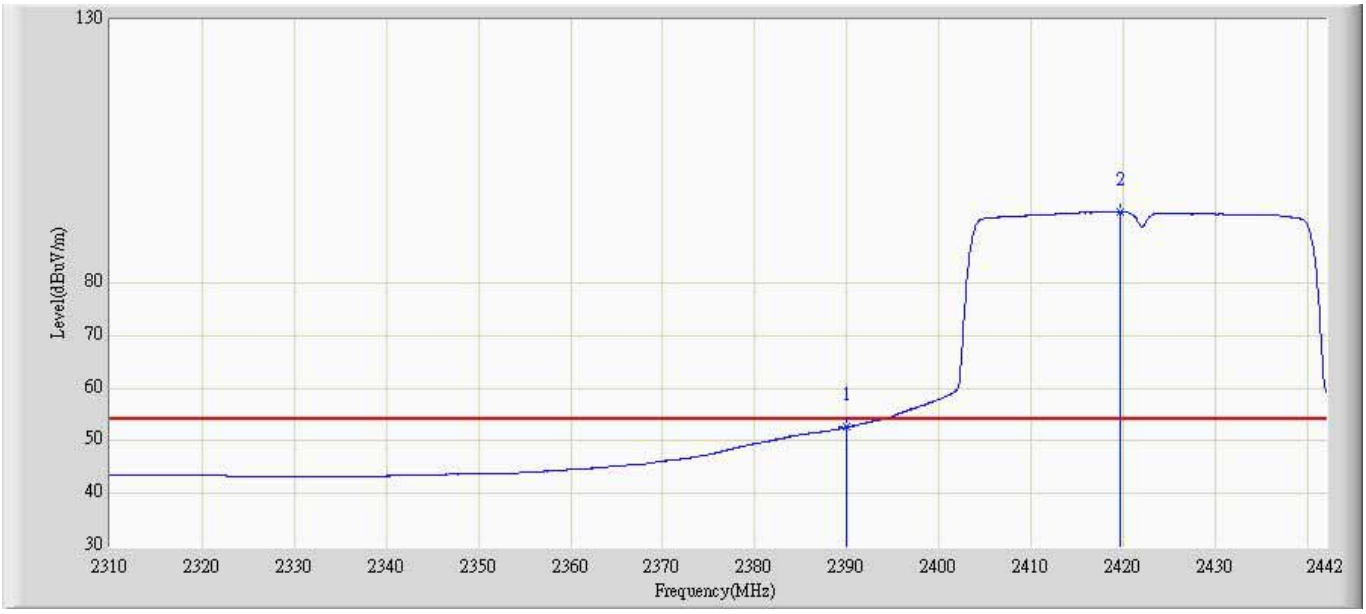
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.589	16.501	-6.411	54.000	31.088	AV
2	*	2426.160	86.691	55.331	N/A	N/A	31.360	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 010	



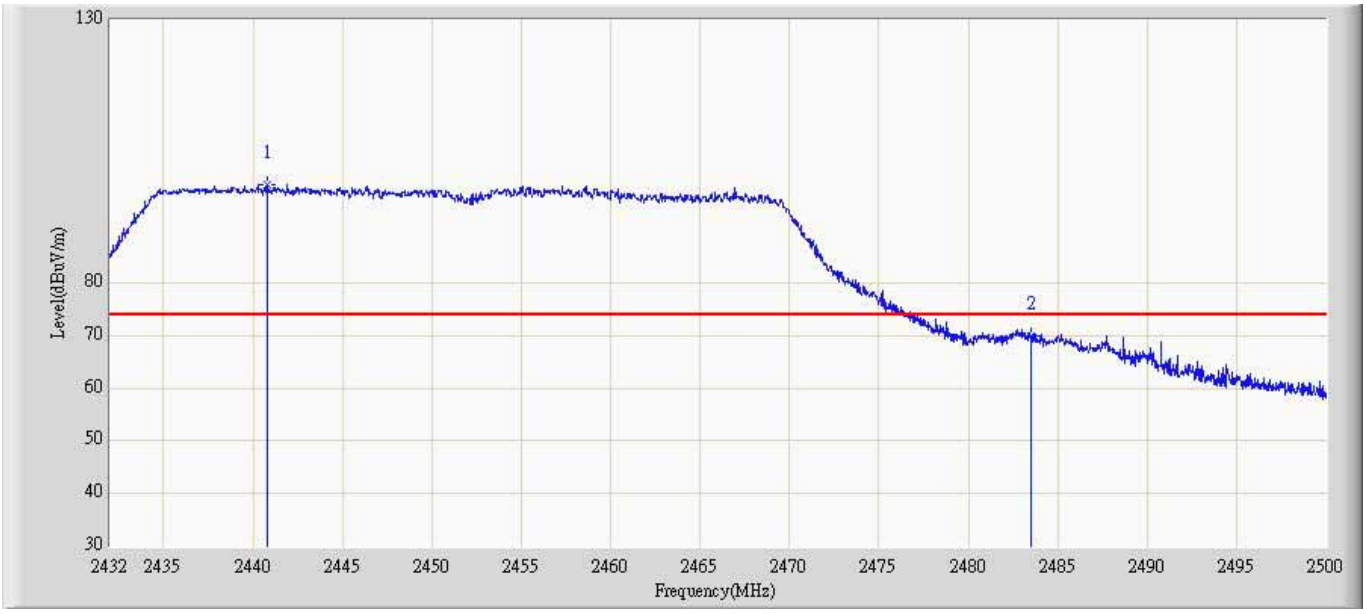
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.240	71.917	40.844	-2.083	74.000	31.073	PK
2		2390.000	69.348	38.260	-4.652	74.000	31.088	PK
3	*	2415.732	105.732	74.468	N/A	N/A	31.265	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 14:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2422MHz by 802.11n40MHz Ant 010	



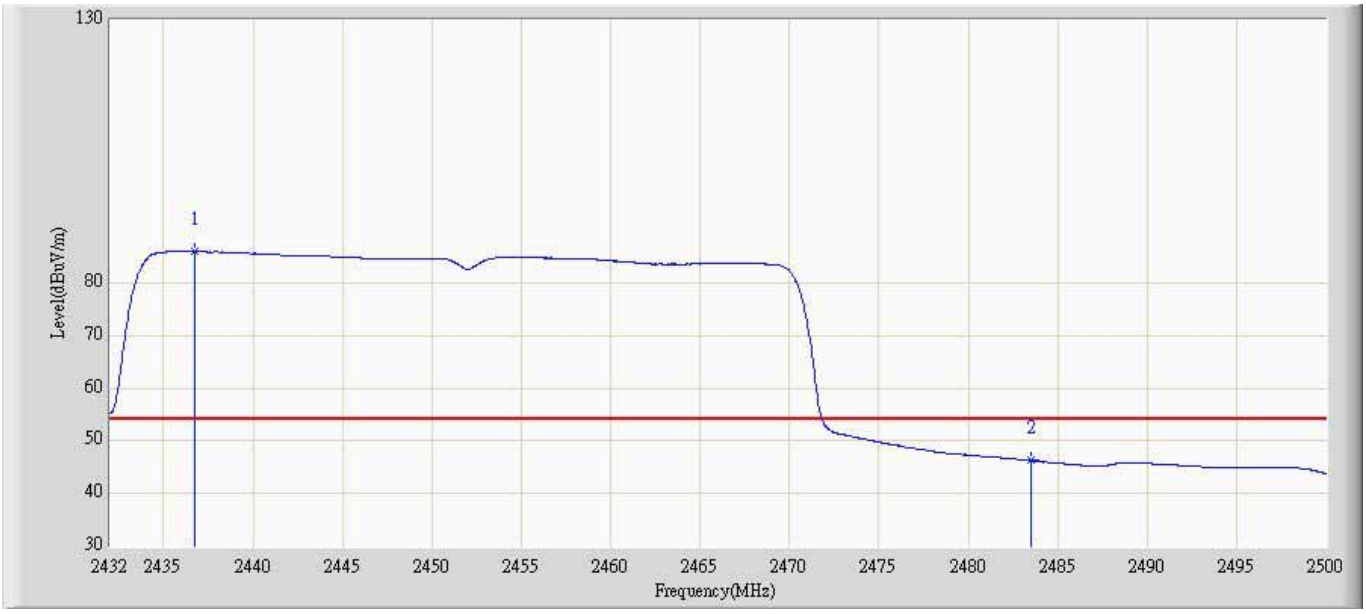
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.590	21.502	-1.410	54.000	31.088	AV
2	*	2419.626	93.519	62.219	N/A	N/A	31.300	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 15:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 010	



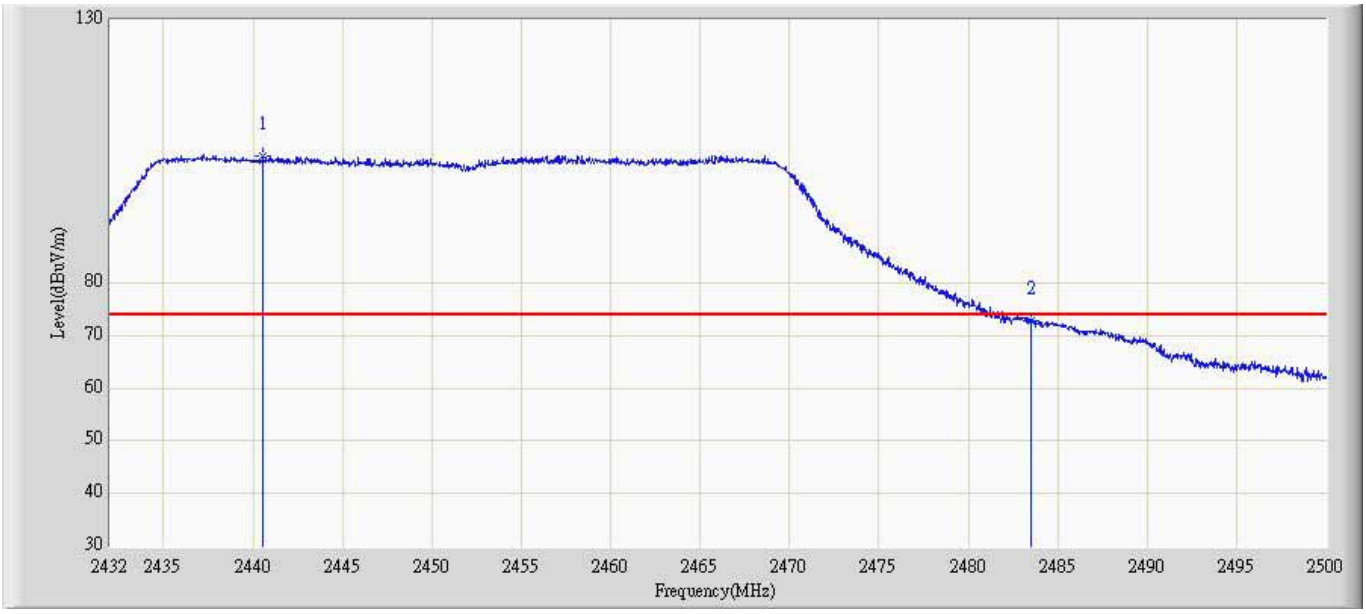
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2440.772	98.643	67.148	N/A	N/A	31.495	PK
2		2483.500	69.890	38.276	-4.110	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 15:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 010	



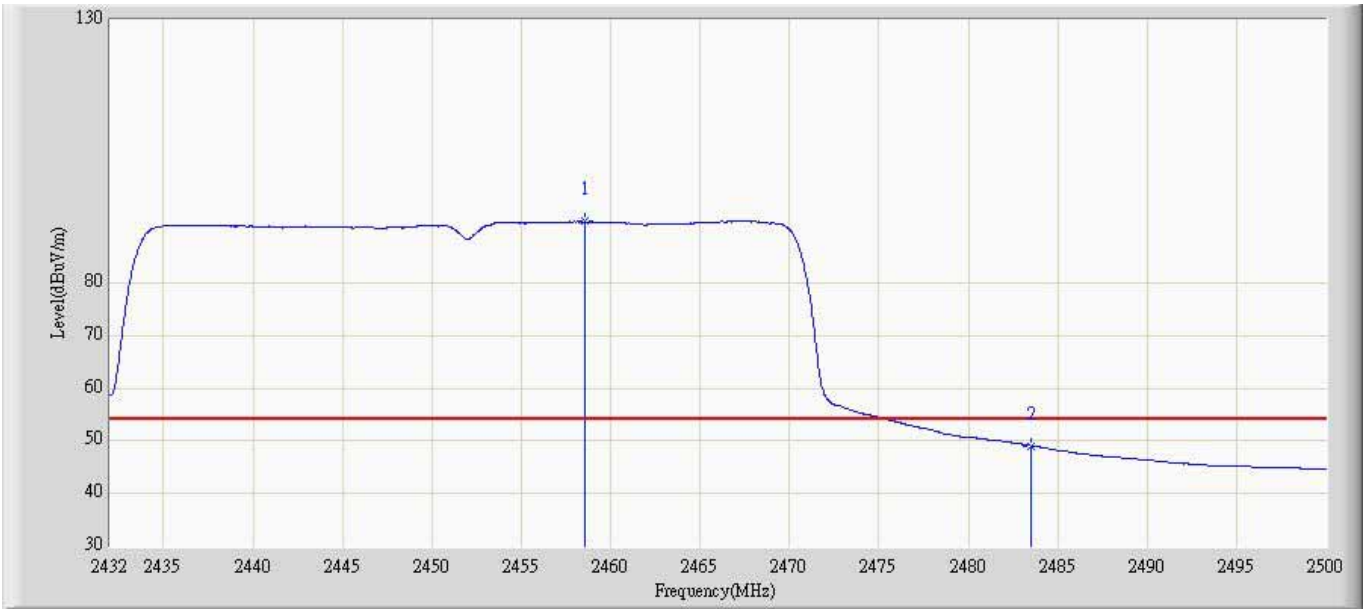
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2436.760	85.973	54.515	N/A	N/A	31.457	AV
2		2483.500	46.288	14.675	-7.712	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 15:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 010	



