FCC PART 15.247

EMI MEASUREMENT AND TEST REPORT

For

GLOBAL WATCH INDUSTRIES SRL

LARGO DEGLI STAGNINI No. 4-5-6, ZONA ARTIGIANALE,70026 MODUGNO (BA) Italy

FCC ID: TOECT8239

October 11, 2005

This Report Concerns:	**Equipment Type:**
☒ Original Report	Bluetooth Headset, BLUEVOICE

Test Engineer:	Louise Lu
Report No.:	RSZ05091706
Test Date:	September 29- October 10, 2005
Reviewed By:	Chris Zeng
Prepared By:	Bay Area Compliance Lab Corp. (ShenZhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China Tel: +86-755-33320018 Fax: +86-755-33320008

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *GLOBAL WATCH INDUSTRIES SRL*'s product, model number: CT.8239 or the "EUT" as referred to in this report is a Bluetooth Headset , and puoduct name is BLUEVOICE. The EUT is measured approximately 23.0 cm L x 3.8 cm W x 2.3 cm H, rated input voltage: DC 3.7V battery.

** The test data gathered are from production sample, serial number: CT051011, provided by the manufacturer, we receive the EUT 2005-9-17.*

Objective

The following test report is prepared on behalf of *GLOBAL WATCH INDUSTRIES SRL* in accordance with Part 2, Subpart J, and Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207,15.209, and 15.247 rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Lab Corp. (ShenZhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Lab Corp. (ShenZhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China.

Test site at Bay Area Compliance Lab Corp. (ShenZhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Lab Corp. (ShenZhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0). The current scope of accreditations can be found at http://ts.nist.gov/ts/htdocs/210/214/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

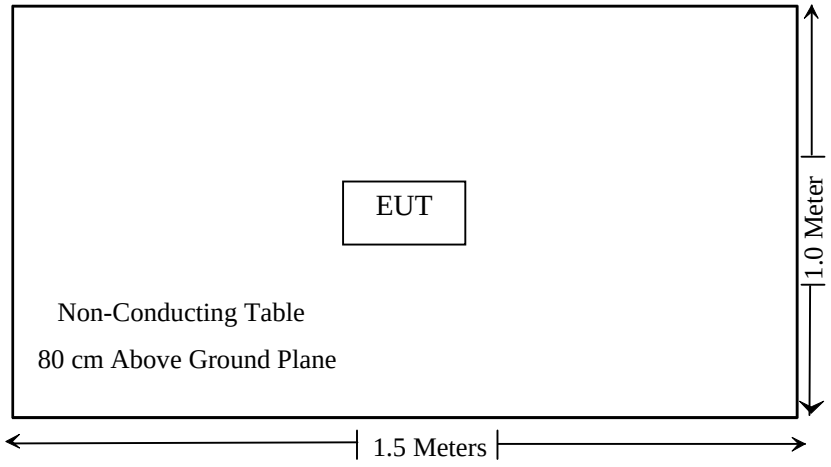
Equipment Modifications

Bay Area Compliance Lab Corp. (ShenZhen) has not done any modification on the EUT.

Configuration of Test Setup

EUT

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.203	Antenna Requirement	Compliant
§15.205&§15.209	Radiated Emission	Compliant *
§15.247(a)(1)	Channel Separation Test	Compliant
§15.247(a)(1)(iii)	Time of occupancy (Dwell Time)	Compliant
§15.247(a)(1)(iii)	Quantity of hopping channel Test	Compliant
§15.247(b)(1)	Peak Output Power Measurement	Compliant
§15.247(d)	Band edges testing	Compliant
§15.247(b)(5) § 2.1093	RF Safety Requirements	Compliant
§ 2.1051	Spurious Emission at Antenna Port	Compliant

* Within measurement uncertainty

§15.203 - ANTENNA APPLICATION

Applicable Standard

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a permanent antenna, fulfill the requirement of this section.

Test Result: Pass

§15.205, §15.209, §15.247 - RADIATED EMISSION

Applicable Standard

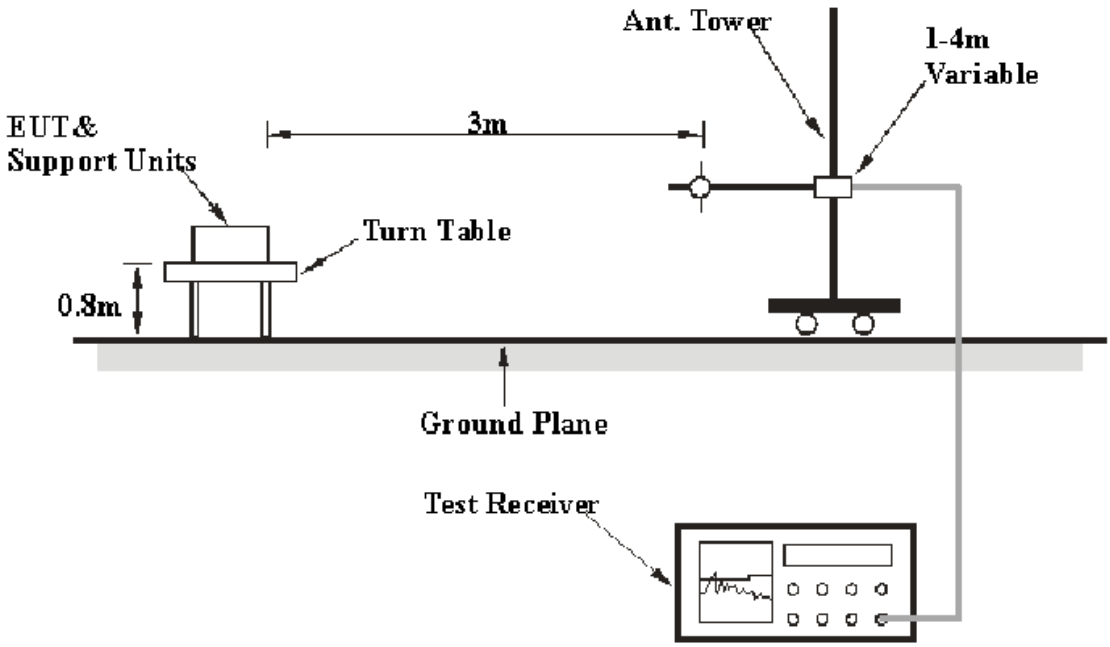
According to FCC §15.247 (d)

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ±4.4 dB.

EUT Setup



The radiated emission tests were performed in the 3-meter Chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209 and FCC 15.247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	***RBW***	***Video B/W***
30MHz – 1000 MHz	100 kHz	300 kHz
1000 MHz – 25 GHz	1 MHz	3 MHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
A.H. System	Horn Antenna	SAS-200/571	135	2005-4-28	2006-4-28
HP	Amplifier	HP8447D	2944A09795	2005-8-17	2006-8-17
HP	Preamplifier	8449B	3008A00277	2005-8-17	2006-8-17
Rohde & Schwarz	Spectrum Analyzer	FSEM30	849720/019	2004-11-10	2005-11-10
Rohde&Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2005-4-28	2006-4-28

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the PK&AV detection mode.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Meter reading. The basic equation is as follows:

Corr. Ampl. =Meter Reading + Antenna Loss+ Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Corr. Ampl. –Standard Limit

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.207, and 15.247, with the worst margin reading of:

-2.1 dB at **14412 MHz** in the **Horizontal** polarization, Low Channel

-2.1 dB at **14646 MHz** in the **Horizontal** polarization, Middle Channel

-2.1 dB at **14880 MHz** in the **Vertical** polarization, High Channel

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Louise Lu on 2005-9-30

Test mode: Transmitting

Indicated			Table	Antenna		Correction Factor			Corrected Amplitude	FCC 15 .209 & FCC 15.247	
Frequency MHz	Meter Reading dBμV/m	Comments	Angle Degree	Height Meter	Polar H/ V	Antenna Loss dB	Cable Loss dB	Amp. Gain dB	Corr. Ampl. dBμV/m	Limit dBμV/m	Margin dB
Low Channel, 1GHz-25GHz											
2402	81.70	PK	180	1.2	H	28.1	3.7	35.16	78.3		
2402	81.00	AV	90	1.0	H	28.1	3.7	35.16	77.6		
2402	83.80	PK	60	1.2	V	28.1	3.7	35.16	80.4		
2402	83.60	AV	270	1.0	V	28.1	3.7	35.16	80.2		
14412	33.40	AV	180	1.2	H	42.1	8.7	32.33	51.9	54	-2.1
14412	33.25	AV	180	1.2	V	42.1	8.7	32.33	51.7	54	-2.3
14412	37.96	PK	45	1.0	H	42.1	8.7	32.33	56.4	74	-17.6
14412	36.52	PK	45	1.2	V	42.1	8.7	32.33	55.0	74	-19.0
7206	44.31	PK	180	1.2	H	36.8	6.1	33.50	53.7	74	-20.3
7206	43.78	PK	45	1.0	V	36.8	6.1	33.50	53.2	74	-20.8
12010	39.60	PK	60	1.0	H	40.5	7.9	35.00	53.0	74	-21.0
9608	42.07	PK	45	1.2	H	38.0	7.3	35.17	52.2	74	-21.8
4804	45.19	PK	180	1.2	V	33.8	5.2	33.00	51.2	74	-22.8
12010	37.60	PK	45	1.2	V	40.5	7.9	35.00	51.0	74	-23.0
4804	44.51	PK	45	1.2	H	33.8	5.2	33.00	50.5	74	-23.5
9608	40.18	PK	60	1.0	V	38.0	7.3	35.17	50.3	74	-23.7

