Test Report

Product Name	：	WIRELESS-G 26DBM NETWORK MINI PCI ADAPTER
Model No.	：	IWAVEPORT WLM54GP26
FCC ID	：	TK4-08-WLM54GP26

Applicant	：	Compex Systems Pte Ltd
Address	：	135 Joo Seng Road, #08-01 PM Industrial Building Singapore 368363

Date of Receipt	：	2008/07/28
Issued Date	：	2008/09/22
Report No.	：	088S024-RF-US-P05V01

Test Report Certification

Issued Date : 2008/09/22
Report No. : 088S024-RF-US-P05V01

QuieTek

Product Name	:	WIRELESS-G 26DBM NETWORK MINI PCI ADAPTER
Applicant	:	Compex Systems Pte Ltd
Address	:	135 Joo Seng Road, #08-01 PM Industrial Building Singapore 368363
Manufacturer	:	Compex Systems Pte Ltd
Address	:	135 Joo Seng Road, #08-01 PM Industrial Building Singapore 368363
Model No.	:	IWAVEPORT WLM54GP26
FCC ID	:	TK4-08-WLM54GP26
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	DC 3.3V
Trade Name	:	COMPEX
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C: 2007 ANSI C63.4: 2003
Test Result	:	Complied
Performed Location	:	SuZhou EMC laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392

Documented By : Lanny Jin
(Lanny Jin)

Reviewed By : Marlin Chen
(Marlin Chen)

Approved By : Gene Chang
(Gene Chang)

Laboratory Information

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

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

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

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

NVLAP Lab Code : 200347-0
1313

LinKou Testing Laboratory :
No. 5, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
TEL : +886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

NVLAP Lab Code: 200533-0
0914

Suzhou Testing Laboratory :
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TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0
1596

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General Information

1.1. EUT Description

Product Name	WIRELESS-G 26DBM NETWORK MINI PCI ADAPTER
Trade Name	COMPEX
Model No.	IWAVEPORT WLM54GP26
FCC ID	TK4-08-WLM54GP26
Working Voltage	DC 3.3V
Frequency Range	802.11b/g: 2412 - 2462 MHz
Channel Number	802.11b/g: 11
Type of Modulation	802.11b: DSSS
	802.11g: OFDM
Data Rate	802.11b: 1/2/5.5/11 Mbps
	802.11g: 6/9/12/18/24/36/48/54 Mbps
Channel Control	Auto
Antenna Type	PIFA
Antenna Gain	Refer to the “Antenna List”

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

802.11b/g/n Antenna List

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

1.2. Mode of Operation

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

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g

Note:

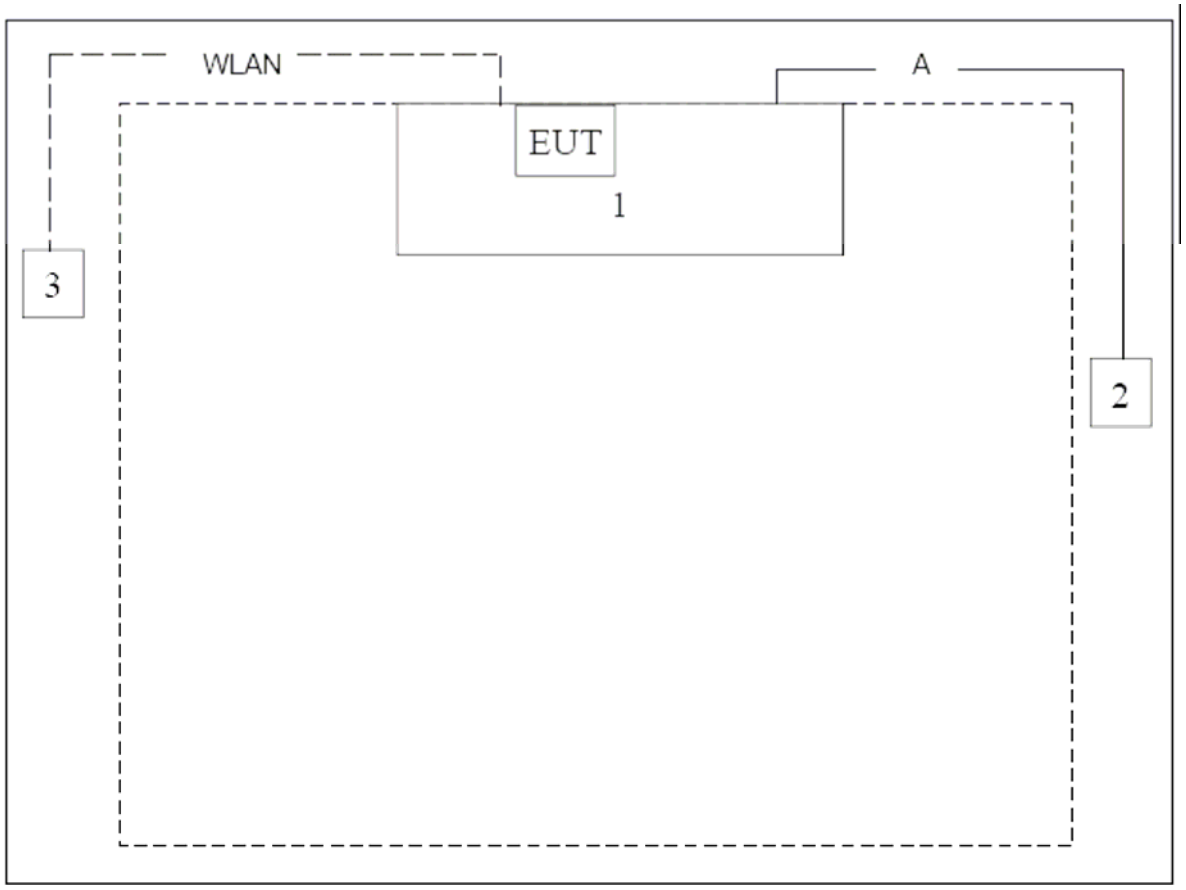
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations.
3. There are two antenna connectors on the board. The main connector is MMCX type, and the other UFL type is used for auxiliary connection (For example, the main connector is bad). They can't work simultaneously; also the power output from main connector was higher than that from auxiliary connector, so the main port was selected to be tested.

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Router Plant	C-5HPWE	Compex	C-5HPWE	N/A
2	Notebook	DELL	PP19L	JH097 A01	Power by adapter
3	MacBook	Apple	MB061CH	W8732B4TZ5V	Power by adapter

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	LAN Cable	No-Shielded, >10m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above
2	Turn on the power of all equipment.
3	Execute the “bricks” software, and transmit data between EUT and Notebook by wireless.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

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

2.2. Test Environment

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

3. Conducted Emission

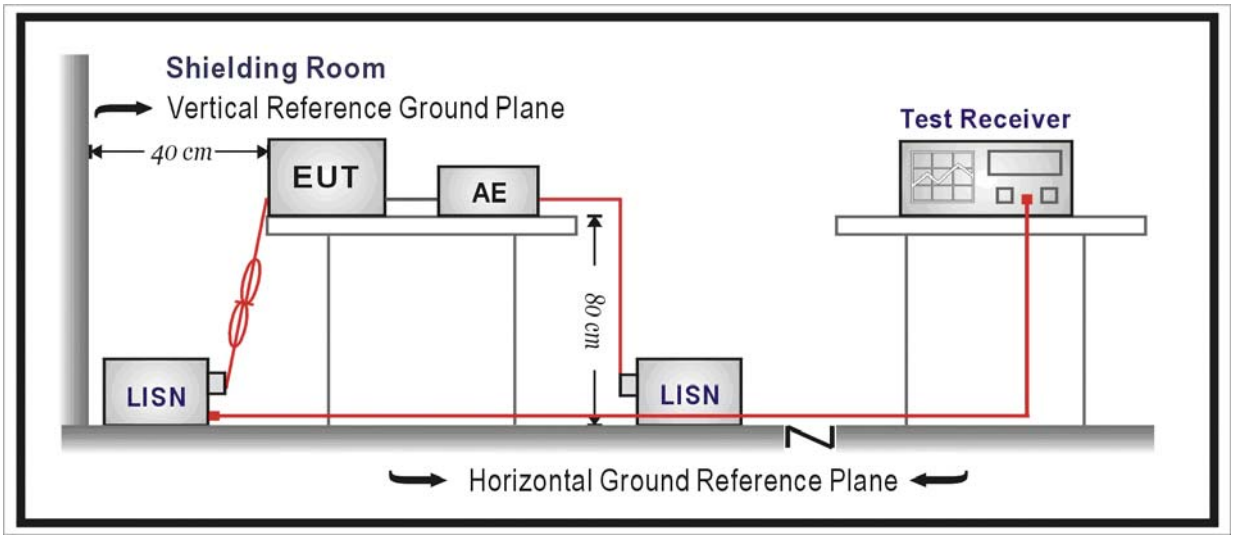
3.1. Test Equipment

Conducted Emission / SR-1

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

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

3.2. Test Setup



3.3. Limit

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

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

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

3.4. Test Procedure

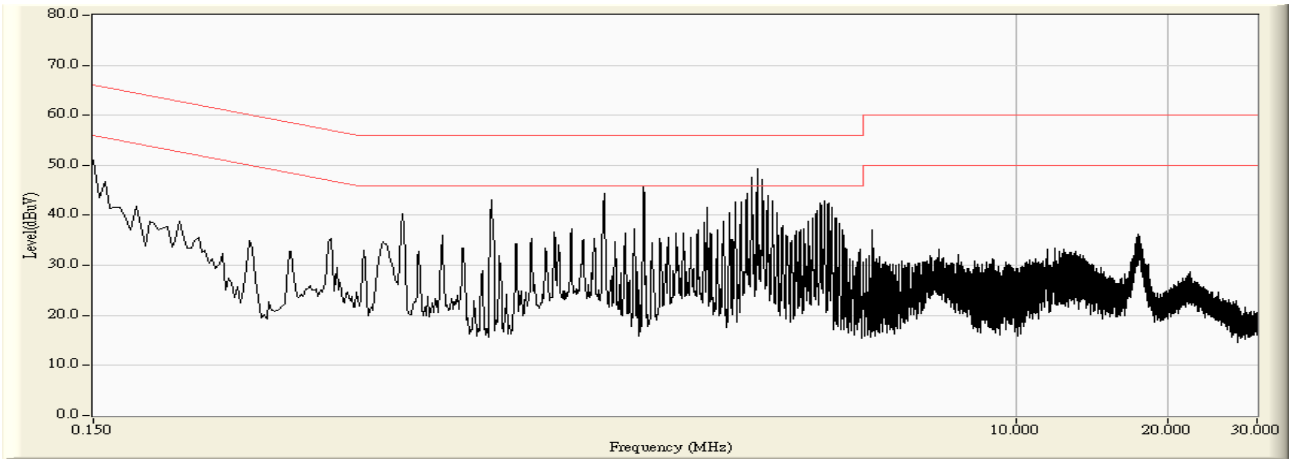
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane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

3.5. Uncertainty

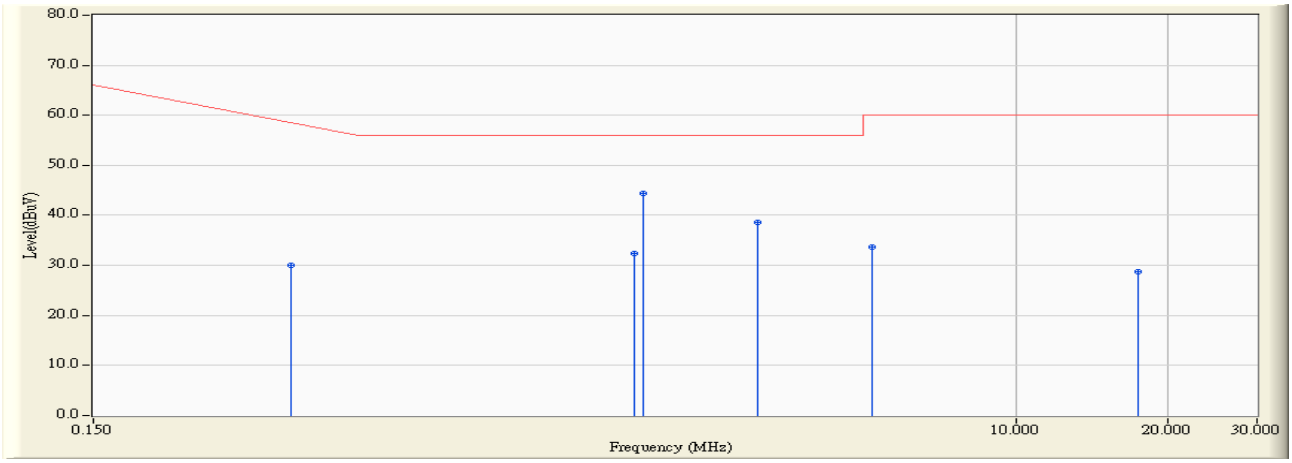
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 13:43**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**



Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 13:51**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**

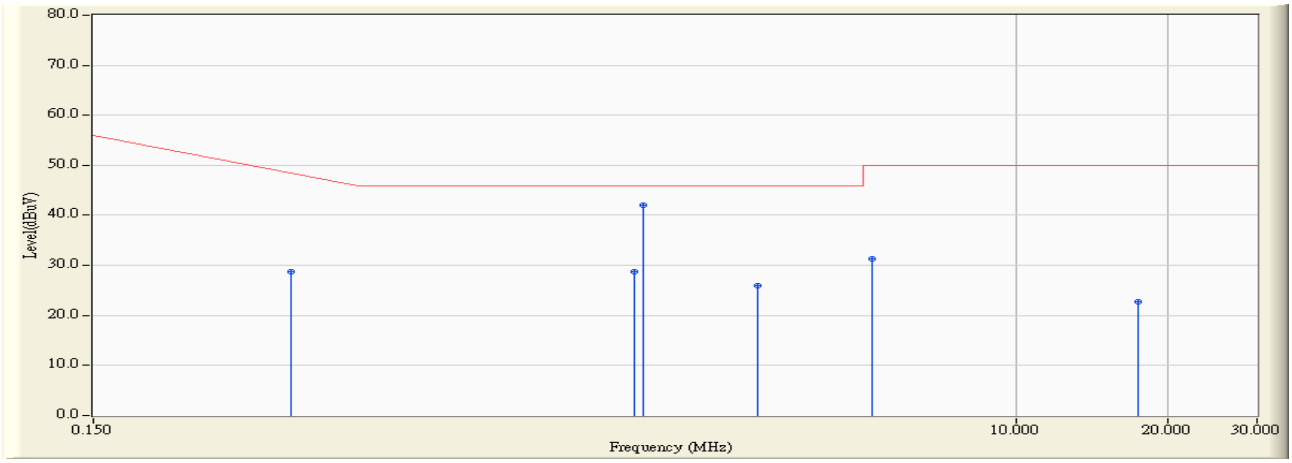


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.370	9.551	20.500	30.051	-29.663	59.714	QUASIPEAK
2		1.762	9.695	22.600	32.295	-23.705	56.000	QUASIPEAK
3	*	1.838	9.690	34.800	44.490	-11.510	56.000	QUASIPEAK
4		3.082	9.760	28.800	38.560	-17.440	56.000	QUASIPEAK
5		5.214	9.880	23.700	33.580	-26.420	60.000	QUASIPEAK
6		17.486	10.070	18.700	28.770	-31.230	60.000	QUASIPEAK

Note:

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

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 13:51**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**

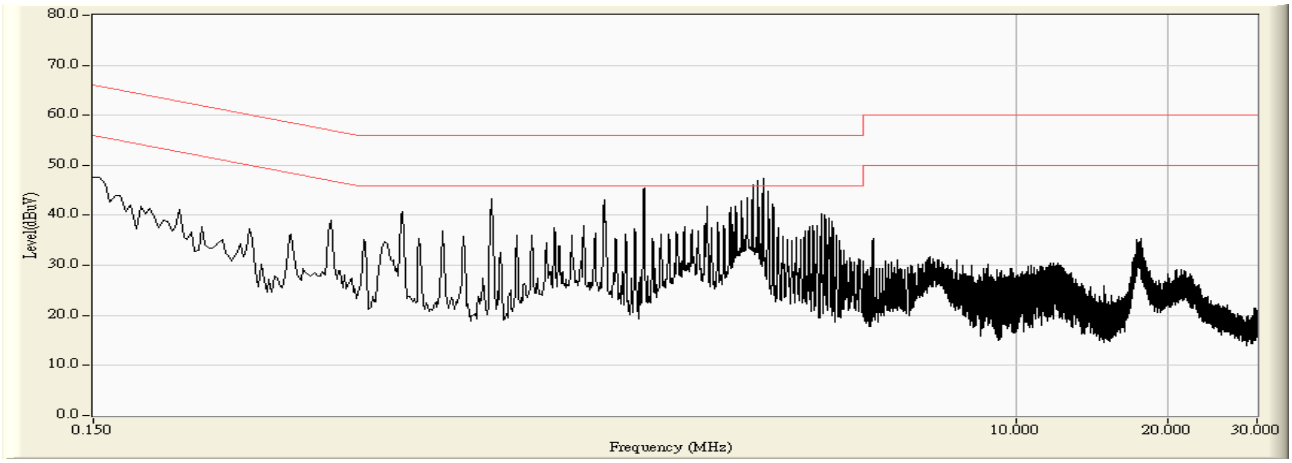


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.370	9.551	19.100	28.651	-21.063	49.714	AVERAGE
2		1.762	9.695	19.000	28.695	-17.305	46.000	AVERAGE
3	*	1.838	9.690	32.400	42.090	-3.910	46.000	AVERAGE
4		3.082	9.760	16.100	25.860	-20.140	46.000	AVERAGE
5		5.214	9.880	21.500	31.380	-18.620	50.000	AVERAGE
6		17.486	10.070	12.700	22.770	-27.230	50.000	AVERAGE

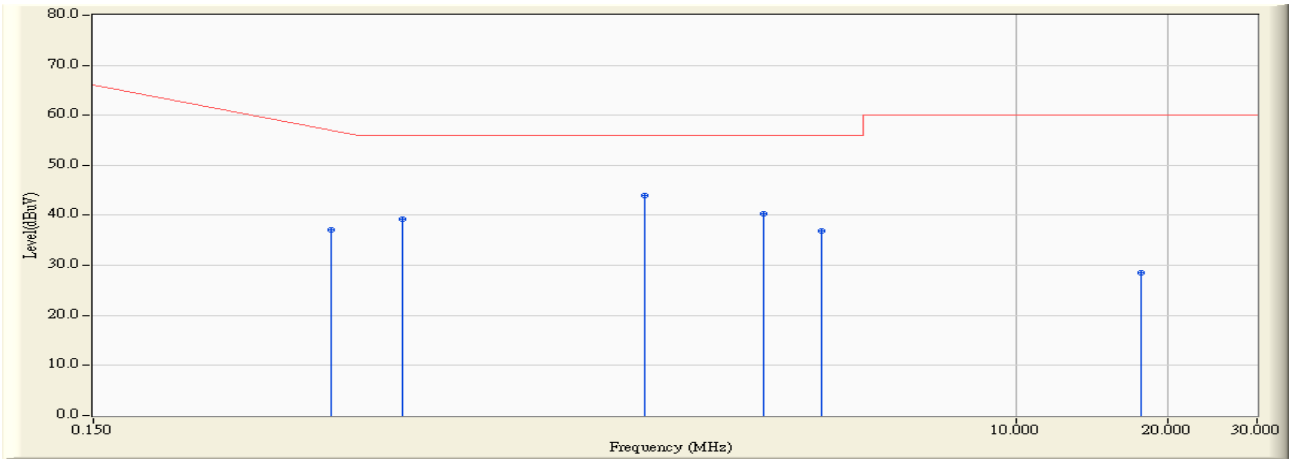
Note:

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

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 13:59**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**



Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 14:03**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**

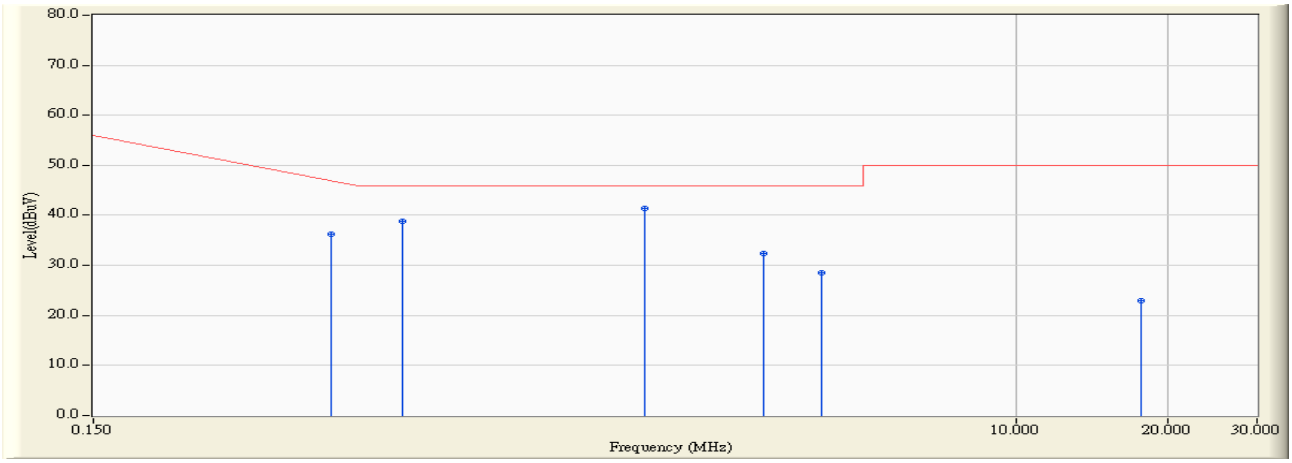


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.442	9.614	27.500	37.114	-20.543	57.657	QUASIPEAK
2		0.614	9.713	29.600	39.313	-16.687	56.000	QUASIPEAK
3	*	1.842	9.680	34.200	43.880	-12.120	56.000	QUASIPEAK
4		3.166	9.690	30.700	40.390	-15.610	56.000	QUASIPEAK
5		4.126	9.710	27.200	36.910	-19.090	56.000	QUASIPEAK
6		17.678	10.150	18.300	28.450	-31.550	60.000	QUASIPEAK

Note:

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

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/08/22 - 14:03**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at Channel 2437MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.442	9.614	26.700	36.314	-11.343	47.657	AVERAGE
2		0.614	9.713	29.200	38.913	-7.087	46.000	AVERAGE
3	*	1.842	9.680	31.800	41.480	-4.520	46.000	AVERAGE
4		3.166	9.690	22.800	32.490	-13.510	46.000	AVERAGE
5		4.126	9.710	18.900	28.610	-17.390	46.000	AVERAGE
6		17.678	10.150	12.900	23.050	-26.950	50.000	AVERAGE

Note:

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

4. Radiated Emission

4.1. Test Equipment

☒Radiated Emission / AC-2

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

☐Radiated Emission / AC-3

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

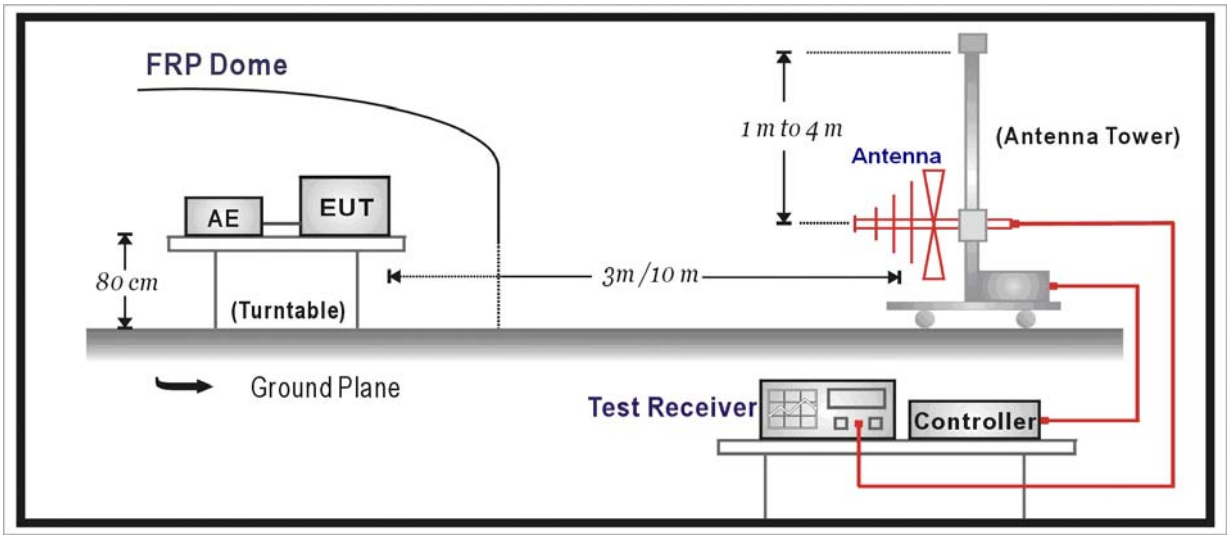
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

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

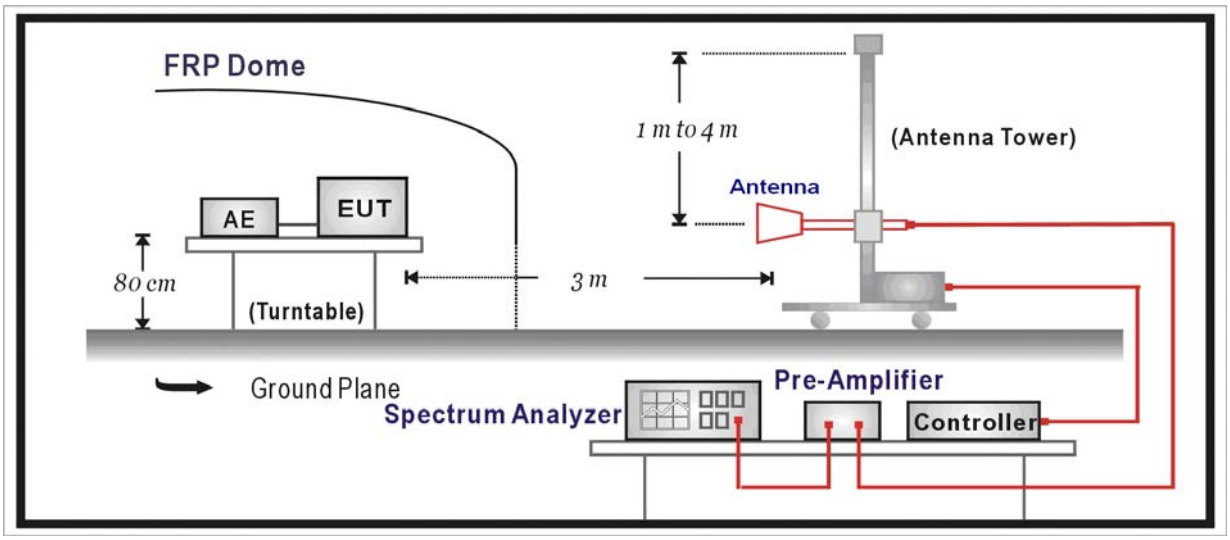
Note 2: The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. 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)

4.4. Test Procedure

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

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

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

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 have the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. This horn 3dB’s beamwidth is 60 degrees for H-plane and 90 degrees for E-plane.