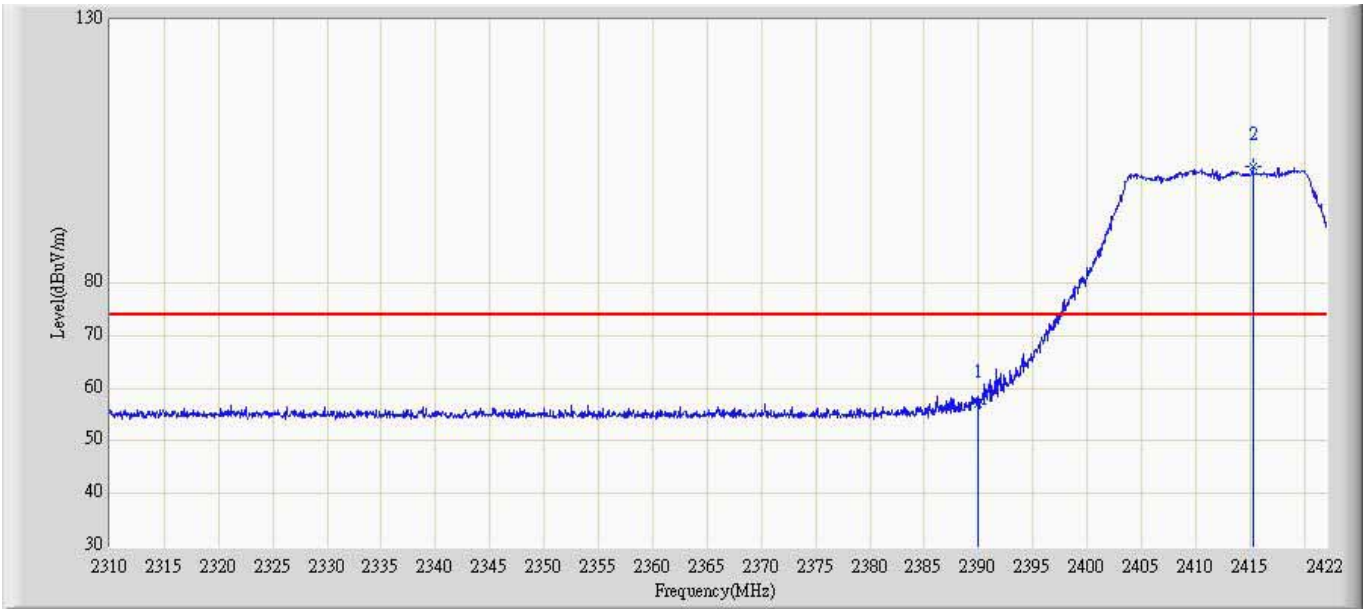
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2440.534	104.080	72.587	N/A	N/A	31.493	PK
2		2483.500	72.695	41.081	-1.305	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/05 - 15:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4: Transmit at channel 2452MHz by 802.11n40MHz Ant 010	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.554	91.664	60.084	N/A	N/A	31.580	AV
2		2483.500	49.090	17.477	-4.910	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz) Ant 110	

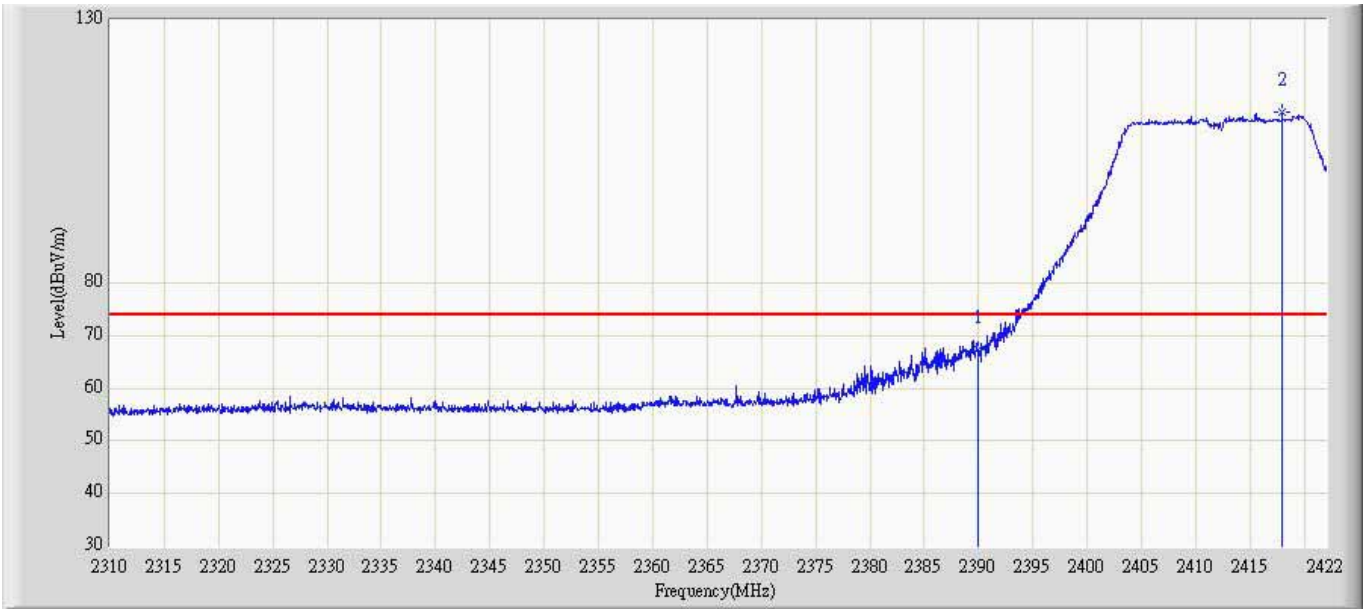


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.085	26.370	-16.915	74.000	30.715	PK
2	*	2415.280	102.165	71.452	N/A	N/A	30.712	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz) Ant 110	

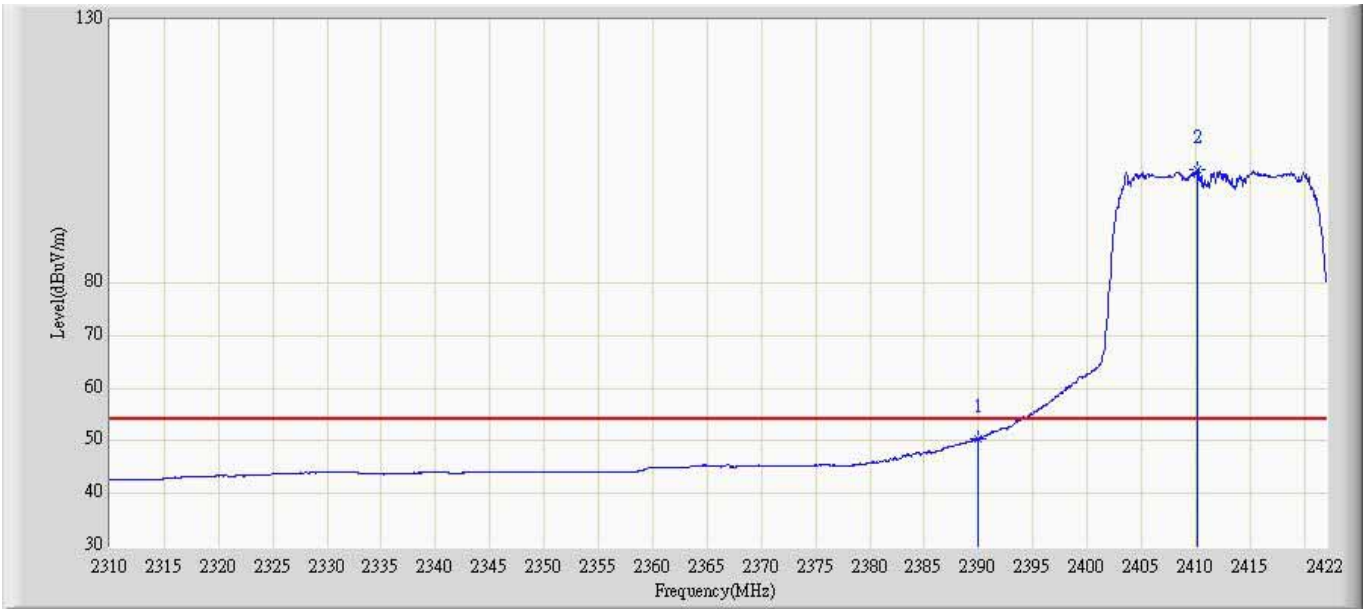
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.793	13.078	-10.207	54.000	30.715	AV
2	*	2415.784	89.545	58.832	N/A	N/A	30.713	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz) Ant 110	



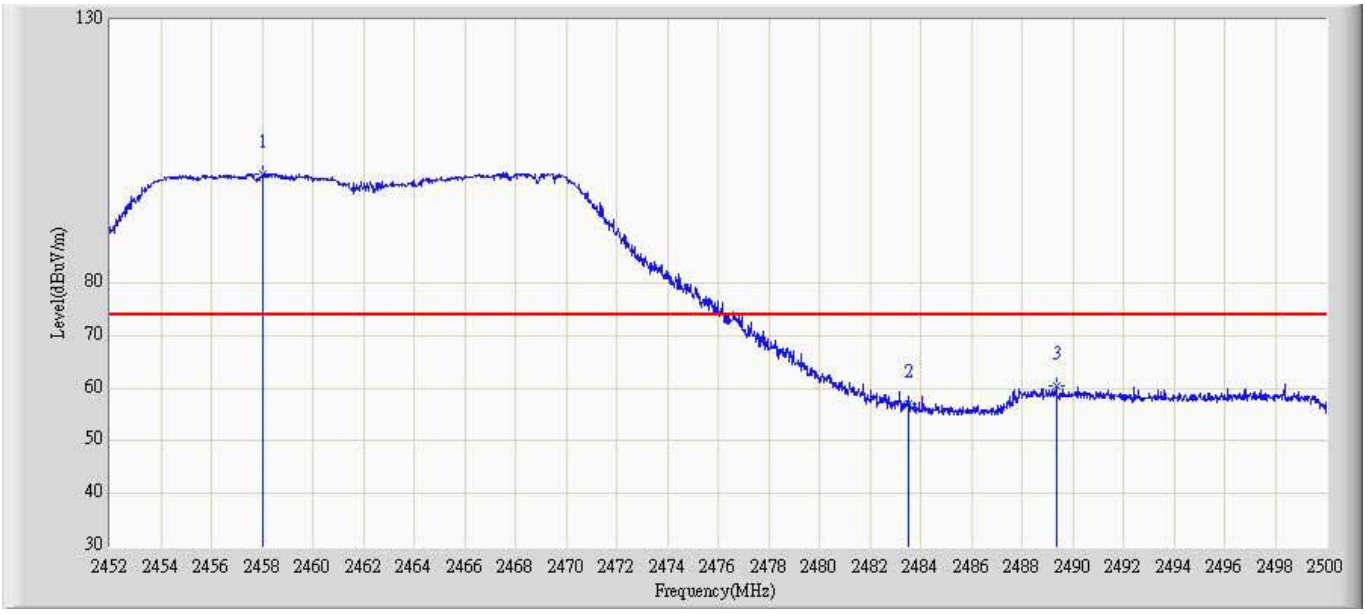
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.371	36.656	-6.629	74.000	30.715	PK
2	*	2417.968	112.517	81.803	N/A	N/A	30.714	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz) Ant 110	