Indicated			Table	Antenna		Correction Factor			Corrected Amplitude	FCC 15 .209 & FCC 15.247	
Frequency MHz	Meter Reading dBμV/m	Comments	Angle Degree	Height Meter	Polar H/ V	Antenna Loss dB	Cable Loss dB	Amp. Gain dB	Corr. Ampl. dBμV/m	Limit dBμV/m	Margin dB
Middle Channel, 1GHz-25GHz											
2441	75.20	PK	45	1.0	H	28.1	3.7	35.16	71.8		
2441	74.80	AV	180	1.2	H	28.1	3.7	35.16	71.4		
2441	77.60	PK	45	1.0	V	28.1	3.7	35.16	74.2		
2441	77.30	AV	60	1.0	V	28.1	3.7	35.16	73.9		
14646	35.78	AV	180	1.2	H	40.6	8.9	33.33	52.0	54	-2.1
14646	35.24	AV	60	1.0	V	40.6	8.9	33.33	51.4	54	-2.6
12205	37.72	AV	45	1.0	H	40.5	7.9	35.00	51.1	54	-2.9
14646	38.53	PK	45	1.2	V	40.6	8.9	33.33	54.7	74	-19.3
12205	41.05	PK	60	1.0	H	40.5	7.9	35.00	54.5	74	-19.6
14646	38.23	PK	180	1.2	H	40.6	8.9	33.33	54.4	74	-19.6
7323	43.87	PK	180	1.2	H	36.8	6.1	33.50	53.3	74	-20.7
9764	41.30	PK	45	1.2	H	38.0	7.0	34.50	51.8	74	-22.2
9764	41.09	PK	45	1.2	V	38.0	7.0	34.50	51.6	74	-22.4
7323	42.07	PK	60	1.0	V	36.8	6.1	33.50	51.5	74	-22.5
4882	44.70	PK	45	1.2	H	33.8	5.2	33.00	50.7	74	-23.3
12205	37.25	PK	180	1.2	V	40.5	7.9	35.00	50.7	74	-23.4
4882	43.75	PK	45	1.0	V	33.8	5.2	33.00	49.8	74	-24.3
High Channel, 1GHz-25GHz											
2480	72.40	PK	45	1.0	H	28.1	3.7	35.16	69.0		
2480	71.90	AV	180	1.2	H	28.1	3.7	35.16	68.5		
2480	70.30	PK	45	1.0	V	28.1	3.7	35.16	66.9		
2480	69.70	AV	60	1.0	V	28.1	3.7	35.16	66.3		
14880	34.62	AV	60	1.0	V	41.5	9.1	33.33	51.9	54	-2.1
12400	36.83	AV	45	1.0	H	41.2	8.3	35.00	51.3	54	-2.7
14880	33.91	AV	45	1.0	H	41.5	9.1	33.33	51.2	54	-2.8
14880	39.64	PK	60	1.0	V	41.5	9.1	33.33	56.9	74	-17.1
14880	37.54	PK	180	1.2	H	41.5	9.1	33.33	54.8	74	-19.2
12400	39.92	PK	60	1.0	H	41.2	8.3	35.00	54.4	74	-19.6
12400	38.62	PK	45	1.2	V	41.2	8.3	35.00	53.1	74	-20.9
9920	42.16	PK	45	1.2	H	37.6	7.3	34.50	52.6	74	-21.4
4960	45.16	PK	45	1.2	H	33.8	5.2	33.00	51.2	74	-22.8
9920	40.38	PK	180	1.2	V	37.6	7.3	34.50	50.8	74	-23.2
7440	42.35	PK	180	1.2	H	35.8	6.1	33.50	50.8	74	-23.3
7440	42.31	PK	45	1.2	V	35.8	6.1	33.50	50.7	74	-23.3
4960	43.83	PK	60	1.0	V	33.8	5.2	33.00	49.8	74	-24.2

§15.247(a)(1)-CHANNEL SEPARATION TEST

Applicable Standard

Frequency hopping systems shall have hoping channel carrier frequencies separated by a minimum of 25 kHz or the 20dB Bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Set the EUT in transmitting mode, spectrum Bandwidth was set at 100 kHz, maxhold the channel.
2. Set the adjacent channel of the EUT maxhold another truce.
3. Measure the channel separation.

Test Data

Environmental Conditions

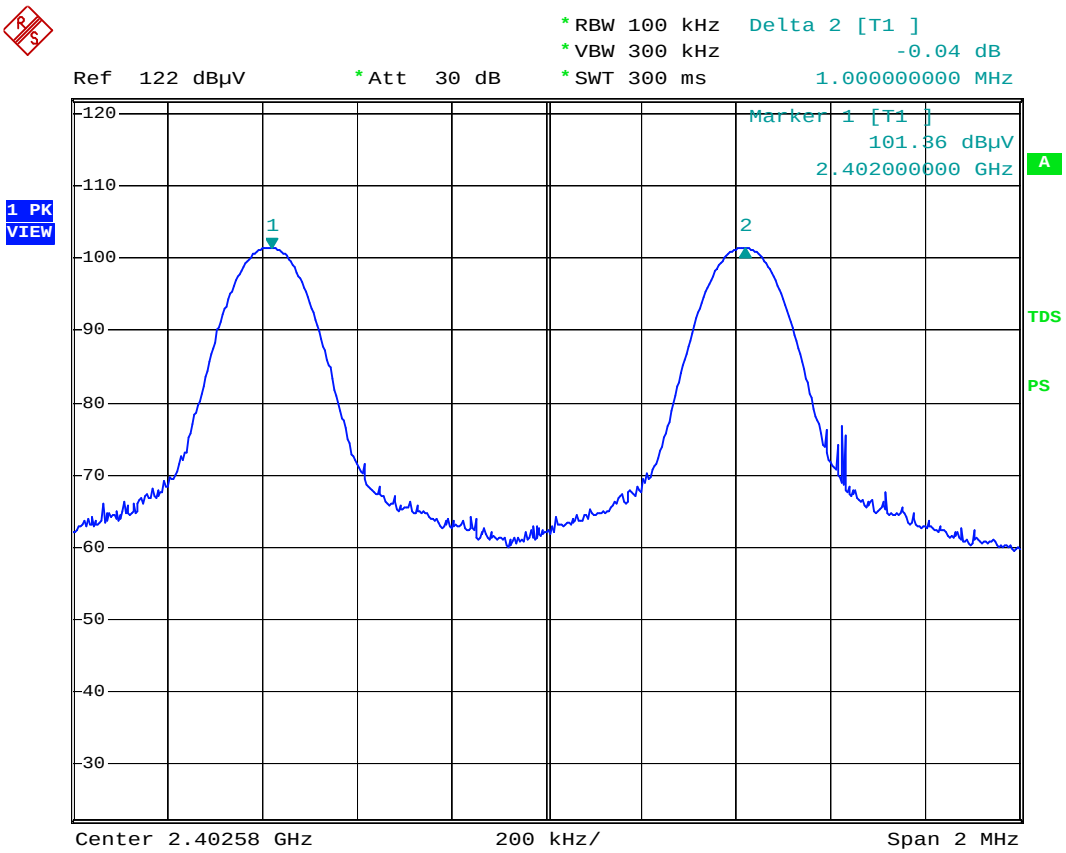
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Louise Lu on 2005-9-29