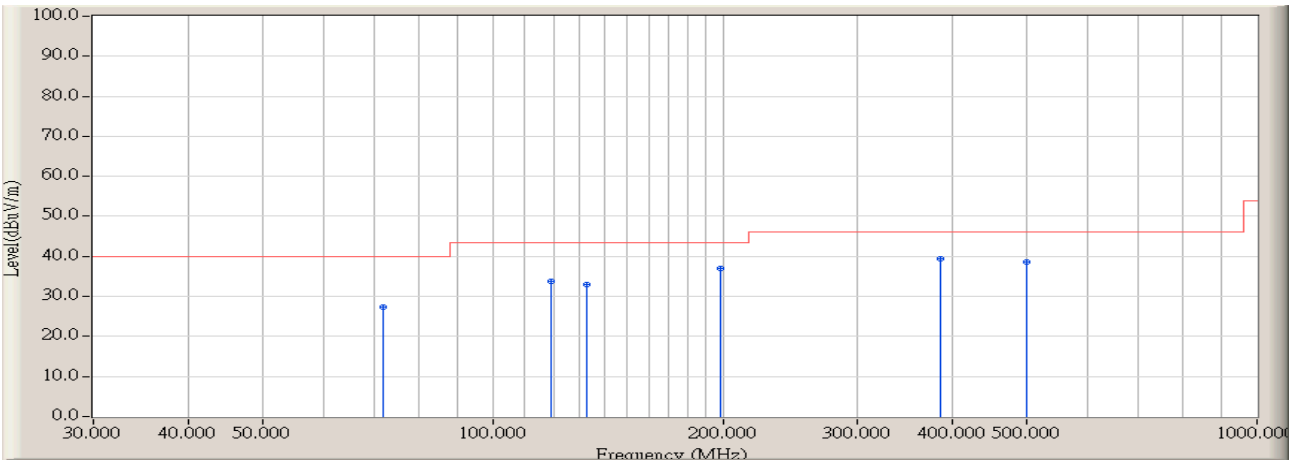
4.5. Uncertainty

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

below 1G is defined as ± 3.8 dB

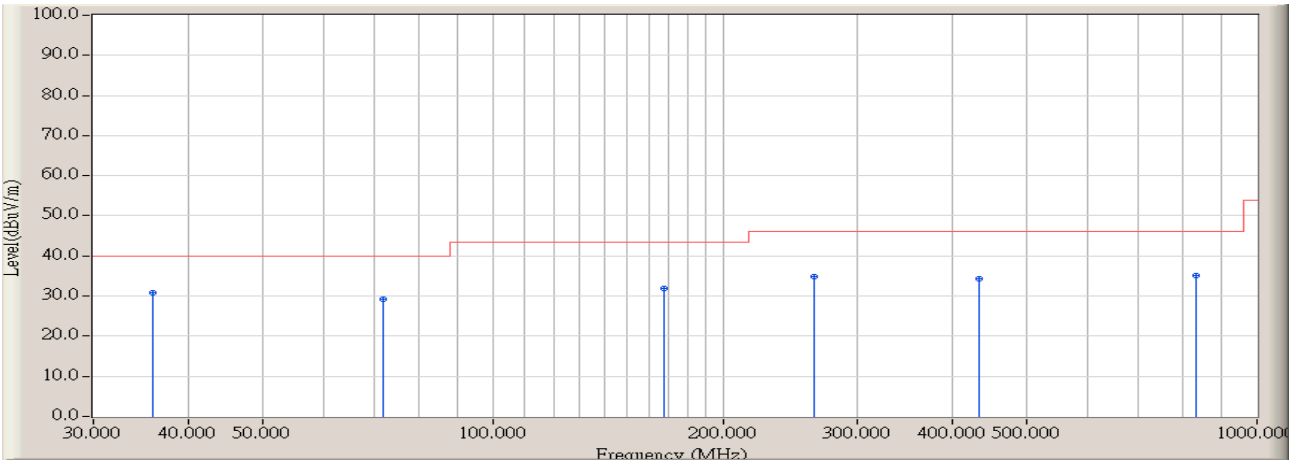
4.6. Test Result

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:40**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



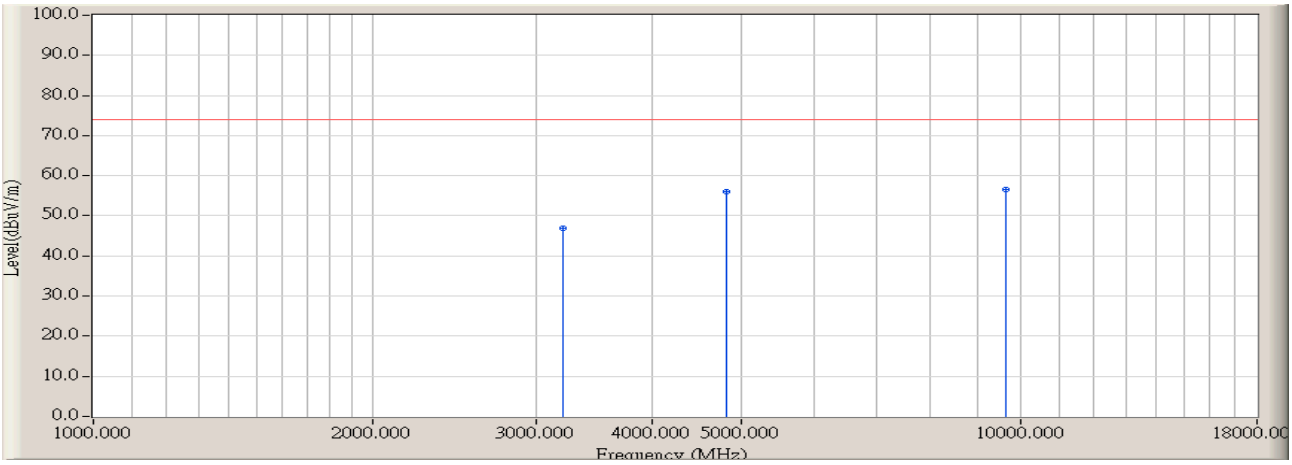
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		71.710	-14.448	41.874	27.426	-12.574	40.000	QUASIPEAK	125.600	112.400
2		119.240	-10.120	43.960	33.840	-9.680	43.520	QUASIPEAK	142.600	79.200
3		132.820	-9.428	42.502	33.074	-10.446	43.520	QUASIPEAK	100.000	185.000
4		198.780	-10.966	47.871	36.905	-6.615	43.520	QUASIPEAK	143.500	177.000
5	*	385.020	-5.555	45.023	39.468	-6.552	46.020	QUASIPEAK	106.500	93.500
6		500.450	-3.384	42.115	38.731	-7.289	46.020	QUASIPEAK	100.000	196.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:41**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



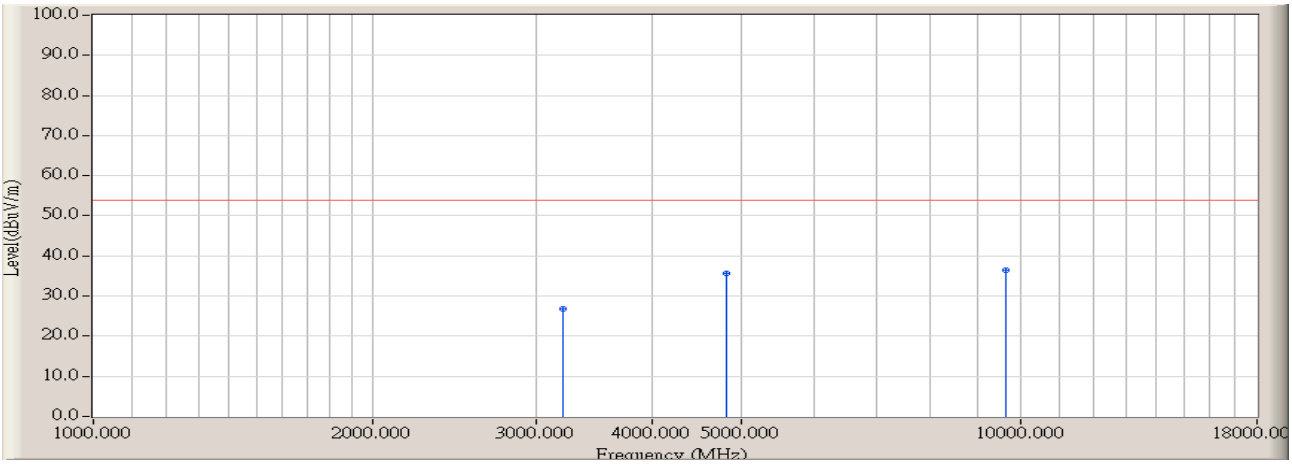
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	35.820	-1.383	32.330	30.947	-9.053	40.000	QUASIPEAK	100.000	136.500
2		71.710	-14.448	43.549	29.101	-10.899	40.000	QUASIPEAK	106.800	92.800
3		167.740	-10.505	42.517	32.012	-11.508	43.520	QUASIPEAK	100.000	253.800
4		263.770	-8.570	43.395	34.825	-11.195	46.020	QUASIPEAK	142.500	78.600
5		432.550	-4.700	38.890	34.190	-11.830	46.020	QUASIPEAK	100.000	79.400
6		832.190	2.064	32.947	35.011	-11.009	46.020	QUASIPEAK	108.400	95.800

Engineer : Jame	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:03**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



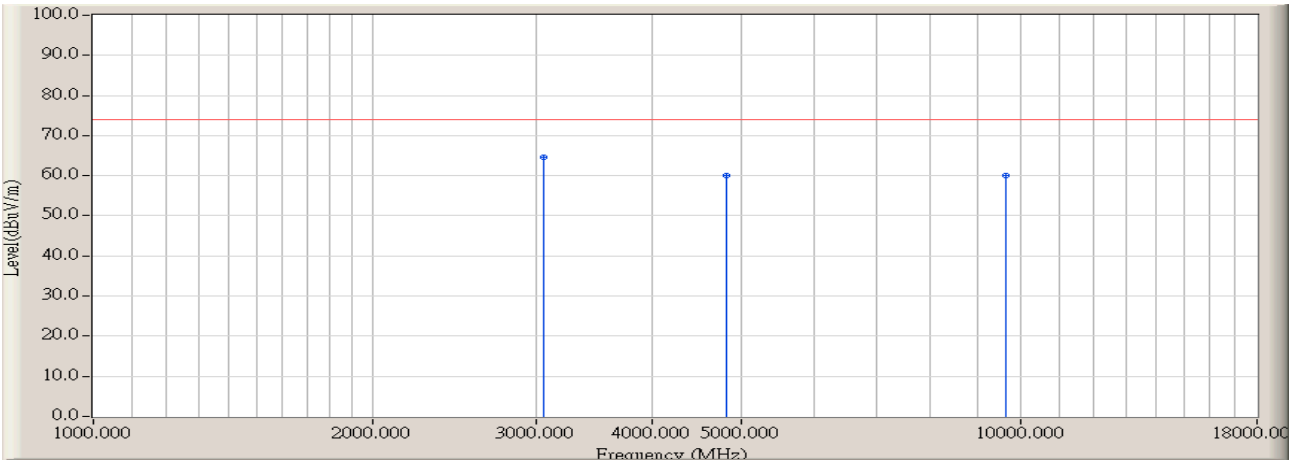
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-1.490	48.405	46.915	-27.055	73.970	PEAK	100.000	126.500
2		4825.000	3.610	52.301	55.911	-18.059	73.970	PEAK	110.300	142.800
3	*	9653.000	14.190	42.305	56.495	-17.475	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:03**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



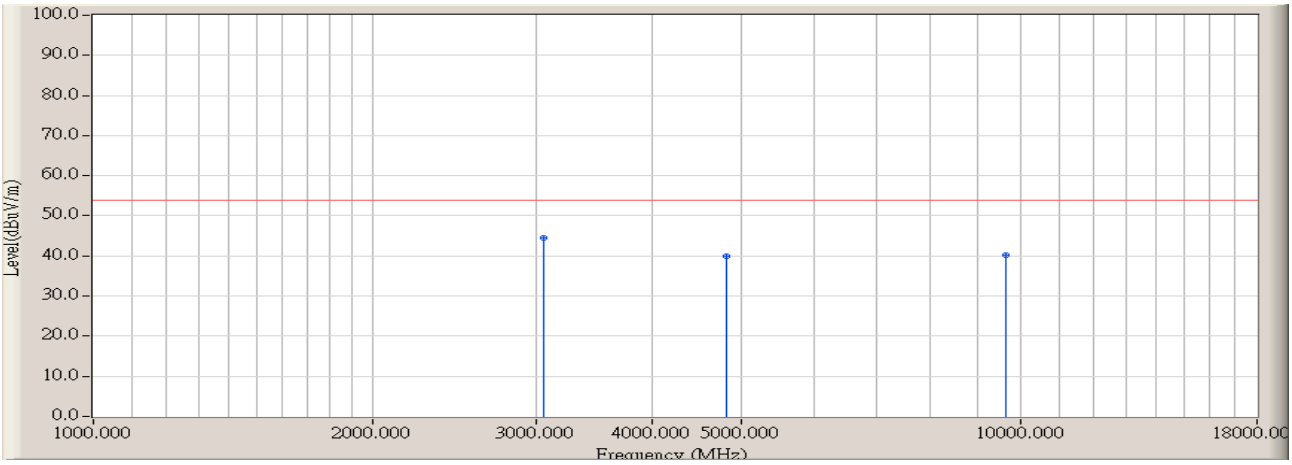
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-1.490	28.200	26.710	-27.260	53.970	AVERAGE	152.000	147.000
2		4825.000	3.610	32.100	35.710	-18.260	53.970	AVERAGE	148.000	85.000
3	*	9653.000	14.190	22.201	36.391	-17.579	53.970	AVERAGE	158.000	247.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 14:50**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



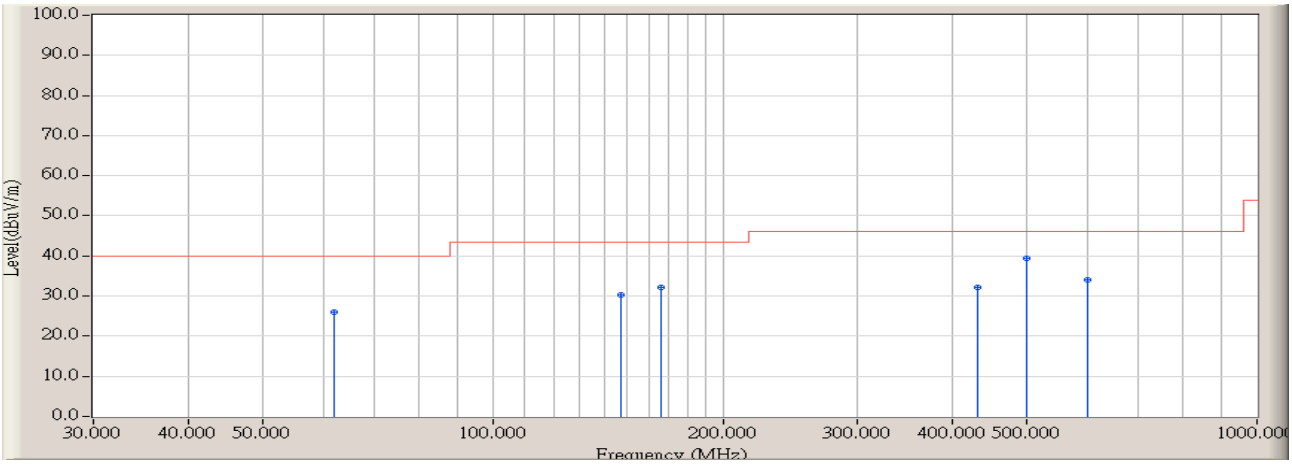
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3057.000	-1.450	66.169	64.719	-9.251	73.970	PEAK	100.000	172.500
2		4825.000	3.610	56.346	59.956	-14.014	73.970	PEAK	100.000	167.400
3		9653.000	14.190	45.896	60.086	-13.884	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 14:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



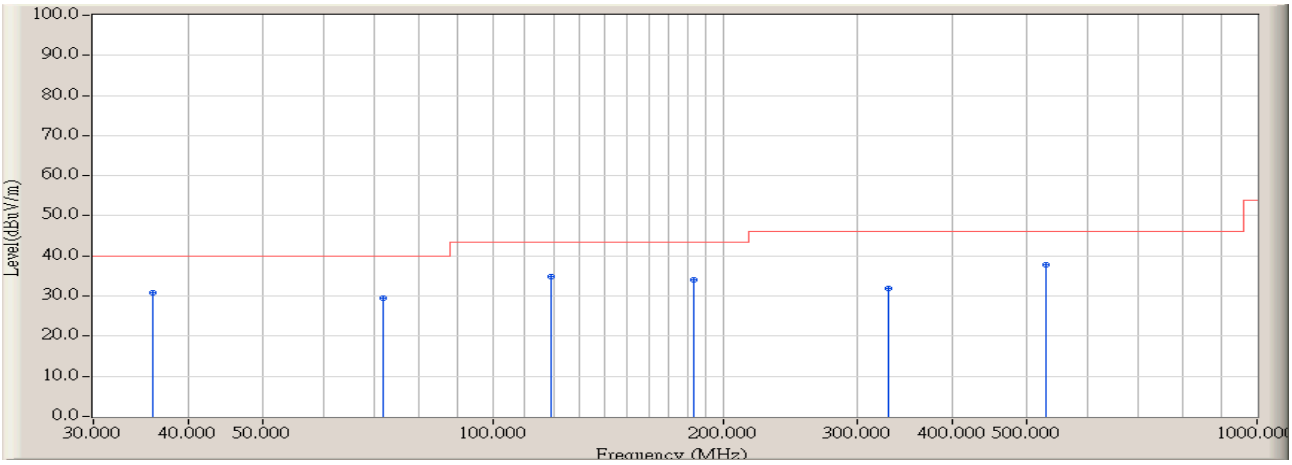
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3057.000	-1.450	46.024	44.574	-9.396	53.970	AVERAGE	147.000	52.000
2		4825.000	3.610	36.230	39.840	-14.130	53.970	AVERAGE	152.000	102.000
3		9653.000	14.190	26.010	40.200	-13.770	53.970	AVERAGE	154.000	246.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:42**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



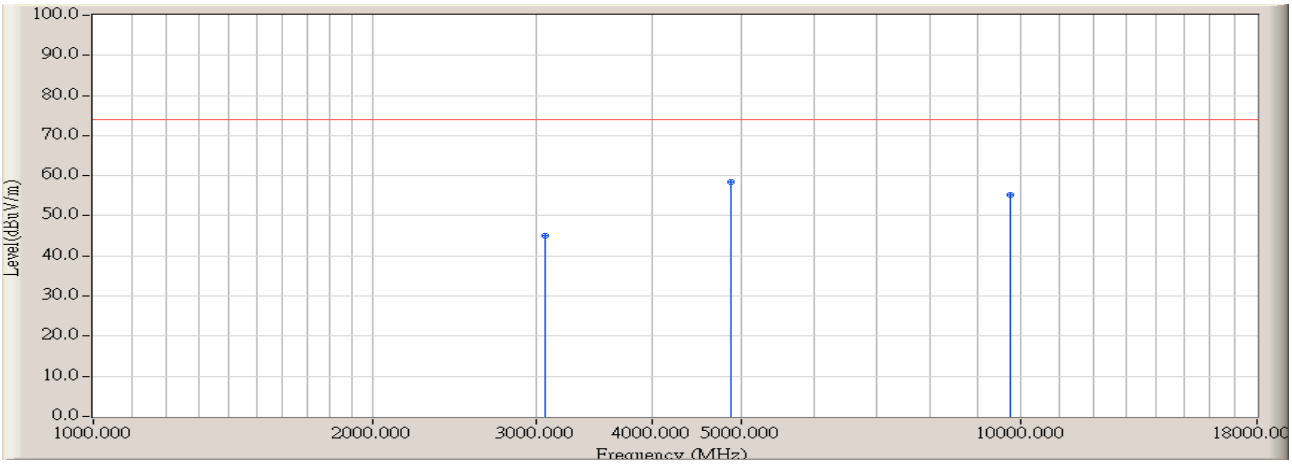
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		62.010	-13.407	39.459	26.052	-13.948	40.000	QUASIPEAK	126.600	114.400
2		147.370	-9.299	39.524	30.225	-13.295	43.520	QUASIPEAK	143.600	80.200
3		165.800	-10.309	42.460	32.151	-11.369	43.520	QUASIPEAK	102.000	184.000
4		431.580	-4.672	36.840	32.168	-13.852	46.020	QUASIPEAK	145.500	174.000
5	*	500.450	-3.384	42.721	39.337	-6.683	46.020	QUASIPEAK	107.500	95.500
6		599.390	-1.510	35.445	33.935	-12.085	46.020	QUASIPEAK	102.000	192.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:42**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



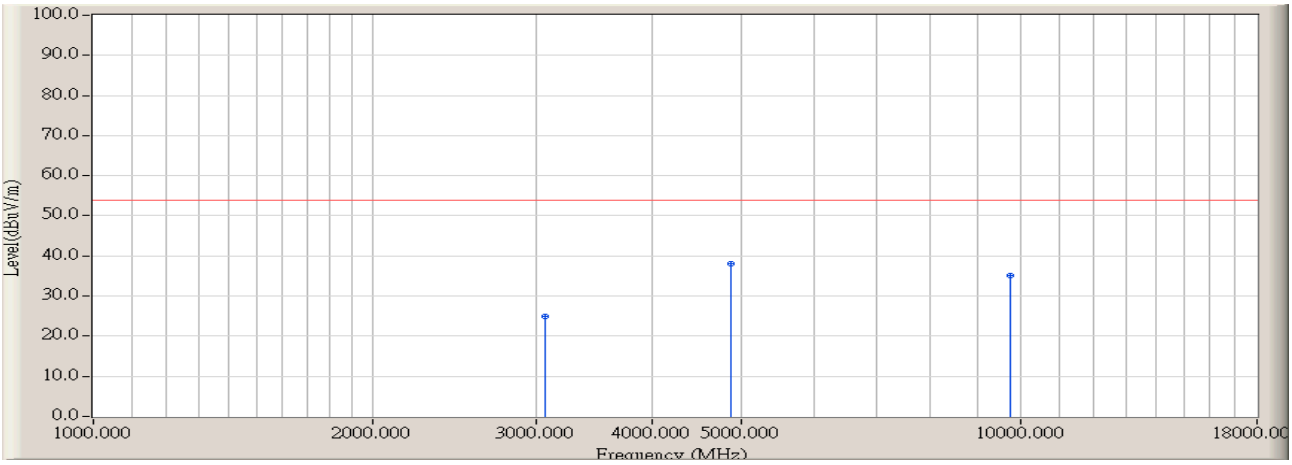
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		35.820	-1.383	32.134	30.751	-9.249	40.000	QUASIPEAK	101.000	132.500
2		71.710	-14.448	43.952	29.504	-10.496	40.000	QUASIPEAK	104.800	94.800
3		119.240	-10.120	44.842	34.722	-8.798	43.520	QUASIPEAK	101.000	254.800
4		183.260	-11.570	45.718	34.148	-9.372	43.520	QUASIPEAK	143.500	72.600
5		328.760	-6.691	38.544	31.853	-14.167	46.020	QUASIPEAK	101.000	79.400
6	*	528.580	-3.289	40.969	37.680	-8.340	46.020	QUASIPEAK	104.400	94.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



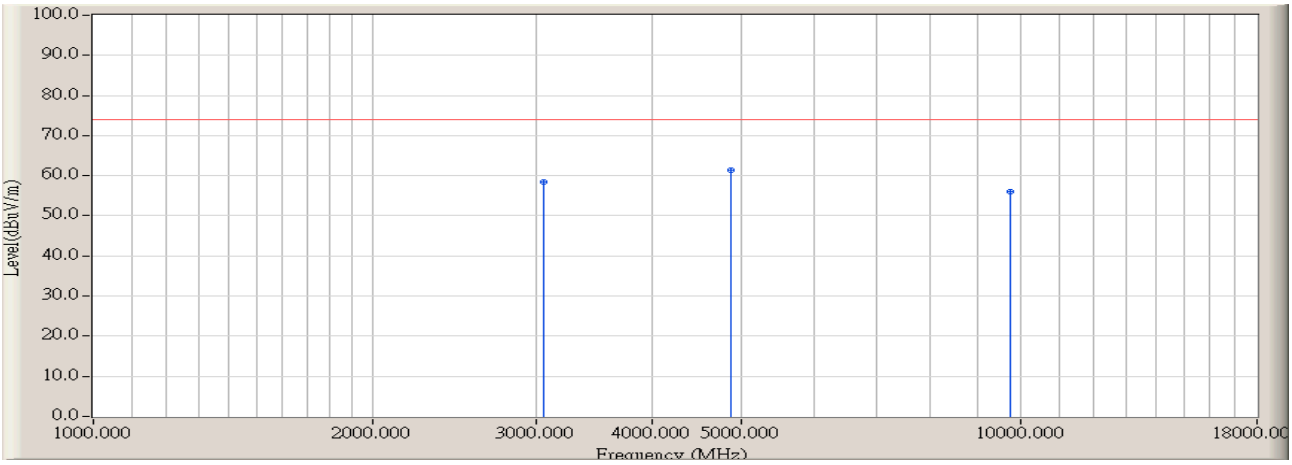
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3074.000	-1.410	46.396	44.986	-28.984	73.970	PEAK	100.000	126.500
2	*	4876.000	3.640	54.828	58.468	-15.502	73.970	PEAK	110.300	142.800
3		9755.000	14.720	40.540	55.260	-18.710	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:10**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



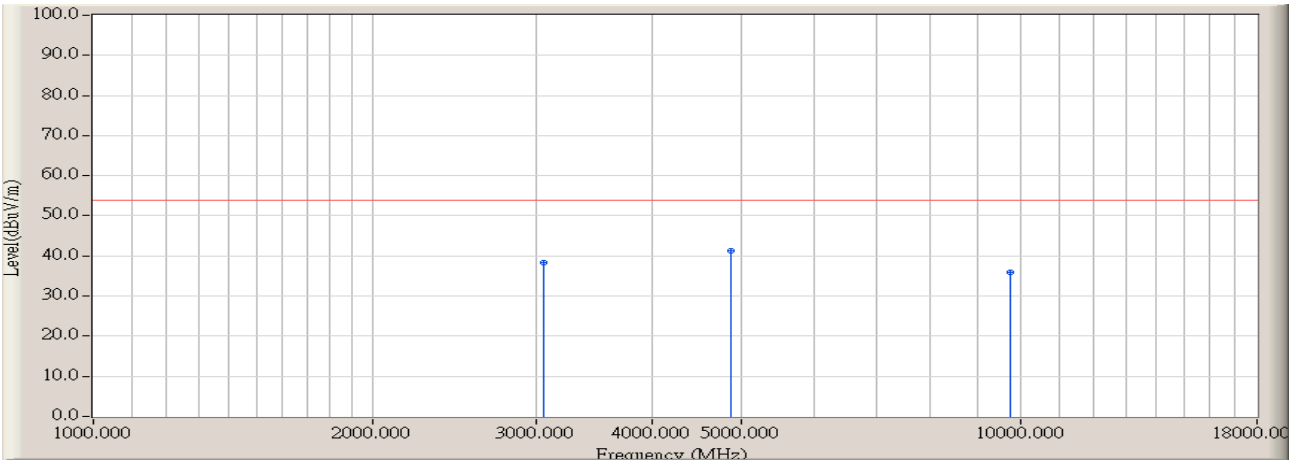
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3074.000	-1.410	26.300	24.890	-29.080	53.970	AVERAGE	148.000	185.000
2	*	4876.000	3.640	34.500	38.140	-15.830	53.970	AVERAGE	147.000	340.000
3		9755.000	14.720	20.450	35.170	-18.800	53.970	AVERAGE	148.000	146.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:06**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



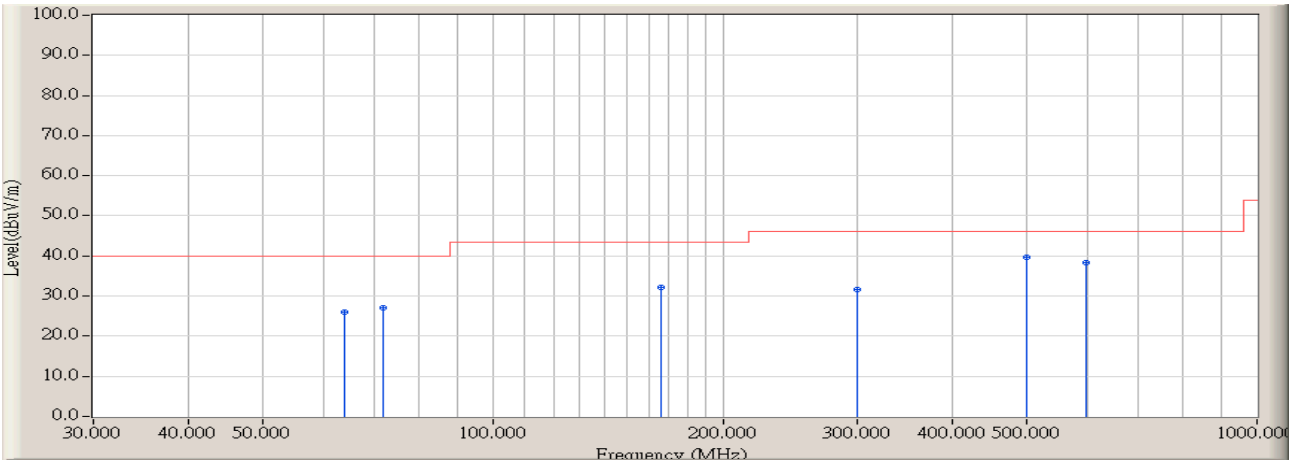
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	59.969	58.519	-15.451	73.970	PEAK	100.000	172.500
2	*	4876.000	3.640	57.685	61.325	-12.645	73.970	PEAK	100.000	167.400
3		9755.000	14.720	41.324	56.044	-17.926	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:06**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2437MHz**