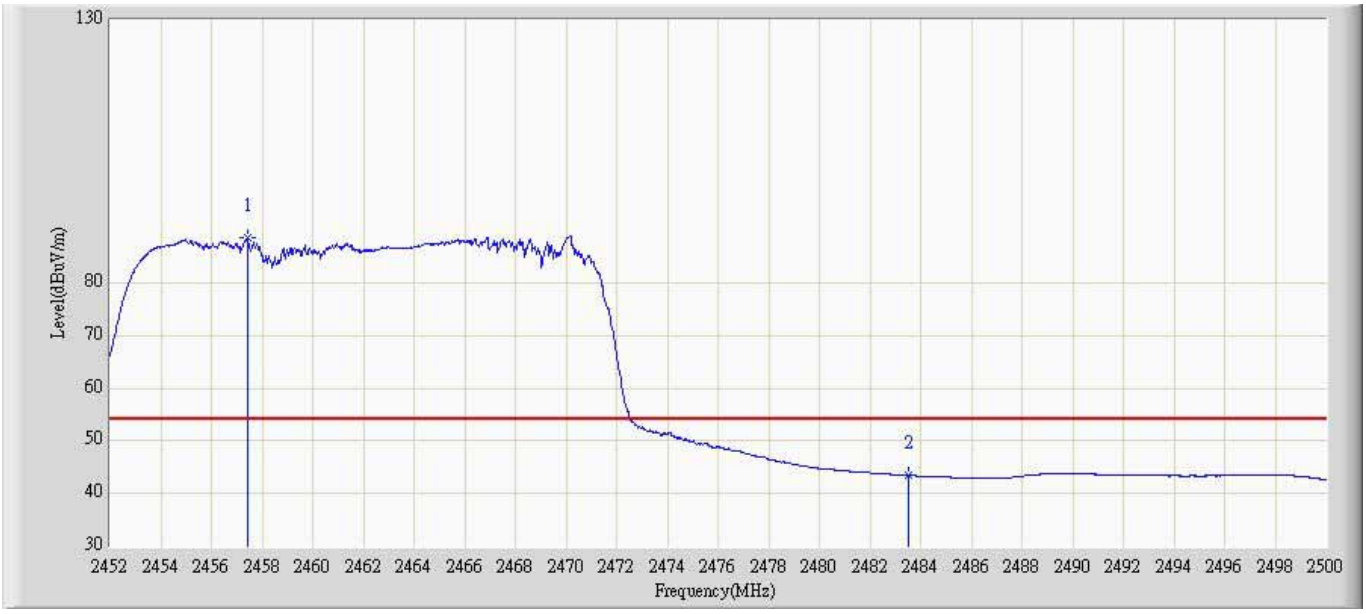
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.460	19.745	-3.540	54.000	30.715	AV
2	*	2410.184	101.620	70.910	N/A	N/A	30.710	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz) Ant 110	



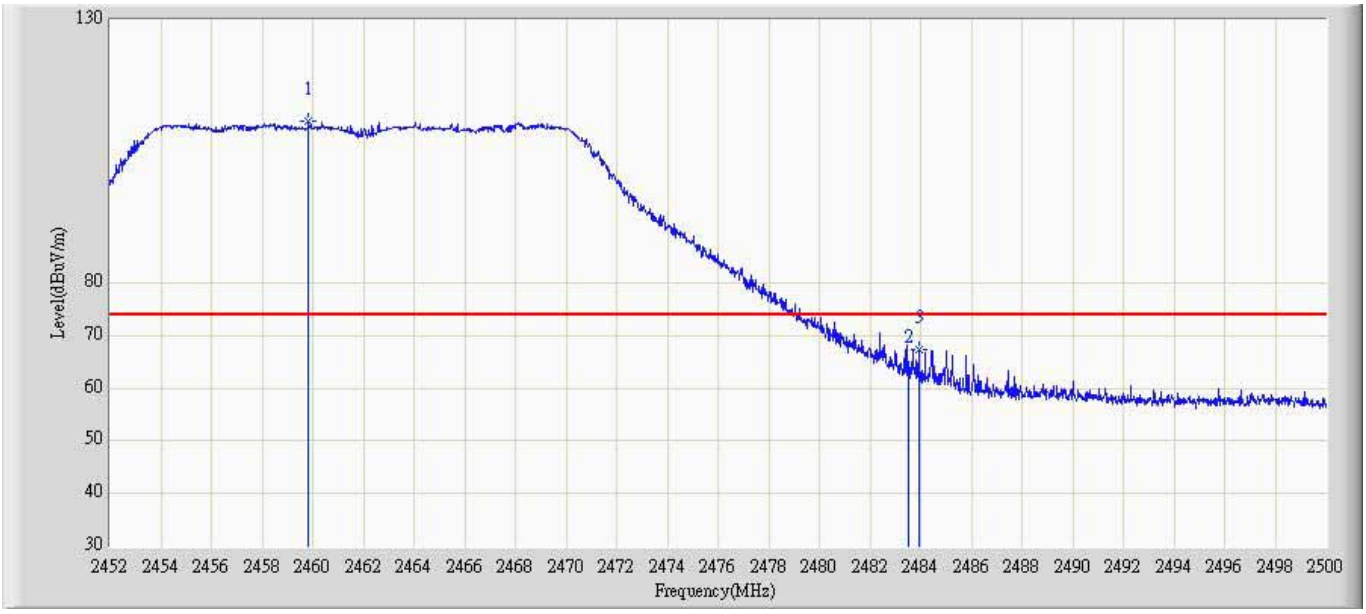
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.000	100.781	70.053	N/A	N/A	30.728	PK
2		2483.500	57.092	26.362	-16.908	74.000	30.730	PK
3		2489.344	60.508	29.778	-13.492	74.000	30.730	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz) Ant 110	



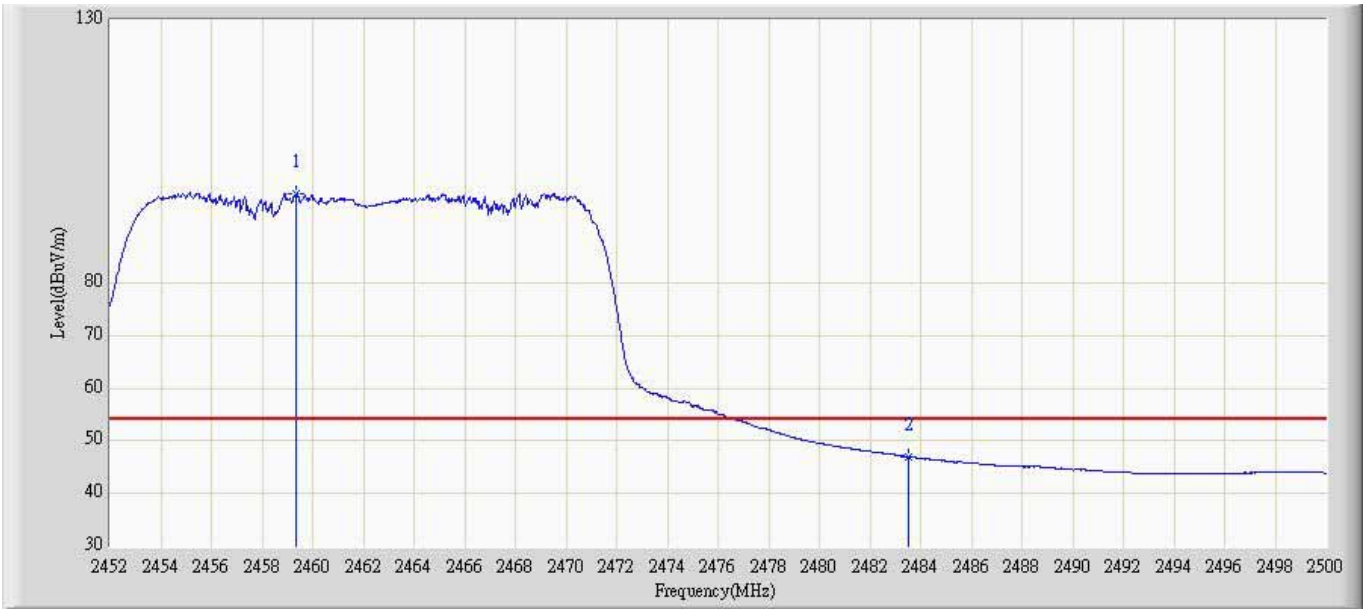
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.448	88.507	57.780	N/A	N/A	30.727	AV
2		2483.500	43.442	12.712	-10.558	54.000	30.730	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz) Ant 110	



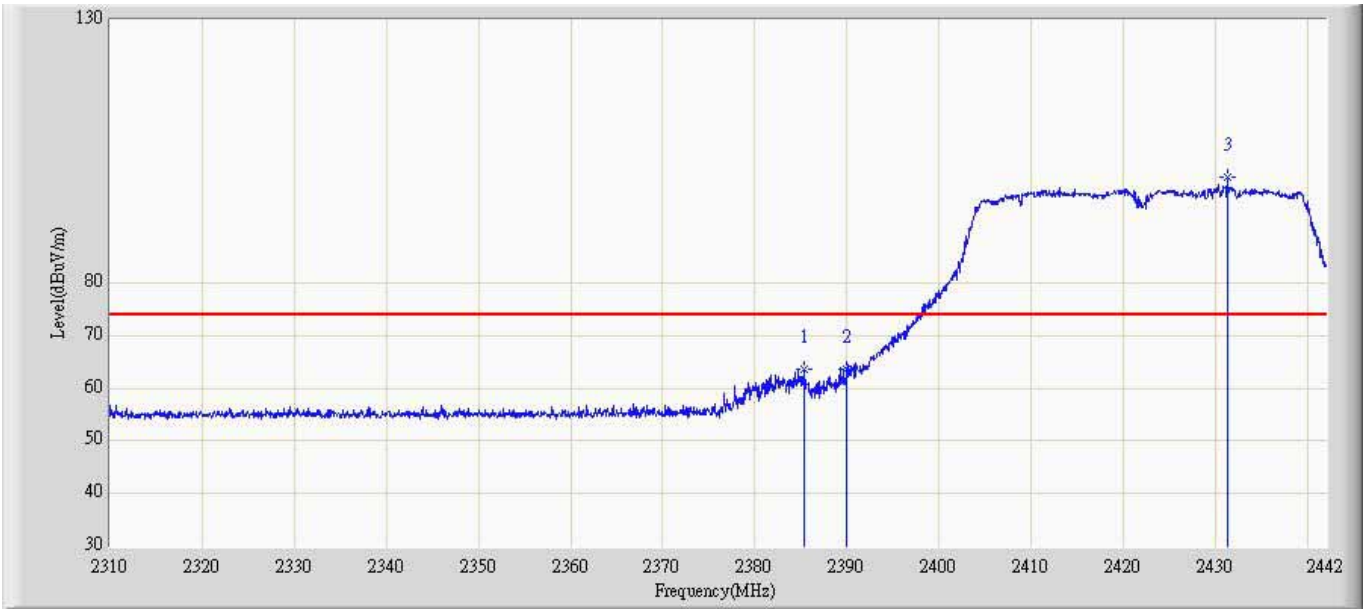
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.824	110.781	80.052	N/A	N/A	30.729	PK
2		2483.500	63.622	32.892	-10.378	74.000	30.730	PK
3		2483.920	67.227	36.497	-6.773	74.000	30.730	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 17:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz) Ant 110	



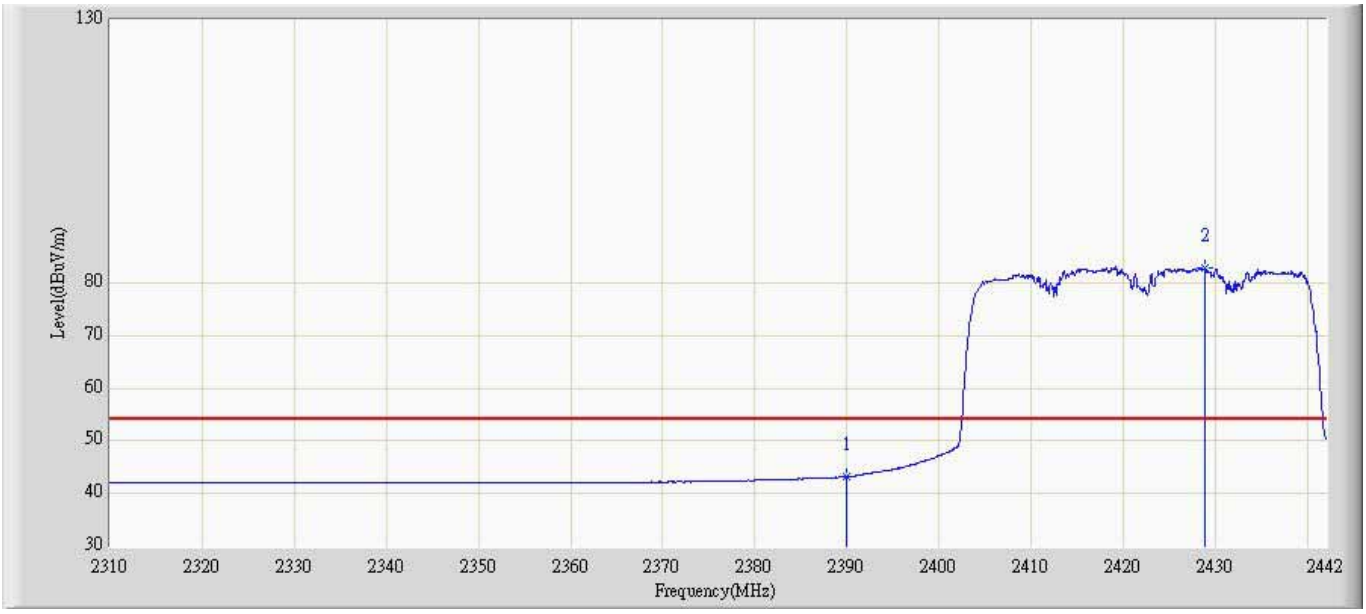
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.368	96.992	66.264	N/A	N/A	30.728	AV
2		2483.500	47.000	16.270	-7.000	54.000	30.730	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 18:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz) Ant 110	



