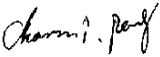
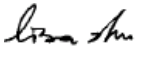
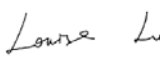
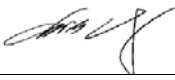


FCC PART 15.247
EMI MEASUREMENT AND TEST REPORT
For
Metro (Suzhou) Technologies Co., Ltd.

No. 221 Xinghai Street, Suzhou Industrial Park

FCC ID: RA4MLPN9535

March 7, 2006

This Report Concerns: ☒ Original Report	Equipment Type: Bluetooth Wireless Laser Barcode Scanner
Test Engineer:  Charmi Peng	 Lisa Zhu  Louise Lu
Report No.: RSH06021401	
Test Date: February 17- 24, 2006	
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	

Note: The test report is specially limited to the above company and this particular sample only.
It may not be duplicated without prior written consent of Bay Area Compliance Lab Corp.
(ShenZhen). This report **must not** be used by the client to claim product certification,
approval, or endorsement by NVLAP, NIST or any agency of the US Government.

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
RELATED SUBMITTAL(S)/GRANT(S).....	4
TEST METHODOLOGY	4
TEST FACILITY	4
HOST SYSTEM CONFIGURATION LIST AND DETAILS	5
LOCAL SUPPORT EQUIPMENT LIST AND DETAILS	5
EXTERNAL I/O CABLE	5
SYSTEM TEST CONFIGURATION.....	6
DESCRIPTION OF TEST CONFIGURATION	6
EQUIPMENT MODIFICATIONS	6
CONFIGURATION OF TEST SETUP	7
BLOCK DIAGRAM OF TEST SETUP	8
SUMMARY OF TEST RESULTS	9
§15.203 - ANTENNA REQUIREMENT.....	10
STANDARD APPLICABLE	10
§15.207 (a)- CONDUCTED EMISSION.....	11
MEASUREMENT UNCERTAINTY	11
EUT SETUP.....	11
EMI TEST RECEIVER SETUP	11
TEST EQUIPMENT LIST AND DETAILS.....	12
TEST PROCEDURE	12
TEST RESULTS SUMMARY	12
TEST DATA	13
PLOT(S) OF TEST DATA.....	13
§15.205, §15.209, §15.247 - RADIATED EMISSION	16
STANDARD APPLICABLE	16
MEASUREMENT UNCERTAINTY.....	16
EUT SETUP.....	16
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	17
TEST EQUIPMENT LIST AND DETAILS.....	17
TEST PROCEDURE	17
CORRECTED AMPLITUDE & MARGIN CALCULATION	17
TEST RESULTS SUMMARY	18
TEST DATA	18
§15.247(a)(1)-CHANNEL SEPARATION TEST	23
STANDARD APPLICABLE	23
TEST EQUIPMENT LIST AND DETAILS.....	23
TEST PROCEDURE	23
TEST DATA	23
§15.247(a)(1) –20dB BANDWIDTH TESTING	31
STANDARD APPLICABLE	31
TEST EQUIPMENT LIST AND DETAILS.....	31
TEST PROCEDURE	31
TEST DATA	31
§15.247(a)(1)(iii)-QUANTITY OF HOPPING CHANNEL TEST	38
STANDARD APPLICABLE	38
TEST EQUIPMENT LIST AND DETAILS.....	38
TEST PROCEDURE	38
TEST DATA	38

§15.247(a)(1)(iii) -TIME OF OCCUPANCY (DWELL TIME).....	41
STANDARD APPLICABLE	41
TEST EQUIPMENT LIST AND DETAILS.....	41
TEST PROCEDURE	41
TEST DATA	41
§15.247(b)(1) - PEAK OUTPUT POWER MEASUREMENT	54
STANDARD APPLICABLE	54
TEST EQUIPMENT LIST AND DETAILS.....	54
TEST PROCEDURE	54
TEST DATA	54
§15.247(d) - 100 KHZ BANDWIDTH OF BAND EDGES.....	61
STANDARD APPLICABLE	61
TEST EQUIPMENT LIST AND DETAILS.....	61
TEST PROCEDURE	61
TEST DATA	62

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *Metro (Suzhou) Technologies Co., Ltd.*'s product is a Bluetooth Wireless Laser Barcode Scanner, the EUT was composed of two parts, one is a Handset (model number: MS9535) which measures approximately 22.0cmL x 9.0cmW x 3.2cmH, and the other is a Base (model number: MI9535) which measures approximately 20.0cmL x 10.0cm W x 5.3cmH, rated input voltage: 120 VAC/60 Hz.

Adapter: Manufacturer: HON-KWANG

Model: HK-A110-A05

Input: 100 –240 VAC/50- 60 Hz 0.45A

Output: 5 VDC 300mA

** The test data gathered are from production sample, serial number: MS9535: 5606030325; MI9535: 5505530901 provided by the manufacturer, we receive the EUT on 2006-2-14.*

Objective

This Type approval report is prepared on behalf of *Metro (Suzhou) Technologies Co., Ltd.* in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order 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 emissions measurement was performed and 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 and Industrial Canada registration test site No.: 5500A. 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>

Host System Configuration List and Details

Manufacturer	Description	Model	Serial Number	FCC ID
DELL	Motherboard	OWC297	CN-OWC297-70821-566-02BR	DoC
DELL	Power	NPS-250KB D	CN-0H2678-17972-56E8NBM	DoC
Seagate	Hard Disk	ST340014A	5JXK3NAD	DoC
DELL	3.5' Floppy	N/A	CN-0N8893-69802-54Q-02OZ	DoC
Lite-ON	CD-Rom	LTN-489S	N/A	DoC
Intel	Ethernet	PRO 10/100 VE	N/A	DoC

Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number	FCC ID
DELL	PC	DELL 170L	CN-0TC670-70821-560-F4WQ	DoC
DELL	Keyboard	SK-8110	CN07N244-71616-56I-110O	DoC
DELL	Mouse	M071KC	519046820	DoC
DELL	LCD Monitor	1505FP	Y4287-7168-574-GBSH	DoC
Intel	CPU	Celeron D-2533	N/A	DoC
ProMOS	Memory	V826632K24SATG-C0	0525-K1933700	DoC
HP	Laser Jet5L	C3941A	JPTVOB2337	DoC

External I/O Cable

Cable Description	Length (M)	From/Port	To
Shielded Detachable Keyboard Cable	1.50	Keyboard Port / Host	Keyboard
Shielded Detachable Mouse Cable	1.50	Mouse Port / Host	Mouse
Shielded Detachable Printer Cable	1.20	Parallel Port / Host	Printer
Shielded Serial Cable	2.20	EUT	Host PC

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

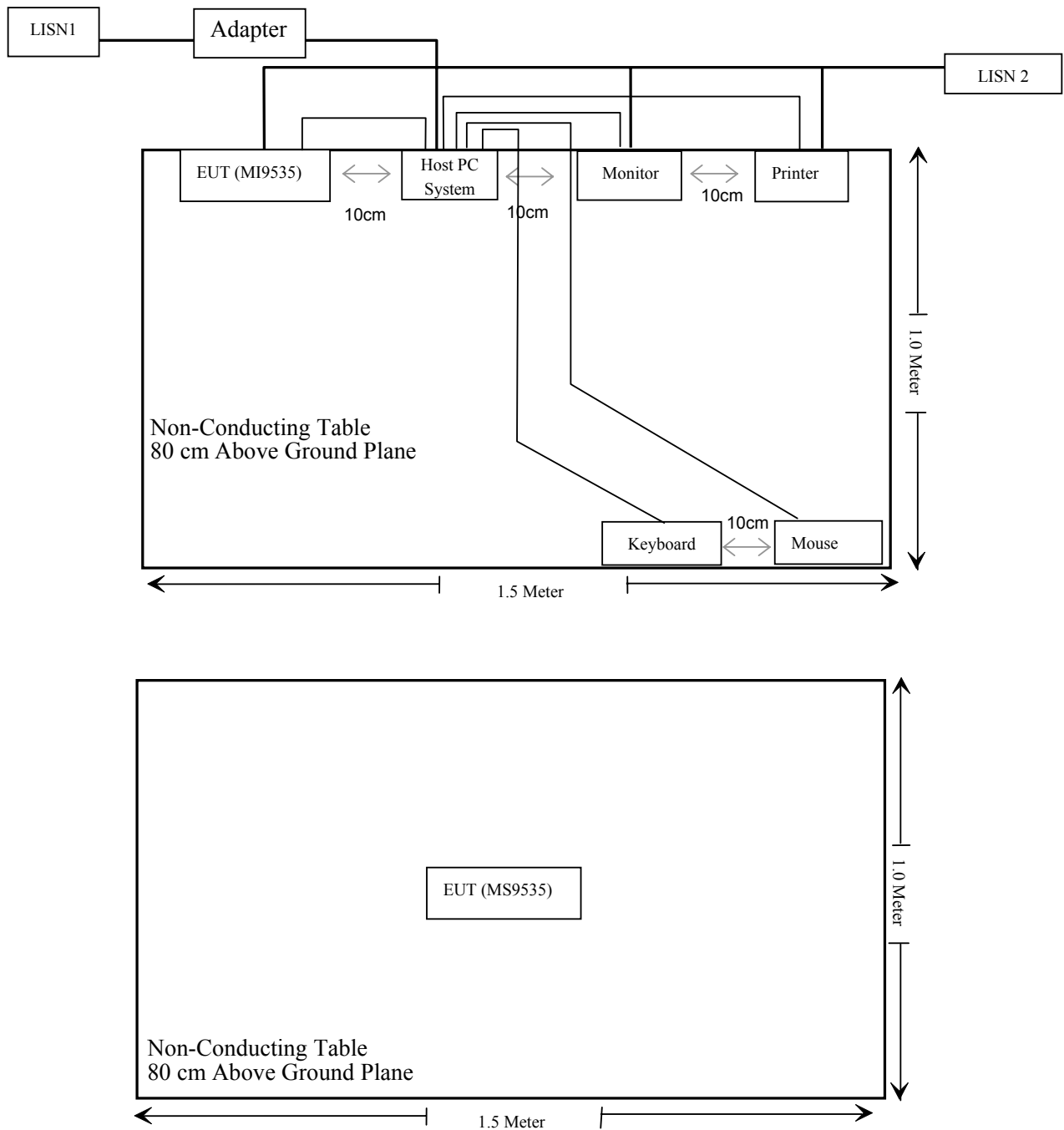
Bay Area Compliance Lab Corp. (ShenZhen) has not done any modification on the EUT.

Test Mode: Transmitting



Block Diagram of Test Setup

Test Mode: Transmitting



SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.203	Antenna Requirement	Compliant
§15.205	Restricted Band	Compliant
§15.207 (a)	Conducted Emission	Compliant
§15.205, §15.209, §15.247(d)	Radiated Emission	Compliant
§15.247 (a)(1)	20 dB Bandwidth	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

§15.203 - ANTENNA REQUIREMENT

Standard Applicable

According to § 15.203, 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.

And according to § 15.247 (b) (4), if transmitting antennas of directional gain greater than 6 dBi are used the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The antenna for this device is an integral antenna with gain of 1 dBi.

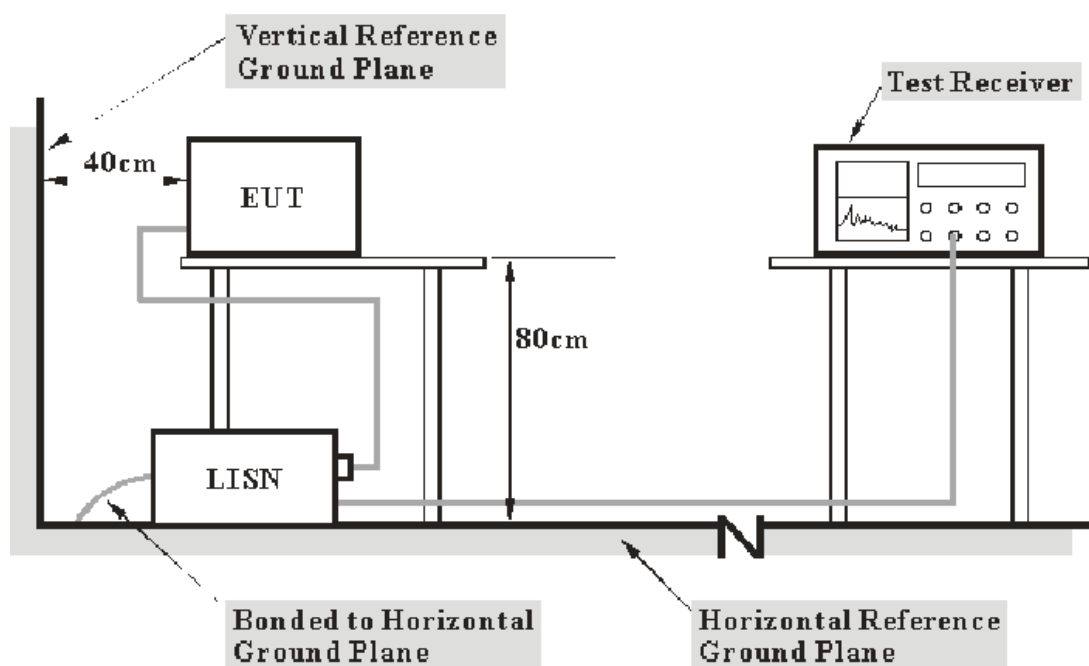
§15.207 (a)- CONDUCTED EMISSION

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ± 2.4 dB.

EUT Setup



- Note:** 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 (a) limits.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

<u>Frequency Range</u>	<u>IFBW</u>
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12008	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2005-8-17	2006-8-17
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2005-2-28	2006-2-28

* Com-Power's LISN were used as the supporting equipment.

* **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

During the conducted emission test, the Adapter power cord was connected to the outlet of the LISN.

Maximizing procedure were performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, with the worst margin reading of:

Transmitting: -6.10 dB at 0.246 MHz in the Line conductor mode.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	53%
ATM Pressure:	1009mbar

The testing was performed by Lisa Zhu on 2006-2-17.