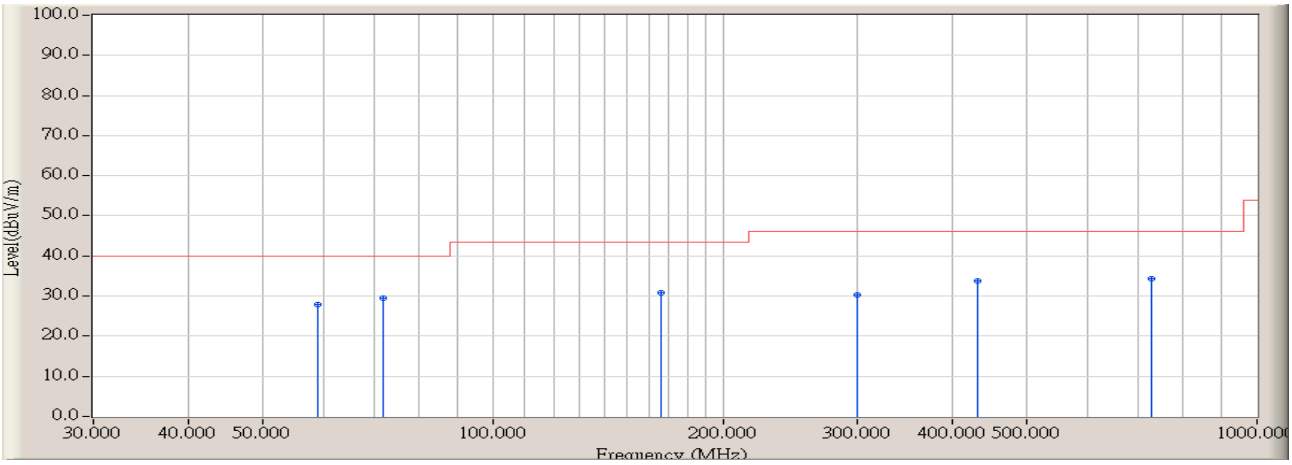
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	39.850	38.400	-15.570	53.970	AVERAGE	147.000	24.000
2	*	4876.000	3.640	37.580	41.220	-12.750	53.970	AVERAGE	154.000	247.000
3		9755.000	14.720	21.320	36.040	-17.930	53.970	AVERAGE	151.000	254.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:43**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



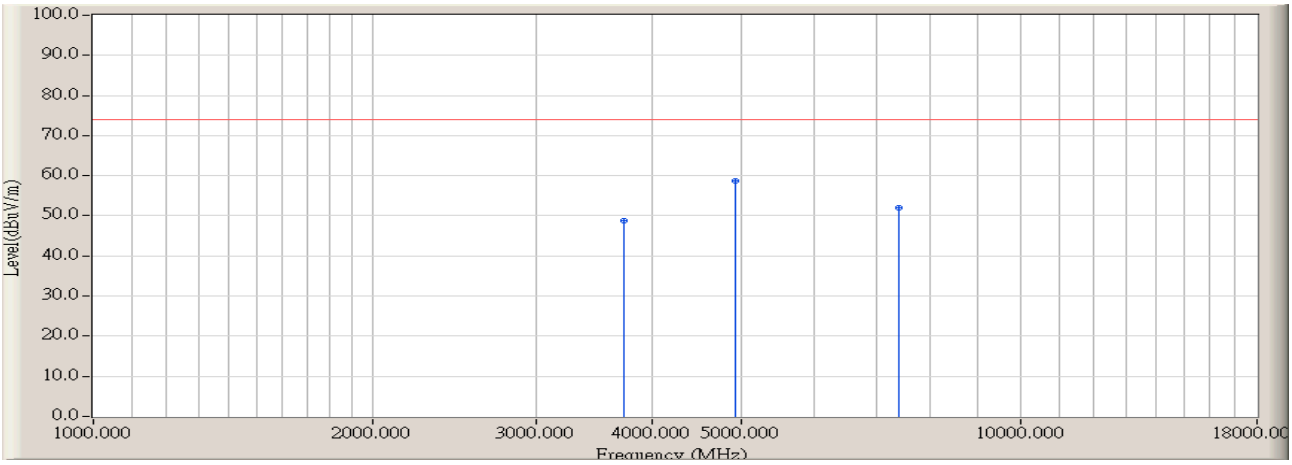
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		63.950	-13.759	39.665	25.906	-14.094	40.000	QUASIPEAK	121.600	113.400
2		71.710	-14.448	41.657	27.209	-12.791	40.000	QUASIPEAK	141.600	79.200
3		165.800	-10.309	42.411	32.102	-11.418	43.520	QUASIPEAK	102.000	175.000
4		299.660	-7.935	39.484	31.549	-14.471	46.020	QUASIPEAK	142.500	187.000
5	*	500.450	-3.384	42.929	39.545	-6.475	46.020	QUASIPEAK	103.500	95.500
6		598.420	-1.577	39.940	38.363	-7.657	46.020	QUASIPEAK	103.000	194.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:43**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



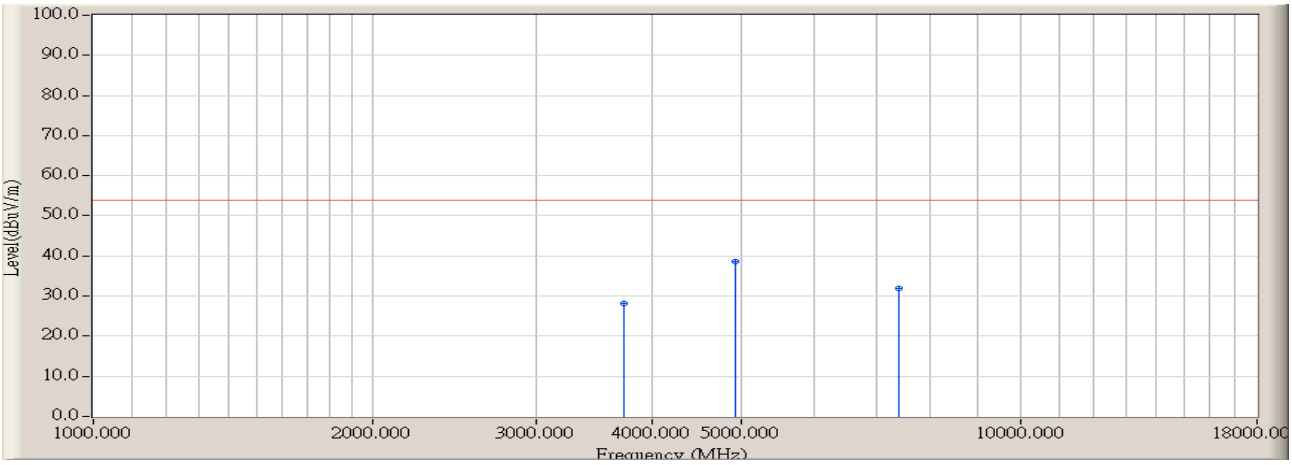
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		59.100	-12.373	40.206	27.833	-12.167	40.000	QUASIPEAK	100.000	136.500
2	*	71.710	-14.448	43.911	29.463	-10.537	40.000	QUASIPEAK	106.800	92.800
3		165.800	-10.309	41.274	30.965	-12.555	43.520	QUASIPEAK	100.000	253.800
4		299.660	-7.935	38.326	30.391	-15.629	46.020	QUASIPEAK	142.500	78.600
5		431.580	-4.672	38.417	33.745	-12.275	46.020	QUASIPEAK	100.000	79.400
6		726.460	0.997	33.432	34.429	-11.591	46.020	QUASIPEAK	108.400	95.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



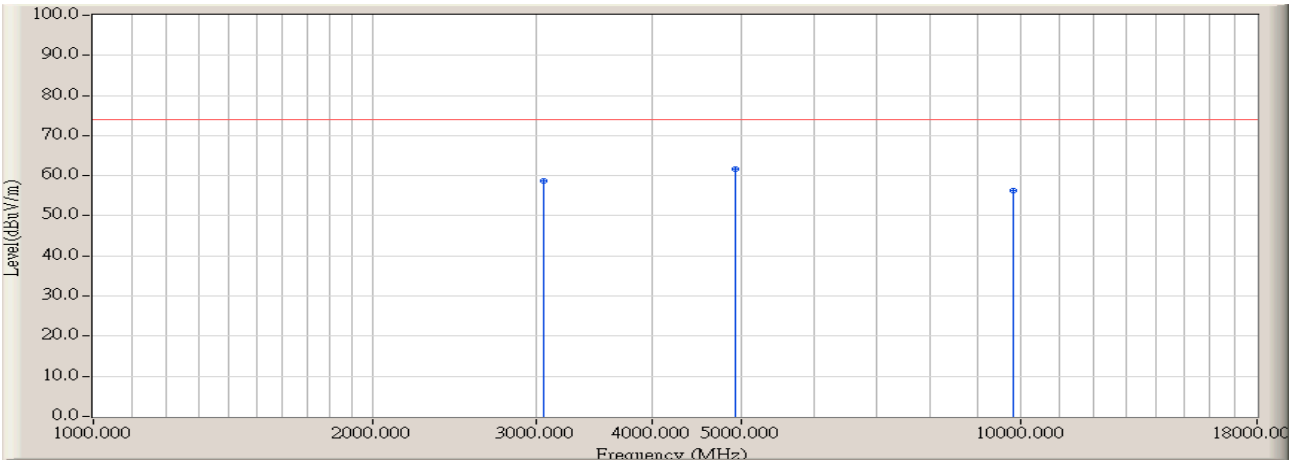
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3737.000	-0.280	48.949	48.669	-25.301	73.970	PEAK	100.000	126.500
2	*	4927.000	3.920	54.893	58.813	-15.157	73.970	PEAK	110.300	142.800
3		7392.000	11.630	40.345	51.975	-21.995	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:17**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



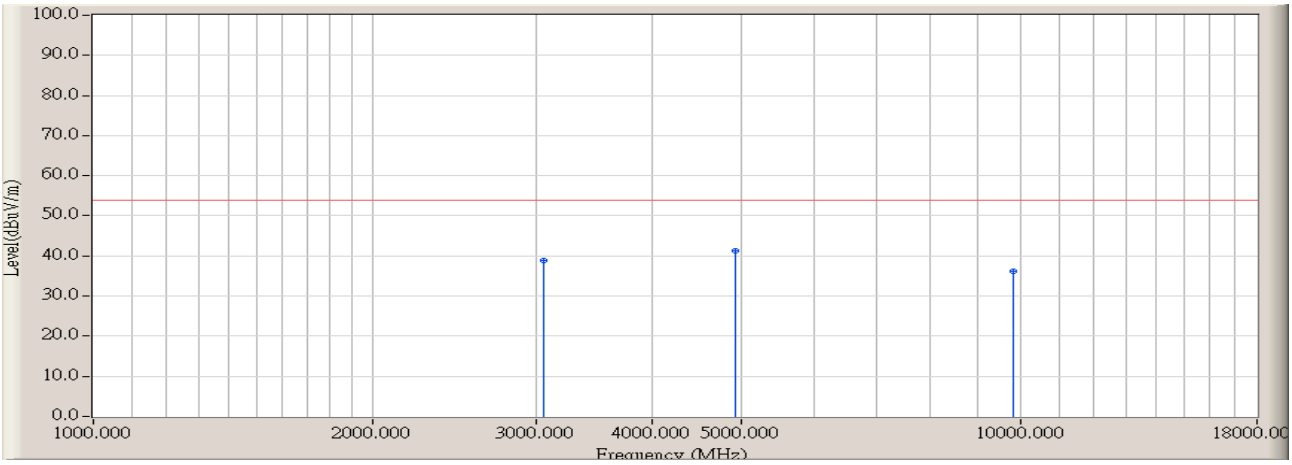
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3737.000	-0.280	28.540	28.260	-25.710	53.970	AVERAGE	156.000	230.000
2	*	4927.000	3.920	34.800	38.720	-15.250	53.970	AVERAGE	149.000	80.500
3		7392.000	11.630	20.300	31.930	-22.040	53.970	AVERAGE	157.000	230.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



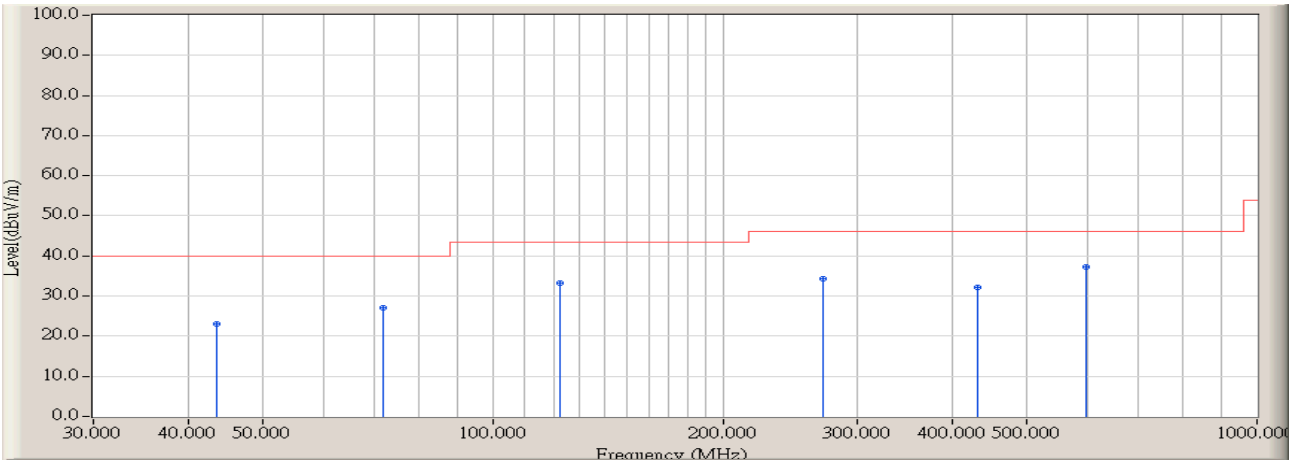
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	60.199	58.749	-15.221	73.970	PEAK	100.000	172.500
2	*	4927.000	3.920	57.656	61.576	-12.394	73.970	PEAK	100.000	167.400
3		9840.000	14.750	41.467	56.217	-17.753	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



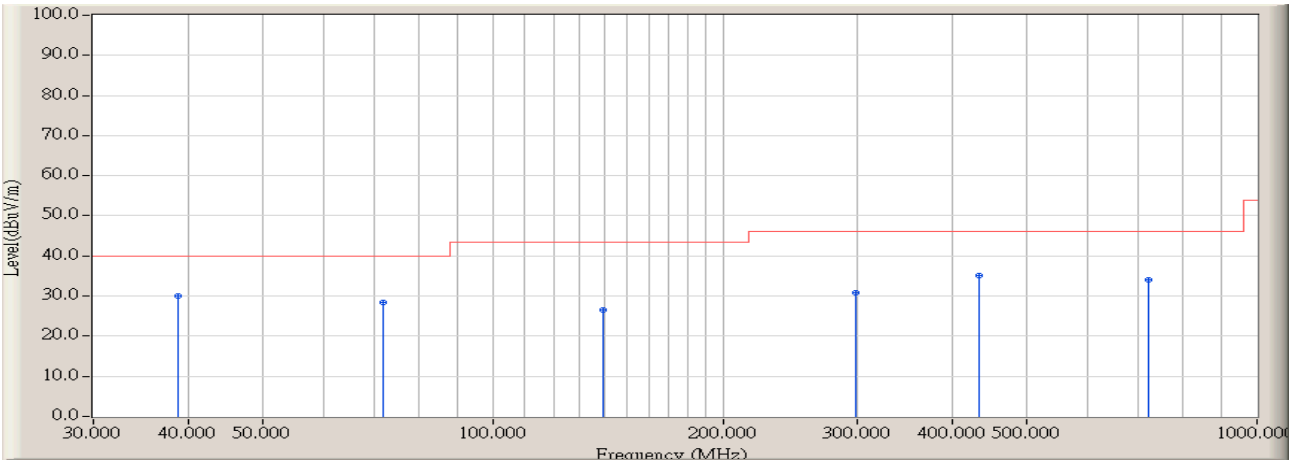
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	40.200	38.750	-15.220	53.970	AVERAGE	156.000	254.000
2	*	4927.000	3.920	37.450	41.370	-12.600	53.970	AVERAGE	145.000	20.500
3		9840.000	14.750	21.400	36.150	-17.820	53.970	AVERAGE	152.000	98.600

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:45**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



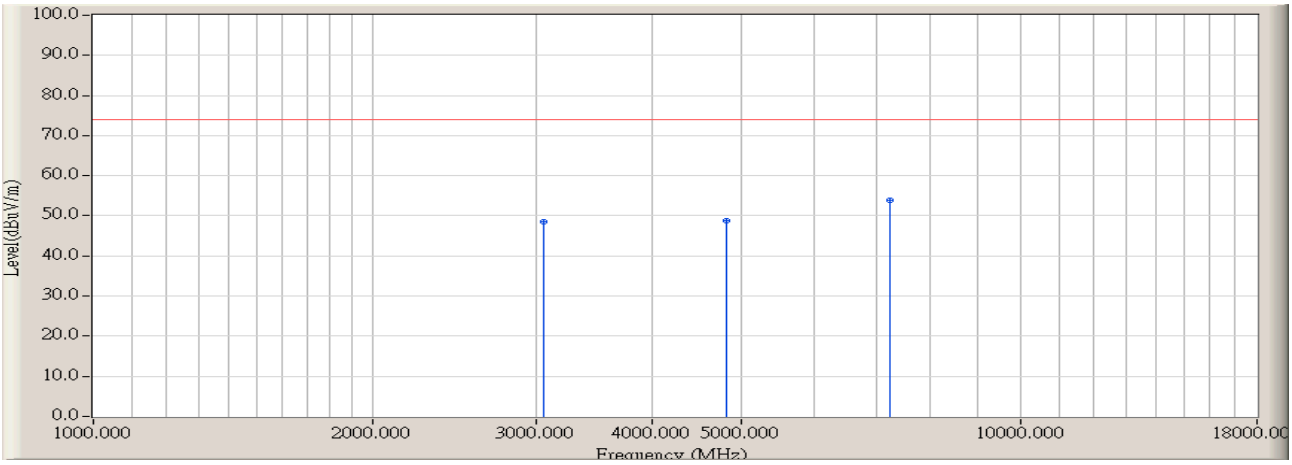
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		43.580	-5.189	28.372	23.183	-16.817	40.000	QUASIPEAK	125.600	112.400
2		71.710	-14.448	41.448	27.000	-13.000	40.000	QUASIPEAK	142.600	79.200
3		122.150	-9.970	43.315	33.345	-10.175	43.520	QUASIPEAK	100.000	185.000
4		270.560	-8.554	42.817	34.263	-11.757	46.020	QUASIPEAK	143.500	177.000
5		431.580	-4.672	36.952	32.280	-13.740	46.020	QUASIPEAK	106.500	93.500
6	*	597.450	-1.642	38.817	37.175	-8.845	46.020	QUASIPEAK	100.000	196.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:45**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



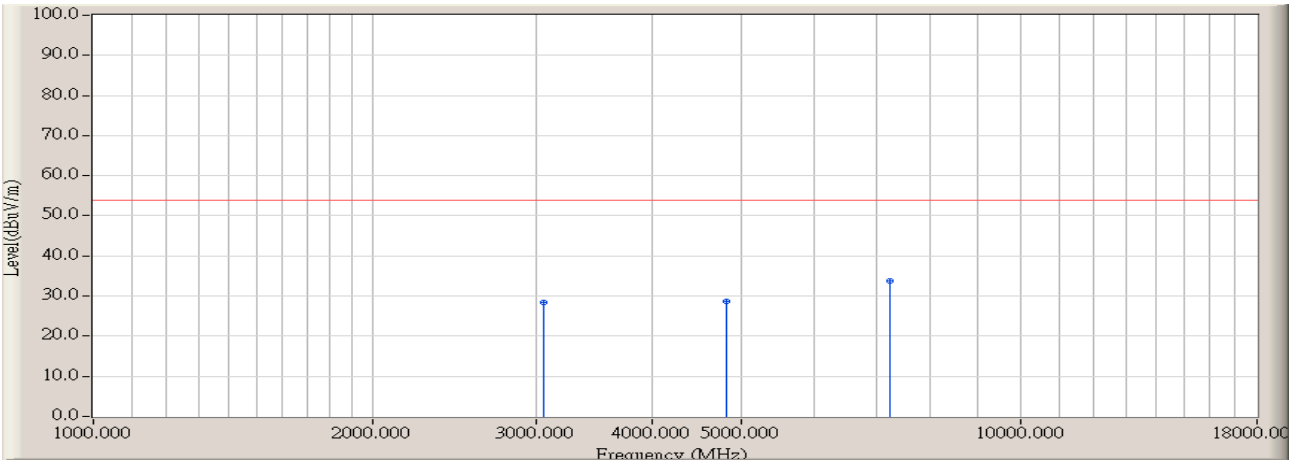
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	38.730	-2.804	32.913	30.109	-9.891	40.000	QUASIPEAK	100.000	136.500
2		71.710	-14.448	43.000	28.552	-11.448	40.000	QUASIPEAK	106.800	92.800
3		139.610	-9.348	35.823	26.475	-17.045	43.520	QUASIPEAK	100.000	253.800
4		298.690	-7.999	38.714	30.715	-15.305	46.020	QUASIPEAK	142.500	78.600
5		433.520	-4.680	39.702	35.022	-10.998	46.020	QUASIPEAK	100.000	79.400
6		722.580	0.935	33.073	34.008	-12.012	46.020	QUASIPEAK	108.400	95.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:22**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



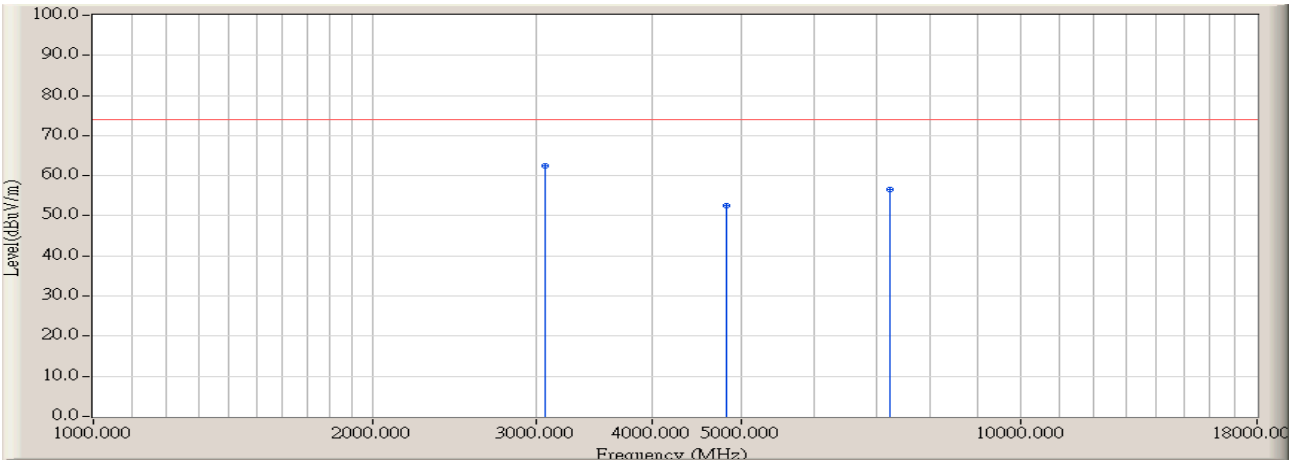
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	49.956	48.506	-25.464	73.970	PEAK	100.000	126.500
2		4825.000	3.610	45.207	48.817	-25.153	73.970	PEAK	110.300	142.800
3	*	7222.000	12.280	41.639	53.919	-20.051	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:22**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



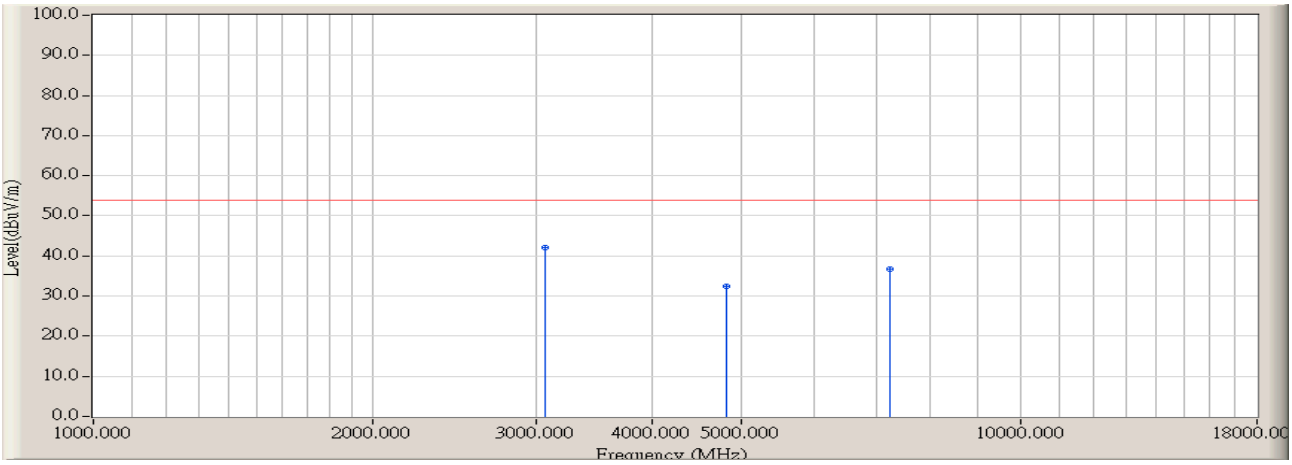
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	29.840	28.390	-25.580	53.970	AVERAGE	149.000	254.000
2		4825.000	3.610	25.200	28.810	-25.160	53.970	AVERAGE	145.000	30.600
3	*	7222.000	12.280	21.500	33.780	-20.190	53.970	AVERAGE	148.500	145.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:24**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



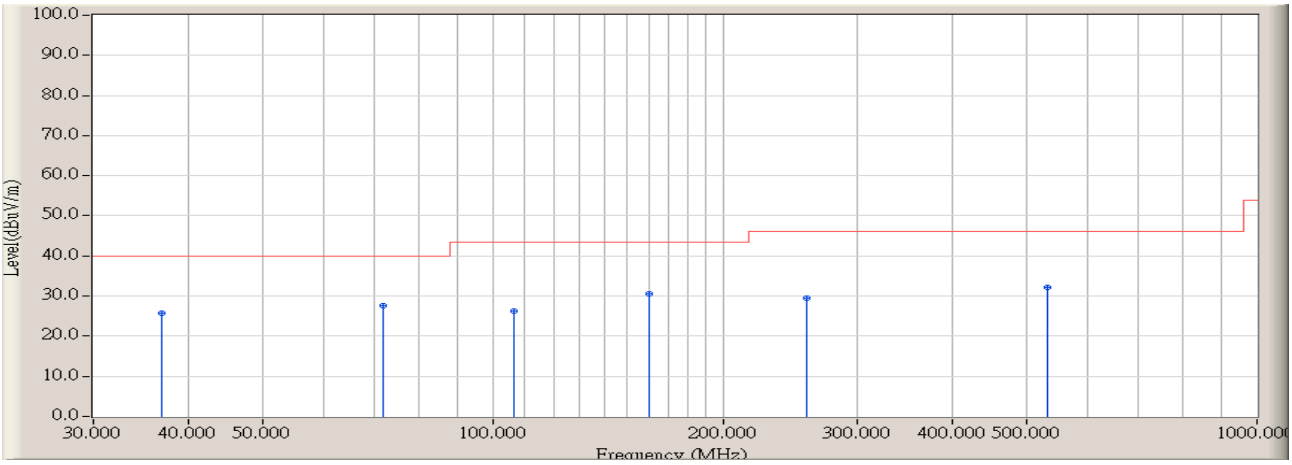
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3074.000	-1.410	63.761	62.351	-11.619	73.970	PEAK	100.000	172.500
2		4825.000	3.610	48.886	52.496	-21.474	73.970	PEAK	100.000	167.400
3		7239.000	12.270	44.345	56.615	-17.355	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:24**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



