Test Report

Product Name ： Wireless Audio Box

Model No. ： WA2300

FCC ID. ： SW8WA2300

Applicant ： GOOD WAY TECHNOLOGY CO., LTD.

Address ： 3F, No. 135 Lane 235, Pau Chiao Rd., Hsin Tien Taipei County, Taiwan.

Date of Receipt ： 2010/03/17

Issued Date ： 2010/04/28

Report No. ： 103257R-RFUSP37V02-A

Report Version ： V1.0

Test Report Certification

Issued Date : 2010/04/28
Report No. : 103257R-RFUSP42V01-A

QuieTek

Product Name	:	Wireless Audio Box
Applicant	:	GOOD WAY TECHNOLOGY CO., LTD.
Address	:	3F, No. 135 Lane 235, Pau Chiao Rd., Hsin Tien Taipei County, Taiwan.
Manufacturer	:	GOOD WAY TECHNOLOGY CO., LTD.
Model No.	:	WA2300
FCC ID.	:	SW8WA2300
EUT Voltage	:	AC 100-240V, 50/60Hz
Trade Name	:	GOOD WAY
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2009
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 / Engineering Adm. Specialist)

Reviewed By : Sheena Huang
(Sheena Huang / Engineer)

Approved By : Roy Wang
(Roy Wang / Manager)

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Wireless Audio Box
Trade Name	GOOD WAY
Model No.	WA2300
Frequency Range	2404~2476MHz
Channel Number	25
Type of Modulation	GFSK
Channel Control	Auto
Antenna Type	PIFA
Antenna Gain	2.08dBi

Component	
Power Adapter	DVE, DSC-6PFA-05 FUS 050100 I/P: 100-240V, 50/60Hz 0.2A O/P: +5V, 1A Cable Out: Non-Shielded, 1.5m

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1	2404 MHz	Channel 8	2425 MHz	Channel 15	2446 MHz	Channel 22	2467 MHz
Channel 2	2407 MHz	Channel 9	2428 MHz	Channel 16	2449 MHz	Channel 23	2470 MHz
Channel 3	2410 MHz	Channel 10	2431 MHz	Channel 17	2452 MHz	Channel 24	2473 MHz
Channel 4	2413 MHz	Channel 11	2434 MHz	Channel 18	2455 MHz	Channel 25	2476 MHz
Channel 5	2416 MHz	Channel 12	2437 MHz	Channel 19	2458 MHz		
Channel 6	2419 MHz	Channel 13	2440 MHz	Channel 20	2461 MHz		
Channel 7	2422 MHz	Channel 14	2443 MHz	Channel 21	2464 MHz		

Note:

1. This device is a Wireless Audio Box included a 2.4GHz receiving function, and 2.4GHz transmitting function.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. 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.
   This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 103257R-RFUSP37V02-A 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 modulations to determine the worst case condition, base on EUT's peak output power level. After evaluated, EUT with GFSK modulation has highest peak output power level which means that GFSK modulation is the worst condition. The following table is the final test mode.

Pre-Test Mode	
EMI	Mode 1: Transmit-Box
Final Test Mode	
EMI	Mode 1: Transmit-Box

Emission	
Performed Item	Mode 1
Conducted Emission	Yes
Peak Power Output	Yes
Radiated Emission	Yes
Band Edge	Yes
Channel of Number	Yes
Channel Separation	Yes
Occupied Bandwidth(20dB)	Yes
Occupied Bandwidth(6dB)	Yes
Dwell Time	Yes
Power Density	Yes

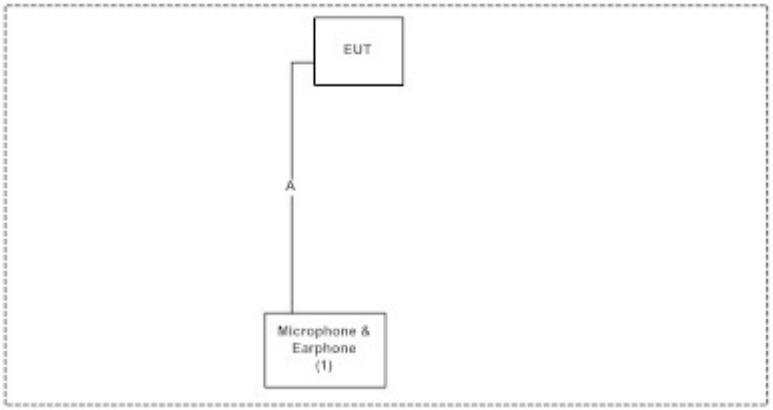
1.4. Tested System Details

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	Microphone & Earphone	Fujiei	SBZ-38	N/A	DoC	--

1.5. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	Microphone & Earphone Cable	Shielded, 1.8m, two ferrite cores bonded.

1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.5.
2	Turn on the power of all equipment.
3	The EUT will play the audio function.
4	Verify the model operation.
5	Repeat the above procedure (3) to (4).

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	Conducted Emission	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Peak Power Output	15 - 35	25
Humidity (%RH)		25 - 75	54
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Radiated Emission	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	RF antenna conducted test	15 - 35	25
Humidity (%RH)		25 - 75	52
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Radiated Emission Band Edge	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Number of hopping frequency	15 - 35	25
Humidity (%RH)		25 - 75	53
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Carrier Frequency Separation	15 - 35	26
Humidity (%RH)		25 - 75	54
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Occupied Bandwidth	15 - 35	26
Humidity (%RH)		25 - 75	55
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	Dwell Time	15 - 35	26
Humidity (%RH)		25 - 75	52
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description:

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2010

Accredited by TAF
Accreditation Number: 1313
Effective through: December 27, 2010

March 23, 2008 Accreditation on DNV
Statement No. : 413-99-LAB11

March 27, 2008 Accreditation on TUV Rheinland
Certificate No.: 10011438-2-2008

October 31, 2007 Accreditation on Nemko
Certificate No.: ELA 165

Site Name: Quietek Corporation

Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwan, R.O.C.
TEL : 886-3-5928858 / FAX : 886-3-5928859
E-Mail : service@quietek.com

2. Conducted Emission

2.1. Test Equipment

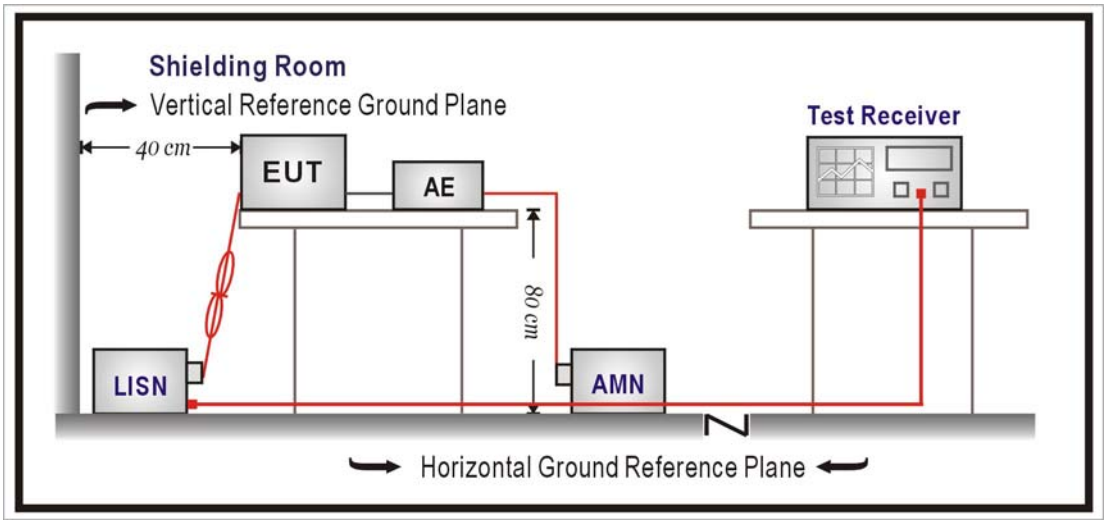
The following test equipment are used during the test:

Conducted Emission / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
LISN	R&S	ENV216	100096	2009/09/28
LISN	R&S	ESH3-Z5	836679/022	2009/06/08
Test Receiver	R&S	ESCS 30	825442/017	2010/02/05

Note: All equipment upon which need to calibrated 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 and tested according to ANSI C63.4: 2009.

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Test Specification

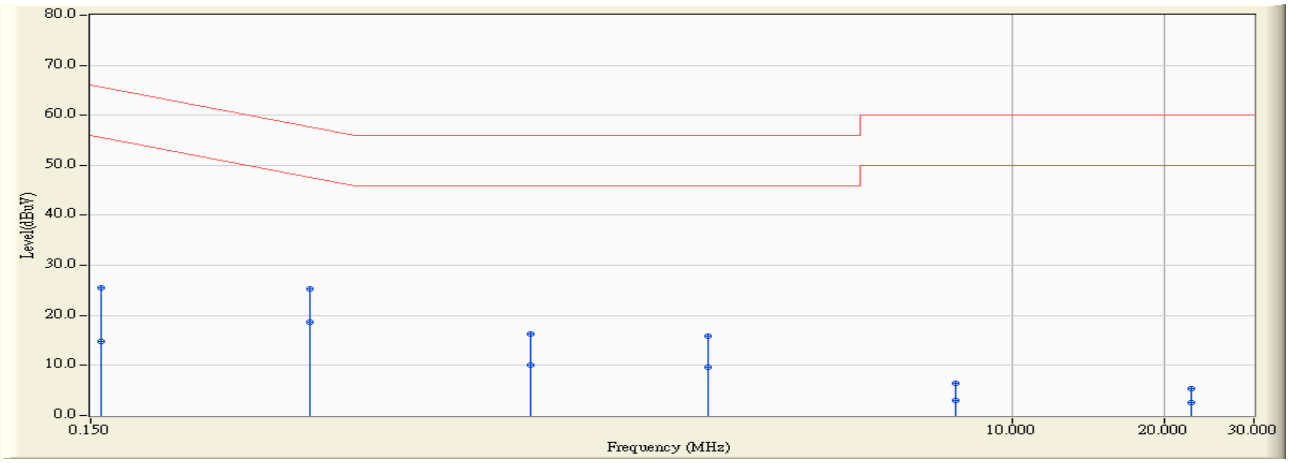
According to FCC Part 15 Subpart C Paragraph 15.207: 2009

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR3	**Time : 2010/03/22 - 11:24**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A) - Line1	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box**

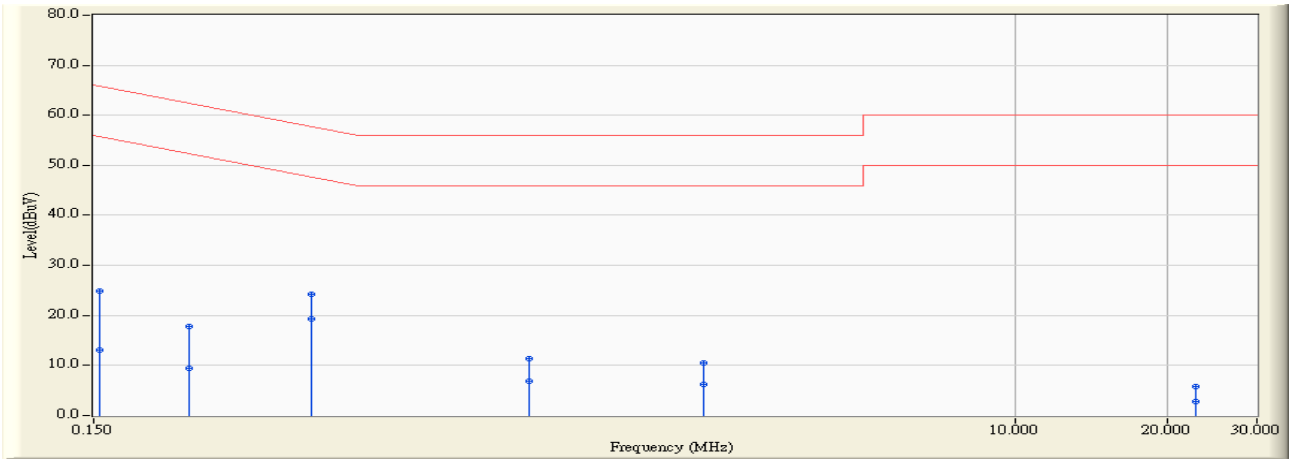


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.803	15.760	25.564	-40.015	65.578	QUASIPEAK
2		0.158	9.803	4.910	14.714	-40.865	55.578	AVERAGE
3		0.408	9.777	15.600	25.377	-32.316	57.693	QUASIPEAK
4	*	0.408	9.777	8.890	18.667	-29.026	47.693	AVERAGE
5		1.111	9.772	6.560	16.332	-39.668	56.000	QUASIPEAK
6		1.111	9.772	0.290	10.062	-35.938	46.000	AVERAGE
7		2.490	9.872	5.960	15.832	-40.168	56.000	QUASIPEAK
8		2.490	9.872	-0.240	9.632	-36.368	46.000	AVERAGE
9		7.713	10.025	-3.600	6.426	-53.574	60.000	QUASIPEAK
10		7.713	10.025	-7.130	2.896	-47.104	50.000	AVERAGE
11		22.525	10.265	-4.880	5.385	-54.615	60.000	QUASIPEAK
12		22.525	10.265	-7.700	2.565	-47.435	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 : 2010/03/22 - 11:28**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A) - Line2	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.801	15.060	24.861	-40.926	65.786	QUASIPEAK
2		0.154	9.801	3.250	13.051	-42.736	55.786	AVERAGE
3		0.232	9.835	7.960	17.795	-44.581	62.377	QUASIPEAK
4		0.232	9.835	-0.380	9.455	-42.921	52.377	AVERAGE
5		0.404	9.778	14.400	24.178	-33.595	57.773	QUASIPEAK
6	*	0.404	9.778	9.630	19.408	-28.365	47.773	AVERAGE
7		1.087	9.770	1.680	11.450	-44.550	56.000	QUASIPEAK
8		1.087	9.770	-2.960	6.810	-39.190	46.000	AVERAGE
9		2.412	9.874	0.740	10.614	-45.386	56.000	QUASIPEAK
10		2.412	9.874	-3.740	6.134	-39.866	46.000	AVERAGE
11		22.697	10.467	-4.700	5.767	-54.233	60.000	QUASIPEAK
12		22.697	10.467	-7.760	2.707	-47.293	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

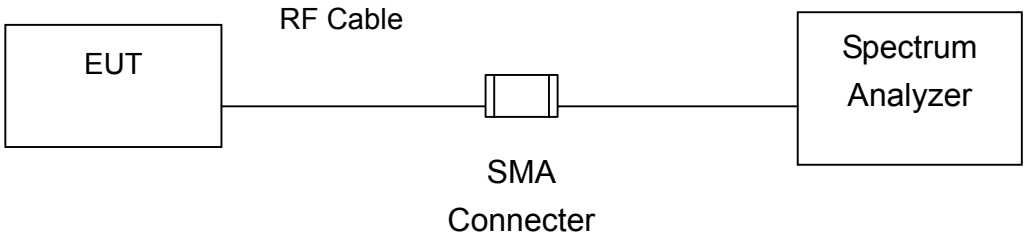
3.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP/ 100005	Oct., 2009
2	No.1 OATS			Sep., 2009

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. Test procedures

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

3.4. Limits

For frequency hopping systems operating in the 902-928 MHz band: 1 Watt for systems employing at least 50 hopping channels; and, 0.25 Watts for systems employing less than 50 hopping channels.

For frequency hopping systems in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1Watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 Watt.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2009

3.6. Uncertainty

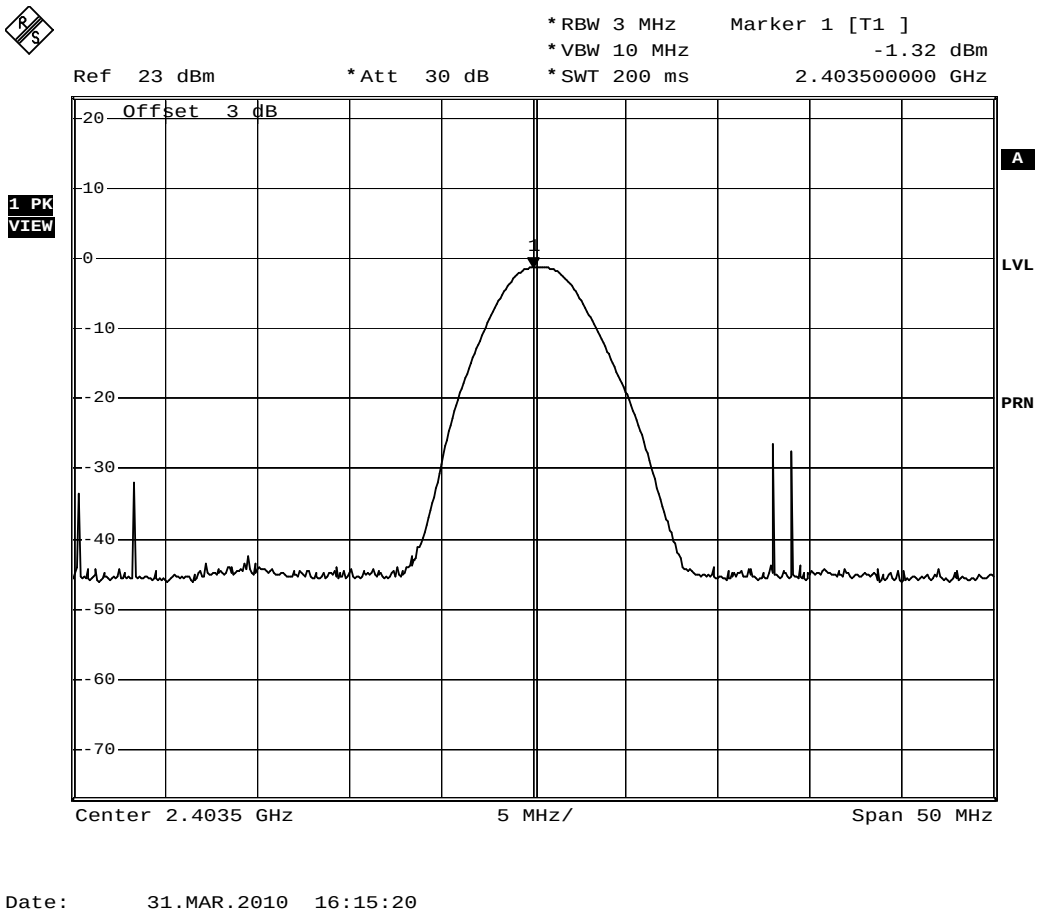
The measurement uncertainty is defined as ± 1.27 dB.