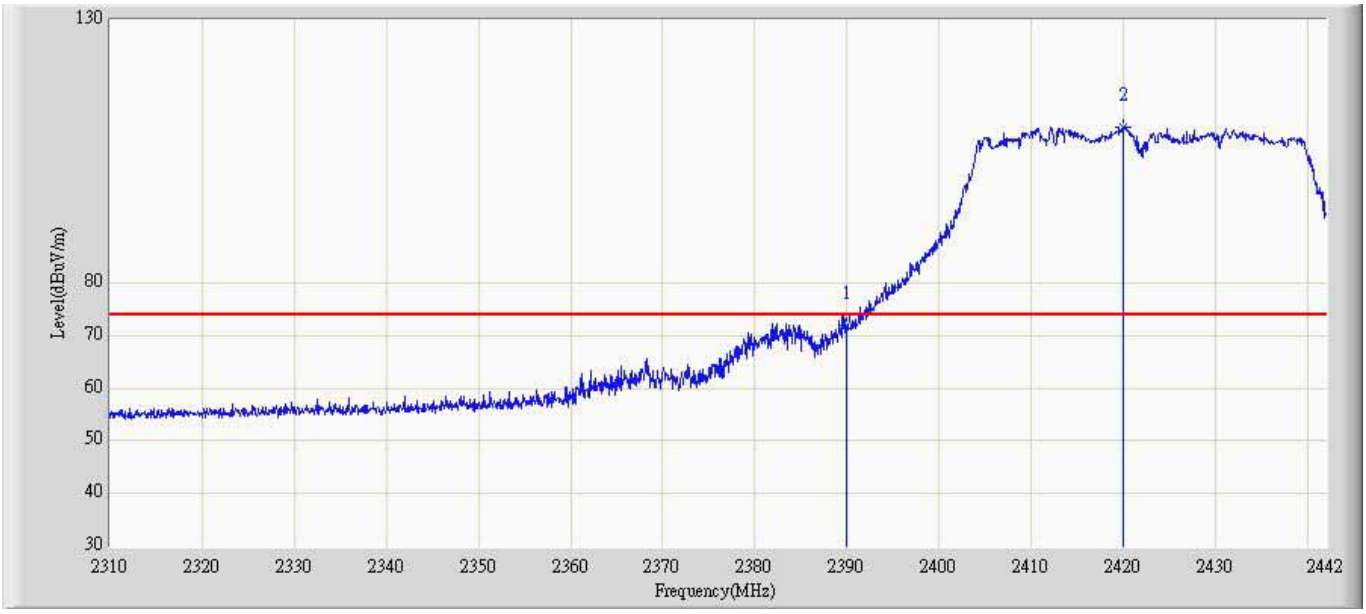
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.438	63.544	32.824	-10.456	74.000	30.720	PK
2		2390.000	63.592	32.877	-10.408	74.000	30.715	PK
3	*	2431.308	99.990	69.270	N/A	N/A	30.720	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 18:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz) Ant 110	



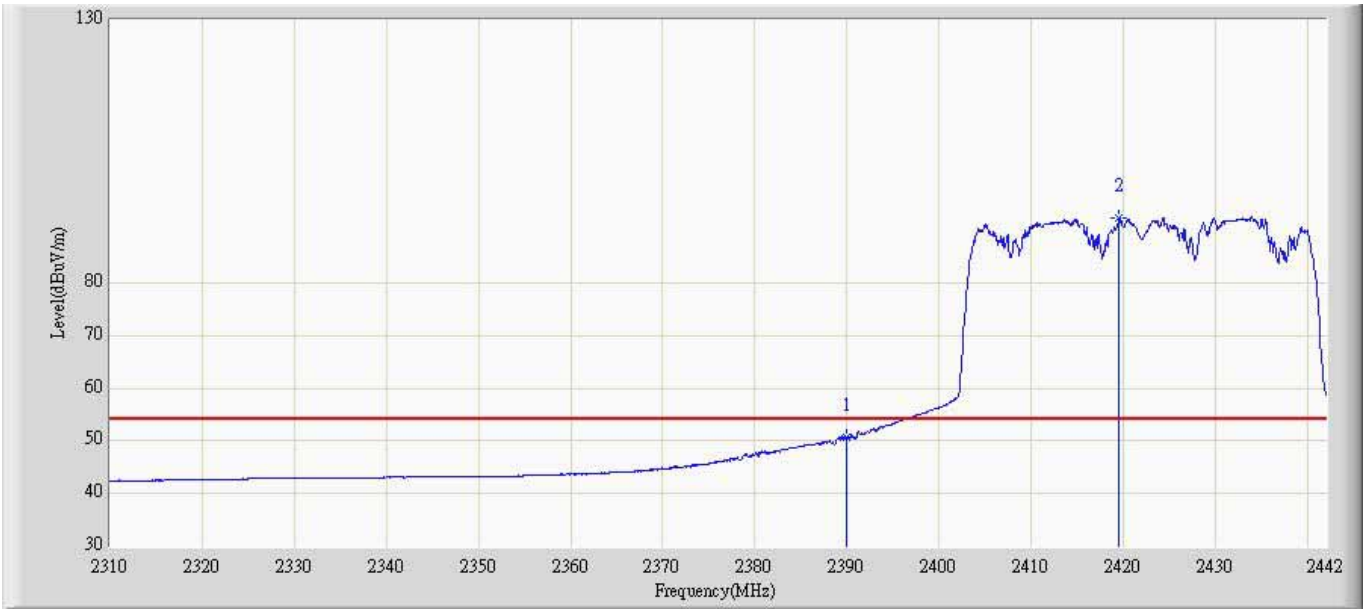
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.253	12.538	-10.747	54.000	30.715	AV
2	*	2428.866	82.981	52.261	N/A	N/A	30.720	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz) Ant 110	



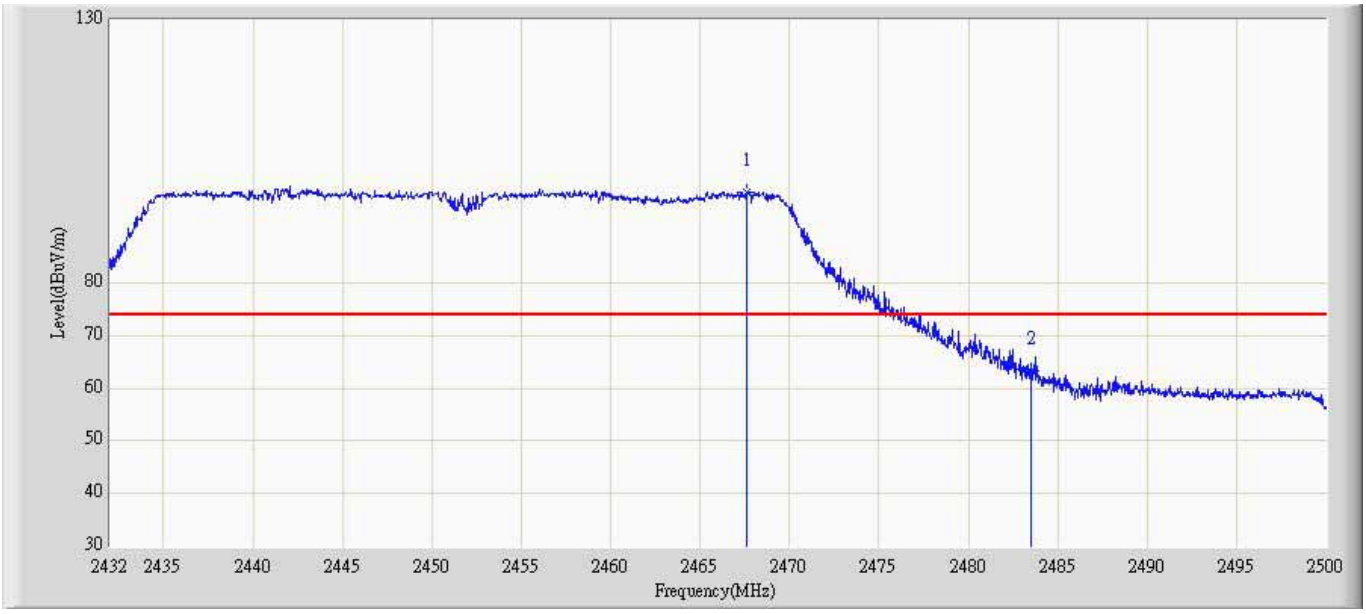
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	71.826	41.111	-2.174	74.000	30.715	PK
2	*	2420.022	109.489	78.774	N/A	N/A	30.716	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz) Ant 110	



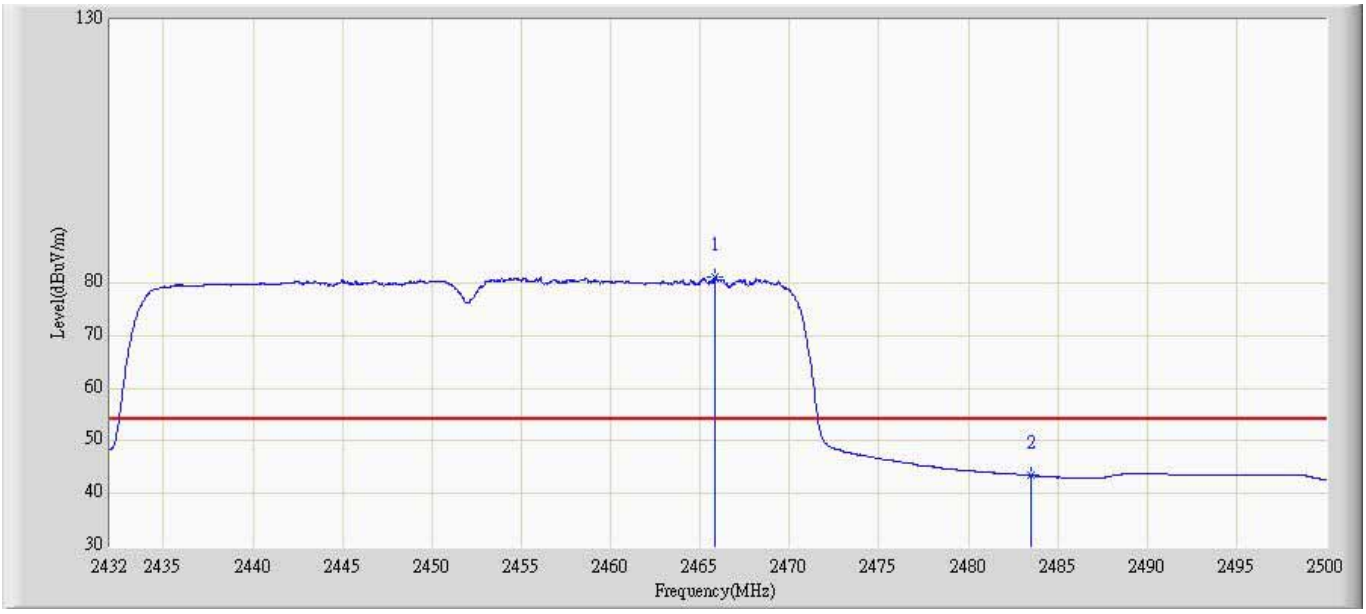
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.704	19.989	-3.296	54.000	30.715	AV
2	*	2419.560	92.385	61.670	N/A	N/A	30.715	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz) Ant 110	



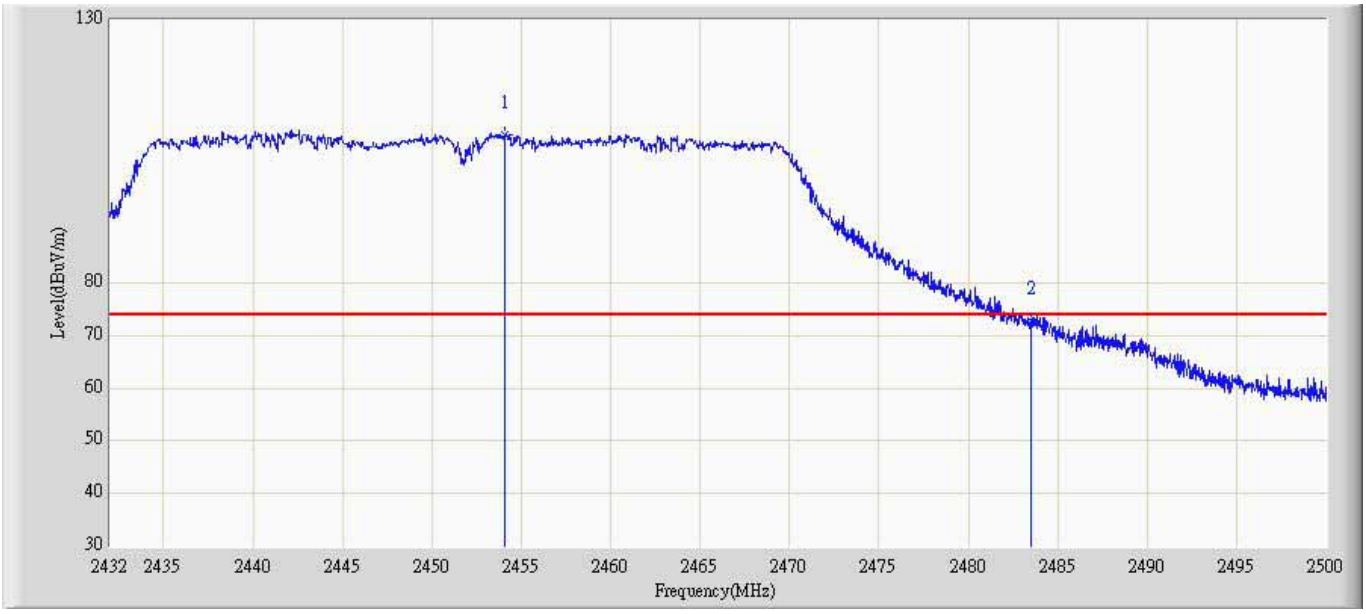
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.598	97.340	66.610	N/A	N/A	30.730	PK
2		2483.500	63.206	32.476	-10.794	74.000	30.730	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz) Ant 110	