Test Mode: Transmitting

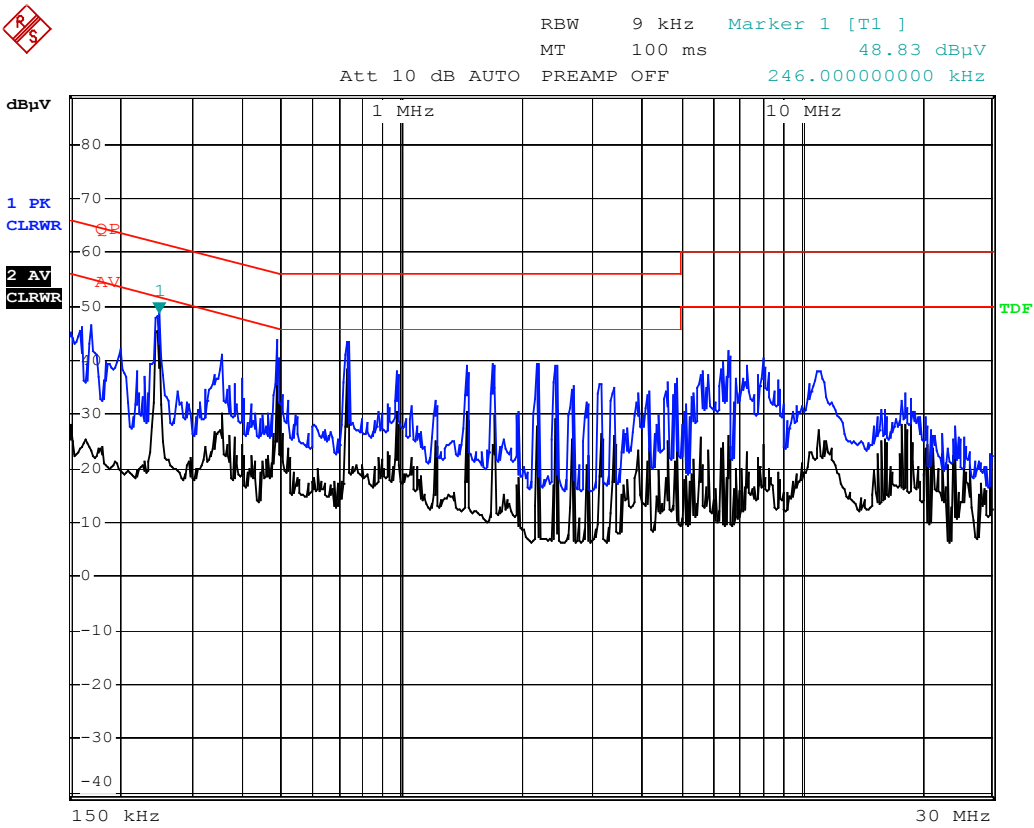
LINE CONDUCTED EMISSIONS				FCC Part 15.207	
Frequency MHz	Amplitude dBμV	Detector QP/AV	Phase Line/Neutral	Limit dBμV	Margin dB
0.246	45.8	AV	Line	51.89	-6.10
0.490	37.5	AV	Line	46.17	-8.67
0.738	36.1	AV	Line	46.00	-9.95
0.738	34.6	AV	Neutral	46.00	-11.38
0.490	34.2	AV	Neutral	46.17	-11.94
0.490	43.9	QP	Line	56.17	-12.26
0.738	43.5	QP	Line	56.00	-12.53
0.246	39.0	AV	Neutral	51.89	-12.94
0.738	42.9	QP	Neutral	56.00	-13.06
0.246	48.8	QP	Line	61.89	-13.06
0.490	42.4	QP	Neutral	56.17	-13.73
1.462	30.5	AV	Line	46.00	-15.52
2.442	30.0	AV	Neutral	46.00	-15.99
2.190	39.4	QP	Line	56.00	-16.59
0.354	42.2	QP	Neutral	58.87	-16.70
1.702	39.2	QP	Line	56.00	-16.81
0.246	45.1	QP	Neutral	61.89	-16.84
1.462	38.9	QP	Line	56.00	-17.14
0.354	31.6	AV	Neutral	48.87	-17.30
2.442	38.3	QP	Neutral	56.00	-17.66
2.190	27.8	AV	Line	46.00	-18.20
1.710	27.7	AV	Neutral	46.00	-18.30
1.710	37.2	QP	Neutral	56.00	-18.77
1.702	24.3	AV	Line	46.00	-21.73

* Within the measurement uncertainty.

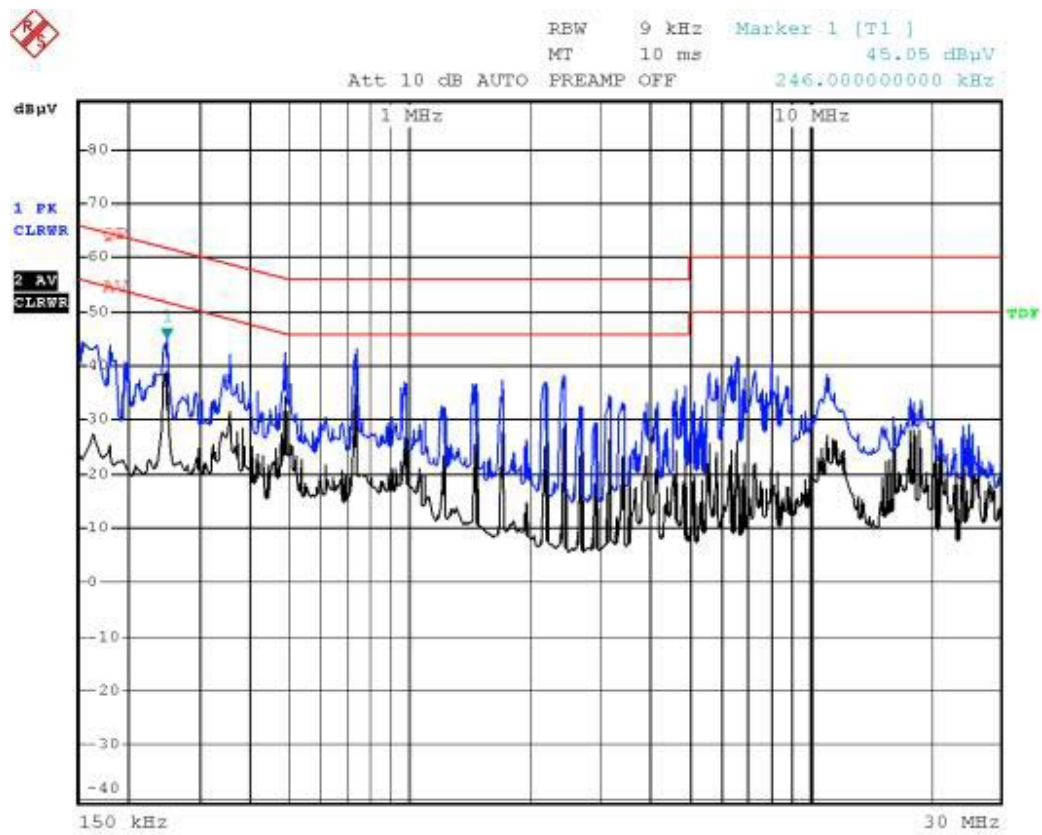
Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

Line:



Neutral:



§15.205, §15.209, §15.247 - RADIATED EMISSION

Standard Applicable

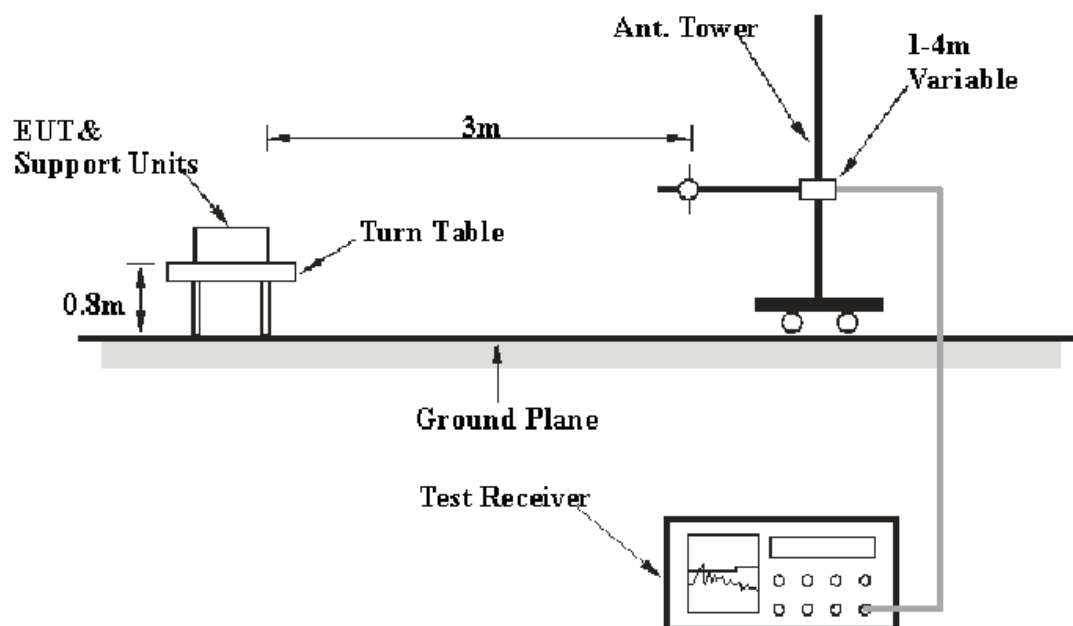
According to FCC §15.247 (d)

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 ± 4.0 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.

The adapter was connected to a 120 VAC/60 Hz power source.

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:

<i>Frequency Range</i>	<i>RBW</i>	<i>Video B/W</i>
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	2005-11-10	2006-11-10
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

For the radiated emissions test, the Adapter power cords were connected to the AC floor outlet.

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 Loss and Cable Loss, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

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 maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Standard Limit}$$

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, 15.209, and 15.247, with the worst margin reading of:

MI9535:

Transmitting (Low Channel): **-17.3 dB** at **6356.7 MHz** in the **Horizontal** polarization

Transmitting (Middle Channel): **-15.2 dB** at **8052.1 MHz** in the **Horizontal** polarization

Transmitting (High Channel): **-16.8 dB** at **8899.79 MHz** in the **Vertical** polarization

Transmitting: **-4.86 dB** at **32.41 MHz** in the **Horizontal** polarization

MS9535:

Transmitting (Low Channel): **-14.1 dB** at **8629.25 MHz** in the **Horizontal** polarization

Transmitting (Middle Channel): **-16.7 dB** at **6771.5 MHz** in the **Vertical** polarization

Transmitting (High Channel): **-16.2 dB** at **9621.24 MHz** in the **Horizontal** polarization

Transmitting: **-6.65 dB** at **32.18 MHz** in the **Horizontal** polarization

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	53%
ATM Pressure:	1009mbar

The testing was performed by Louise Lu on 2006-2-21.

Test Mode: Transmitting (MI9535)

INDICATED			TABLE	ANTENNA		CORRECTION FACTOR			CORRECTED AMPLITUDE	FCC 15 SUBPART C	
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											
2402	85.95	PK(fundamental)	45	1.2	V	28.1	3.61	35	82.7		
2402	48.86	AV(fundamental)	180	1.2	V	28.1	3.61	35	45.6		
2402	84.69	PK(fundamental)	180	1.0	H	28.1	3.61	35	81.4		
2402	48.23	AV(fundamental)	45	1.2	H	28.1	3.61	35	44.9		
6356.7	30.8	AV(spurious)	60	1.0	H	35.6	4.69	34.4	36.7	54	-17.3
5312.3	30.67	AV(spurious)	165	1.5	V	33.8	4.19	33.4	35.3	54	-18.7
5779.3	30.08	AV(spurious)	45	1.2	H	34.1	4.7	34.4	34.5	54	-19.5
4804	29.16	AV(harmonic)	180	1.2	H	33.8	4.64	33.4	34.2	54	-19.8
5779.3	45.36	PK(spurious)	45	1.2	H	34.1	4.7	34.4	52.0	74	-22.0
6356.7	45.27	PK(spurious)	60	1.0	H	35.6	4.69	34.4	51.2	74	-22.8
4804	45.4	PK(harmonic)	180	1.2	H	33.8	4.64	33.4	50.4	74	-23.6
5312.3	44.92	PK(spurious)	150	1.5	V	33.8	4.19	33.4	49.5	74	-24.5
1793.5	31.23	AV(spurious)	135	1.8	V	28.4	2.82	35	27.5	54	-26.6
1793.5	49.89	PK(spurious)	60	1.0	V	28.4	2.82	35	46.1	74	-27.9
1320.8	33.98	AV(spurious)	45	1.2	V	25	2.79	36	25.8	54	-28.2
1320.8	52.32	PK(spurious)	180	1.2	V	25	2.79	36	44.1	74	-29.9
Middle Channel											
2441	84.5	PK(fundamental)	45	1.2	V	28.1	3.61	35	81.2		
2441	48.69	AV(fundamental)	180	1.2	V	28.1	3.61	35	45.4		
2441	84.05	PK(fundamental)	180	1.0	H	28.1	3.61	35	80.8		
2441	48.14	AV(fundamental)	45	1.2	H	28.1	3.61	35	44.9		
8052.1	30.79	AV(spurious)	60	1.0	H	37.1	5.18	34.3	38.8	54	-15.2
4882	29.61	AV(harmonic)	165	1.5	V	33.8	4.64	33.4	34.7	54	-19.4
4066.7	31.24	AV(spurious)	45	1.2	H	31.7	4.12	32.5	34.6	54	-19.4
8052.1	45.34	PK(spurious)	60	1.0	H	37.1	5.18	34.3	53.3	74	-20.7
4066.7	45.15	PK(spurious)	45	1.2	H	31.7	4.12	32.5	52.0	74	-22.0
4882	45.43	PK(harmonic)	150	1.5	V	33.8	4.64	33.4	50.5	74	-23.5
1793.5	30.63	AV(spurious)	135	1.8	V	28.4	2.82	35	26.9	54	-27.2
1793.5	49.46	PK(spurious)	60	1.0	V	28.4	2.82	35	45.7	74	-28.3
1144.28	35.39	AV(spurious)	45	1.2	V	23.3	2.5	36	25.2	54	-28.8
1144.28	35.22	AV(spurious)	180	1.2	H	23.3	2.5	36	25.0	54	-29.0
1144.28	54.08	PK(spurious)	180	1.2	V	23.3	2.5	36	43.9	74	-30.1
1144.28	53.59	PK(spurious)	180	1.2	H	23.3	2.5	36	43.4	74	-30.6