3.7. Test Result

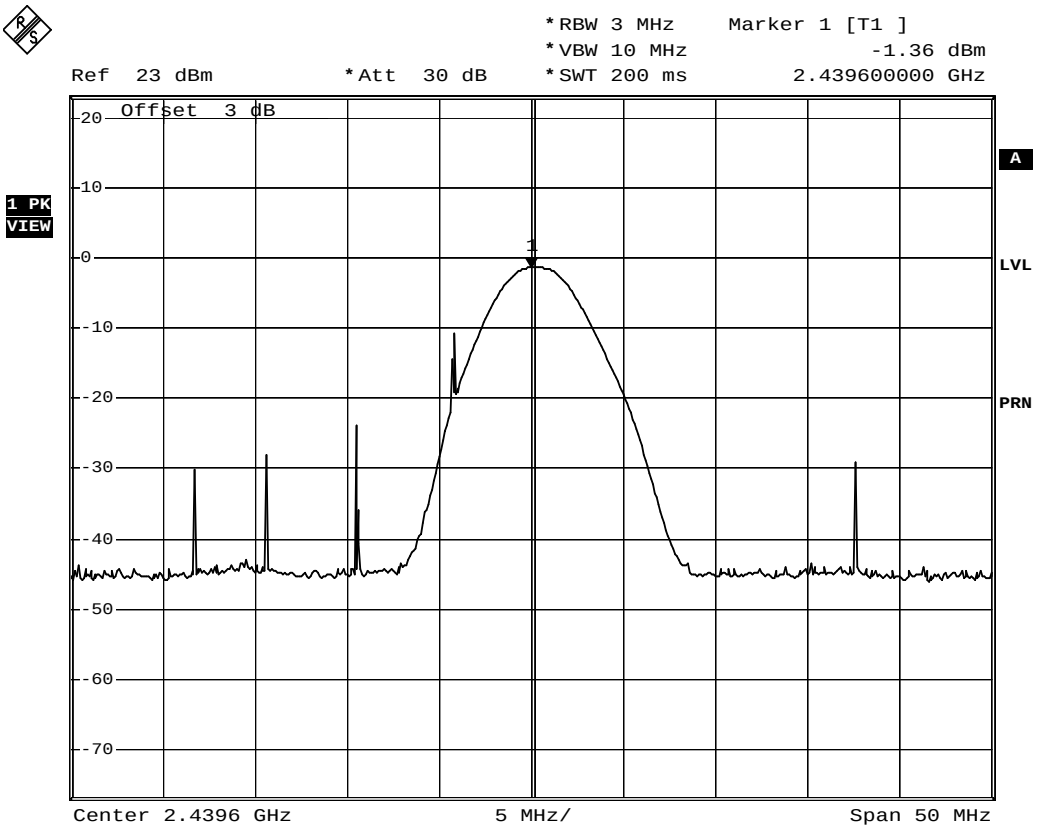
Product	Wireless Audio Box		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/31	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2404	-1.32	1Watt= 30 dBm	Pass
13	2440	-1.36	1Watt= 30 dBm	Pass
25	2476	-1.69	1Watt= 30 dBm	Pass

Channel 1

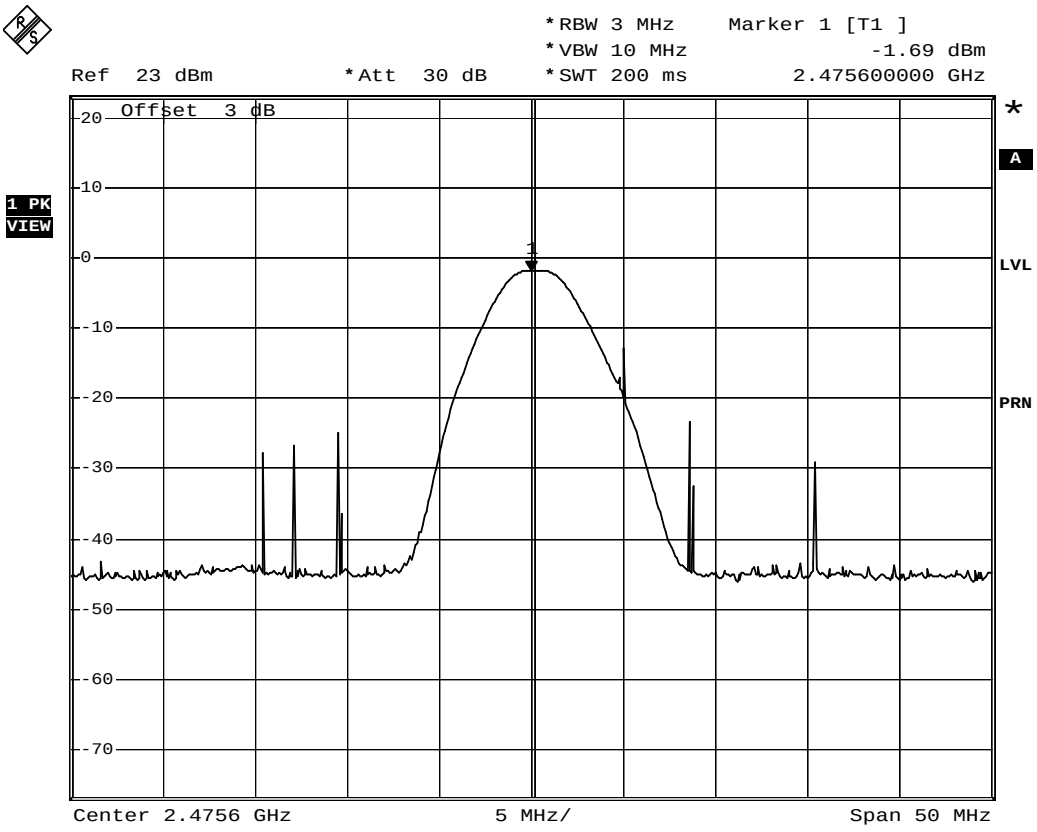


Channel 13



Date: 31.MAR.2010 16:16:43

Channel 25



Date: 31.MAR.2010 16:17:56

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the test:

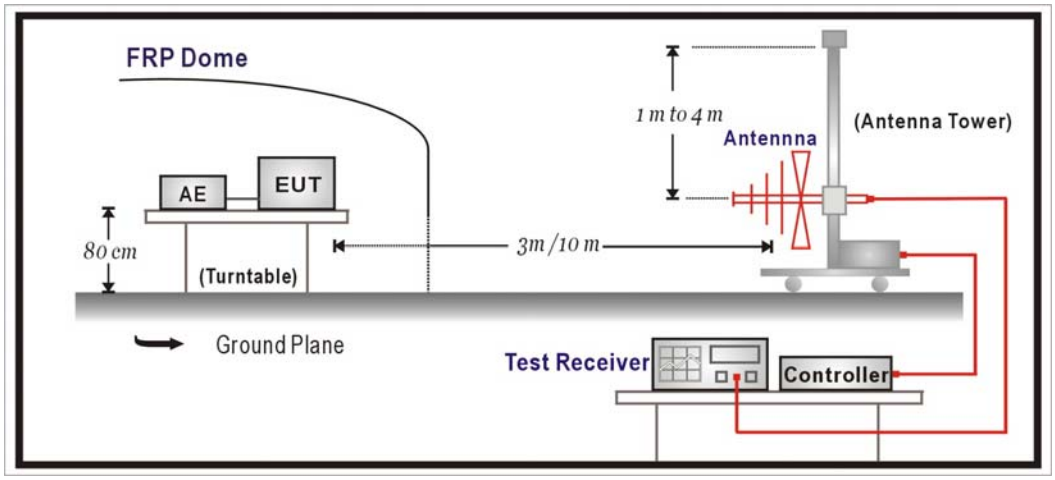
Radiated Emission / CB1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2895	2009/09/03
Horn Antenna	Schwarzback	BBHA 9120D	743	2010/03/16
Loop Antenna	R & S	HFH2-Z2	833799/004	2009/09/13
Pre-Amplifier	Quietek	AP-025C	CHM0608021	2009/11/13
Pre-Amplifier	MITEQ	AMF-4D-005180-24-10P	888003	2009/12/04
Spectrum Analyzer	R & S	FSP40	100005	2009/08/25
Test Receiver	R & S	ESCS 30	825442/017	2010/02/03

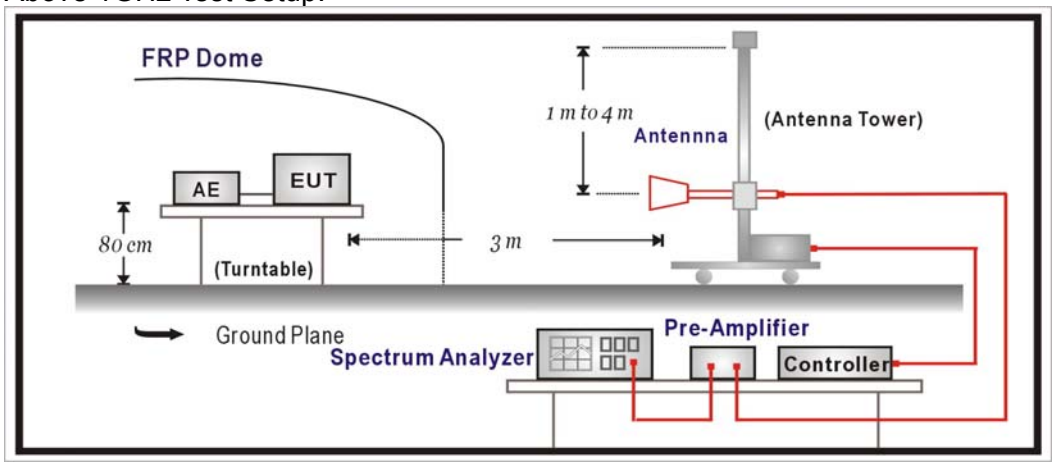
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

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	uV/m	dBuV/m
30-88	**100**	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 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 15.209: 2009

4.6. Uncertainty

The measurement uncertainty

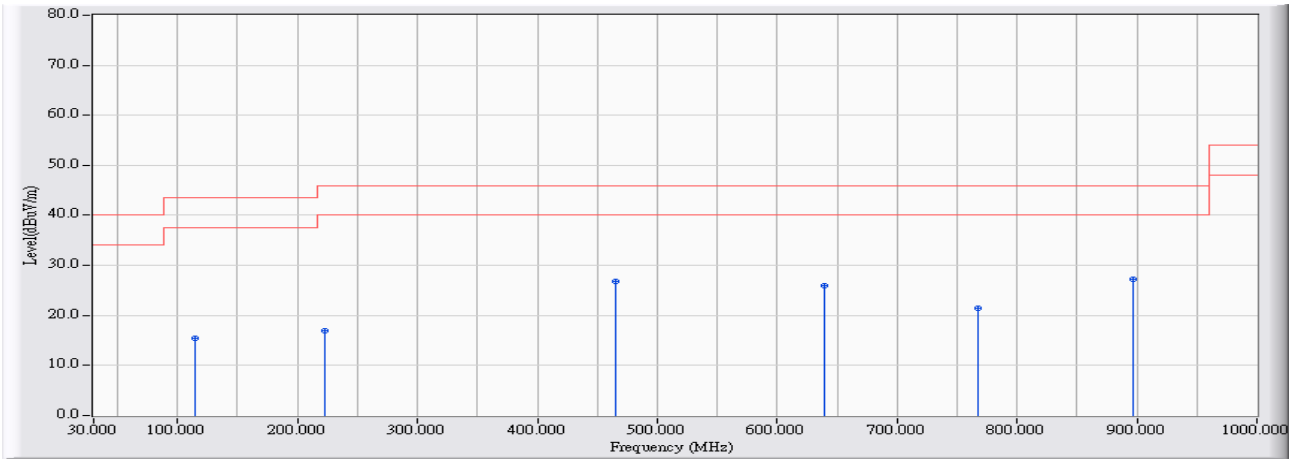
30MHz～1GHz as ±3.19dB

1GHz～26.5Ghz as ±3.9dB

4.7. Test Result

30MHz-1GHz Spurious:

Site : CB1	**Time : 2010/04/21 - 11:22**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : FCC_30-1G(2009) - HORIZONTAL	**Power : 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2440MHz)**

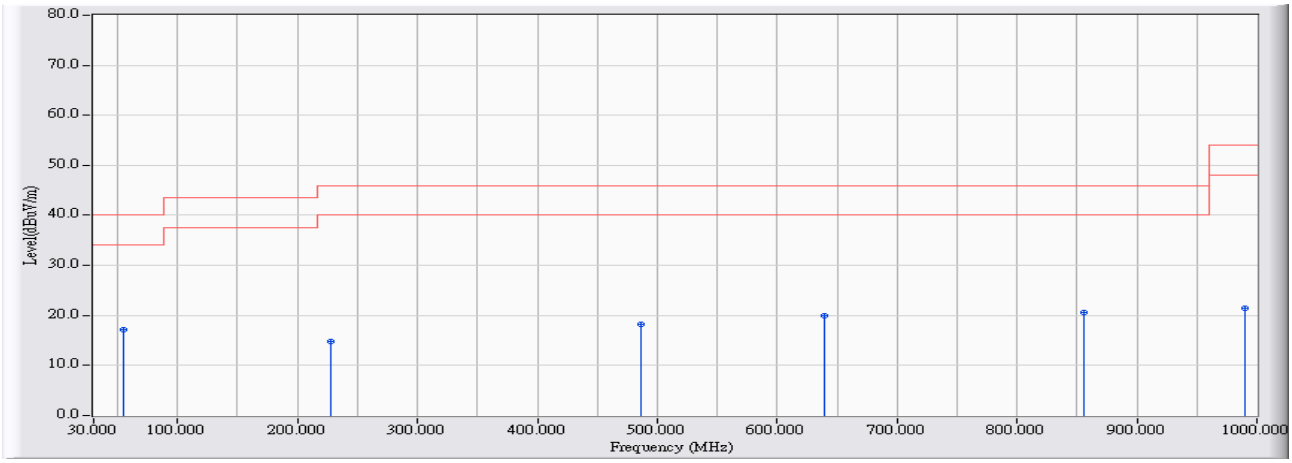


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		114.072	-13.332	28.785	15.453	-28.047	43.500	QUASIPEAK
2		222.377	-12.765	29.617	16.852	-29.148	46.000	QUASIPEAK
3		464.885	-6.564	33.390	26.826	-19.174	46.000	QUASIPEAK
4		639.477	-1.920	27.873	25.953	-20.047	46.000	QUASIPEAK
5		767.205	-5.035	26.560	21.525	-24.475	46.000	QUASIPEAK
6	*	896.527	-1.523	28.846	27.323	-18.677	46.000	QUASIPEAK

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 : 2010/04/21 - 11:46**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : FCC_30-1G(2009) - VERTICAL	**Power : 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2440MHz)**



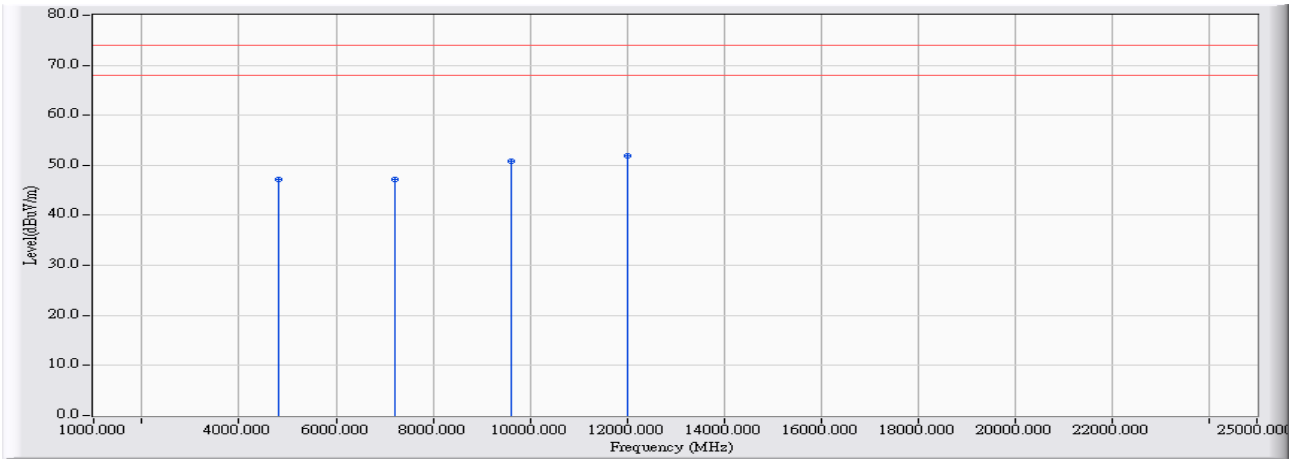
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	54.253	-14.941	32.026	17.085	-22.915	40.000	QUASIPEAK
2		227.224	-11.522	26.362	14.840	-31.160	46.000	QUASIPEAK
3		485.893	-3.382	21.619	18.237	-27.763	46.000	QUASIPEAK
4		639.485	-2.658	22.682	20.024	-25.976	46.000	QUASIPEAK
5		856.111	-1.899	22.534	20.635	-25.365	46.000	QUASIPEAK
6		990.303	0.166	21.242	21.408	-32.592	54.000	QUASIPEAK

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

Above 1 GHz Spurious:

Site : CB1	**Time : 2010/04/19 - 14:21**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

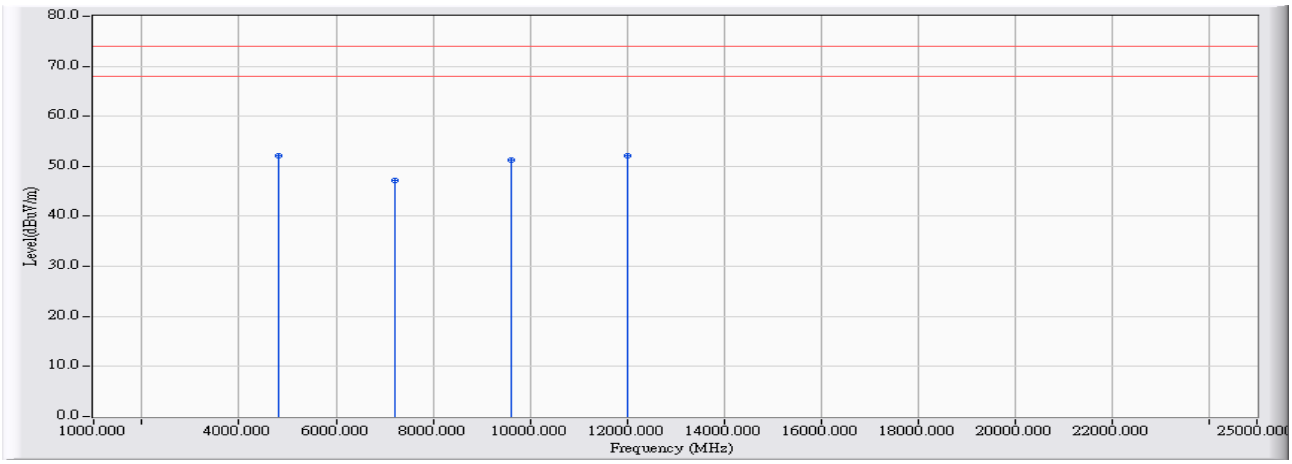


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4806.912	3.352	43.778	47.130	-26.870	74.000	54.00	PEAK
2		7211.944	9.773	37.419	47.192	-26.808	74.000	54.00	PEAK
3		9614.675	13.676	37.160	50.836	-23.164	74.000	54.00	PEAK
4	*	12019.687	18.777	33.105	51.882	-22.118	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2010/04/19 - 14:39**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