Test Result: Pass

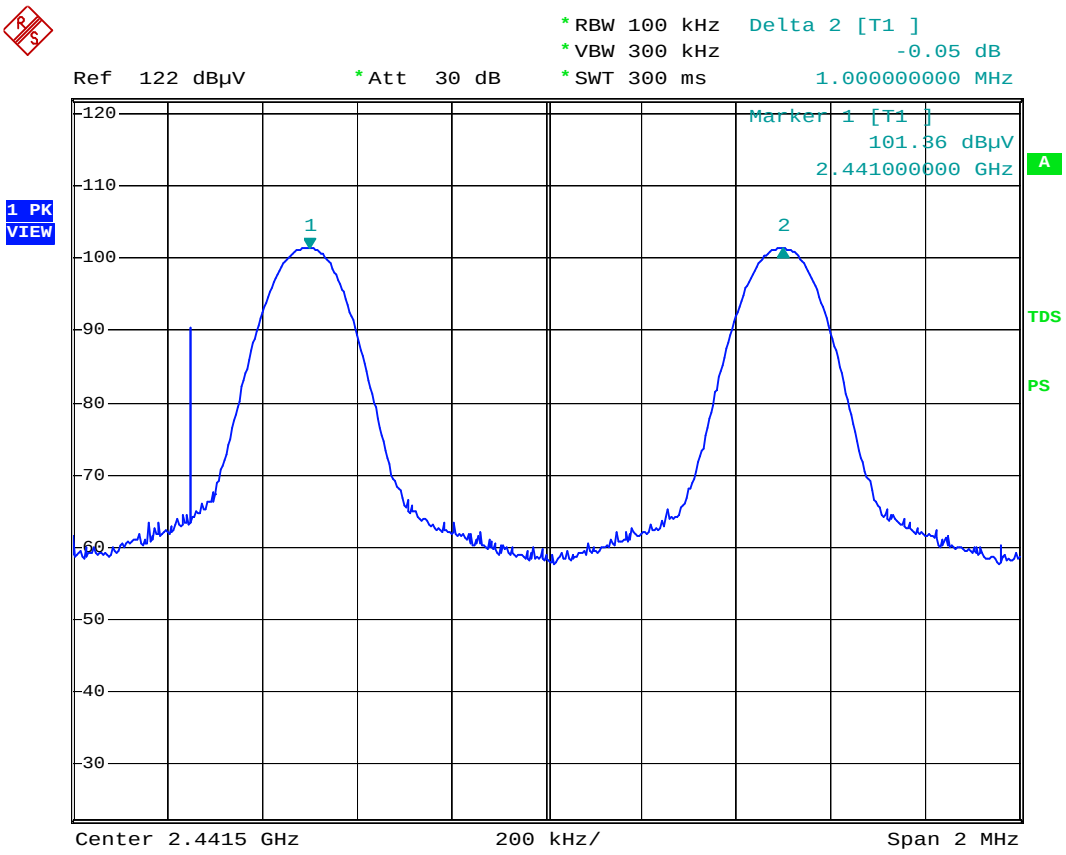
Test mode: Transmitting

CHANNEL	CHANNEL FREQUENCY (MHz)	SEPARATION READ VALUE (kHz)
Low Channel	2402	1000
Adjacency Channel	2403	
Middle Channel	2441	1000
Adjacency Channel	2442	
High Channel	2480	1000
Adjacency Channel	2479	



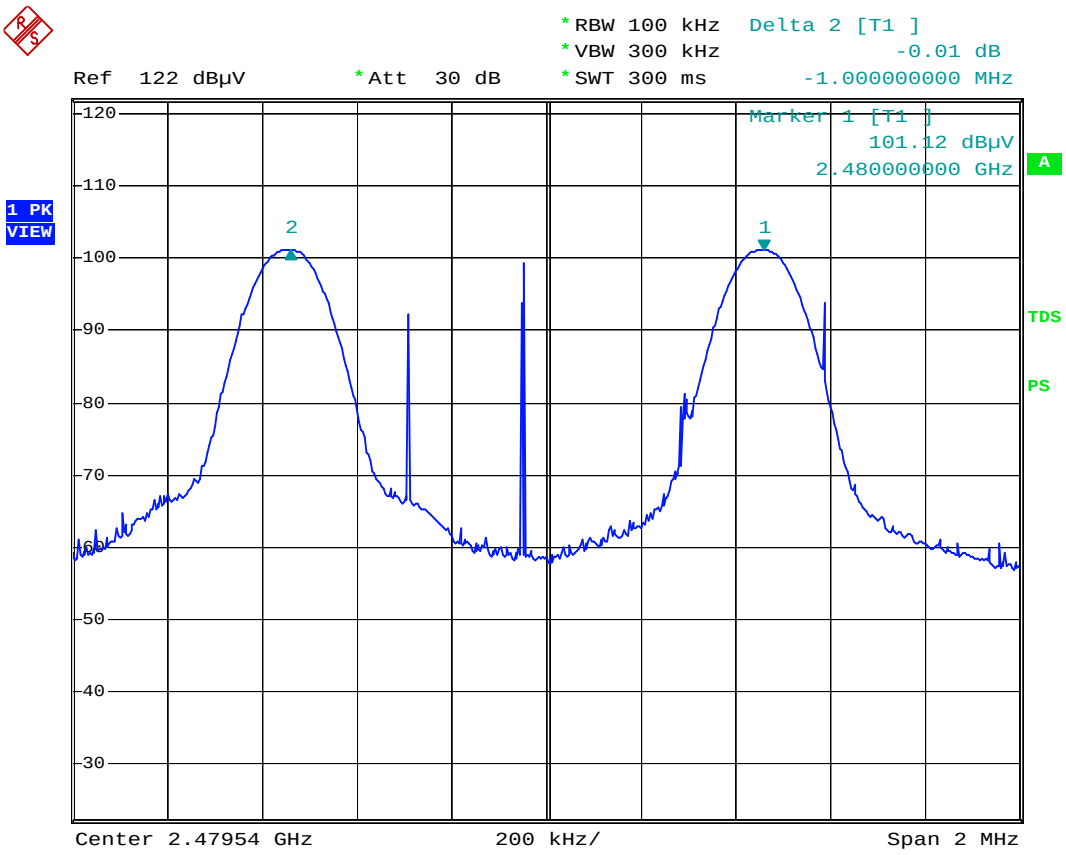
Global Bluevoice M/N: CT.8239 channel separation test (Low channel)

Date: 29.SEP.2005 15:08:38



Global Bluevoice M/N: CT.8239 channel separation test (Middle channel)

Date: 29.SEP.2005 15:03:50



Global Bluevoice M/N: CT.8239 channel separation test (High channel)

Date: 29.SEP.2005 15:01:18

§15.247(a)(1) 20dB BANDWIDTH TESTING

Applicable Standard

Frequency hopping systems shall have hoping channel carrier frequencies separated by a minimum of 25 kHz or the 20dB Bandwidth of the hopping channel, whichever is greater.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument using a known signal from an external generator.
2. Position the EUT without connection to the tunable table. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	1032mbar

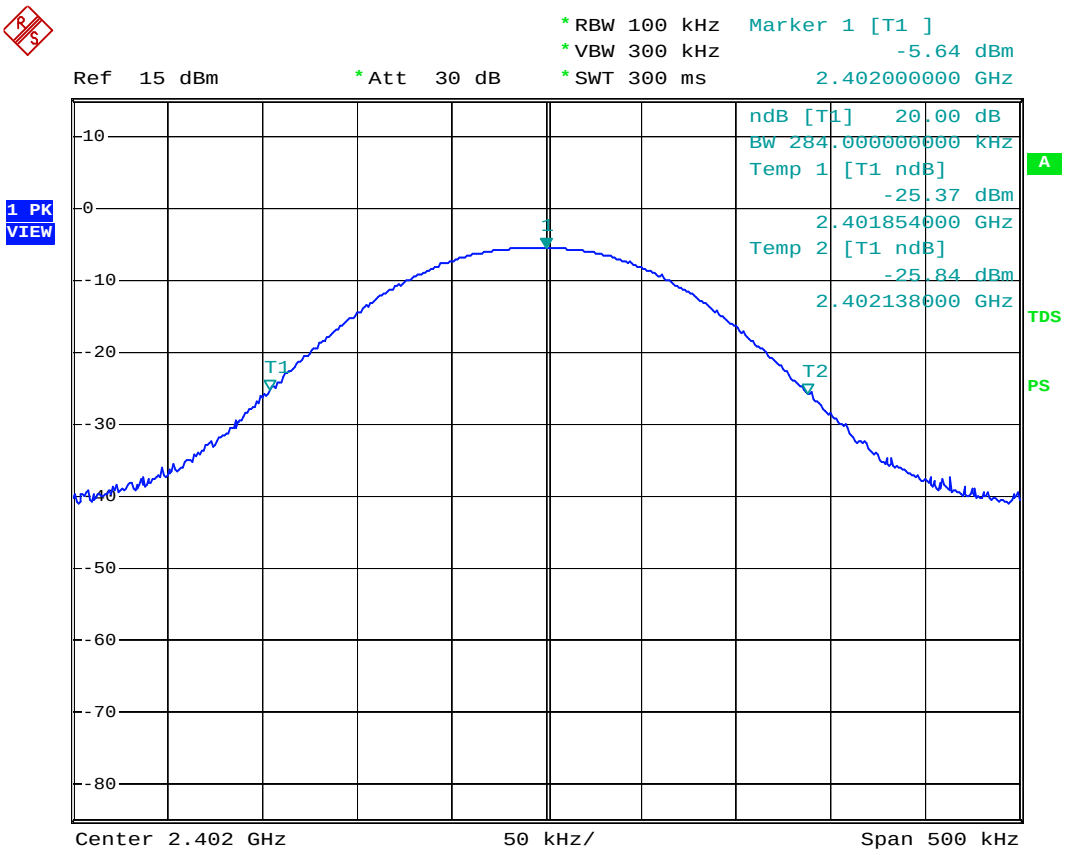
The testing was performed by Louise Lu on 2005-9-29