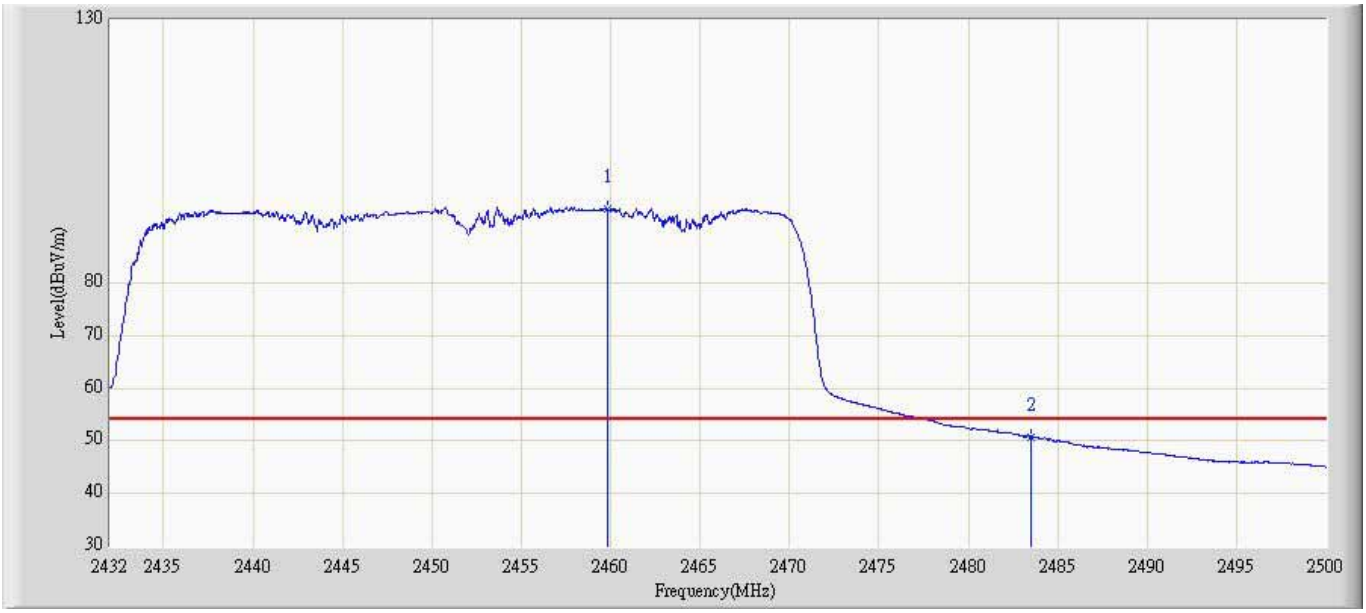
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2465.864	81.091	50.361	N/A	N/A	30.730	AV
2		2483.500	43.420	12.690	-10.580	54.000	30.730	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz) Ant 110	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.066	108.159	77.434	N/A	N/A	30.725	PK
2		2483.500	72.783	42.053	-1.217	74.000	30.730	PK

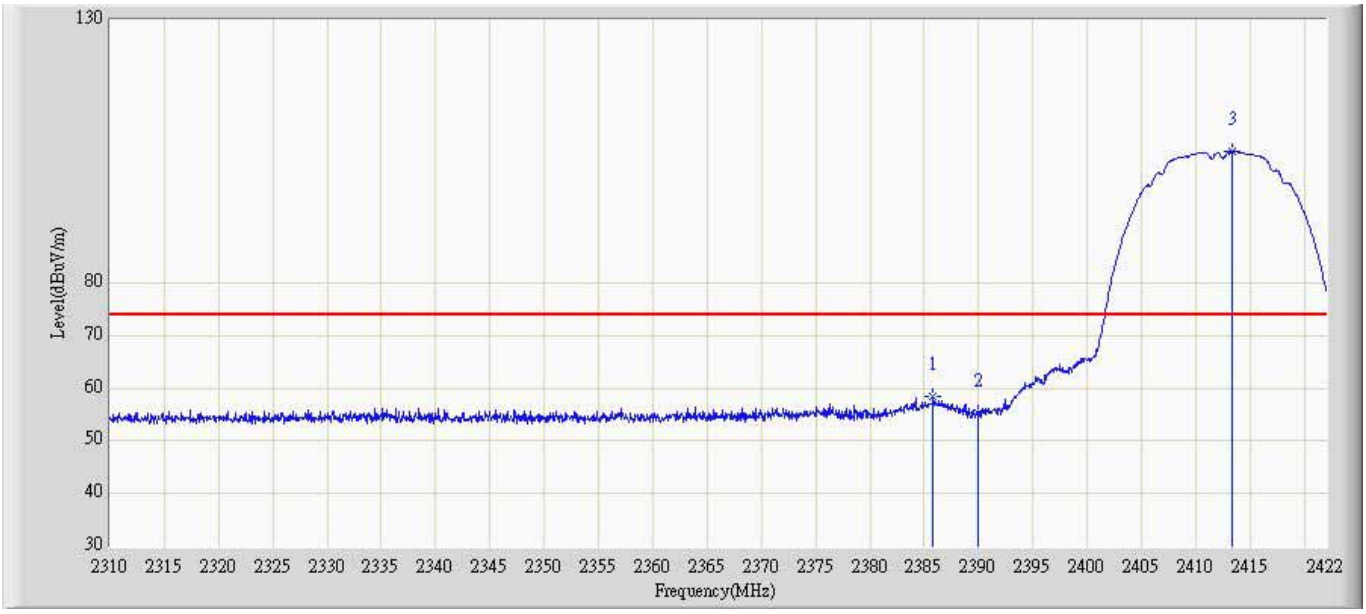
Engineer: Milo	
Site: AC5	Time: 2013/06/07 - 20:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz) Ant 110	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.846	94.171	63.442	N/A	N/A	30.729	AV
2		2483.500	50.772	20.042	-3.228	54.000	30.730	AV

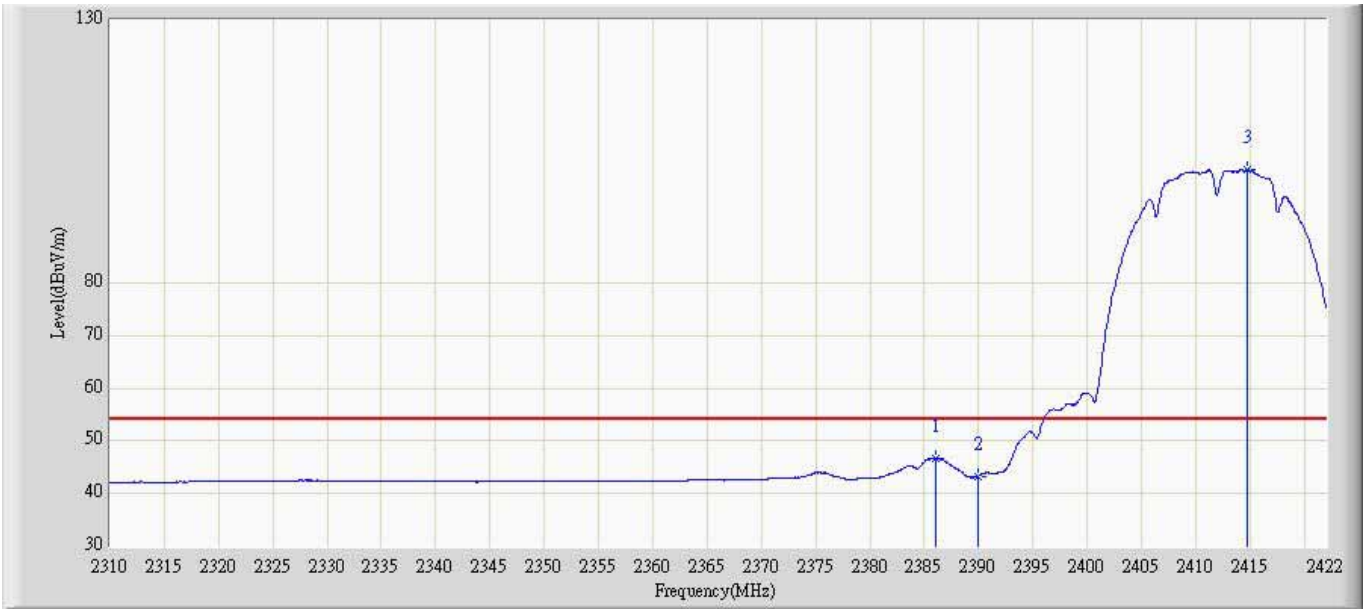
Test by Panel Antenna #1

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



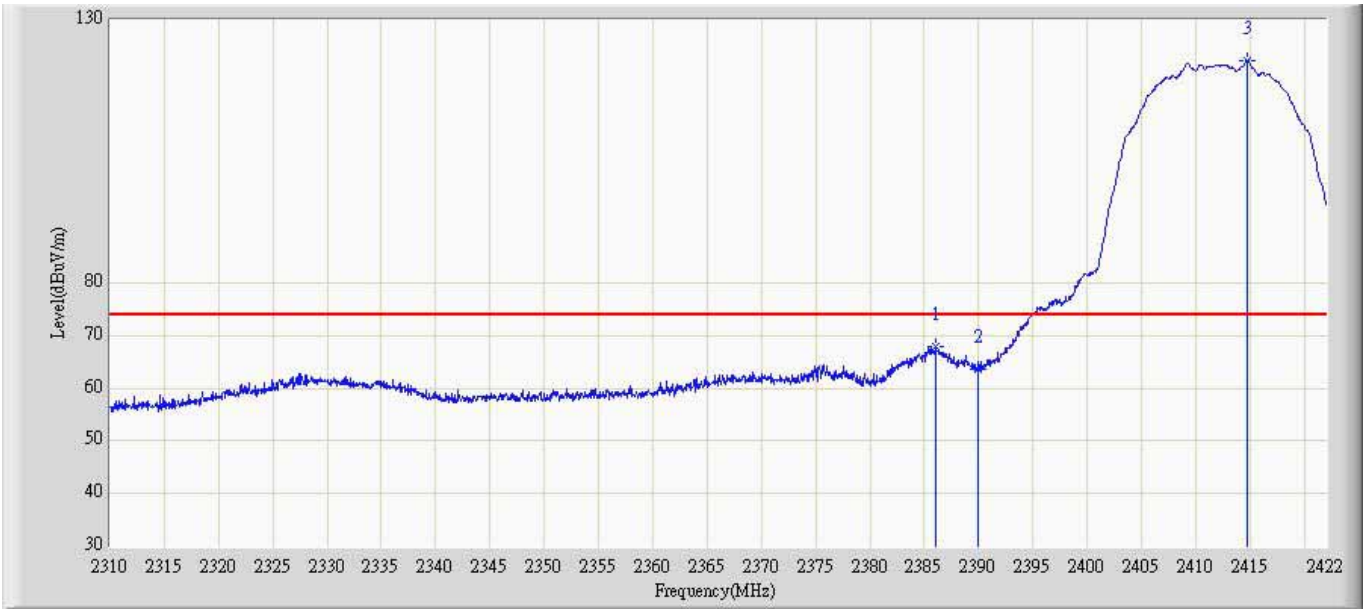
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.824	58.386	27.311	-15.614	74.000	31.075	PK
2		2390.000	55.254	24.166	-18.746	74.000	31.088	PK
3	*	2413.376	104.977	73.734	N/A	N/A	31.243	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