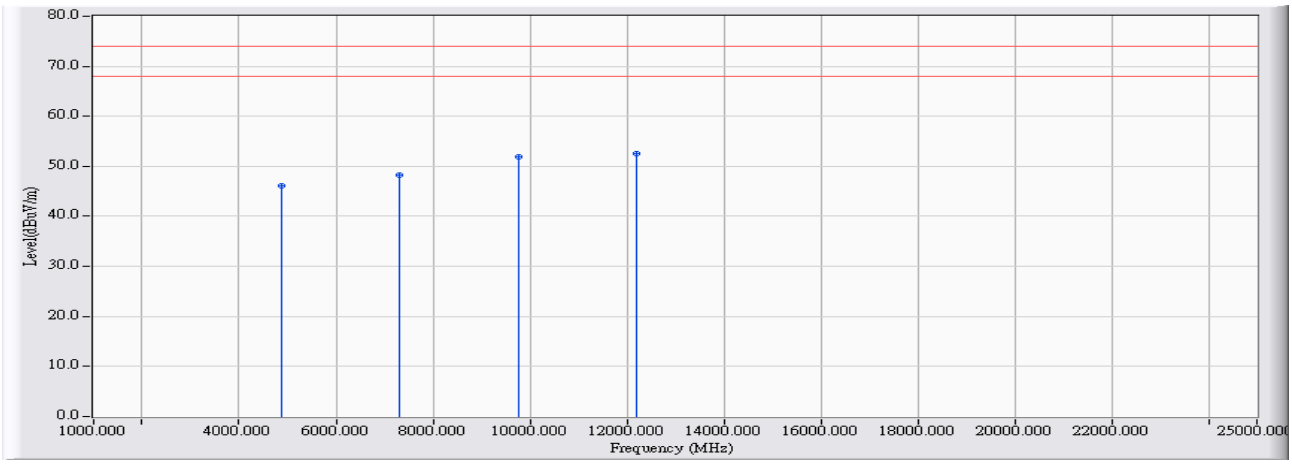


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4807.156	5.534	46.507	52.041	-21.959	74.000	54.00	PEAK
2		7211.851	9.412	37.824	47.236	-26.764	74.000	54.00	PEAK
3		9614.485	13.747	37.508	51.255	-22.745	74.000	54.00	PEAK
4	*	12020.025	17.426	34.702	52.128	-21.872	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2010/04/19 - 14:45**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2440MHz)**

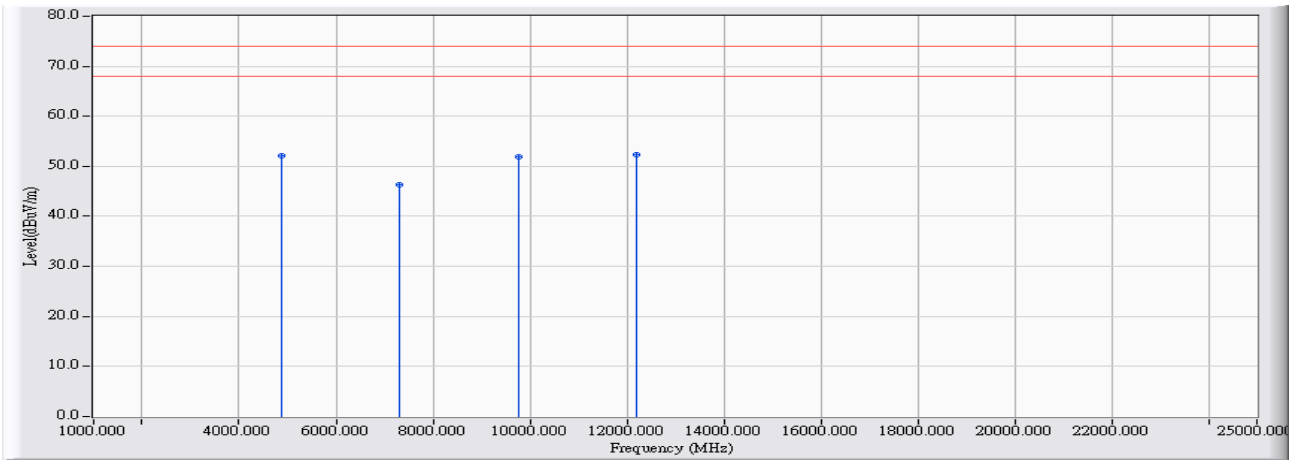


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4879.807	3.546	42.487	46.033	-27.967	74.000	54.00	PEAK
2		7319.284	10.265	37.962	48.227	-25.773	74.000	54.00	PEAK
3		9760.382	14.269	37.686	51.955	-22.045	74.000	54.00	PEAK
4	*	12198.654	18.068	34.381	52.449	-21.551	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2010/04/19 - 15:03**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2440MHz)**

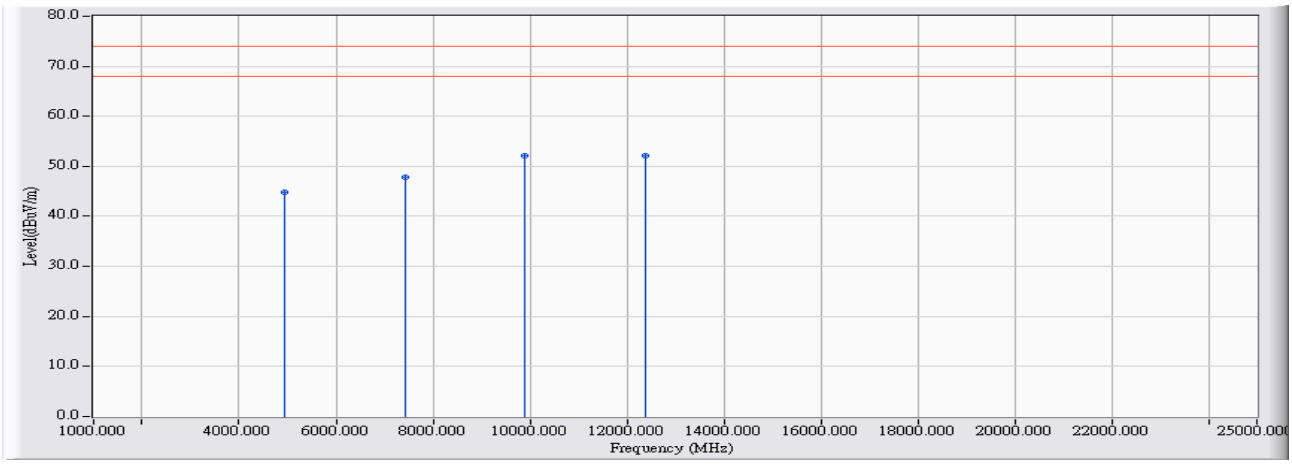


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	4879.615	5.580	46.432	52.012	-21.988	74.000	54.00	PEAK
2		7319.001	9.620	36.613	46.233	-27.767	74.000	54.00	PEAK
3		9760.393	14.479	37.342	51.821	-22.179	74.000	54.00	PEAK
4	*	12198.782	17.099	35.315	52.414	-21.586	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2010/04/19 - 15:21**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**

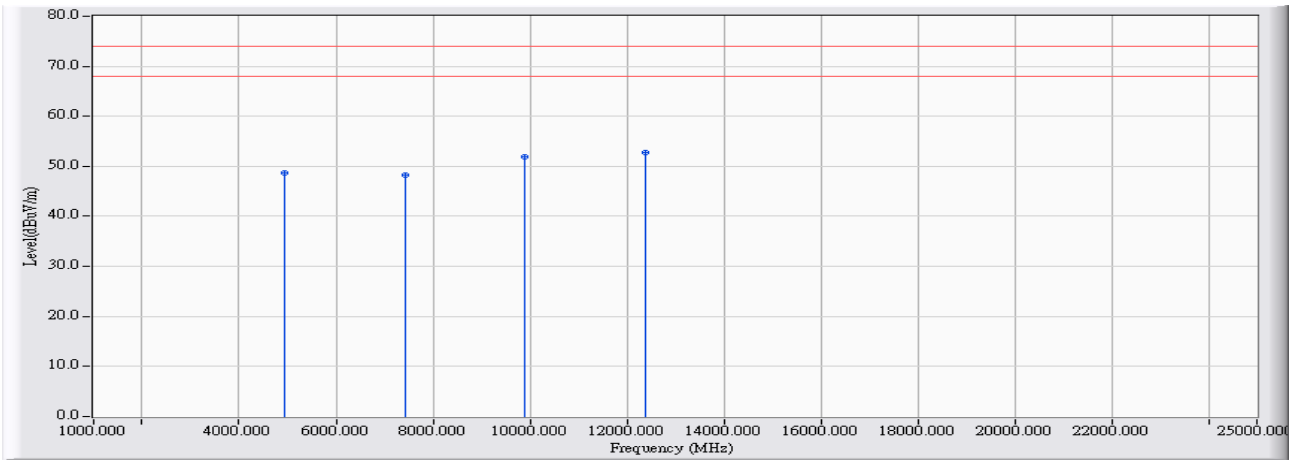


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		4952.691	3.750	41.008	44.758	-29.242	74.000	54.00	PEAK
2		7429.209	10.780	37.101	47.881	-26.119	74.000	54.00	PEAK
3	*	9906.605	14.852	37.198	52.050	-21.950	74.000	54.00	PEAK
4		12381.108	17.344	34.683	52.027	-21.973	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2010/04/19 - 15:38**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_EFS_1-18G(2009-06) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**



		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		4952.541	3.750	44.873	48.623	-25.377	74.000	54.00	PEAK
2		7429.407	10.782	37.432	48.214	-25.786	74.000	54.00	PEAK
3		9906.185	14.852	37.071	51.923	-22.077	74.000	54.00	PEAK
4	*	12380.877	17.345	35.461	52.806	-21.194	74.000	54.00	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

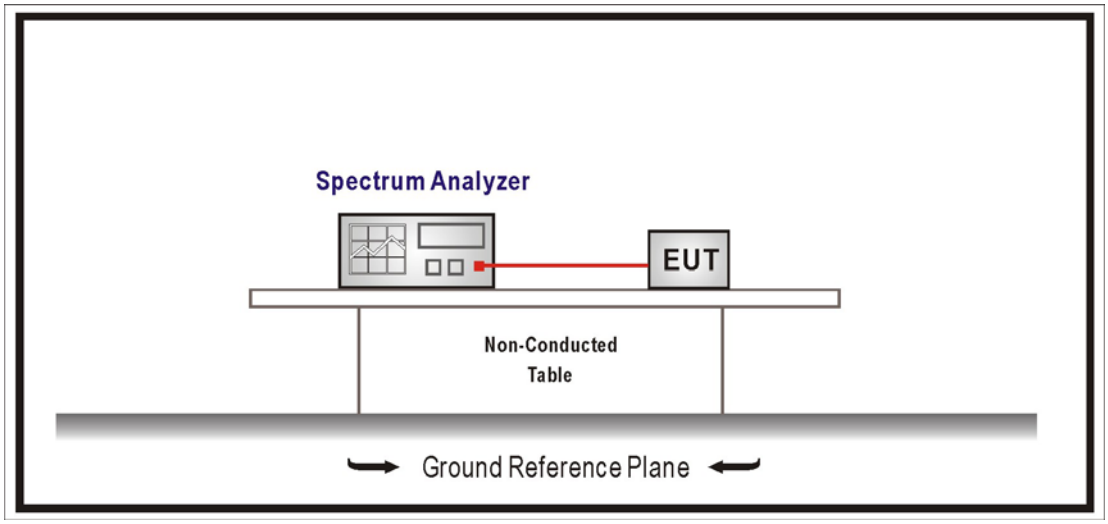
RF Conducted Measurement:				
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

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

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 FHSS test procedure of FCC Public Notice DA 00-705 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: 2009

5.6. Uncertainty

The measurement uncertainty

Conducted is defined as ± 1.27dB

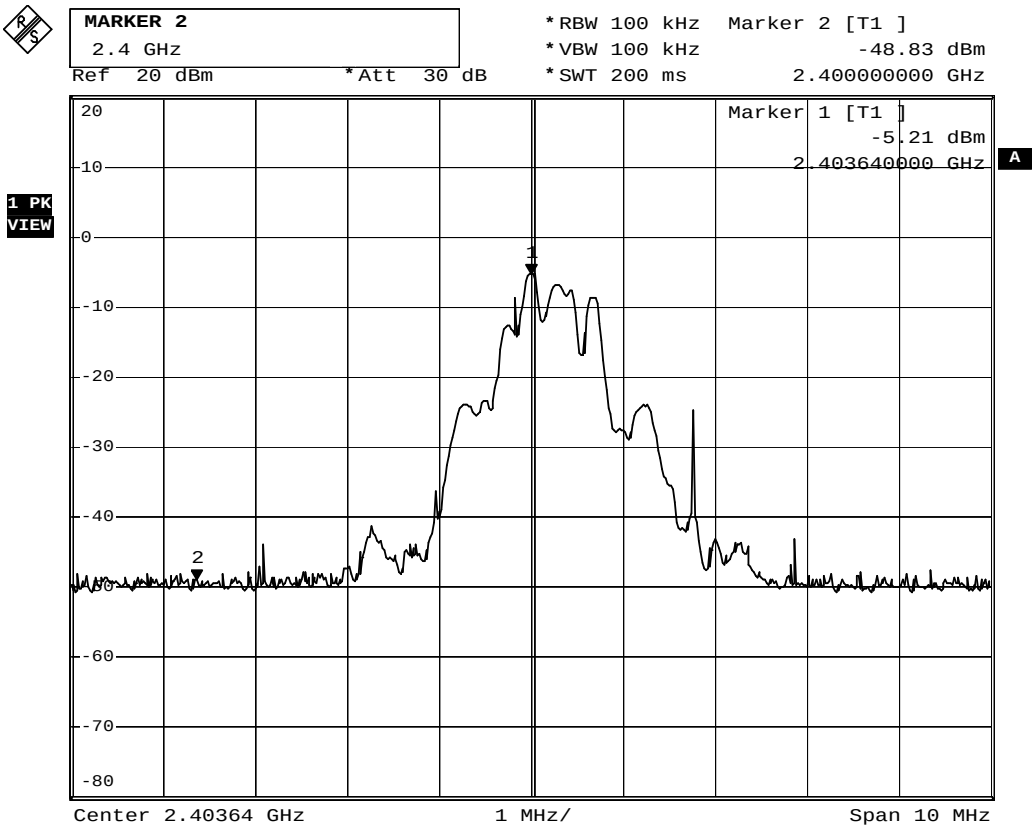
Radiated is defined as ± 3.9dB

5.7. Test Result

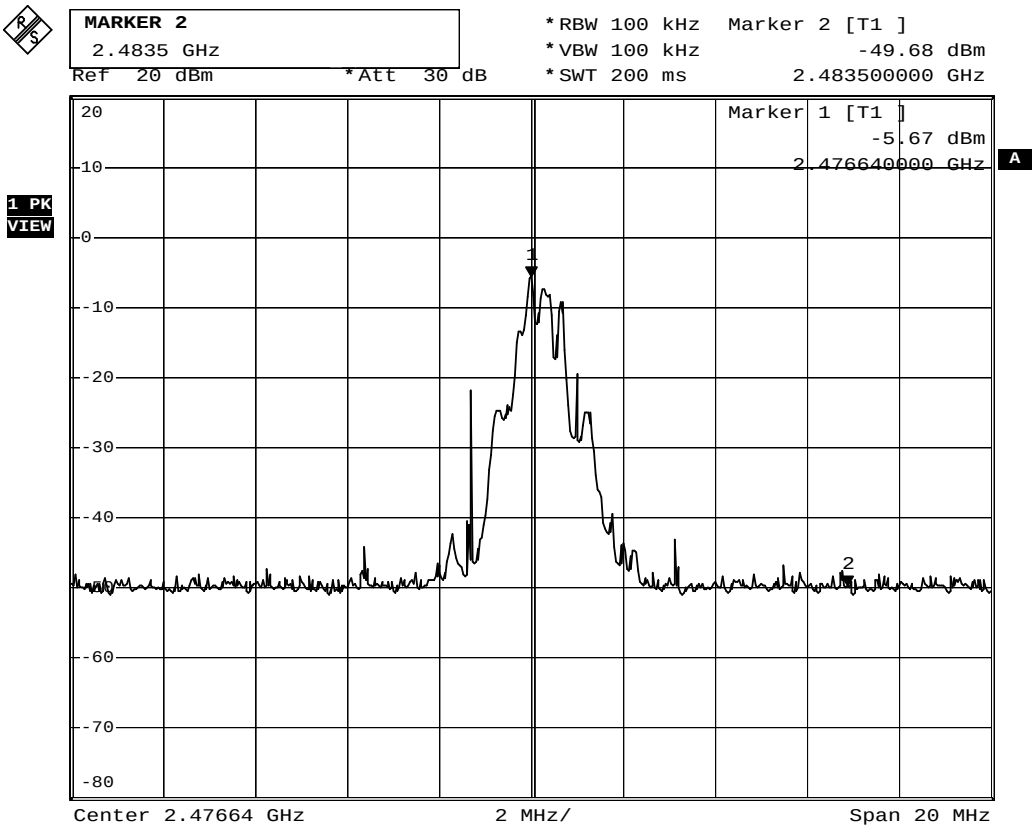
Product	Wireless Audio Box		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/30	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2404	43.62	≧20	Pass
25	2476	44.01	≧20	Pass