Test Result: Pass

Test mode: Transmitting

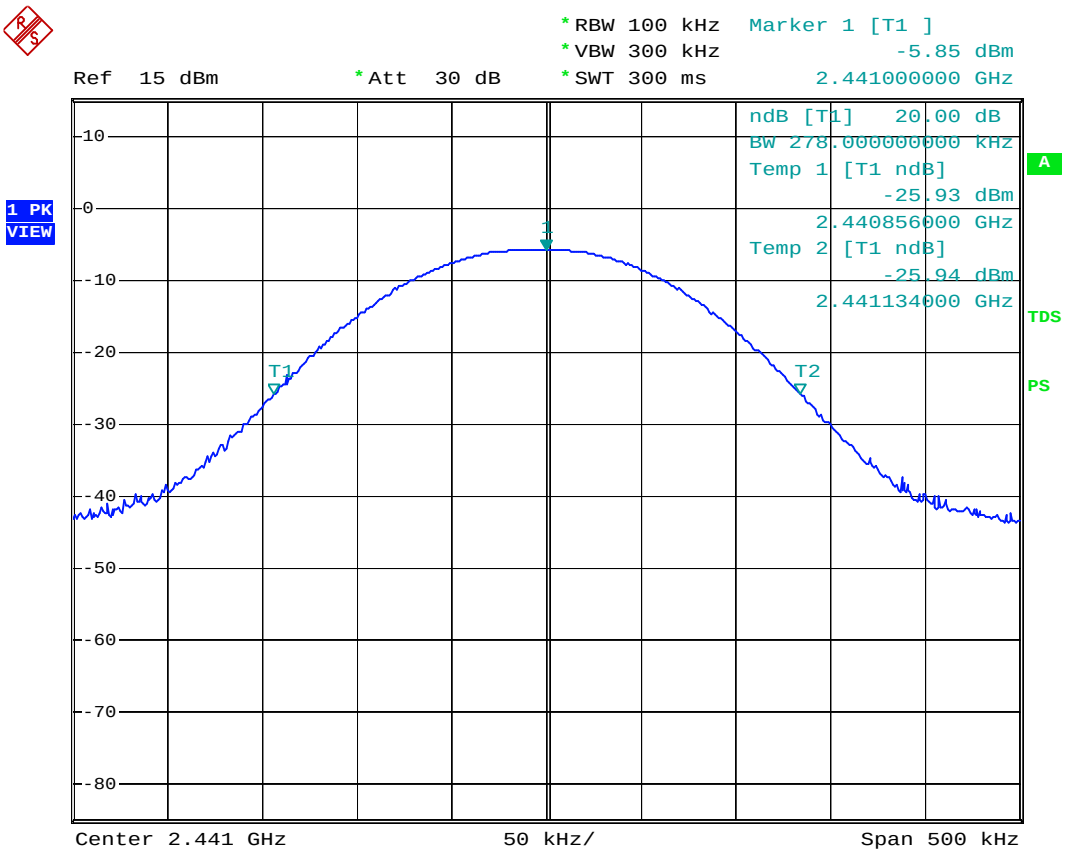
The result has been complied with the §15.247(a)(1), see the following plot:

Channel	Channel frequency (MHz)	20dB Bandwidth (KHz)
Low channel	2402	284
Middle channel	2441	278
High channel	2480	278

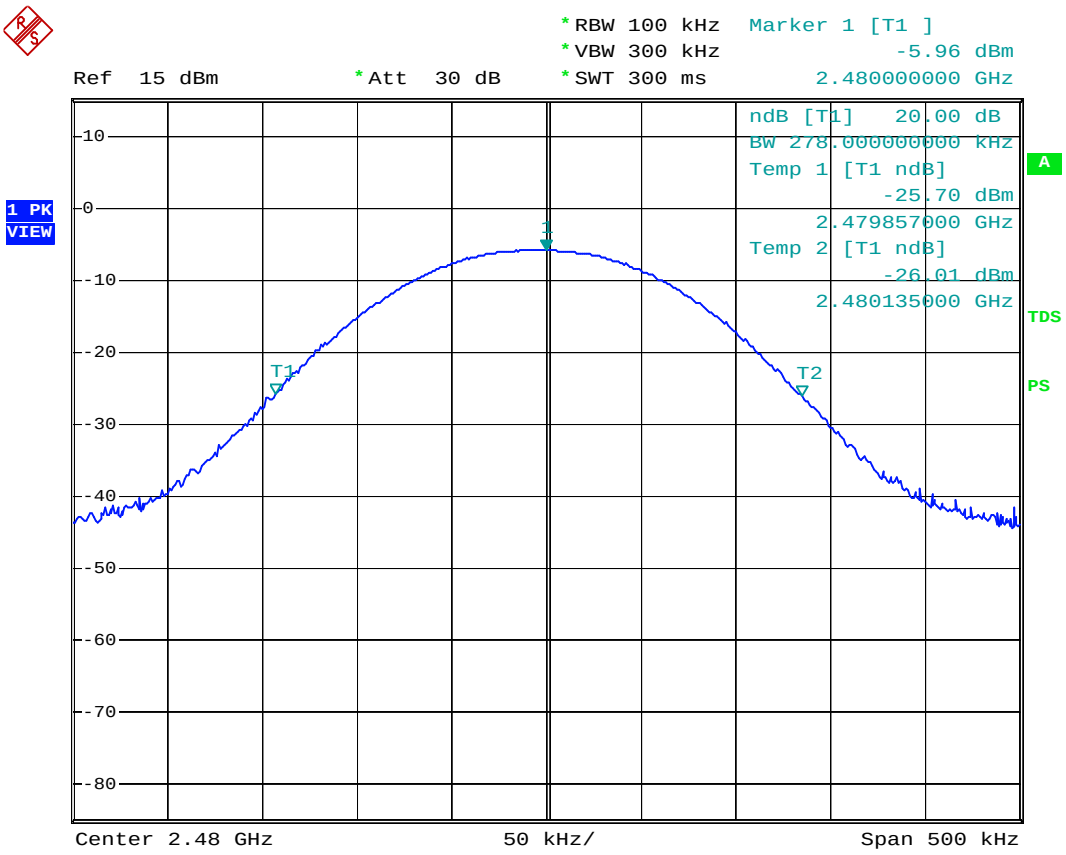


Global Bluevoice M/N: CT.8239 20dB Bandwidth (Low channel)

Date: 29.SEP.2005 15:12:24



Global Bluevoice M/N: CT.8239 20dB Bandwidth (middle ch
annel)
Date: 29.SEP.2005 15:13:30



Global Bluevoice M/N: CT.8239 20dB Bandwidth (high chan
nel)

Date: 29.SEP.2005 15:14:57

§15.247(a)(1)(iii)-QUANTITY OF HOPPING CHANNEL TEST

Applicable Standard

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. 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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
2. Set the EUT in transmitting mode from first channel to last.
3. By using the Max-Hold function record the Quantity of the channel.

Limit

FCC Part 15, Subpart C Section 15.247

FREQUENCY RANGE (MHz)	Limit (Quantity of Hopping Channel)			
	20 dB bandwidth <250 kHz	20 dB bandwidth >250 kHz	20 dB bandwidth <1 MHz	20 dB bandwidth >1 MHz
902-928	50	25	N/A	N/A
2400-2483.5	N/A	N/A	15	15
5725-5850	N/A	N/A	75	N/A

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

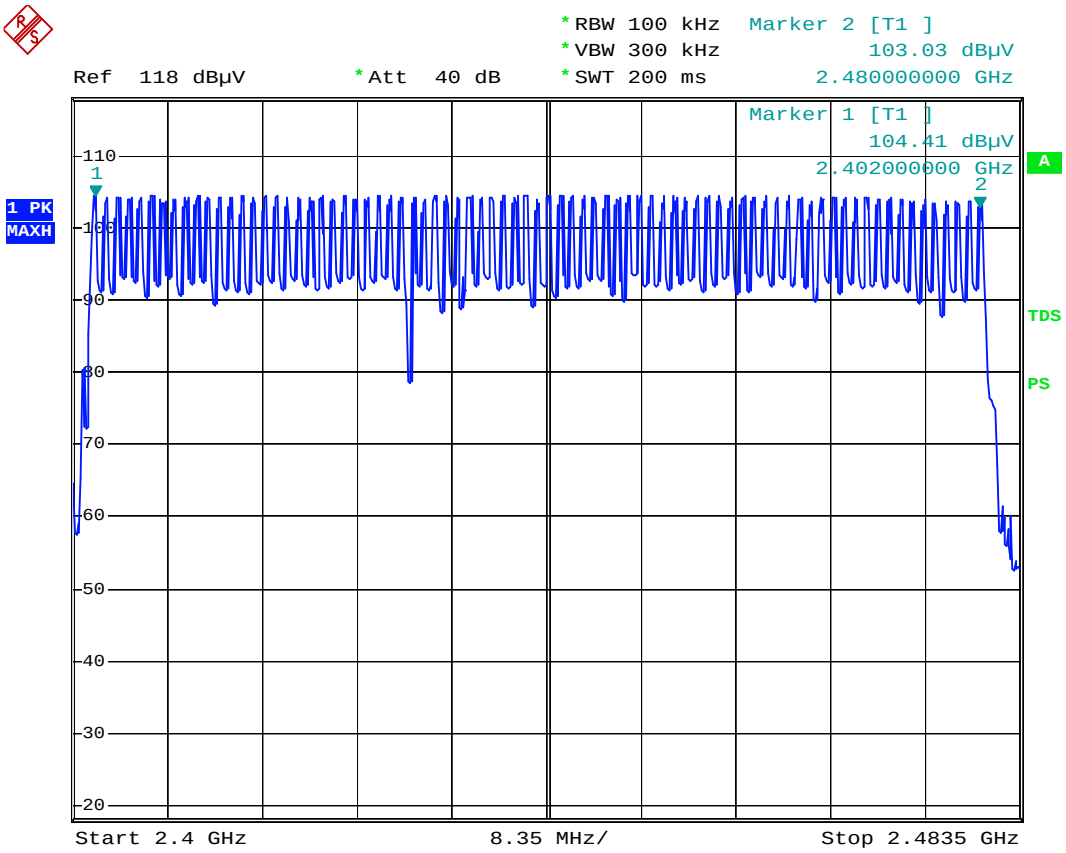
The testing was performed by Louise Lu on 2005-9-29.