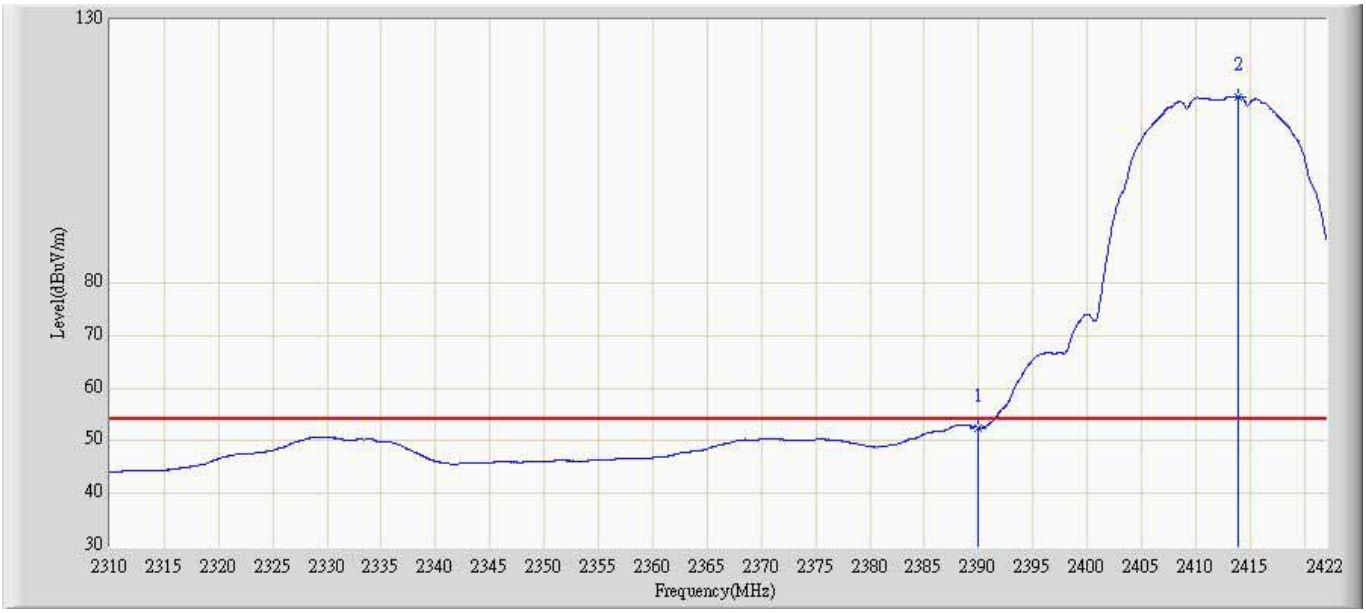
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.992	46.622	15.546	-7.378	54.000	31.076	AV
2		2390.000	43.335	12.247	-10.665	54.000	31.088	AV
3	*	2414.776	101.527	70.271	N/A	N/A	31.255	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



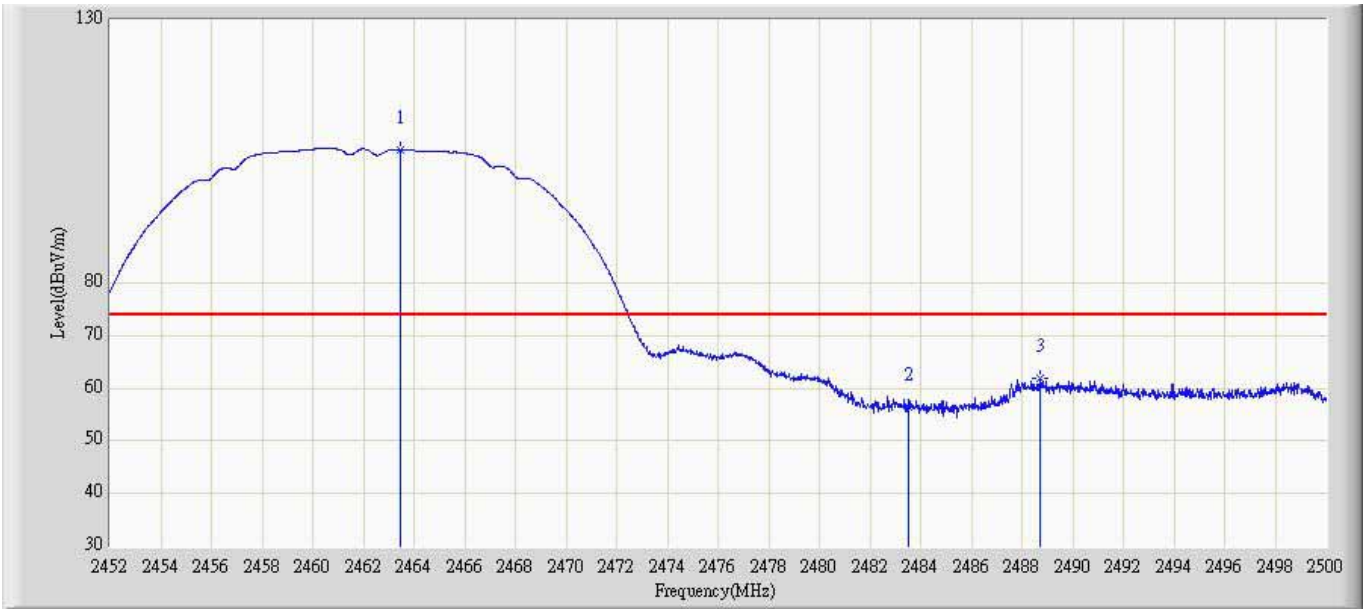
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.992	67.986	36.910	-6.014	74.000	31.076	PK
2		2390.000	63.763	32.675	-10.237	74.000	31.088	PK
3	*	2414.776	122.176	90.920	N/A	N/A	31.255	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2412MHz by 802.11b Ant 100	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.540	21.452	-1.460	54.000	31.088	AV
2	*	2413.880	115.450	84.203	N/A	N/A	31.248	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.472	105.390	73.797	N/A	N/A	31.594	PK
2		2483.500	56.479	24.866	-17.521	74.000	31.613	PK
3		2488.696	62.027	30.408	-11.973	74.000	31.619	PK

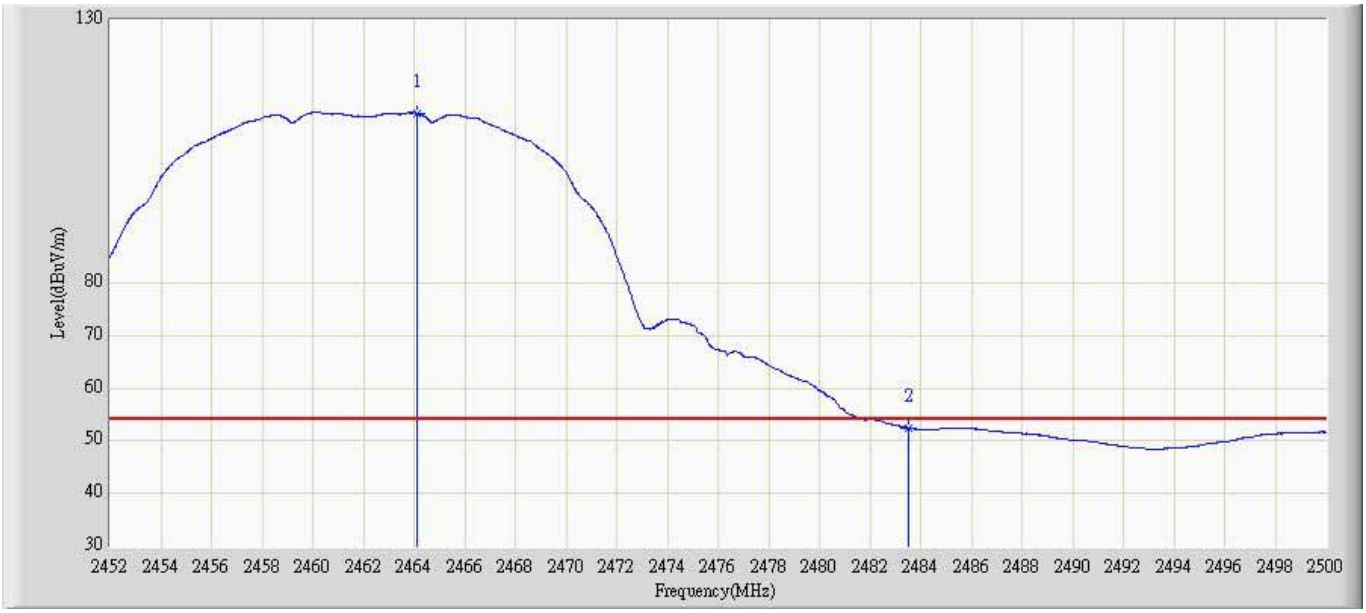
Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.360	102.013	70.423	N/A	N/A	31.590	AV
2		2483.500	44.974	13.361	-9.026	54.000	31.613	AV
3		2488.576	47.554	15.935	-6.446	54.000	31.619	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	

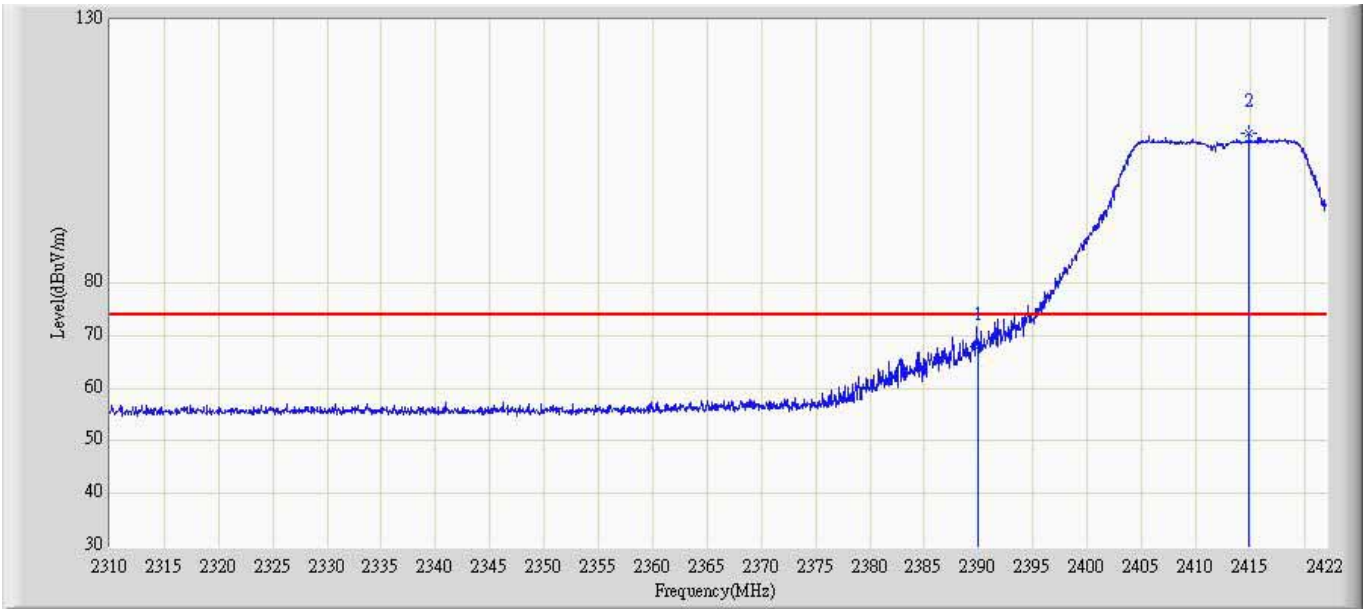
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.344	122.812	91.229	N/A	N/A	31.583	PK
2		2483.500	67.606	35.992	-6.394	74.000	31.613	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 11:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 1: Transmit at channel 2462MHz by 802.11b Ant 100	



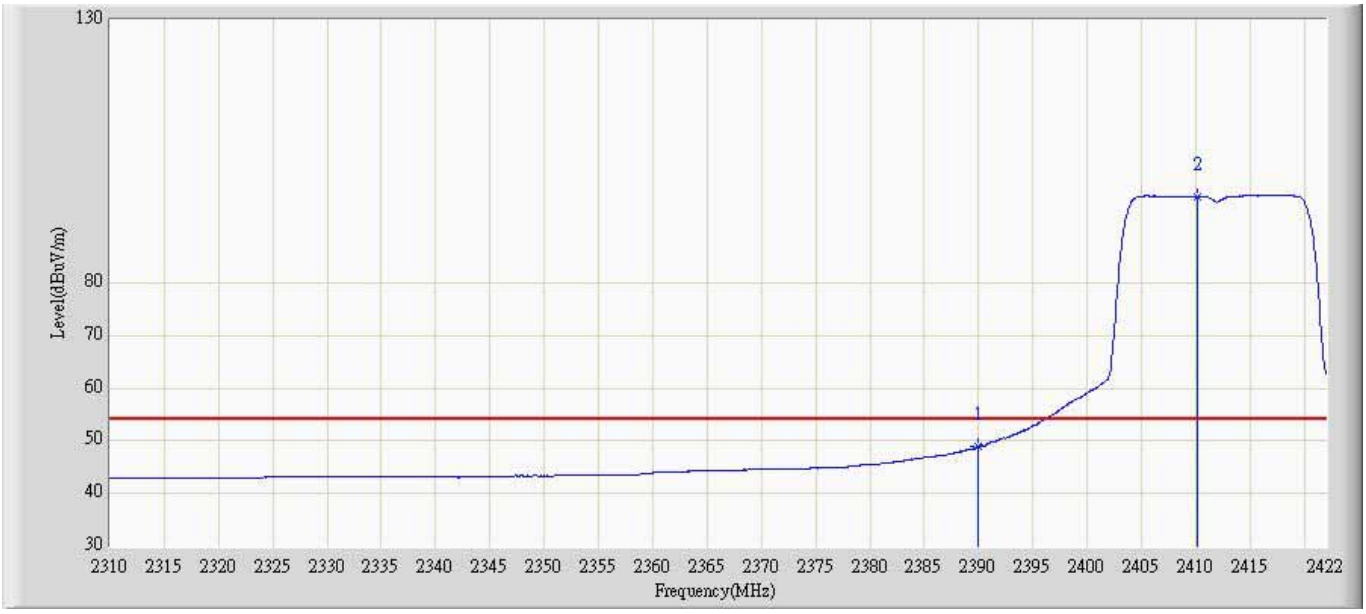
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.144	112.232	80.638	N/A	N/A	31.594	AV
2		2483.500	52.437	20.823	-1.563	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 12:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