Channel 1-Bandedge



Channel 25-Bandedge

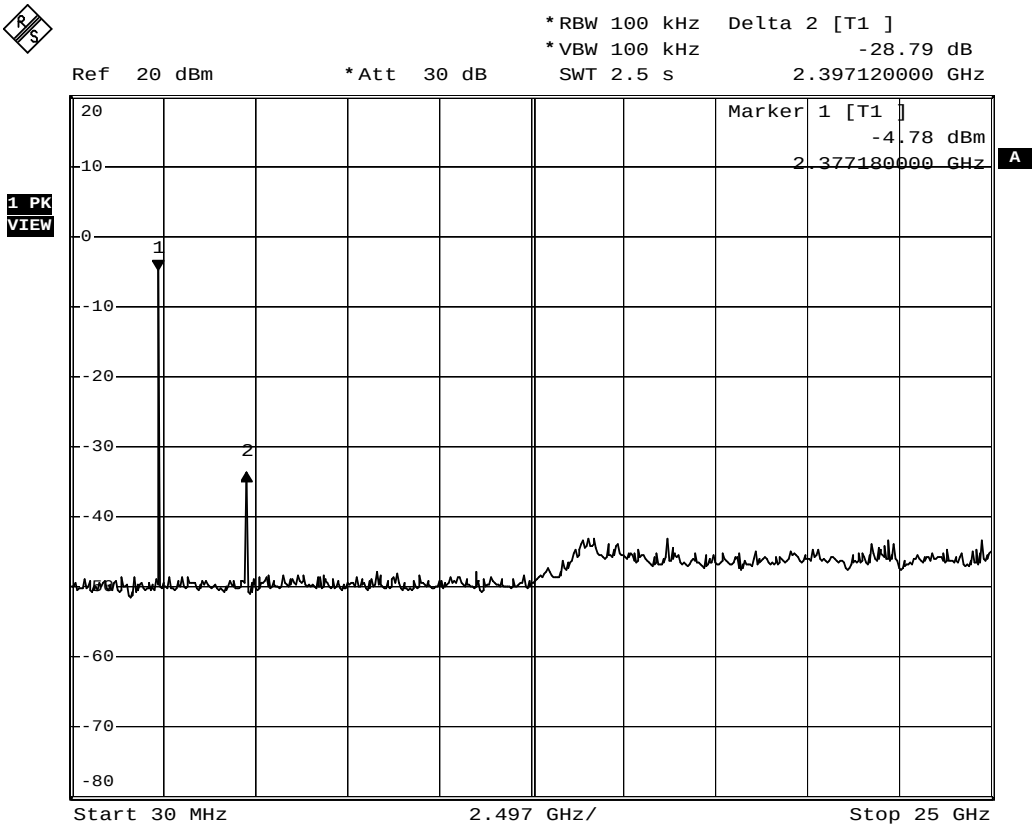


Date: 29.MAR.2010 17:23:29

Product	Wireless Audio Box		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/30	Test Site	No.1 OATS

Conducted Spurious

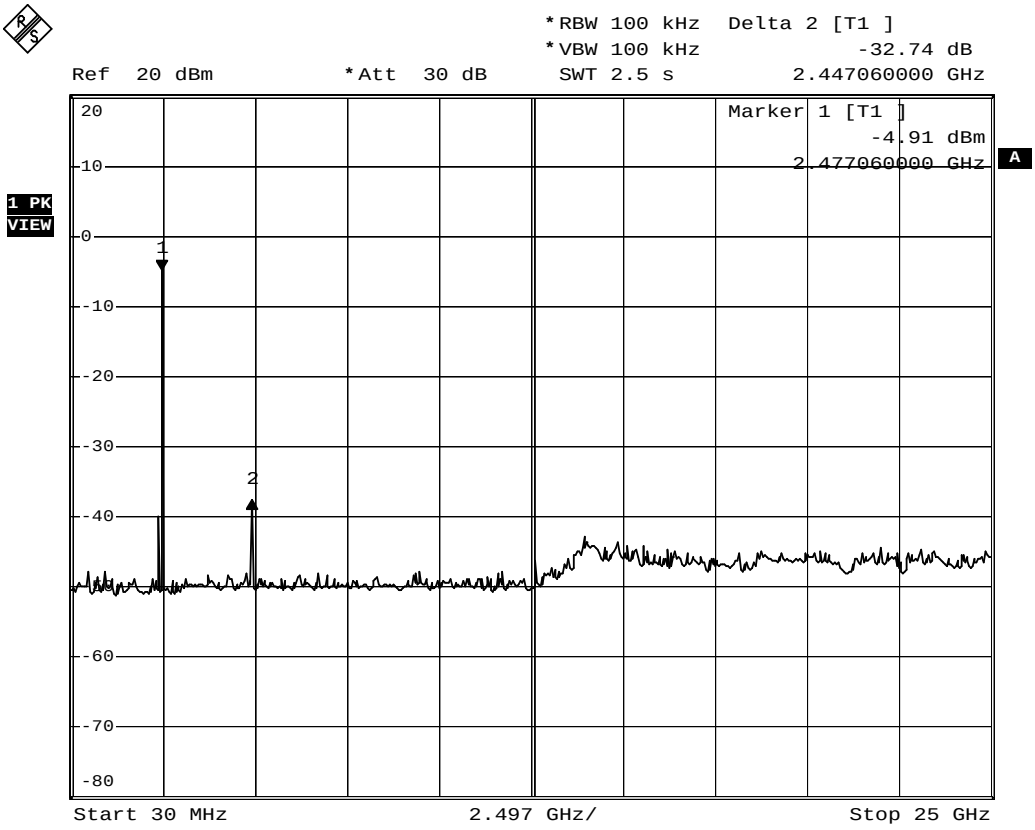
Channel 1 (30M-25G)



Date: 30.MAR.2010 15:06:54

Conducted Spurious

Channel 25(30M-25G)



Date: 30.MAR.2010 15:08:52

6. Radiated Emission Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

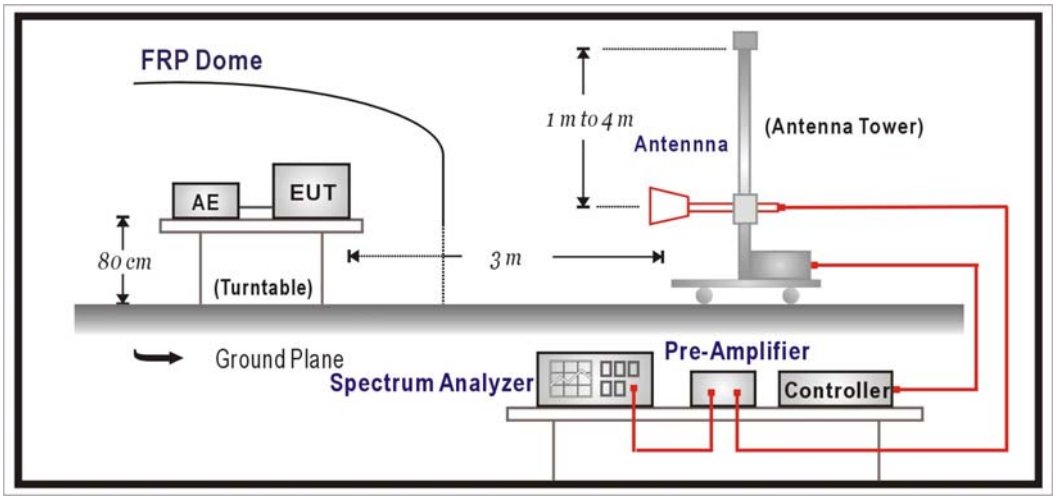
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2009
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2010
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2009
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2009
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2009
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2009
7	No.1 OATS				Sep., 2009

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

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

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 FHSS test procedure of FCC Public Notice DA 00-705 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: 2009

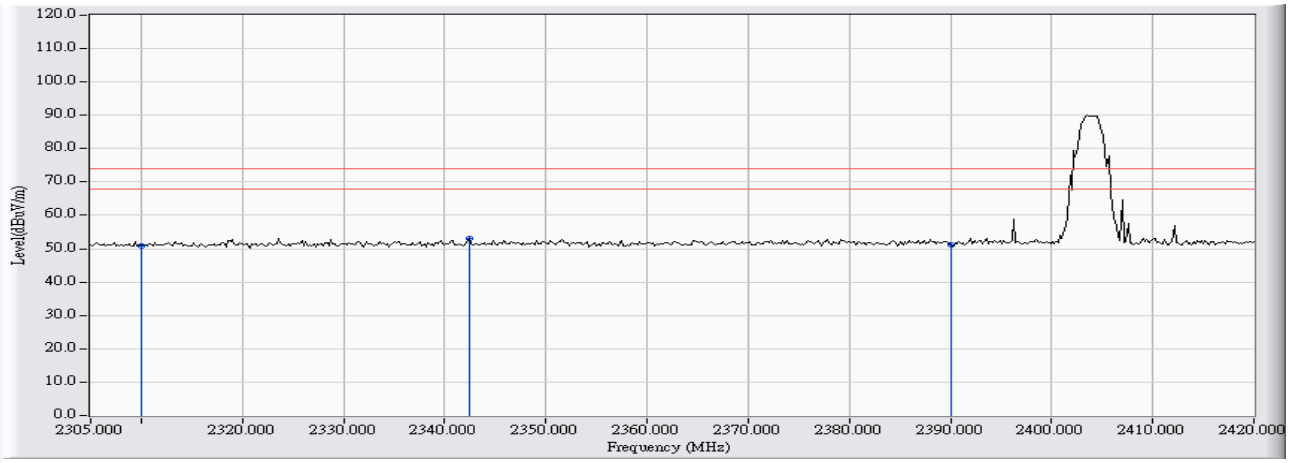
6.6. Uncertainty

The measurement uncertainty ± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : Site1	**Time : 2010/03/30 - 10:43**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

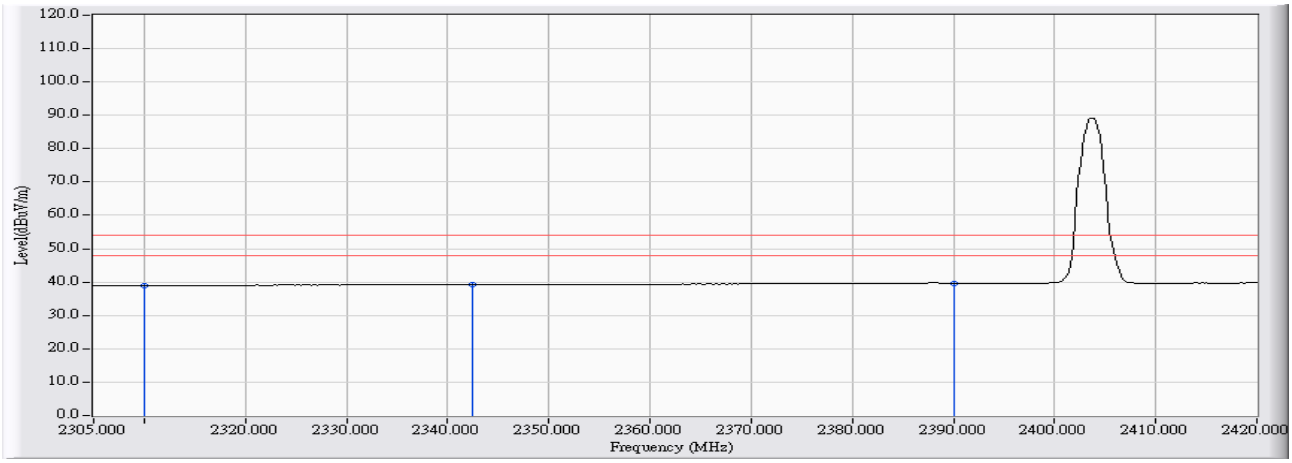


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.154	23.792	50.946	-23.054	74.000	PEAK
2	*	2342.375	27.320	25.763	53.082	-20.918	74.000	PEAK
3		2390.000	27.549	23.601	51.150	-22.850	74.000	PEAK

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 : Site1	**Time : 2010/03/30 - 10:45**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

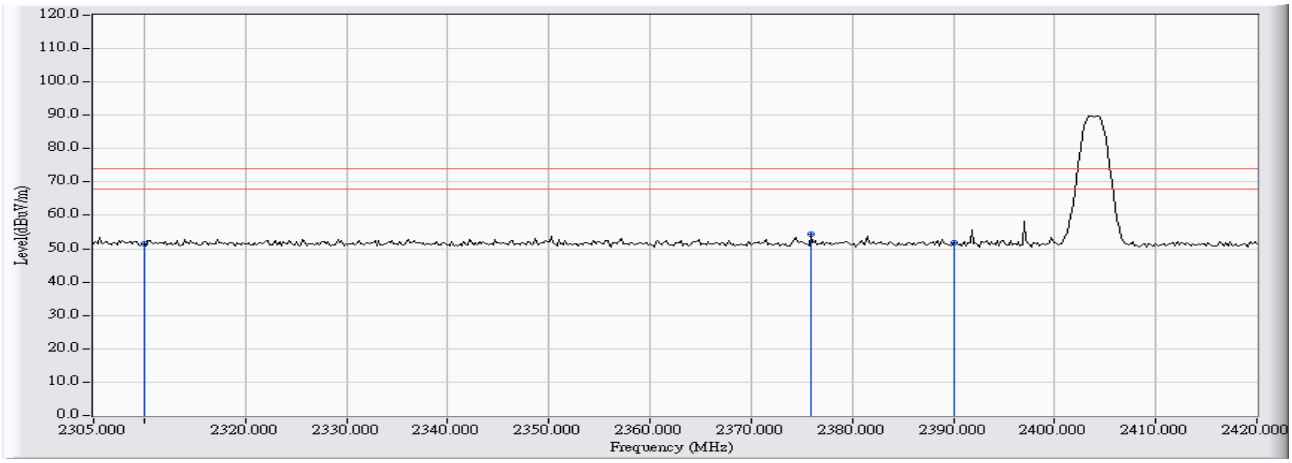


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.154	11.876	39.030	-14.970	54.000	AVERAGE
2		2342.375	27.320	11.886	39.205	-14.795	54.000	AVERAGE
3	*	2390.000	27.549	12.056	39.605	-14.395	54.000	AVERAGE

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 : Site1	**Time : 2010/03/30 - 10:49**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

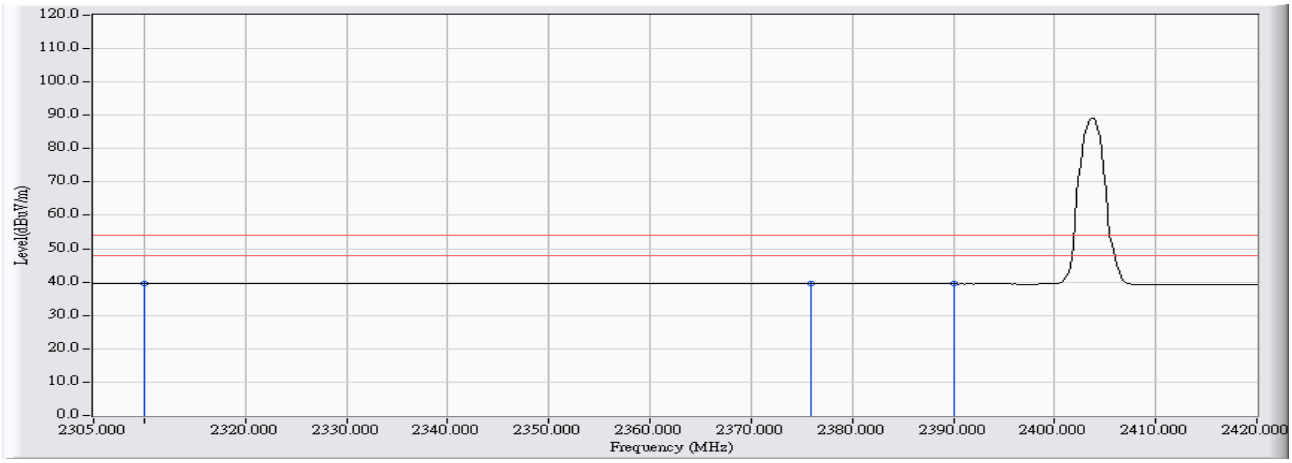


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.780	23.610	51.390	-22.610	74.000	PEAK
2	*	2375.917	27.443	26.890	54.334	-19.666	74.000	PEAK
3		2390.000	27.371	24.342	51.712	-22.288	74.000	PEAK

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 : Site1	**Time : 2010/03/30 - 10:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2404MHz)**

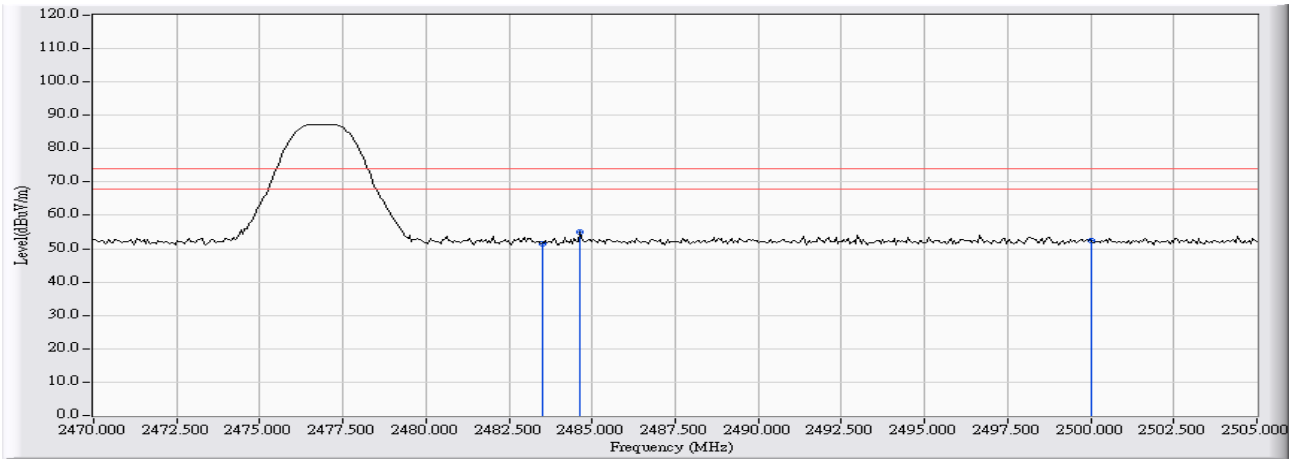


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2310.000	27.780	11.849	39.629	-14.371	54.000	AVERAGE
2		2375.917	27.443	12.003	39.447	-14.553	54.000	AVERAGE
3		2390.000	27.371	12.077	39.447	-14.553	54.000	AVERAGE

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 : Site1	**Time : 2010/03/30 - 11:05**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**