Test Result: Pass

Test mode: Transmitting

The frequency hopping systems operating in 2.4~2.4835 GHz band employ 79 nonoverlapping channels.

Hopping Channel Frequency Range (MHz)	Quantity OF hopping Channel Read Value (Channel)	Quantity Of Hopping channel limit (Channel)
2402 ~ 2480	79	>15



Global Bluevoice M/N: CT.8239 quantity of hooping channe
l
Date: 29.SEP.2005 16:37:59

§15.247(a)(1)(iii) -TIME OF OCCUPANCY (DWELL TIME)

Applicable Standard

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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

The EUT was worked in channel hopping; Spectrum SPAN was set as 0 Hz, Sweep was set as 0.4 X channel no.(s), The quantity of False was get from single sweep. In addition, the time of single Pluses was tested.

Limit

FCC Part 15, Subpart C Section 15.247.

FREQUENCY RANGE (MHz)	LIMIT (ms)		
	20dB bandwidth <250kHz (50 Channel)	20dB bandwidth >250kHz (50 Channel)	20dB bandwidth <1 MHz (79 Channel)
902-928	400(20s)	400(10s)	N/A
2400-2483.5	N/A	N/A	400(31.6s)
5725-5850	N/A	N/A	400(30s)

Test Data

Environmental Conditions

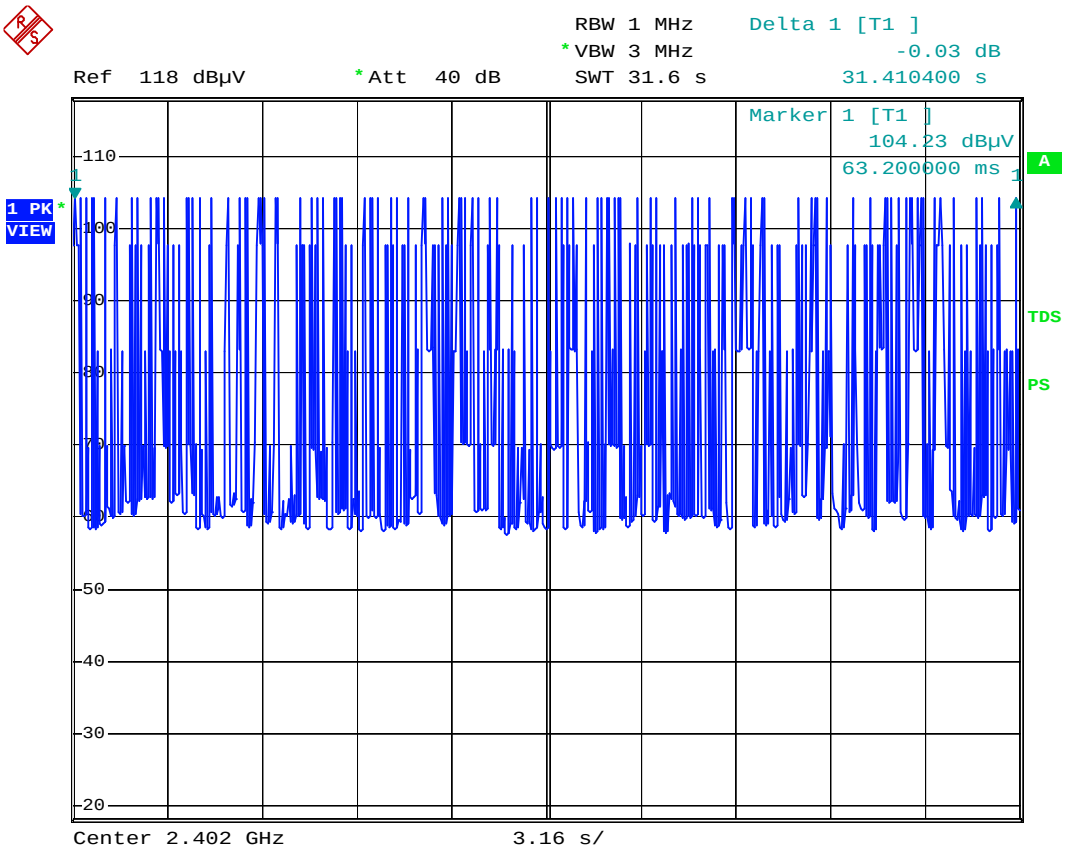
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Louise Lu on 2005-9-29.

Test Result: Pass

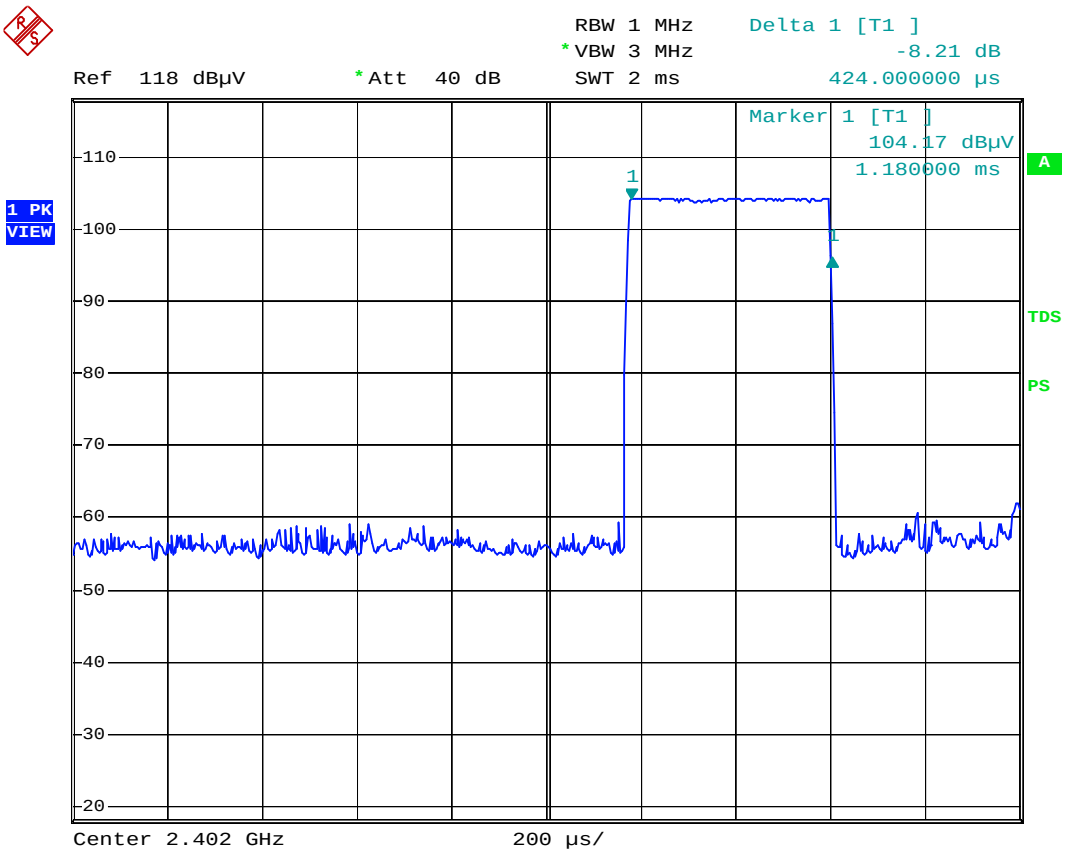
Test mode: Transmitting

Channel	Pulse wide (msec)	Number of hopping Pluses in 0.4*channel number	Dwell time (sec)	Limit (sec)
Low Channel	0.424	320	0.135	0.4
Mid Channel	0.424	320	0.135	0.4
High Channel	0.424	320	0.135	0.4



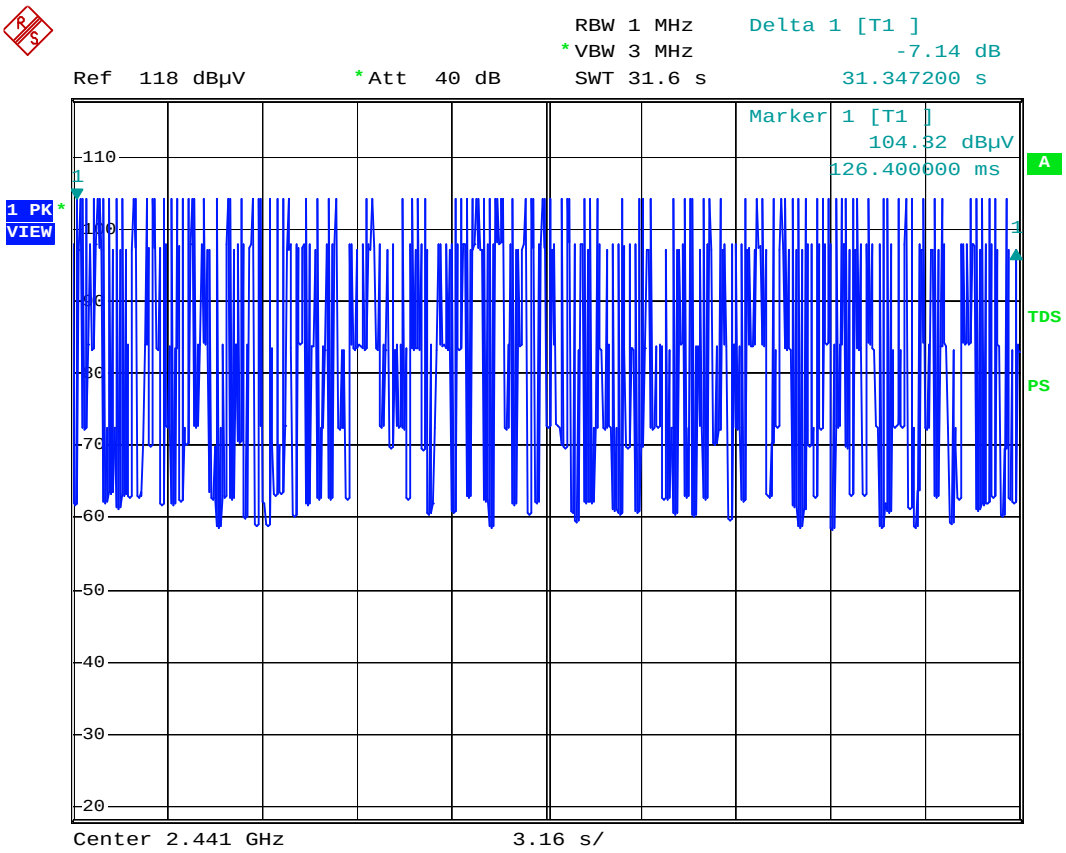
Global Bluevoice M/N: CT.8239 low channel