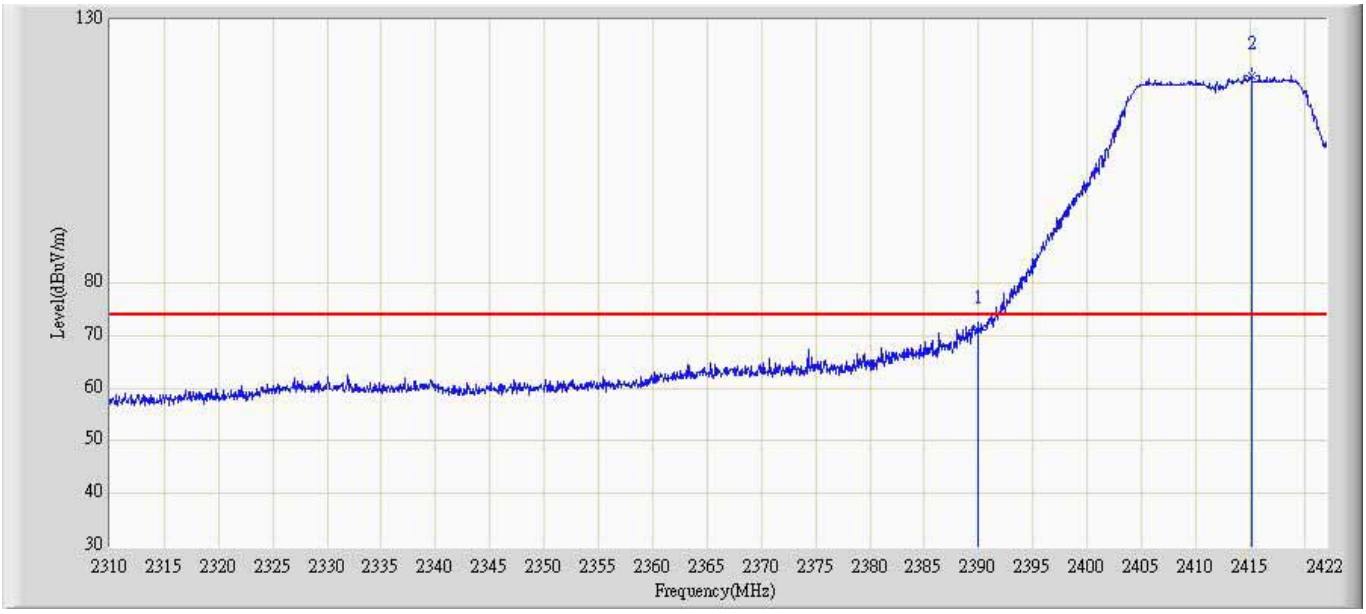
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.969	36.881	-6.031	74.000	31.088	PK
2	*	2414.888	108.477	77.220	N/A	N/A	31.257	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



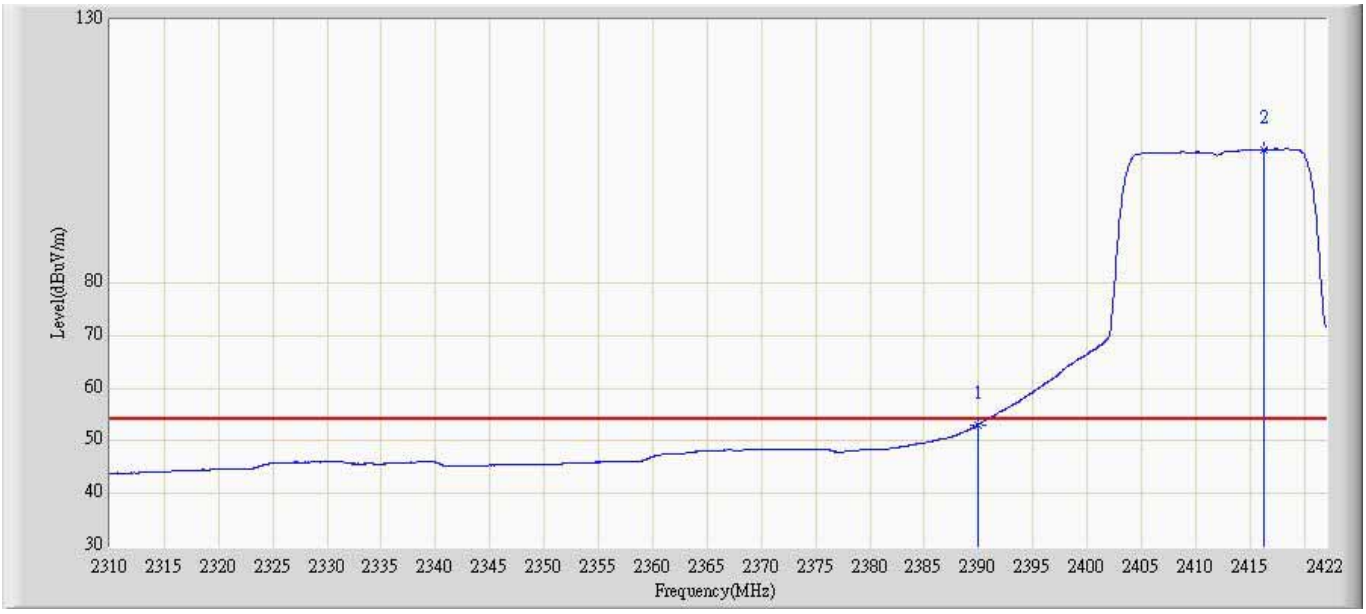
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.928	17.840	-5.072	54.000	31.088	AV
2	*	2410.184	96.338	65.123	N/A	N/A	31.215	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



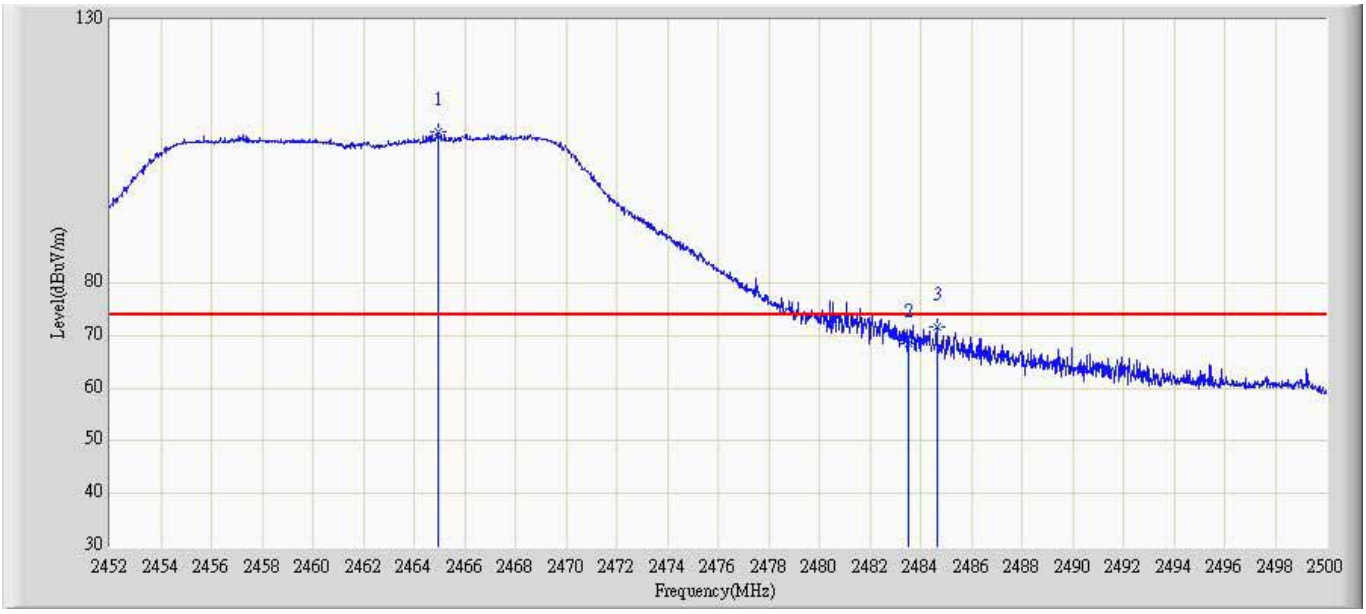
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	71.153	40.065	-2.847	74.000	31.088	PK
2	*	2415.112	119.392	88.133	N/A	N/A	31.258	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2412MHz by 802.11g Ant 100	



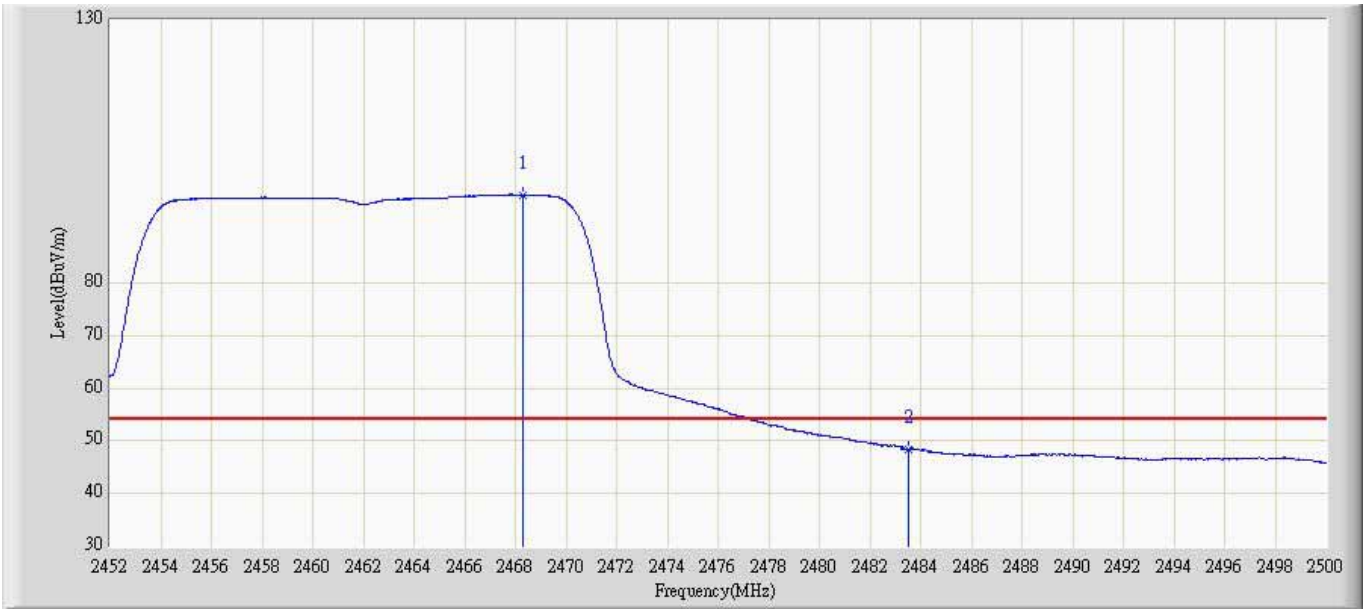
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.123	22.035	-0.877	54.000	31.088	AV
2	*	2416.344	105.251	73.981	N/A	N/A	31.270	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



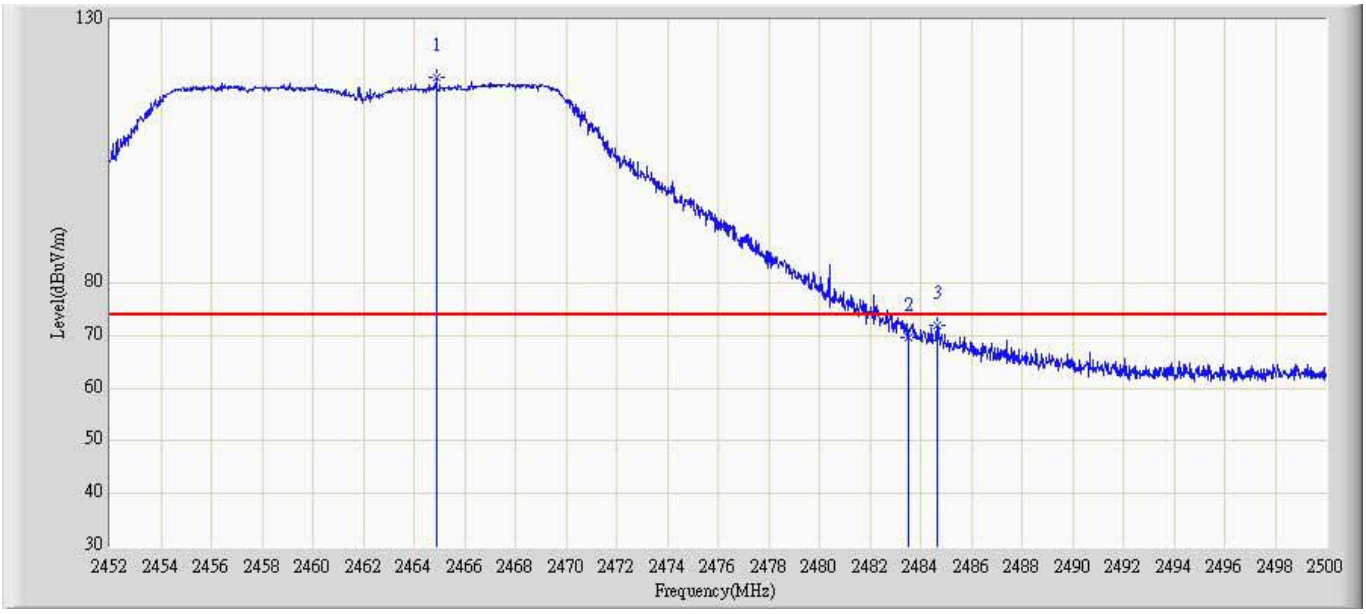
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.936	108.814	77.219	N/A	N/A	31.595	PK
2		2483.500	68.573	36.959	-5.427	74.000	31.613	PK
3		2484.640	71.689	40.074	-2.311	74.000	31.615	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



