Test Report

Product Name	：	Wire-to-Air
Model No.	：	AWS8212, AWS821T, AWS822R, AM8212, AM821T, AM822R
FCC ID.	：	NGVAWS821T, NGVAWS822R

Applicant	：	AIRWAVE Technologies Inc.
Address	：	4F, NO.9, Industry E. 9th Road Science-based Industrial Park, Hsinchu, Taiwan, R.O.C..

Date of Receipt	：	2012/01/18
Issued Date	：	2012/03/03
Report No.	：	121322R-RFUSP42V01
Report Version	：	V1.0

Test Report Certification

Issued Date : 2012/03/03
Report No. : 121322R-RFUSP42V01

QuieTek

Product Name	:	Wire-to-Air
Applicant	:	AIRWAVE Technologies Inc.
Address	:	4F, NO.9, Industry E. 9th Road Science-based Industrial Park, Hsinchu, Taiwan, R.O.C..
Manufacturer	:	AIRWAVE Technologies Inc.
Model No.	:	AWS8212, AWS821T, AWS822R, AM8212, AM821T, AM822R
FCC ID.	:	NGVAWS821T, NGVAWS822R
EUT Voltage	:	DC 5V (Power by Notebook PC)
Trade Name	:	AIRWAVE, audiomate
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2010
Test Result	:	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Carol Tsai
(Carol Tsai / Adm. Specialist)

Reviewed By : Chris Liu
(Chris Liu / Engineer)

Approved By : Roy Wang
(Roy Wang / Manager)

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Wire-to-Air
Trade Name	AIRWAVE, audiomate
Model No.	AWS8212, AWS821T, AWS822R, AM8212, AM821T, AM822R
Frequency Range	2404.4~2476.7MHz
Channel Number	12
Type of Modulation	GFSK
Channel Control	Auto
Antenna Type	Soldered on PCB
Antenna Gain	2.58dBi (TX) / 3.14dBi (Rx)

Component	
USB Cable	Shielded, 0.8m

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01	2404.4MHz	Channel 04	2416.7MHz	Channel 07	2437.8MHz	Channel 10	2464.1MHz
Channel 02	2407.6MHz	Channel 05	2428.6MHz	Channel 08	2443.6MHz	Channel 11	2467.7MHz
Channel 03	2413.6MHz	Channel 06	2434.6MHz	Channel 09	2455.7MHz	Channel 12	2476.7MHz

Note:

1. This device is a Wire-to-Air included a 2.4GHz transmitting function, and 2.4GHz receiving function.
2. The variation of model number is for different strategy of marketing.
3. The different of the each FCC & model number is shown as below:

Package name	Product Type	FCC ID	Model No.
AWS8212, AM821	Transmitter	NGVAWS821T	AWS821T, AM821T
	Receiver	NGVAWS822R	AWS822R, AM822R

4. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247.
5. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
6. This device is a composite device in accordance with Part 15 regulations. The receiving function receiving was tested and its test report number is 121322R-RFUSP37V02 under Declaration of Conformity.

1.3. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

TX	Mode 1: Transmitter-Transmit Mode 2: Receiver- Transmit

Test Items	Mode1	Channel	Result
Conducted Emission	1/2	8	Complies
Peak Power Output	1/2	1/8/12	Complies
Radiated Emission (Under 1GHz)	1/2	8	Complies
Radiated Emission (Above 1GHz)	1/2	1/8/12	Complies
RF antenna conducted test	1/2	1/12	Complies
Radiated Emission Band Edge	1/2	1/8/12	Complies
Occupied Bandwidth	1/2	1/8/12	Complies
Power Density	1/2	1/8/12	Complies

1.4. Tested System Details

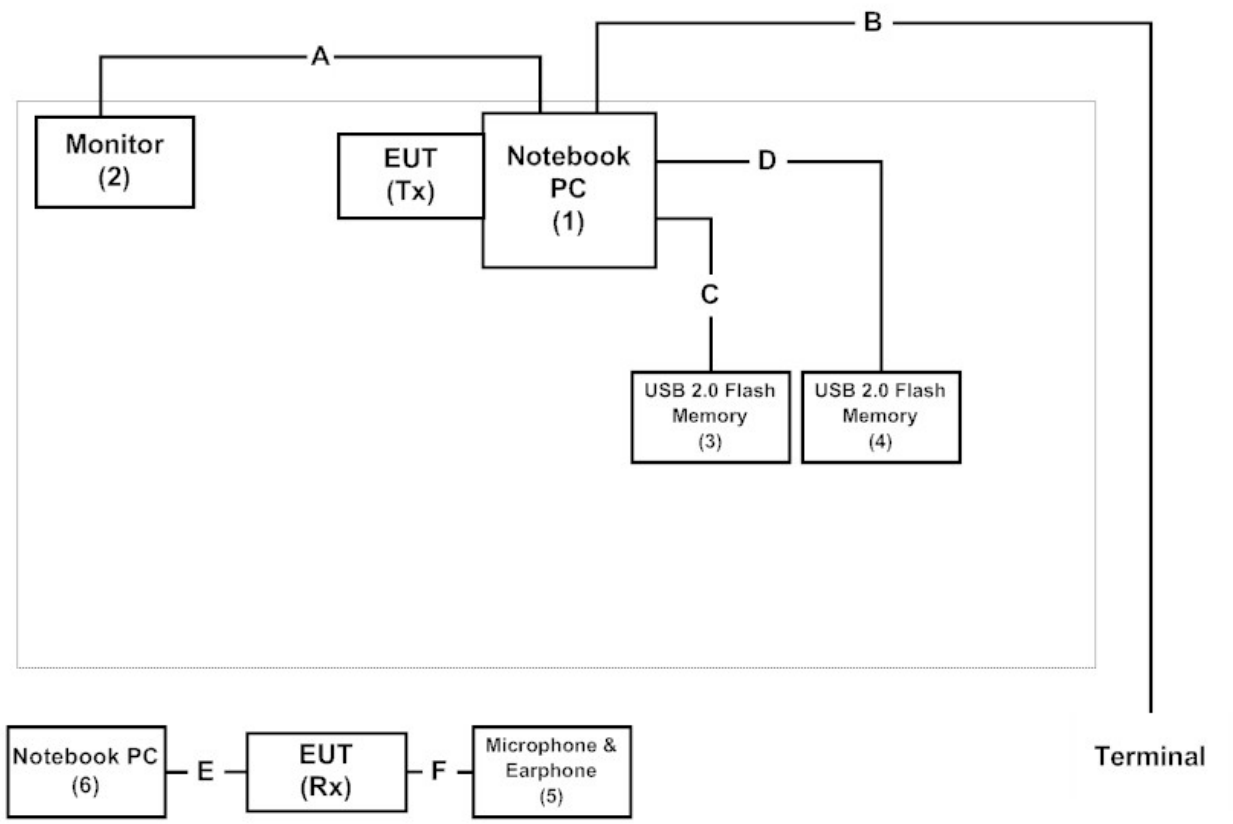
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	HP	110-3010TU	CNC0343H1W	DoC	Non-Shielded, 1m
2	Monitor	DELL	U2410f	082WXD-72872-16R-0V8L	DoC	Non-Shielded, 1.8m
3	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
4	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
5	Microphone & Earphone	Fujiei	SBZ-38	N/A	DoC	--
6	Notebook PC	ACER	PAV70	LUSEW0D0371105FE221601	DoC	Non-Shielded, 2.5m one ferrite core bonded

1.5. Configuration of tested System

Test Mode	Mode 1: Transmitter-Transmit

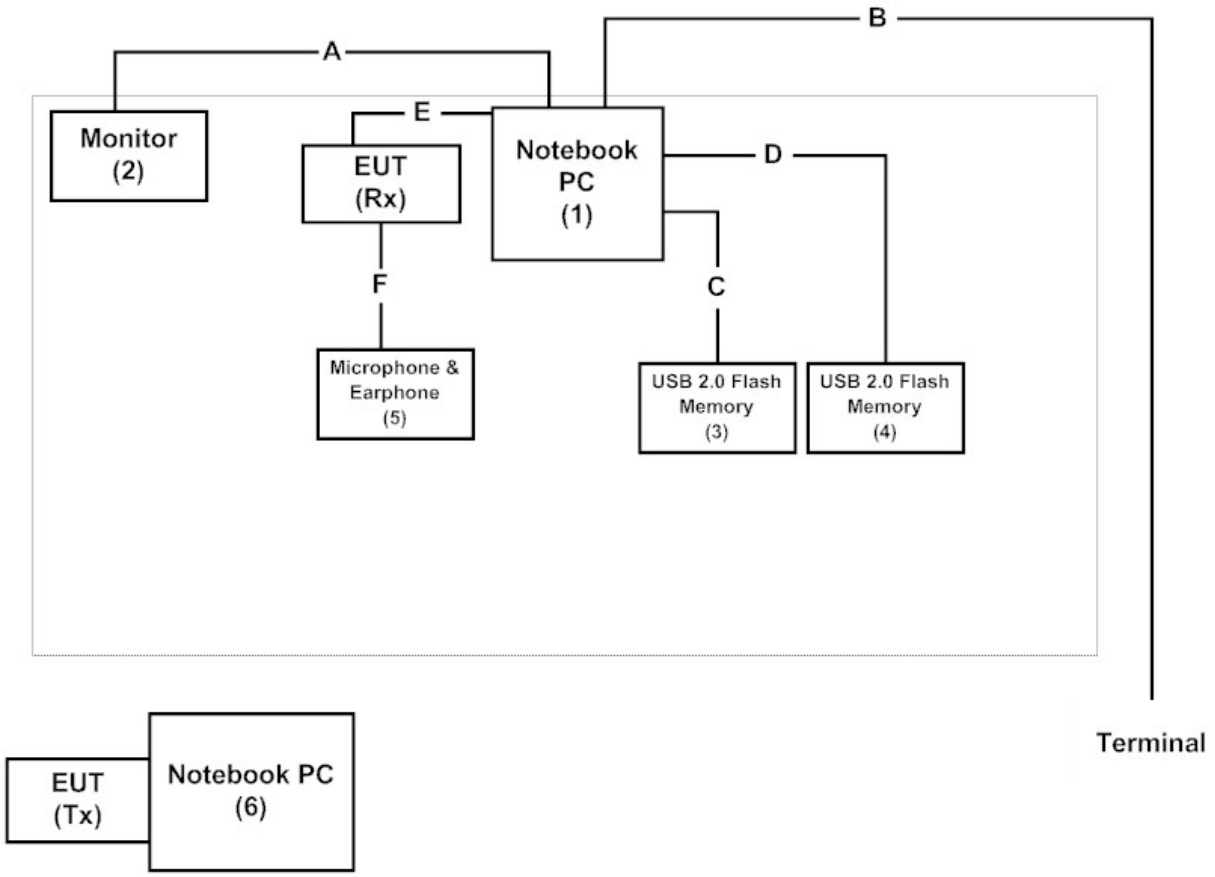
Connection Diagram



Signal Cable Type		Signal cable Description
A	VGA Cable	Shielded, 1.8m, two ferrite cores bonded.
B	LAN Cable	Non-Shielded, 3m
C	USB 2.0 Flash Memory Cable	Shielded, 1.5m
D	USB 2.0 Flash Memory Cable	Shielded, 1.5m
E	USB Cable	Shielded, 0.8m
F	Microphone & Earphone Cable	Non-Shielded, 1.2m

Test Mode	Mode 2: Receiver- Transmit

Connection Diagram



Signal Cable Type		Signal cable Description
A	VGA Cable	Shielded, 1.8m, two ferrite cores bonded.
B	LAN Cable	Non-Shielded, 3m
C	USB 2.0 Flash Memory Cable	Shielded, 1.5m
D	USB 2.0 Flash Memory Cable	Shielded, 1.5m
E	USB Cable	Shielded, 0.8m
F	Microphone & Earphone Cable	Non-Shielded, 1.2m

1.6. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Turn on the power of all equipment.
3	The RF signal's status will continue transmit through EUT.
4	Repeat the above procedure (3)

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	20
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 RF antenna conducted test (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Band Edge (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Power Density (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description: September 27, 2010 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 365520

Accredited by TAF
Accreditation Number: 1313
Effective through: December 27, 2013

Testing Laboratory 1313

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2012

NVLAP Lab Code : 200347-0

Site Name: Quietek Corporation
Site Address: No. 75-2, 3rd Lin, Wangye Keng, Yonghxing
Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan
TEL : 886-3-5928858 / FAX : 886-3-5928859
E-Mail : service@quietek.com

2. Conducted Emission

2.1. Test Equipment

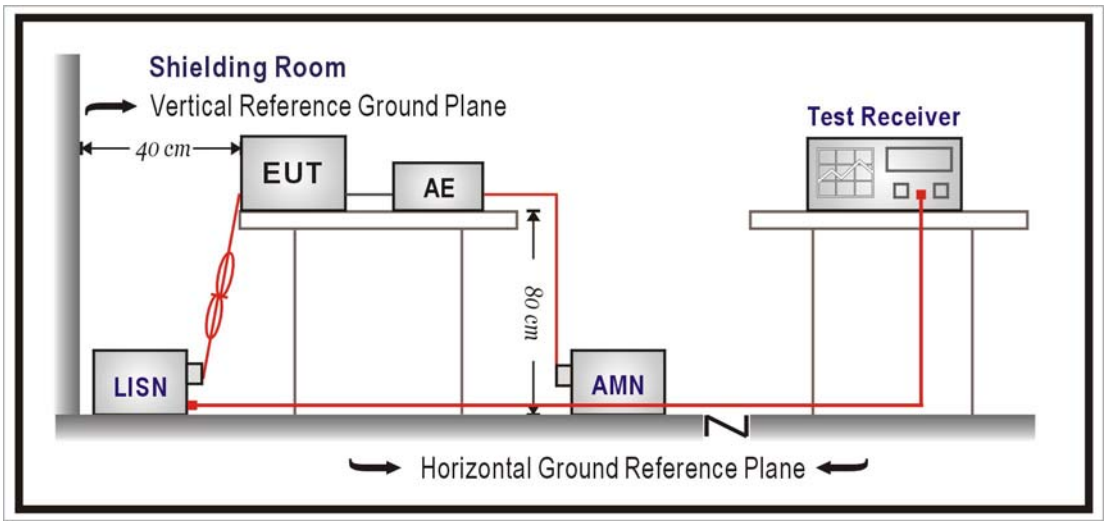
The following test equipments are used during the test:

Conducted Emission / SR3

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
LISN	R&S	ENV216	100096	2011/09/07	2012/09/06
LISN	R&S	ESH3-Z5	836679/022	2012/02/07	2013/02/06
Test Receiver	R&S	ESCS 30	825442/017	2012/01/02	2013/01/01

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

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

Remarks: In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 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.

2.5. Test Specification

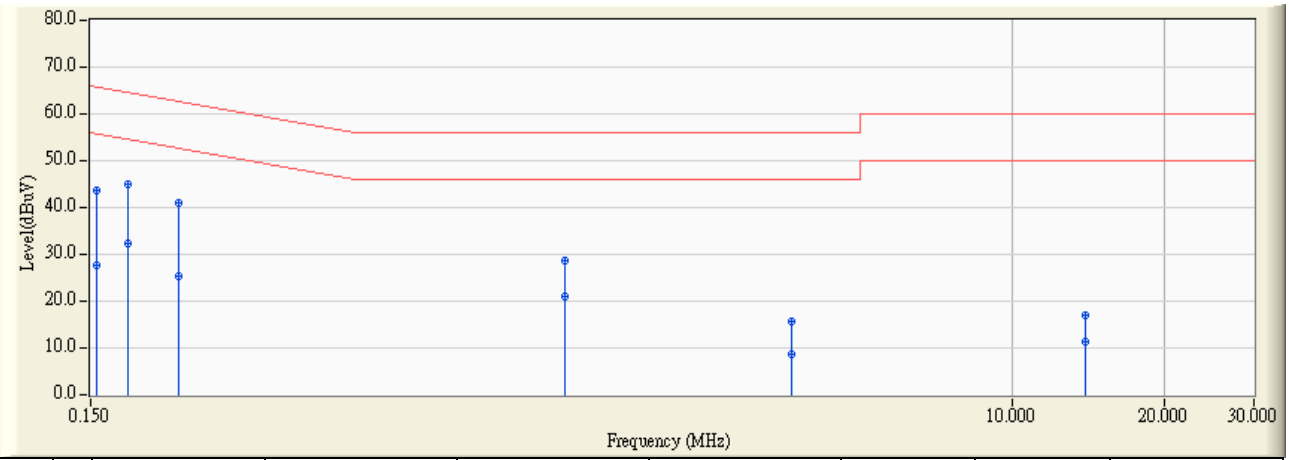
According to FCC Part 15 Subpart C Paragraph 15.207: 2010

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR3	**Time : 2012/02/01 - 11:23**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-1_0831 - Line1	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit**

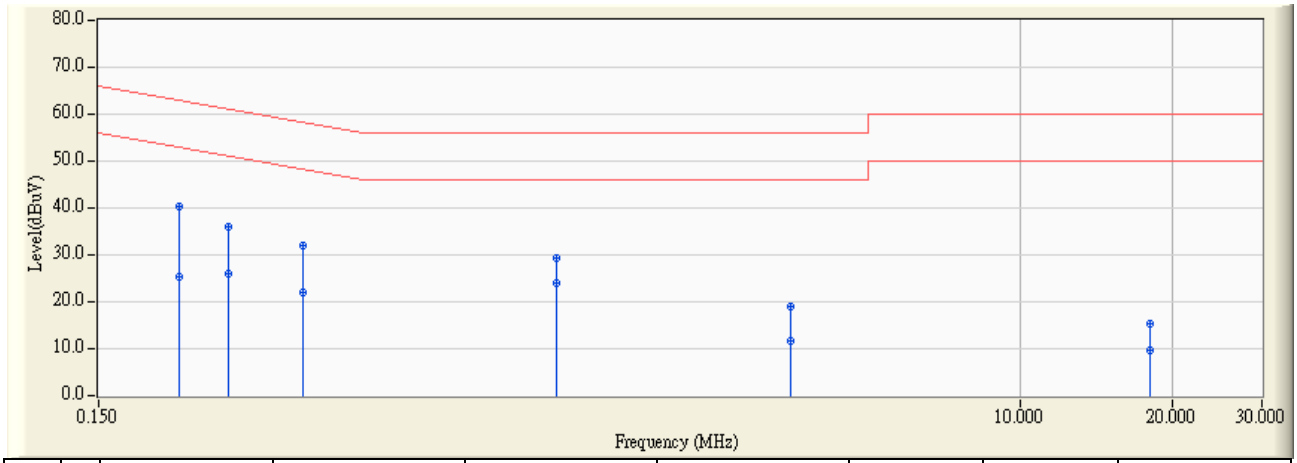


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.629	34.010	43.639	-22.148	65.786	QUASIPEAK
2		0.154	9.629	17.900	27.529	-28.258	55.786	AVERAGE
3	*	0.177	9.631	35.420	45.051	-19.558	64.609	QUASIPEAK
4		0.177	9.631	22.770	32.401	-22.208	54.609	AVERAGE
5		0.224	9.634	31.200	40.834	-21.827	62.661	QUASIPEAK
6		0.224	9.634	15.860	25.494	-27.167	52.661	AVERAGE
7		1.298	9.738	18.990	28.728	-27.272	56.000	QUASIPEAK
8		1.298	9.738	11.330	21.068	-24.932	46.000	AVERAGE
9		3.658	9.819	5.980	15.799	-40.201	56.000	QUASIPEAK
10		3.658	9.819	-1.170	8.649	-37.351	46.000	AVERAGE
11		13.908	10.047	6.990	17.036	-42.964	60.000	QUASIPEAK
12		13.908	10.047	1.320	11.366	-38.634	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.

Site : SR3	**Time : 2012/02/01 - 11:26**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-1_0831 - Line2	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit**

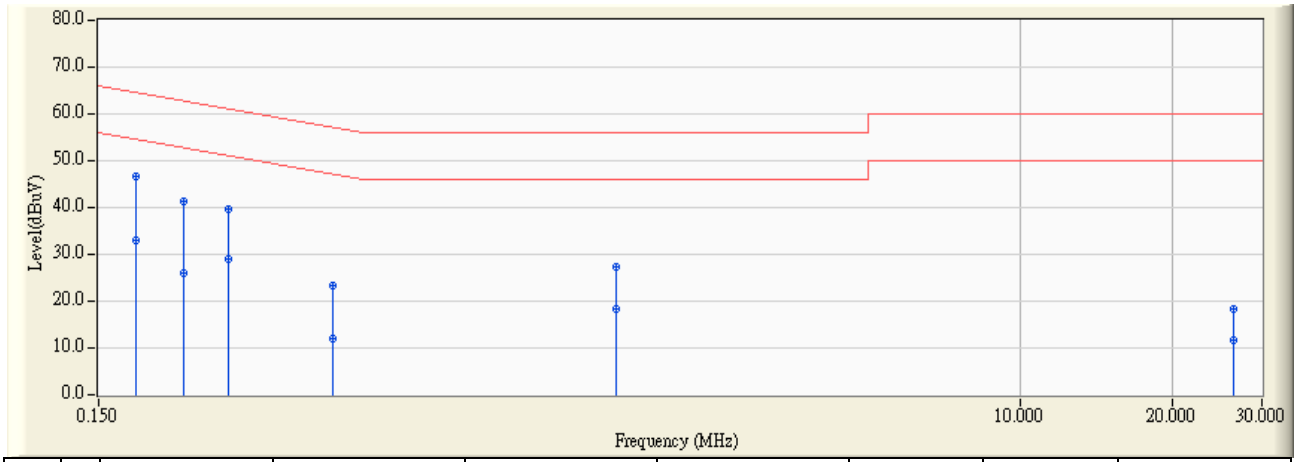


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.216	9.644	30.590	40.234	-22.722	62.956	QUASIPEAK
2		0.216	9.644	15.580	25.224	-27.732	52.956	AVERAGE
3		0.271	9.647	26.270	35.917	-25.167	61.084	QUASIPEAK
4		0.271	9.647	16.290	25.937	-25.147	51.084	AVERAGE
5		0.380	9.653	22.420	32.073	-26.196	58.269	QUASIPEAK
6		0.380	9.653	12.480	22.133	-26.136	48.269	AVERAGE
7		1.209	9.734	19.640	29.375	-26.625	56.000	QUASIPEAK
8	*	1.209	9.734	14.410	24.145	-21.855	46.000	AVERAGE
9		3.513	9.818	9.140	18.958	-37.042	56.000	QUASIPEAK
10		3.513	9.818	1.740	11.558	-34.442	46.000	AVERAGE
11		18.084	10.235	5.060	15.296	-44.704	60.000	QUASIPEAK
12		18.084	10.235	-0.510	9.726	-40.274	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.