INDICATED			TABLE	ANTENNA		CORRECTION FACTOR			CORRECTED AMPLITUDE	FCC 15 SUBPART C	
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
High Channel											
2480	80.67	PK(fundamental)	45	1.2	V	28.1	3.61	35	77.4		
2480	47.39	AV(fundamental)	180	1.2	V	28.1	3.61	35	44.1		
2480	74.41	PK(fundamental)	180	1.0	H	28.1	3.61	35	71.1		
2480	45.74	AV(fundamental)	45	1.2	H	28.1	3.61	35	42.5		
8899.79	28.56	AV(spurious)	165	1.2	V	37.8	5.15	34.3	37.2	54	-16.8
7440	28.89	AV(harmonic)	60	1.0	H	35.8	4.75	33.7	35.7	54	-18.3
5112.2	29.62	AV(spurious)	45	1.2	H	33.8	3.88	33.4	33.9	54	-20.1
8899.79	44.93	PK(spurious)	150	1.2	V	37.8	5.15	34.3	53.6	74	-20.4
5112.2	45.31	PK(spurious)	45	1.2	H	33.8	3.88	33.4	52.0	74	-22.0
7440	44.99	PK(harmonic)	60	1.0	H	35.8	4.75	33.7	51.8	74	-22.2
1811.6	32.16	AV(spurious)	135	1.5	V	28.4	2.82	35	28.4	54	-25.6
1811.6	49.34	PK(spurious)	60	1.0	V	28.4	2.82	35	45.6	74	-28.4
1324.6	32.28	AV(spurious)	45	1.2	V	25	2.79	36	24.1	54	-29.9
1324.6	51.55	PK(spurious)	180	1.2	V	25	2.79	36	43.3	74	-30.7
1144.28	31.93	AV(spurious)	180	1.2	H	23.3	2.5	36	21.7	54	-32.3
1144.28	50.46	PK(spurious)	180	1.2	H	23.3	2.5	36	40.3	74	-33.7

Test Mode: Transmitting (MI9535)

Indicated				TABLE	Antenna		Correction Factor			FCC Part 15.209	
Frequency MHz	Meter Reading dBμV/m	Comments	Direction Degree	Height Meter	Polar H/V	Antenna Loss dB	Cable Loss dB	Amp. Gain dB	Corr. Ampl. dBμV/m	Limit dBμV/m	Margin dB
32.41	37.69	PK	289	1.0	H	24.10	0.37	27.02	35.14	40.00	-4.86
98.38	55.71	PK	60	1.2	V	8.20	0.80	26.75	37.96	43.50	-5.54
98.38	55.62	PK	289	1.0	H	8.20	0.80	26.75	37.87	43.50	-5.63
32.18	36.91	PK	45	1.0	V	24.10	0.37	27.02	34.36	40.00	-5.64
49.06	50.04	PK	35	3.8	V	10.80	0.44	27.01	34.27	40.00	-5.73
376.52	47.72	PK	45	1.2	H	15.50	3.06	26.96	39.32	46.00	-6.68
669.95	42.61	PK	45	1.0	H	20.30	3.14	27.21	38.84	46.00	-7.16
535.04	44.28	PK	180	1.2	H	18.60	3.03	27.26	38.65	46.00	-7.35
261.27	47.62	PK	60	1.0	H	12.40	2.32	26.23	36.11	46.00	-9.89
535.04	41.27	PK	90	1.2	V	18.60	3.03	27.26	35.64	46.00	-10.36
403.93	41.57	PK	45	1.2	V	16.10	2.84	27.14	33.37	46.00	-12.63
261.27	42.42	PK	35	3.8	V	12.40	2.32	26.23	30.91	46.00	-15.09

Test Mode: Transmitting (MS9535)

INDICATED			TABLE	ANTENNA		CORRECTION FACTOR			CORRECTED AMPLITUDE	FCC 15 SUBPART C	
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											
2402	90.02	PK(fundamental)	45	1.2	V	28.1	3.61	35	86.7		
2402	50.48	AV(fundamental)	180	1.2	V	28.1	3.61	35	47.2		
2402	85.44	PK(fundamental)	180	1.0	H	28.1	3.61	35	82.2		
2402	48.62	AV(fundamental)	45	1.2	H	28.1	3.61	35	45.3		
8629.25	32.07	AV(spurious)	60	1.0	H	36.7	5.41	34.3	39.9	54	-14.1
7763.52	30.62	AV(spurious)	165	1.5	V	35.8	5	34.3	37.1	54	-16.9
4804	31.52	AV(harmonic)	180	1.2	H	33.8	4.64	33.4	36.6	54	-17.4
8629.25	46.56	PK(spurious)	60	1.0	H	36.7	5.41	34.3	54.4	74	-19.6
7763.52	45.63	PK(spurious)	150	1.5	V	35.8	5	34.3	52.1	74	-21.9
1162.3	51.58	PK(spurious)	45	1.2	H	23.3	2.5	36	52.0	74	-22.0
4804	45.27	PK(harmonic)	180	1.2	H	33.8	4.64	33.4	50.3	74	-23.7
1144.28	37.83	AV(spurious)	45	1.2	V	23.3	2.5	36	27.6	54	-26.4
1144.28	56.62	PK(spurious)	180	1.2	V	23.3	2.5	36	46.4	74	-27.6
1252.5	34.23	AV(spurious)	135	1.8	V	23.3	2.5	36	24.0	54	-30.0
1162.3	34.18	AV(spurious)	45	1.2	H	23.3	2.5	36	24.0	54	-30.0
1252.5	52.26	PK(spurious)	60	1.0	V	23.3	2.5	36	42.1	74	-31.9
Middle Channel											
2441	89.33	PK(fundamental)	45	1.2	H	28.1	3.61	35	86.0		
2441	50.14	AV(fundamental)	180	1.2	H	28.1	3.61	35	46.9		
2441	93.37	PK(fundamental)	180	1.0	V	28.1	3.61	35	90.1		
2441	51.21	AV(fundamental)	45	1.2	V	28.1	3.61	35	47.9		
6771.5	29.61	AV(spurious)	60	1.0	V	36.8	4.63	33.7	37.3	54	-16.7
4882	30.11	AV(harmonic)	45	1.2	V	33.8	4.64	33.4	35.2	54	-18.9
5238.4	30.67	AV(spurious)	165	1.5	H	33.8	3.88	33.4	35.0	54	-19.1
6771.5	44.89	PK(spurious)	60	1.0	V	36.8	4.63	33.7	52.6	74	-21.4
4882	45.38	PK(harmonic)	45	1.2	V	33.8	4.64	33.4	52.0	74	-22.0
5238.4	44.65	PK(spurious)	150	1.5	H	33.8	3.88	33.4	48.9	74	-25.1
1162.3	35.11	AV(spurious)	45	1.2	H	23.3	2.5	36	24.9	54	-29.1
1162.08	34.18	AV(spurious)	180	1.2	V	23.3	2.5	36	24.0	54	-30.0
1486.97	31.12	AV(spurious)	135	1.8	H	25	2.79	36	22.9	54	-31.1
1162.08	52.43	PK(spurious)	180	1.2	V	23.3	2.5	36	42.2	74	-31.8
1162.3	51.17	PK(spurious)	180	1.2	H	23.3	2.5	36	41.0	74	-33.0
1486.97	48.1	PK(spurious)	60	1.0	H	25	2.79	36	39.9	74	-34.1

INDICATED			TABLE	ANTENNA		CORRECTION FACTOR			CORRECTED AMPLITUDE	FCC 15 SUBPART C	
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
High Channel											
2480	89.68	PK(fundamental)	45	1.2	H	28.1	3.61	35	86.4		
2480	50	AV(fundamental)	180	1.2	H	28.1	3.61	35	46.7		
2480	94.79	PK(fundamental)	180	1.0	V	28.1	3.61	35	91.5		
2480	51.7	AV(fundamental)	45	1.2	V	28.1	3.61	35	48.4		
9621.24	28.58	AV(spurious)	165	1.5	H	38	5.35	34.1	37.8	54	-16.2
8719.4	28.24	AV(spurious)	60	1.0	V	36.7	5.13	34.3	35.8	54	-18.2
9621.24	45.85	PK(spurious)	150	1.5	H	38	5.35	34.1	55.1	74	-18.9
8719.4	45.82	PK(spurious)	60	1.0	V	36.7	5.13	34.3	53.4	74	-20.7
5905.81	28.77	AV(spurious)	135	1.8	H	34.1	4.59	34.4	33.1	54	-20.9
5977.9	28.71	AV(spurious)	45	1.2	V	34.1	4.59	34.4	33.0	54	-21.0
5977.9	44.22	PK(spurious)	45	1.2	V	34.1	4.59	34.4	52.0	74	-22.0
5905.81	44.41	PK(spurious)	60	1.0	H	34.1	4.59	34.4	48.7	74	-25.3
1162.32	35.29	AV(spurious)	180	1.2	V	23.3	2.5	36	25.1	54	-28.9
1162.32	53.93	PK(spurious)	180	1.2	V	23.3	2.5	36	43.7	74	-30.3
1324.64	29.43	AV(spurious)	45	1.2	H	25	2.79	36	21.2	54	-32.8
1324.64	48.52	PK(spurious)	180	1.2	H	25	2.79	36	40.3	74	-33.7

Test Mode: Transmitting (MS9535)

Indicated				Table	Antenna		Correction Factor			FCC Part 15.209	
Frequency MHz	Meter Reading dBμV/m	Comments	Direction Degree	Height Meter	Polar H/V	Antenna Loss dB	Cable Loss dB	Amp. Gain dB	Corr. Ampl. dBμV/m	Limit dBμV/m	Margin dB
32.18	35.90	PK	289	1.0	H	24.10	0.37	27.02	33.35	40.00	-6.65
452.00	45.98	PK	45	1.2	V	17.10	2.95	27.19	38.84	46.00	-7.16
31.73	34.68	QP	45	1.0	V	24.10	0.37	27.02	32.13	40.00	-7.87
509.35	44.20	PK	180	1.2	H	18.00	3.03	28.05	37.18	46.00	-8.82
669.95	38.57	PK	45	1.0	H	20.30	3.14	27.21	34.80	46.00	-11.20
669.95	37.81	PK	90	1.2	V	20.30	3.14	27.21	34.04	46.00	-11.96
231.85	46.47	PK	35	3.8	V	11.70	2.17	26.44	33.90	46.00	-12.10
300.70	43.14	PK	35	3.8	V	13.90	2.61	26.51	33.14	46.00	-12.86
235.13	44.38	PK	60	1.0	H	11.90	2.33	26.44	32.17	46.00	-13.83
261.27	43.59	PK	45	1.2	H	12.40	2.32	26.23	32.08	46.00	-13.92
110.86	41.21	PK	289	1.0	H	12.20	1.16	26.77	27.80	43.50	-15.70
208.65	39.28	PK	60	1.2	V	11.90	2.01	26.58	26.61	43.50	-16.89

§15.247(a)(1)-CHANNEL SEPARATION TEST

Standard Applicable

Frequency hopping systems shall have hopping 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	100028	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.

Limit

FCC Part 15, Subpart C Section 15.247(a)(1). 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.

FREQUENCY RANGE (MHz)	Limit (kHz)
902-928	>25kHz
2400-2483.5	>25kHz
5725-5850	>25kHz

Test Data

Environmental Conditions

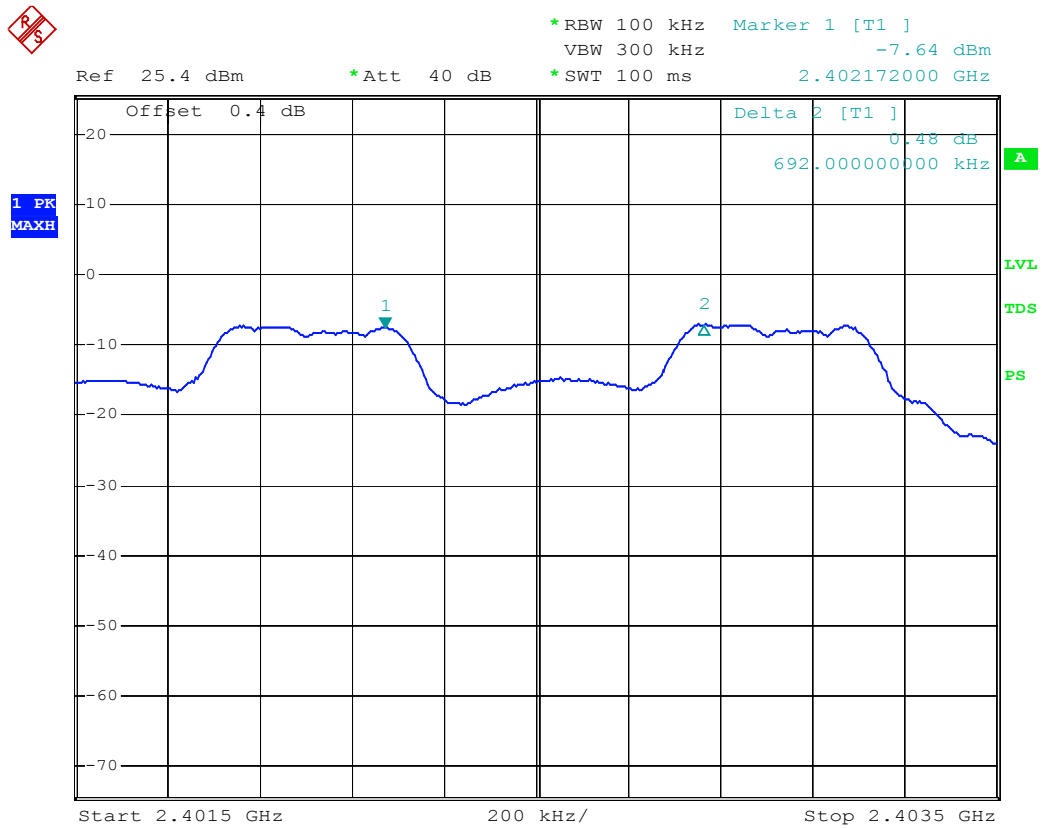
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Charmi Peng on 2006-2-23.