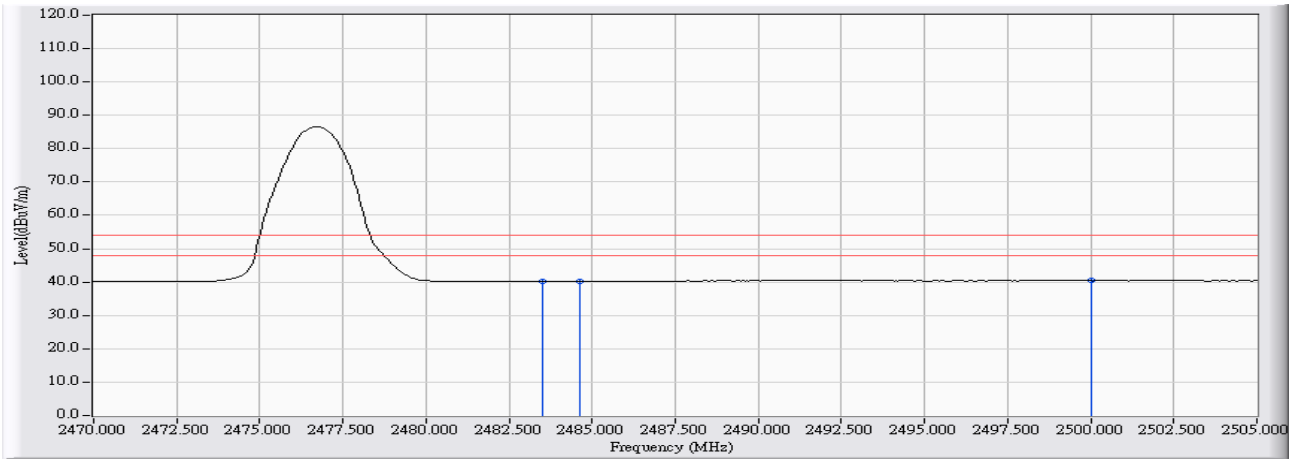


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	28.018	23.509	51.527	-22.473	74.000	PEAK
2	*	2484.642	28.024	27.142	55.166	-18.834	74.000	PEAK
3		2500.000	28.097	24.425	52.522	-21.478	74.000	PEAK

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 : Site1	**Time : 2010/03/30 - 11:09**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**

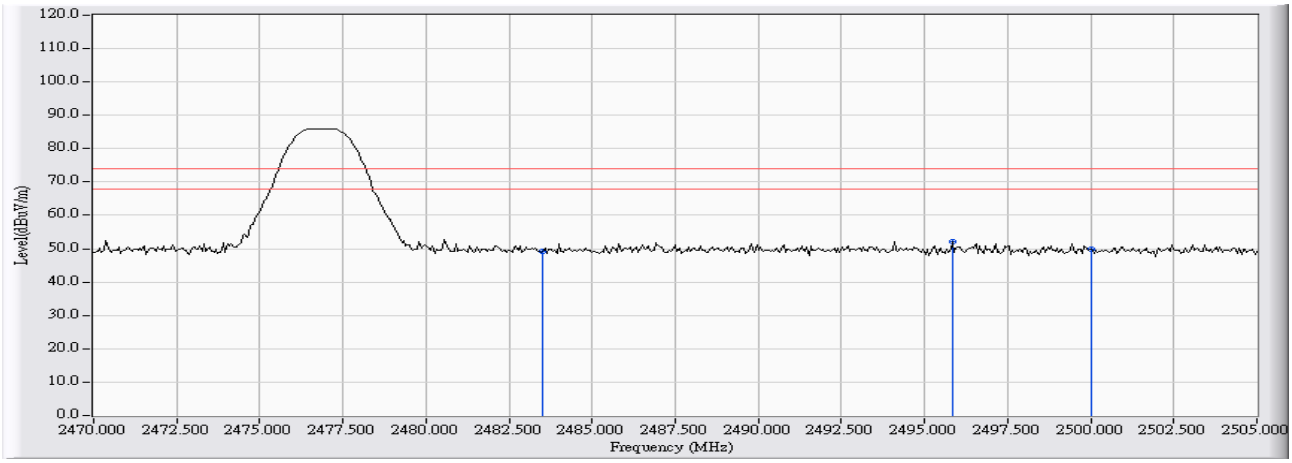


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	28.018	12.254	40.272	-13.728	54.000	AVERAGE
2		2484.642	28.024	12.276	40.300	-13.700	54.000	AVERAGE
3	*	2500.000	28.097	12.296	40.393	-13.607	54.000	AVERAGE

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 : Site1	**Time : 2010/03/30 - 11:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**

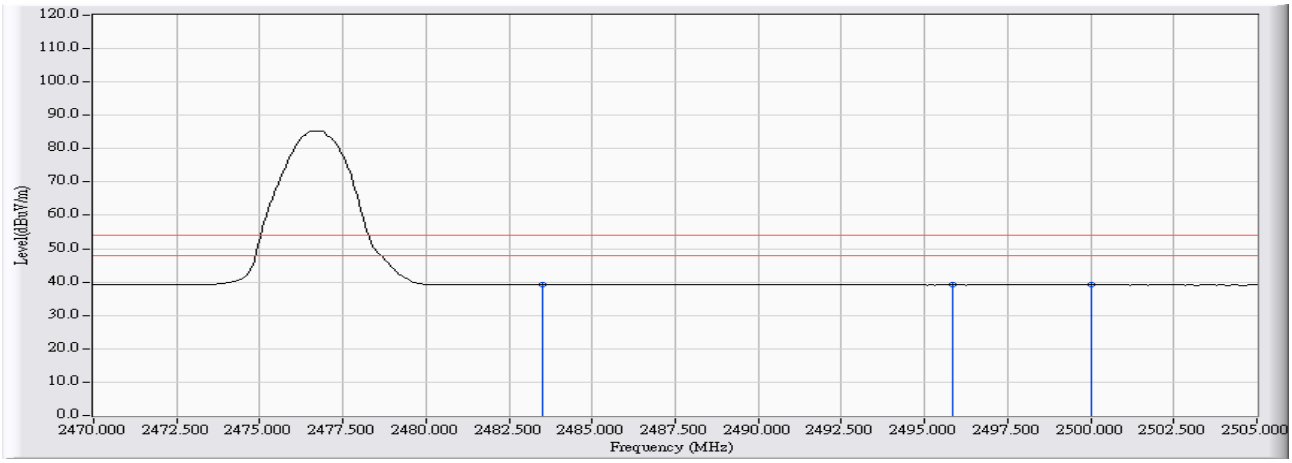


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	26.896	22.296	49.193	-24.807	74.000	PEAK
2	*	2495.842	26.825	25.352	52.177	-21.823	74.000	PEAK
3		2500.000	26.834	22.992	49.826	-24.174	74.000	PEAK

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 : Site1	**Time : 2010/03/30 - 11:27**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB3_FCC_EFS_1-18G(2009-11) - VERTICAL	**Power : AC 120V/60Hz**
EUT : Wireless Audio Box	**Note : Mode 1: Transmit-Box (2476MHz)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	26.896	12.260	39.157	-14.843	54.000	AVERAGE
2		2495.842	26.825	12.308	39.133	-14.867	54.000	AVERAGE
3		2500.000	26.834	12.304	39.138	-14.862	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. Number of hopping frequency

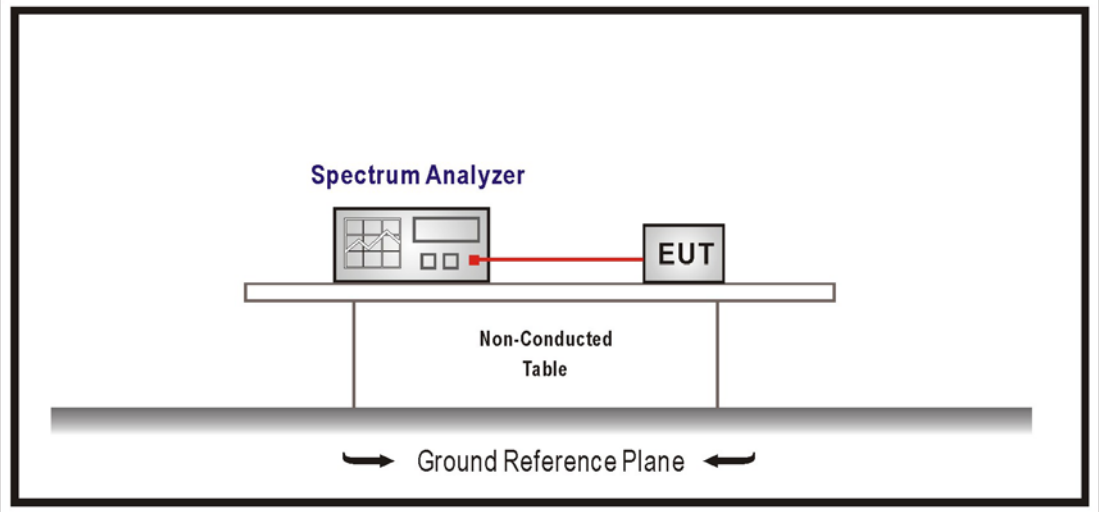
7.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

7.2. Test Setup



7.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

For frequency hopping systems operating in the 2400-2483.5 MHz bands, which use fewer than 75 hopping frequencies, may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels are used.

For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.

7.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = the frequency band of operation

RBW ≥ 1% of the span， VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

7.5. Test Specification

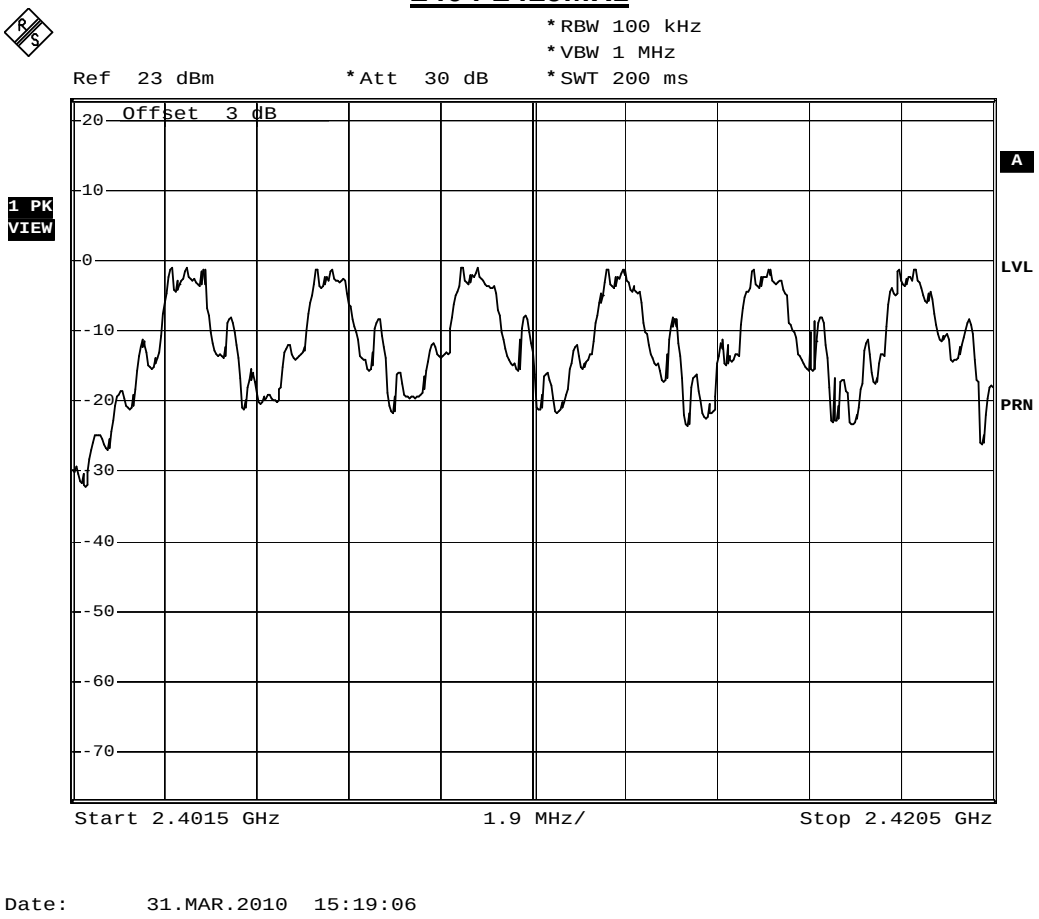
According to FCC Part 15 Subpart C Paragraph 15.247: 2009

7.6. Test Result

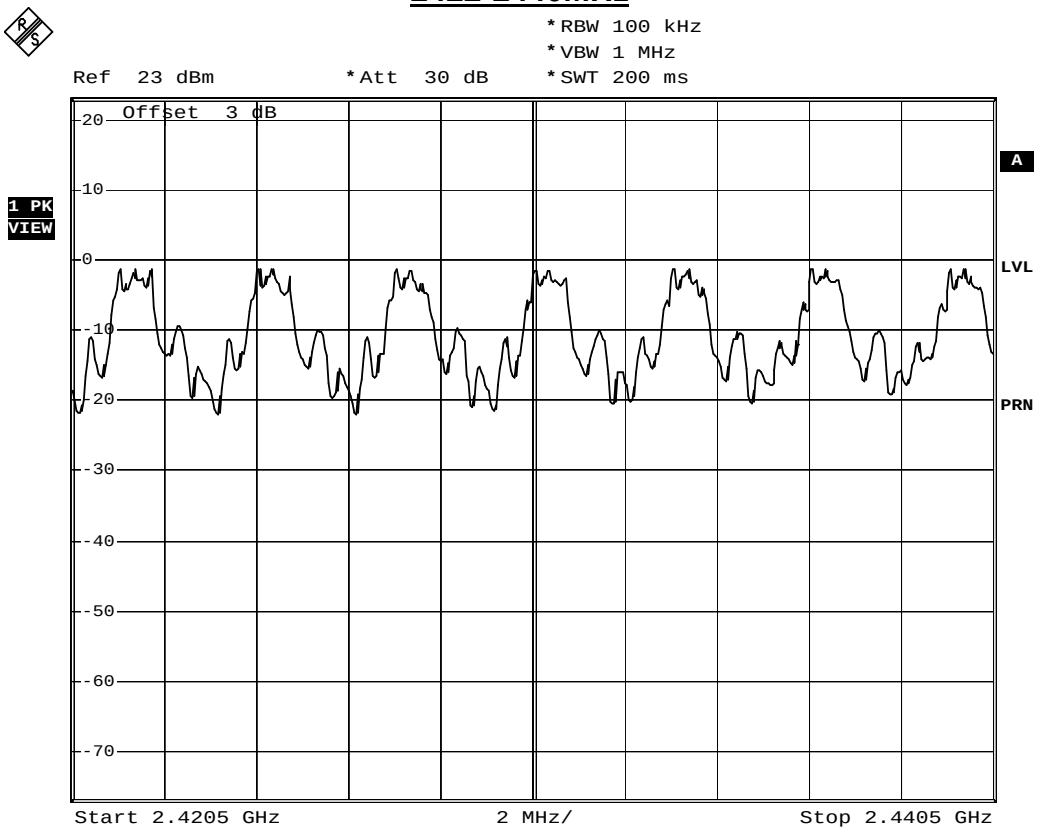
Product	Wireless Audio Box		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/31	Test Site	No.1 OATS

Frequency Range (MHz)	Measure Level (Hopping Channel)	Limit (Hopping Channel)	Result
2404 ~ 2476	25	>15	Pass