Site : SR3	**Time : 2012/02/01 - 11:17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-1_0831 - Line1	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit**

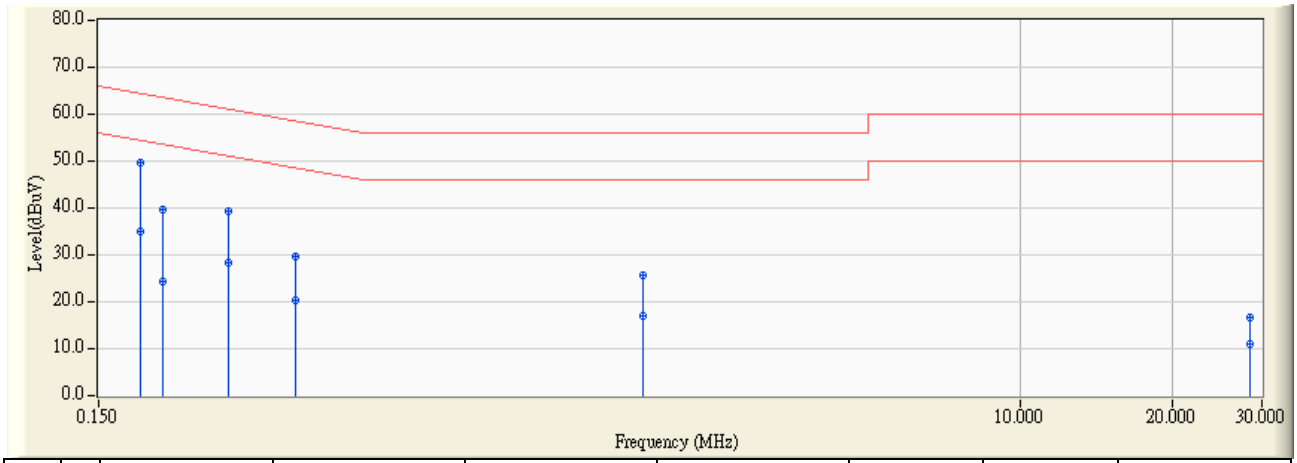


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.177	9.631	37.090	46.721	-17.888	64.609	QUASIPEAK
2		0.177	9.631	23.510	33.141	-21.468	54.609	AVERAGE
3		0.220	9.634	31.640	41.274	-21.533	62.807	QUASIPEAK
4		0.220	9.634	16.380	26.014	-26.793	52.807	AVERAGE
5		0.271	9.637	29.970	39.607	-21.477	61.084	QUASIPEAK
6		0.271	9.637	19.420	29.057	-22.027	51.084	AVERAGE
7		0.435	9.647	13.830	23.477	-33.677	57.154	QUASIPEAK
8		0.435	9.647	2.350	11.997	-35.157	47.154	AVERAGE
9		1.587	9.755	17.480	27.235	-28.765	56.000	QUASIPEAK
10		1.587	9.755	8.580	18.335	-27.665	46.000	AVERAGE
11		26.314	10.299	7.970	18.269	-41.731	60.000	QUASIPEAK
12		26.314	10.299	1.510	11.809	-38.191	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.

Site : SR3	**Time : 2012/02/01 - 11:20**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-1_0831 - Line2	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.181	9.642	39.950	49.592	-14.836	64.428	QUASIPEAK
2		0.181	9.642	25.410	35.052	-19.376	54.428	AVERAGE
3		0.201	9.643	30.020	39.663	-23.915	63.578	QUASIPEAK
4		0.201	9.643	14.750	24.393	-29.185	53.578	AVERAGE
5		0.271	9.647	29.670	39.317	-21.767	61.084	QUASIPEAK
6		0.271	9.647	18.690	28.337	-22.747	51.084	AVERAGE
7		0.369	9.652	20.170	29.822	-28.707	58.529	QUASIPEAK
8		0.369	9.652	10.840	20.492	-28.037	48.529	AVERAGE
9		1.795	9.776	16.000	25.776	-30.224	56.000	QUASIPEAK
10		1.795	9.776	7.180	16.956	-29.044	46.000	AVERAGE
11		28.334	10.537	6.020	16.557	-43.443	60.000	QUASIPEAK
12		28.334	10.537	0.400	10.937	-39.063	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.

3. Peak Power Output

3.1. Test Equipment

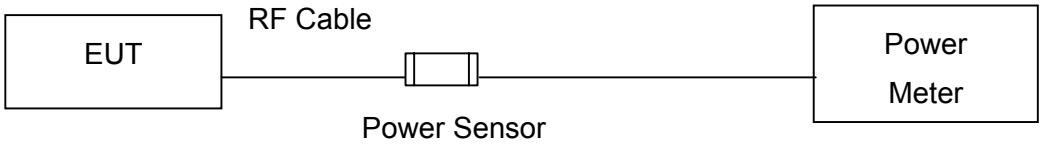
The following test equipments are used during the test:

Peak Power / SR7

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Power Meter	Agilent	N1911A	MY45101353	2011/12/19	2012/12/18
Power Sensor	Agilent	N1921A	MY45241670	2011/12/16	2012/12/15

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup



3.3. Test procedures

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

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

3.6. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB.

3.7. Test Result

Product	Wire-to-Air		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmitter-Transmit		
Date of Test	2012/02/15	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2404.4	10.429	1Watt= 30 dBm	Pass
08	2443.6	10.671	1Watt= 30 dBm	Pass
12	2476.7	10.275	1Watt= 30 dBm	Pass

Product	Wire-to-Air		
Test Item	Peak Power Output		
Test Mode	Mode 2: Receiver- Transmit		
Date of Test	2012/02/15	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2404.4	10.163	1Watt= 30 dBm	Pass
08	2443.6	10.654	1Watt= 30 dBm	Pass
12	2476.7	10.593	1Watt= 30 dBm	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the test:

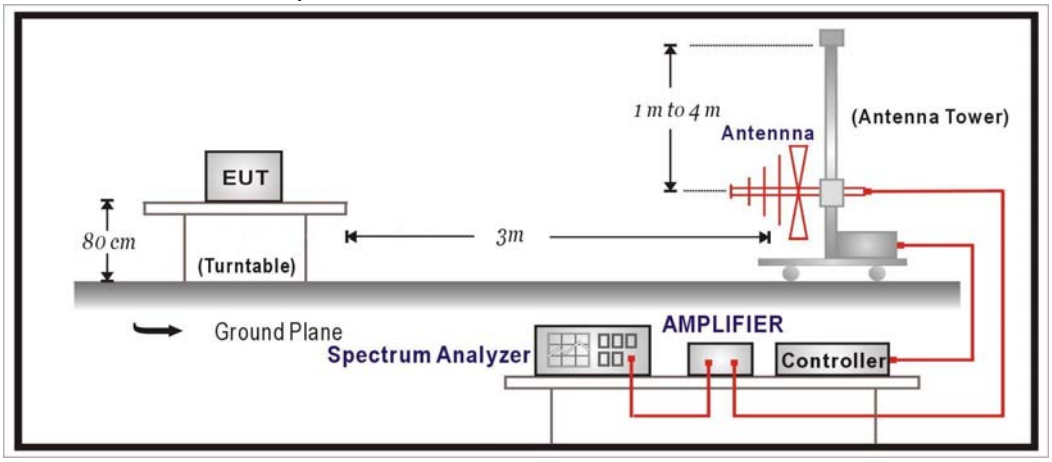
Radiated Emission / CB1

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Bilog Antenna	SCHAFFNER	CBL6112B	2895	2011/08/15	2012/08/14
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120D	743	2012/02/03	2013/02/02
Pre-Amplifier	MITEQ	AMF-4D-005180-24-10P	888003	2011/12/06	2012/12/05
Pre-Amplifier	QuieTek	AP-025C	CHM-0706049	2012/02/03	2013/02/02
Spectrum Analyzer	Agilent	E4440A	MY46187335	2012/02/08	2013/02/07
Coaxial Cable	Huber+Suhner AG	Sucoflex 102	25623/2	2011/03/22	2012/03/21

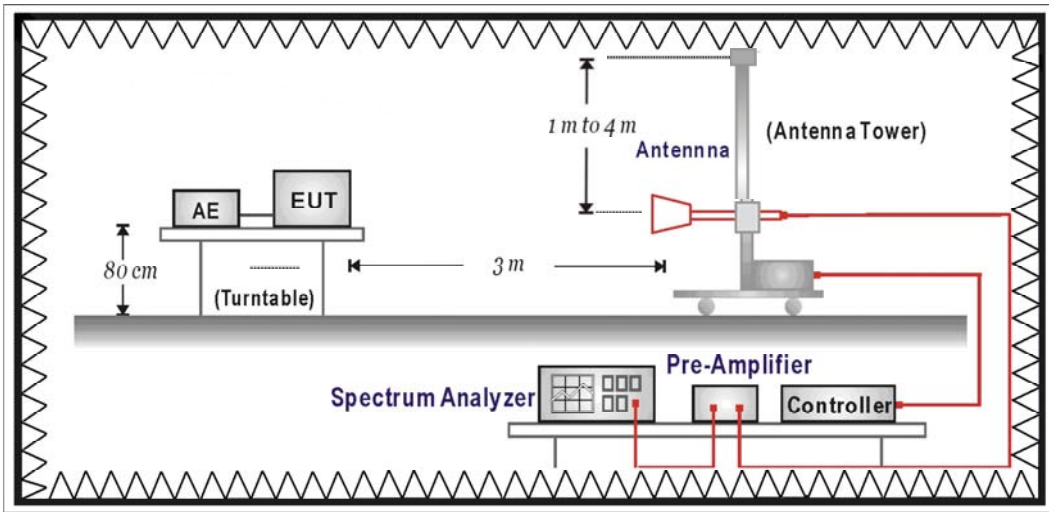
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

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

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

Remarks: 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: 2009 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.
On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

4.6. Uncertainty

The measurement uncertainty

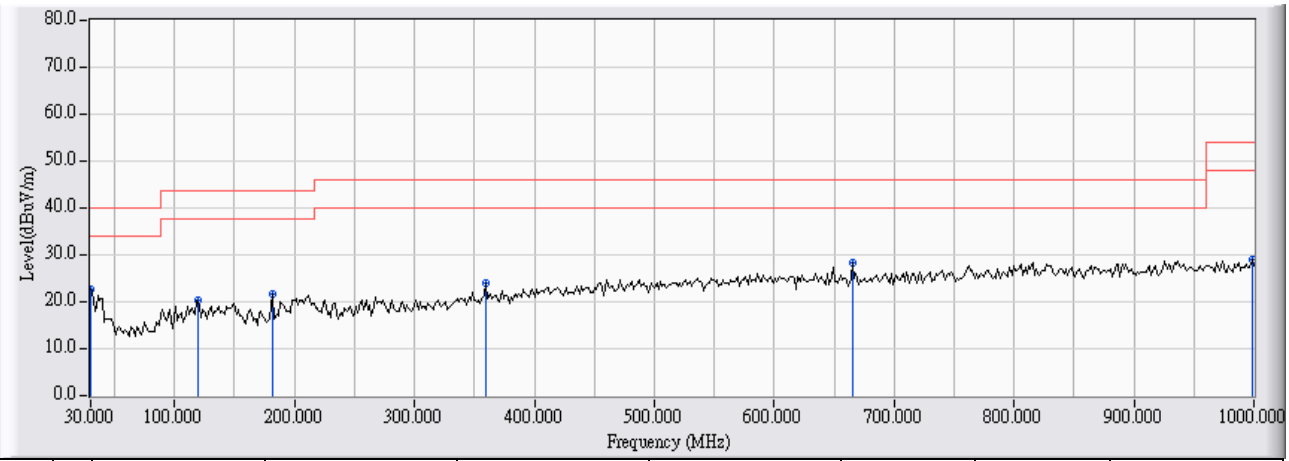
30MHz～1GHz as ±3.43dB

1GHz～26.5Ghz as ±3.65dB

4.7. Test Result

30MHz-1GHz Spurious

Site : CB1	**Time : 2012/02/17 - 18:02**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2443.6MHz**

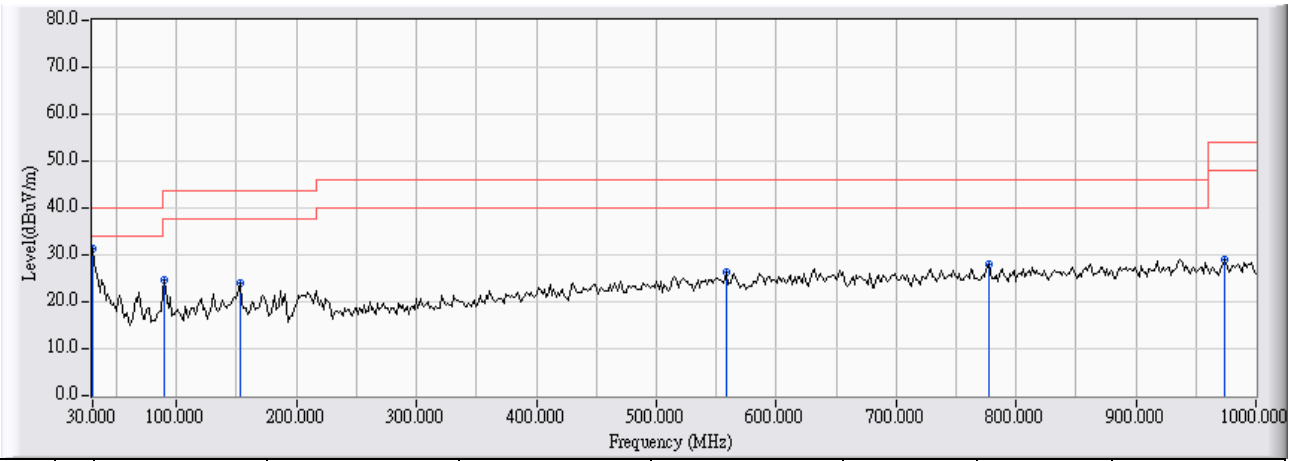


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	30.000	-9.920	32.687	22.767	-17.233	40.000	PEAK
2		118.917	-11.884	32.109	20.226	-23.274	43.500	PEAK
3		181.967	-14.715	36.356	21.641	-21.859	43.500	PEAK
4		359.800	-8.530	32.368	23.837	-22.163	46.000	PEAK
5		665.350	-4.038	32.361	28.323	-17.677	46.000	PEAK
6		998.383	-0.946	29.977	29.030	-24.970	54.000	PEAK

Note:

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

Site : CB1	**Time : 2012/02/17 - 18:07**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2443.6MHz**

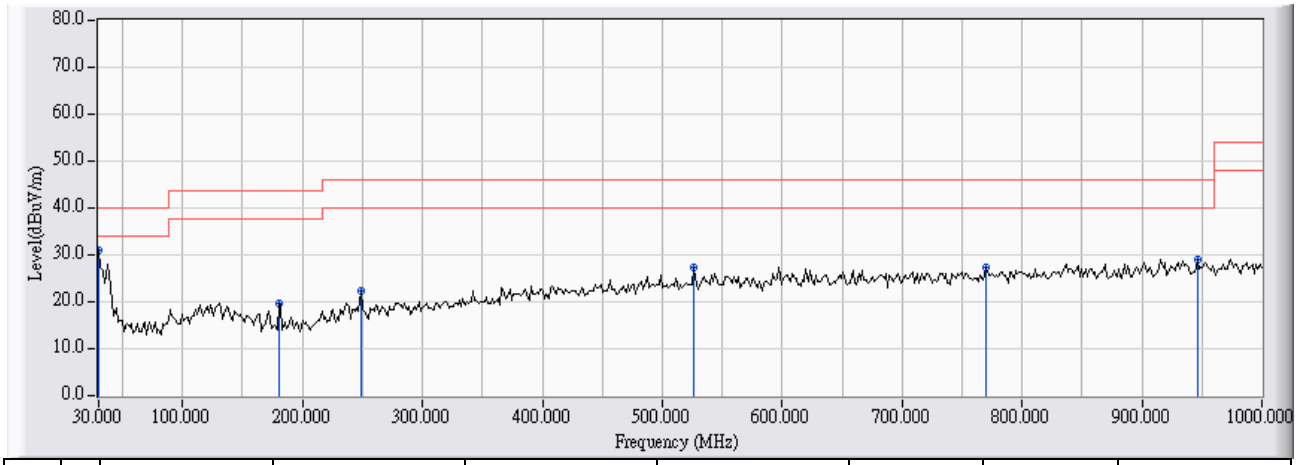


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	30.000	-9.920	41.145	31.225	-8.775	40.000	PEAK
2		89.817	-15.688	40.395	24.707	-18.793	43.500	PEAK
3		152.867	-13.588	37.491	23.903	-19.597	43.500	PEAK
4		558.650	-4.660	31.057	26.397	-19.603	46.000	PEAK
5		776.900	-2.945	30.855	27.910	-18.090	46.000	PEAK
6		974.133	-1.198	30.239	29.042	-24.958	54.000	PEAK

Note:

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

Site : CB1	**Time : 2012/02/17 - 17:49**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2443.6MHz**

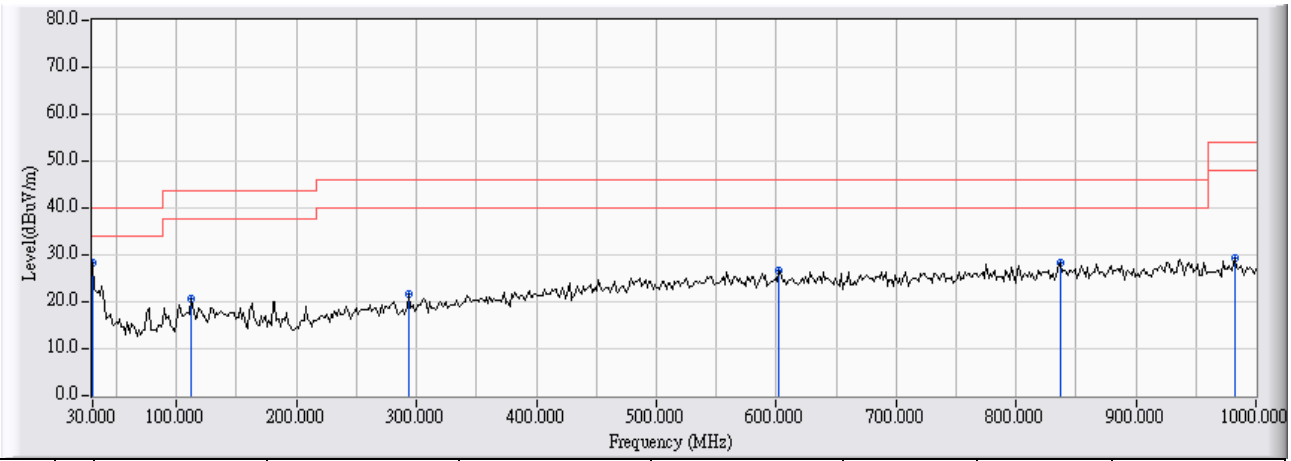


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	30.000	-9.920	40.988	31.068	-8.932	40.000	PEAK
2		180.350	-14.715	34.230	19.515	-23.985	43.500	PEAK
3		248.250	-11.194	33.647	22.453	-23.547	46.000	PEAK
4		526.317	-5.036	32.327	27.291	-18.709	46.000	PEAK
5		770.433	-3.028	30.241	27.214	-18.786	46.000	PEAK
6		946.650	-1.485	30.376	28.891	-17.109	46.000	PEAK

Note:

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

Site : CB1	**Time : 2012/02/17 - 17:54**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2443.6MHz**



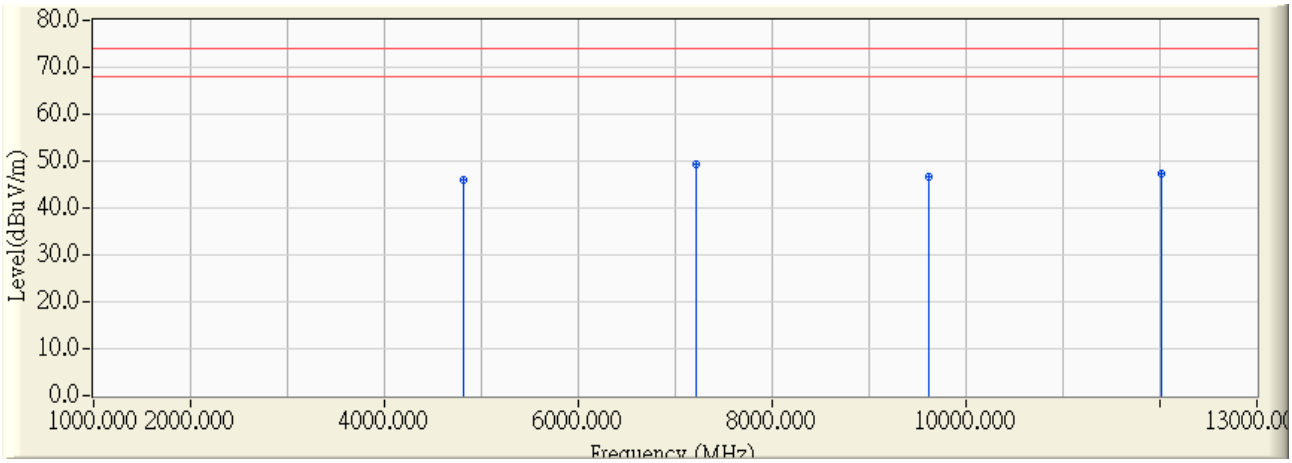
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	30.000	-9.920	38.364	28.444	-11.556	40.000	PEAK
2		112.450	-12.444	32.979	20.535	-22.965	43.500	PEAK
3		293.517	-10.375	31.980	21.604	-24.396	46.000	PEAK
4		602.300	-4.319	30.942	26.623	-19.377	46.000	PEAK
5		836.717	-2.411	30.605	28.195	-17.805	46.000	PEAK
6		982.217	-1.114	30.388	29.274	-24.726	54.000	PEAK

Note:

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

Harmonic & Spurious:

Site : CB1	**Time : 2012/02/02 - 16:29**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

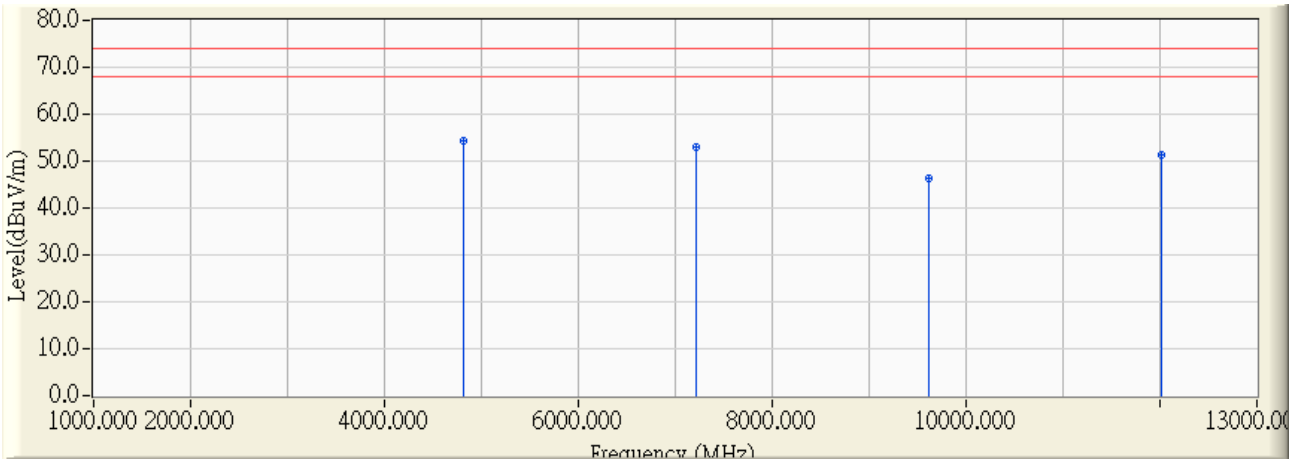


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4808.150	-9.021	55.139	46.118	-27.882	74.000	54.00	PEAK
2	*	7212.300	-2.233	51.592	49.359	-24.641	74.000	54.00	PEAK
3		9616.300	1.848	44.847	46.694	-27.306	74.000	54.00	PEAK
4		12020.450	2.641	44.574	47.216	-26.784	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 16:37**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