Test Result: Pass

Test mode: Transmitting

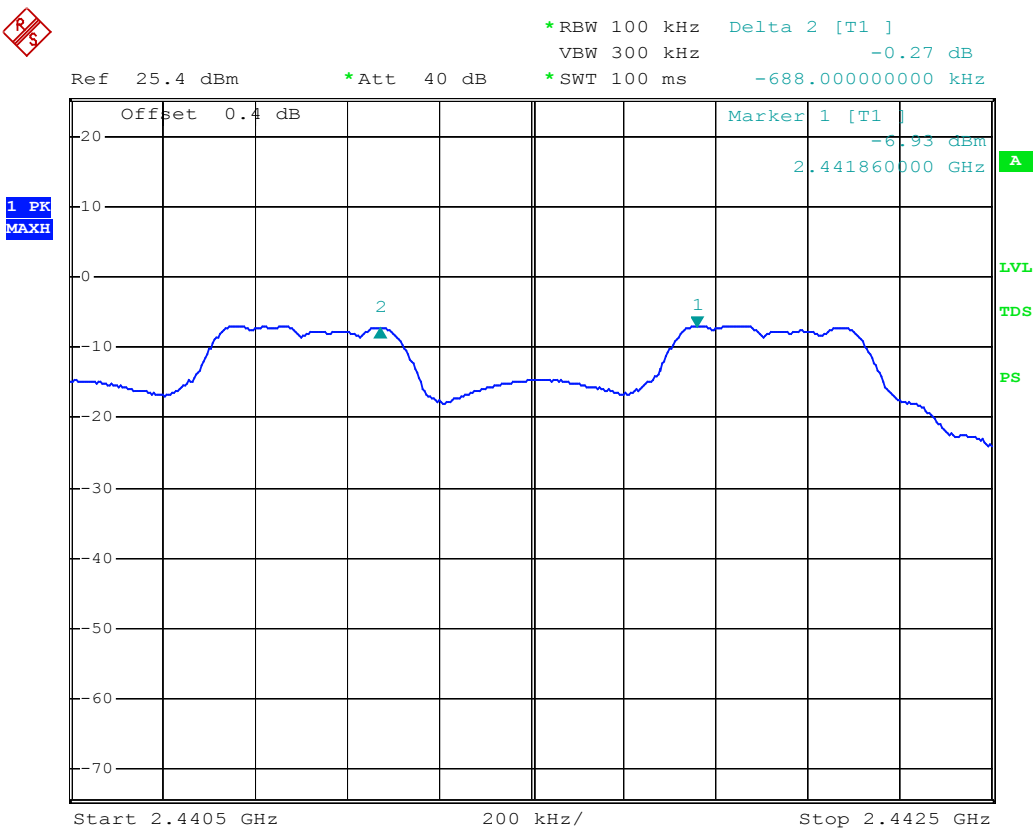
CHANNEL	CHANNEL FREQUENCY (MHz)	SEPARATION READ VALUE (kHz)	SEPARATION LIMIT (kHz)
MI9535			
Low Channel	2402	692	646.67
Adjacency Channel	2403		
Middle Channel	2441	688	453.33
Adjacency Channel	2442		
High Channel	2479	692	466.67
Adjacency Channel	2480		
MS9535			
Low Channel	2402	700	426.67
Adjacency Channel	2403		
Middle Channel	2441	696	426.67
Adjacency Channel	2442		
High Channel	2479	700	453.33
Adjacency Channel	2480		



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 C

h seperation Low channel

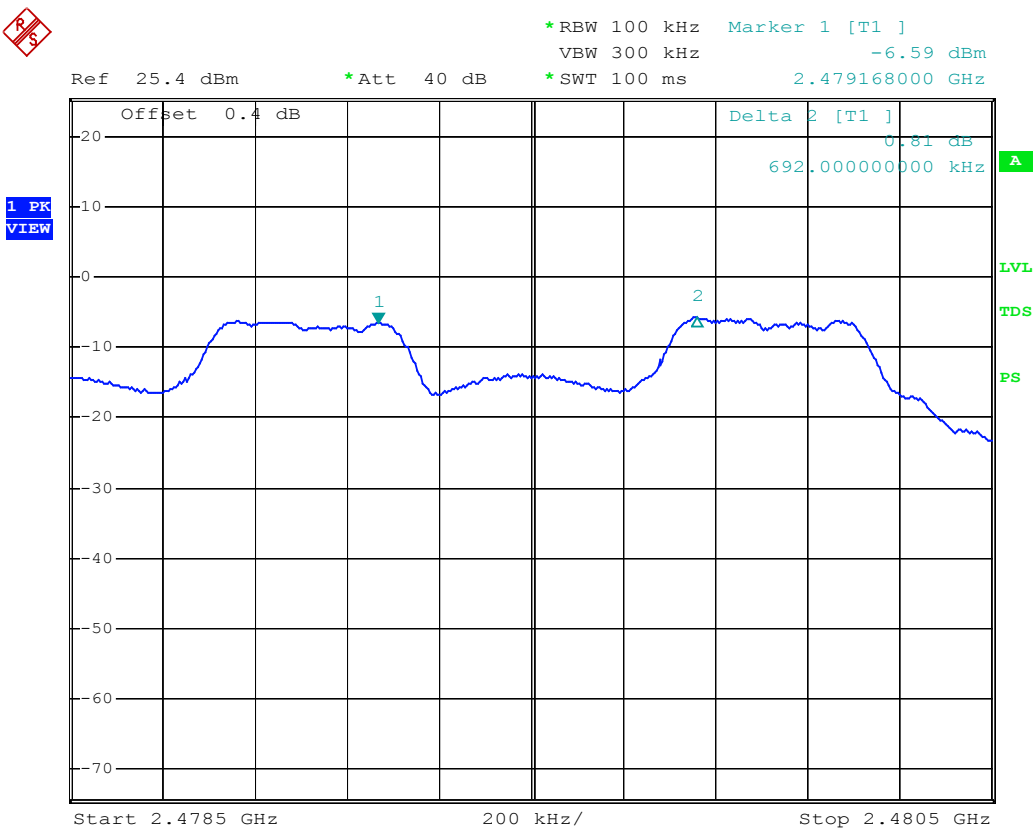
Date: 23.FEB.2006 17:22:54



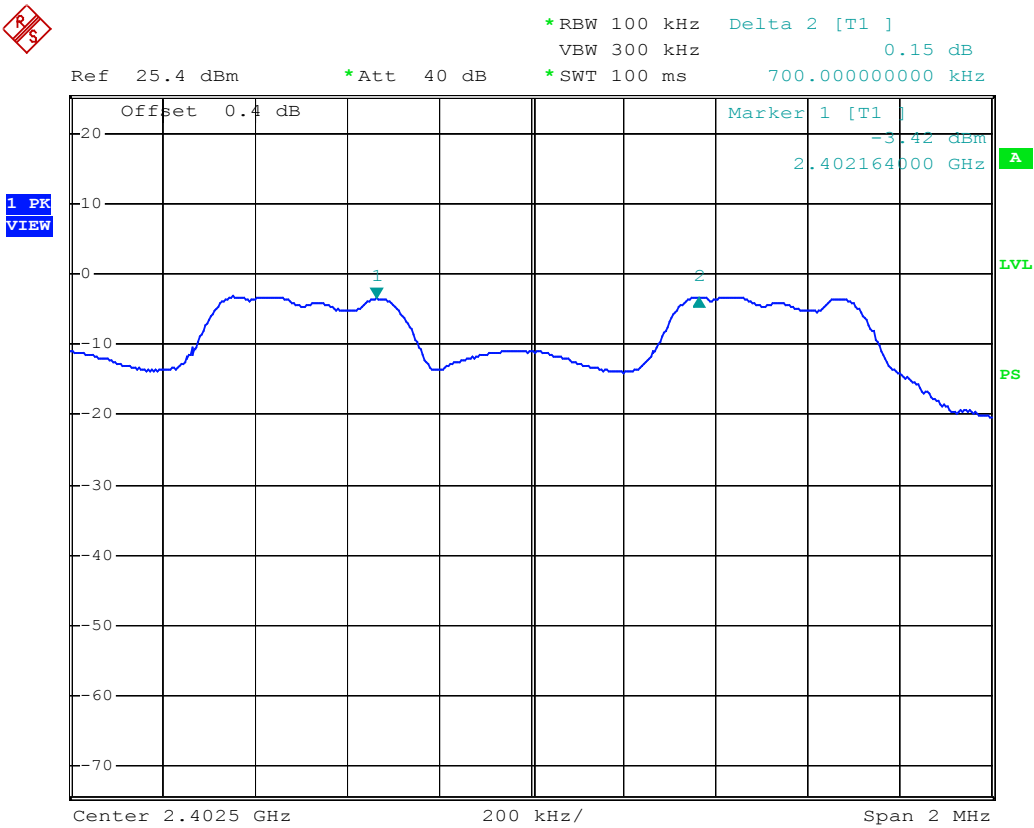
Metro Bluetooth wireless laser barcode scanner M/N:MI9535 C

h seperation Mid channel

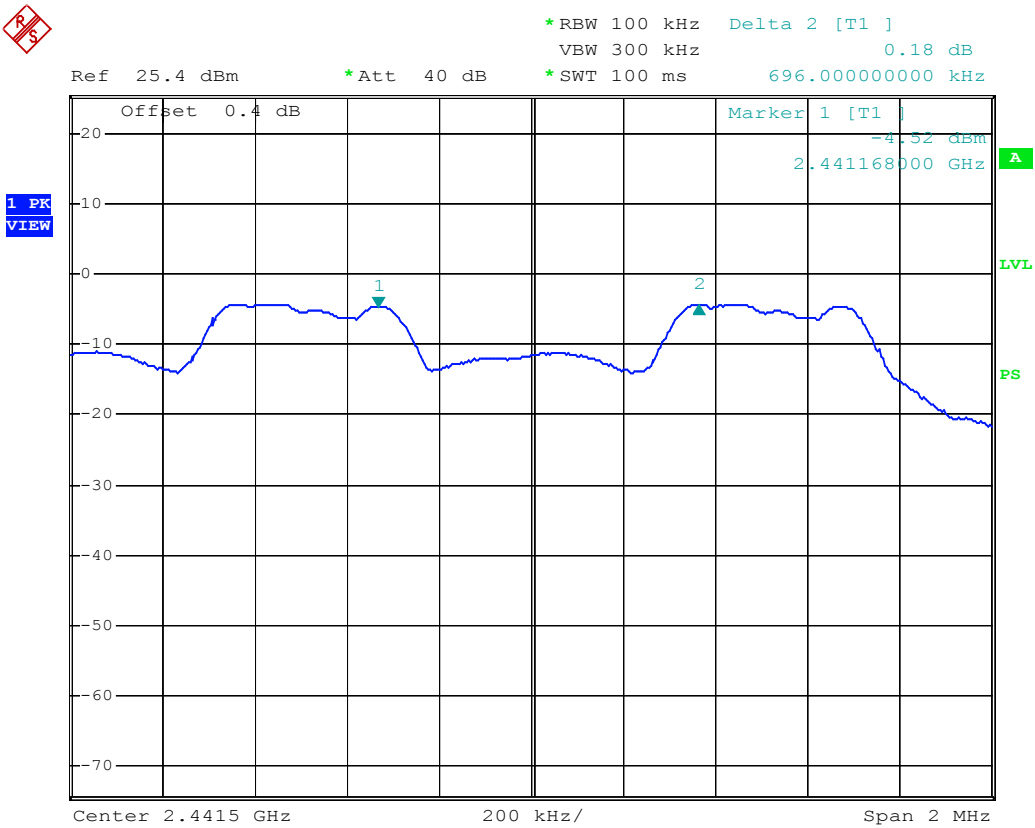
Date: 23.FEB.2006 17:25:05



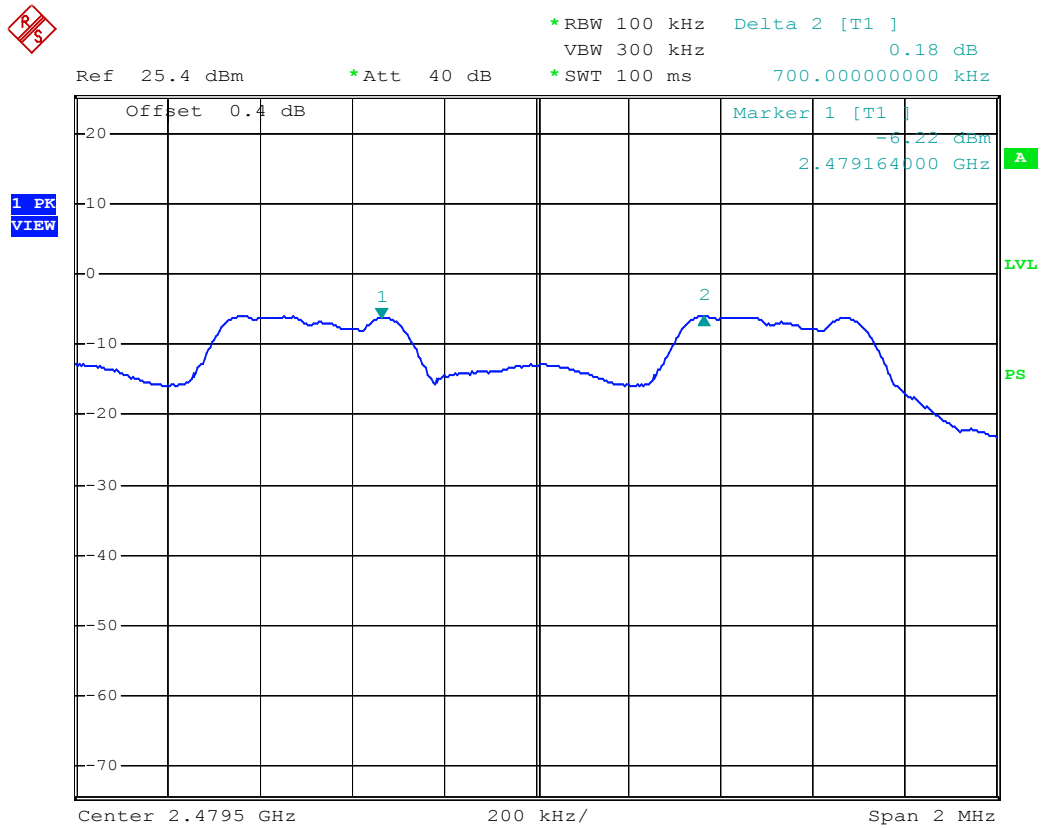
Metro Bluetooth wireless laser barcode scanner M/N:MI9535 C
h seperation High channel
Date: 23.FEB.2006 17:27:20