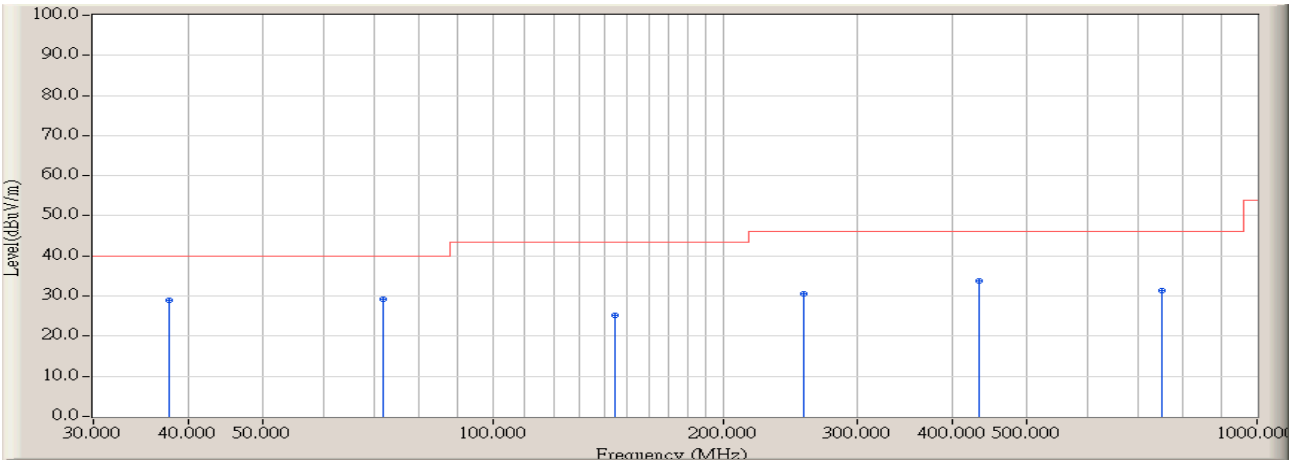
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3074.000	-1.410	43.560	42.150	-11.820	53.970	AVERAGE	156.000	354.000
2		4825.000	3.610	28.840	32.450	-21.520	53.970	AVERAGE	147.500	243.100
3		7239.000	12.270	24.340	36.610	-17.360	53.970	AVERAGE	146.800	100.700

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:46**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



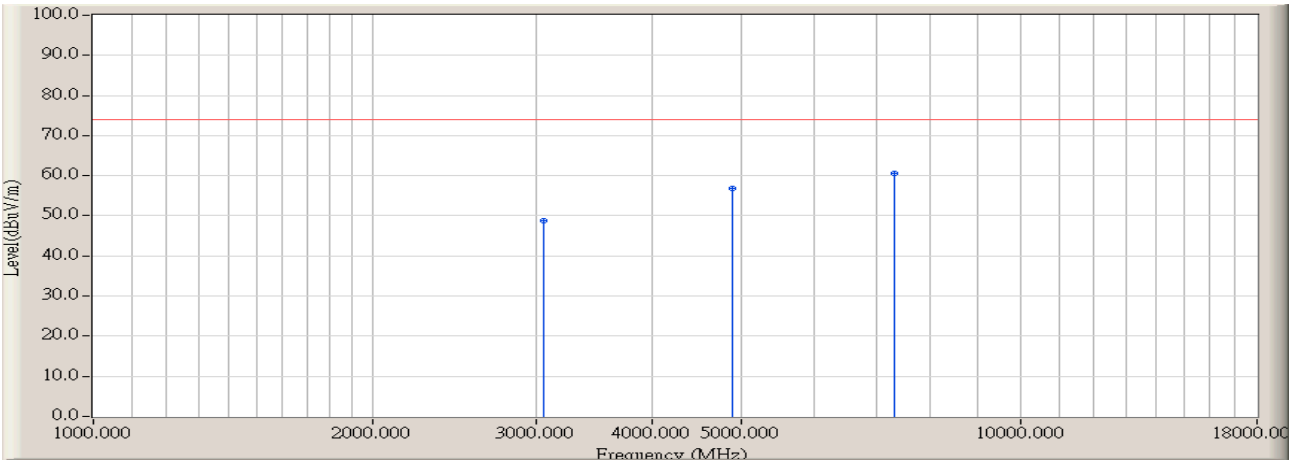
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		36.790	-1.849	27.486	25.637	-14.363	40.000	QUASIPEAK	126.600	114.400
2	*	71.710	-14.448	42.154	27.706	-12.294	40.000	QUASIPEAK	143.600	80.200
3		106.630	-10.827	37.032	26.205	-17.315	43.520	QUASIPEAK	102.000	184.000
4		159.980	-9.828	40.289	30.461	-13.059	43.520	QUASIPEAK	145.500	174.000
5		256.980	-8.592	38.096	29.504	-16.516	46.020	QUASIPEAK	107.500	95.500
6		531.490	-3.287	35.520	32.233	-13.787	46.020	QUASIPEAK	102.000	192.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:46**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



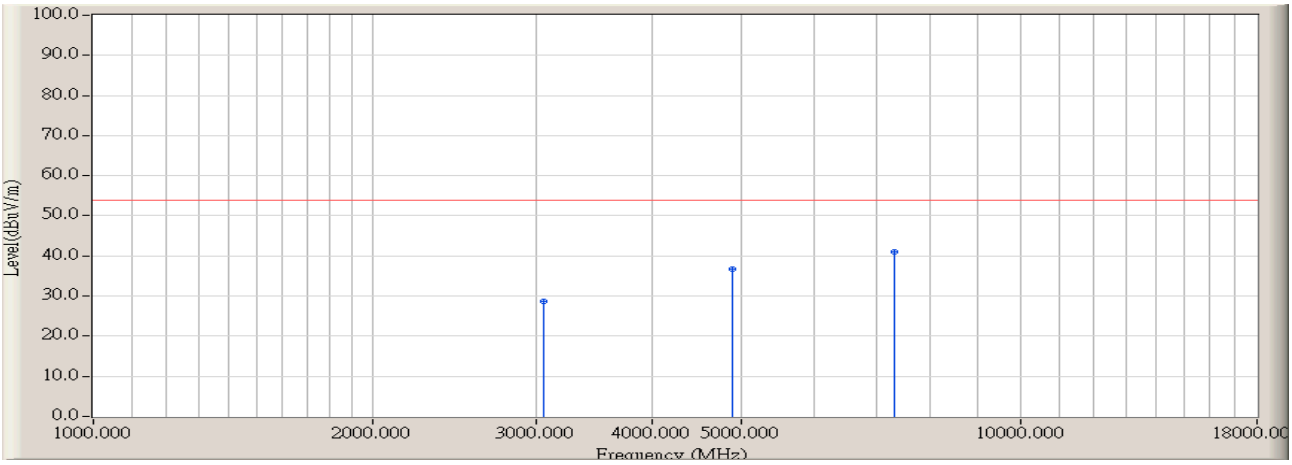
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		37.760	-2.312	31.337	29.025	-10.975	40.000	QUASIPEAK	101.000	132.500
2	*	71.710	-14.448	43.549	29.101	-10.899	40.000	QUASIPEAK	104.800	94.800
3		144.460	-9.146	34.411	25.265	-18.255	43.520	QUASIPEAK	101.000	254.800
4		255.040	-8.638	39.325	30.687	-15.333	46.020	QUASIPEAK	143.500	72.600
5		432.550	-4.700	38.354	33.654	-12.366	46.020	QUASIPEAK	101.000	79.400
6		749.740	1.447	29.820	31.267	-14.753	46.020	QUASIPEAK	104.400	94.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:26**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



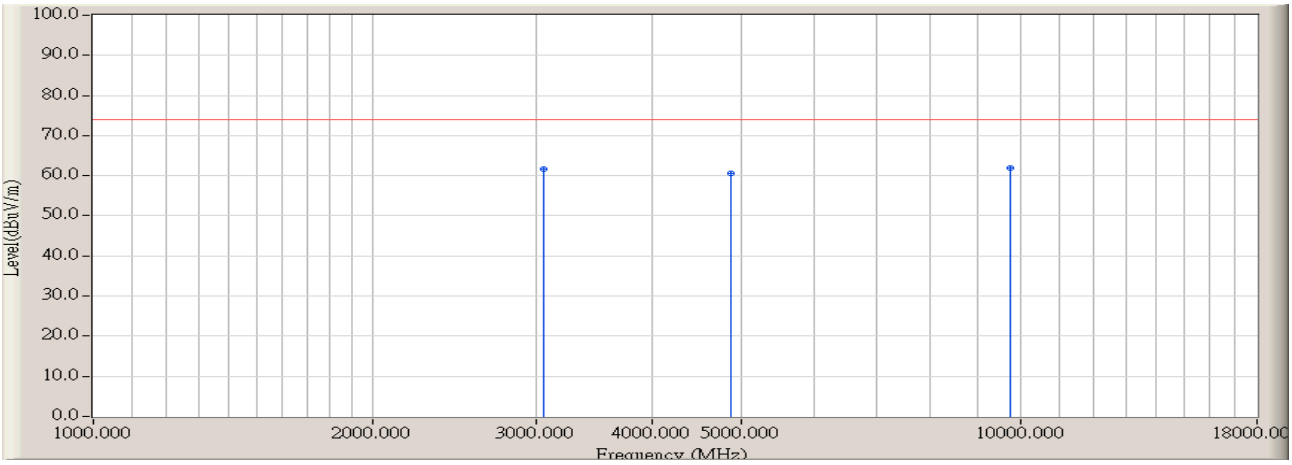
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	50.140	48.690	-25.280	73.970	PEAK	100.000	126.500
2		4893.000	3.620	53.157	56.777	-17.193	73.970	PEAK	110.300	142.800
3	*	7307.000	12.130	48.491	60.621	-13.349	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:26**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



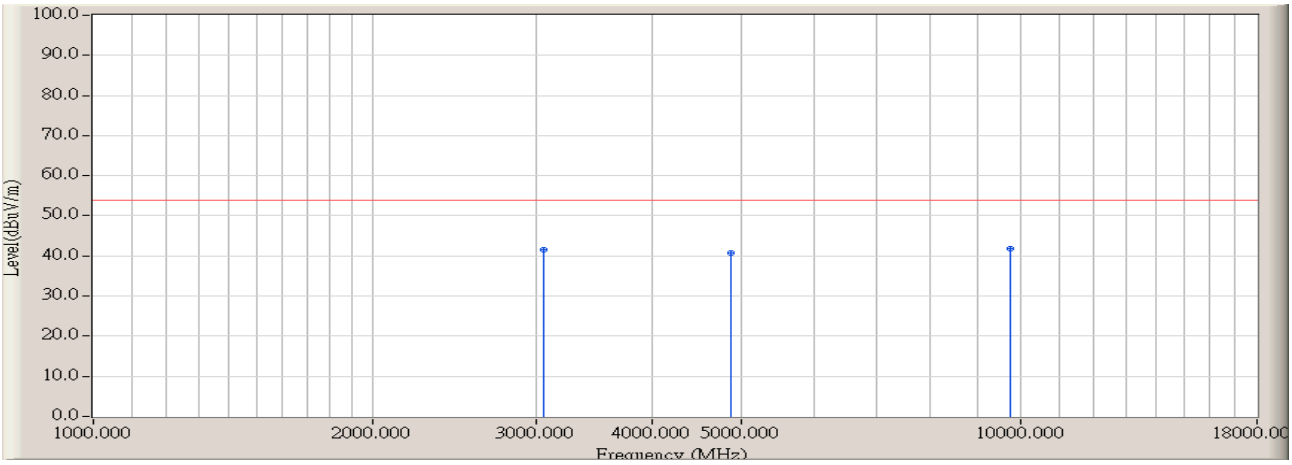
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	30.100	28.650	-25.320	53.970	AVERAGE	161.400	247.000
2		4893.000	3.620	33.100	36.720	-17.250	53.970	AVERAGE	159.000	248.600
3	*	7307.000	12.130	28.800	40.930	-13.040	53.970	AVERAGE	158.000	246.300

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



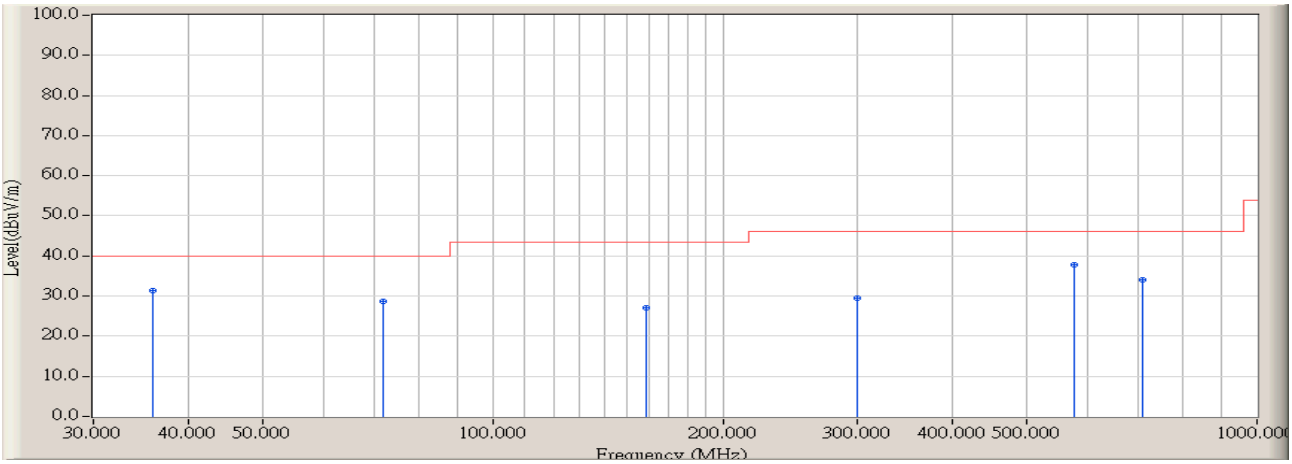
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	63.200	61.750	-12.220	73.970	PEAK	100.000	172.500
2		4876.000	3.640	57.012	60.652	-13.318	73.970	PEAK	100.000	167.400
3	*	9755.000	14.720	47.191	61.911	-12.059	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2437MHz**



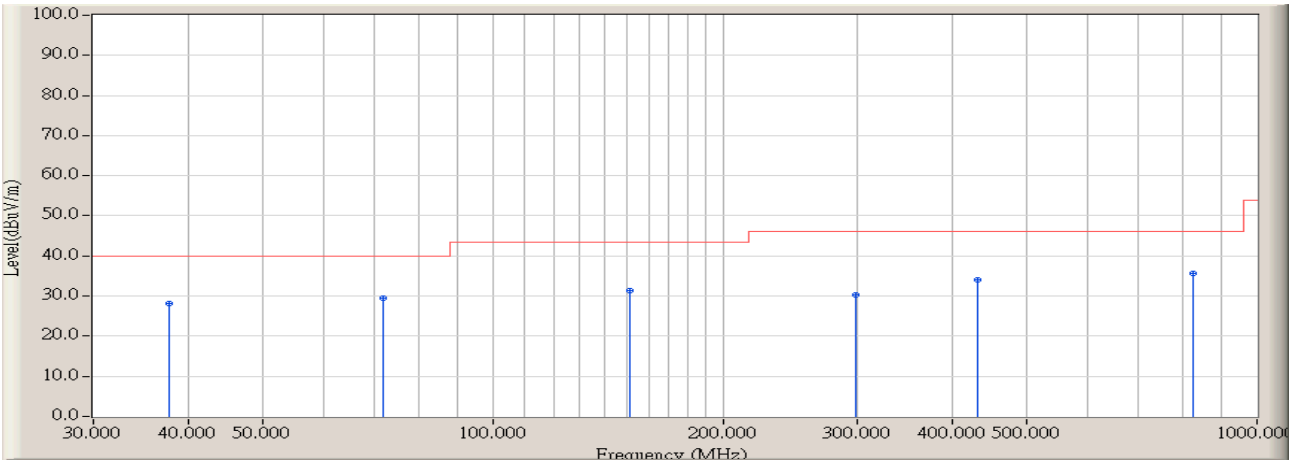
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	43.100	41.650	-12.320	53.970	AVERAGE	164.000	245.000
2		4876.000	3.640	37.000	40.640	-13.330	53.970	AVERAGE	162.000	20.800
3	*	9755.000	14.720	27.120	41.840	-12.130	53.970	AVERAGE	176.000	245.000

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:47**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



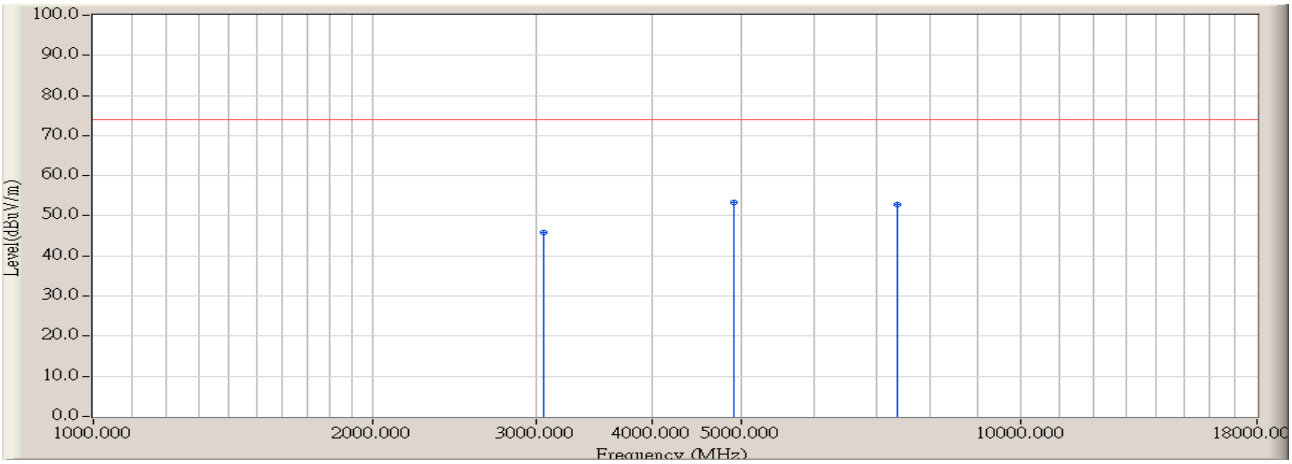
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		35.820	-1.383	32.701	31.318	-8.682	40.000	QUASIPEAK	121.600	113.400
2		71.710	-14.448	43.230	28.782	-11.218	40.000	QUASIPEAK	141.600	79.200
3		159.010	-9.804	36.812	27.008	-16.512	43.520	QUASIPEAK	102.000	175.000
4		299.660	-7.935	37.508	29.573	-16.447	46.020	QUASIPEAK	142.500	187.000
5	*	577.080	-1.414	39.221	37.807	-8.213	46.020	QUASIPEAK	103.500	95.500
6		708.030	0.362	33.685	34.047	-11.973	46.020	QUASIPEAK	103.000	194.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/27 - 16:47**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : CBL6112B-2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



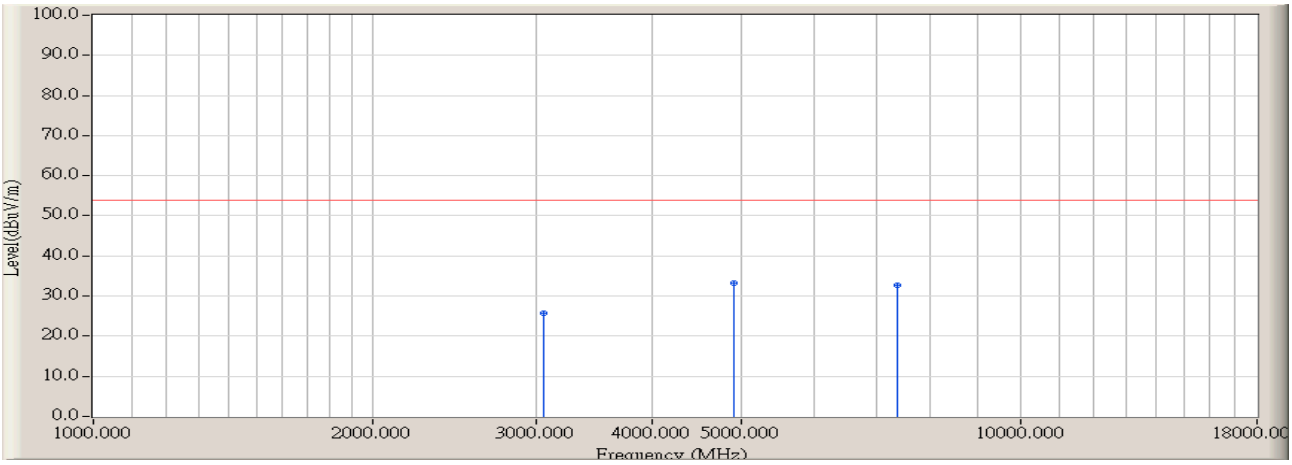
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		37.760	-2.312	30.463	28.151	-11.849	40.000	QUASIPEAK	100.000	136.500
2		71.710	-14.448	43.816	29.368	-10.632	40.000	QUASIPEAK	106.800	92.800
3		151.250	-9.499	40.857	31.358	-12.162	43.520	QUASIPEAK	100.000	253.800
4		298.690	-7.999	38.167	30.168	-15.852	46.020	QUASIPEAK	142.500	78.600
5		431.580	-4.672	38.821	34.149	-11.871	46.020	QUASIPEAK	100.000	79.400
6	*	825.400	1.928	33.688	35.616	-10.404	46.020	QUASIPEAK	108.400	95.800

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



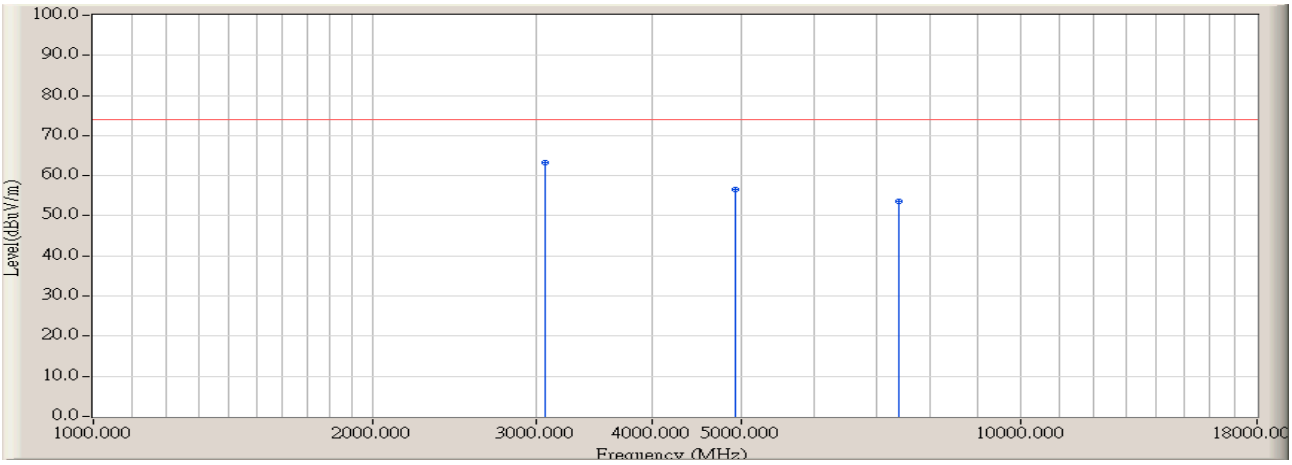
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	47.225	45.775	-28.195	73.970	PEAK	100.000	126.500
2	*	4910.000	3.720	49.765	53.485	-20.485	73.970	PEAK	110.300	142.800
3		7375.000	11.650	41.079	52.729	-21.241	73.970	PEAK	105.000	136.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



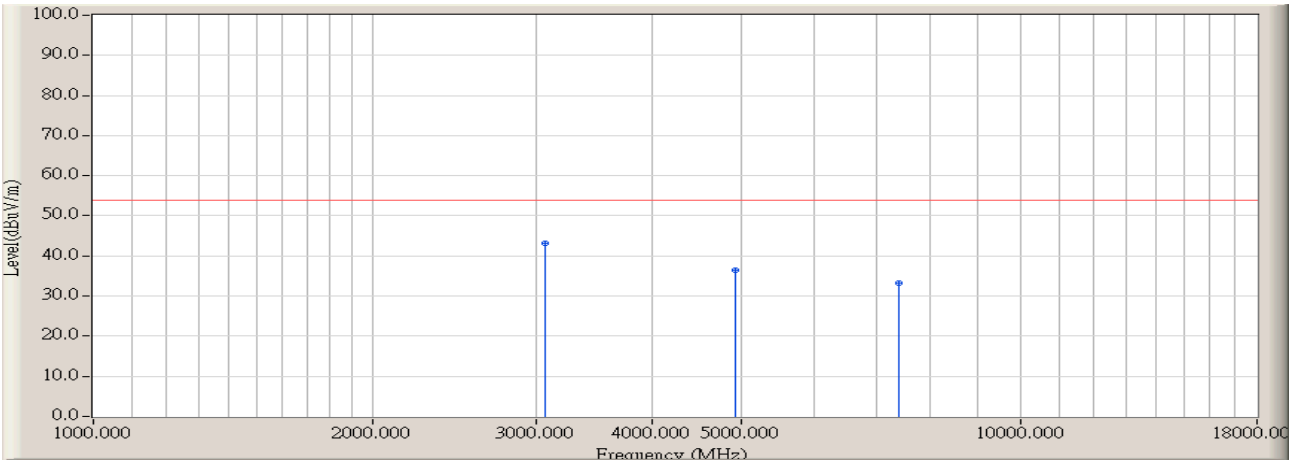
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3057.000	-1.450	27.200	25.750	-28.220	53.970	AVERAGE	154.000	215.000
2	*	4910.000	3.720	29.540	33.260	-20.710	53.970	AVERAGE	146.000	156.000
3		7375.000	11.650	21.000	32.650	-21.320	53.970	AVERAGE	158.000	36.900

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:33**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3074.000	-1.410	64.721	63.311	-10.659	73.970	PEAK	100.000	172.500
2		4927.000	3.920	52.678	56.598	-17.372	73.970	PEAK	100.000	167.400
3		7392.000	11.630	41.916	53.546	-20.424	73.970	PEAK	103.600	206.500

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/26 - 15:33**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	3074.000	-1.410	44.620	43.210	-10.760	53.970	AVERAGE	164.000	324.000
2		4927.000	3.920	32.450	36.370	-17.600	53.970	AVERAGE	149.000	120.600
3		7392.000	11.630	21.560	33.190	-20.780	53.970	AVERAGE	148.000	254.000

5. RF Antenna Conducted Spurious

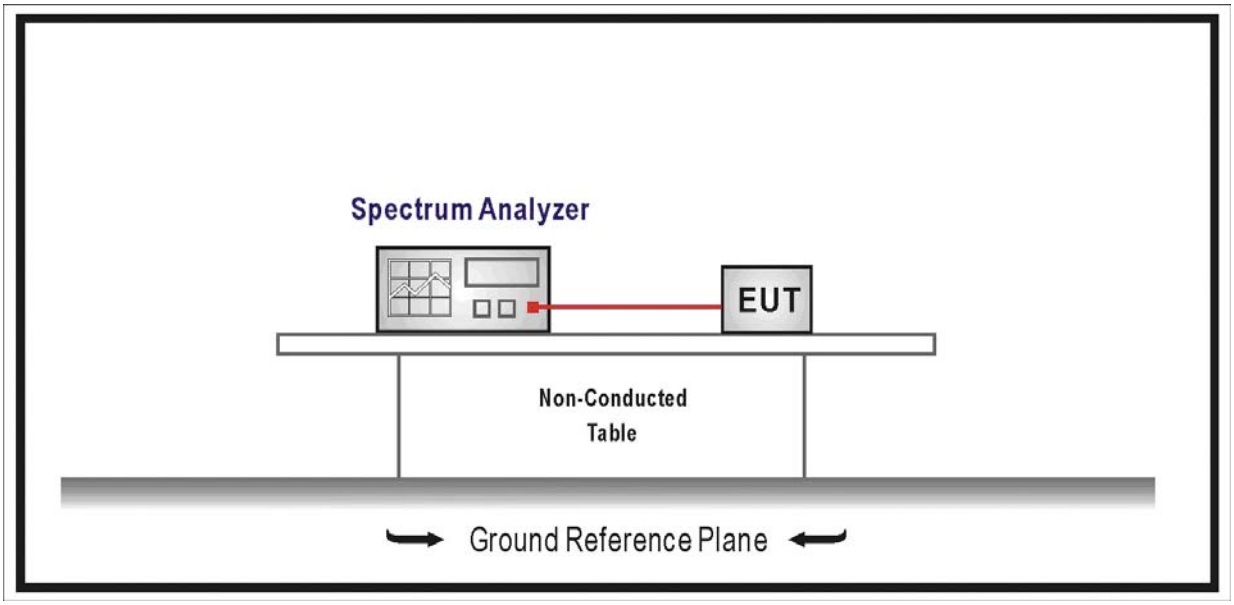
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-4