2404-2419MHz

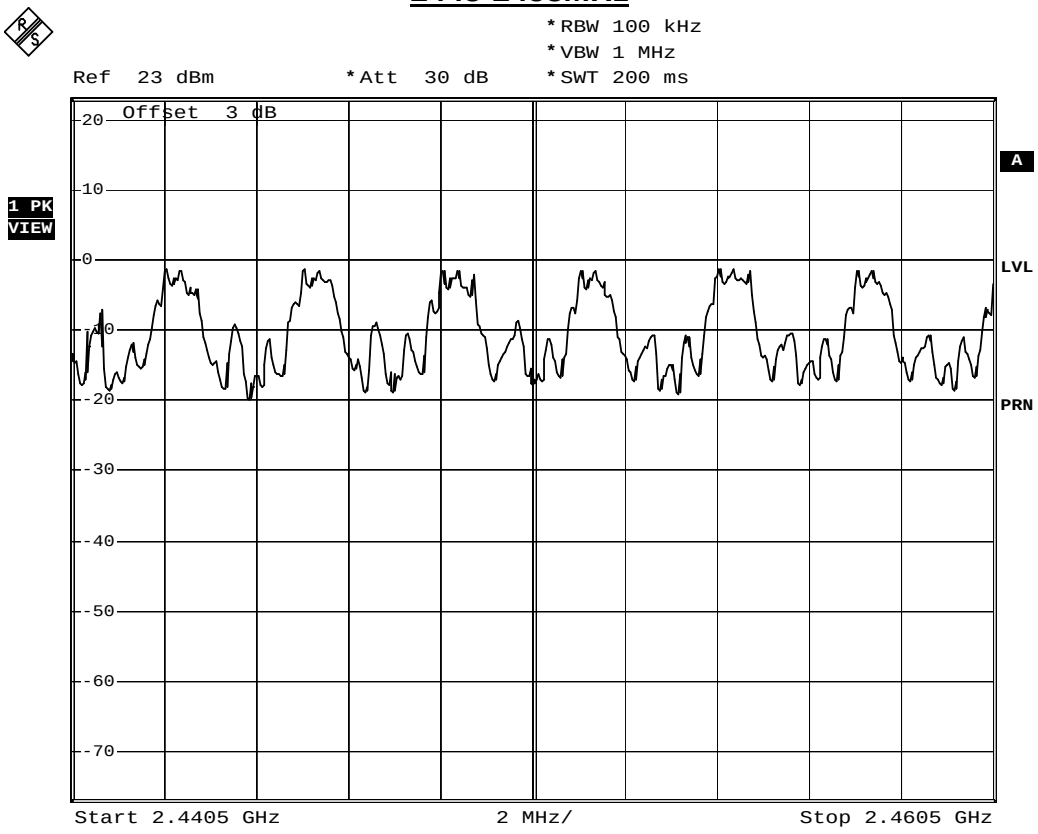


2422-2440MHz



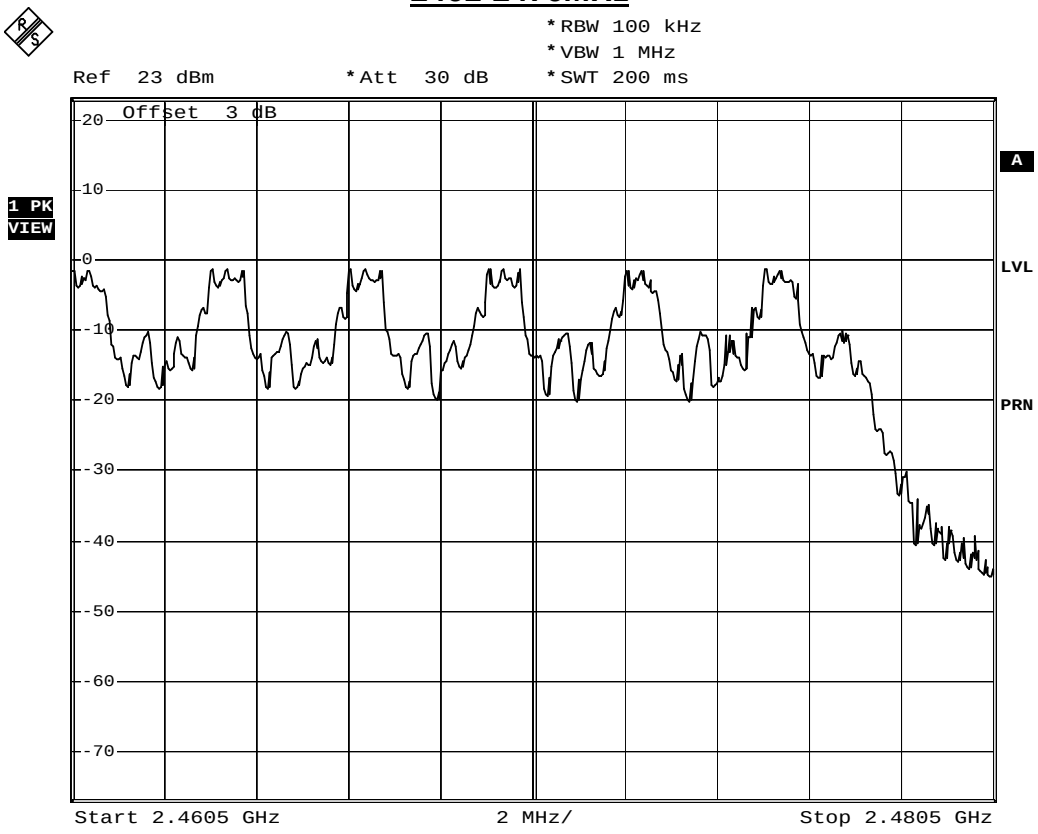
Date: 31.MAR.2010 15:22:43

2443-2458MHz



Date: 31.MAR.2010 15:32:44

2461-2476MHz



Date: 31.MAR.2010 15:37:03

8. Carrier Frequency Separation

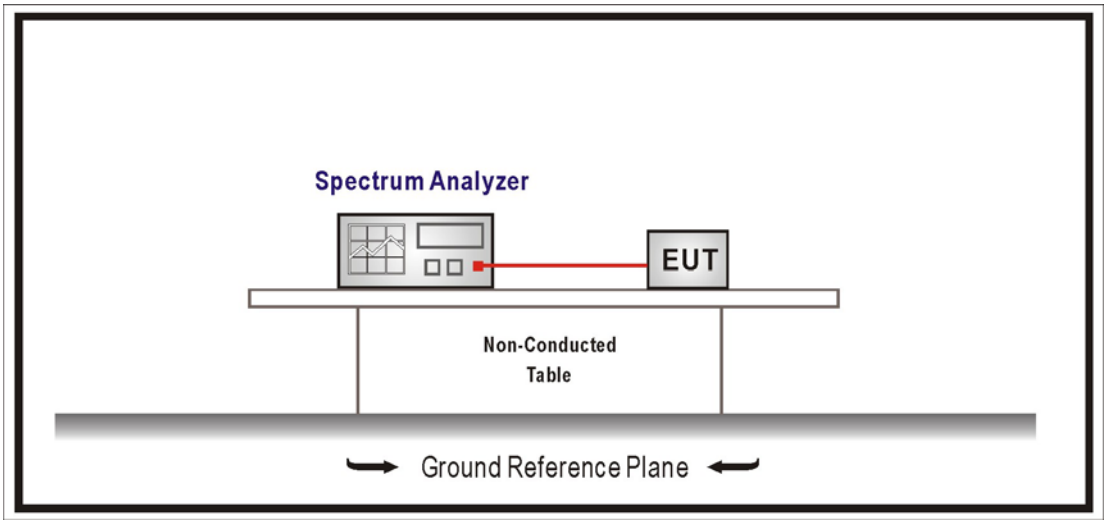
8.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

8.2. Test Setup



8.3. Limits

For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = wide enough to capture the peaks of two adjacent channels

Resolution Bandwidth (RBW) ≥ 1% of the span, VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

8.5. Test Specification

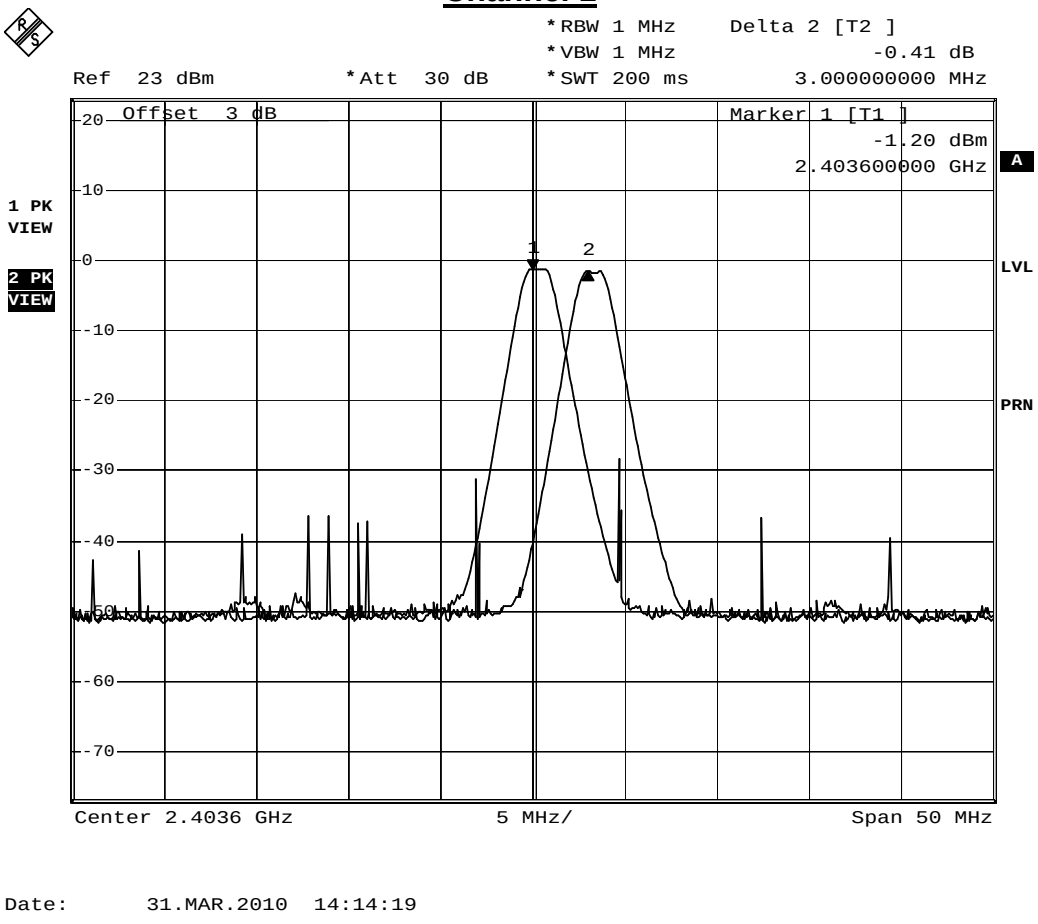
According to FCC Part 15 Subpart C Paragraph 15.247: 2009

8.6. Test Result

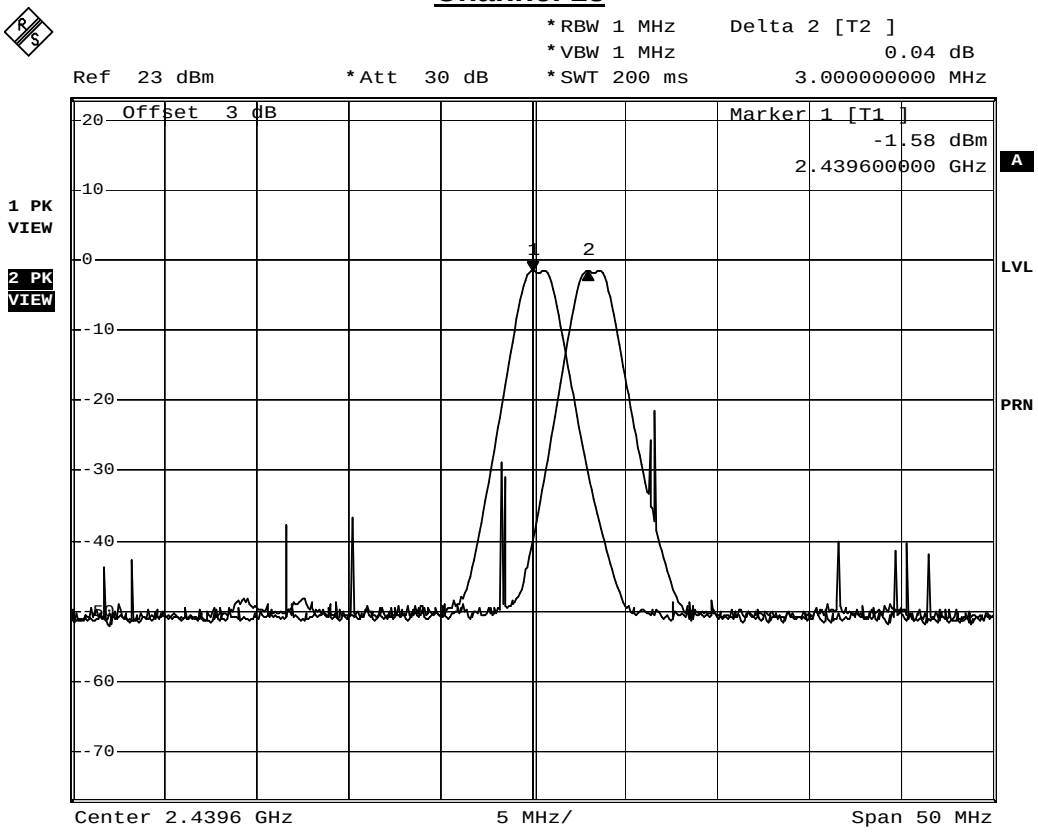
Product	Wireless Audio Box		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/31	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
1	2404	3	>1.413	Pass
13	2440	3	>1.413	Pass
25	2476	3	>1.400	Pass

Channel 1

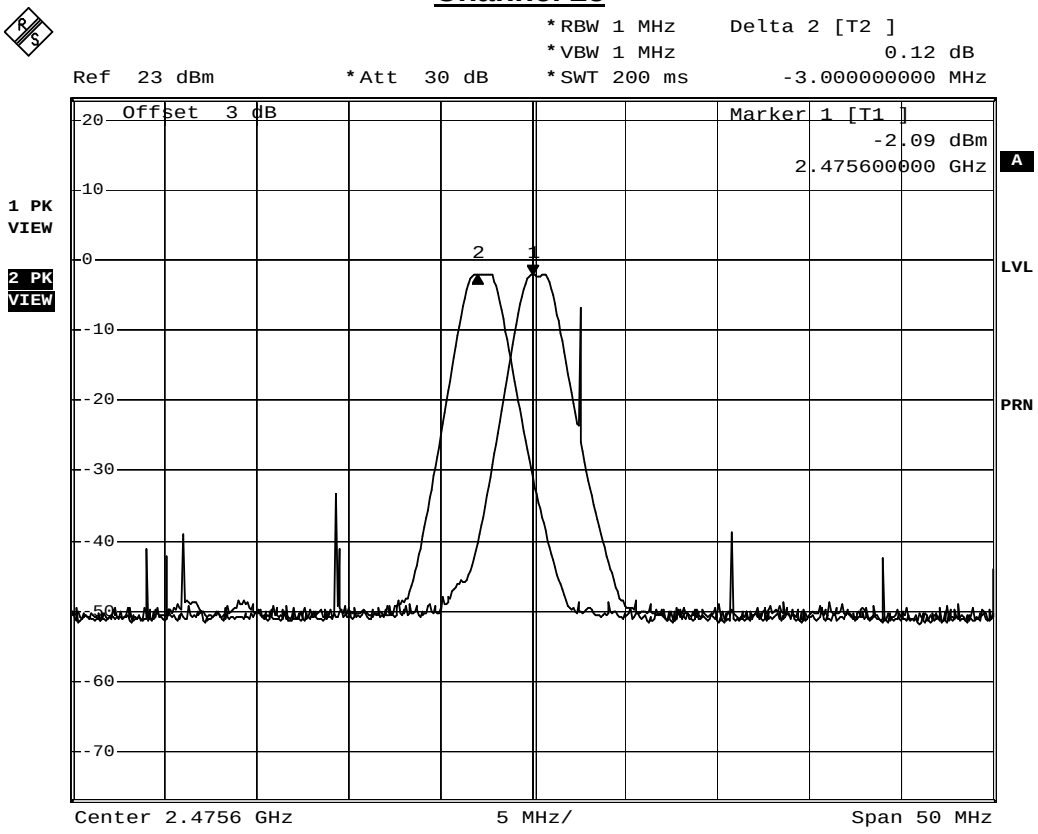


Channel 13



Date: 31.MAR.2010 14:16:38

Channel 25


*RBW 1 MHz
*VBW 1 MHz
*SWT 200 ms
Delta 2 [T2]
0.12 dB
-3.000000000 MHz
Ref 23 dBm
*Att 30 dB
Offset 3 dB
Marker 1 [T1]
-2.09 dBm
2.475600000 GHz
1 PK VIEW
2 PK VIEW
A
LVL
PRN
20
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.4756 GHz
5 MHz/
Span 50 MHz
Date: 31.MAR.2010 14:19:27

9. Occupied Bandwidth (20dB)

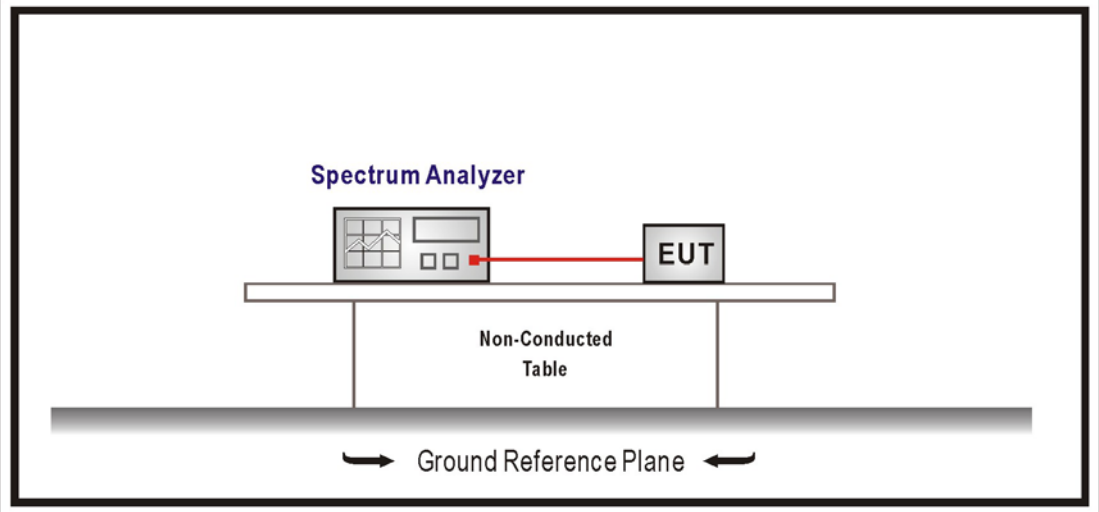
9.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

9.2. Test Setup



9.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

For frequency hopping systems operating in the 5725-5850 MHz bands. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.

For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

9.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel

RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

The EUT should be transmitting at its maximum data rate.

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2009

9.6. Uncertainty

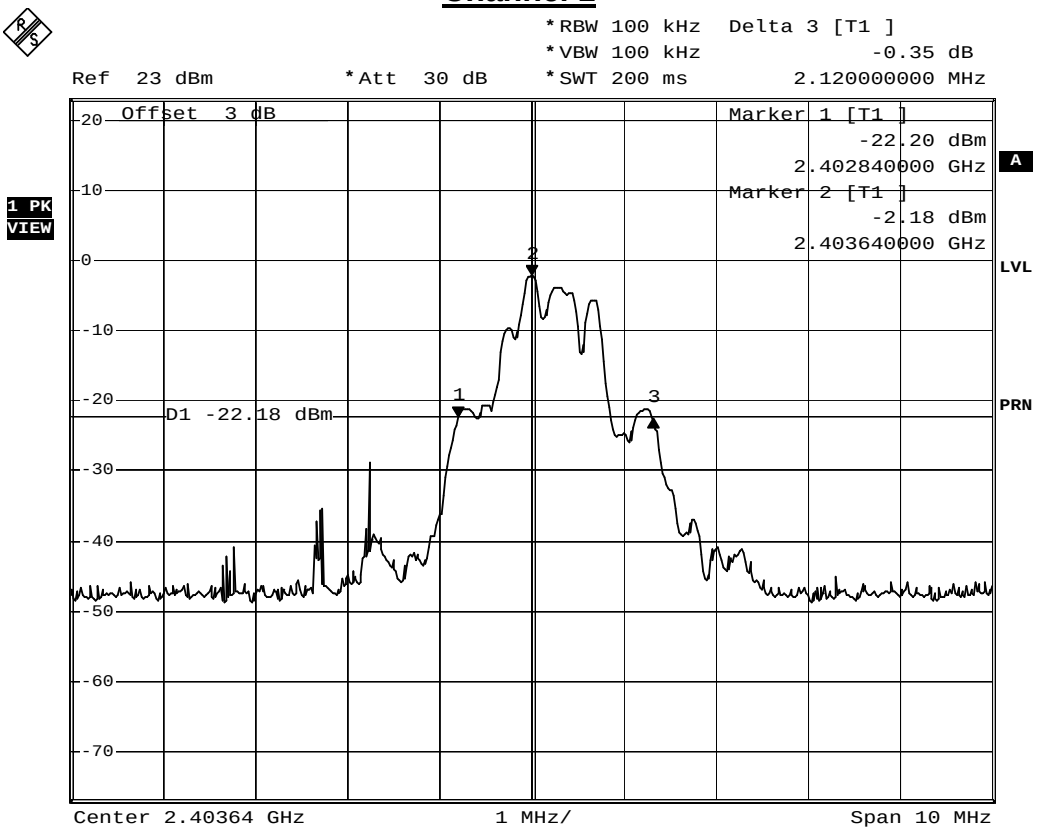
The measurement uncertainty is defined as ±150Hz