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ch
annel separation (L-CH)
Date: 24.FEB.2006 14:13:31



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ch
annel separation (M-CH)
Date: 24.FEB.2006 14:15:20



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ch

annel separation (H-CH)

Date: 24.FEB.2006 14:18:28

§15.247(a)(1) –20dB BANDWIDTH TESTING

Standard Applicable

Frequency hopping systems shall have hopping 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 either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. 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

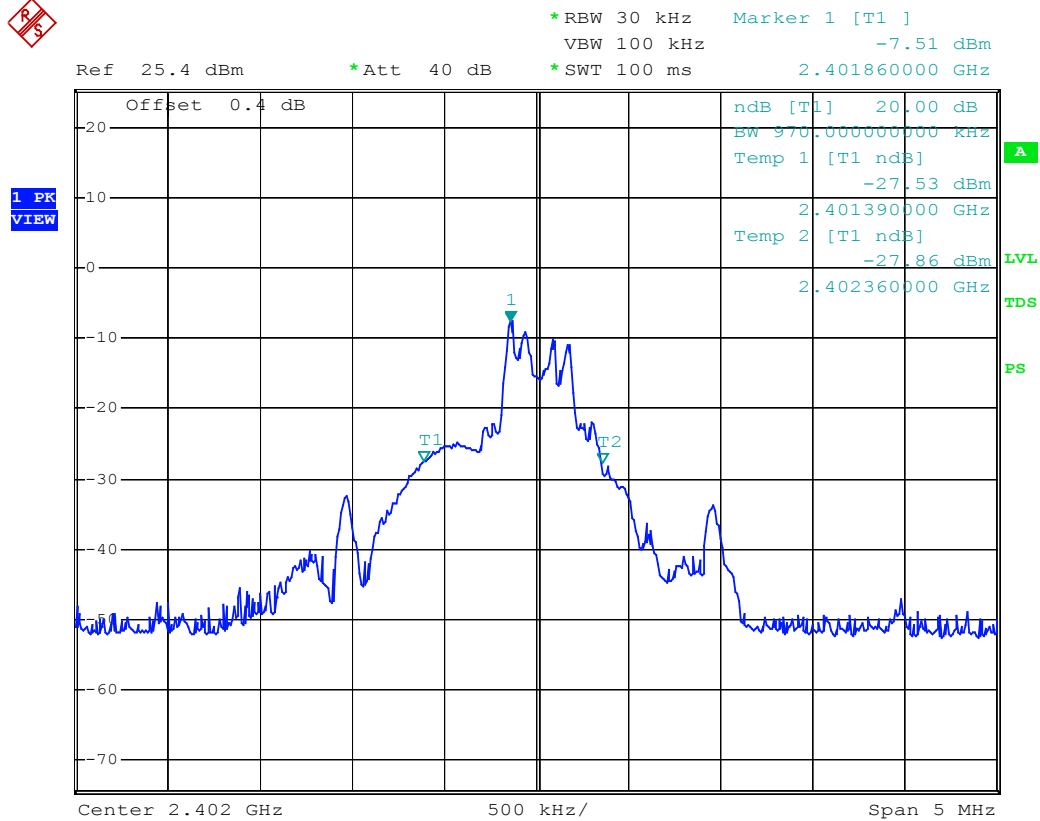
Temperature:	25 ° C
Relative Humidity:	53%
ATM Pressure:	1009mbar

The testing was performed by Charmi Peng on 2006-2-24.

Test Result: Pass

Test Mode: Transmitting

Channel	Channel frequency (MHz)	20dB Bandwidth (kHz)
MI9535		
Low Channel	2402	970
Middle Channel	2441	680
High Channel	2480	700
MS9535		
Low Channel	2402	640
Middle Channel	2441	640
High Channel	2480	680



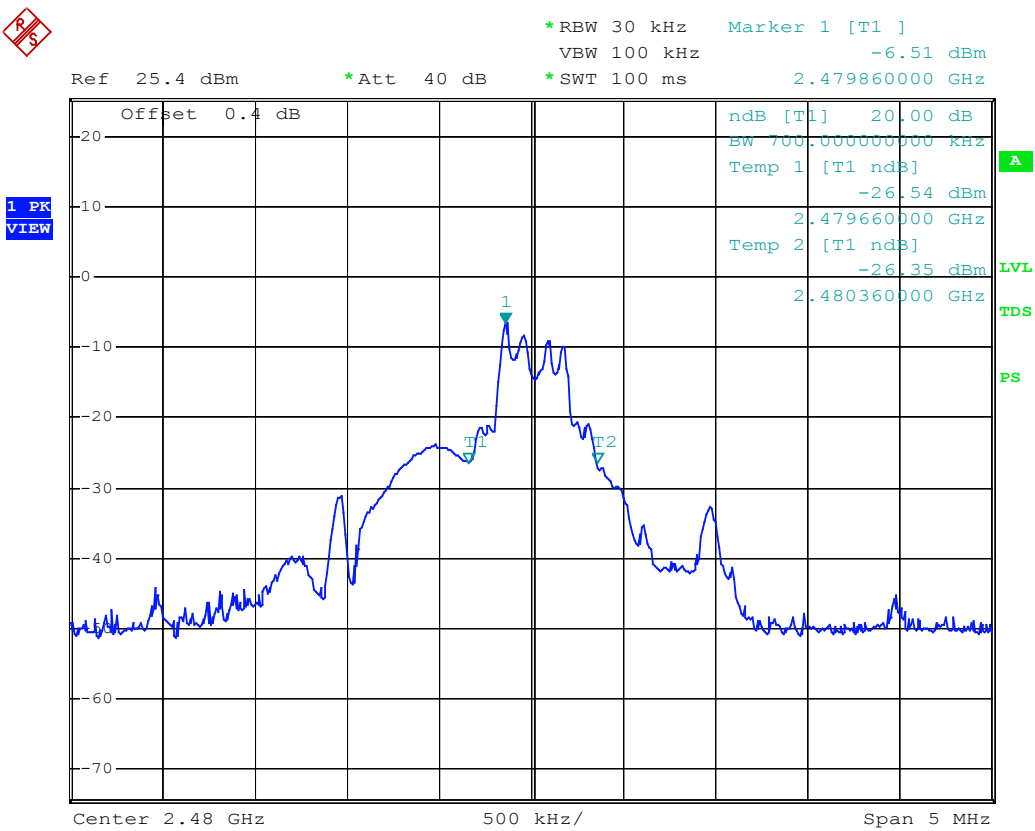
Metro Bluetooth wireless laser barcode scanner M/N:MI9535 2

0dB Bandwidth Low channel

Date: 23.FEB.2006 17:37:43



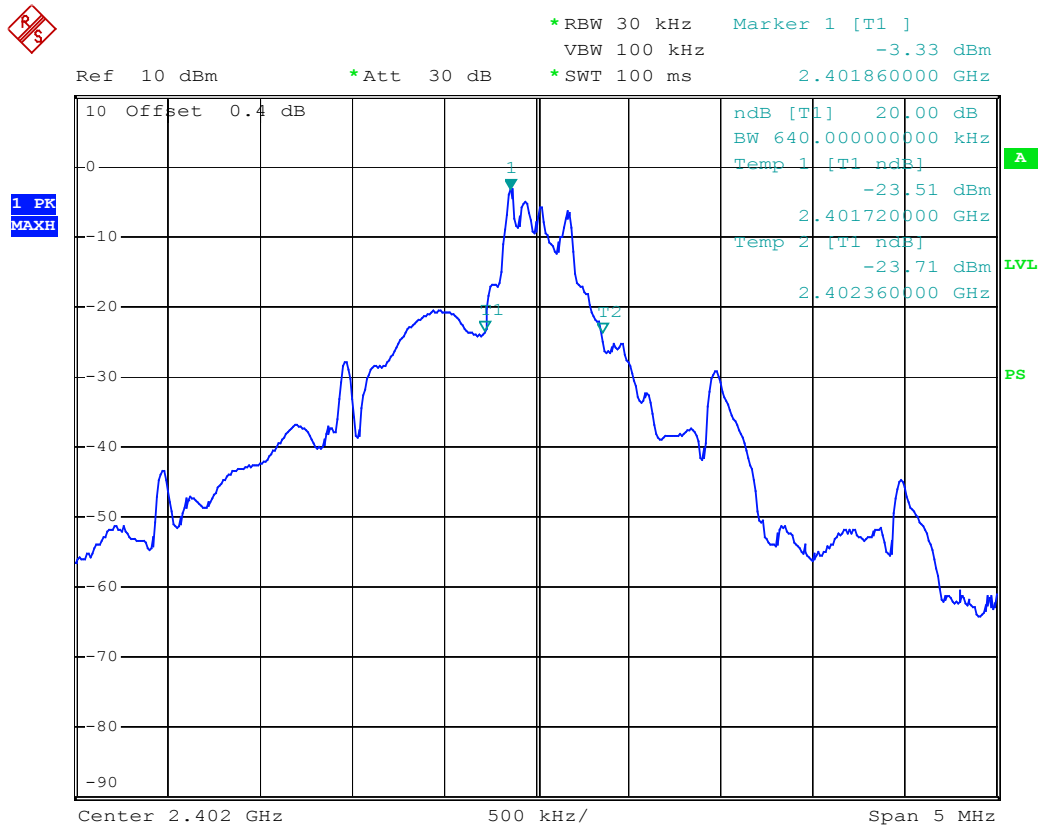
Date: 23.FEB.2006 17:34:07



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 2

0dB Bandwidth High channel

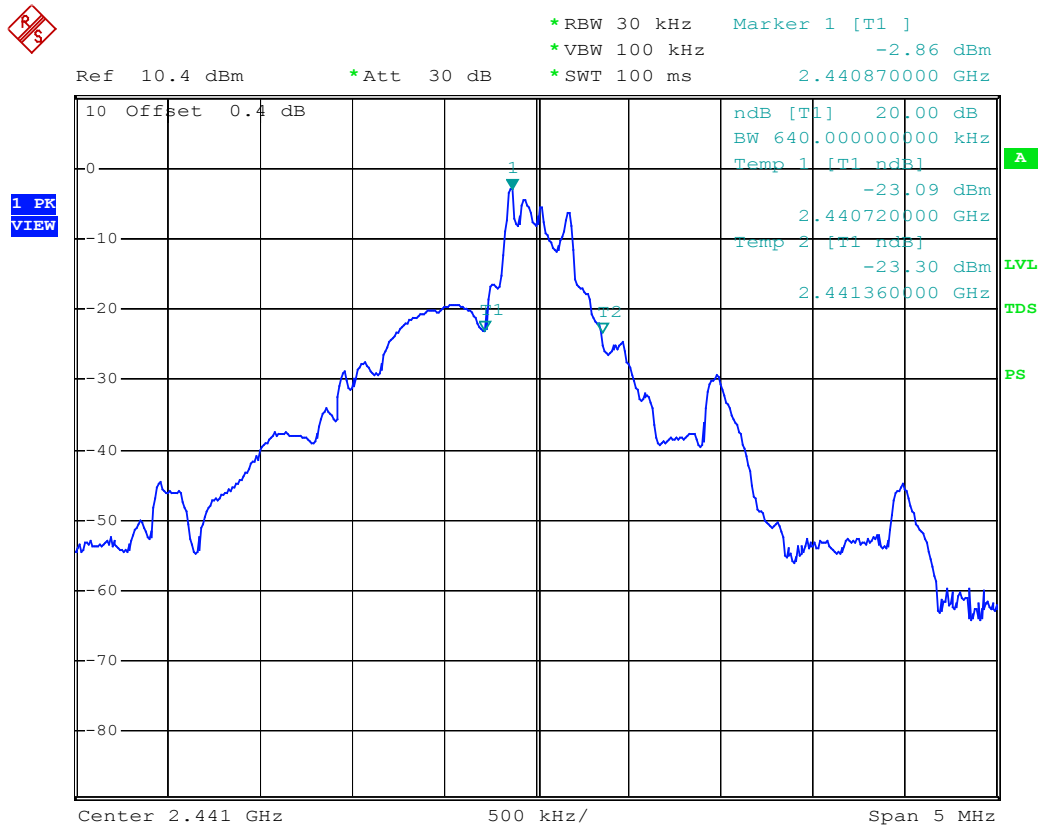
Date: 23.FEB.2006 17:32:49



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 20

dB bandwidth (L-CH)