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

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

5.2. Test Setup



5.3. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.4. Test Procedure

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

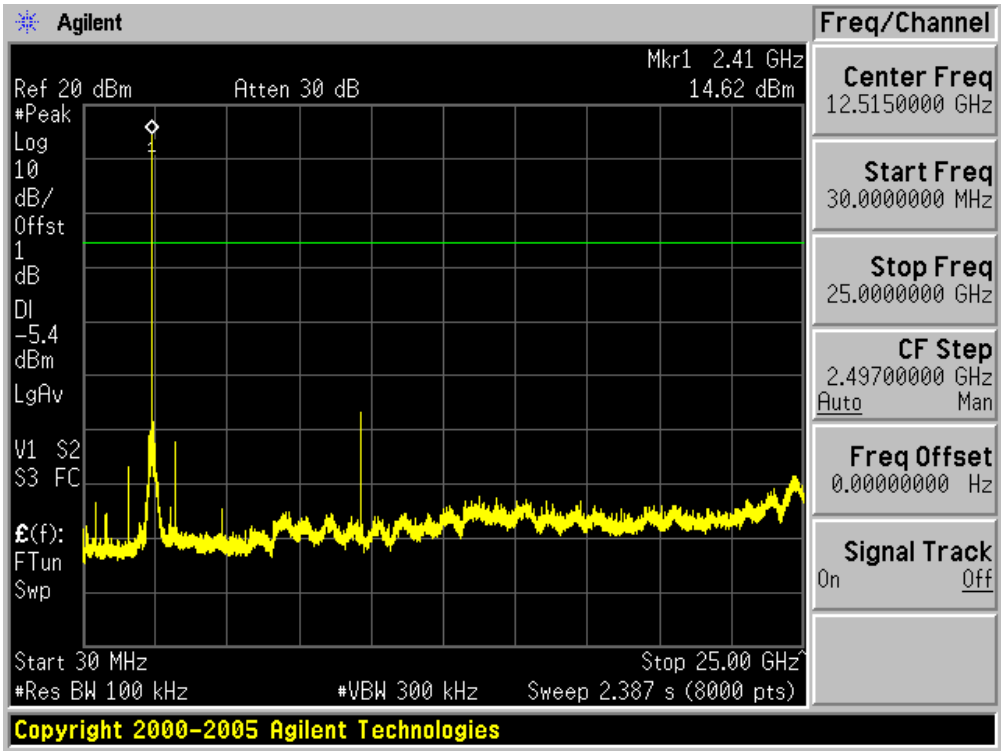
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

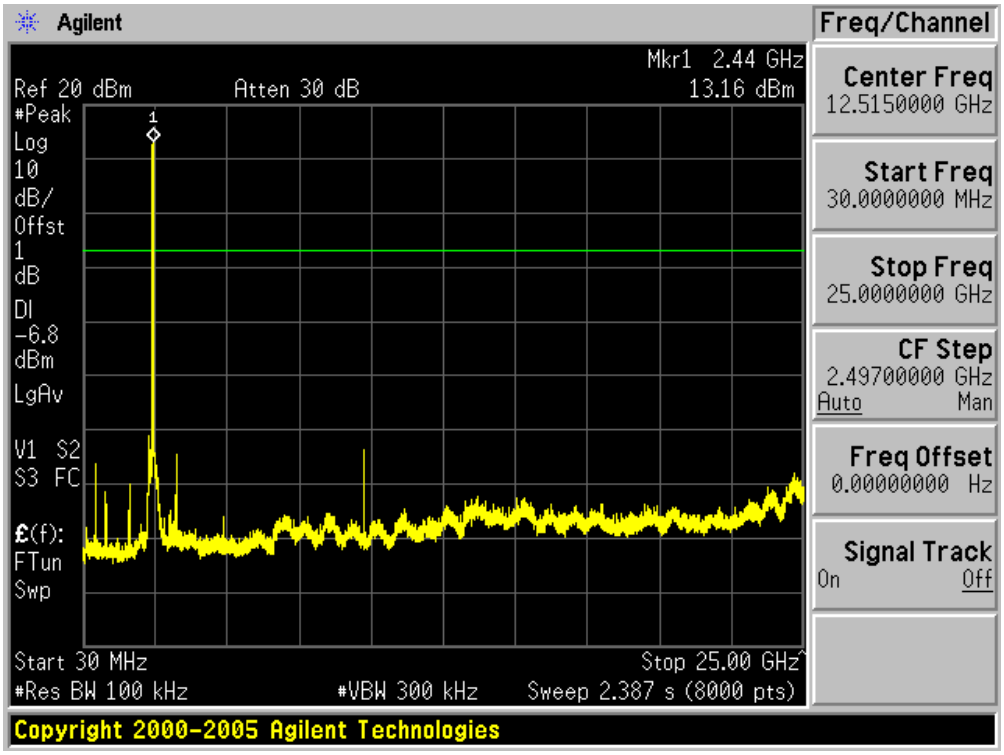
5.6. Test Result

Product	:	IWAVEPORT WLM54GP26
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

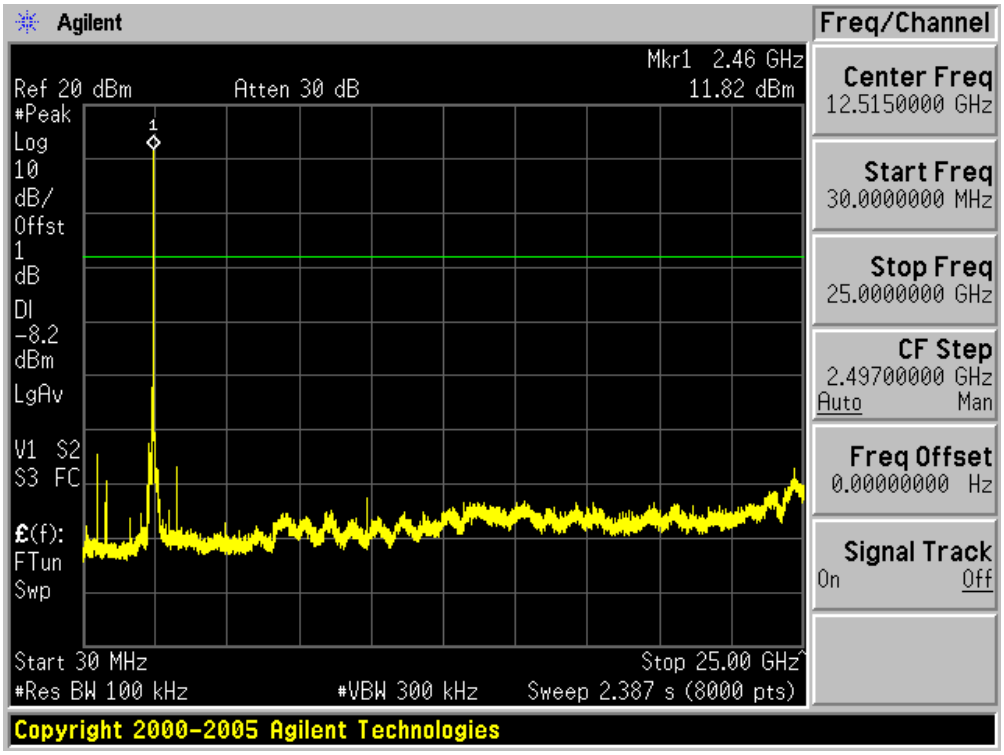
Channel 01 (2412MHz)



Channel 06 (2437MHz)

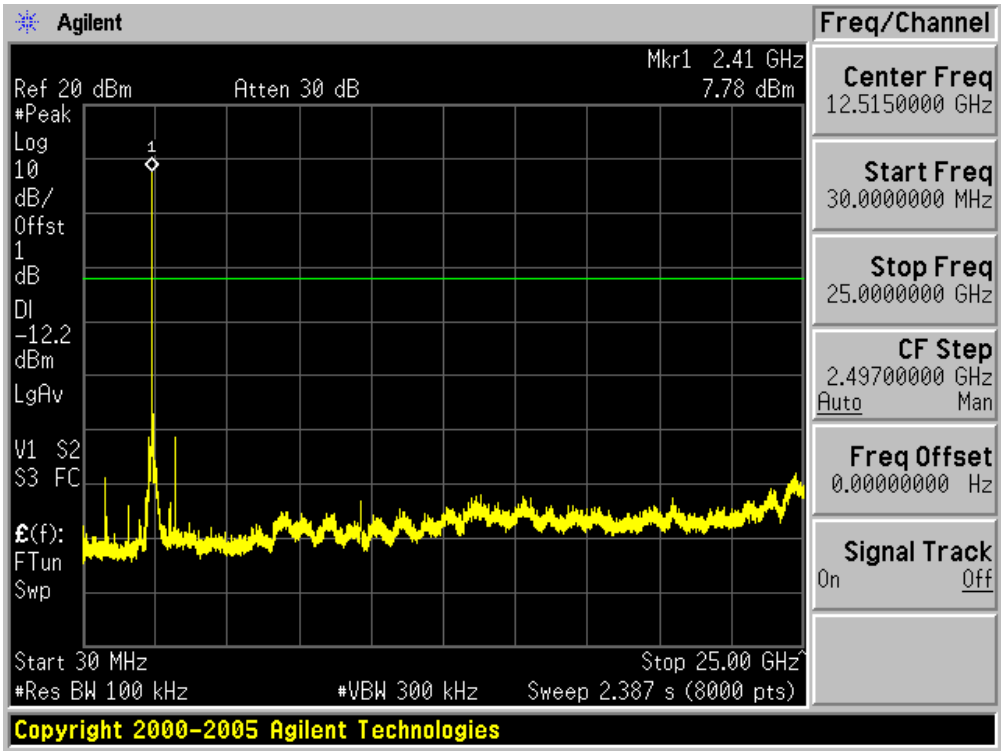


Channel 11 (2462MHz)

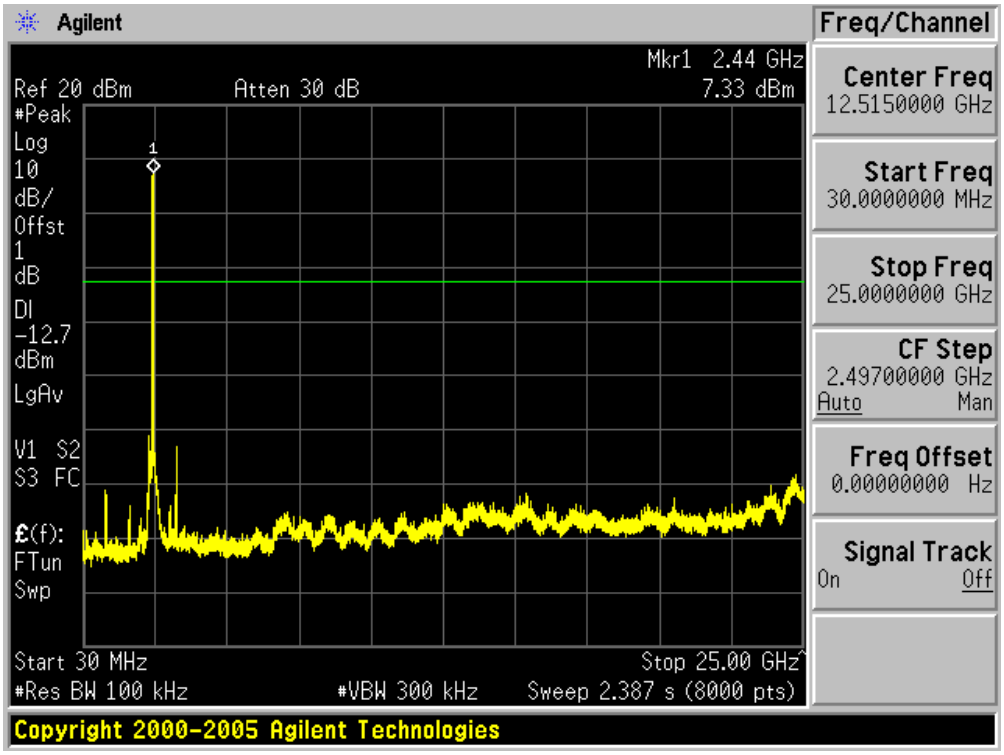


Product	:	IWAVEPORT WLM54GP26
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

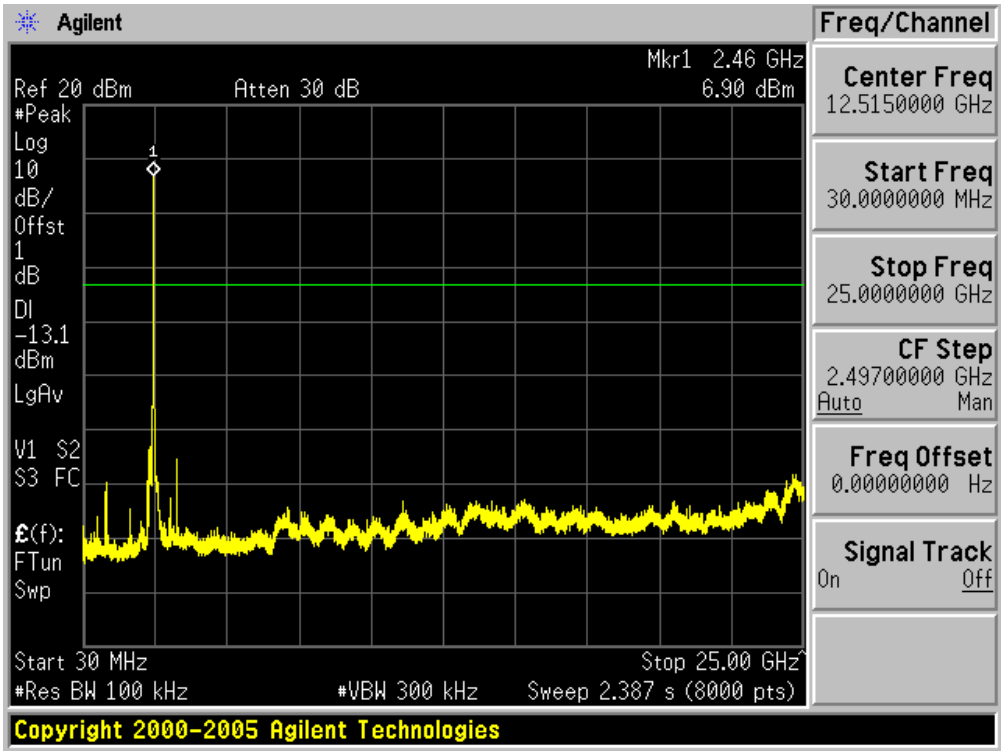
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



6. Radiated Emission Band Edge

6.1. Test Equipment

☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2007/11/12
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

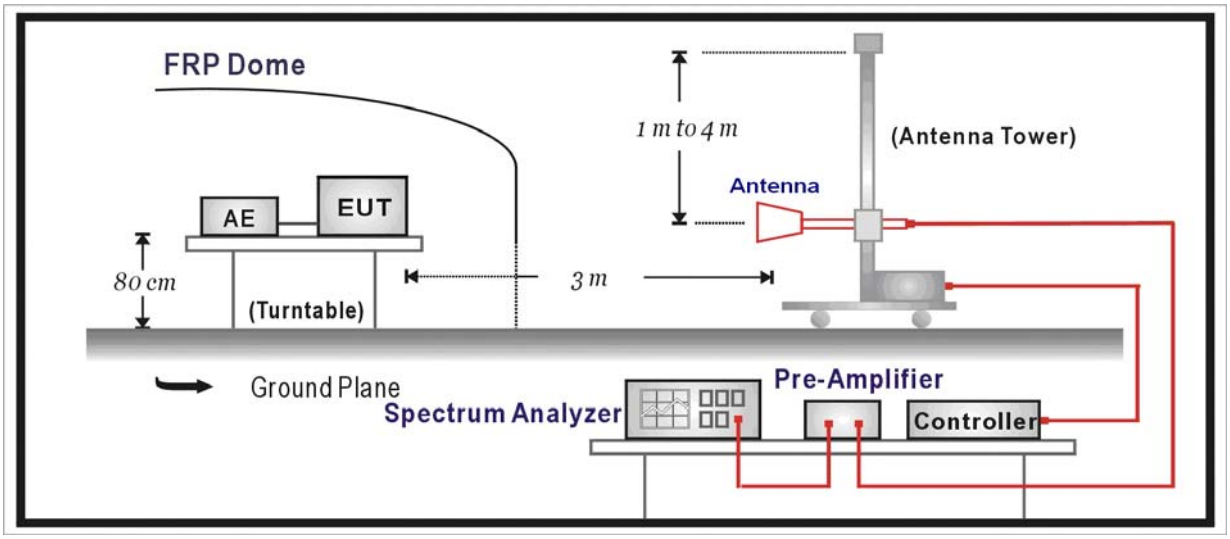
☐Radiated Emission / AC-3

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

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

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

6.2. Test Setup



6.3. Limit

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

6.4. Test Procedure

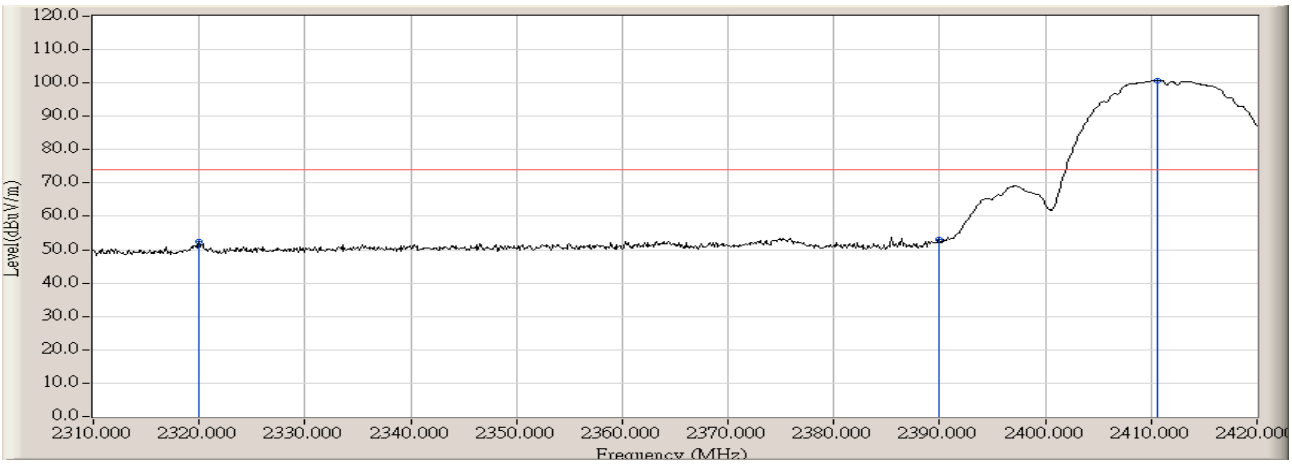
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum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

6.5. Uncertainty

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

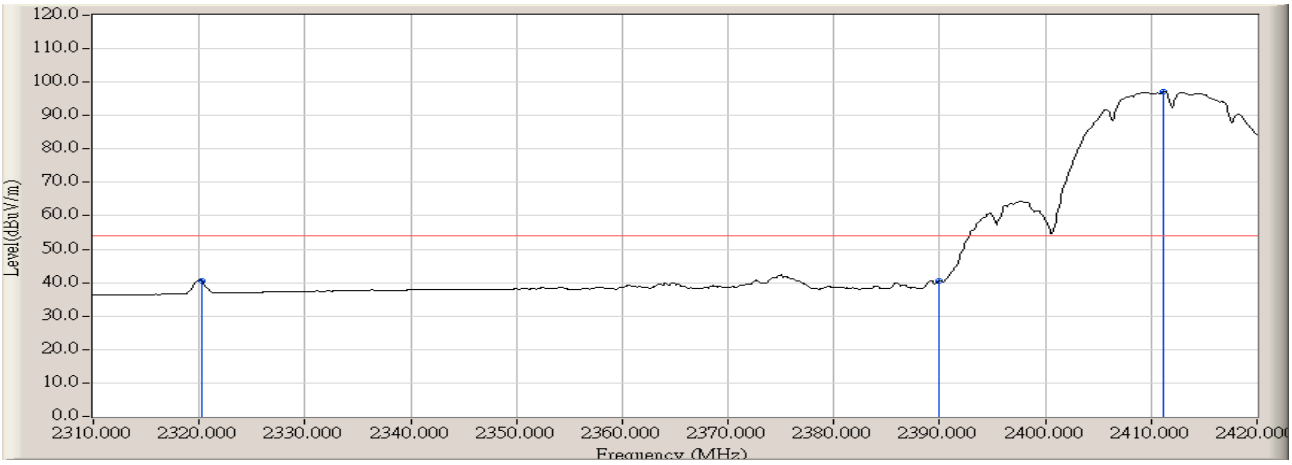
6.6. Test Result

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:31**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



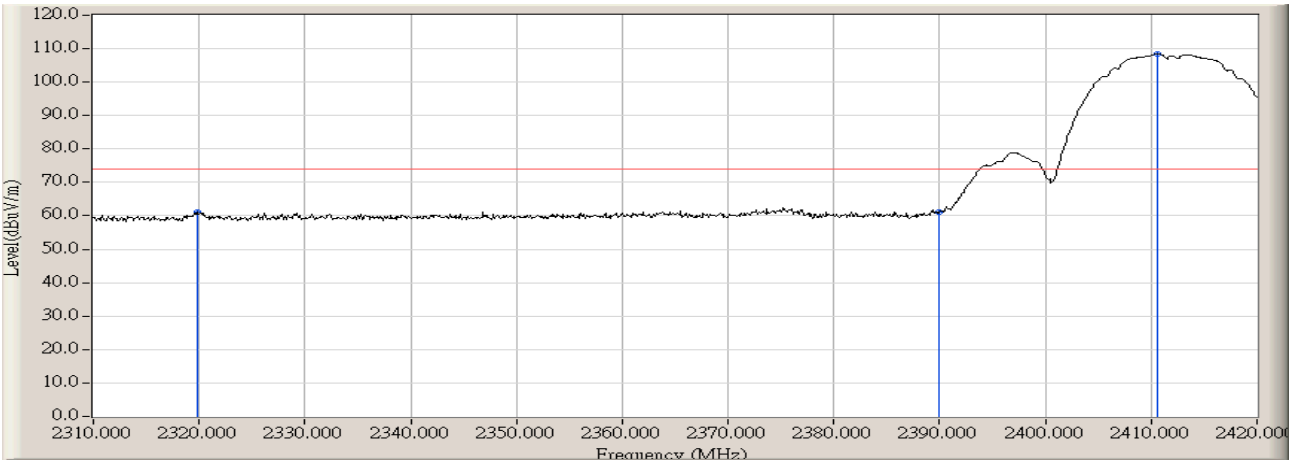
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2320.010	-3.272	55.656	52.383	-21.587	73.970	PEAK
2		2390.000	-3.202	56.165	52.963	-21.007	73.970	PEAK
3	*	2410.540	-3.210	104.058	100.849	N/A	N/A	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:32**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



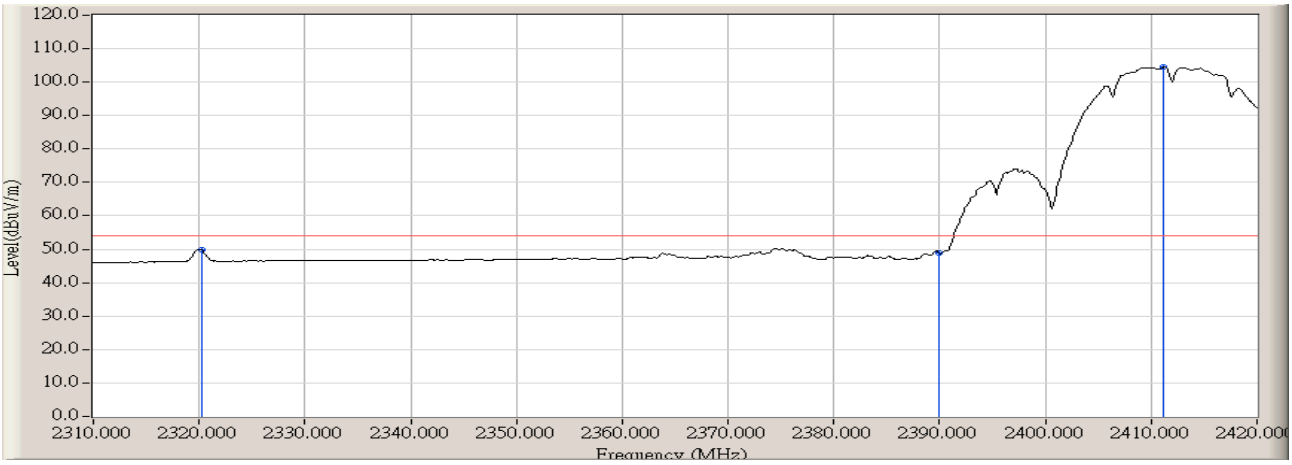
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2320.230	-3.274	43.824	40.551	-13.419	53.970	AVERAGE
2		2390.000	-3.202	43.632	40.430	-13.540	53.970	AVERAGE
3	*	2411.200	-3.211	100.448	97.238	N/A	N/A	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:27**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



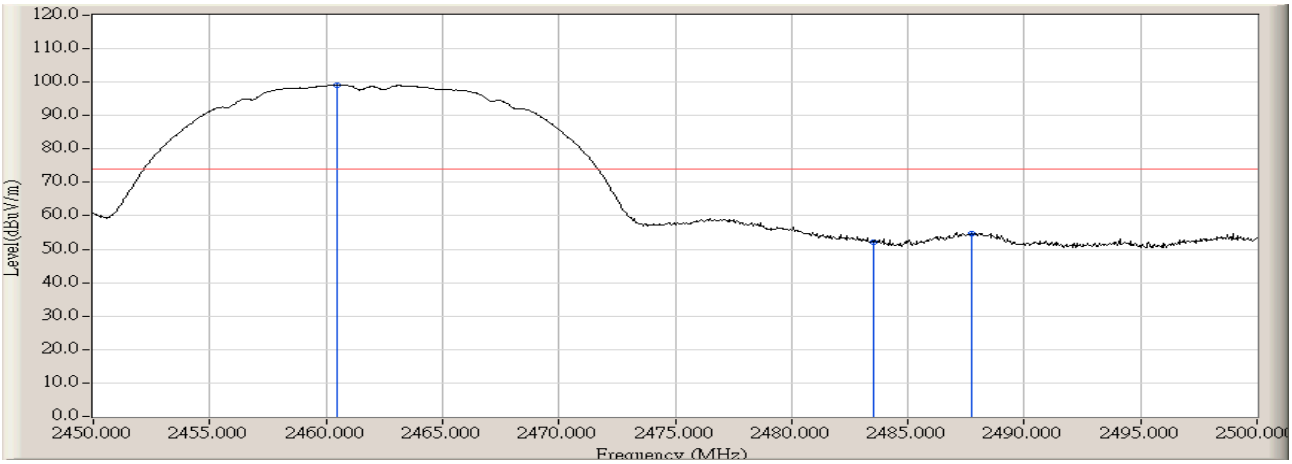
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2319.790	-3.273	64.342	61.069	-12.901	73.970	PEAK
2		2390.000	-3.202	64.246	61.044	-12.926	73.970	PEAK
3	*	2410.650	-3.209	111.567	108.357	N/A	N/A	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2412MHz**