9.7. Test Result

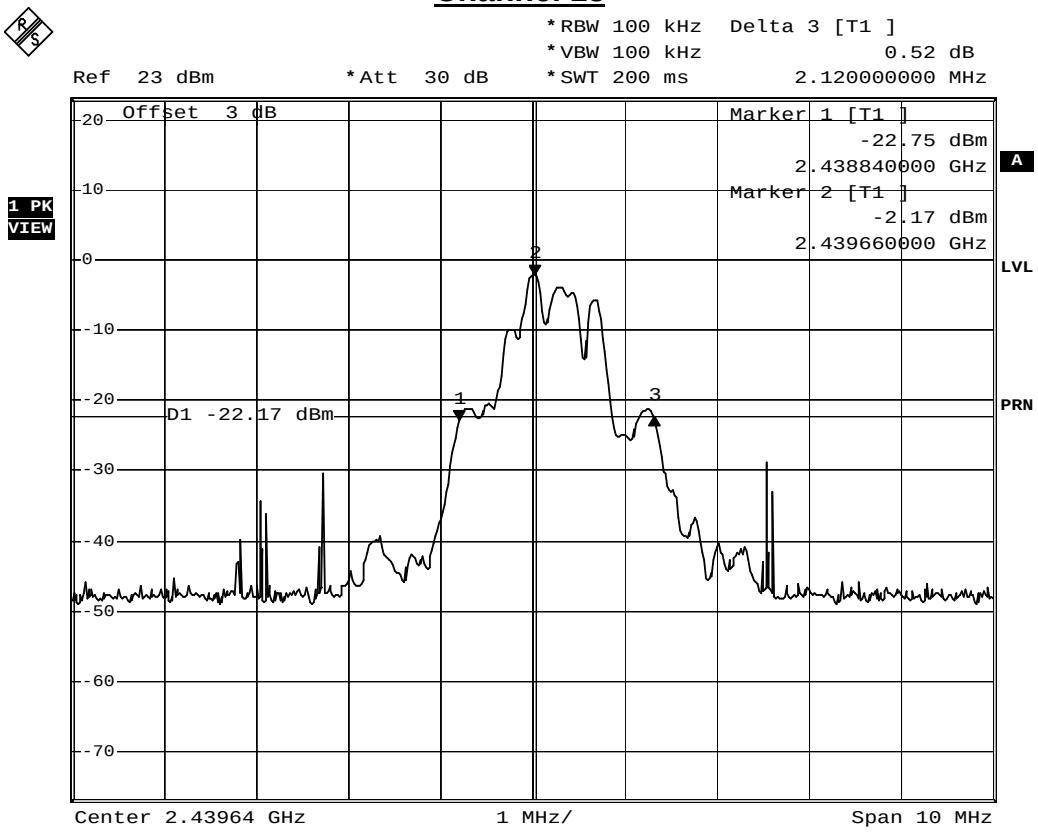
Product	Wireless Audio Box		
Test Item	Occupied Bandwidth (20dB)		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/31	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
1	2404	2.12	--	Pass
13	2440	2.12	--	Pass
25	2476	2.10	--	Pass

Channel 1

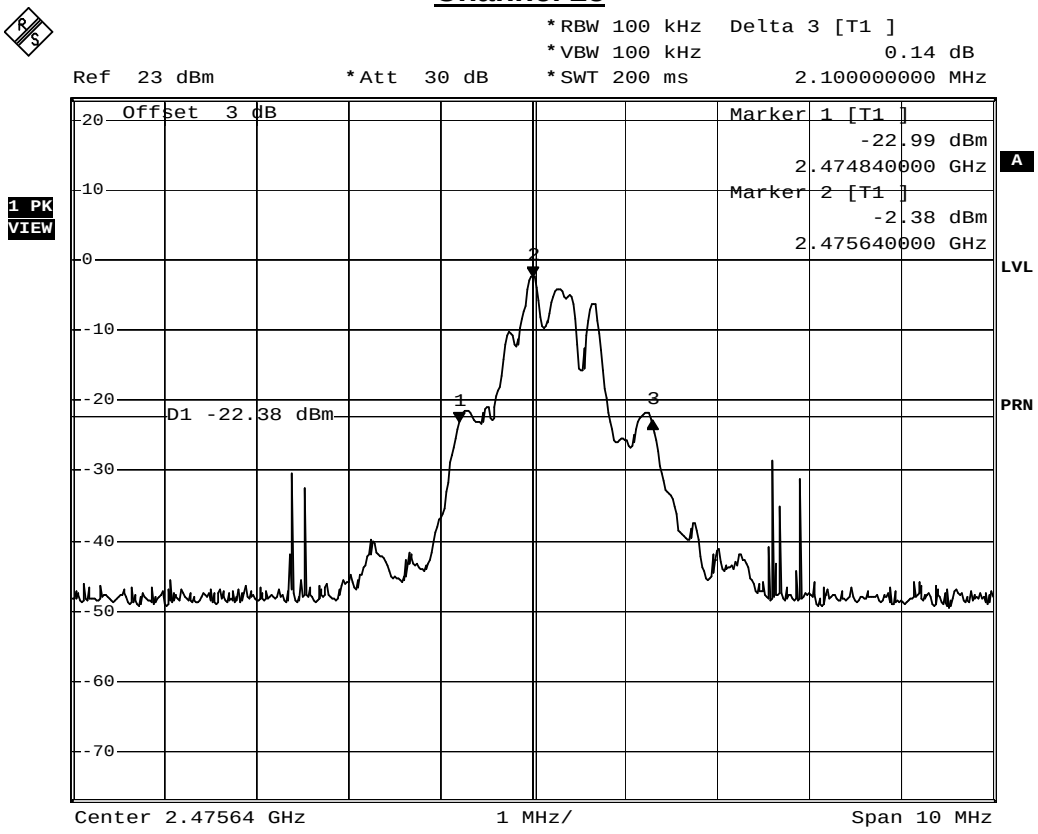


Channel 13



Date: 31.MAR.2010 11:53:21

Channel 25



Date: 31.MAR.2010 11:55:48

10. Occupied Bandwidth (6dB)

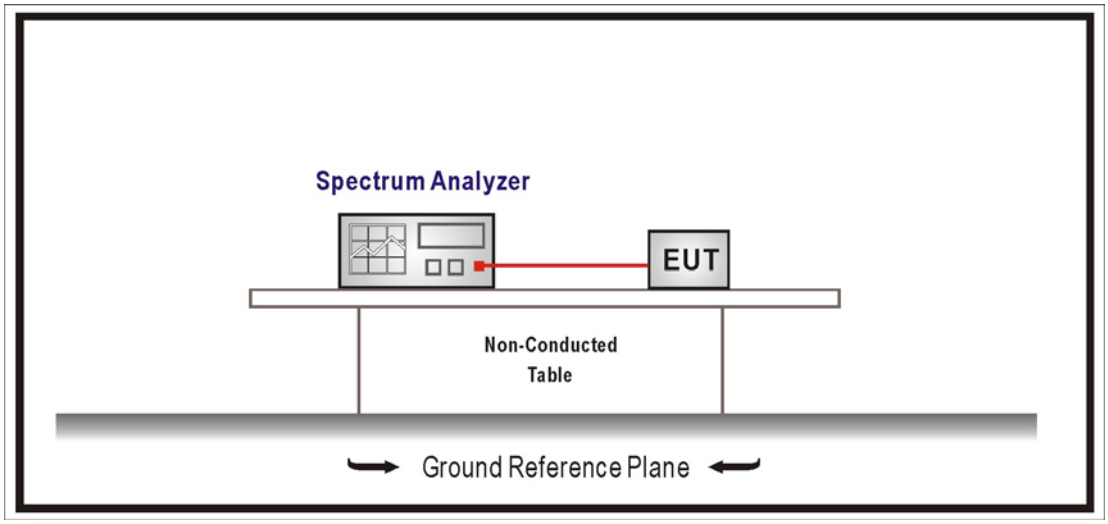
10.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

10.2. Test Setup



10.3. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; 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.

10.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

10.5. Uncertainty

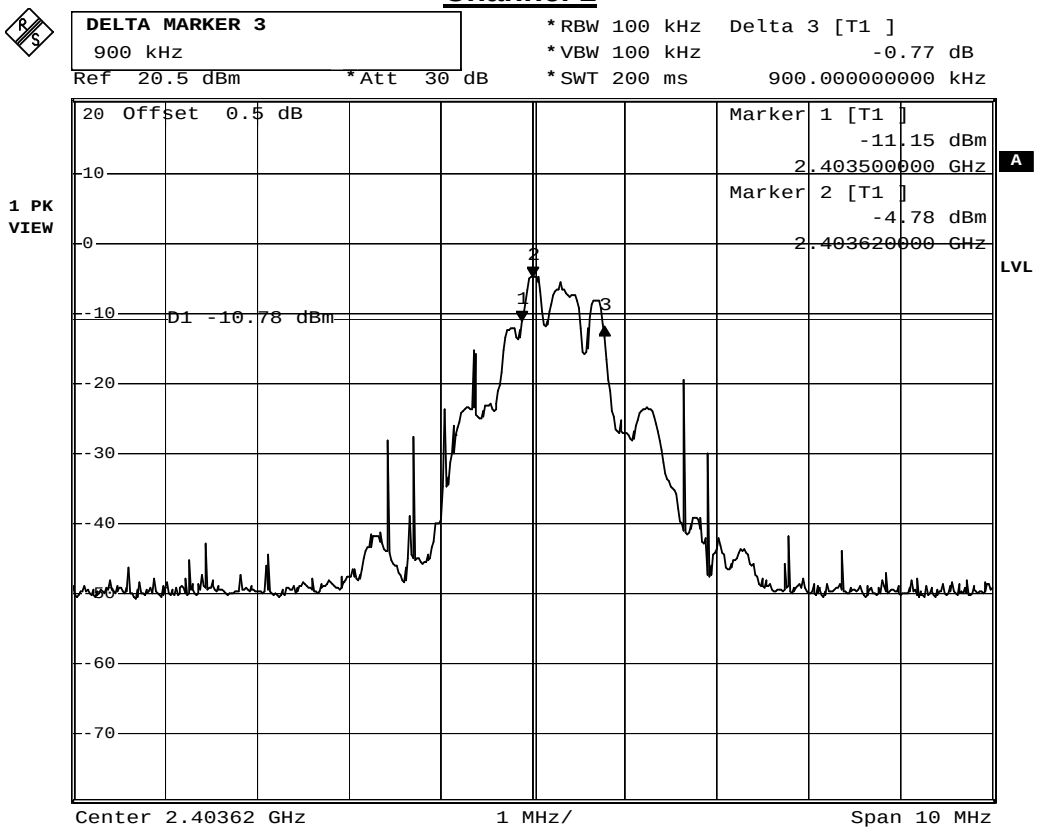
The measurement uncertainty is defined as ±150Hz

10.6. Test Result

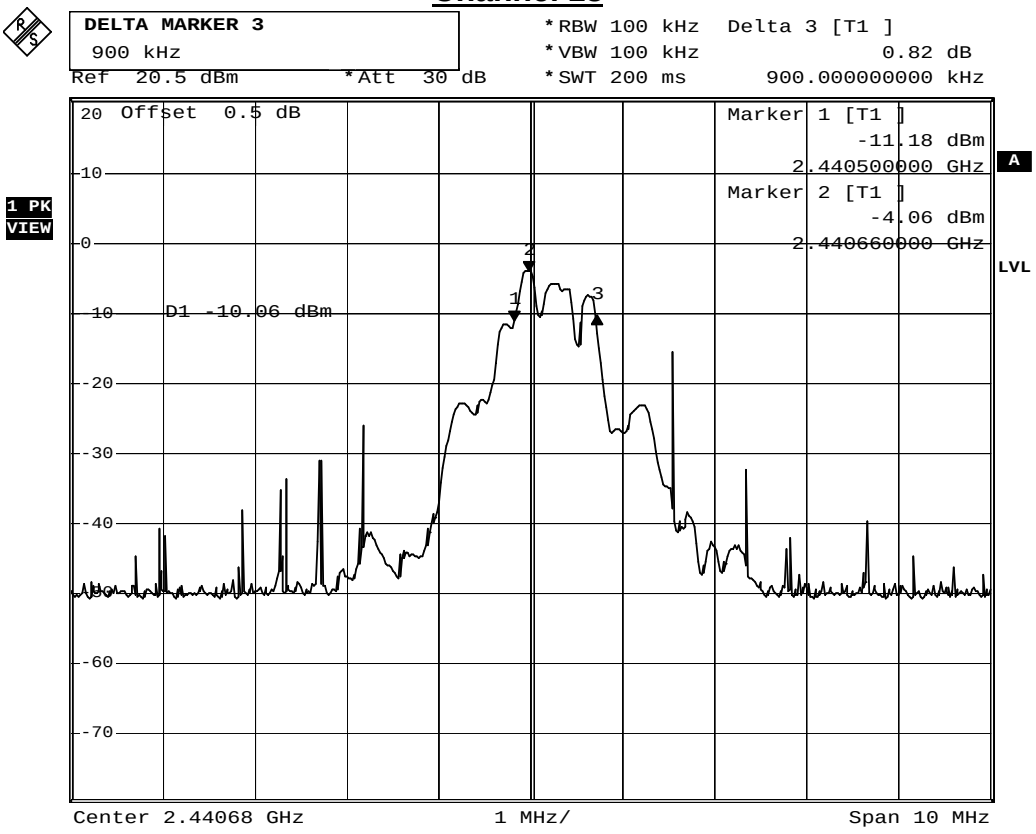
Product	Wireless Audio Box		
Test Item	Occupied Bandwidth (6dB)		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/04/28	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
1	2404	900	≧500	Pass
13	2440	900	≧500	Pass
25	2476	860	≧500	Pass

Channel 1

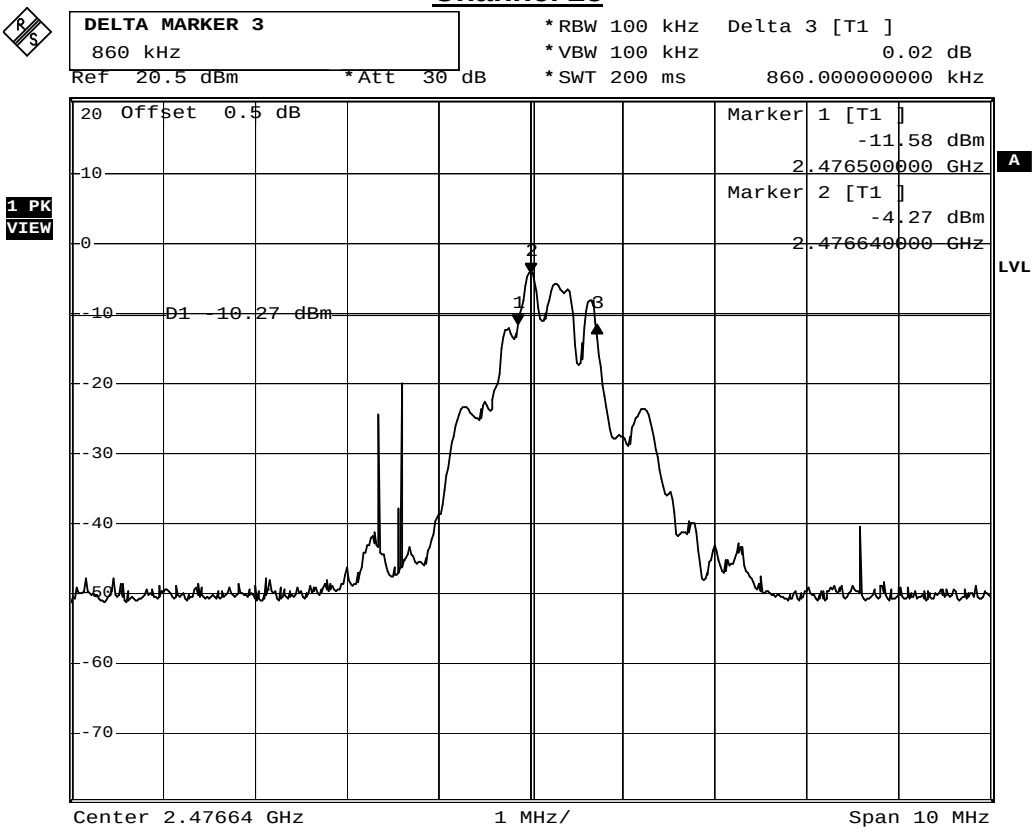


Channel 13



Date: 28.APR.2010 17:28:15

Channel 25



Date: 28.APR.2010 17:37:55

11. Dwell Time

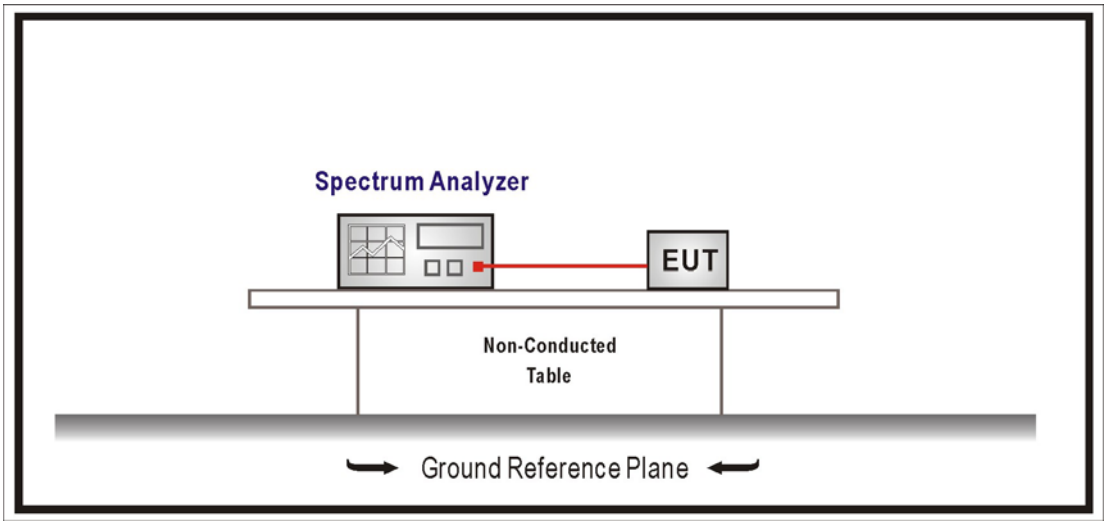
11.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

11.2. Test Setup



11.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.
For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
For frequency hopping systems operating in the 5725-5850 MHz bands. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

11.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = zero span, centered on a hopping channel
RBW = 1 MHz, VBW ≥ RBW
Sweep = as necessary to capture the entire dwell time per hopping channel
Detector function = peak, Trace = max hold

11.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2009

11.6. Test Result

Product	Wireless Audio Box		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2010/03/31	Test Site	No.1 OATS

Occupancy Time of Frequency Hopping System

A) 2404MHz Test Time Period: 0.4*25=10sec，Hopping Times Within 1sec: 3/20msec=150 /sec

The Maximum Occupancy Time Within 10sec: 0.00396*(150/25)*10=0.2376sec。

B) 2440MHz Test Time Period: 0.4*25=10sec，Hopping Times Within 1sec: 3/20msec=150 /sec