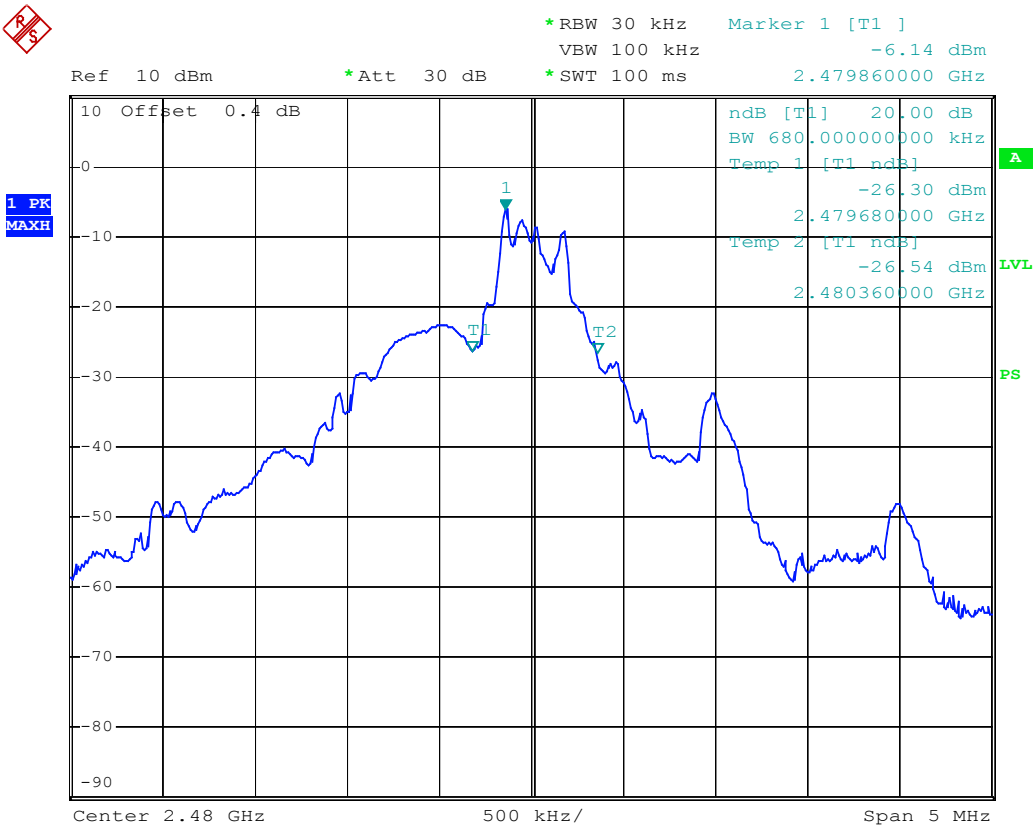
Date: 24.FEB.2006 14:08:10



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 20

dB Bandwidth (M-CH)

Date: 7.MAR.2006 14:30:08



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 20

dB bandwidth (H-CH)

Date: 24.FEB.2006 14:04:56

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

Standard Applicable

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

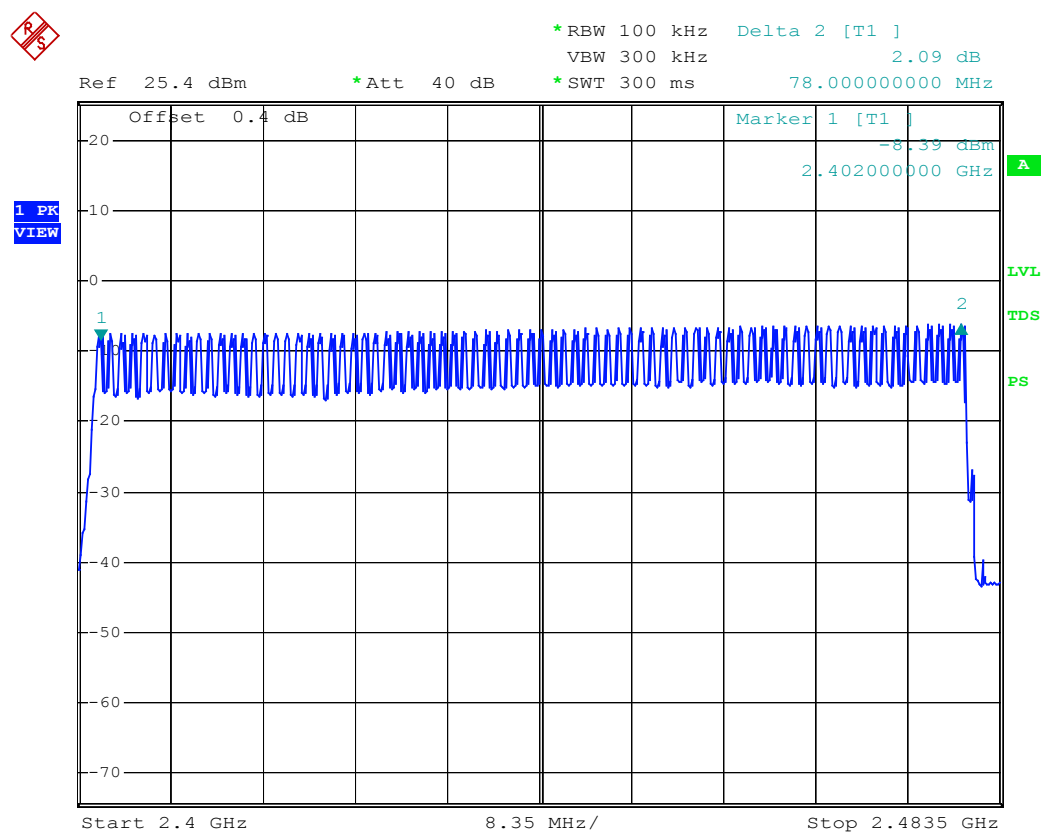
The testing was performed by Charmi Peng on 2006-2-23, 2006-2-24.

Test Result: Pass

Test mode: Transmitting

The frequency hopping systems operating in 2.402~2.480 GHz band employ 79 nonoverlapping channels.

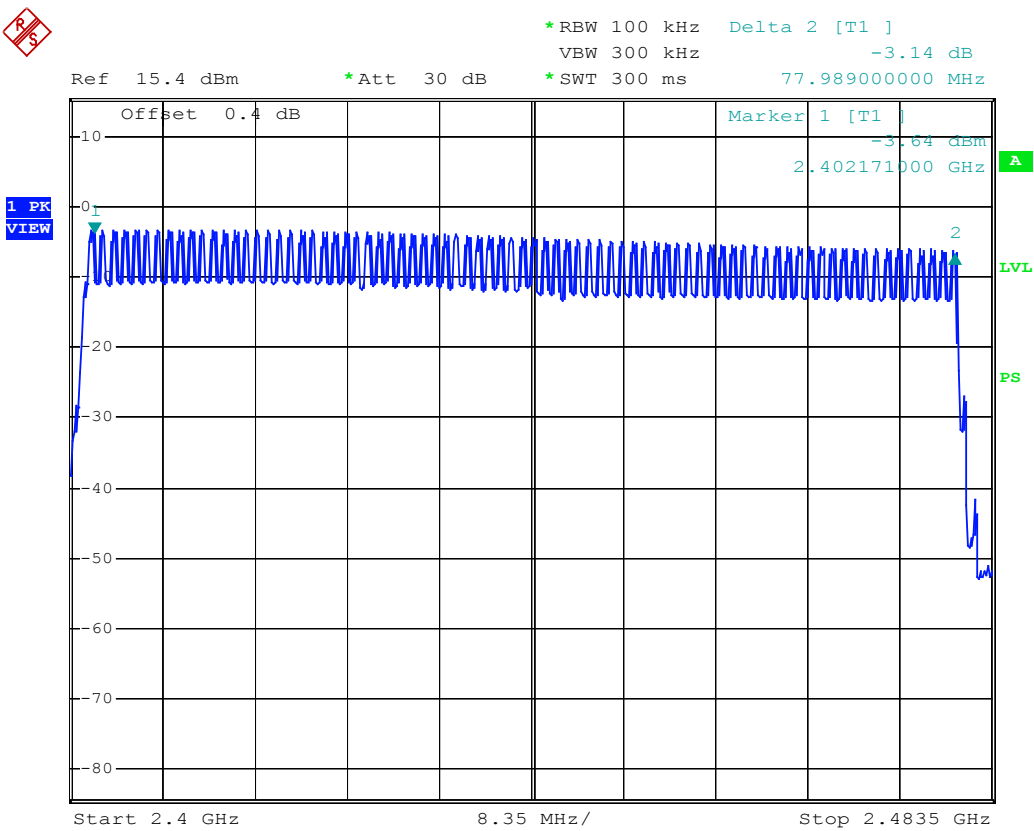
Hopping Channel Frequency Range (MHz)	Quantity OF hopping Channel Read Value (Channel)	Quantity Of Hopping channel limit (Channel)
MI9535/MS9535		
2402.0 ~ 2480.0	79	>15



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 N

o. of Chs

Date: 23.FEB.2006 16:01:35



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 qu
antity of channels
Date: 24.FEB.2006 13:25:56

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

Frequency hopping systems in the 2400-2483.5 MHz 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

The EUT was worked in channel hopping; Spectrum SPAN was set as 0. 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**

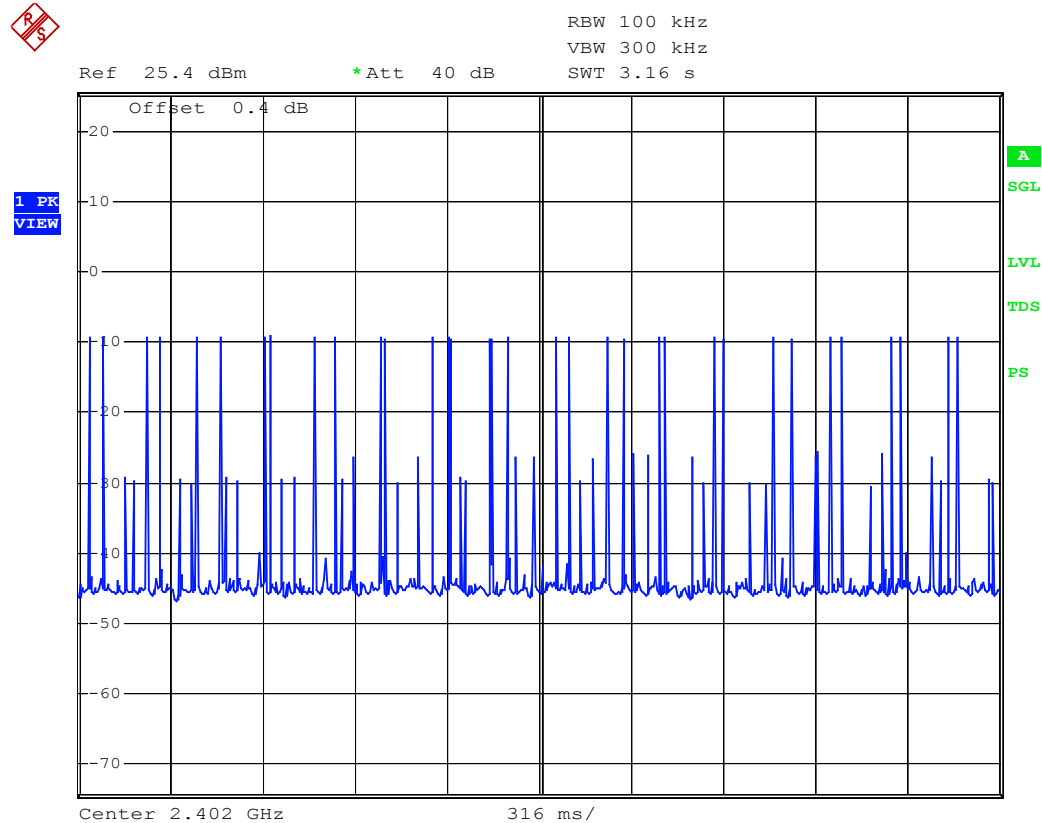
Temperature:	27 °C
Relative Humidity:	50 %
ATM Pressure:	1009 mbar

The testing was performed by Charmi Peng on 2006-2-24.

Test Result: Pass

Test mode: Transmitting

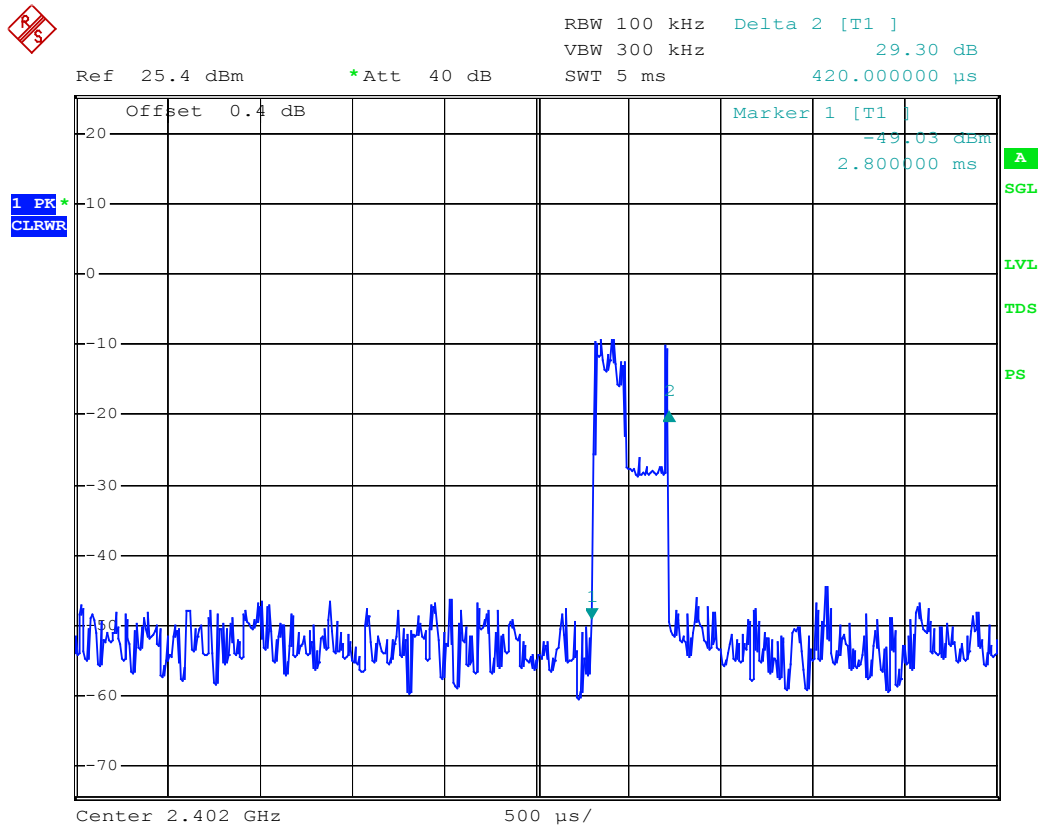
Channel	Frequency MHz	Pulse Wide m Sec	Quantity Pulse per 31.6 Sec	Dwell Time Sec	Limit Sec
MI9535					
Low channel	2402	0.42	320	0.134	0.4
Middle channel	2441	0.42	320	0.134	0.4
High channel	2480	0.42	320	0.134	0.4
MS9535					
Low channel	2402	0.42	320	0.134	0.4
Middle channel	2441	0.42	320	0.134	0.4
High channel	2480	0.42	320	0.134	0.4