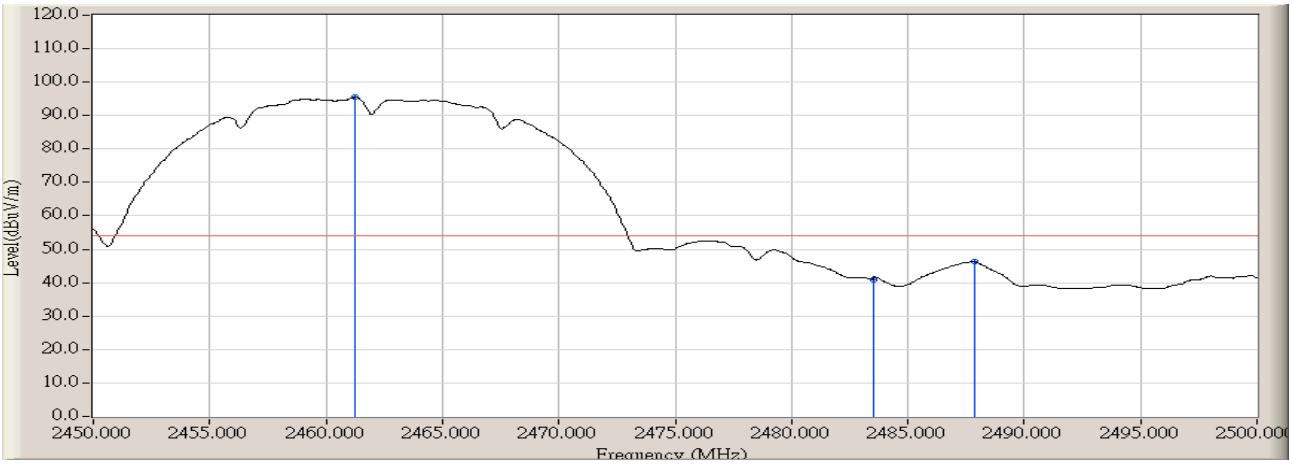
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2320.230	-3.274	53.112	49.839	-4.131	53.970	AVERAGE
2		2390.000	-3.202	52.060	48.858	-5.112	53.970	AVERAGE
3	*	2411.200	-3.211	107.677	104.467	N/A	N/A	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:59**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



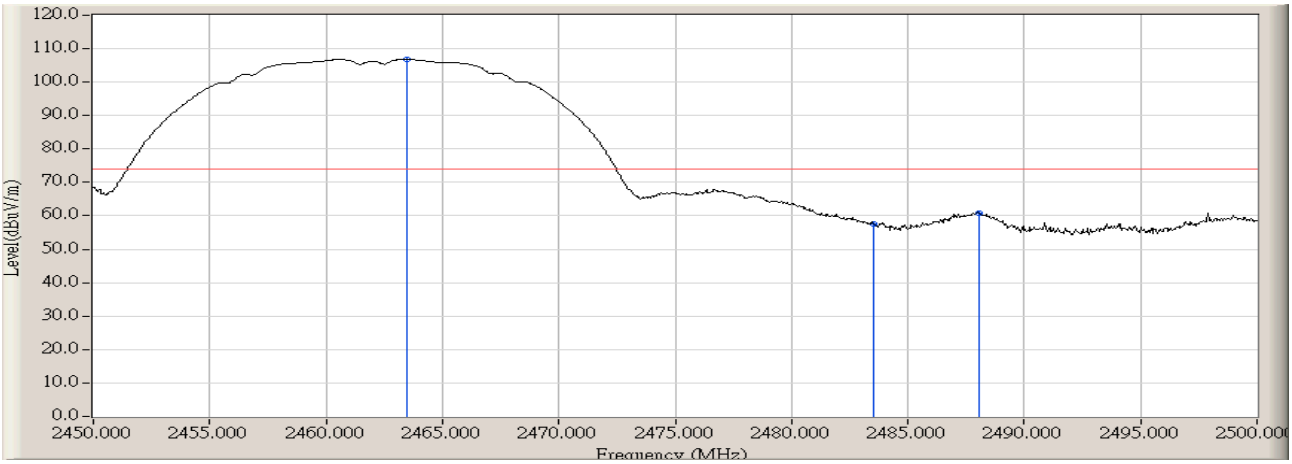
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.500	-3.264	102.397	99.133	N/A	N/A	PEAK
2		2483.500	-3.177	55.440	52.263	-21.707	73.970	PEAK
3		2487.750	-3.164	57.966	54.802	-19.168	73.970	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:00**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



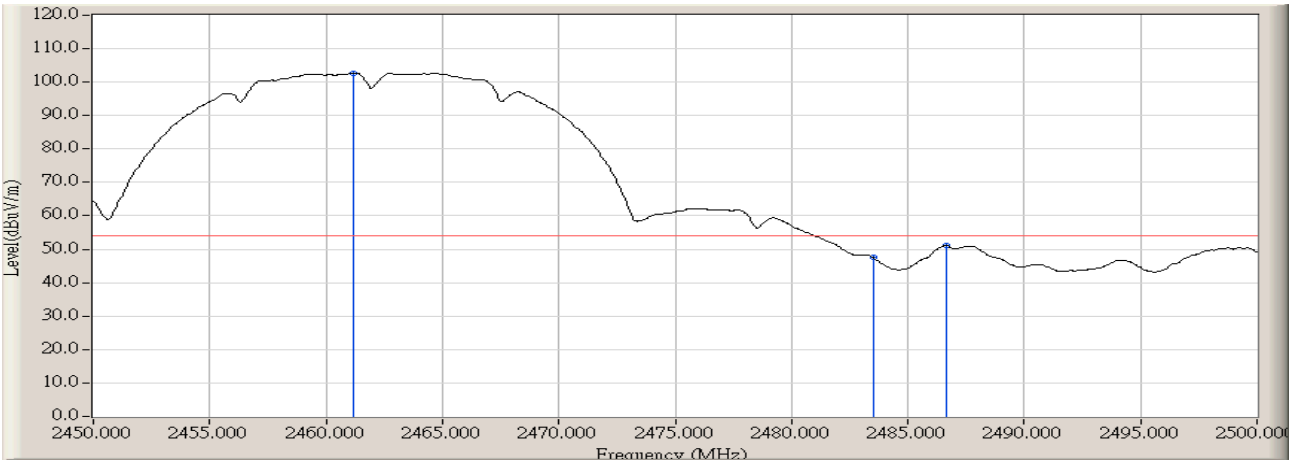
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	-3.261	98.665	95.403	N/A	N/A	AVERAGE
2		2483.500	-3.177	44.114	40.937	-13.033	53.970	AVERAGE
3		2487.850	-3.164	49.416	46.252	-7.718	53.970	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:55**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



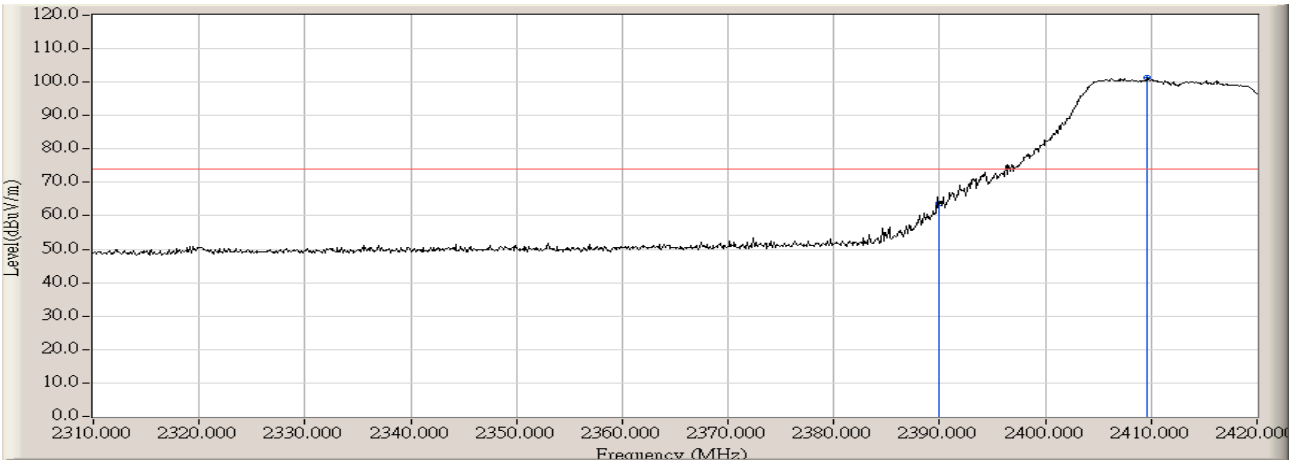
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.450	-3.254	110.052	106.798	N/A	N/A	PEAK
2		2483.500	-3.177	60.924	57.747	-16.223	73.970	PEAK
3		2488.050	-3.163	64.043	60.880	-13.090	73.970	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 14:54**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 1: Transmit by 802.11b at channel 2462MHz**



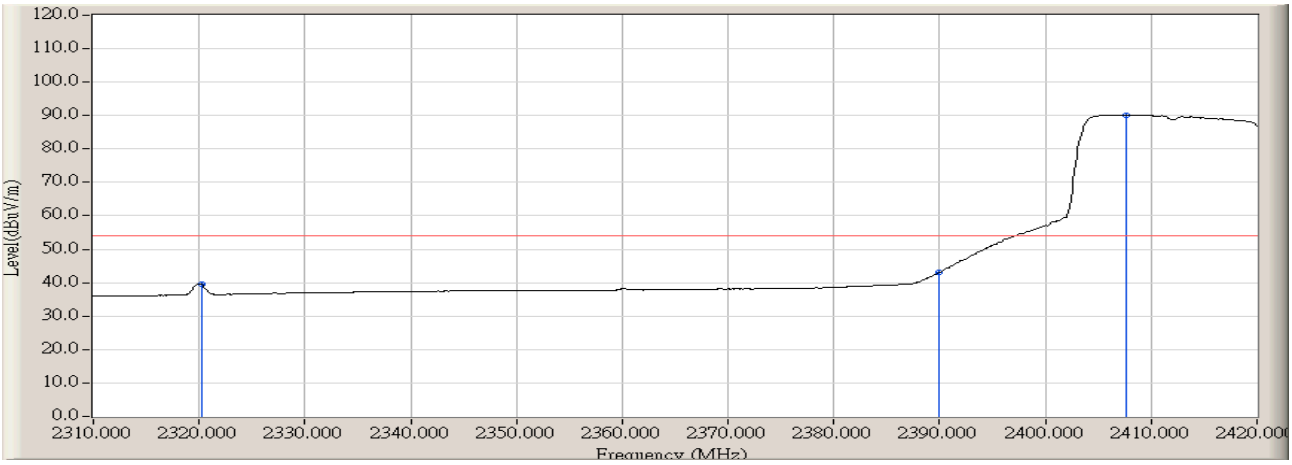
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.200	-3.261	106.020	102.758	N/A	N/A	AVERAGE
2		2483.500	-3.177	50.696	47.519	-6.451	53.970	AVERAGE
3		2486.650	-3.167	54.432	51.265	-2.705	53.970	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:15**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



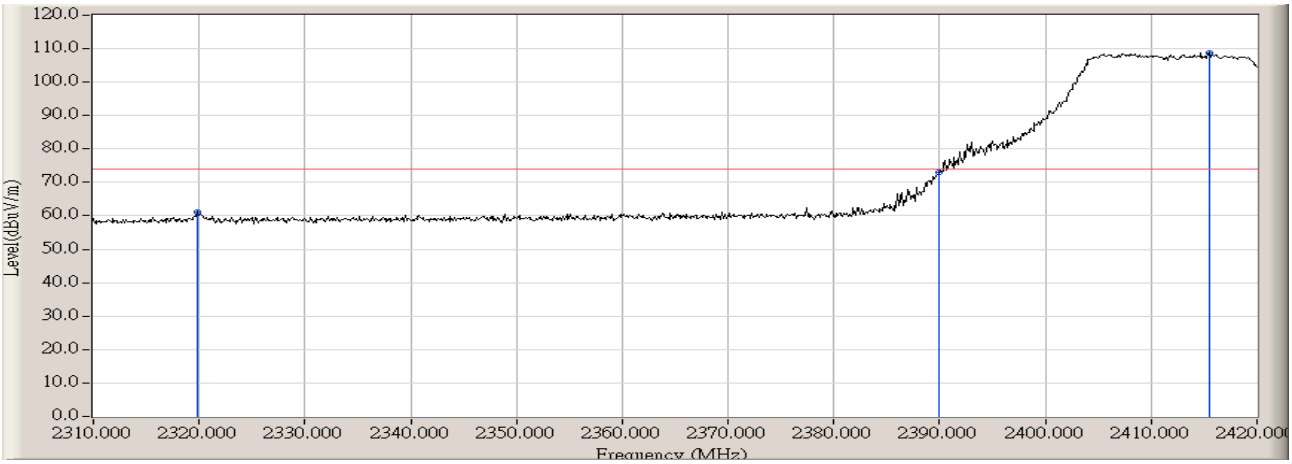
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	-3.202	67.019	63.817	-10.153	73.970	PEAK
2	*	2409.550	-3.208	104.438	101.230	N/A	N/A	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:16**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



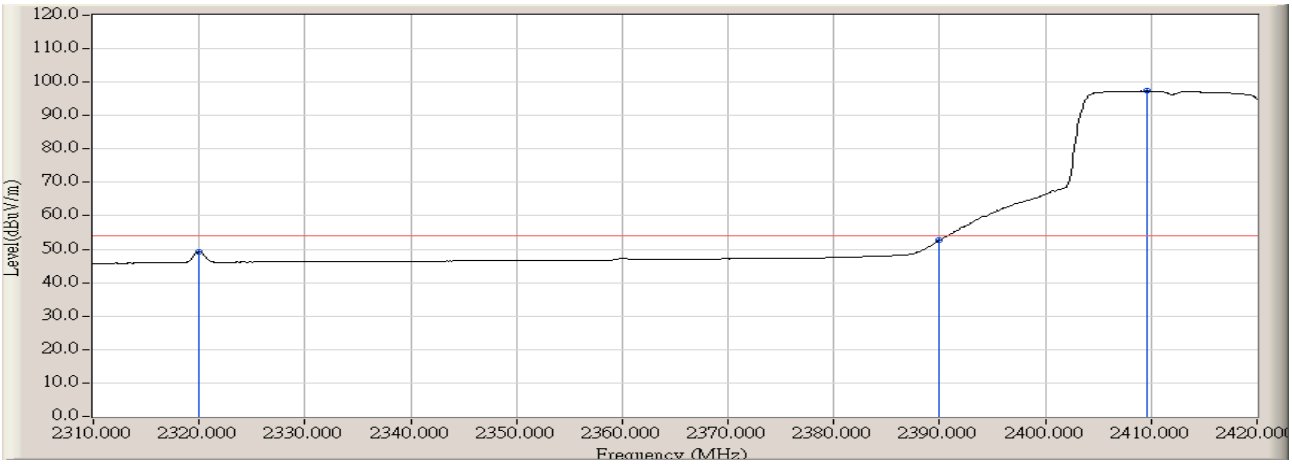
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2320.230	-3.274	42.801	39.528	-14.442	53.970	AVERAGE
2		2390.000	-3.202	46.264	43.062	-10.908	53.970	AVERAGE
3	*	2407.680	-3.206	93.298	90.092	N/A	N/A	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



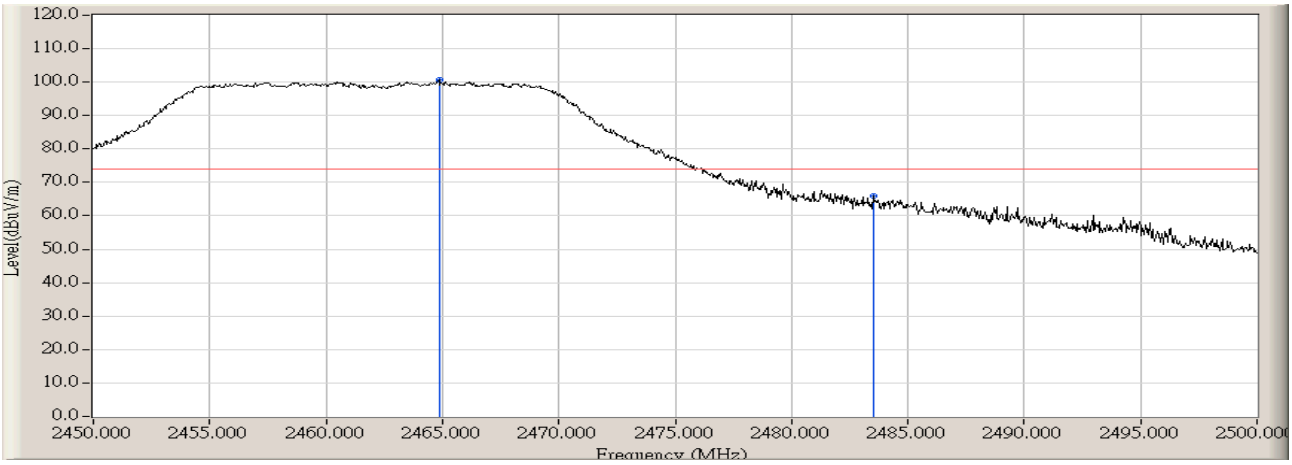
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2319.790	-3.273	64.258	60.985	-12.985	73.970	PEAK
2		2390.000	-3.202	76.158	72.956	-1.014	73.970	PEAK
3	*	2415.490	-3.220	111.988	108.767	N/A	N/A	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:12**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2412MHz**



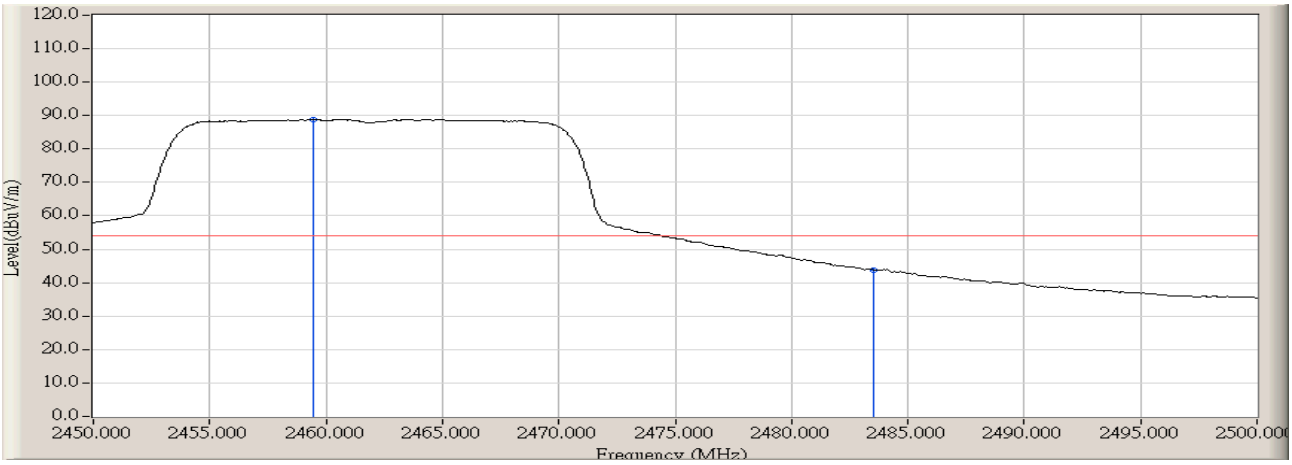
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2320.010	-3.272	52.476	49.203	-4.767	53.970	AVERAGE
2		2390.000	-3.202	55.951	52.749	-1.221	53.970	AVERAGE
3	*	2409.660	-3.209	100.546	97.338	N/A	N/A	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



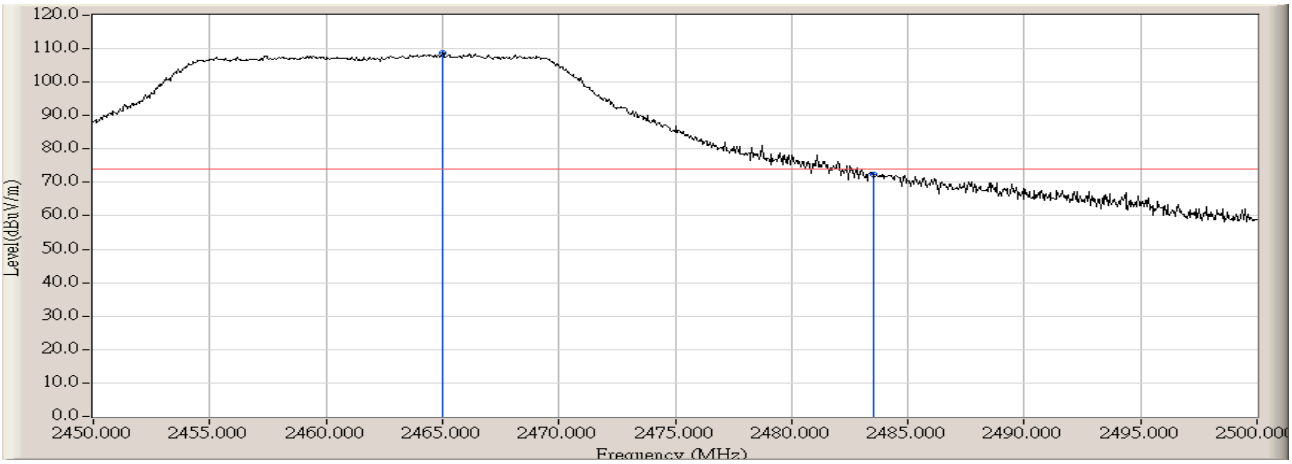
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.850	-3.248	104.012	100.764	N/A	N/A	PEAK
2		2483.500	-3.177	69.214	66.037	-7.933	73.970	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



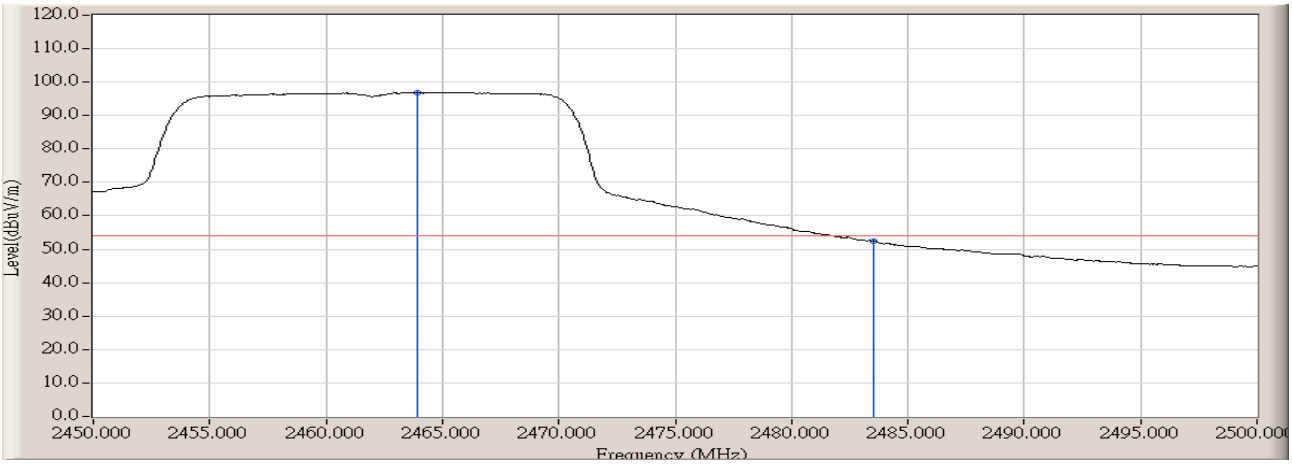
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.450	-3.265	92.196	88.930	N/A	N/A	AVERAGE
2		2483.500	-3.177	47.073	43.896	-10.074	53.970	AVERAGE

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:27**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.000	-3.248	111.968	108.720	N/A	N/A	PEAK
2		2483.500	-3.177	75.698	72.521	-1.449	73.970	PEAK

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/08/15 - 15:26**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : IWAVEPORT WLM54GP26	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Model 2: Transmit by 802.11g at channel 2462MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.950	-3.252	100.125	96.873	N/A	N/A	AVERAGE
2		2483.500	-3.177	55.737	52.560	-1.410	53.970	AVERAGE

7. Operation Frequency Range of 20dB Bandwidth

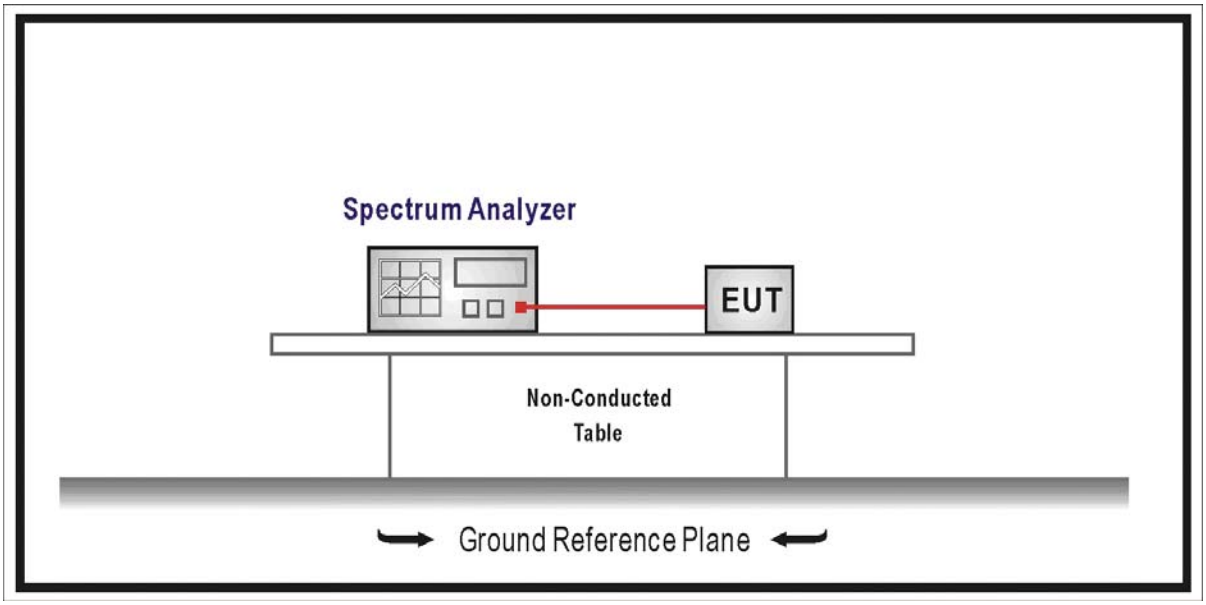
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-4

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

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

7.2. Test Setup



7.3. Limit

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

7.4. Test Procedure

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

Set RBW = 100 kHz, Span greater than RBW.