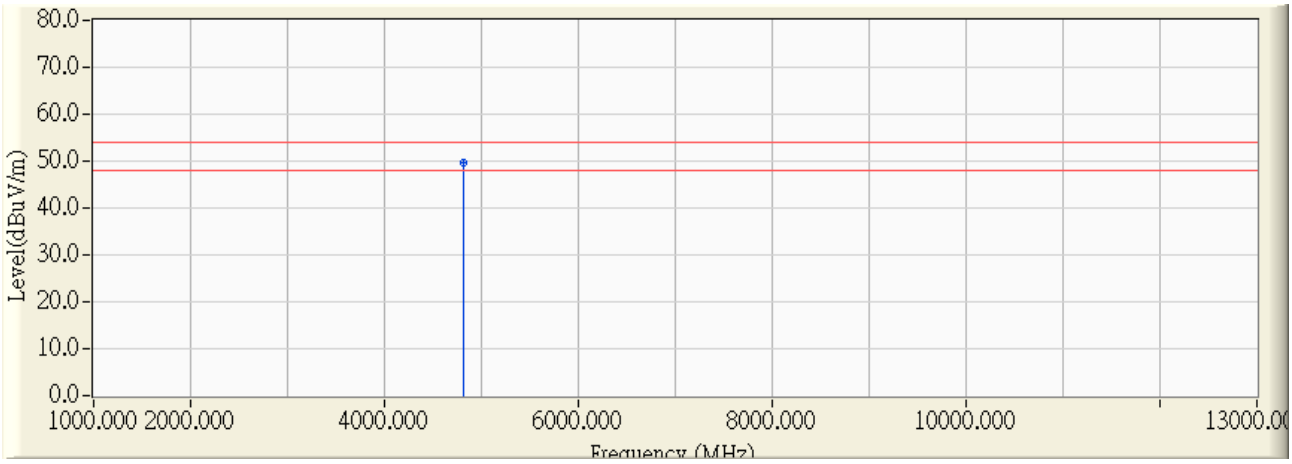


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4808.500	-9.021	63.264	54.244	-19.756	74.000	54.00	PEAK
2		7212.300	-2.233	55.104	52.871	-21.129	74.000	54.00	PEAK
3		9616.250	1.847	44.493	46.340	-27.660	74.000	54.00	PEAK
4		12020.500	2.641	48.836	51.478	-22.522	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 16:39**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

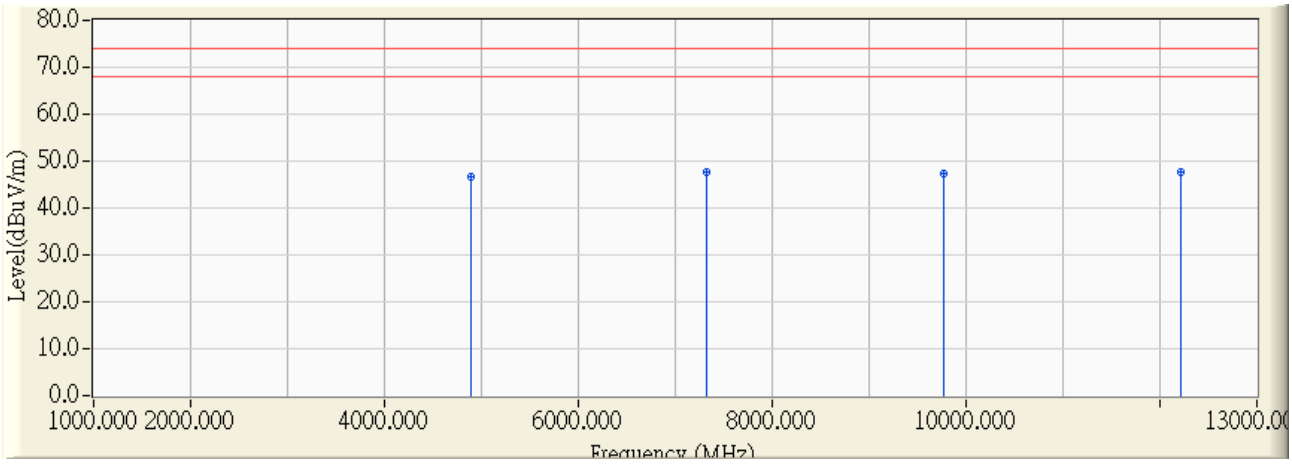


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4808.150	-9.021	58.550	49.529	-4.471	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 16:51**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2443.6MHz**

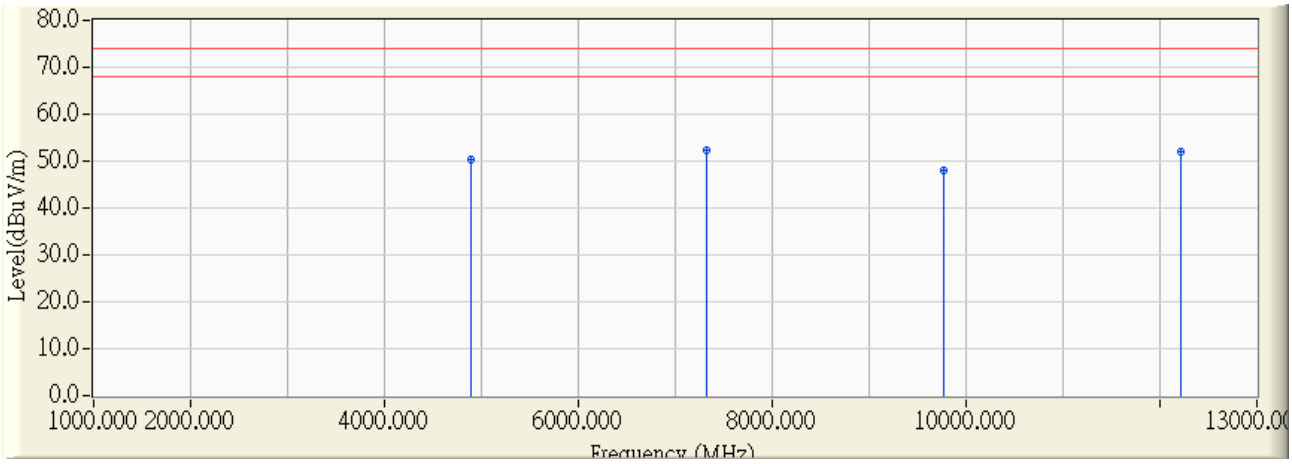


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4885.650	-8.788	55.329	46.542	-27.458	74.000	54.00	PEAK
2		7328.400	-1.884	49.605	47.721	-26.279	74.000	54.00	PEAK
3		9772.000	3.039	44.453	47.491	-26.509	74.000	54.00	PEAK
4	*	12214.600	2.571	45.185	47.756	-26.244	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 16:47**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2443.6MHz**

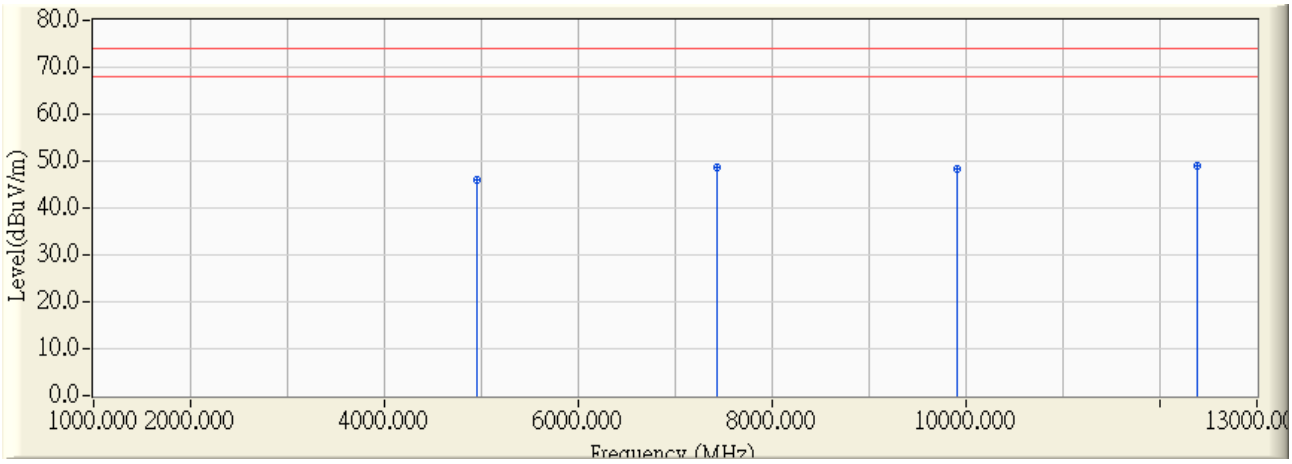


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4885.950	-8.785	59.053	50.267	-23.733	74.000	54.00	PEAK
2	*	7328.650	-1.884	54.117	52.234	-21.766	74.000	54.00	PEAK
3		9771.250	3.032	44.840	47.872	-26.128	74.000	54.00	PEAK
4		12214.200	2.570	49.288	51.859	-22.141	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 16:58**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

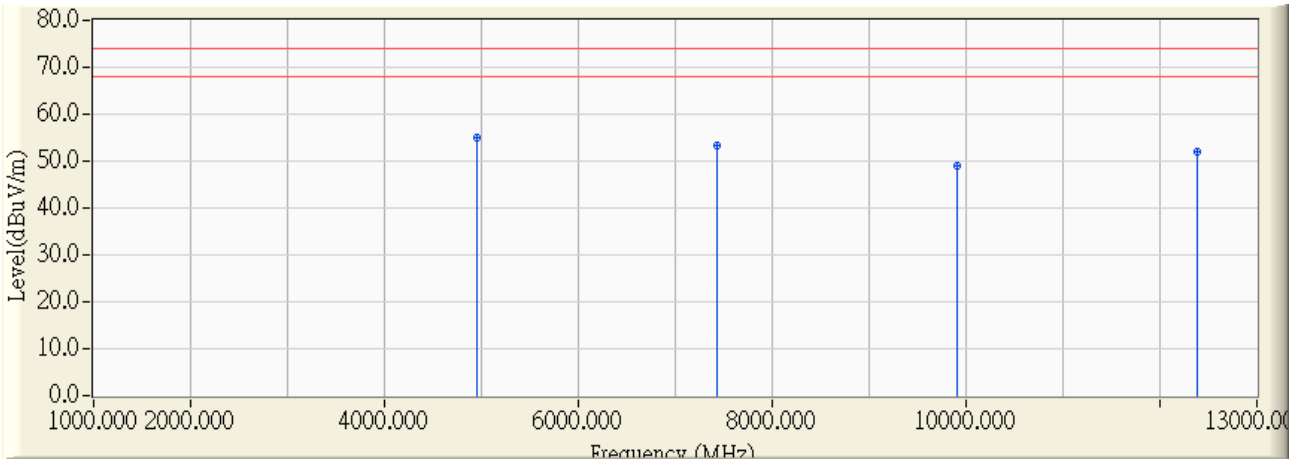


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4954.600	-8.579	54.430	45.851	-28.149	74.000	54.00	PEAK
2		7431.850	-1.571	50.164	48.592	-25.408	74.000	54.00	PEAK
3		9909.650	4.091	44.300	48.391	-25.609	74.000	54.00	PEAK
4	*	12386.650	2.510	46.388	48.898	-25.102	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:04**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

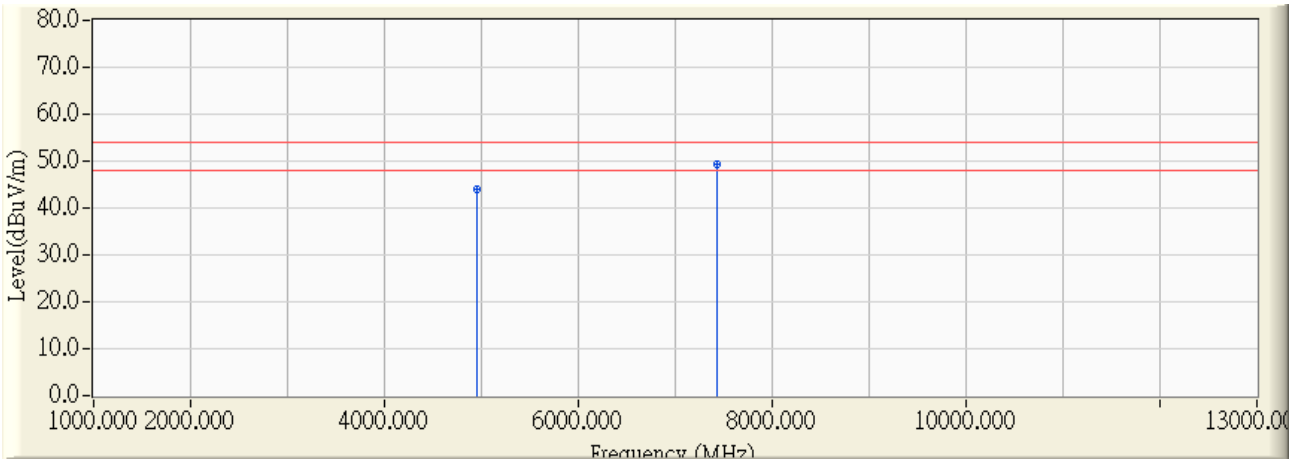


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4953.200	-8.582	63.552	54.969	-19.031	74.000	54.00	PEAK
2		7431.900	-1.571	54.785	53.213	-20.787	74.000	54.00	PEAK
3		9909.400	4.089	44.791	48.880	-25.120	74.000	54.00	PEAK
4		12386.600	2.510	49.645	52.155	-21.845	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:09**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

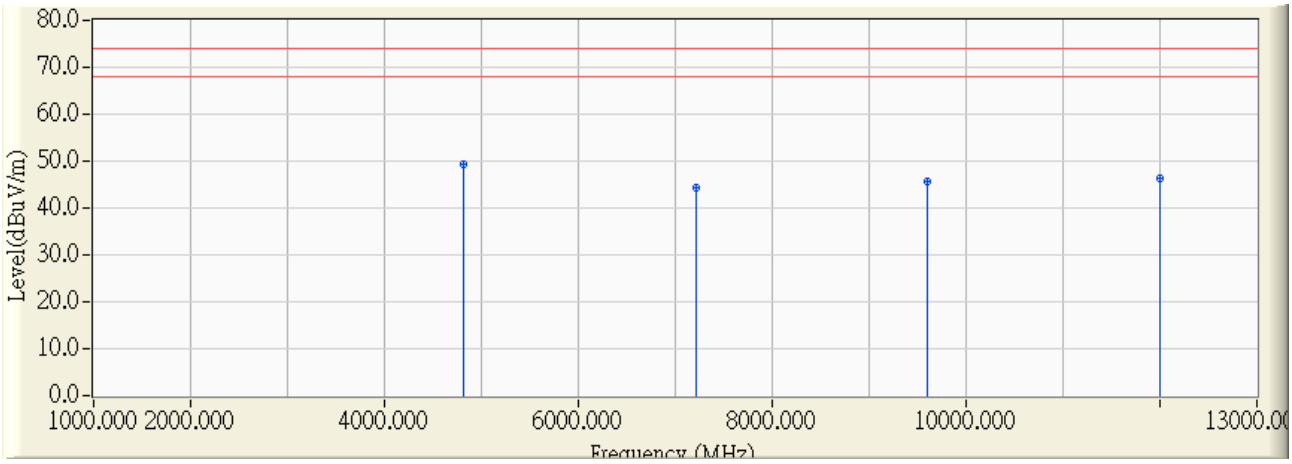


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4954.500	-8.579	52.582	44.003	-9.997	74.000	54.00	AVERAGE
2	*	7431.950	-1.571	51.023	49.451	-4.549	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:45**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

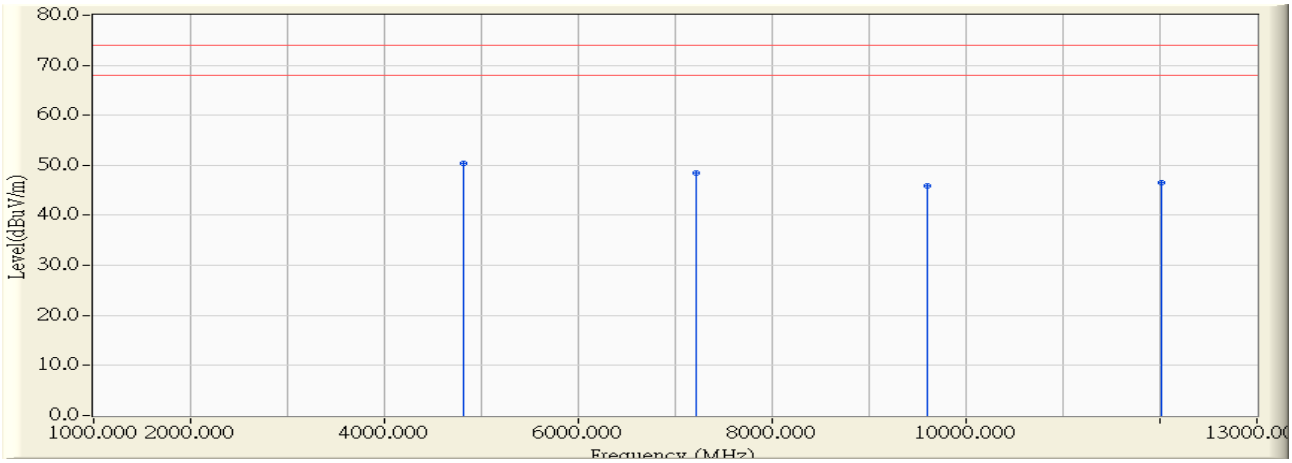


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4809.450	-9.017	58.491	49.473	-24.527	74.000	54.00	PEAK
2		7214.650	-2.226	46.656	44.430	-29.570	74.000	54.00	PEAK
3		9604.250	1.755	43.964	45.719	-28.281	74.000	54.00	PEAK
4		12005.200	2.651	43.661	46.312	-27.688	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/14 - 15:54**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

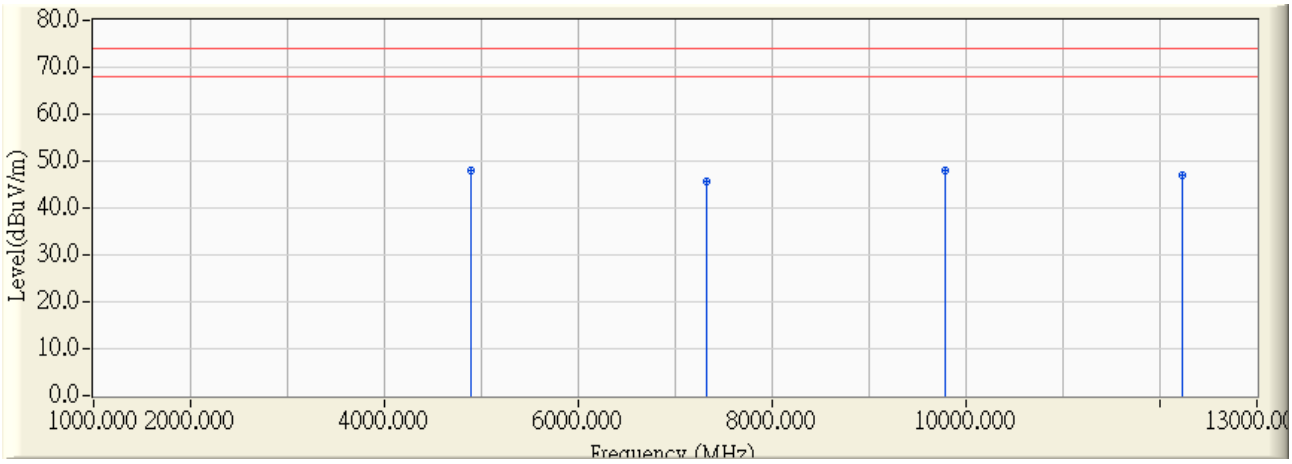


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4809.000	-9.019	59.400	50.381	-23.619	74.000	54.00	PEAK
2		7214.150	-2.228	50.705	48.477	-25.523	74.000	54.00	PEAK
3		9600.150	1.724	44.214	45.938	-28.062	74.000	54.00	PEAK
4		12022.000	2.641	43.869	46.510	-27.490	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:31**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2443.6MHz**

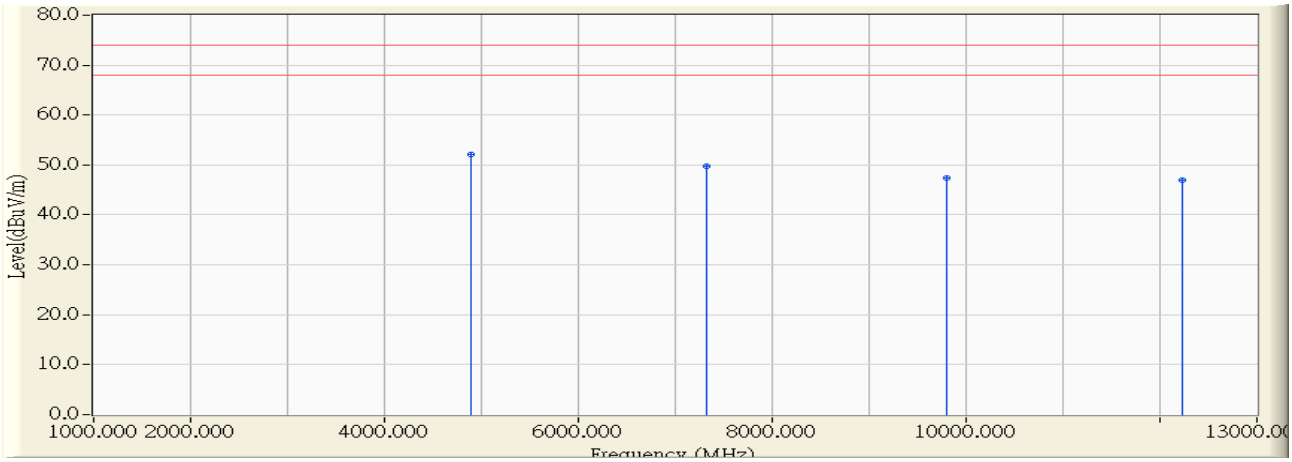


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4886.250	-8.785	56.792	48.007	-25.993	74.000	54.00	PEAK
2		7329.350	-1.880	47.700	45.819	-28.181	74.000	54.00	PEAK
3		9788.500	3.165	44.695	47.859	-26.141	74.000	54.00	PEAK
4		12234.550	2.564	44.354	46.918	-27.082	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/14 - 16:00**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2443.6MHz**