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 N

o. of pluses Low channel

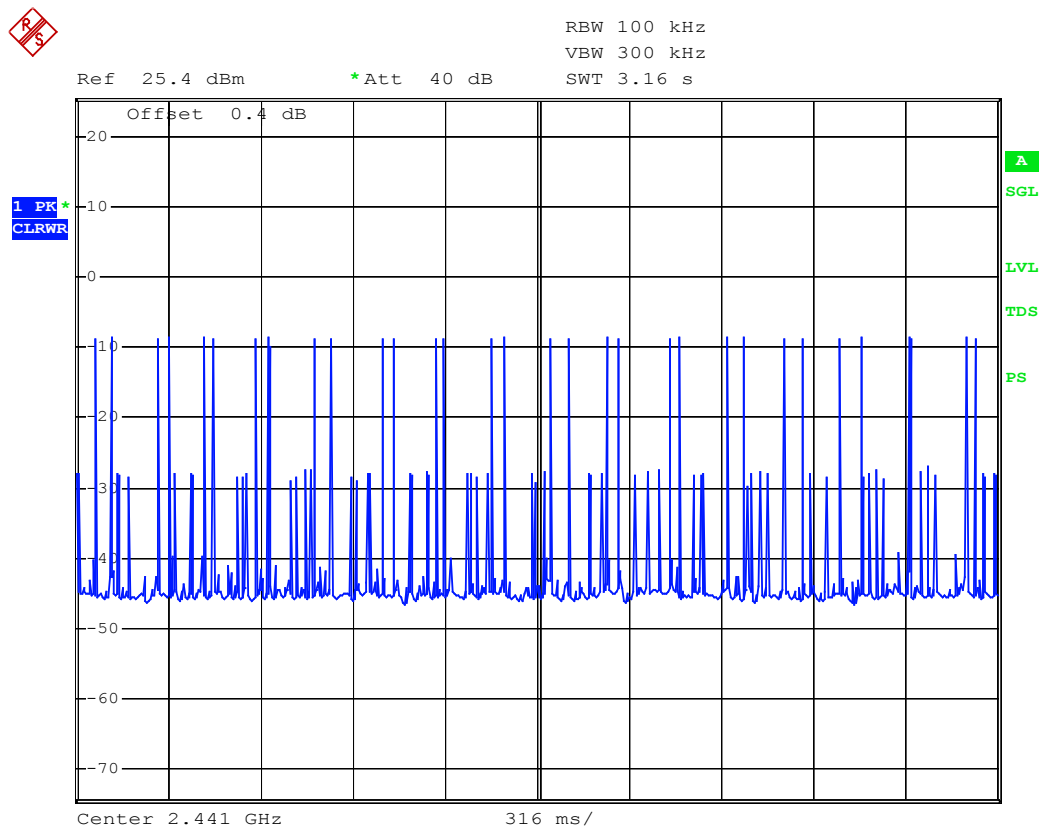
Date: 23.FEB.2006 16:33:27



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 P

luses Low channel

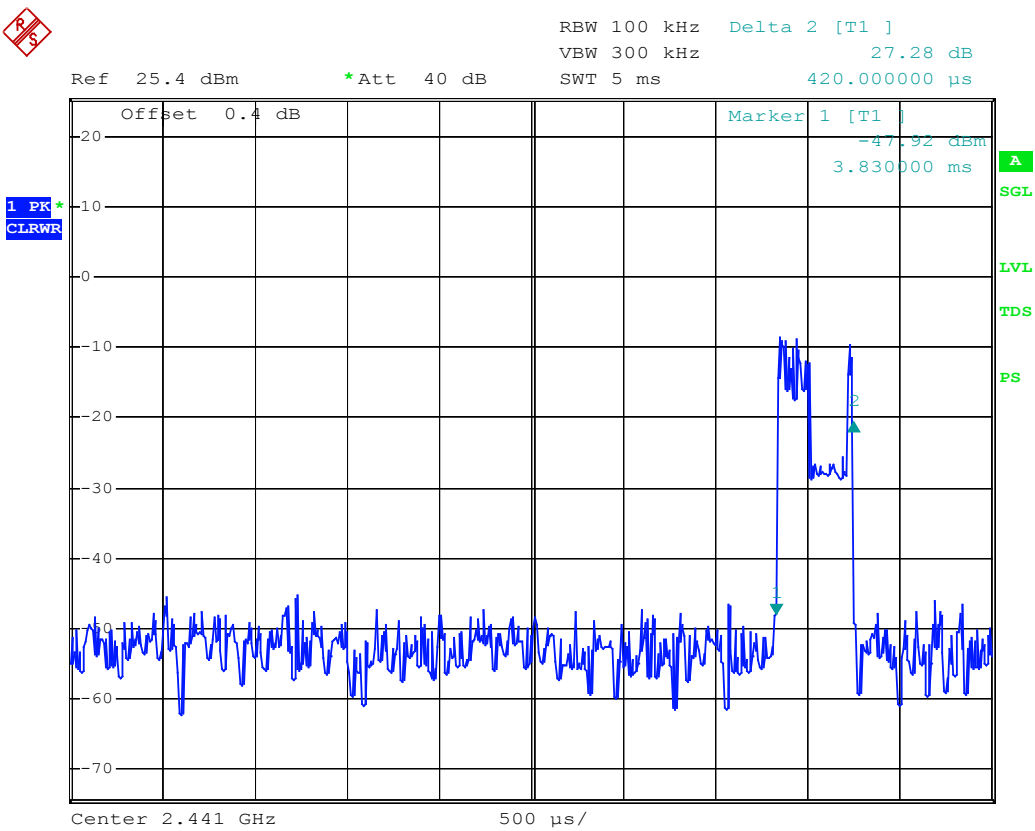
Date: 23.FEB.2006 16:42:50



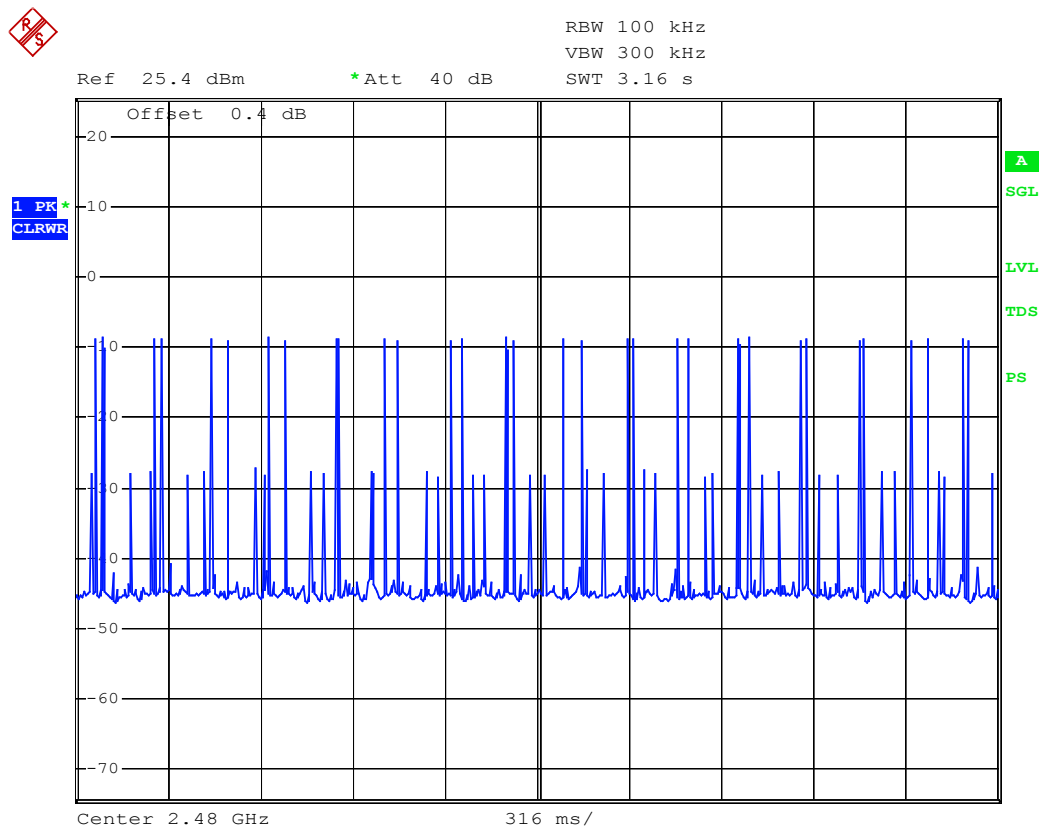
Metro Bluetooth wireless laser barcode scanner M/N:MI9535 N

o. of Pluses Mid channel

Date: 23.FEB.2006 16:56:50



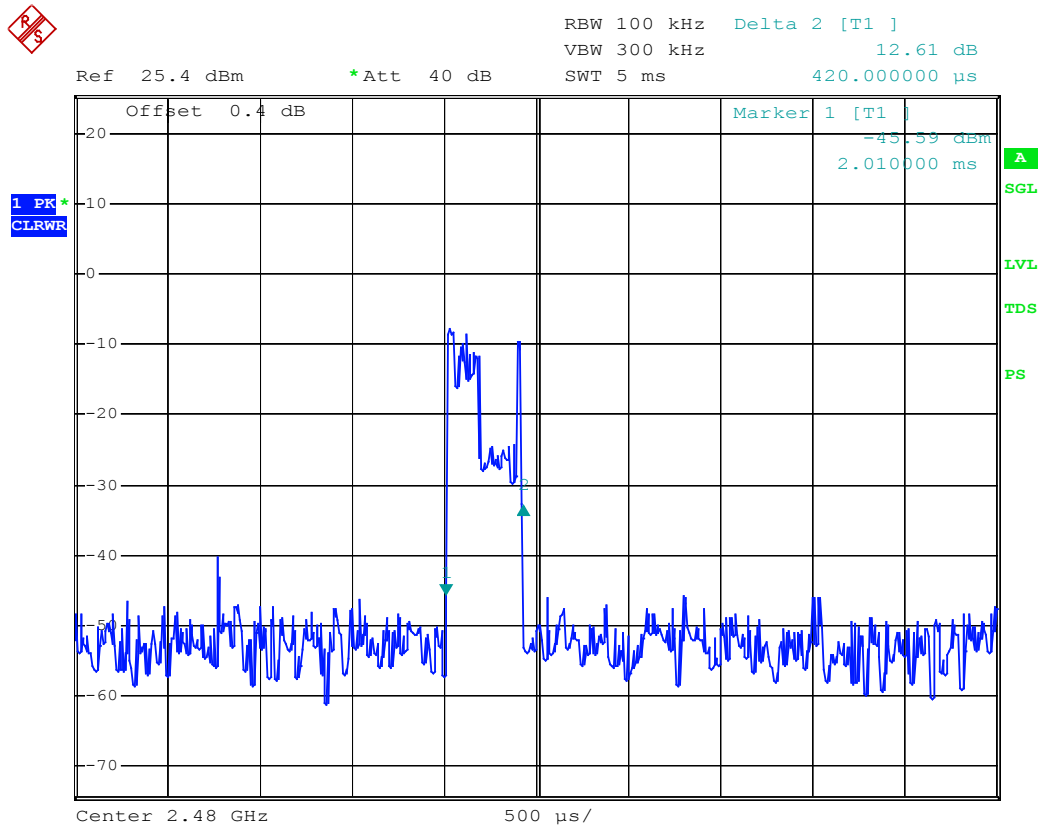
Metro Bluetooth wireless laser barcode scanner M/N:MI9535
Pluses Mid channel
Date: 23.FEB.2006 16:58:16