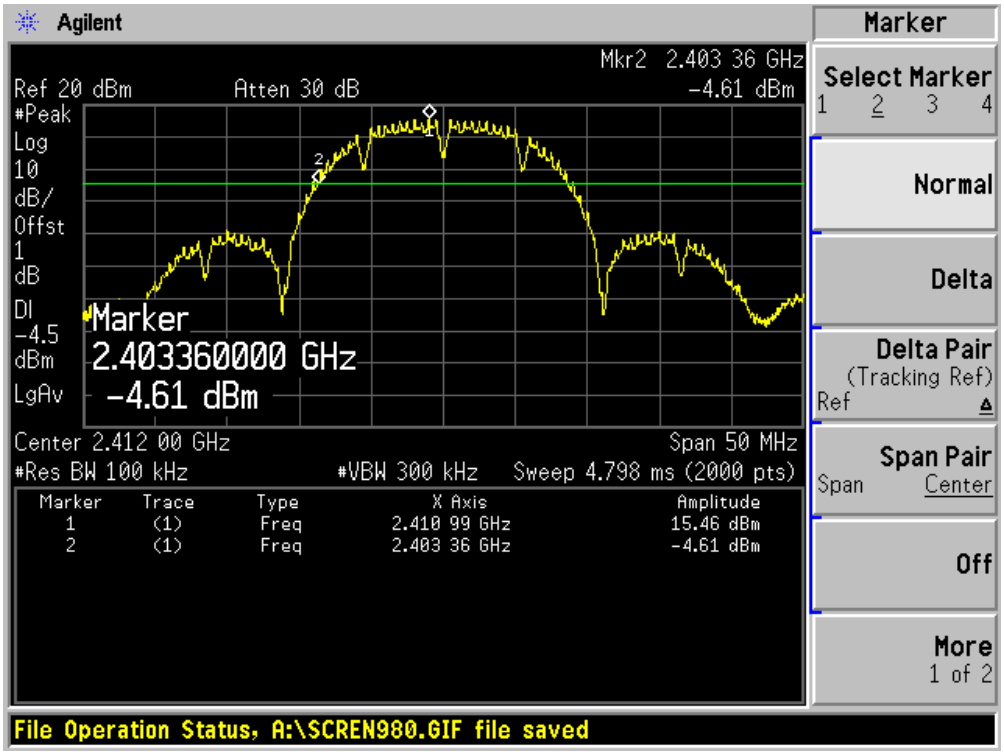
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

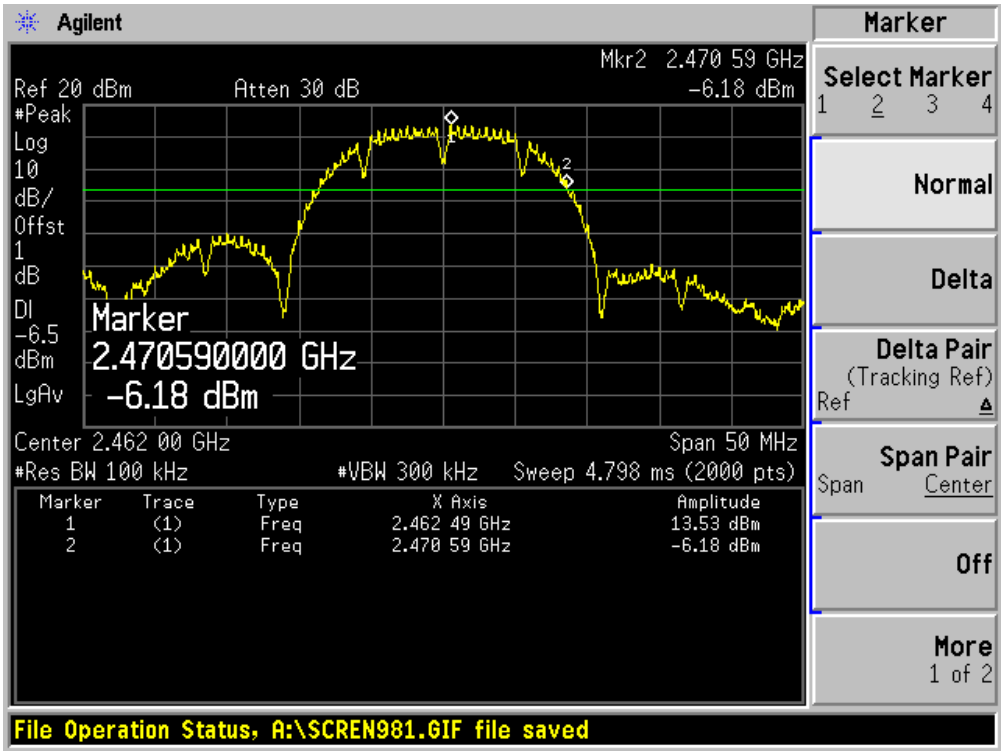
7.6. Test Result

Product	:	IWAVEPORT WLM54GP26
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel 01 (2412MHz)

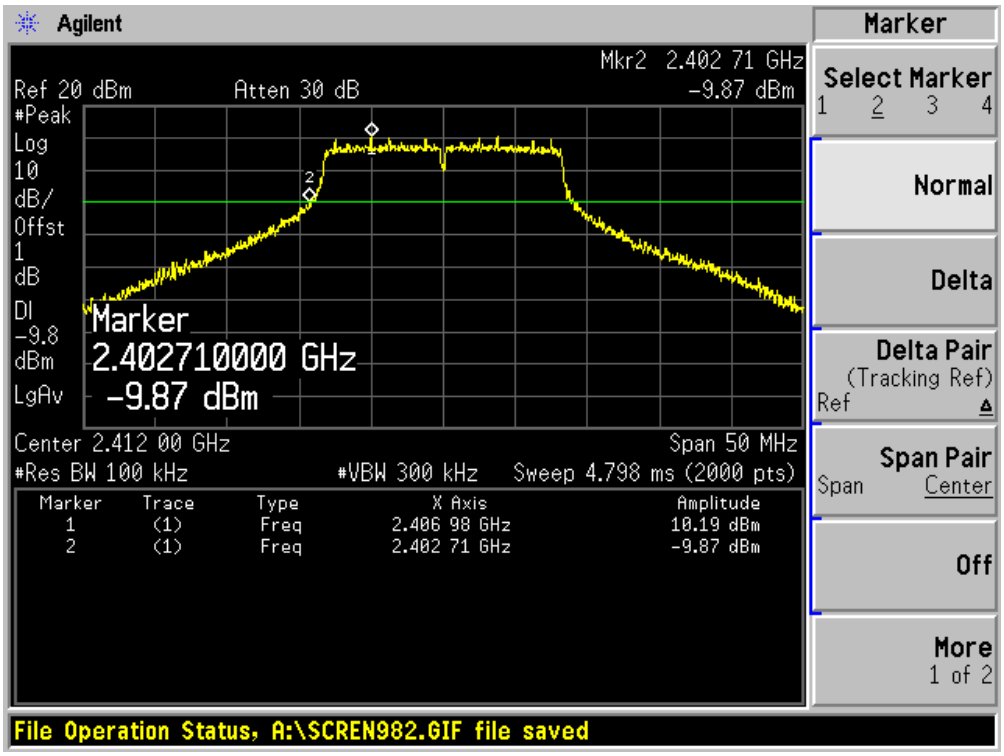


Channel 11 (2462MHz)

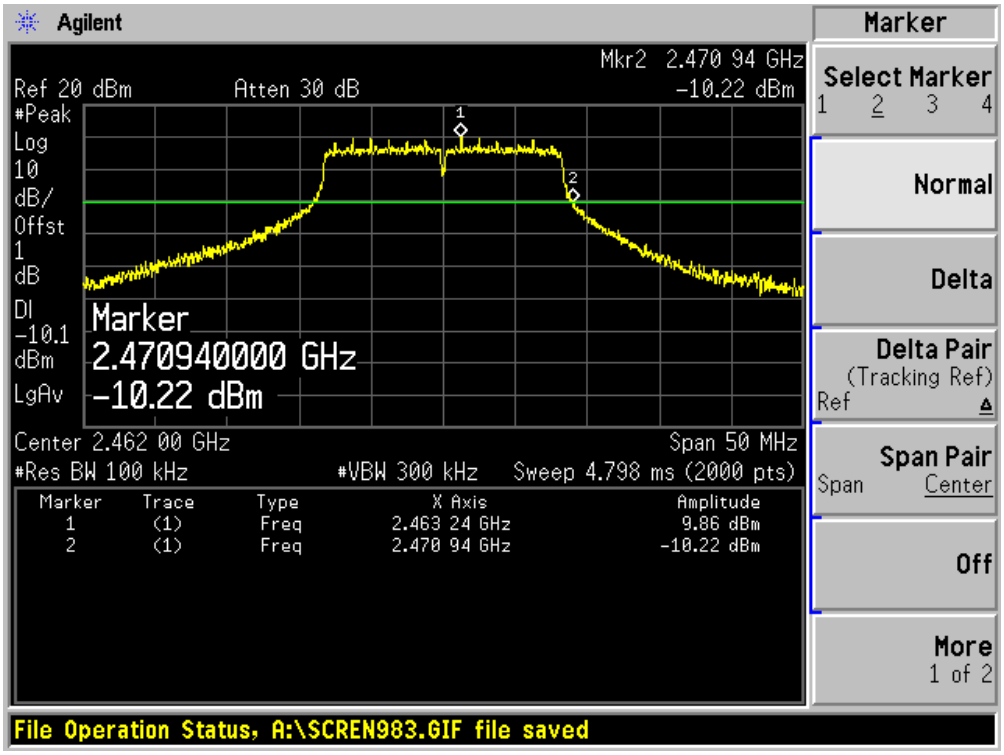


Product	:	IWAVEPORT WLM54GP26
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



8. Occupied Bandwidth

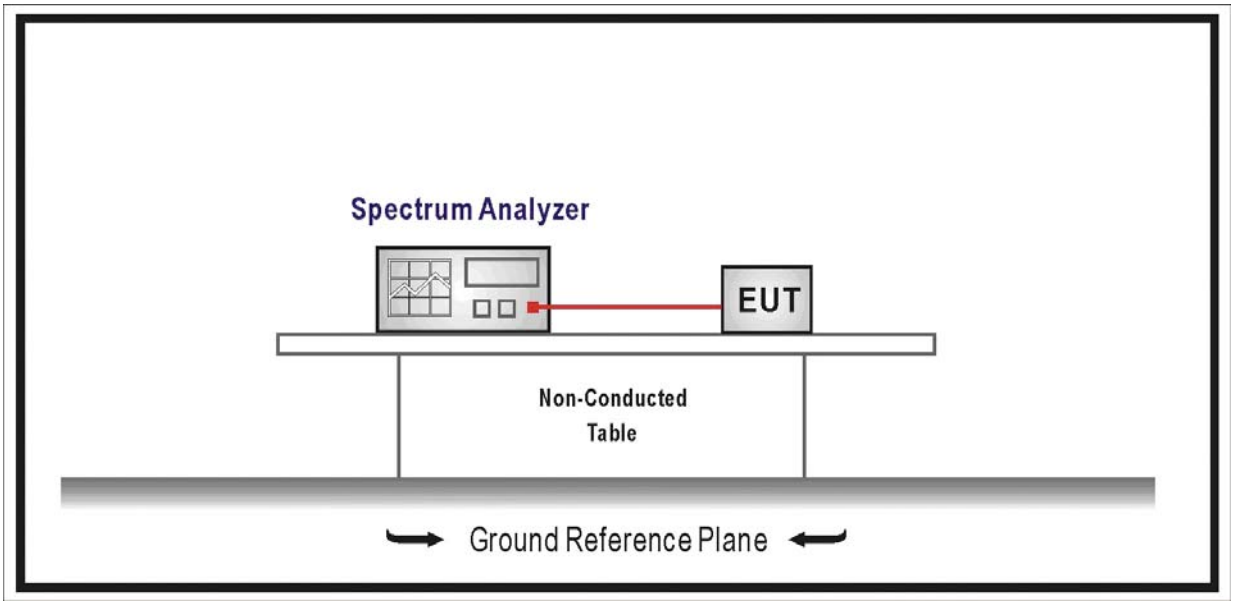
8.1. Test Equipment

Occupied Bandwidth / AC-4

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

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

8.2. Test Setup



8.3. Limit

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

8.4. Test Procedure

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

8.5. Uncertainty

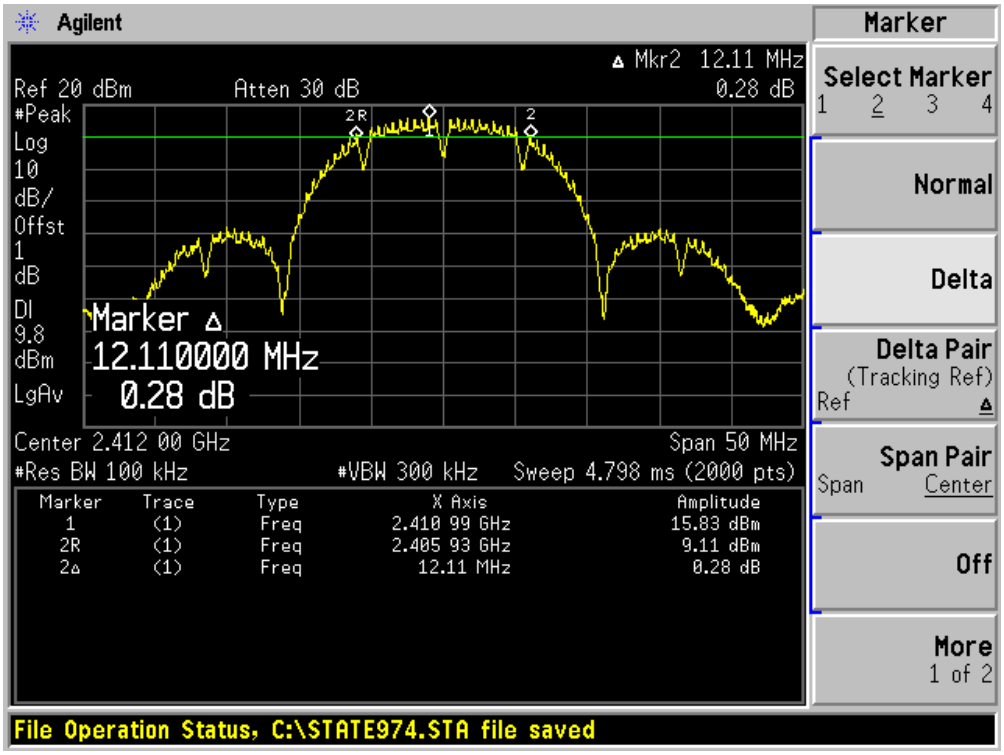
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

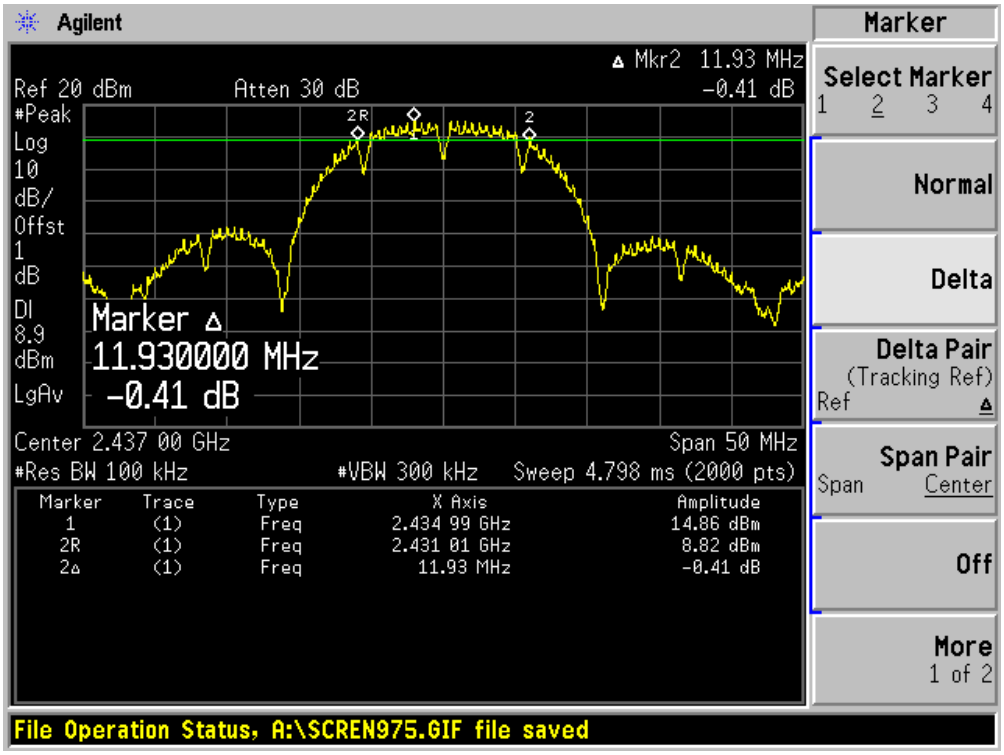
Product	:	IWAVEPORT WLM54GP26
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12110	500	Pass
06	2437	11930	500	Pass
11	2462	12010	500	Pass

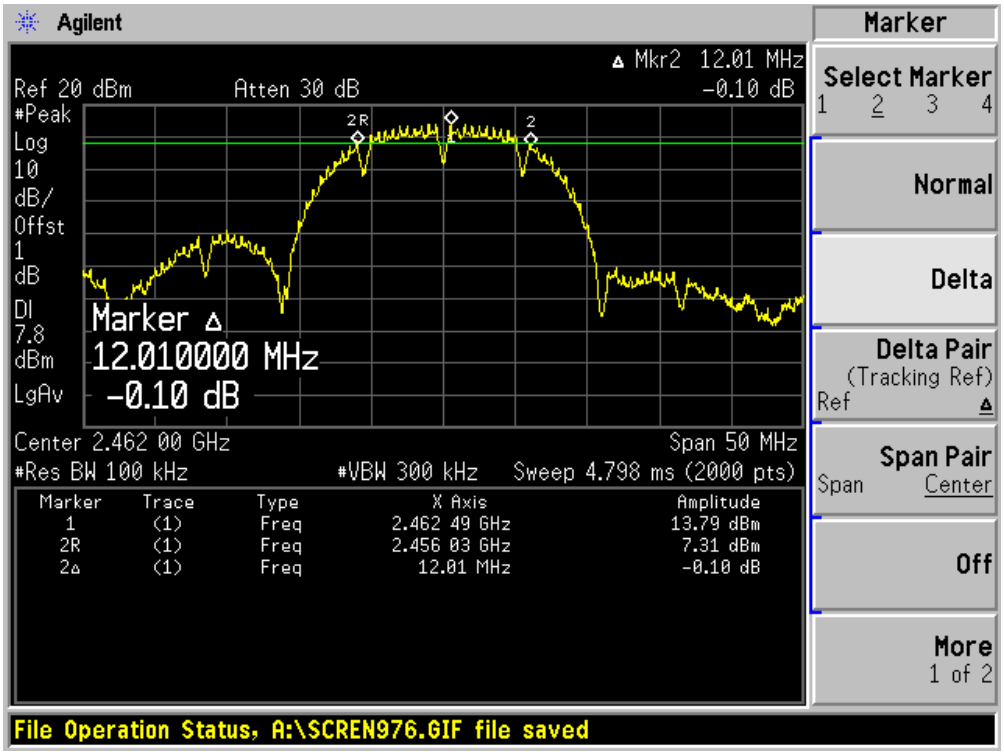
Channel 01 (2412MHz)



Channel 06 (2437MHz)



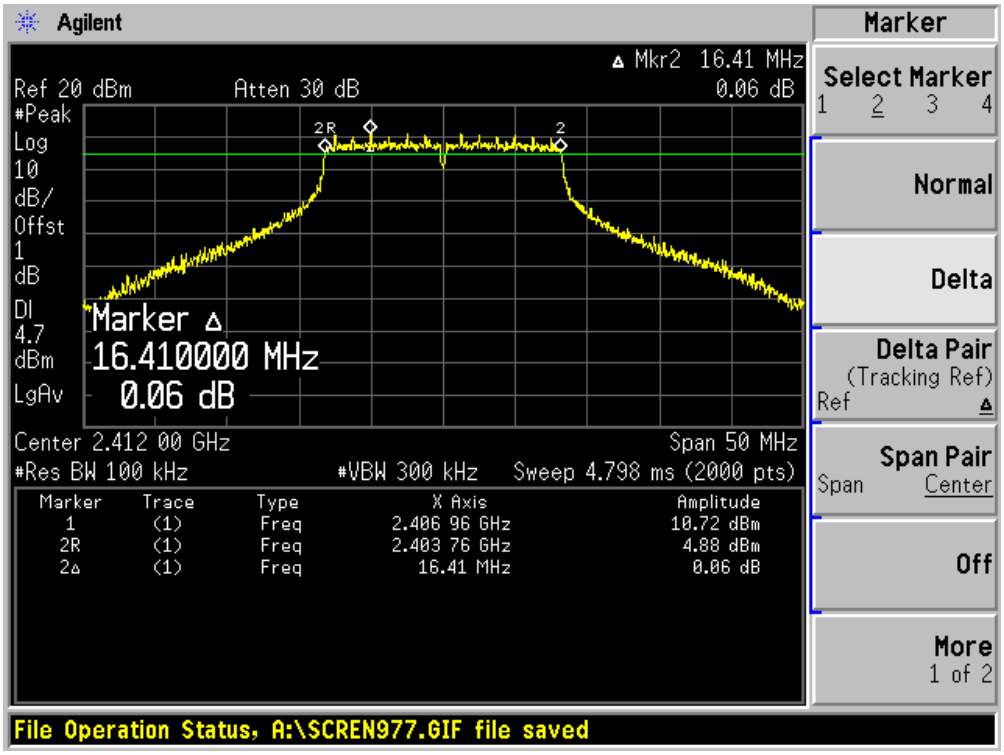
Channel 11 (2462MHz)



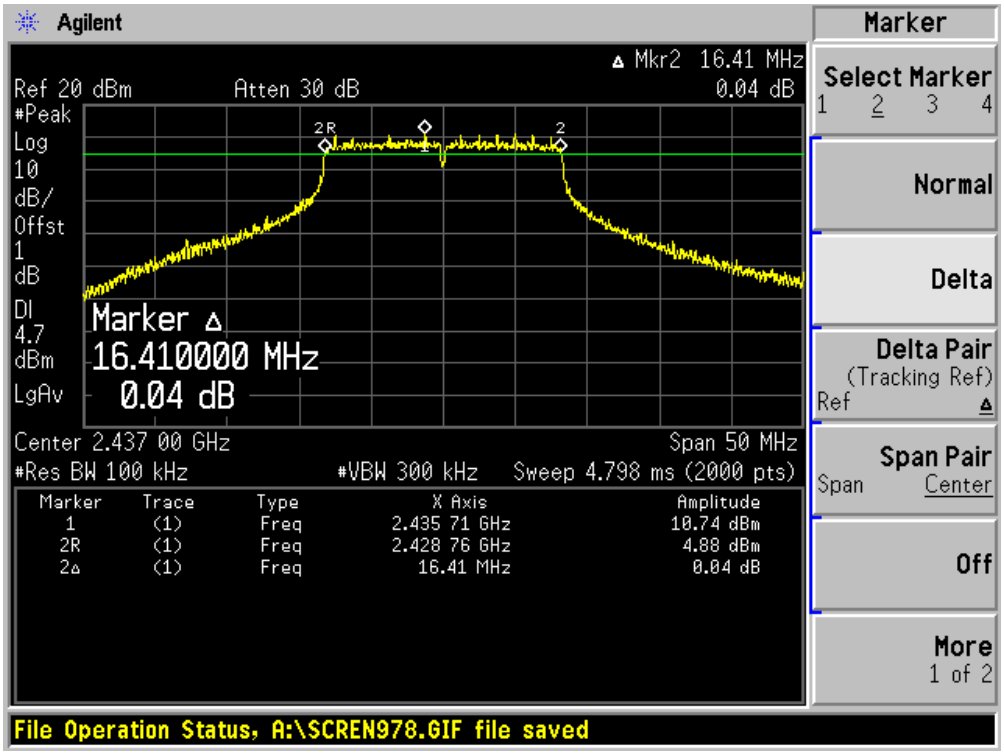
Product	:	IWAVEPORT WLM54GP26
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

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

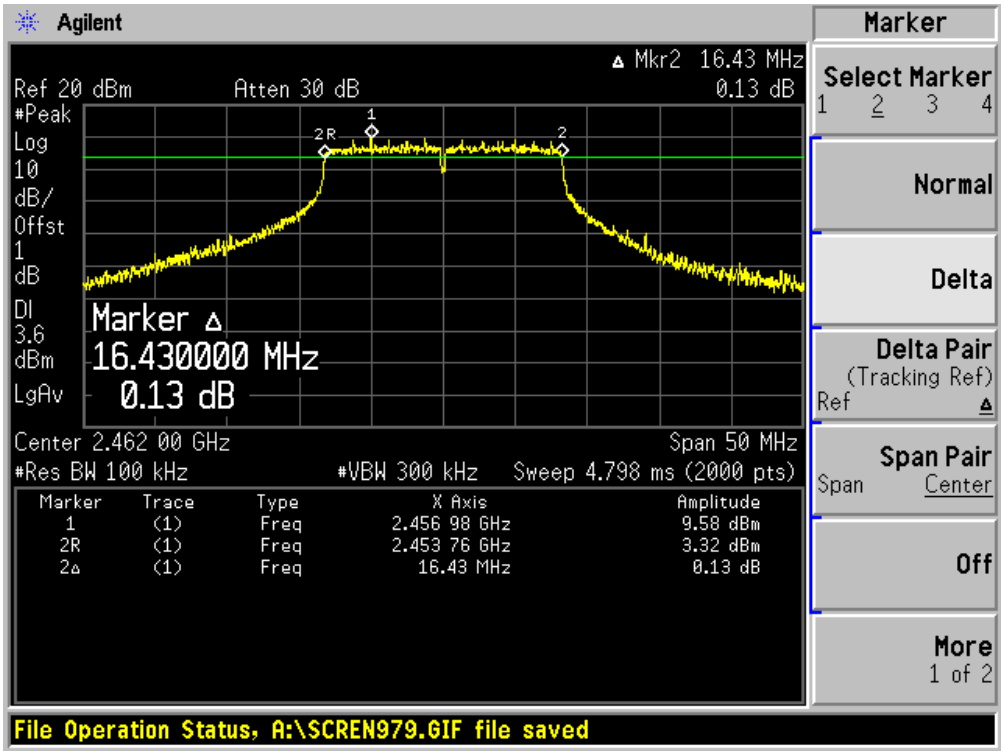
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



9. Power Output

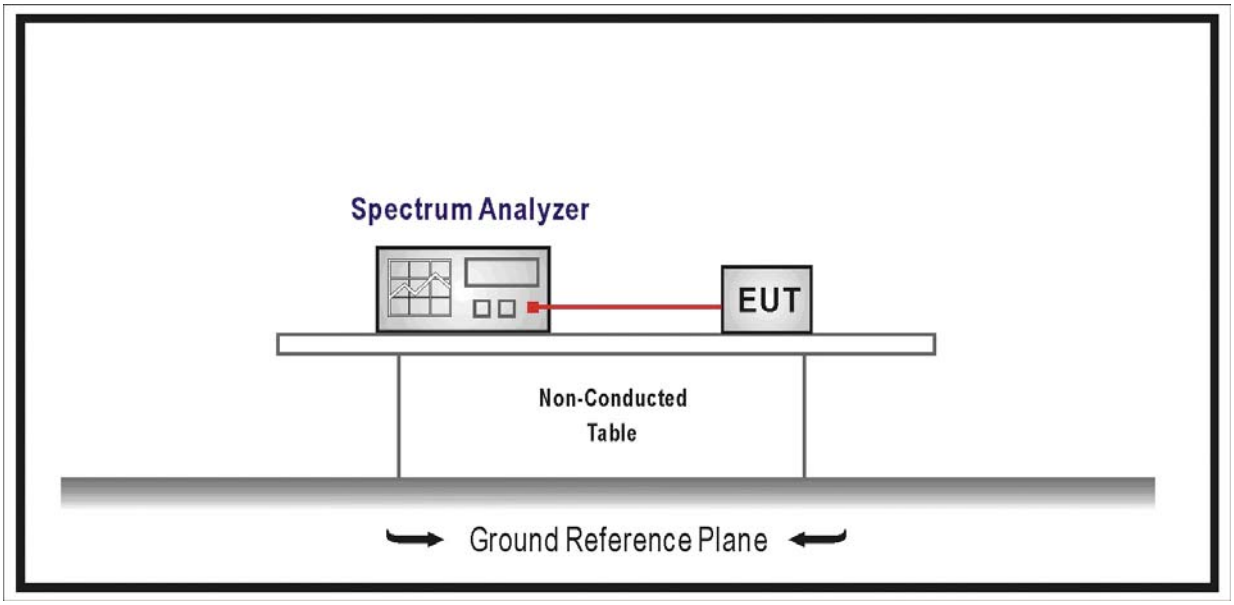
9.1. Test Equipment

Power Output / AC-4

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

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

9.2. Test Setup



9.3. Limit

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

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

9.4. Test Procedure

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

As “T” ≧ sweep time, the test procedure will be used as following:
1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW ≧ 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep.
If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to “free run”.
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer’s band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each
frequency bin across the 1 MHz.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