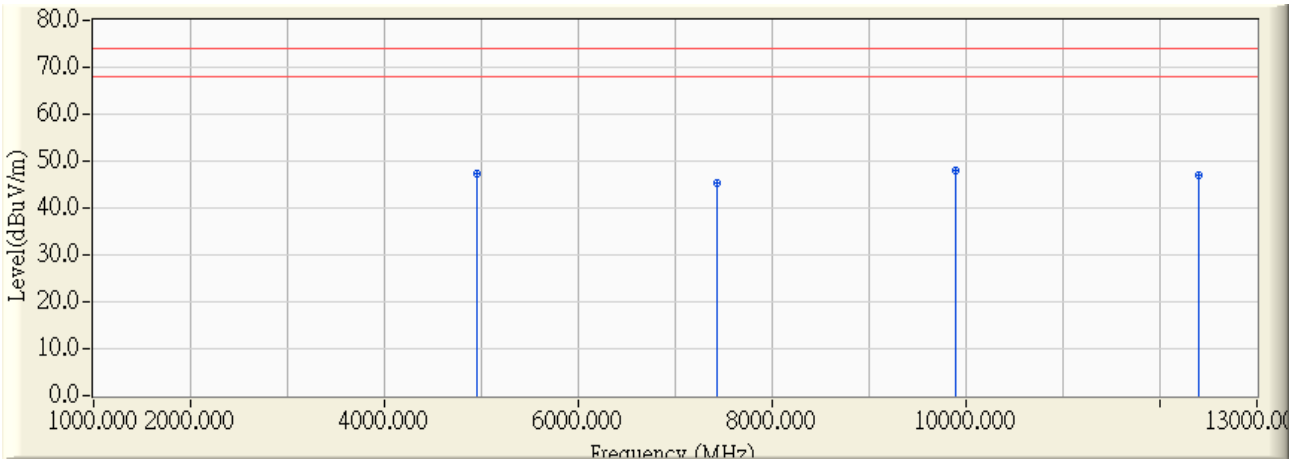


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4885.600	-8.788	60.930	52.143	-21.857	74.000	54.00	PEAK
2		7329.500	-1.880	51.684	49.804	-24.196	74.000	54.00	PEAK
3		9798.400	3.240	44.084	47.324	-26.676	74.000	54.00	PEAK
4		12236.000	2.564	44.310	46.873	-27.127	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:24**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**

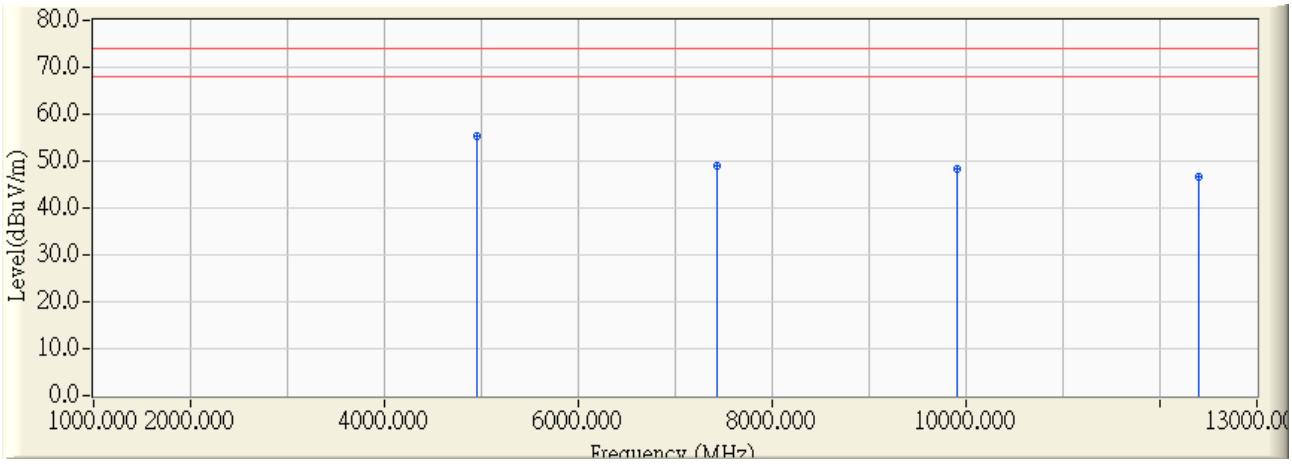


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4954.000	-8.581	55.909	47.329	-26.671	74.000	54.00	PEAK
2		7431.250	-1.575	47.055	45.481	-28.519	74.000	54.00	PEAK
3	*	9893.450	3.968	44.087	48.054	-25.946	74.000	54.00	PEAK
4		12395.900	2.507	44.370	46.877	-27.123	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:16**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**

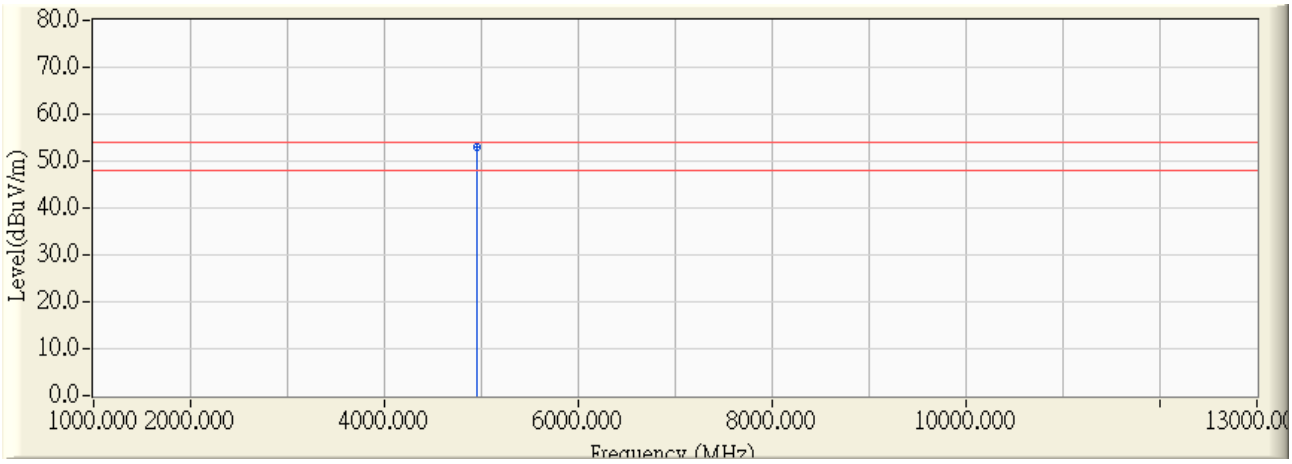


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4954.050	-8.581	63.895	55.315	-18.685	74.000	54.00	PEAK
2		7431.200	-1.575	50.637	49.063	-24.937	74.000	54.00	PEAK
3		9908.050	4.078	44.244	48.323	-25.677	74.000	54.00	PEAK
4		12398.450	2.506	44.309	46.815	-27.185	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2012/02/02 - 17:18**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note Mode 2: Receiver- Transmit 2476.7MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4954.050	-8.581	61.694	53.114	-0.886	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

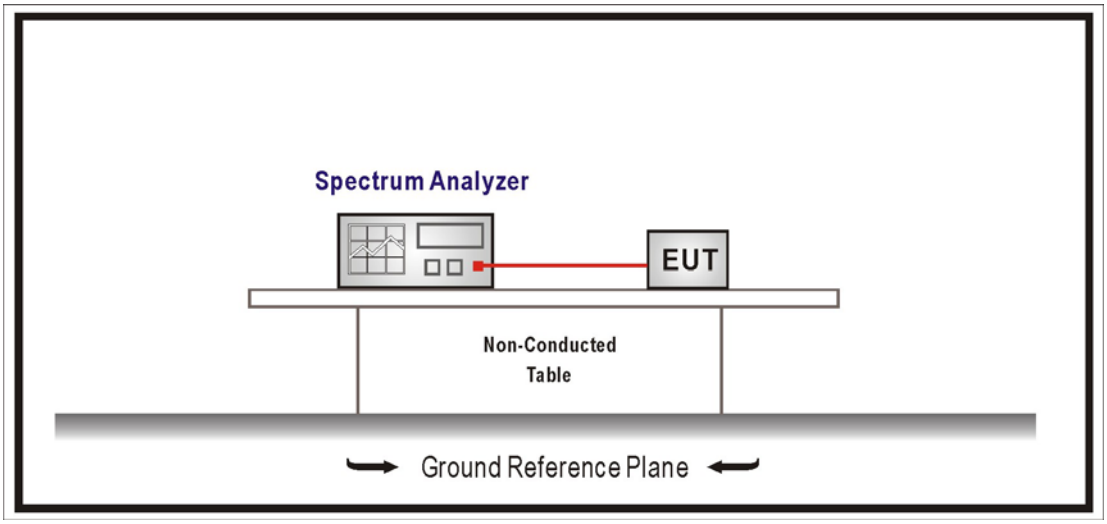
RF antenna conducted test / SR7

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Spectrum Analyzer	R&S	FSP	100561	2012/01/17	2013/01/16

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

RF Antenna Conducted Measurement:



5.3. Limits

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

5.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and 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. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

5.6. Uncertainty

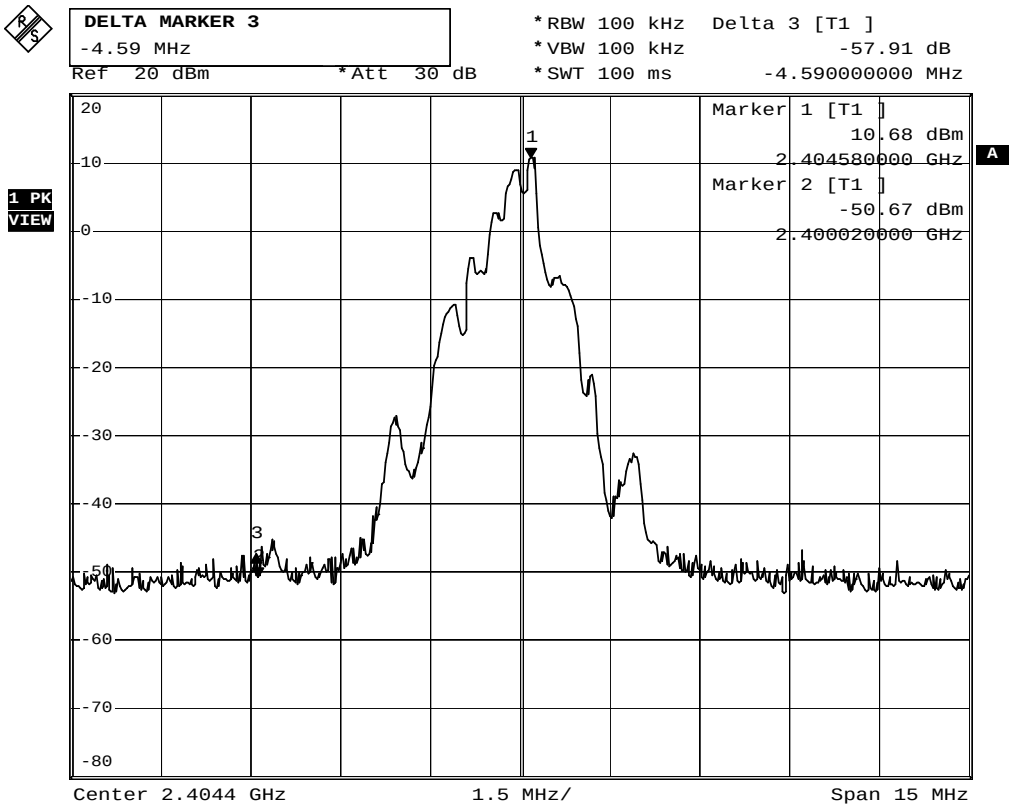
Conducted is defined as ± 1.27dB

5.7. Test Result

Product	Wire-to-Air		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmitter-Transmit		
Date of Test	2012/02/20	Test Site	SR7

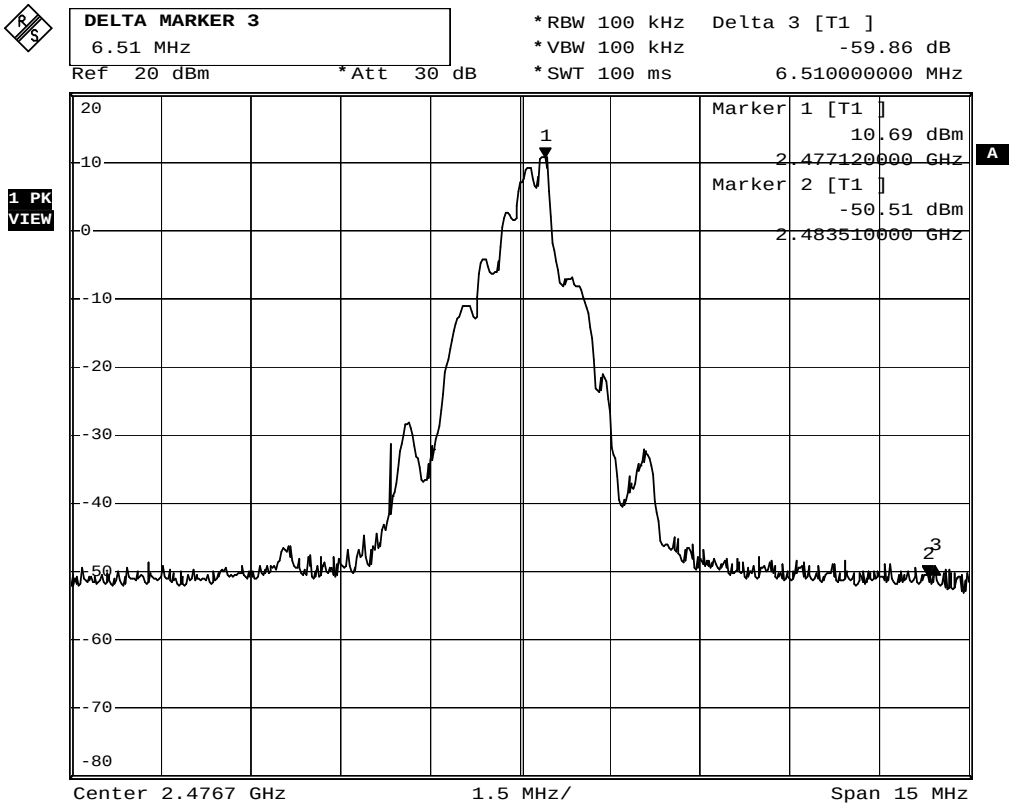
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
01	2404.4	57.91	≧20	Pass
12	2476.7	59.86	≧20	Pass

Channel 01 (2404.4MHz)



Comment: A:\2
Date: 20.FEB.2012 09:57:44

Channel 12 (2476.7MHz)

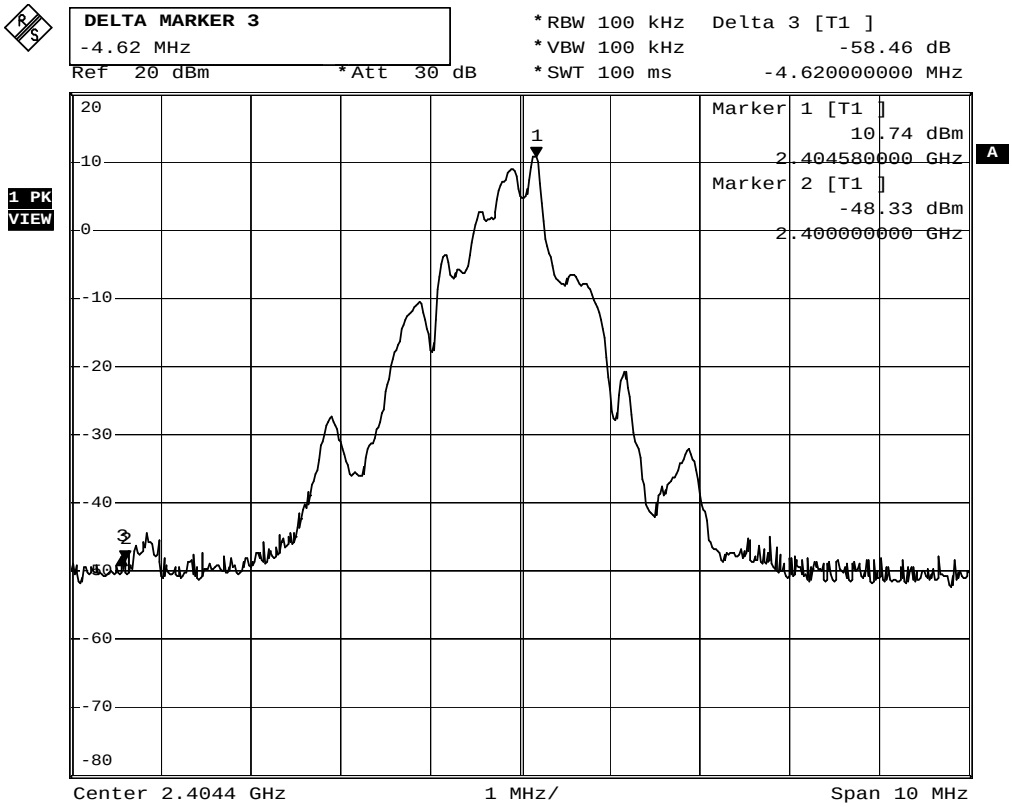


Comment: A:\2
Date: 20.FEB.2012 09:52:59

Product	Wire-to-Air		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Receiver- Transmit		
Date of Test	2012/02/20	Test Site	SR7

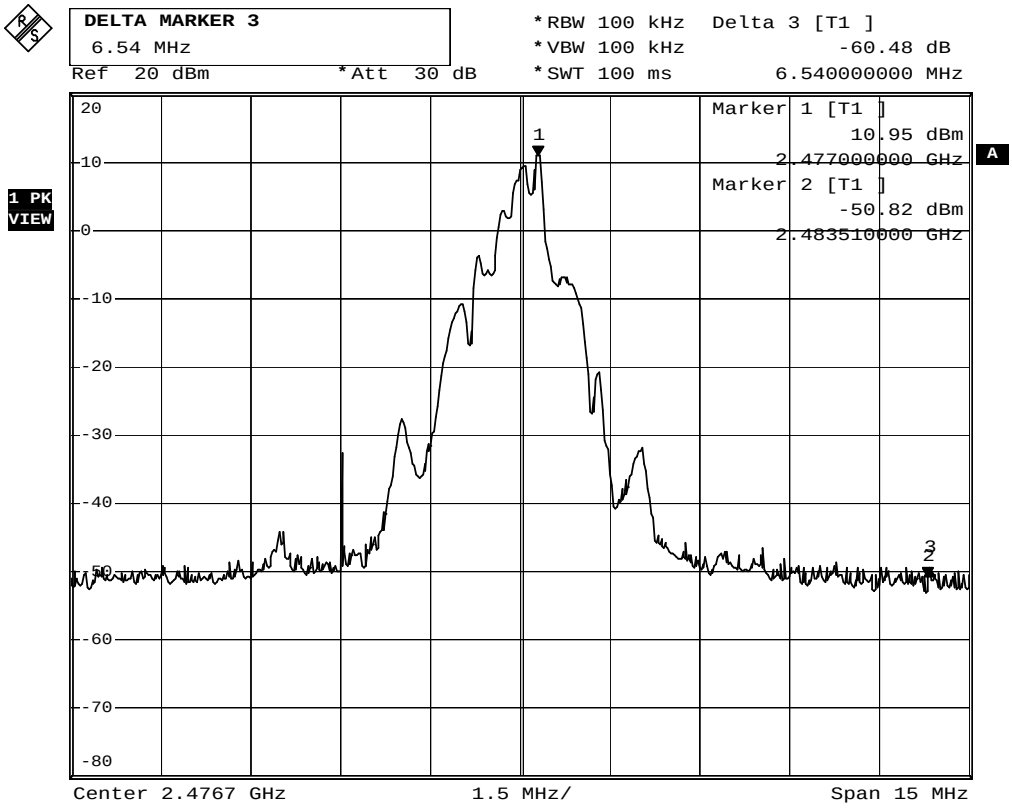
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
01	2404.4	58.46	≧20	Pass
12	2476.7	60.48	≧20	Pass

Channel 01 (2404.4MHz)



Comment: A:\2
Date: 20.FEB.2012 09:38:33

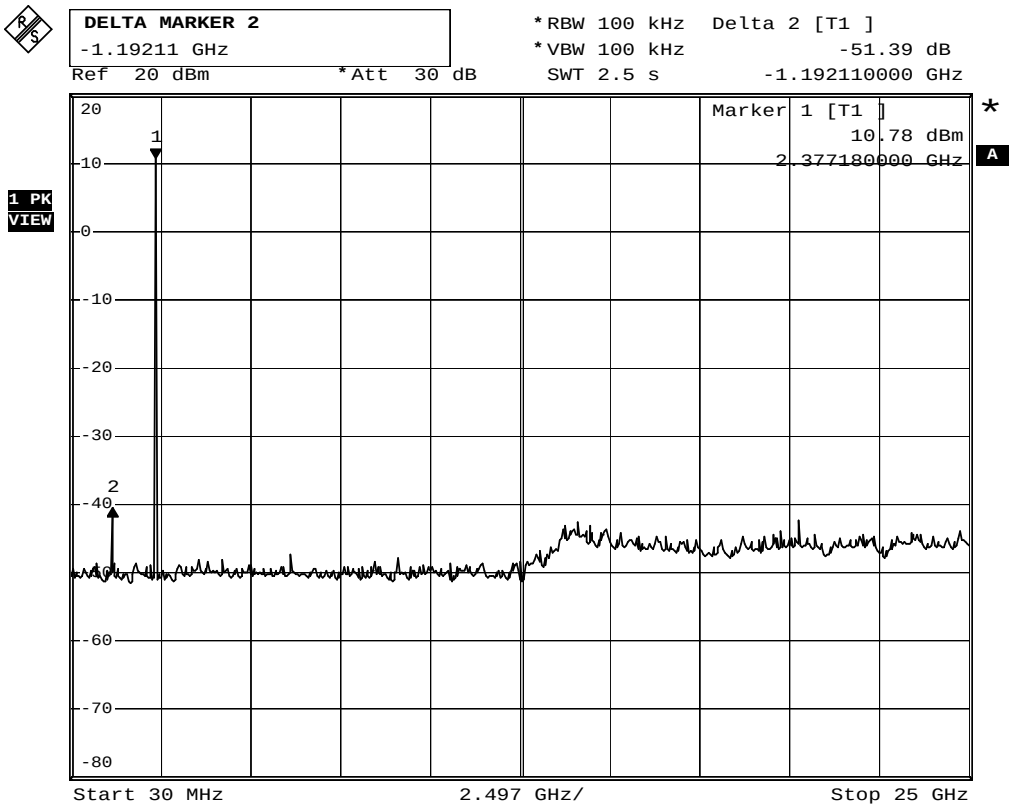
Channel 12 (2476.7MHz)