Date: 29.SEP.2005 17:08:57



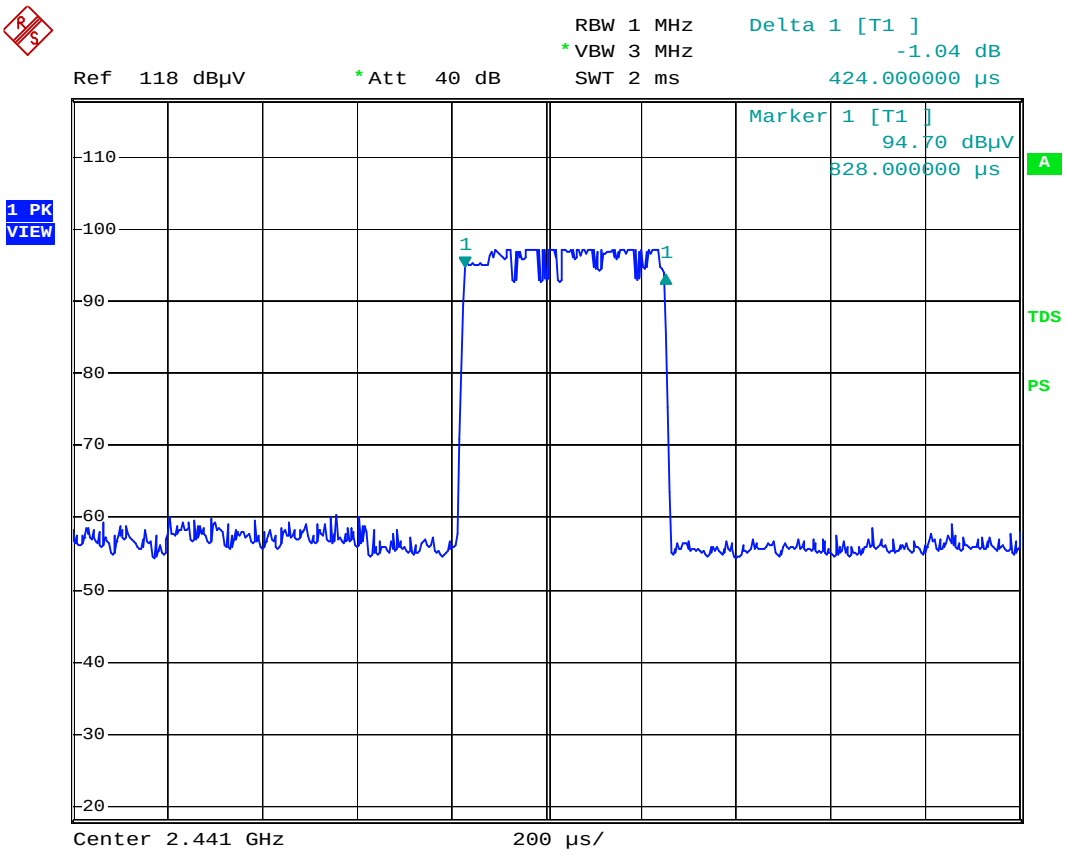
Global Bluevoice M/N: CT.8239 low channel

Date: 29.SEP.2005 16:51:32



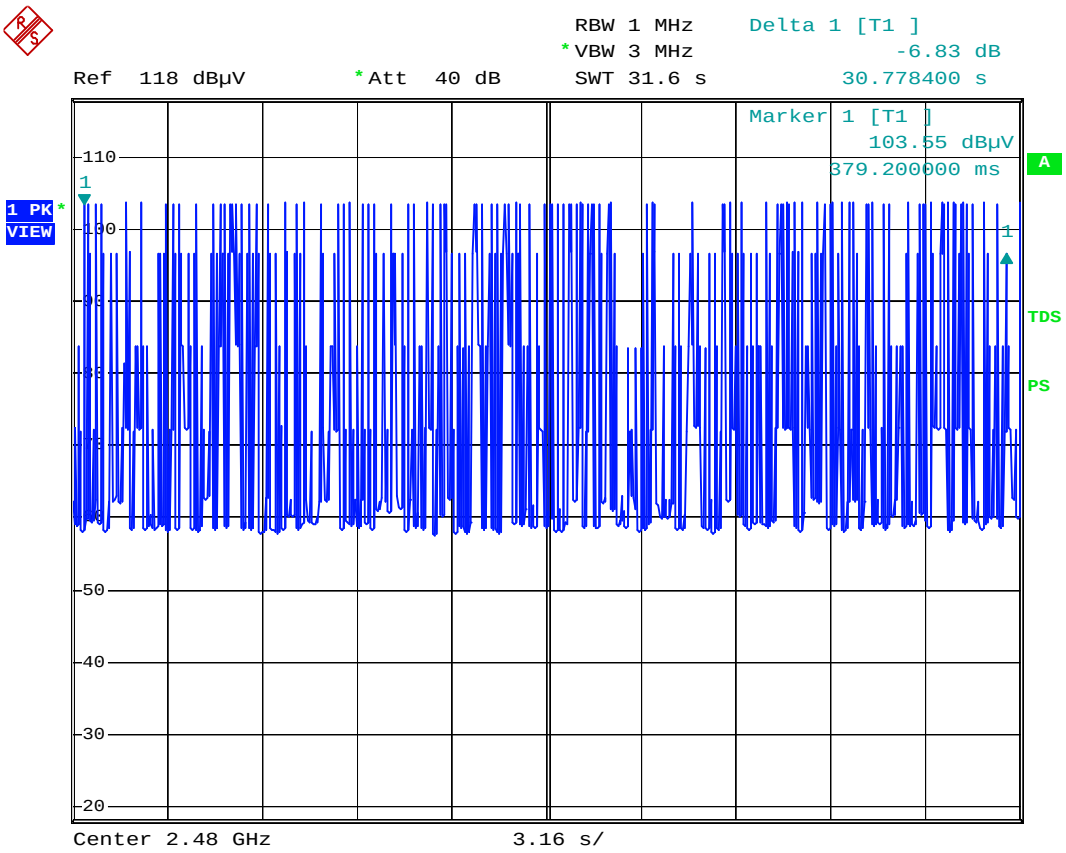
Global Bluevoice M/N: CT.8239 Middle channel

Date: 29.SEP.2005 17:07:04



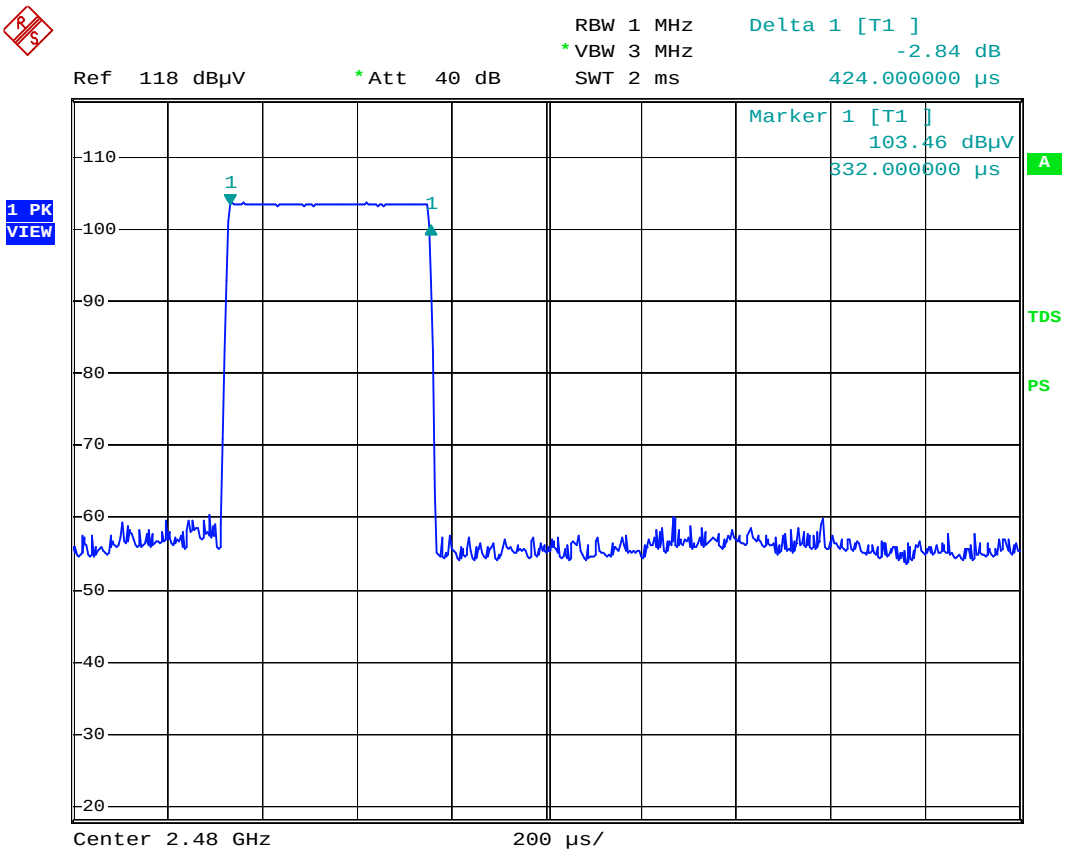
Global Bluevoice M/N: CT.8239 middle channel