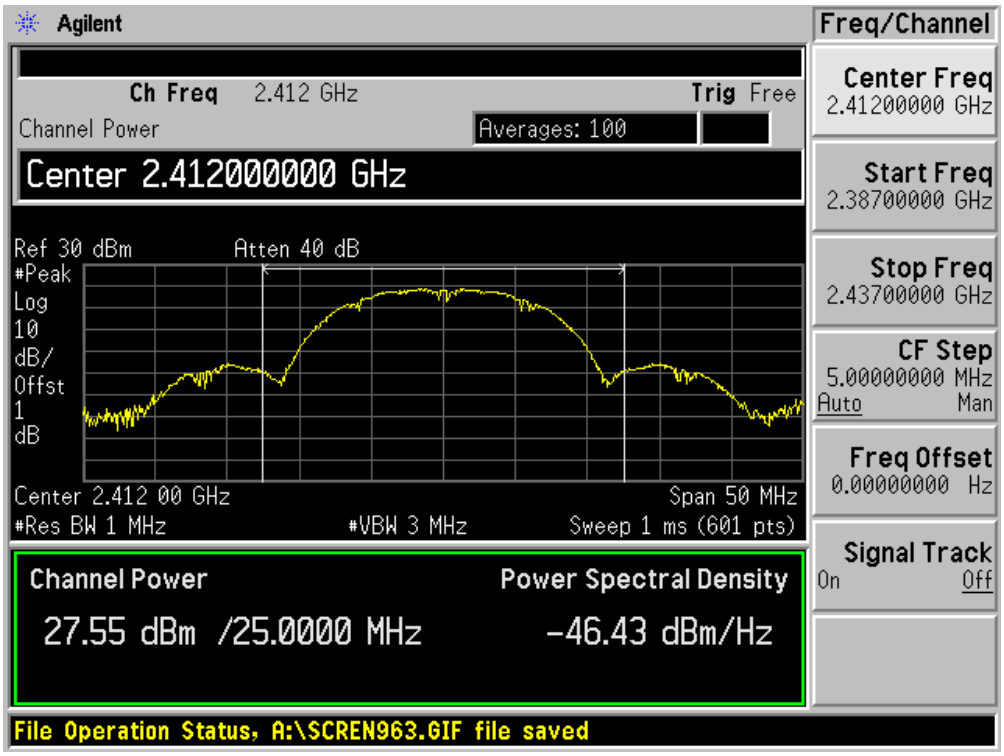
9.6. Test Result

Product	:	IWAVEPORT WLM54GP26
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

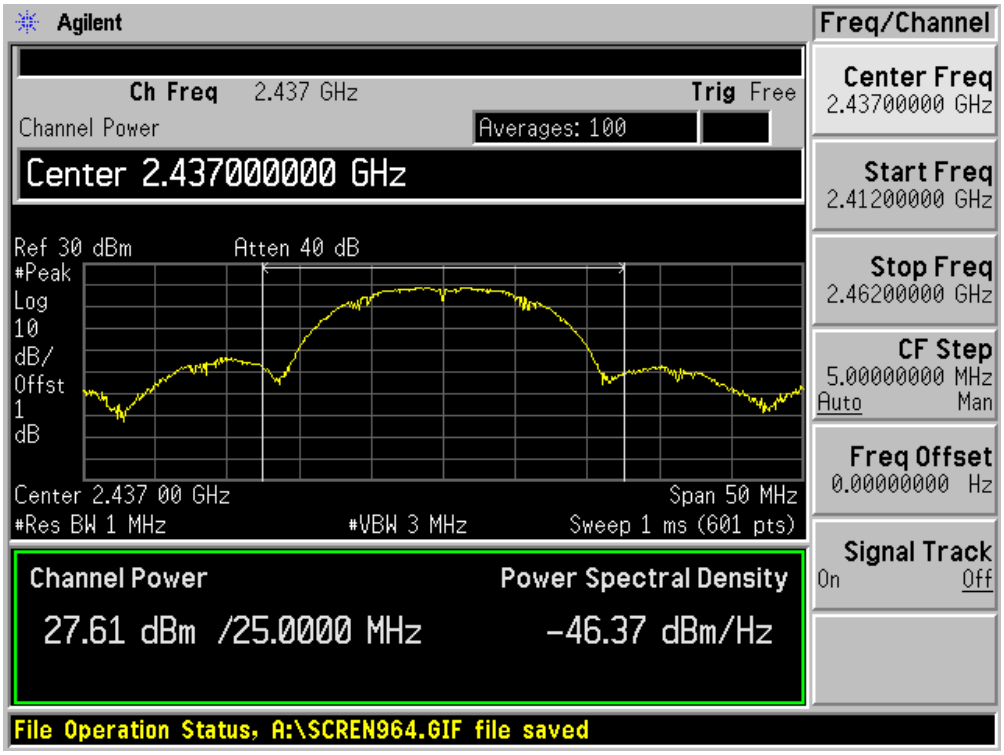
Channel No.	Frequency (MHz)	Data Rate (Mbps)				Limit (dBm)
		1	2	5.5	11	
01	2412	27.55	--	--	--	30
06	2437	27.61	27.49	27.28	27.13	30
11	2462	26.16	--	--	--	30

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

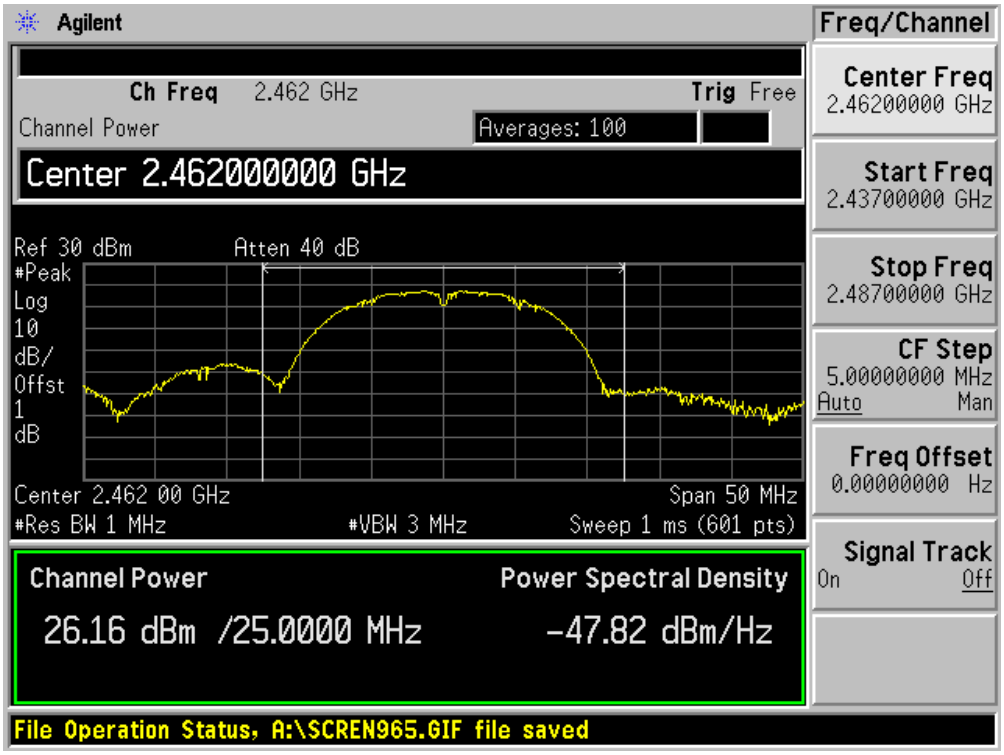
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

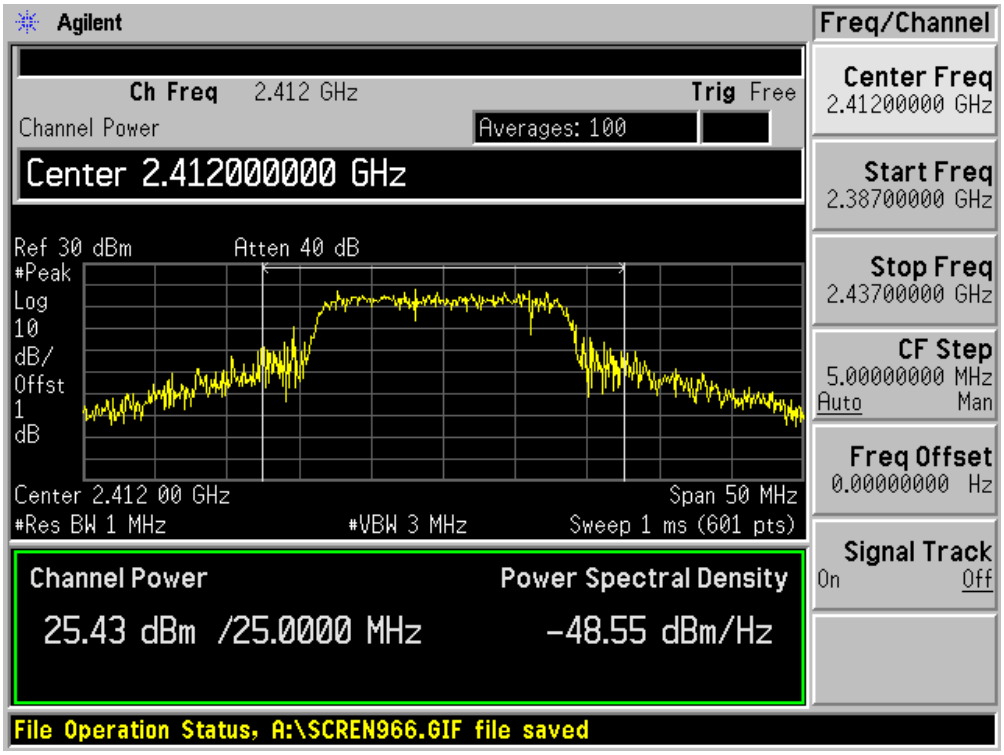


Product	:	IWAVEPORT WLM54GP26
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

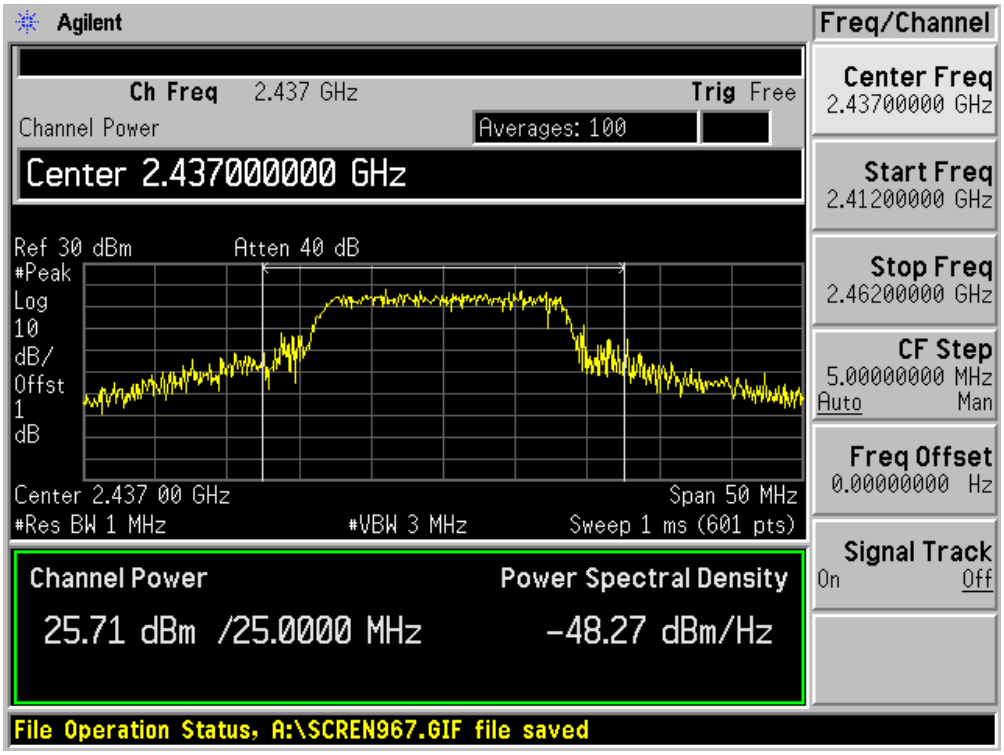
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Limit (dBm)
		6	9	12	18	24	36	48	54	
01	2412	25.43	--	--	--	--	--	--	--	30
06	2437	25.71	25.5	25.4	25.4	25.4	25.3	25.3	25.1	30
11	2462	24.53	--	--	--	--	--	--	--	30

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

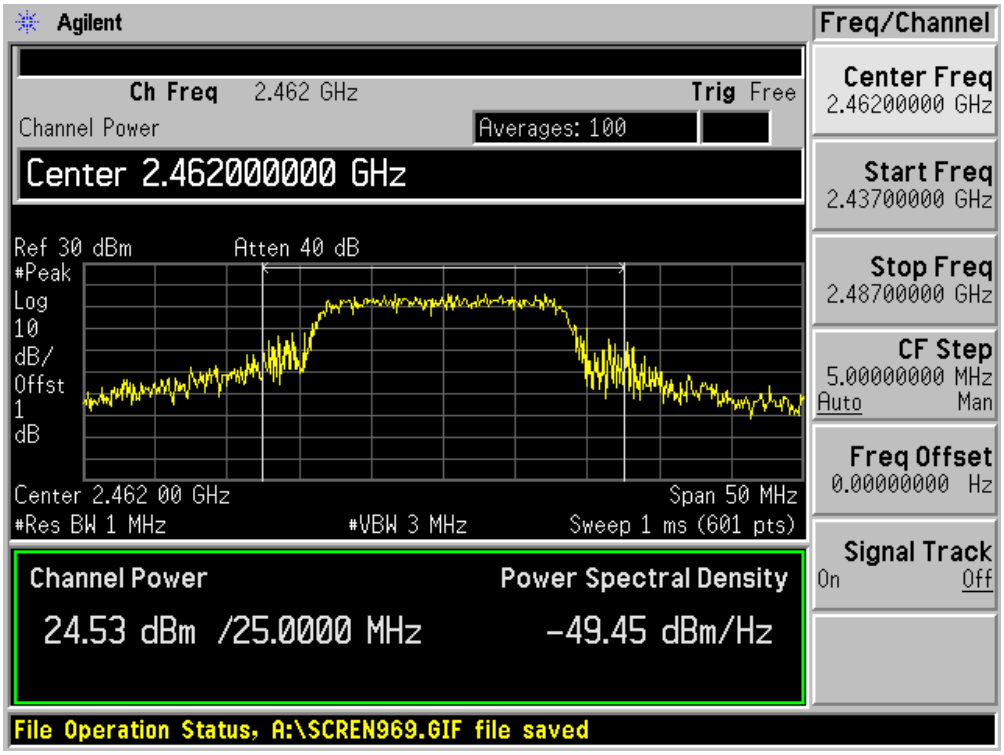
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



10. Power Spectral Density

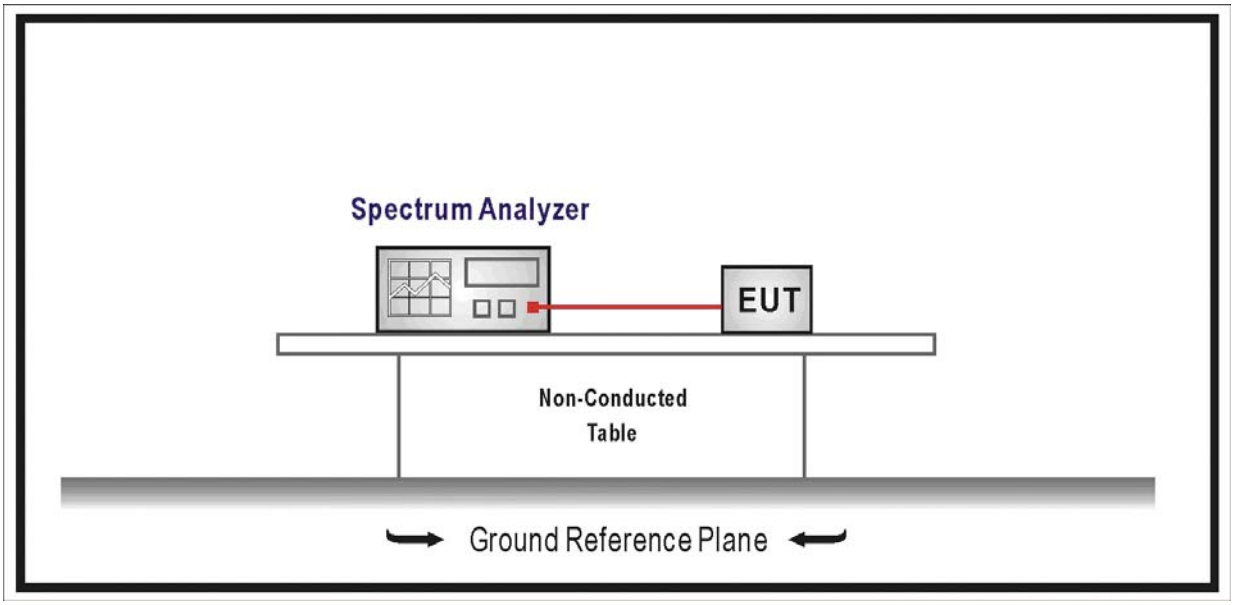
10.1. Test Equipment

Power Spectral Density / AC-4

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

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

10.2. Test Setup



10.3. Limit

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

10.4. Test Procedure

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

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

10.5. Uncertainty

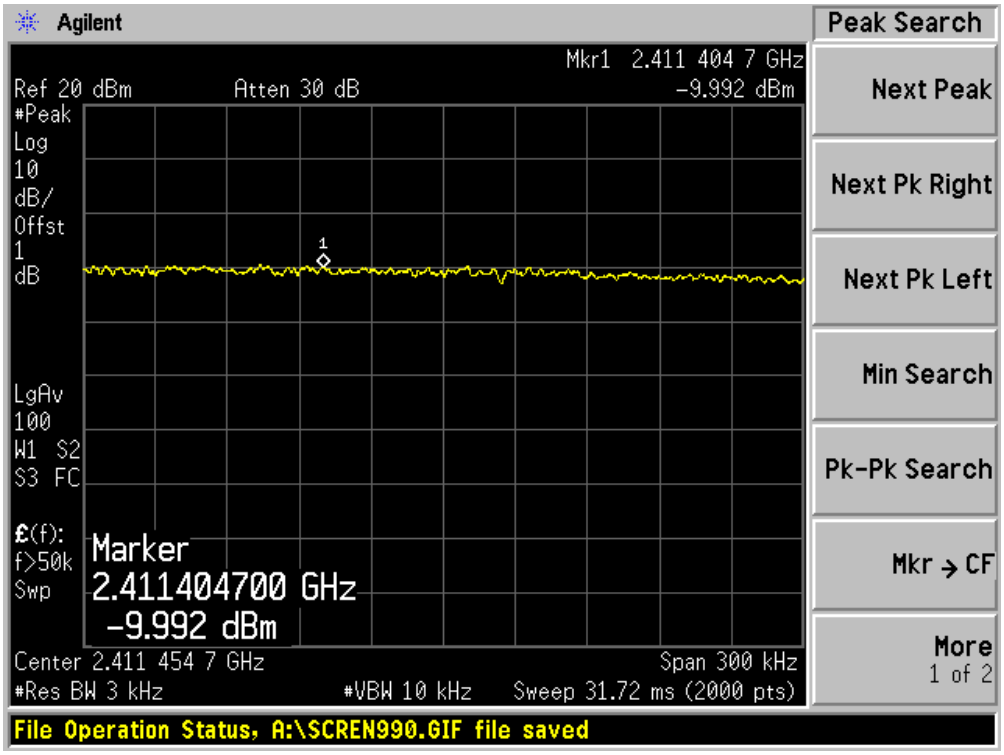
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

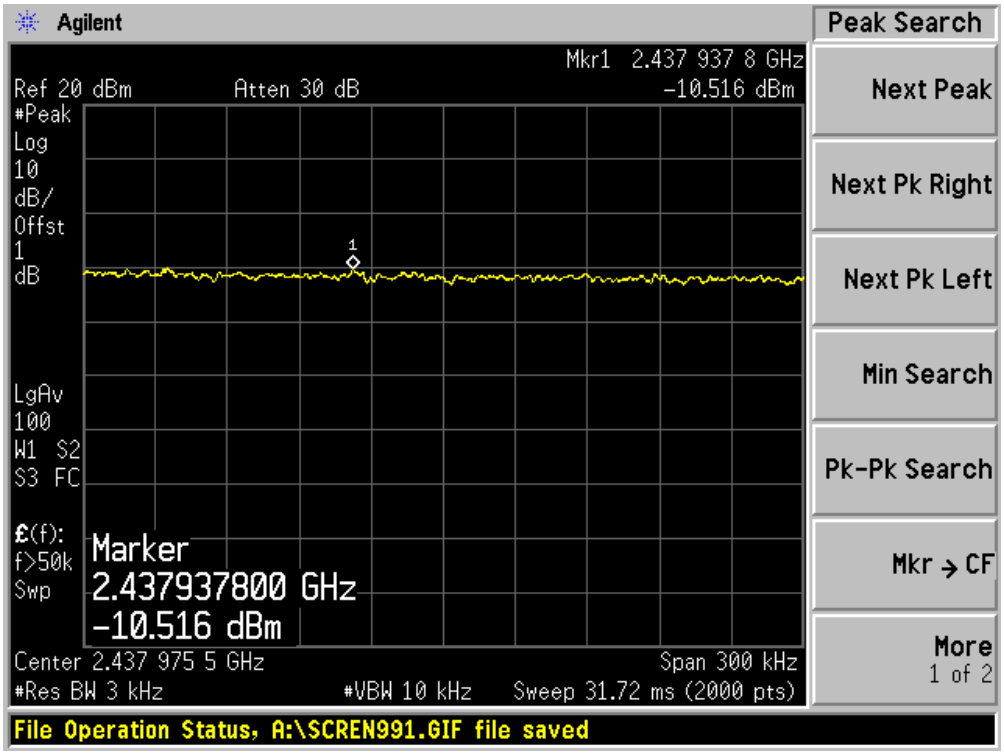
Product	:	IWAVEPORT WLM54GP26
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-9.992	8	Pass
06	2437	-10.516	8	Pass
11	2462	-11.981	8	Pass

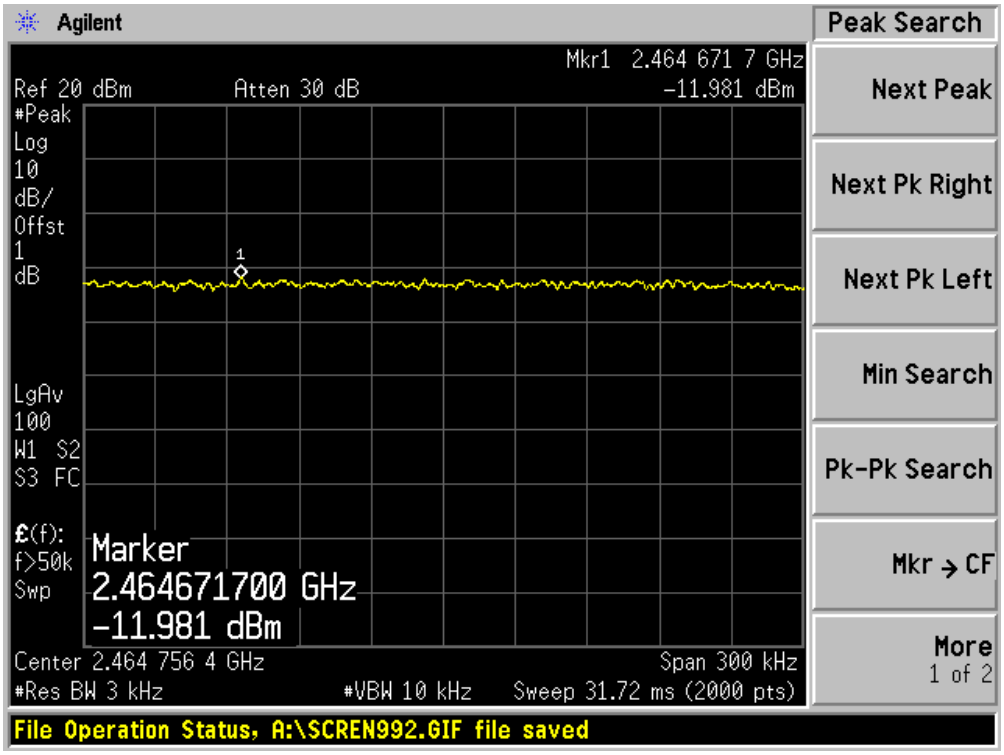
Channel 01 (2412MHz)



Channel 06 (2437MHz)



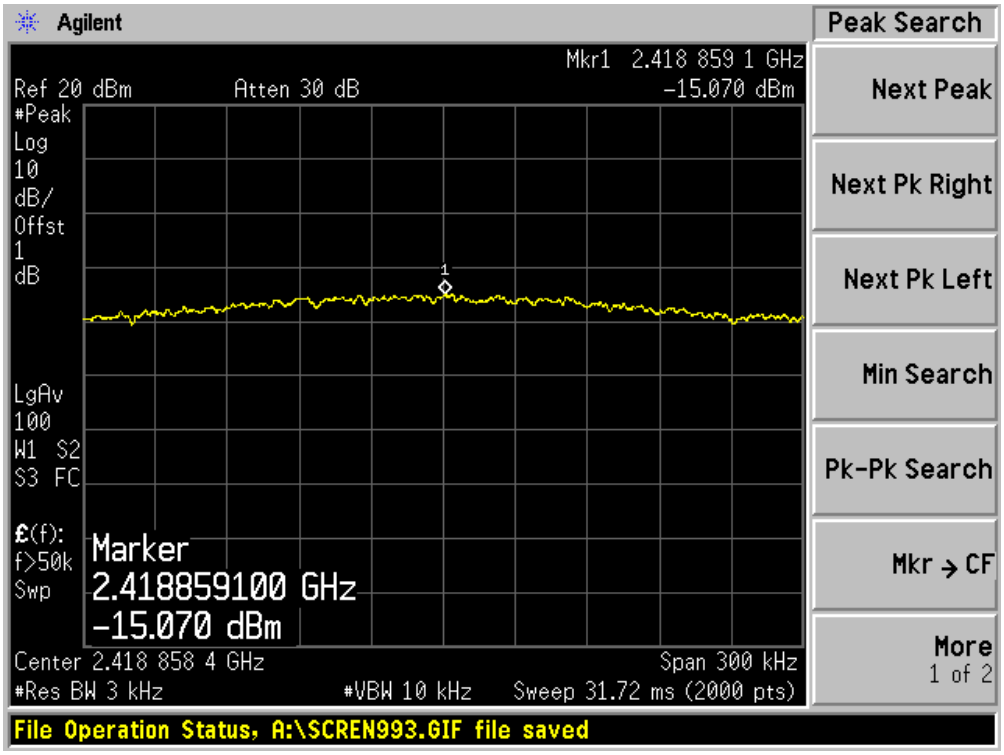
Channel 11 (2462MHz)



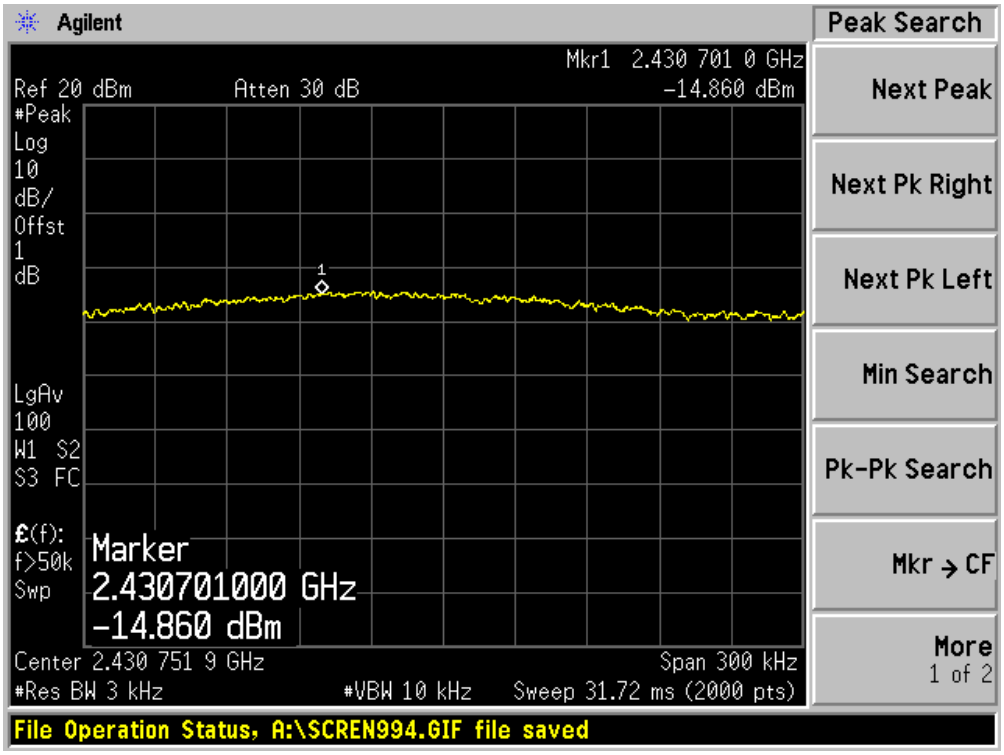
Product	:	IWAVEPORT WLM54GP26
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-15.070	8	Pass
06	2437	-14.860	8	Pass
11	2462	-14.945	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)