Comment: A:\2
Date: 20.FEB.2012 09:47:22

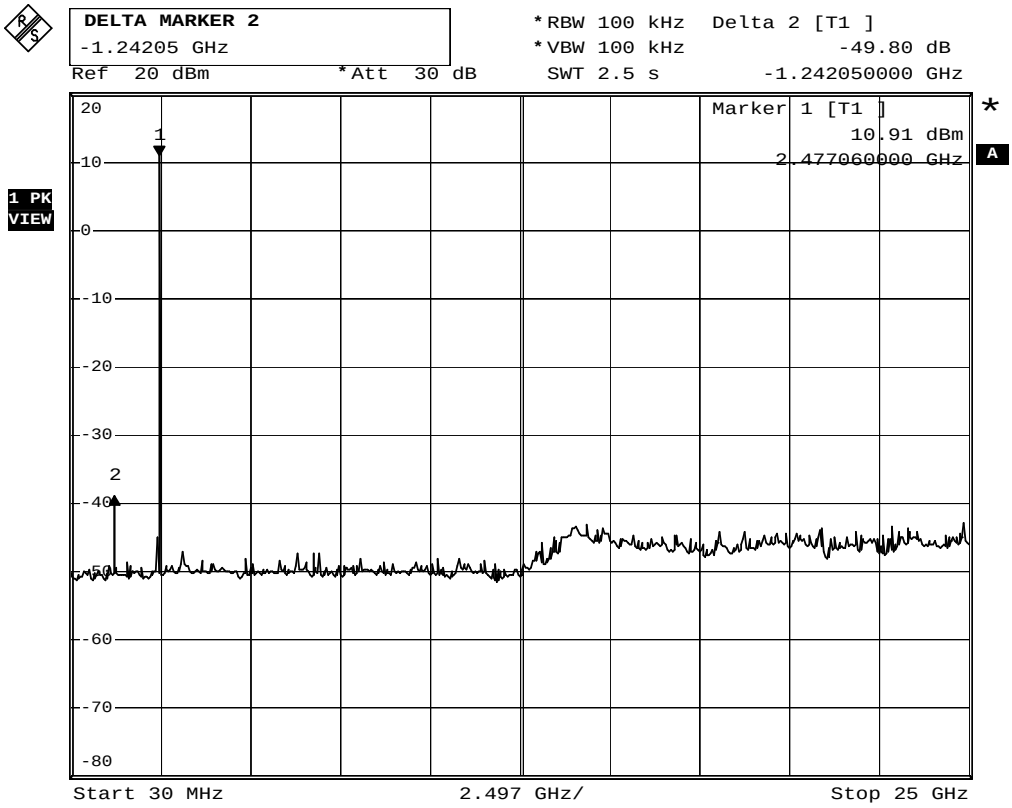
Product	Wire-to-Air		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmitter-Transmit		
Date of Test	2012/02/20	Test Site	SR7

Channel 01 (2404.4MHz) (30MHz-25GHz)



Comment: A:\2
Date: 20.FEB.2012 09:55:38

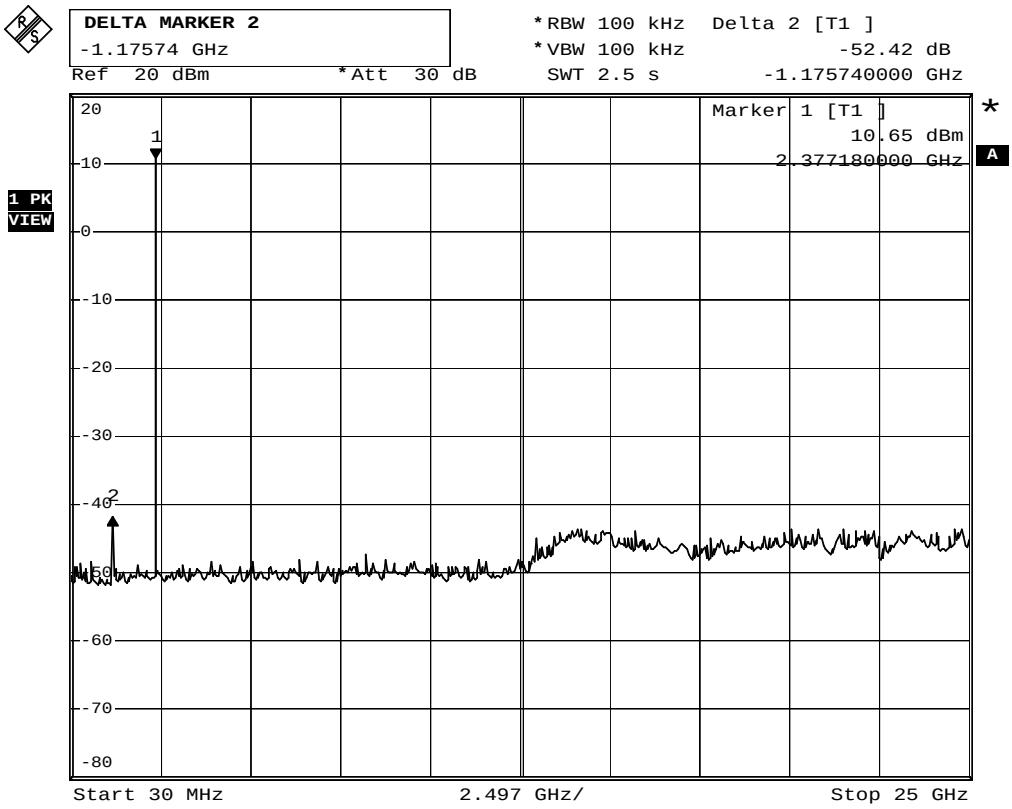
Channel 12 (2476.7MHz) (30MHz-25GHz)



Comment: A:\2
Date: 20.FEB.2012 09:54:30

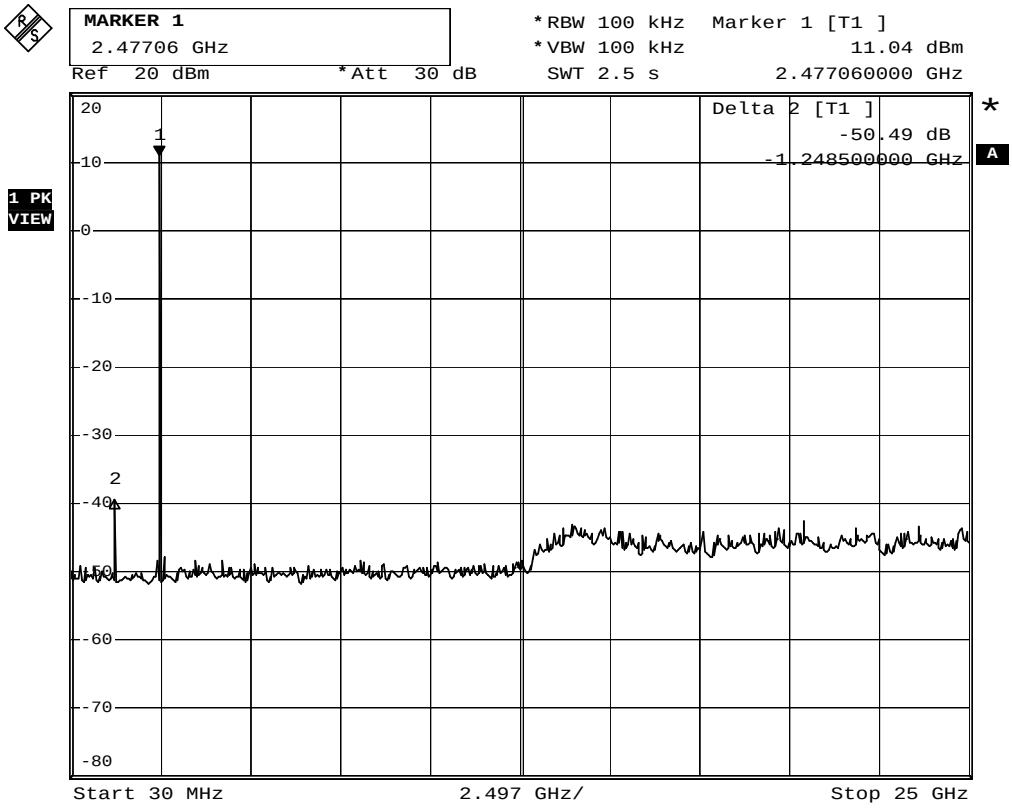
Product	Wire-to-Air		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Receiver- Transmit		
Date of Test	2012/02/20	Test Site	SR7

Channel 01 (2404.4MHz) (30MHz-25GHz)



Comment: A:\2
Date: 20.FEB.2012 09:42:05

Channel 12 (2476.7MHz) (30MHz-25GHz)



Comment: A:\2
Date: 20.FEB.2012 09:44:21

6. Radiated Emission Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

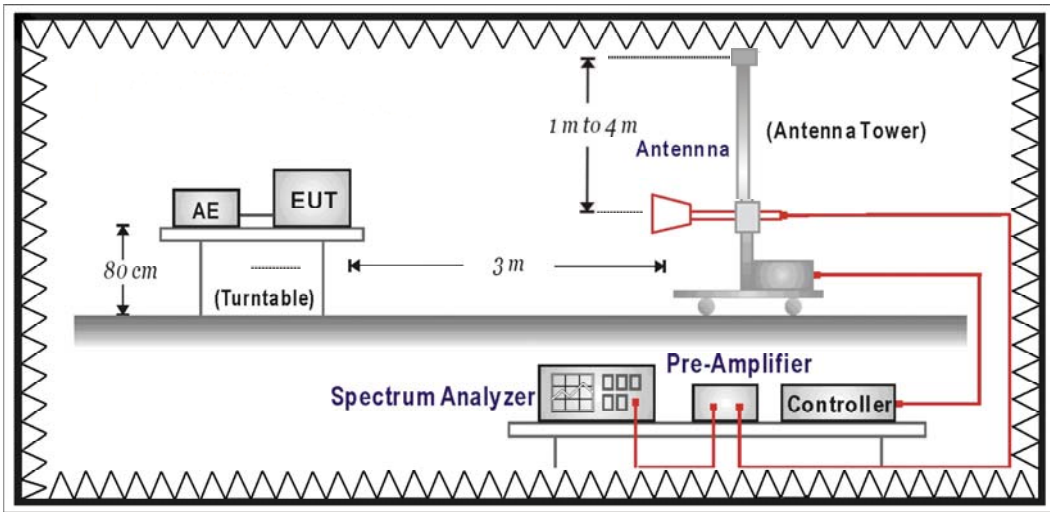
Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120D	743	2012/02/03	2013/02/02
Spectrum Analyzer	Agilent	E4440A	MY46187335	2012/02/08	2013/02/07
Coaxial Cable	Huber+Suhner AG	Sucoflex 102	25623/2	2011/03/22	2012/03/21

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

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

6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.
The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

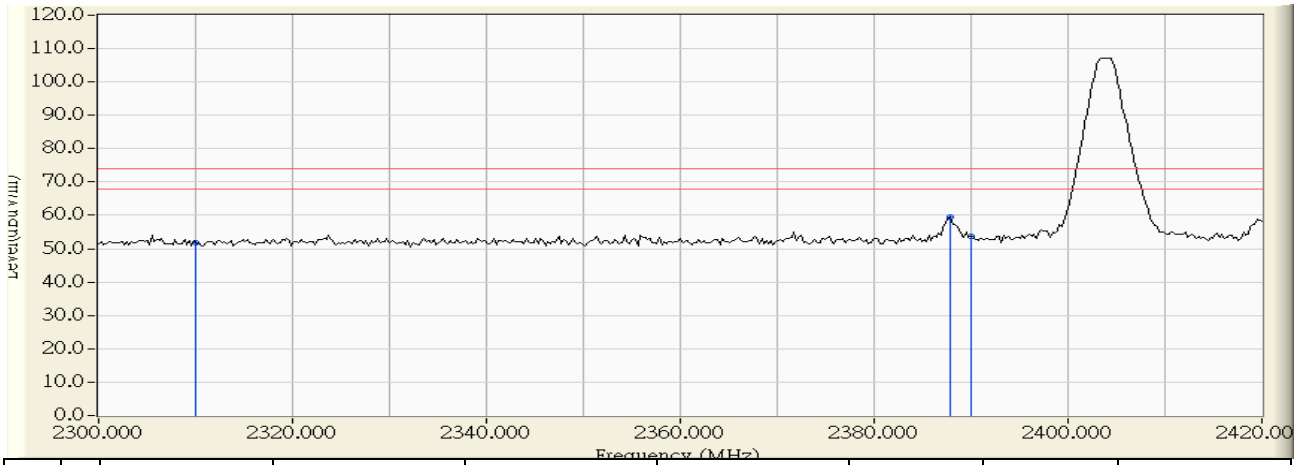
6.6. Uncertainty

The measurement uncertainty
± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : CB1	**Time : 2012/02/06 - 18:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

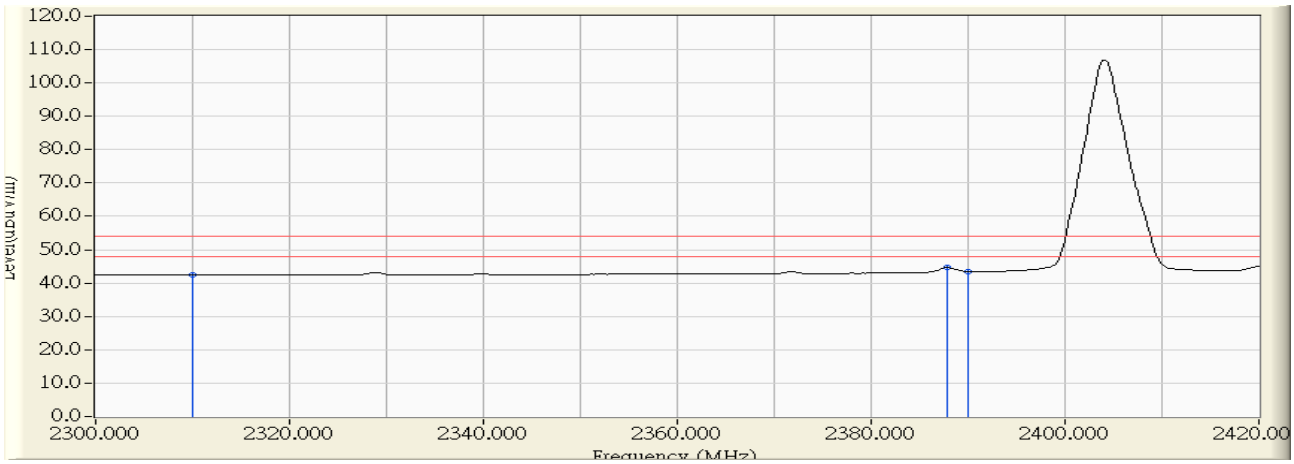


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	22.120	51.899	-22.101	74.000	PEAK
2	*	2387.840	30.556	29.035	59.591	-14.409	74.000	PEAK
3		2390.000	30.578	23.193	53.771	-20.229	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 18:11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

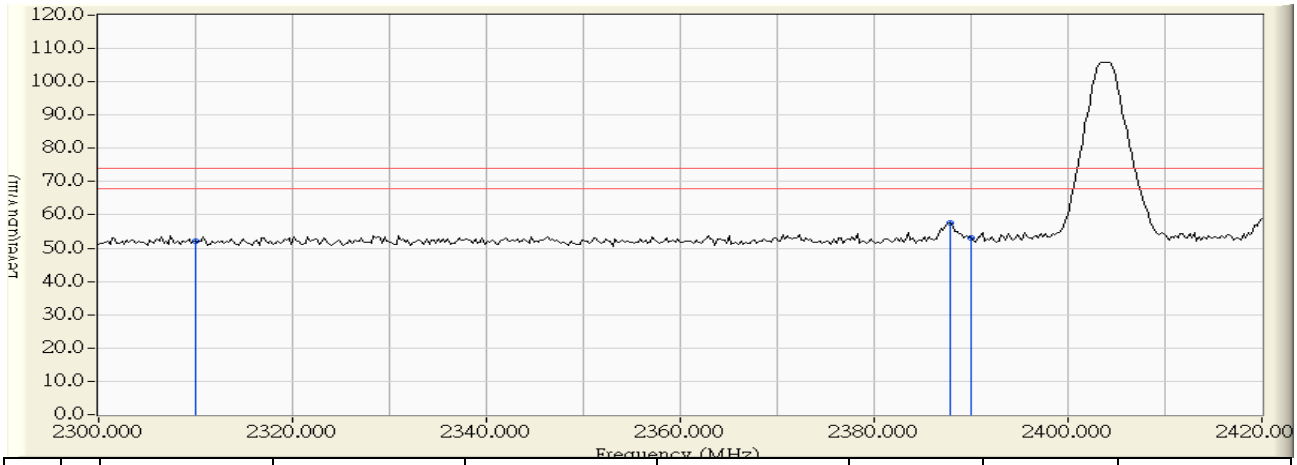


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	12.575	42.354	-11.646	54.000	AVERAGE
2	*	2387.840	30.556	14.035	44.591	-9.409	54.000	AVERAGE
3		2390.000	30.578	12.891	43.469	-10.531	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 18:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

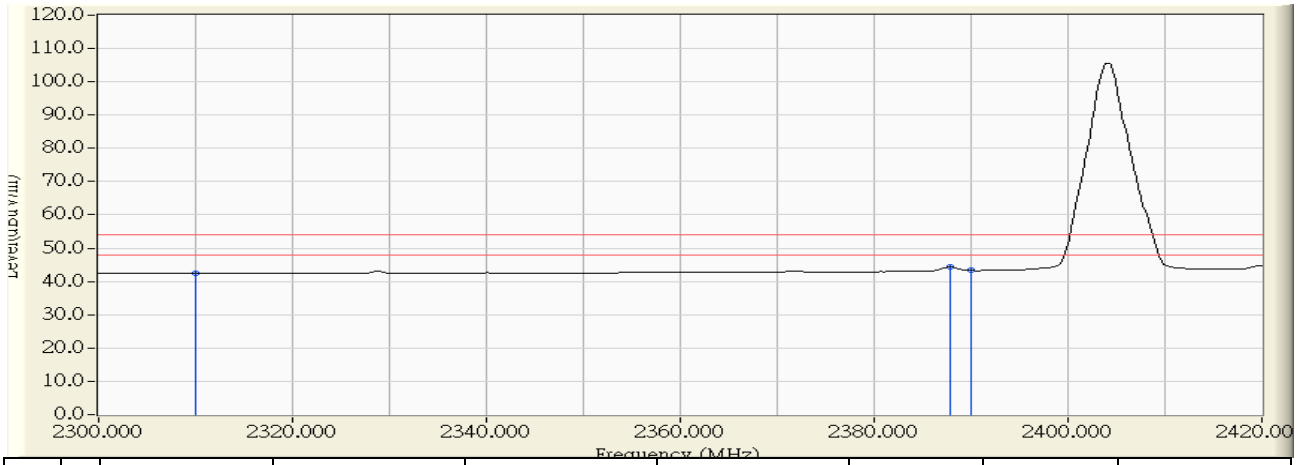


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	22.184	51.963	-22.037	74.000	PEAK
2	*	2387.840	30.556	26.989	57.545	-16.455	74.000	PEAK
3		2390.000	30.578	22.439	53.017	-20.983	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 18:15**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2404.4MHz**

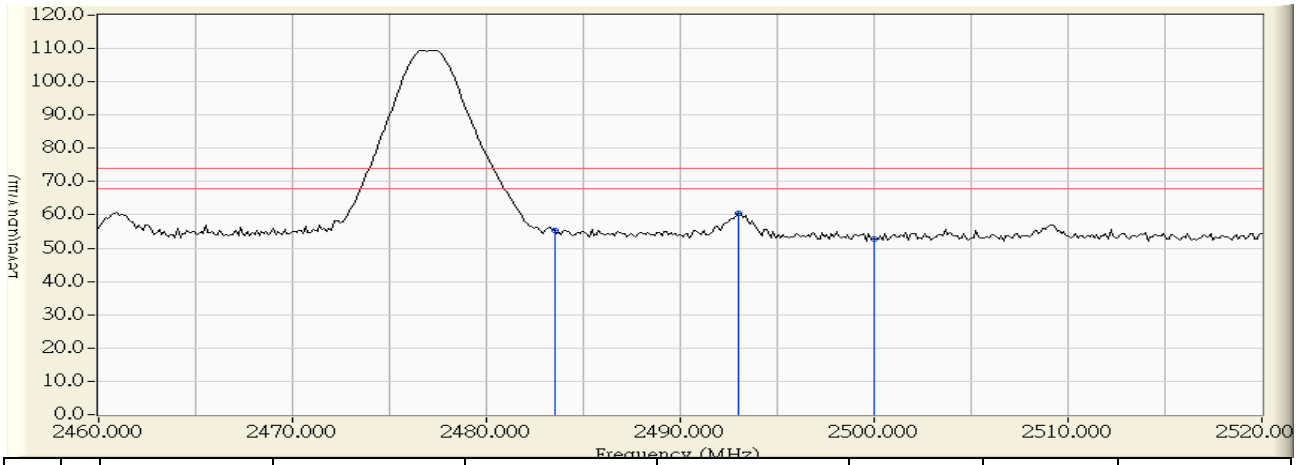


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	12.564	42.343	-11.657	54.000	AVERAGE
2	*	2387.840	30.556	13.756	44.312	-9.688	54.000	AVERAGE
3		2390.000	30.578	12.727	43.305	-10.695	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

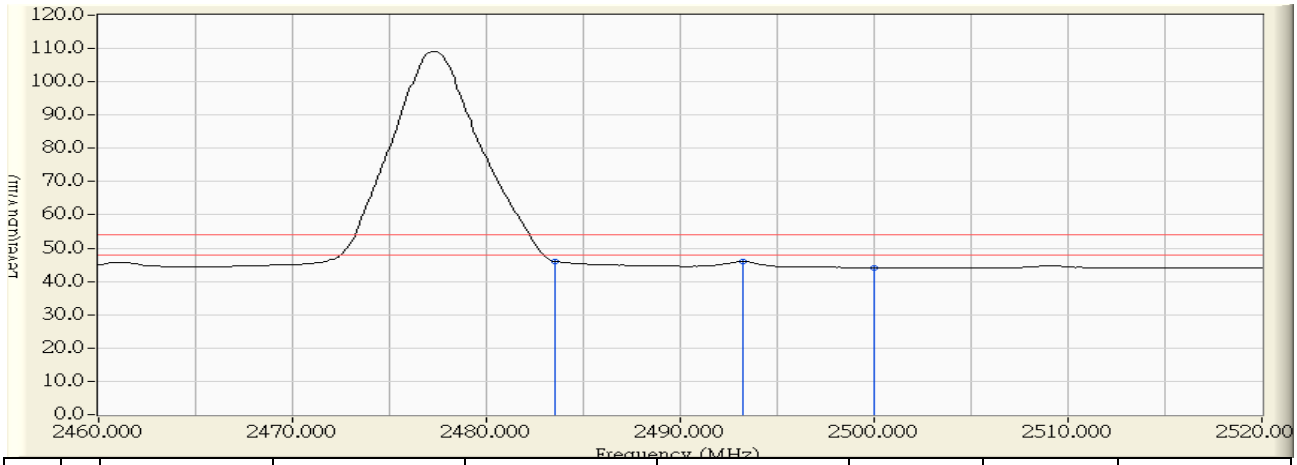


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	23.968	55.480	-18.520	74.000	PEAK
2	*	2493.000	31.607	28.719	60.326	-13.674	74.000	PEAK
3		2500.000	31.638	21.143	52.782	-21.218	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:26**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