Date: 29.SEP.2005 16:53:35



Global Bluevoice M/N: CT.8239 High channel

Date: 29.SEP.2005 17:04:56



Global Bluevoice M/N: CT.8239 High channel

Date: 29.SEP.2005 16:59:13

§15.247(b)(1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

(b) The maximum peak conducted output power of the intentional radiator shall not exceed the following:

(1) For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

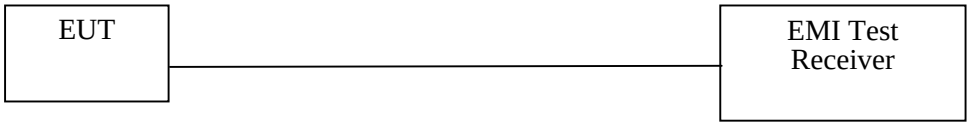
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde&Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the UFL port of EUT to a Peak Power Meter.



Test Data

Environmental Conditions

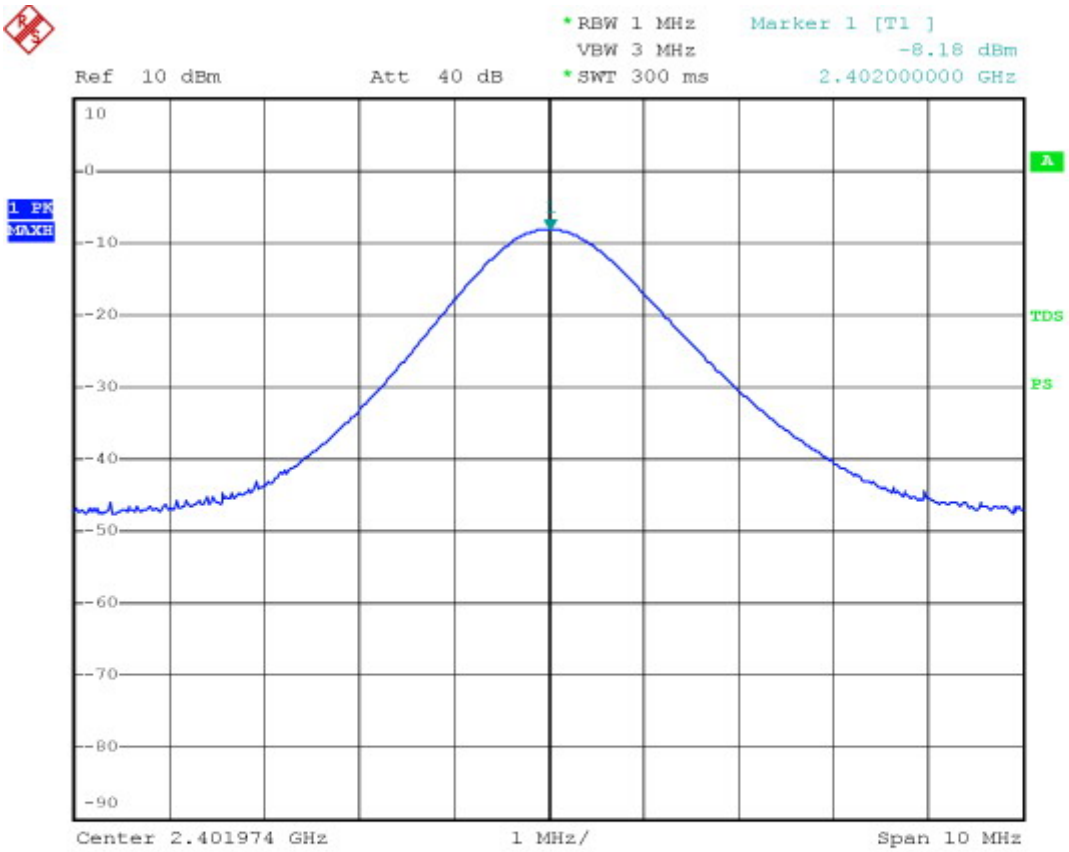
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Louise Lu on 2005-10-10.

Test Result: Pass

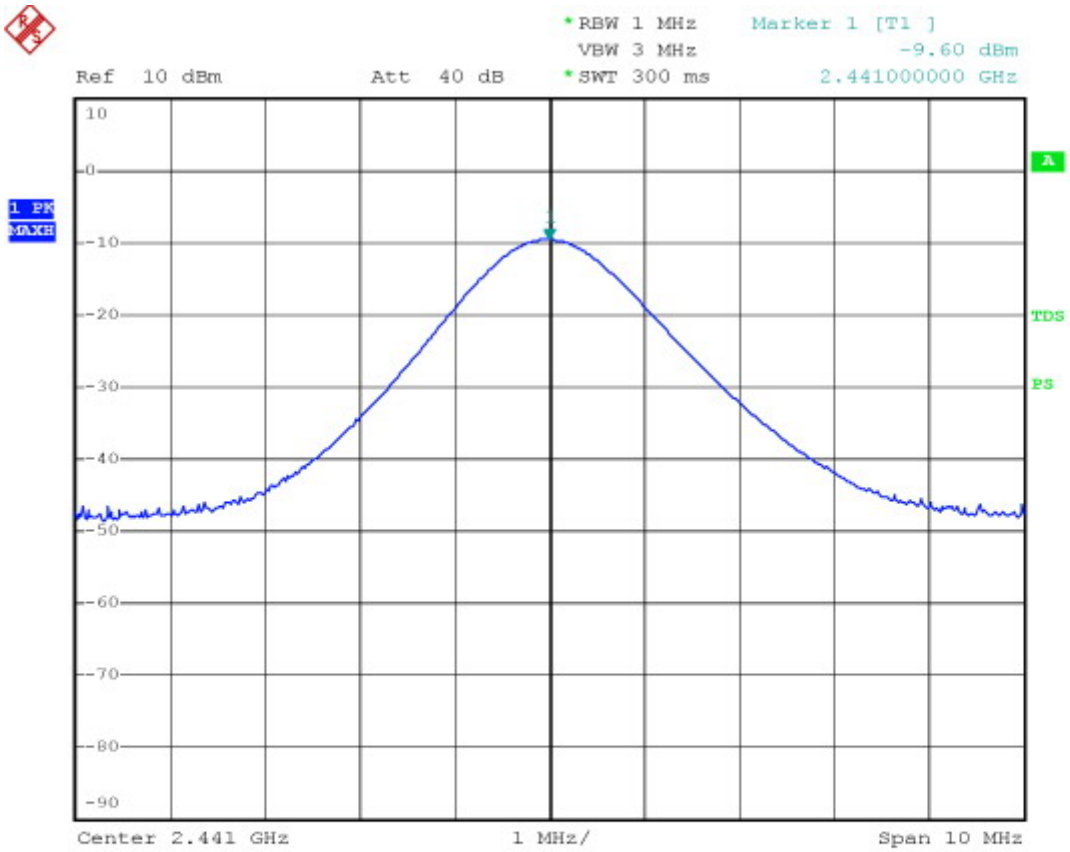
Test mode: Transmitting

Channel	Channel Frequency (MHz)	Reading Power (dBm)	Cable Loss (dB)	Power Output (w)	Limit (w)
Low Channel	2402	-8.18	0.3	0.000163	1
Middle Channel	2441	-9.60	0.3	0.000117	1
High Channel	2480	-8.78	0.3	0.000142	1