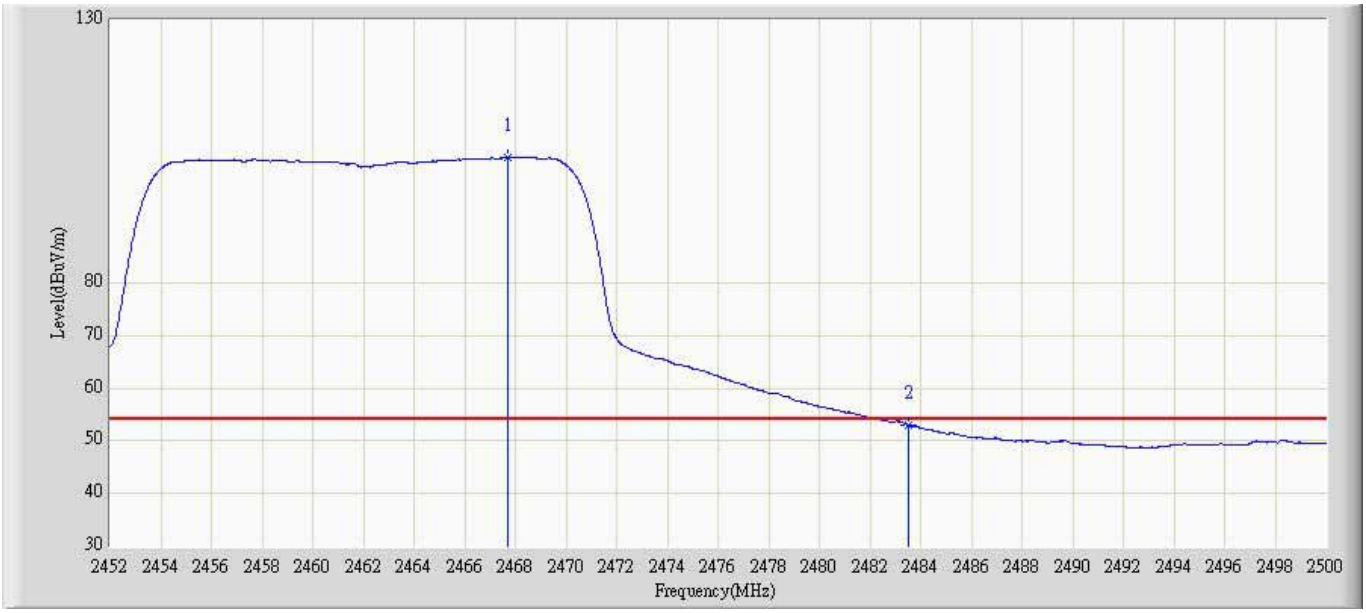
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.272	96.727	65.129	N/A	N/A	31.599	AV
2		2483.500	48.477	16.864	-5.523	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



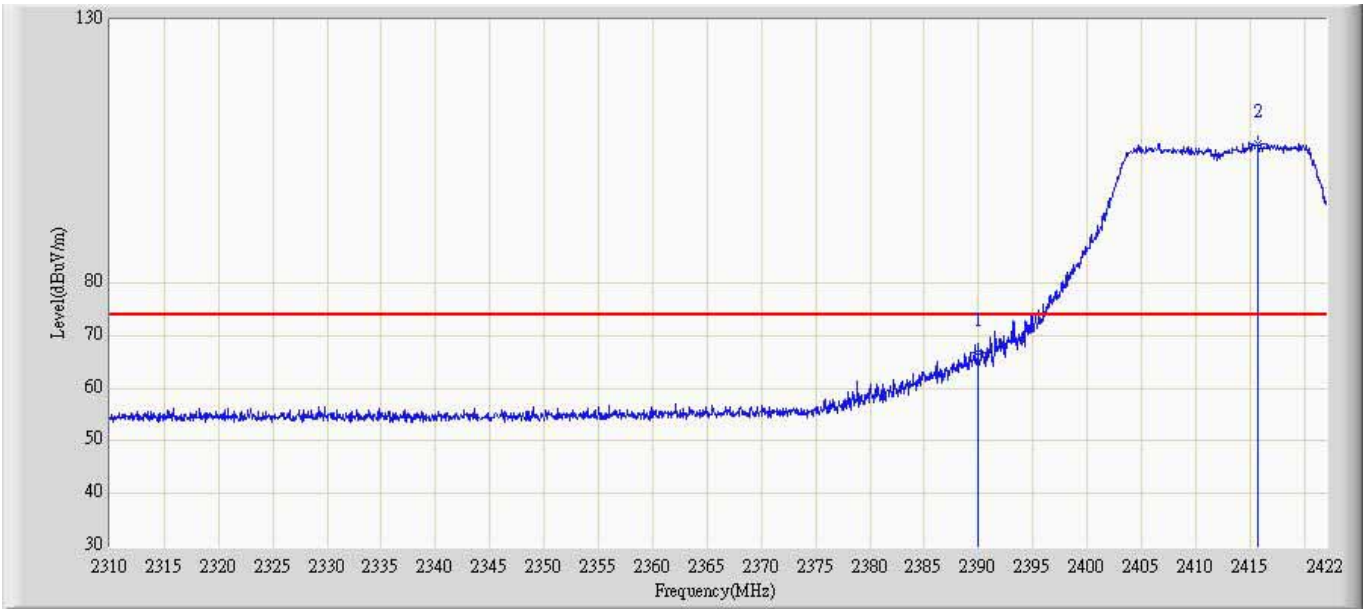
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.888	119.054	87.459	N/A	N/A	31.595	PK
2		2483.500	69.779	38.165	-4.221	74.000	31.613	PK
3		2484.640	71.827	40.212	-2.173	74.000	31.615	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 2: Transmit at channel 2462MHz by 802.11g Ant 100	



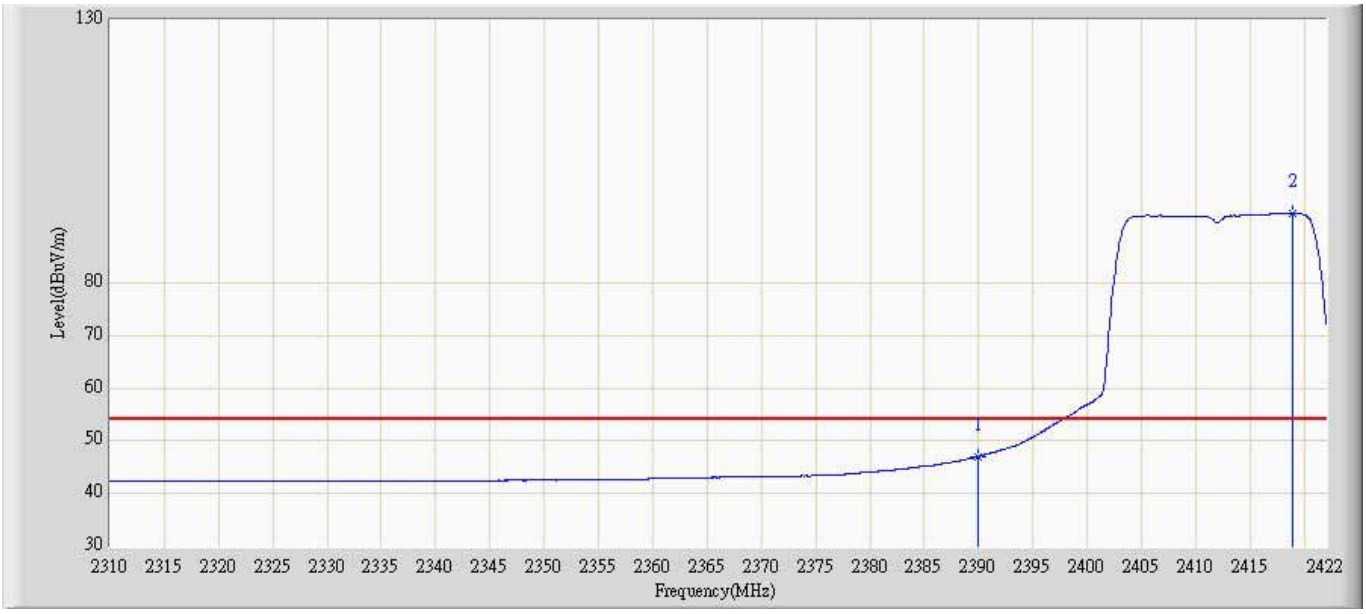
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.672	103.767	72.169	N/A	N/A	31.597	AV
2		2483.500	53.069	21.456	-0.931	54.000	31.613	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



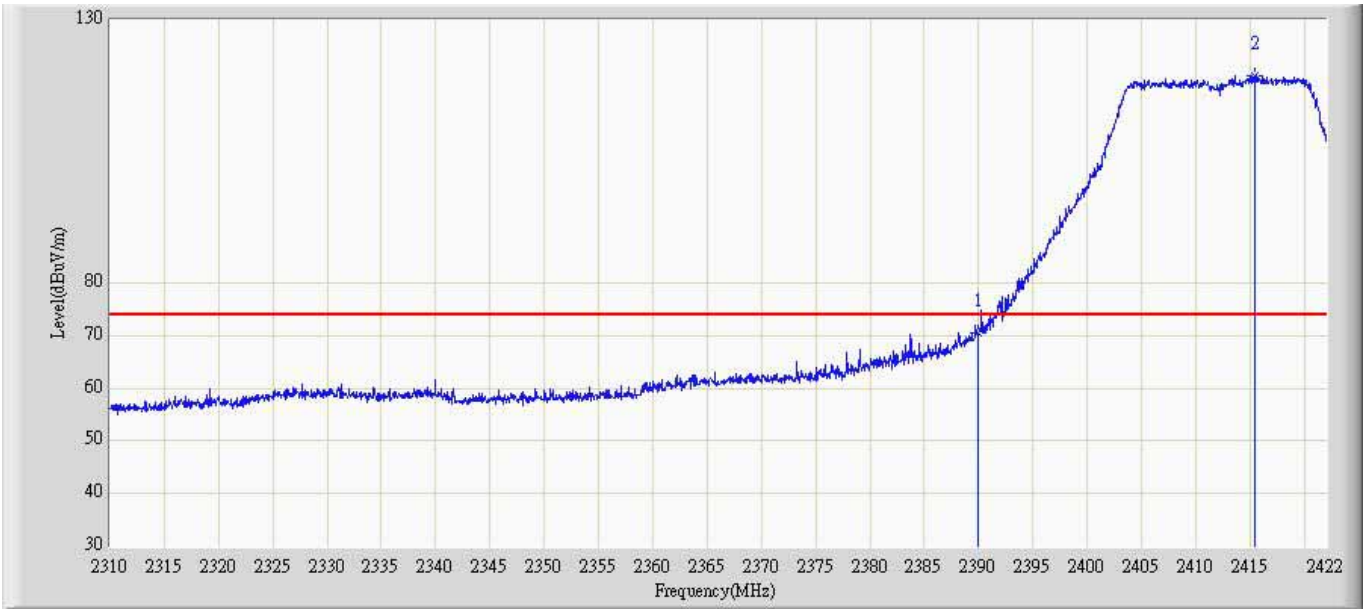
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	66.682	35.594	-7.318	74.000	31.088	PK
2	*	2415.728	106.577	75.313	N/A	N/A	31.265	PK

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Horizontal
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.027	15.939	-6.973	54.000	31.088	AV
2	*	2418.920	93.210	61.916	N/A	N/A	31.294	AV

Engineer: Milo	
Site: AC5	Time: 2013/06/04 - 15:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D-737(1-18GHz)	Polarity: Vertical
EUT: WIRELESS-BGN 23DBM 2X2 NETWORK MINI PCIE ADAPTER	Power: AC 120V/60Hz
Note: Mode 3: Transmit at channel 2412MHz by 802.11n20MHz Ant 100	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	70.423	39.335	-3.577	74.000	31.088	PK
2	*	2415.448	119.308	88.046	N/A	N/A	31.262	PK