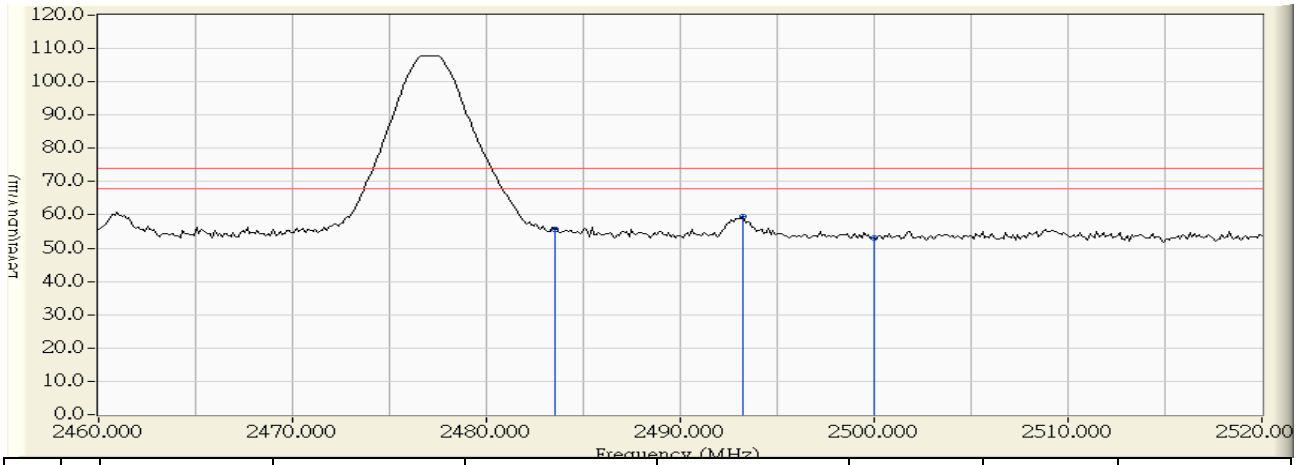


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	14.387	45.899	-8.101	54.000	AVERAGE
2	*	2493.240	31.609	14.357	45.966	-8.034	54.000	AVERAGE
3		2500.000	31.638	12.516	44.155	-9.845	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

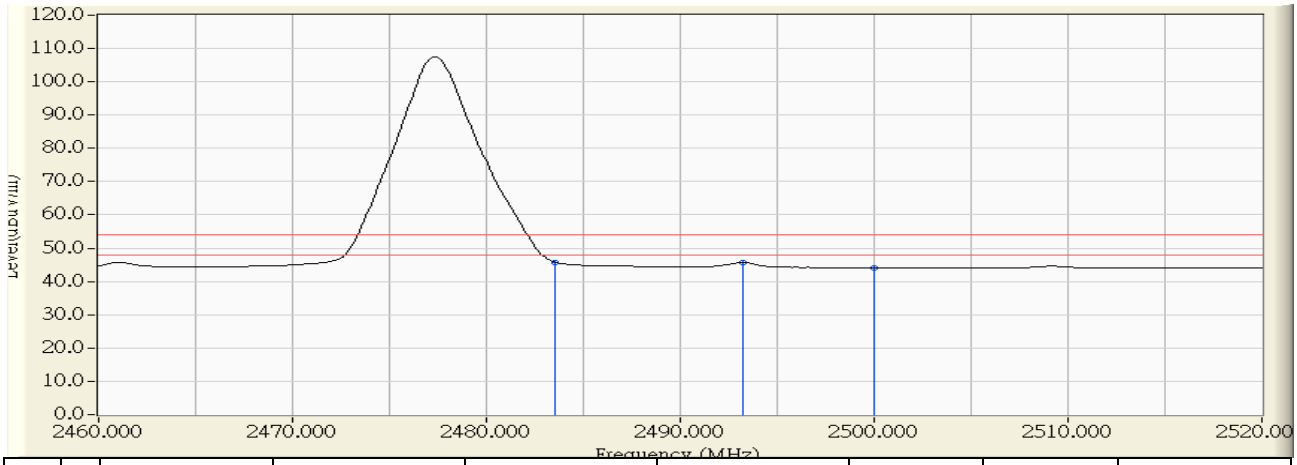


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	24.302	55.814	-18.186	74.000	PEAK
2	*	2493.240	31.609	27.788	59.397	-14.603	74.000	PEAK
3		2500.000	31.638	21.389	53.028	-20.972	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:31**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 1: Transmitter-Transmit 2476.7MHz**

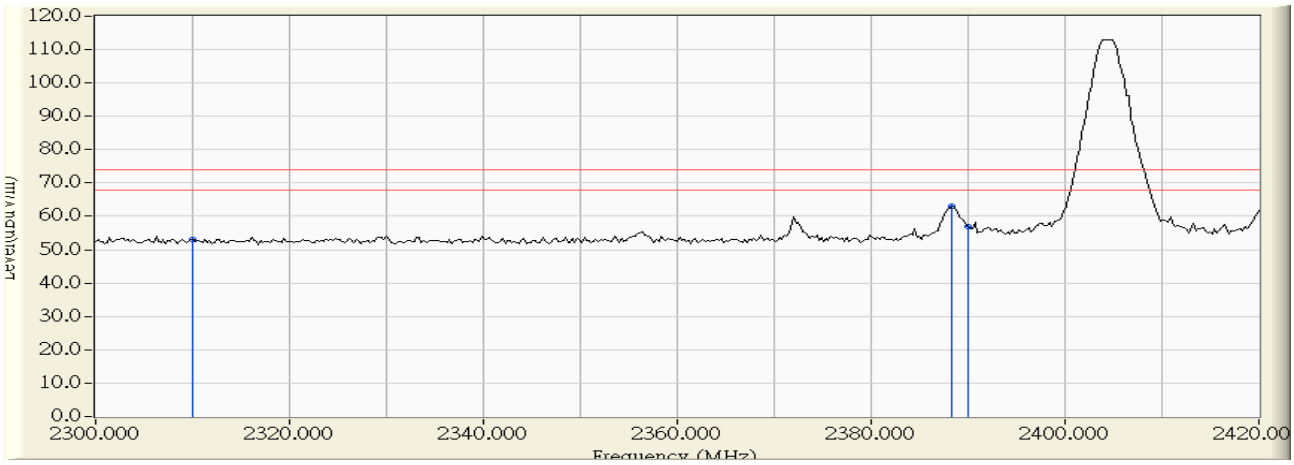


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	14.323	45.835	-8.165	54.000	AVERAGE
2		2493.240	31.609	14.016	45.625	-8.375	54.000	AVERAGE
3		2500.000	31.638	12.471	44.110	-9.890	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 16:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

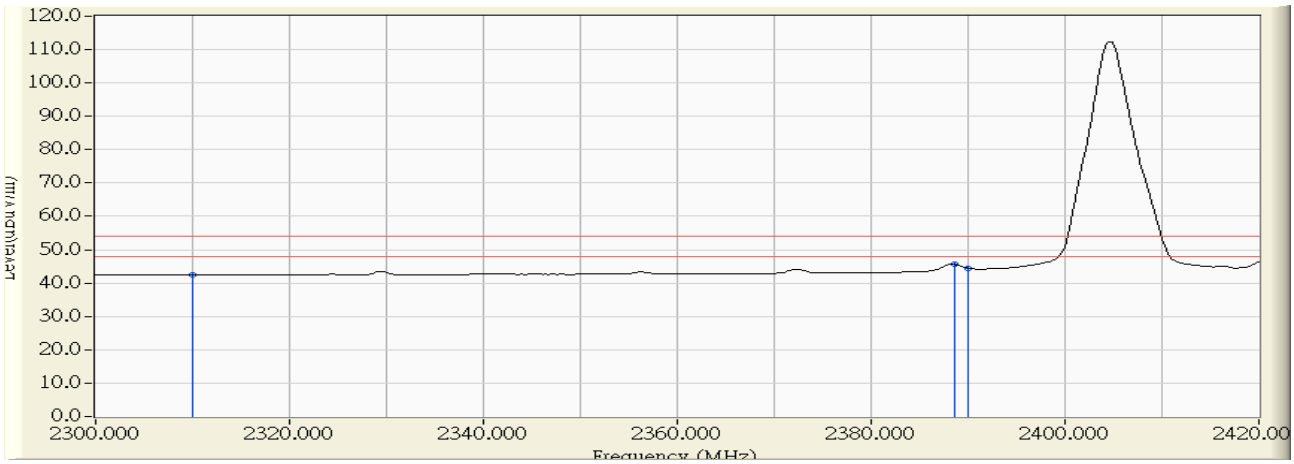


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	23.399	53.178	-20.822	74.000	PEAK
2	*	2388.320	30.562	32.444	63.005	-10.995	74.000	PEAK
3		2390.000	30.578	26.261	56.839	-17.161	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 16:40**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

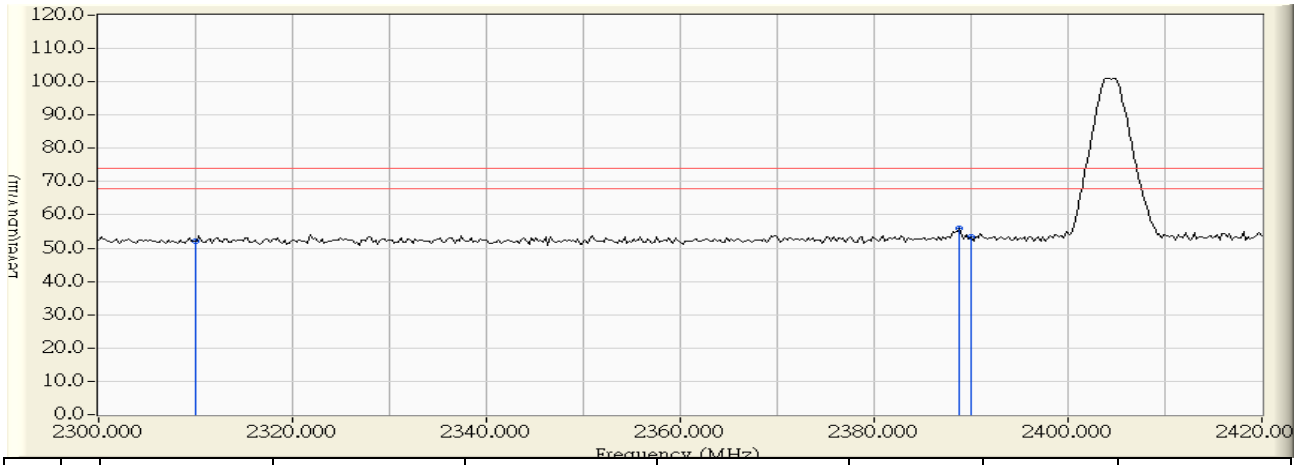


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	12.619	42.398	-11.602	54.000	AVERAGE
2	*	2388.560	30.564	15.093	45.657	-8.343	54.000	AVERAGE
3		2390.000	30.578	13.919	44.497	-9.503	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 16:26**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

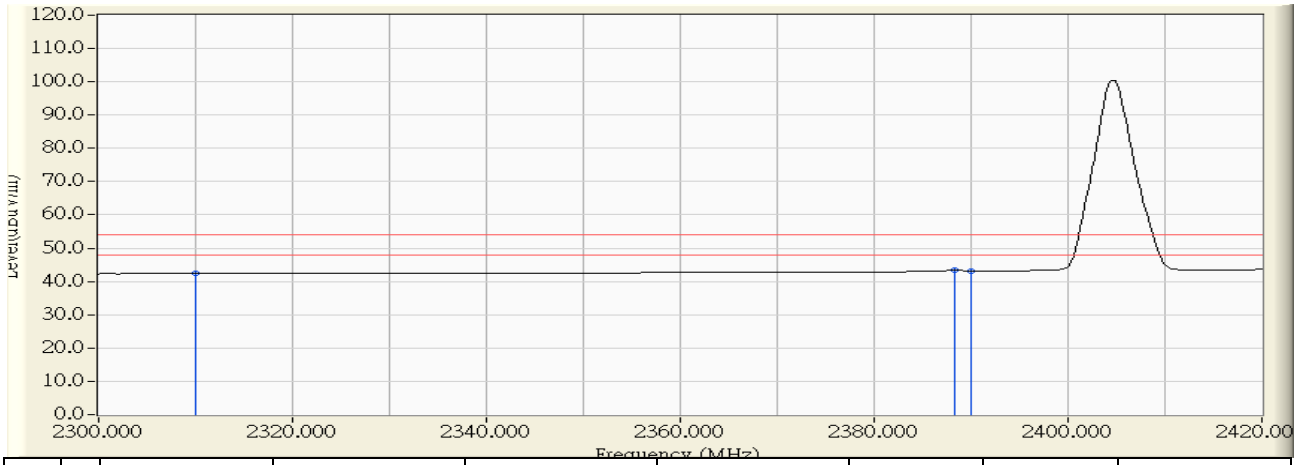


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	22.321	52.100	-21.900	74.000	PEAK
2	*	2388.800	30.566	25.278	55.844	-18.156	74.000	PEAK
3		2390.000	30.578	22.779	53.357	-20.643	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 16:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2404.4MHz**

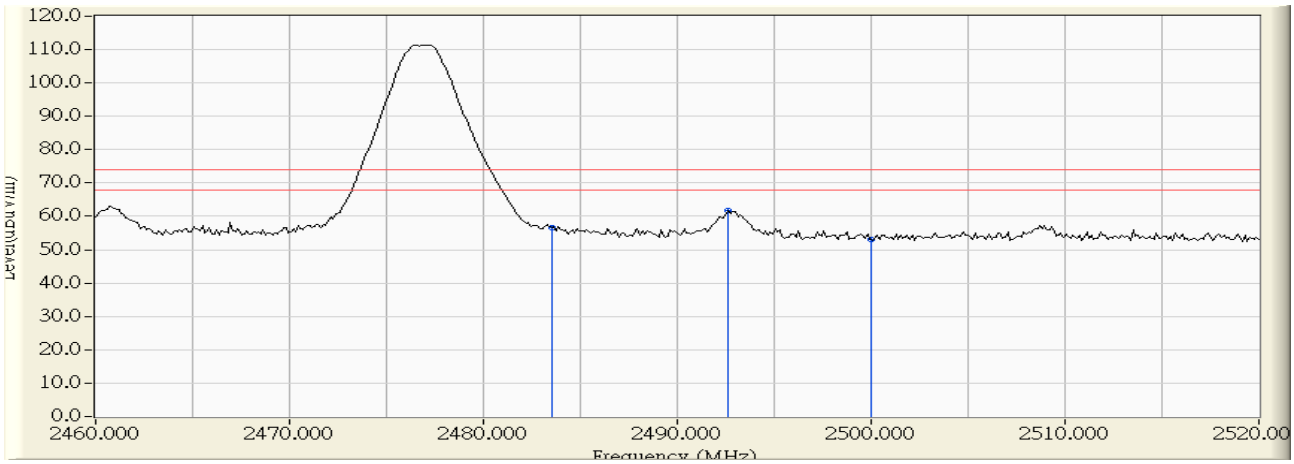


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	12.572	42.351	-11.649	54.000	AVERAGE
2	*	2388.320	30.562	13.029	43.590	-10.410	54.000	AVERAGE
3		2390.000	30.578	12.585	43.163	-10.837	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:00**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**

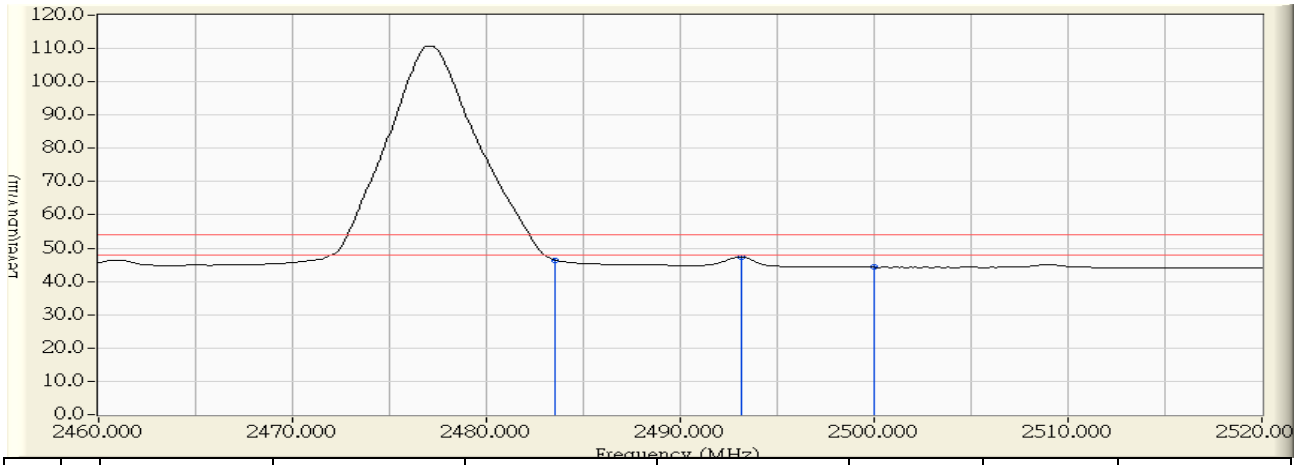


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	25.086	56.598	-17.402	74.000	PEAK
2	*	2492.640	31.603	30.069	61.672	-12.328	74.000	PEAK
3		2500.000	31.638	21.369	53.008	-20.992	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:03**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**

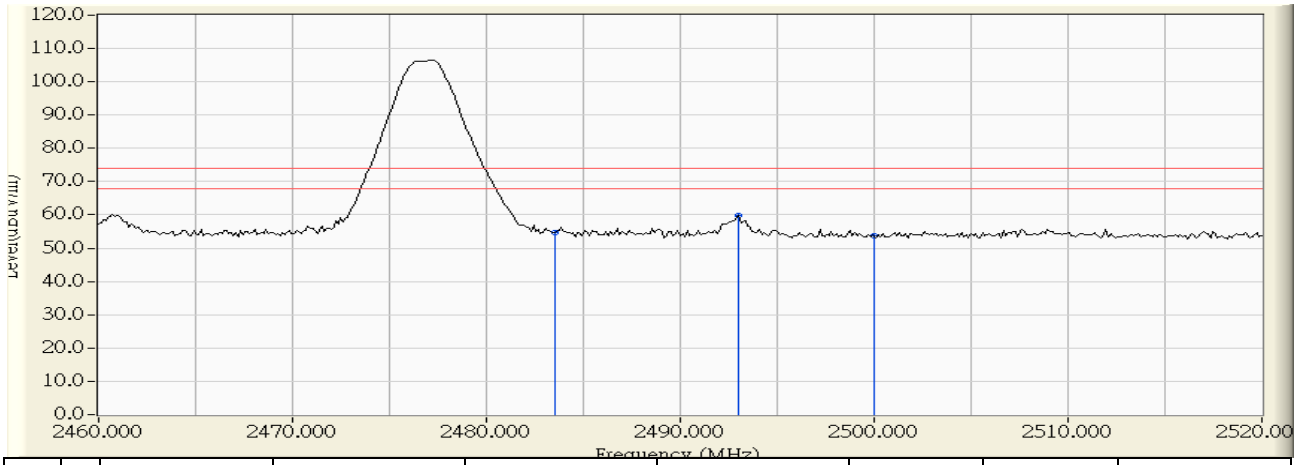


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	14.928	46.440	-7.560	54.000	AVERAGE
2	*	2493.120	31.608	15.727	47.335	-6.665	54.000	AVERAGE
3		2500.000	31.638	12.599	44.238	-9.762	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:06**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**

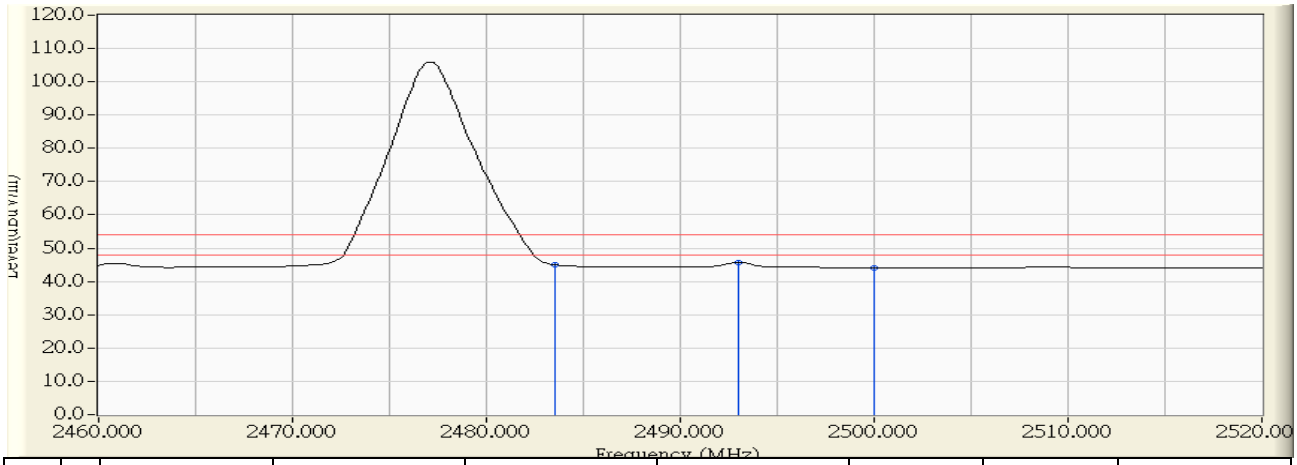


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	23.078	54.590	-19.410	74.000	PEAK
2	*	2493.000	31.607	28.075	59.682	-14.318	74.000	PEAK
3		2500.000	31.638	22.084	53.723	-20.277	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/02/06 - 17:08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V (Power by Notebook PC)**
EUT : Wire-to-Air	**Note : Mode 2: Receiver- Transmit 2476.7MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	13.449	44.961	-9.039	54.000	AVERAGE
2	*	2493.000	31.607	14.149	45.756	-8.244	54.000	AVERAGE
3		2500.000	31.638	12.507	44.146	-9.854	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

7.1. Test Equipment

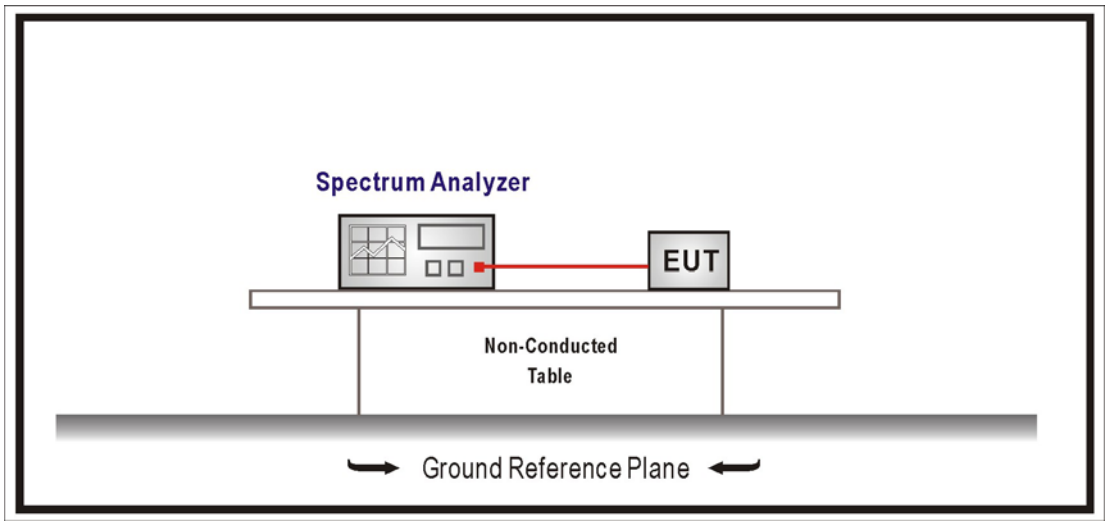
The following test equipments are used during the test:

Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Spectrum Analyzer	R&S	FSP	100561	2012/01/17	2013/01/16

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; 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.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

7.6. Uncertainty

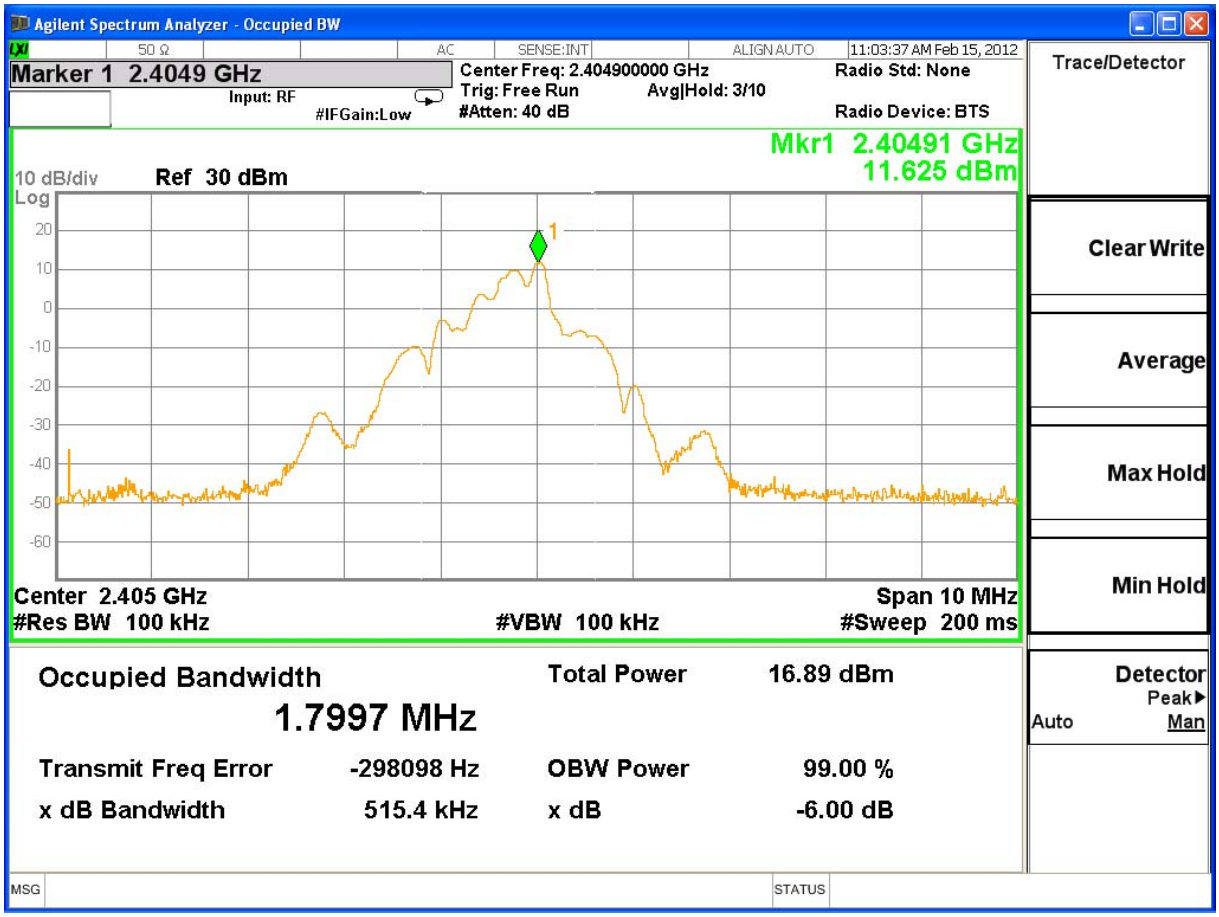
The measurement uncertainty is defined as ±150Hz

7.7. Test Result

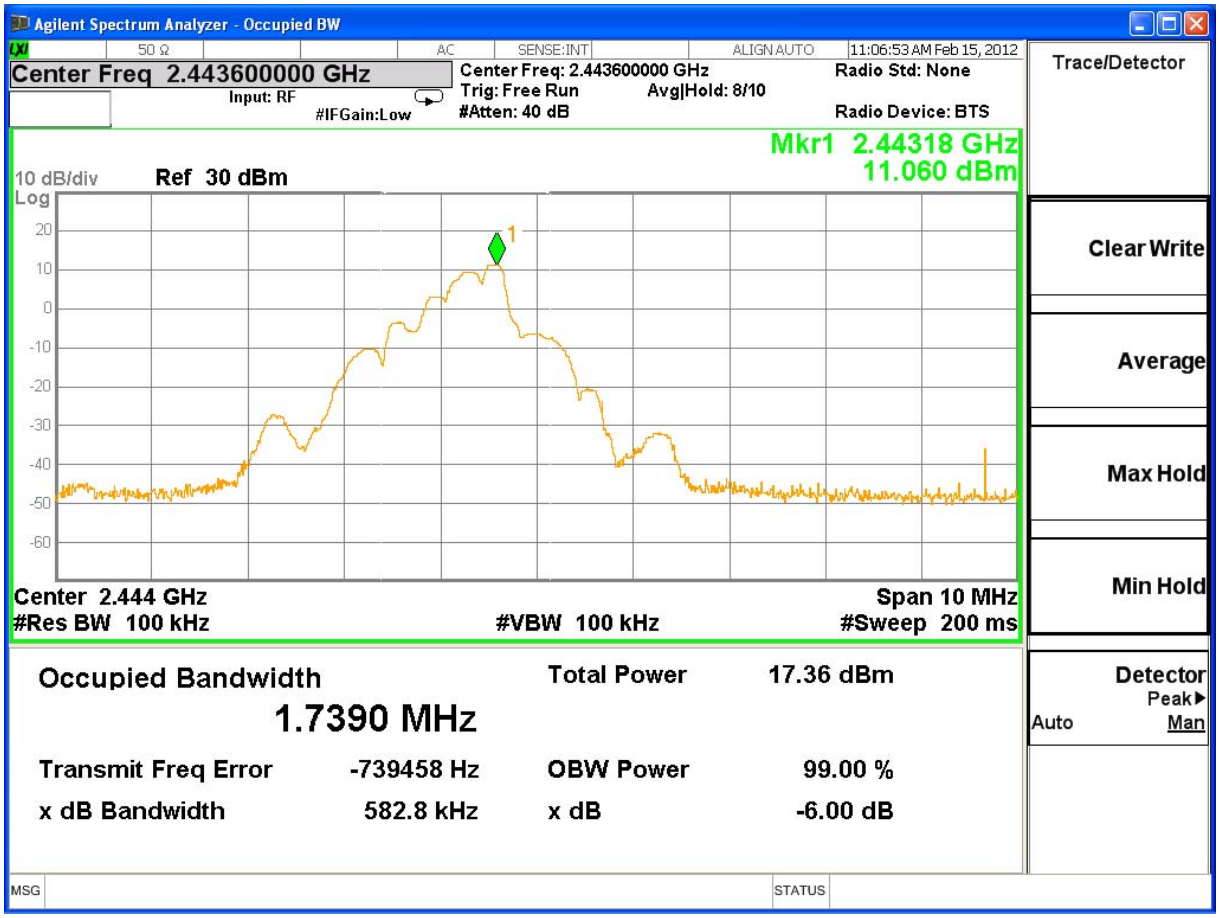
Product	Wire-to-Air		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmitter-Transmit		
Date of Test	2012/02/15	Test Site	SR7

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2404.4	515.4	≥ 500	Pass
08	2443.6	582.8	≥ 500	Pass
12	2476.7	584.4	≥ 500	Pass

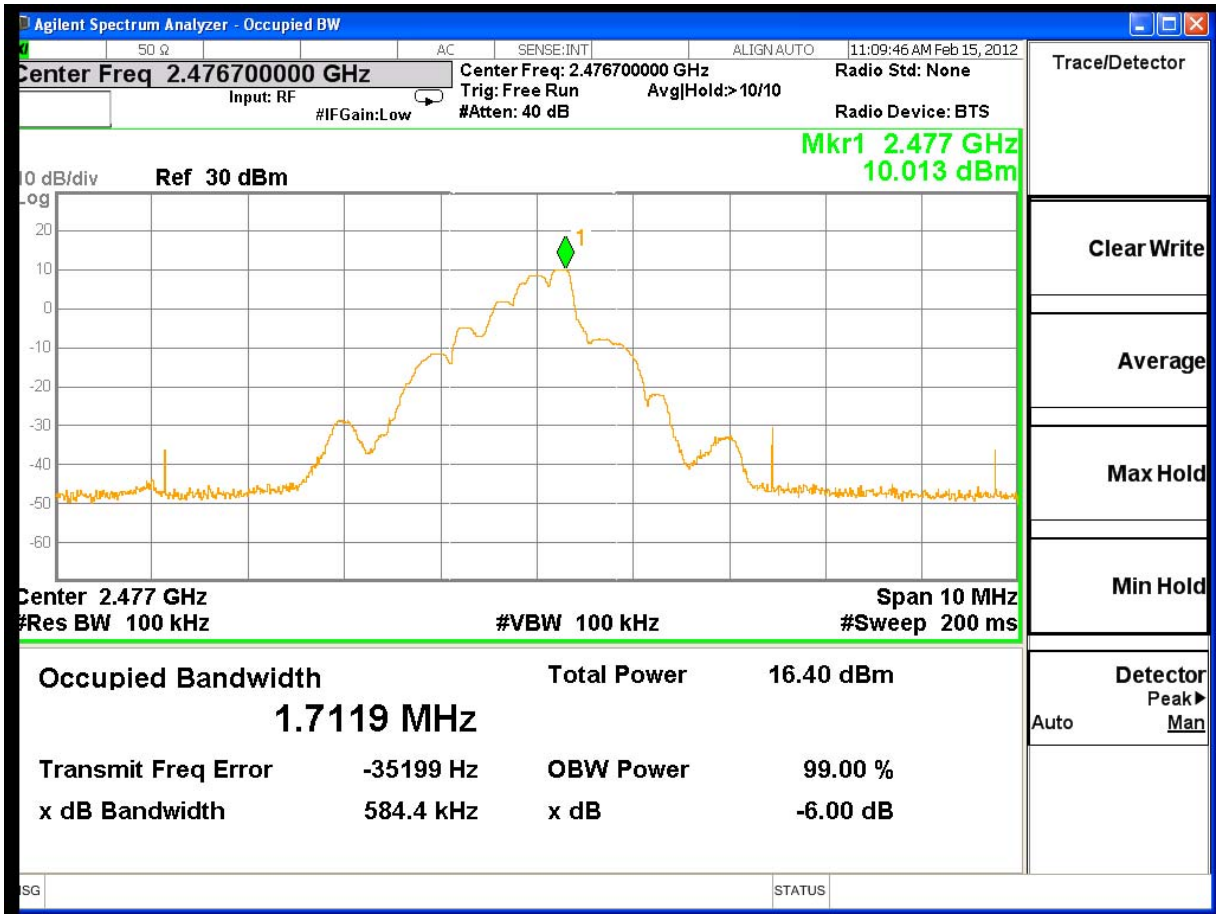
Channel 01



Channel 08


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
11:06:53 AM Feb 15, 2012
Center Freq 2.443600000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.443600000 GHz
Trig: Free Run
Avg|Hold: 8/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Trace/Detector
Mkr1 2.44318 GHz
11.060 dBm
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center 2.444 GHz
#Res BW 100 kHz
#VBW 100 kHz
Span 10 MHz
#Sweep 200 ms
Occupied Bandwidth
1.7390 MHz
Total Power
17.36 dBm
Transmit Freq Error
-739458 Hz
OBW Power
99.00 %
x dB Bandwidth
582.8 kHz
x dB
-6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

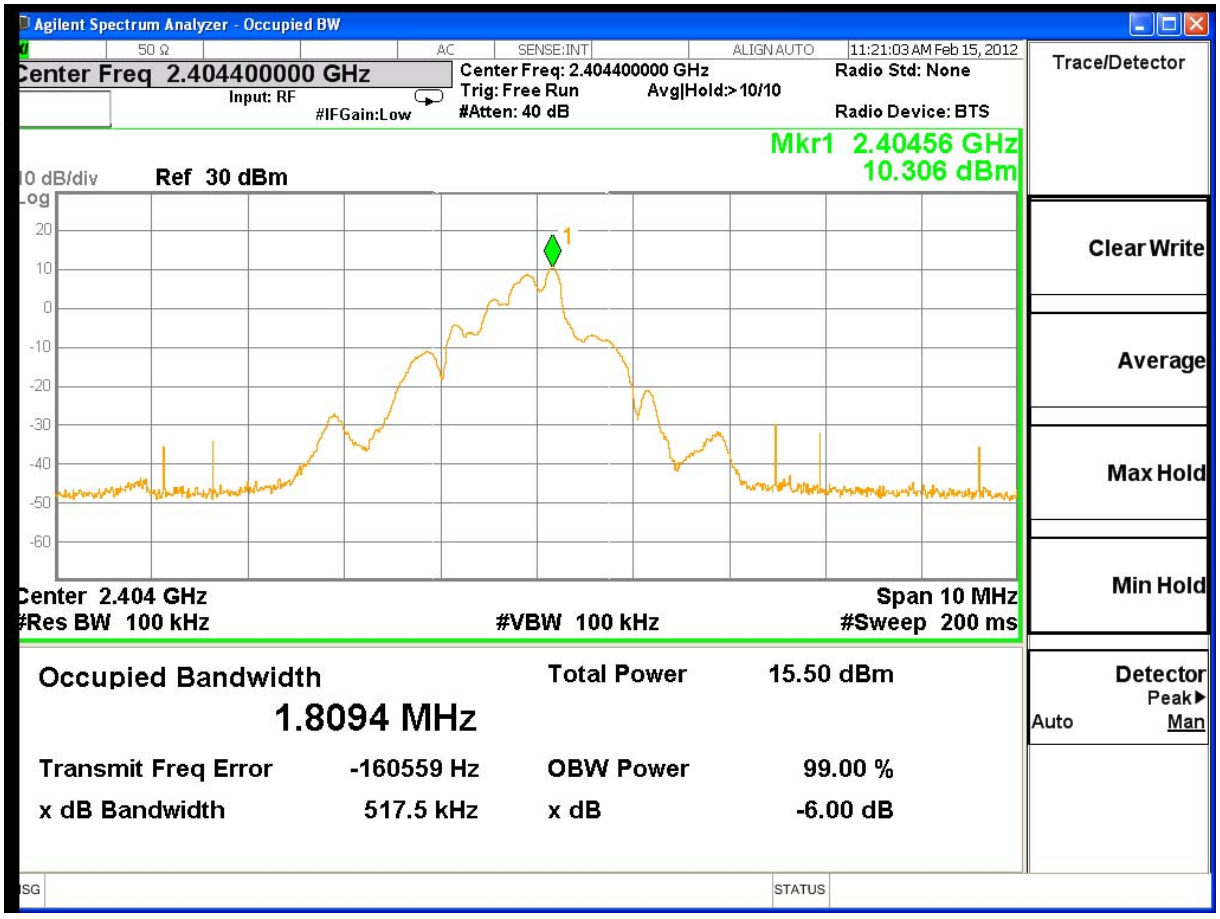
Channel 12


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
11:09:46 AM Feb 15, 2012
Center Freq 2.476700000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.476700000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Trace/Detector
Mkr1 2.477 GHz
10.013 dBm
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center 2.477 GHz
#Res BW 100 kHz
#VBW 100 kHz
Span 10 MHz
#Sweep 200 ms
Occupied Bandwidth
1.7119 MHz
Total Power
16.40 dBm
Transmit Freq Error
-35199 Hz
OBW Power
99.00 %
x dB Bandwidth
584.4 kHz
x dB
-6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

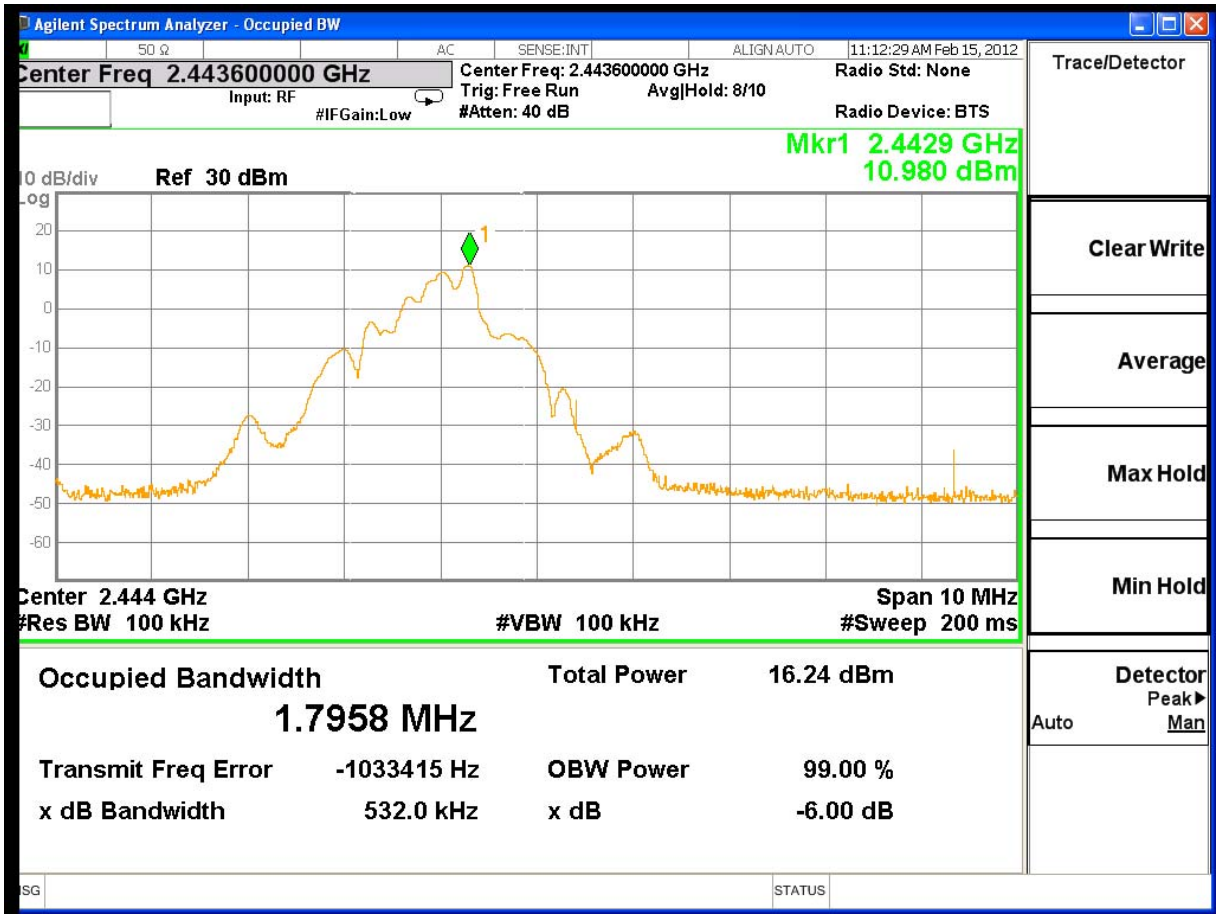
Product	Wire-to-Air		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: Receiver- Transmit		
Date of Test	2012/02/15	Test Site	SR7

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2404.4	517.5	≧500	Pass
08	2443.6	532.0	≧500	Pass
12	2476.7	517.6	≧500	Pass

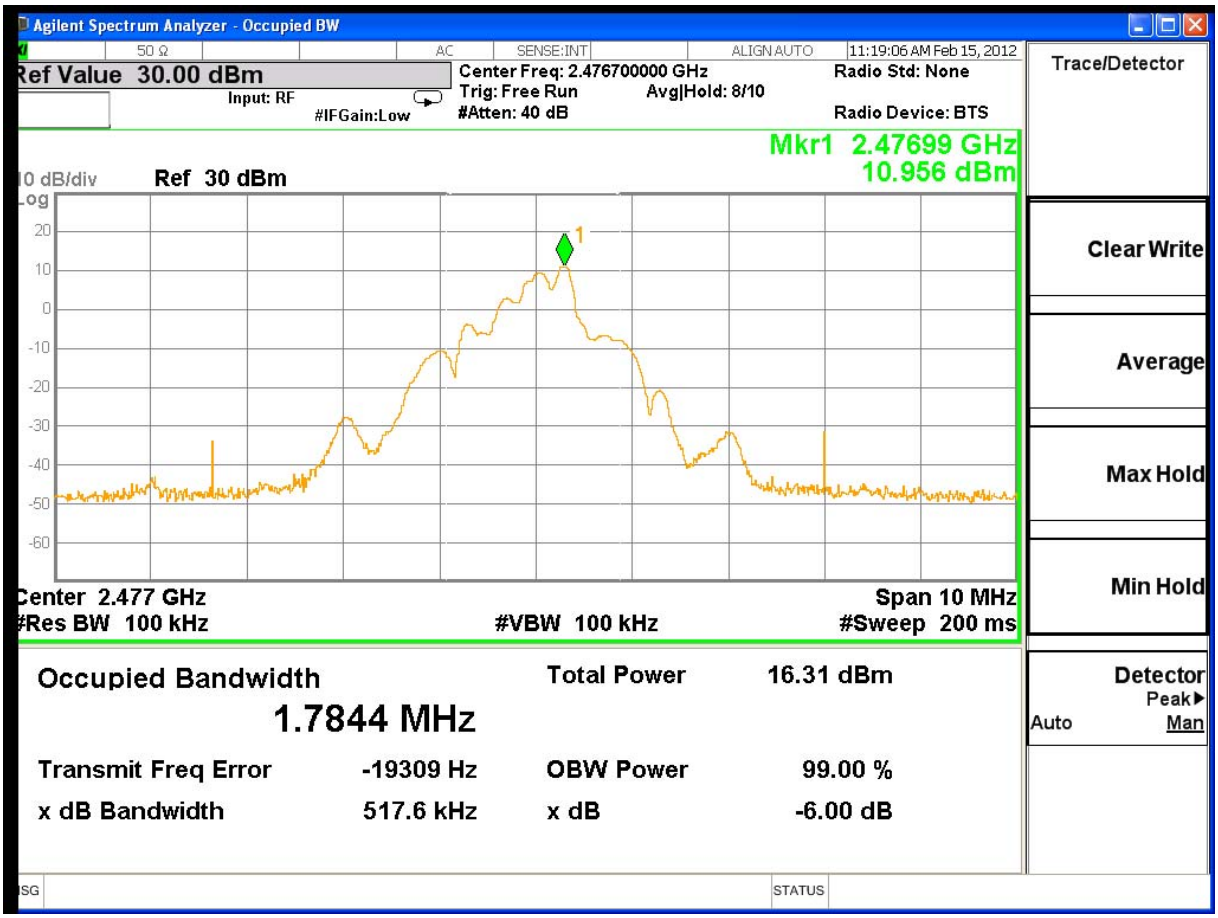
Channel 01



Channel 08


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
11:12:29 AM Feb 15, 2012
Center Freq 2.443600000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.443600000 GHz
Trig: Free Run
Avg|Hold: 8/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Trace/Detector
Mkr1 2.4429 GHz
10.980 dBm
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
1
Center 2.444 GHz
#Res BW 100 kHz
#VBW 100 kHz
Span 10 MHz
#Sweep 200 ms
Occupied Bandwidth
1.7958 MHz
Total Power 16.24 dBm
Transmit Freq Error -1033415 Hz
OBW Power 99.00 %
x dB Bandwidth 532.0 kHz
x dB -6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