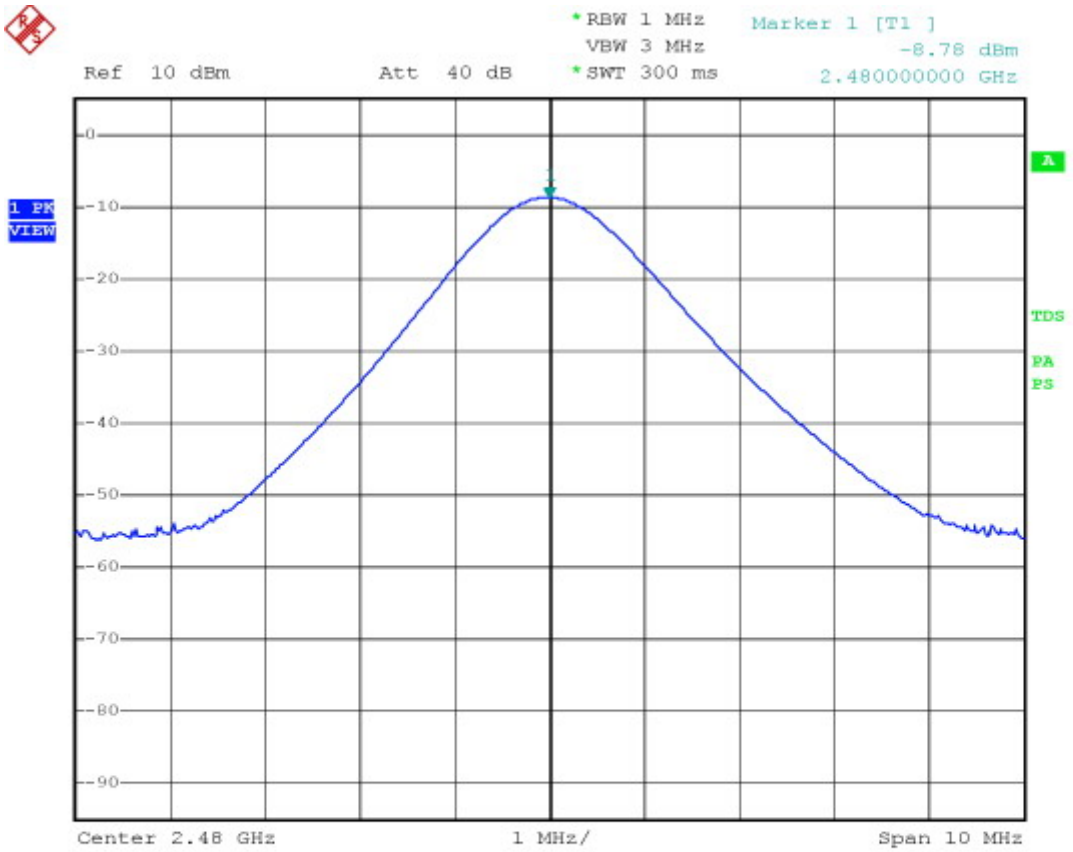
Global BlueVoice M/N:CT.8239 Output Power Low Channel

Date: 10.OCT.2005 11:25:19



Global BlueVoice M/N:CT.8239 Output Power Mid Channel

Date: 10.OCT.2005 11:25:02



Global BlueVoice M/N:CT.8239 Output Power High Channel

Date: 10.OCT.2005 11:24:42

§15.247(d)- BAND EDGES TESTING

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument using a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Start 2.4 G Hz, stop 2.4835 GHz, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge.
4. Measure the frequency edge point amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the edge frequency.

Test Data

Environmental Conditions

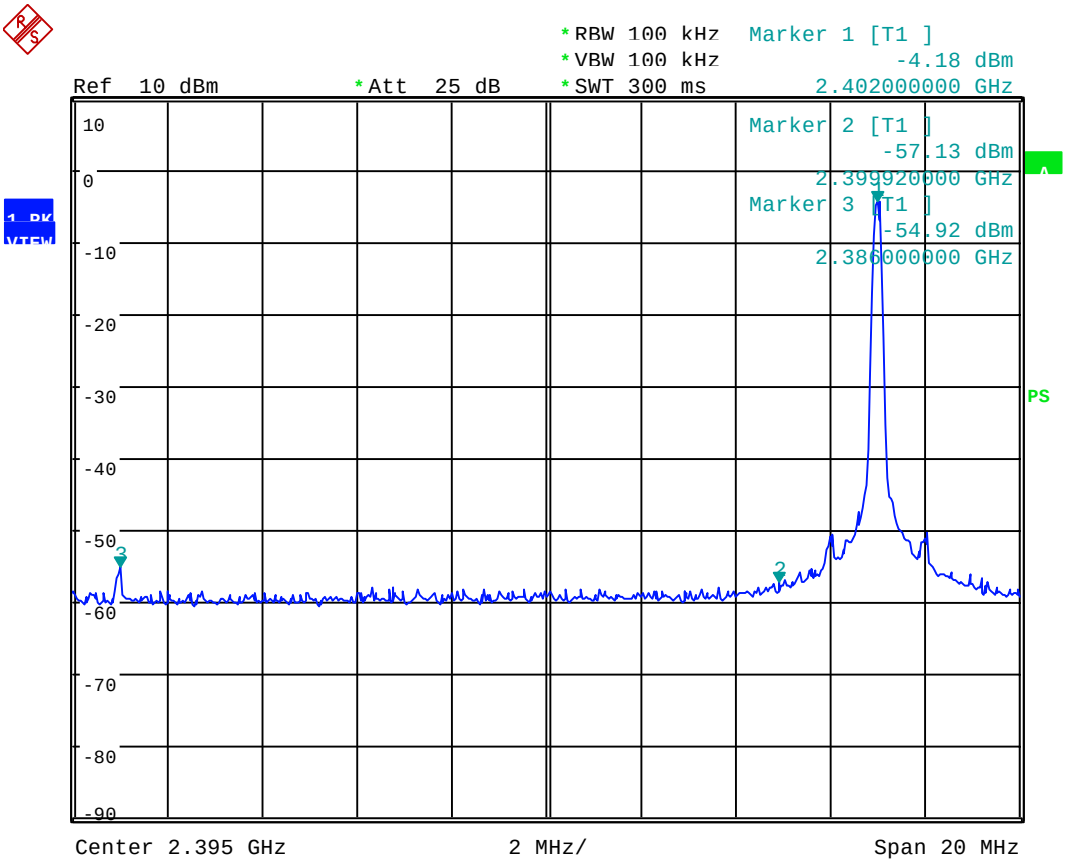
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

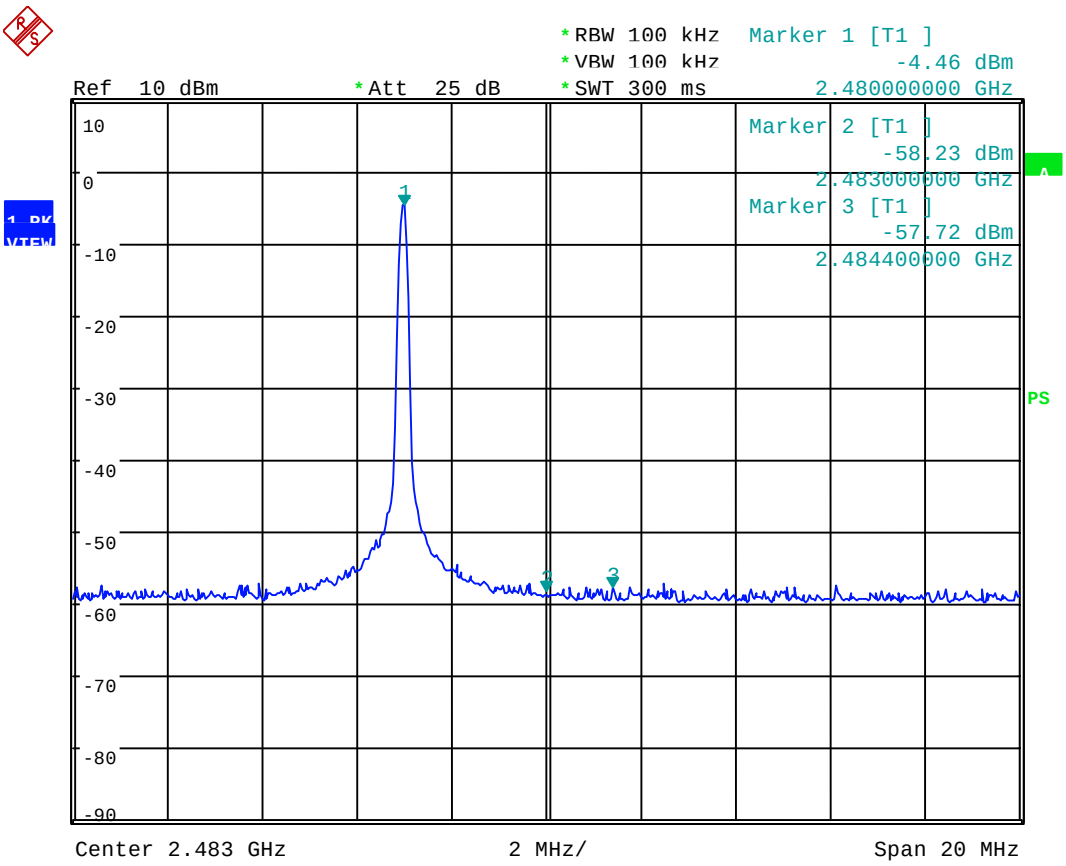
The testing was performed by Louise Lu on 2005-9-29.

Test Result: Pass

Test mode: Transmitting

Frequency (MHz)	Emission (dBuV/m)	Limit (dBuV/m)
2400.0	49.87	54
2438.5	48.77	54




*RBW 100 kHz
*VBW 100 kHz
*SWT 300 ms
Marker 1 [T1]
-4.46 dBm
2.480000000 GHz
Marker 2 [T1]
-58.23 dBm
2.483000000 GHz
Marker 3 [T1]
-57.72 dBm
2.484400000 GHz
Ref 10 dBm
*Att 25 dB
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
PS
Center 2.483 GHz
2 MHz/
Span 20 MHz