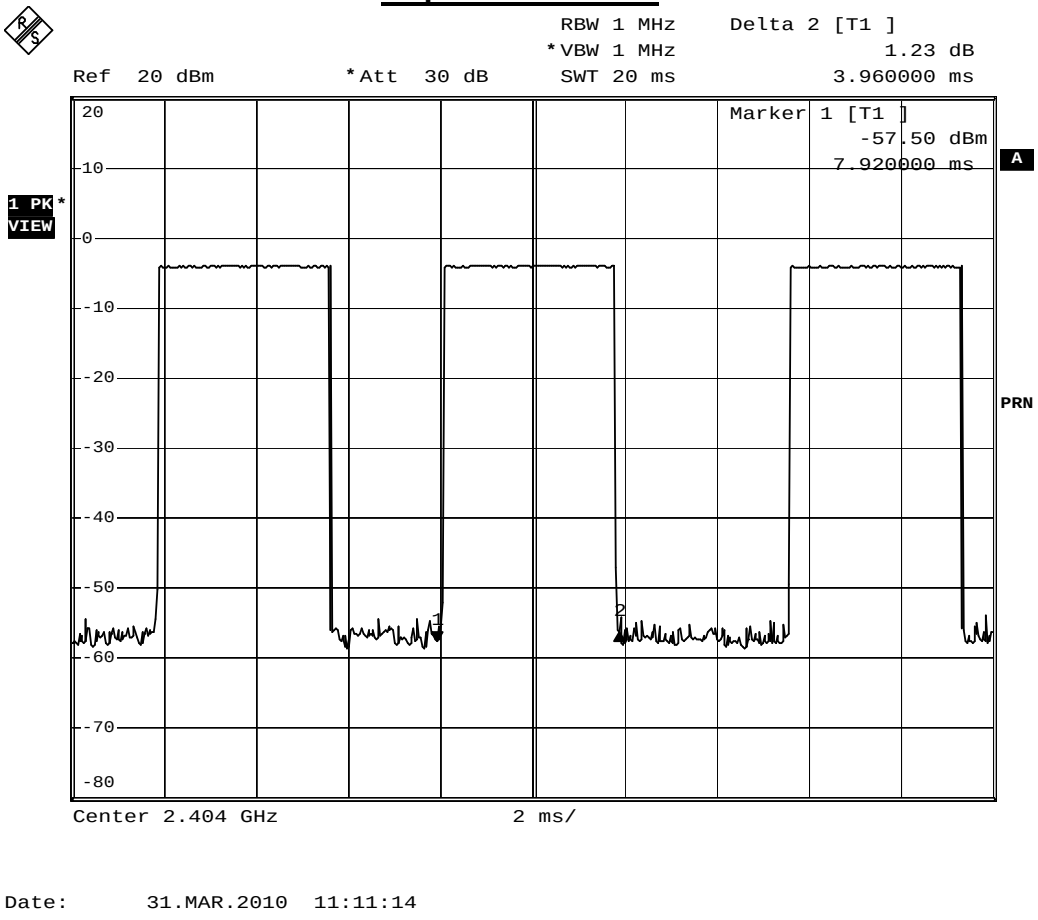
The Maximum Occupancy Time Within 10sec: 0.00392*(150/25)*10=0.2352sec。

C) 2476MHz Test Time Period: 0.4*25=10sec，Hopping Times Within 1sec: 3/20msec=150 /sec

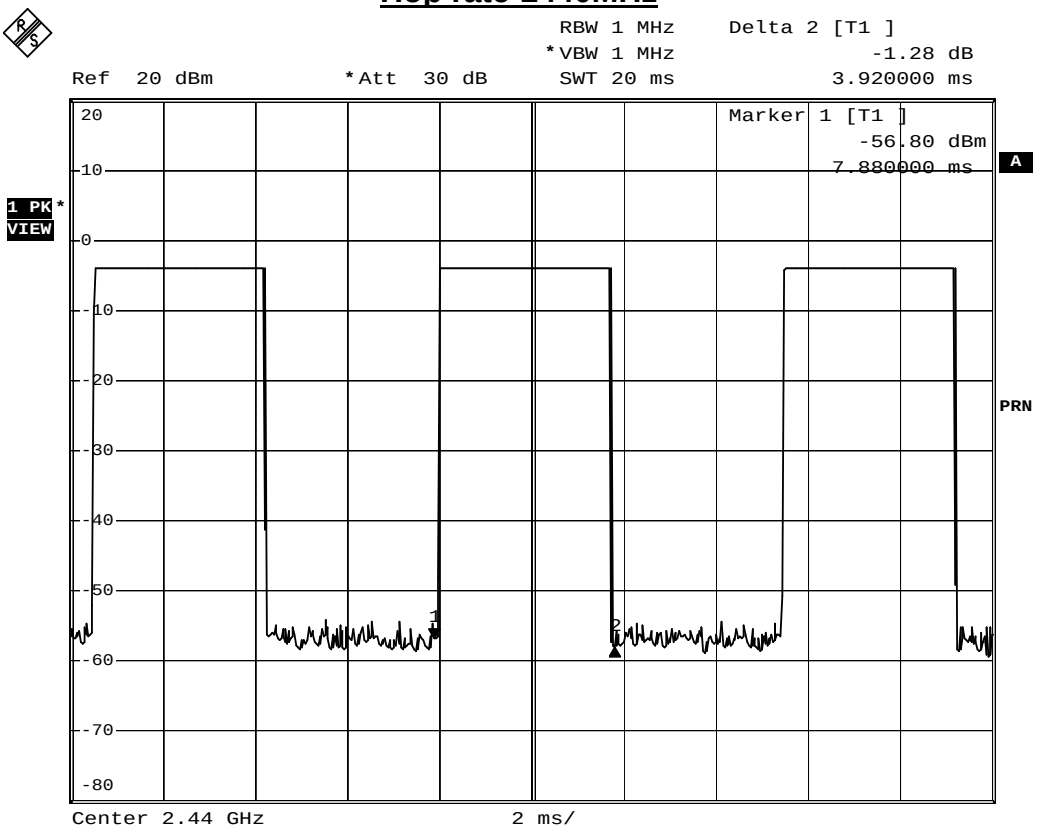
The Maximum Occupancy Time Within 10sec: 0.00388(150/25)*10=0.2328sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

Hop rate-2404MHz

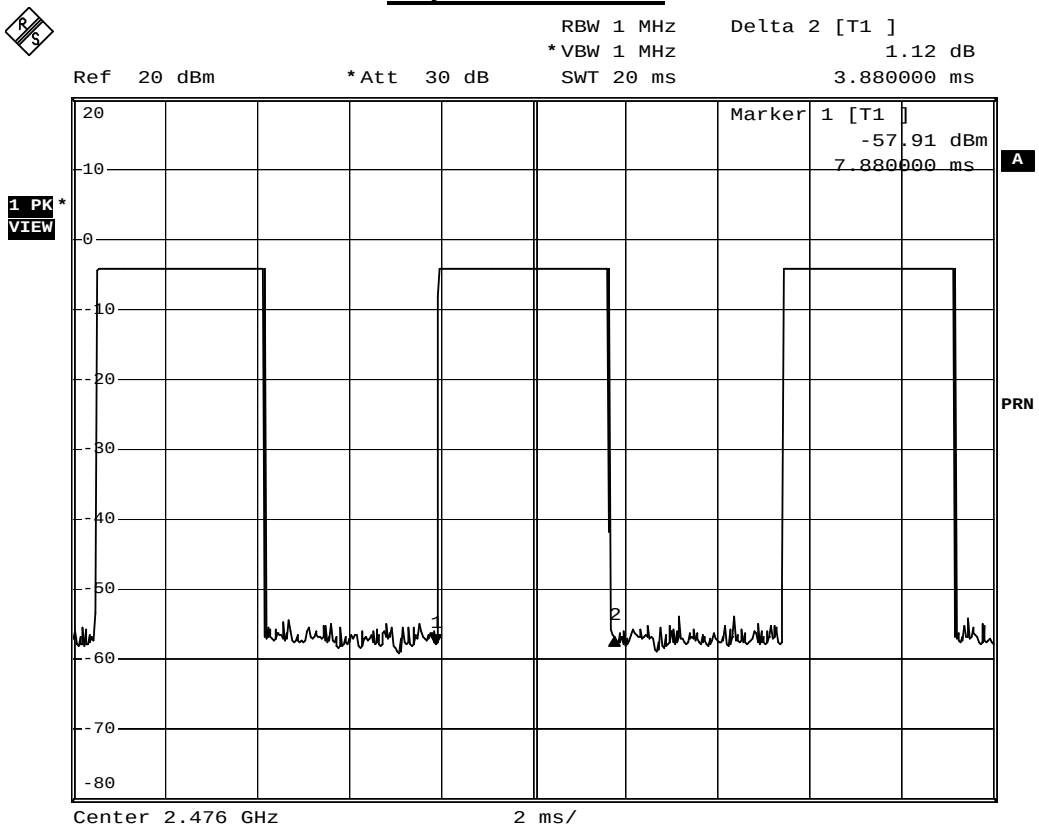


Hop rate-2440MHz



Date: 31.MAR.2010 11:13:56

Hop rate-2476MHz



Date: 31.MAR.2010 11:17:01

12. Power Density

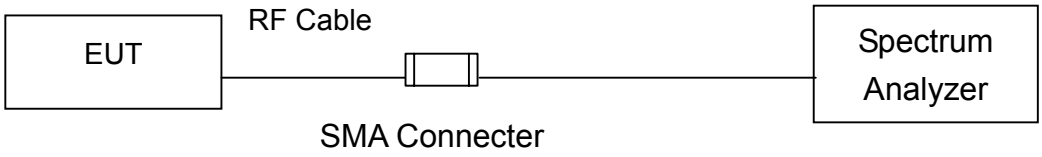
12.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2010
2	No.1 OATS			Sep., 2009

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

12.2. Test Setup



12.3. 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.

12.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; 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

12.5. Uncertainty

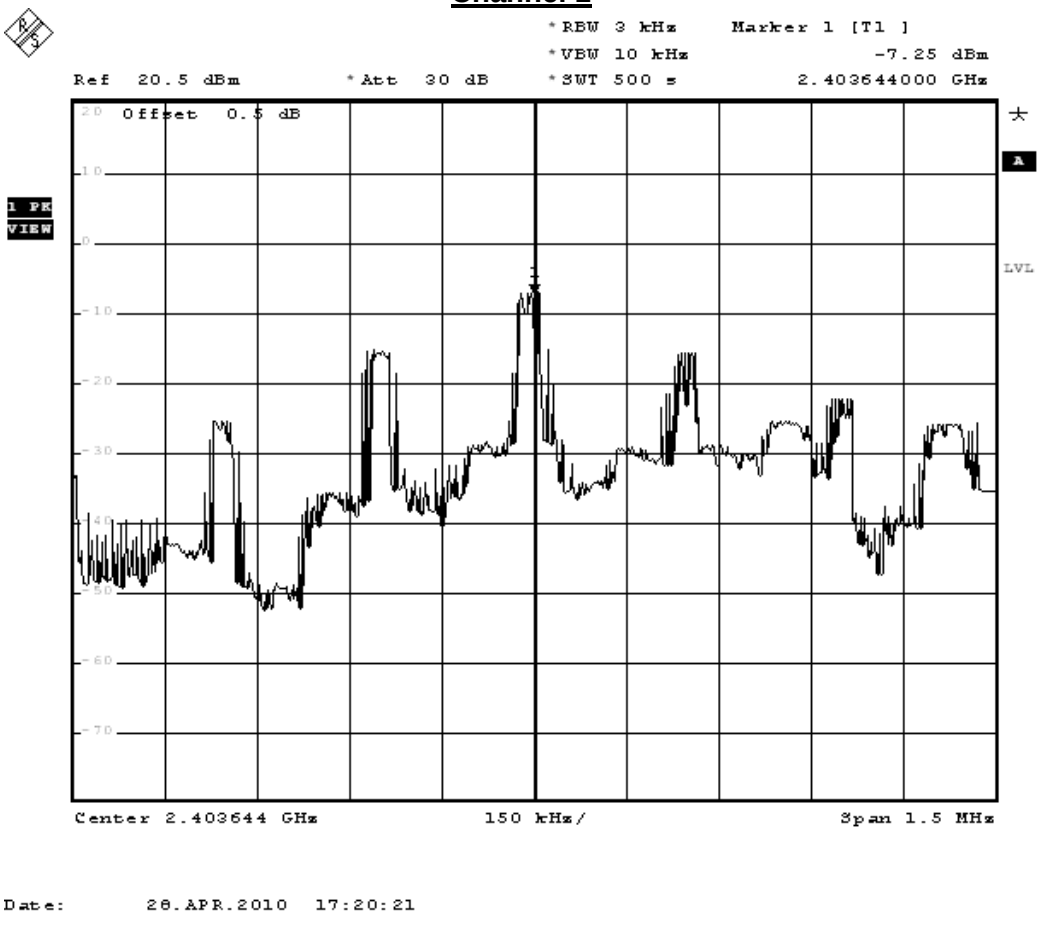
The measurement uncertainty is defined as ±1.27dB.

12.6. Test Result

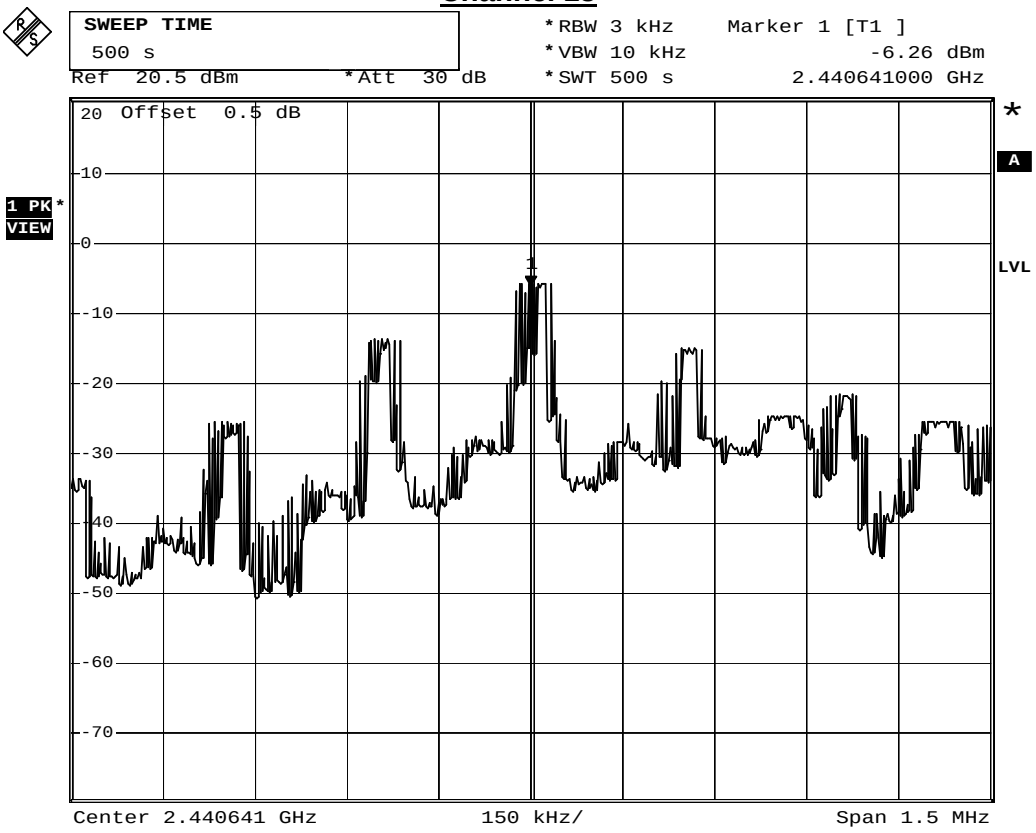
Product	Wireless Audio Box		
Test Item	Power Density		
Test Mode	Mode 1: Transmit-Box		
Date of Test	2009/04/28	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2404	-7.25	≦8	Pass
13	2440	-6.26	≦8	Pass
25	2476	-6.58	≦8	Pass

Channel 1

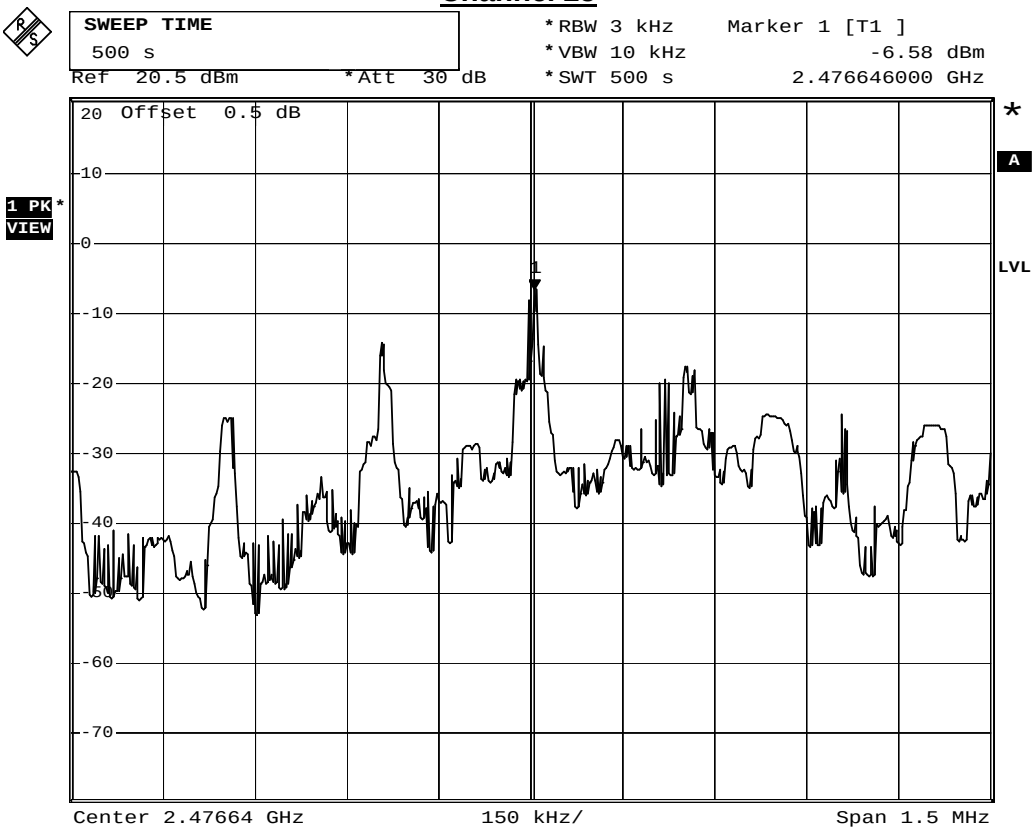


Channel 13



Date: 28.APR.2010 17:35:00

Channel 25



Date: 28.APR.2010 17:41:34