Channel 12


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
11:19:06 AM Feb 15, 2012
Ref Value 30.00 dBm
Input: RF
#IFGain:Low
Center Freq: 2.476700000 GHz
Trig: Free Run
Avg|Hold: 8/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Trace/Detector
Mkr1 2.47699 GHz
10.956 dBm
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center 2.477 GHz
#Res BW 100 kHz
#VBW 100 kHz
Span 10 MHz
#Sweep 200 ms
Occupied Bandwidth
1.7844 MHz
Total Power
16.31 dBm
Transmit Freq Error
-19309 Hz
OBW Power
99.00 %
x dB Bandwidth
517.6 kHz
x dB
-6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

8. Power Density

8.1. Test Equipment

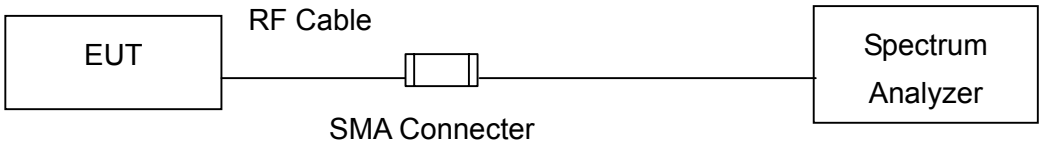
The following test equipment are used during the test:

Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Cal. Date	Next Cal. Date
Spectrum Analyzer	R&S	FSP	100561	2012/01/17	2013/01/16

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; 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

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2010

8.6. Uncertainty

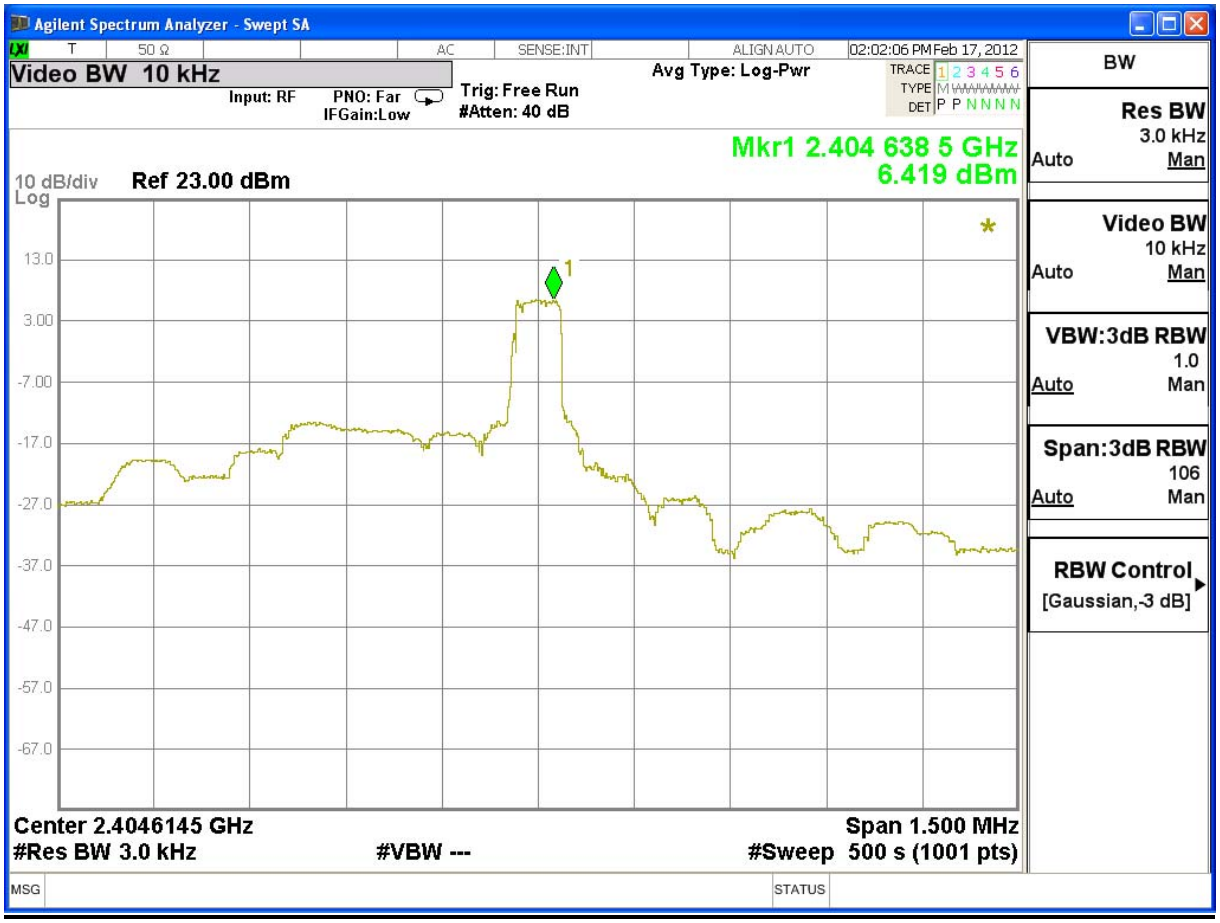
The measurement uncertainty is defined as ±1.27dB.

8.7. Test Result

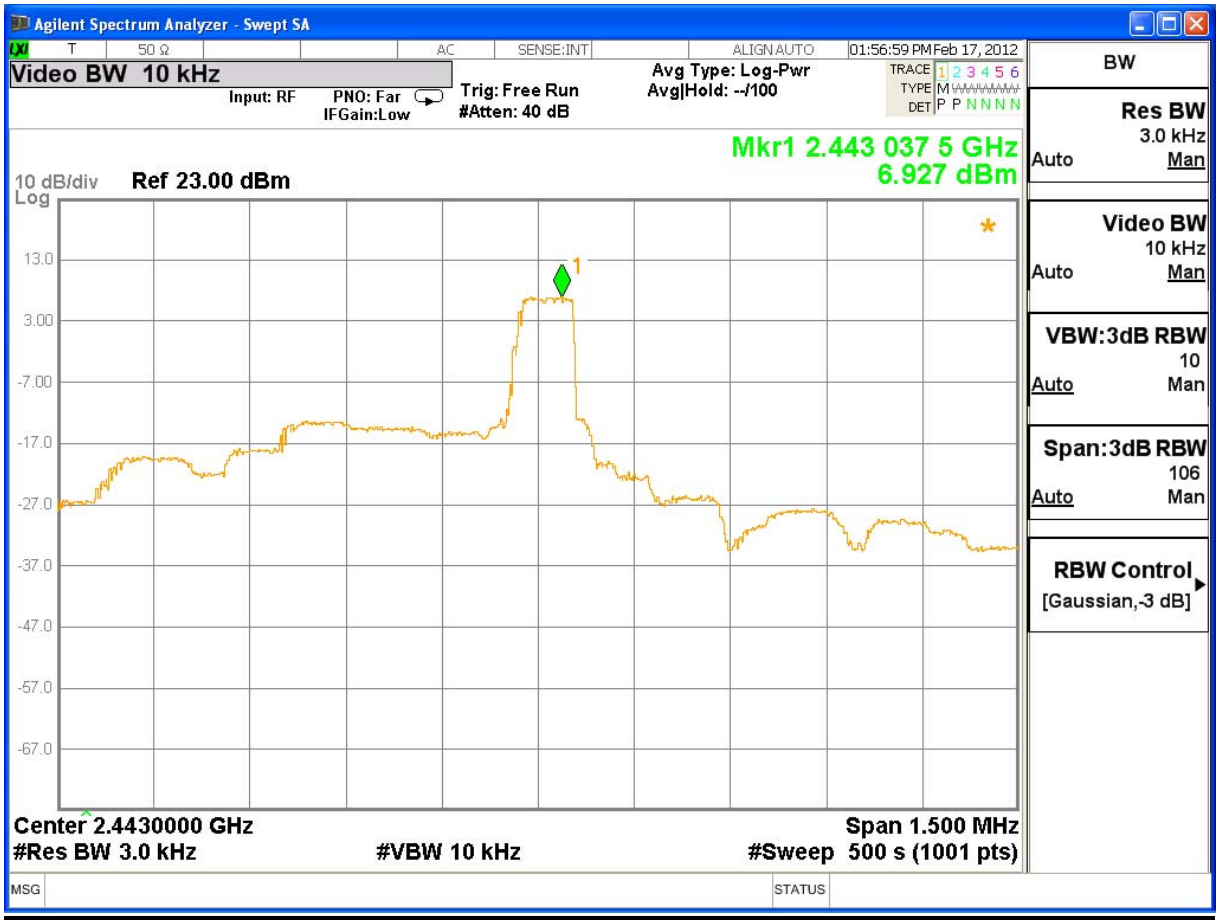
Product	Wire-to-Air		
Test Item	Power Density		
Test Mode	Mode 1: Transmitter-Transmit		
Date of Test	2012/02/17	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2404.4	6.419	≦8	Pass
08	2443.6	6.927	≦8	Pass
12	2476.7	6.820	≦8	Pass

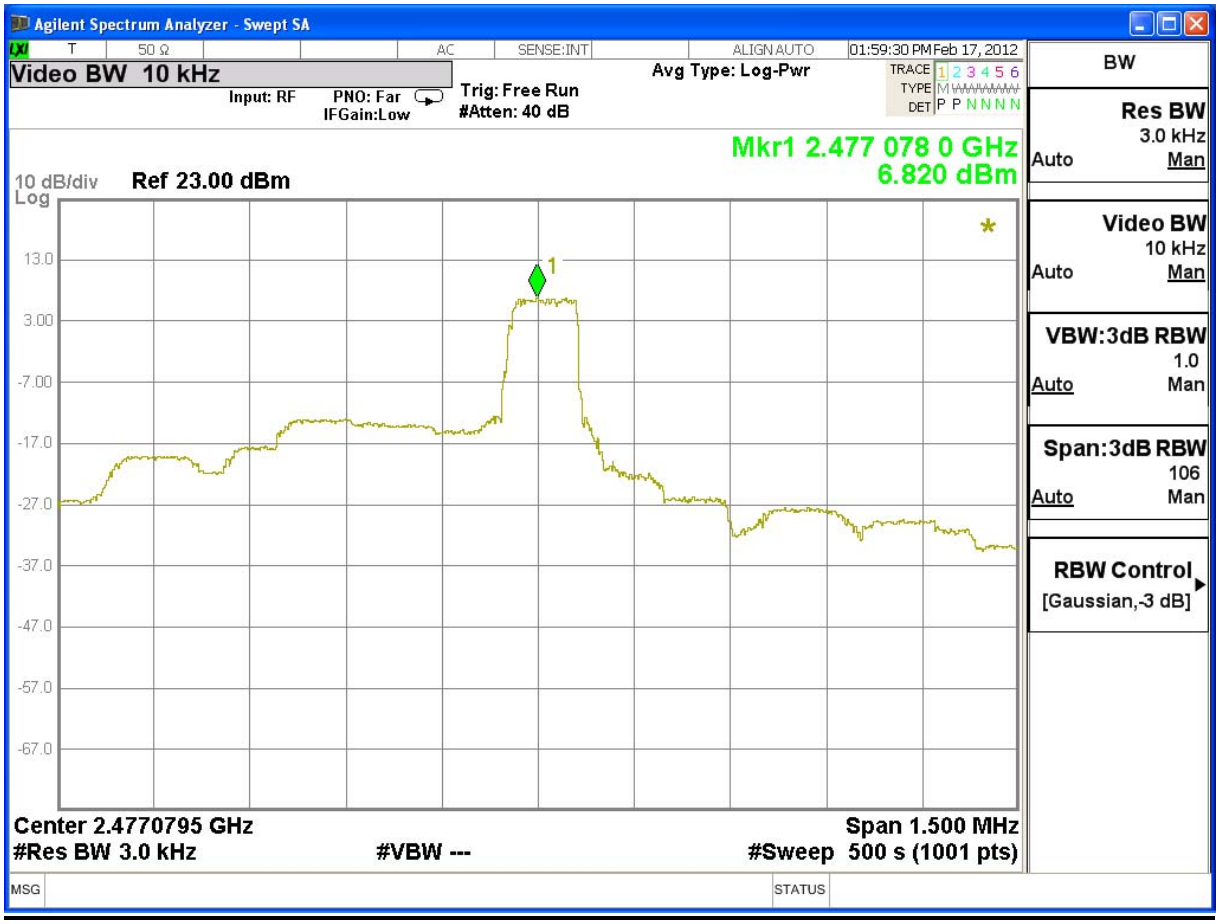
Channel 01



Channel 08


Agilent Spectrum Analyzer - Swept SA
Video BW 10 kHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold: --/100
01:56:59 PM Feb 17, 2012
Mkr1 2.443 037 5 GHz
6.927 dBm
10 dB/div
Log
Ref 23.00 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
Center 2.4430000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 1.500 MHz
#Sweep 500 s (1001 pts)
BW
Res BW
3.0 kHz
Auto
Man
Video BW
10 kHz
Auto
Man
VBW:3dB RBW
10
Auto
Man
Span:3dB RBW
106
Auto
Man
RBW Control
[Gaussian,-3 dB]
MSG
STATUS

Channel 12

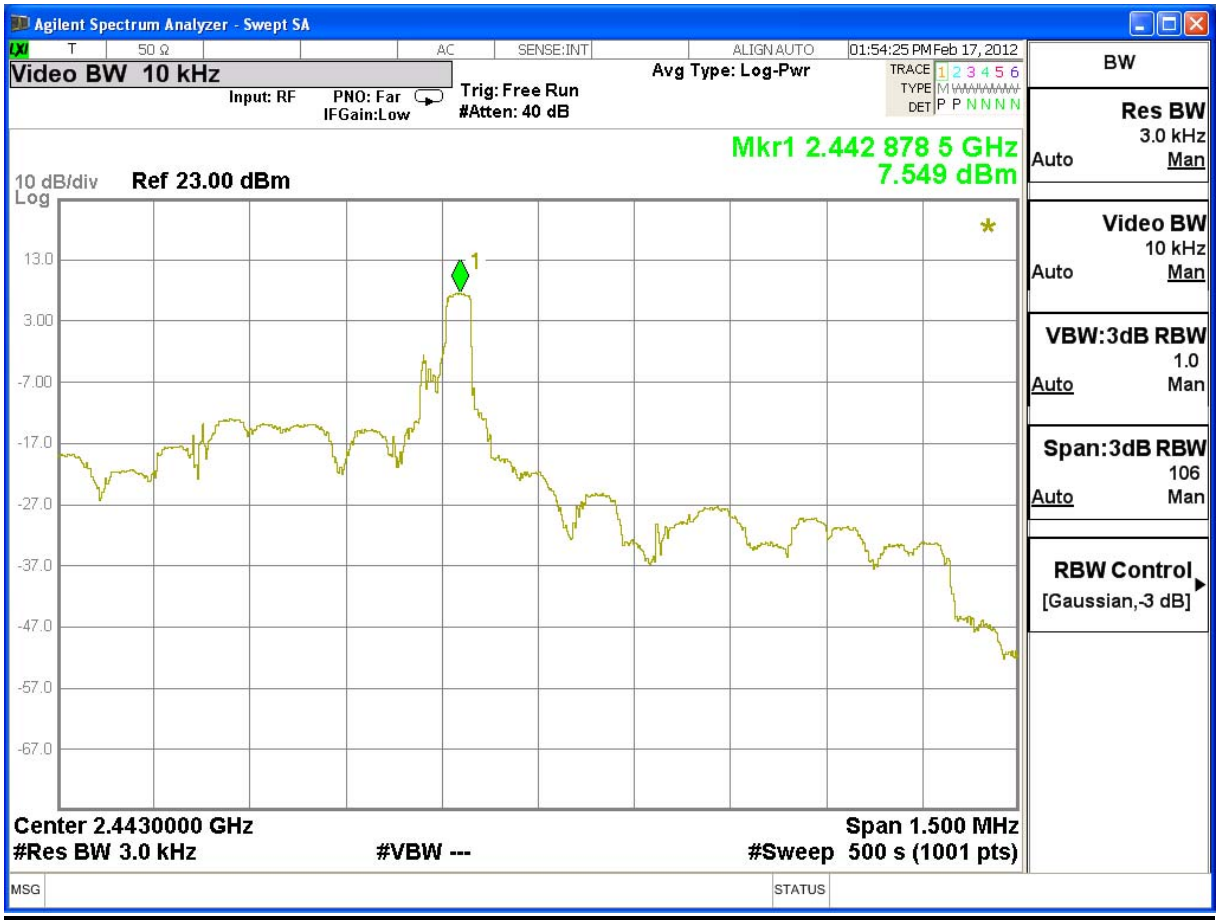

Agilent Spectrum Analyzer - Swept SA
Video BW 10 kHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
01:59:30 PM Feb 17, 2012
Mkr1 2.477 078 0 GHz
6.820 dBm
10 dB/div
Log
Ref 23.00 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
Center 2.4770795 GHz
#Res BW 3.0 kHz
#VBW ---
Span 1.500 MHz
#Sweep 500 s (1001 pts)
BW
Res BW
3.0 kHz
Auto
Man
Video BW
10 kHz
Auto
Man
VBW:3dB RBW
1.0
Auto
Man
Span:3dB RBW
106
Auto
Man
RBW Control
[Gaussian,-3 dB]
MSG
STATUS

Product	Wire-to-Air		
Test Item	Power Density		
Test Mode	Mode 2: Receiver- Transmit		
Date of Test	2012/02/17	Test Site	SR7

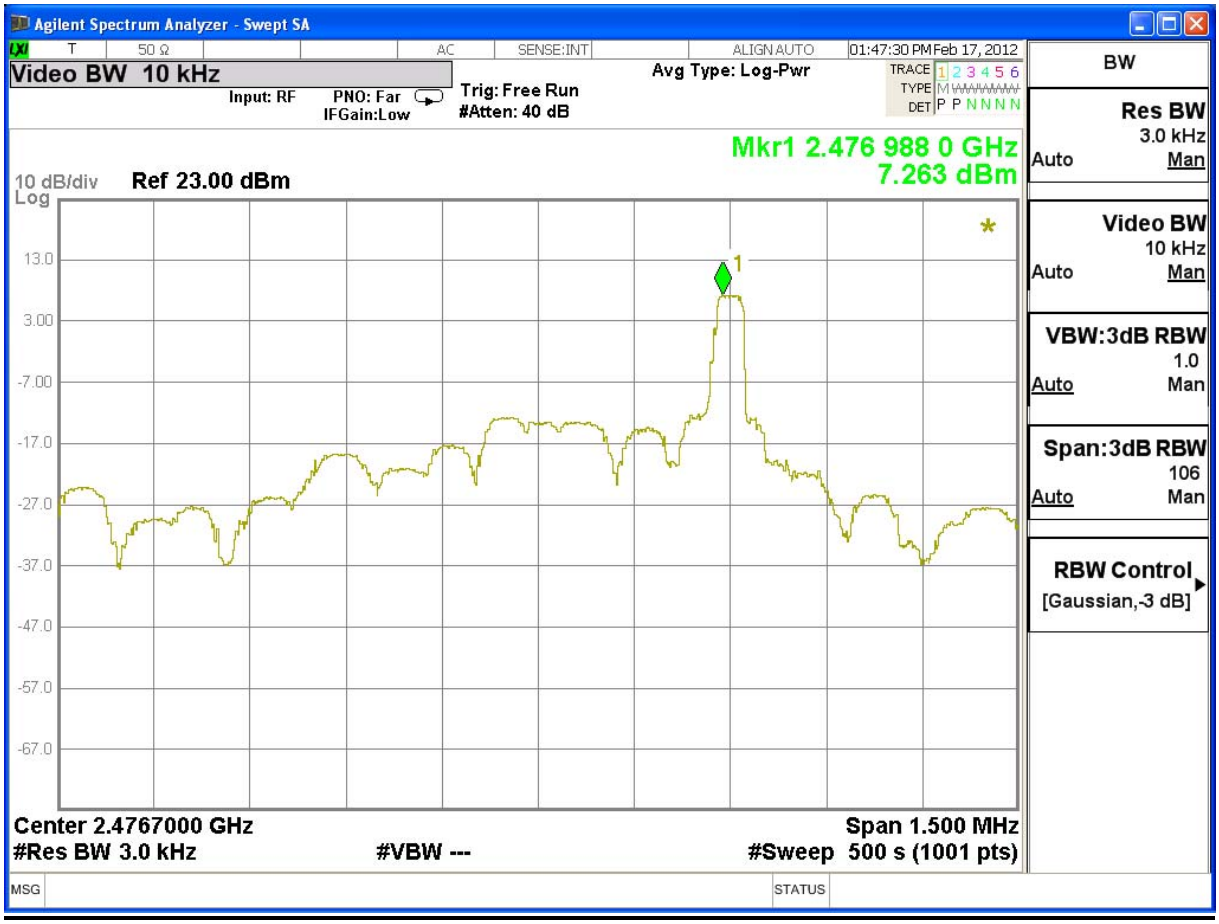
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2404.4	6.439	≦8	Pass
08	2443.6	7.549	≦8	Pass
12	2476.7	7.263	≦8	Pass

Channel 01

Channel 08


Agilent Spectrum Analyzer - Swept SA
Video BW 10 kHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
01:54:25 PM Feb 17, 2012
Mkr1 2.442 878 5 GHz
7.549 dBm
10 dB/div
Log
Ref 23.00 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
Center 2.4430000 GHz
#Res BW 3.0 kHz
#VBW ---
Span 1.500 MHz
#Sweep 500 s (1001 pts)
BW
Res BW
3.0 kHz
Auto
Man
Video BW
10 kHz
Auto
Man
VBW:3dB RBW
1.0
Auto
Man
Span:3dB RBW
106
Auto
Man
RBW Control
[Gaussian,-3 dB]
MSG
STATUS

Channel 12


Agilent Spectrum Analyzer - Swept SA
Video BW 10 kHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
01:47:30 PM Feb 17, 2012
Mkr1 2.476 988 0 GHz
7.263 dBm
10 dB/div
Log
Ref 23.00 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
Center 2.4767000 GHz
#Res BW 3.0 kHz
#VBW ---
Span 1.500 MHz
#Sweep 500 s (1001 pts)
BW
Res BW
3.0 kHz
Auto
Man
Video BW
10 kHz
Auto
Man
VBW:3dB RBW
1.0
Auto
Man
Span:3dB RBW
106
Auto
Man
RBW Control
[Gaussian,-3 dB]
MSG
STATUS