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 N

o. of Pluses High channel

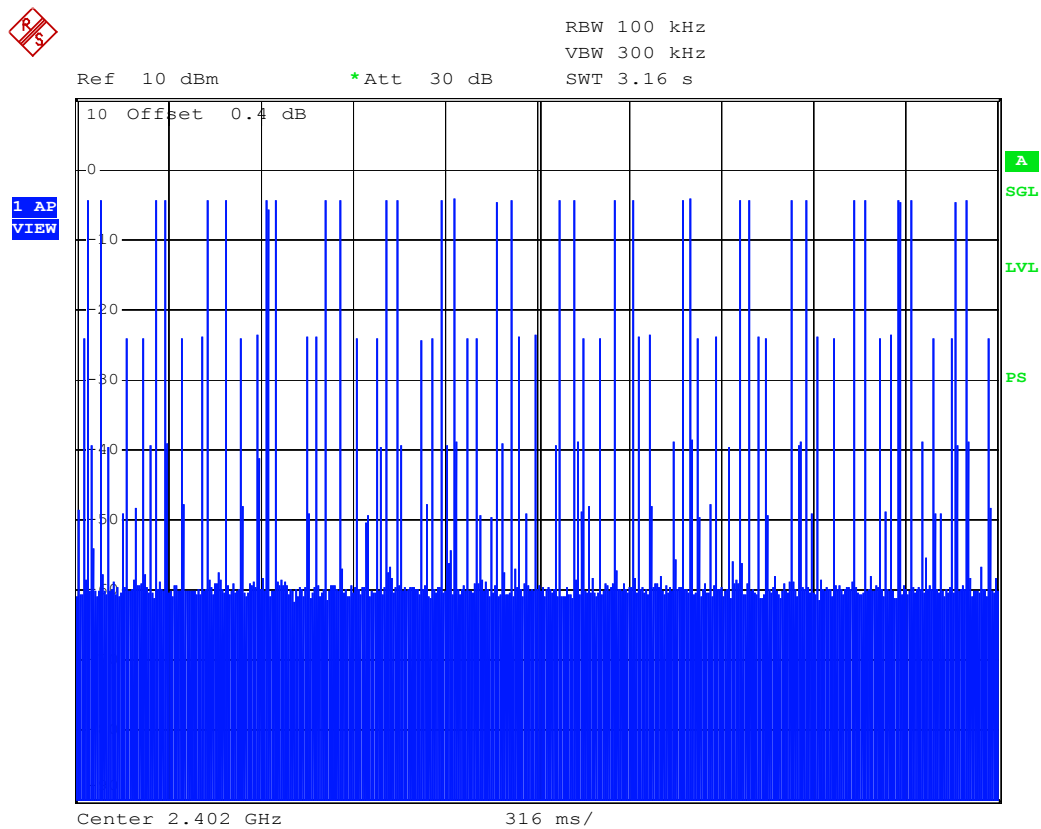
Date: 23.FEB.2006 17:00:13



Metro Bluetooth wireless laser barcode scanner M/N:MI9535

Pluses High channel

Date: 23.FEB.2006 16:59:29



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ti

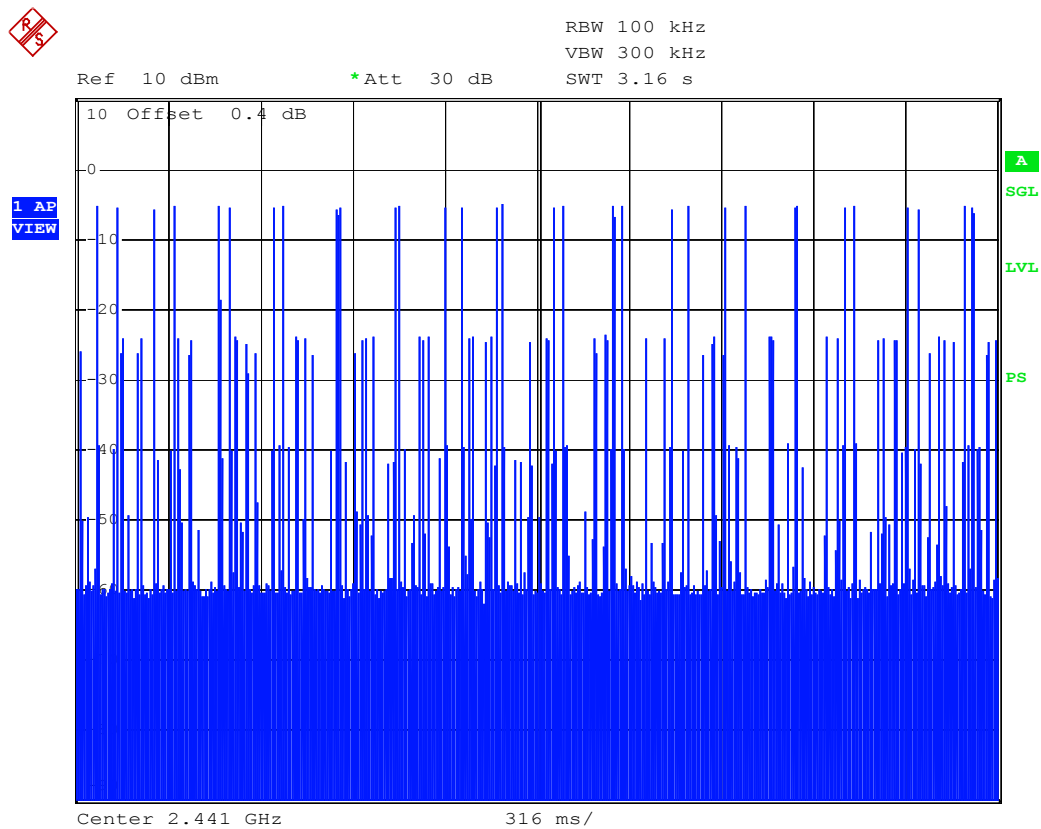
me of occupy (L-CH)

Date: 24.FEB.2006 13:40:23



me of PULS (L-CH)

Date: 24.FEB.2006 13:44:07



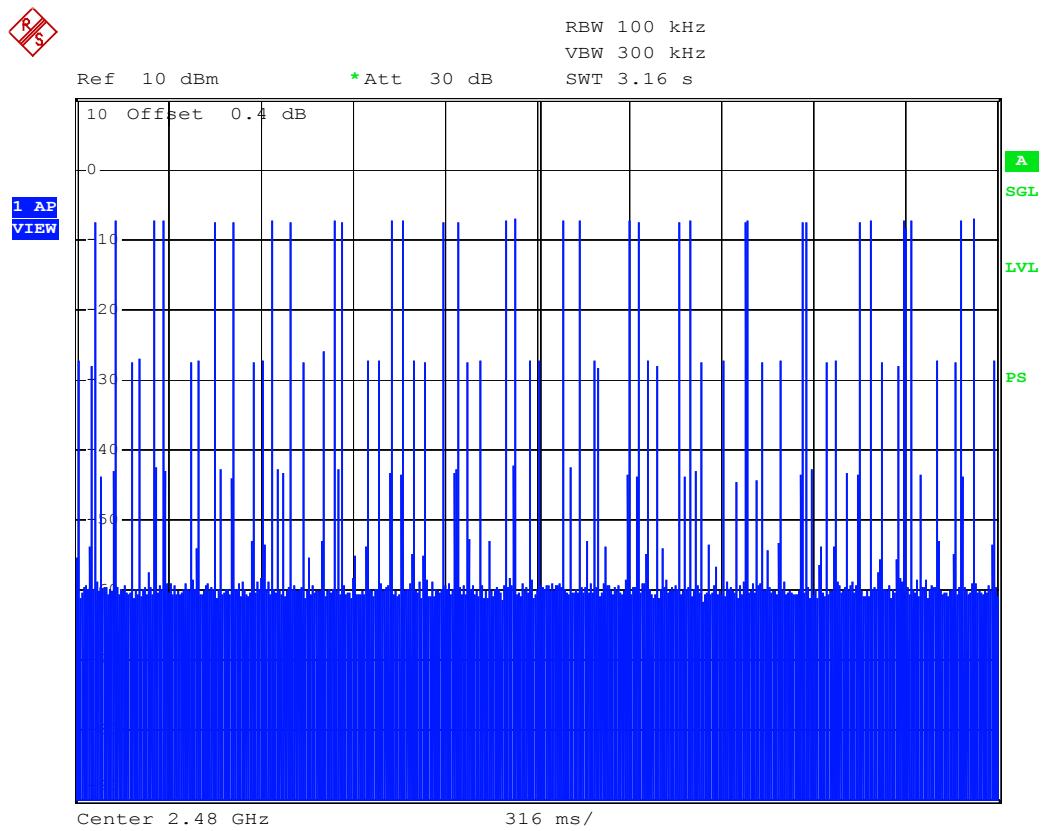
Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ti

me of OCCUPY (M-CH)

Date: 24.FEB.2006 13:47:27



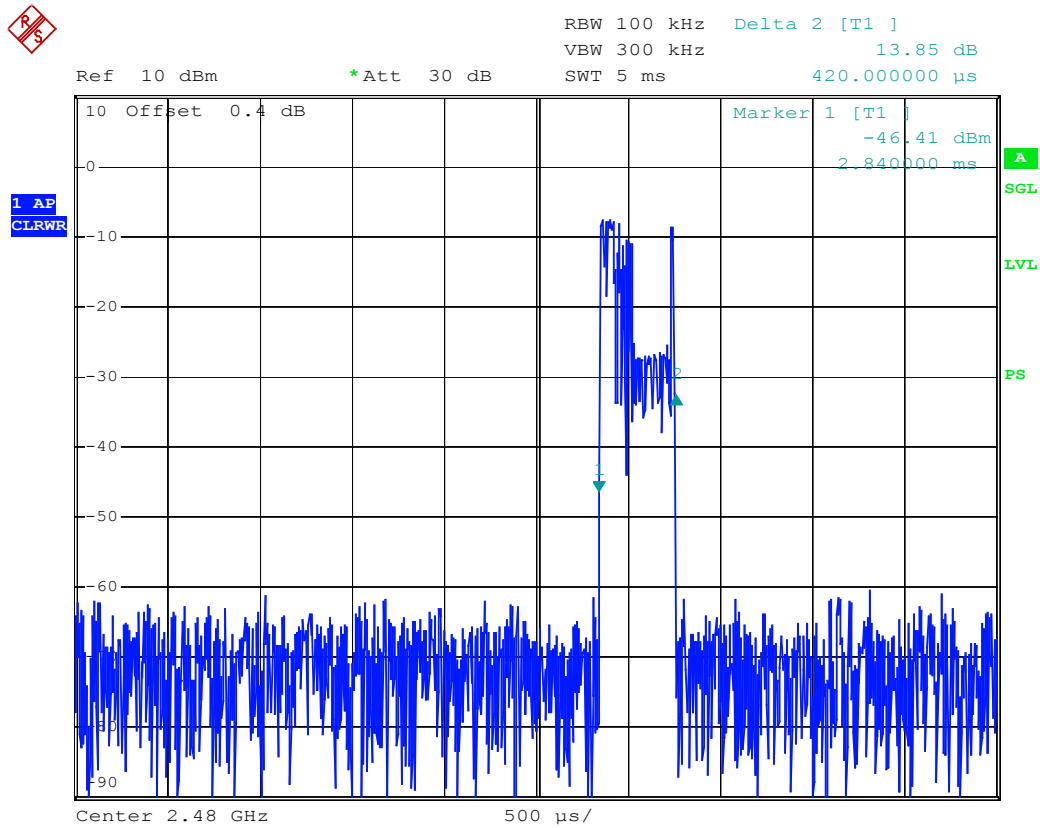
me of PULS (M-CH)



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ti

me of OCCUPY (H-CH)

Date: 24.FEB.2006 13:48:31



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ti

me of puls (H-CH)

Date: 24.FEB.2006 13:50:15

§15.247(b)(1) - PEAK OUTPUT POWER MEASUREMENT**Standard Applicable**

According to §15.247(b) (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.

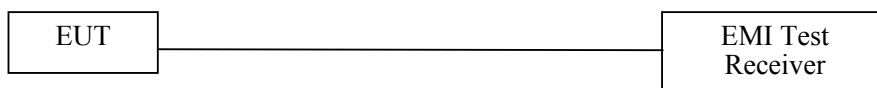
Test Equipment List and Details

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 antenna port to a EMI Test Receiver.
3. Add a correction factor to the display.

**Test Data****Environmental Conditions**

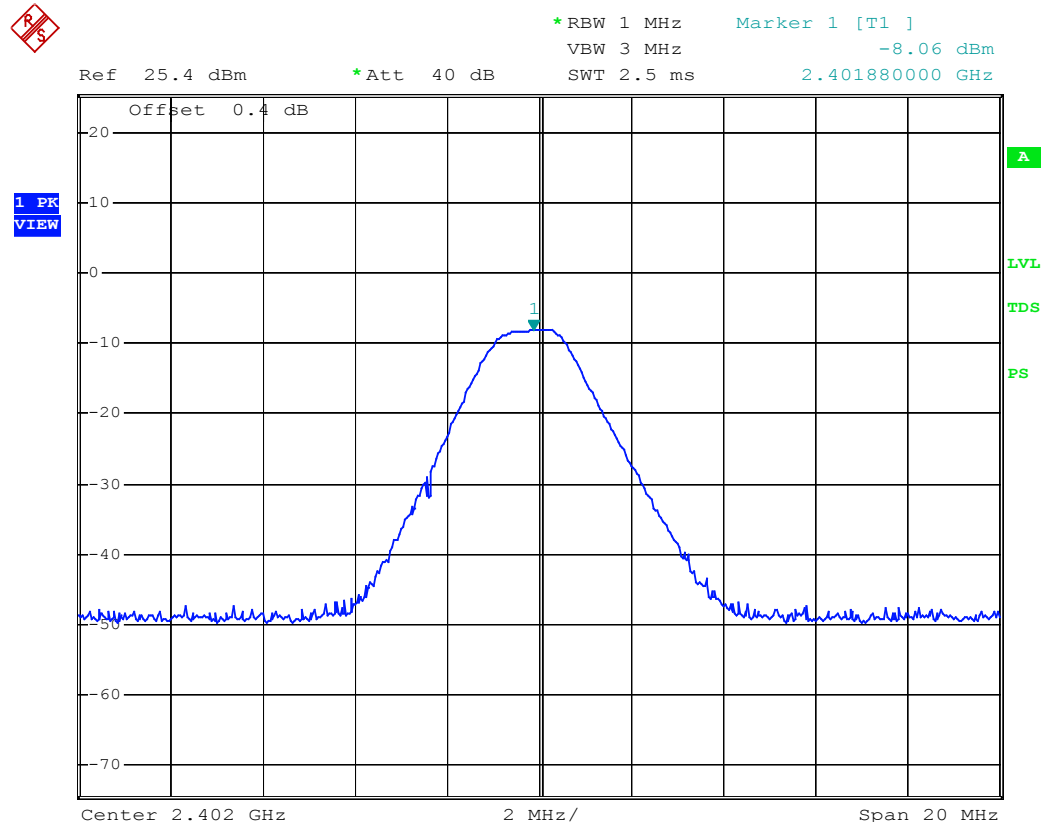
Temperature:	25 ° C
Relative Humidity:	53%
ATM Pressure:	1009mbar

The testing was performed by Charmi Peng on 2006-2-24.

Test Result: Pass

Please refer to the following plots.

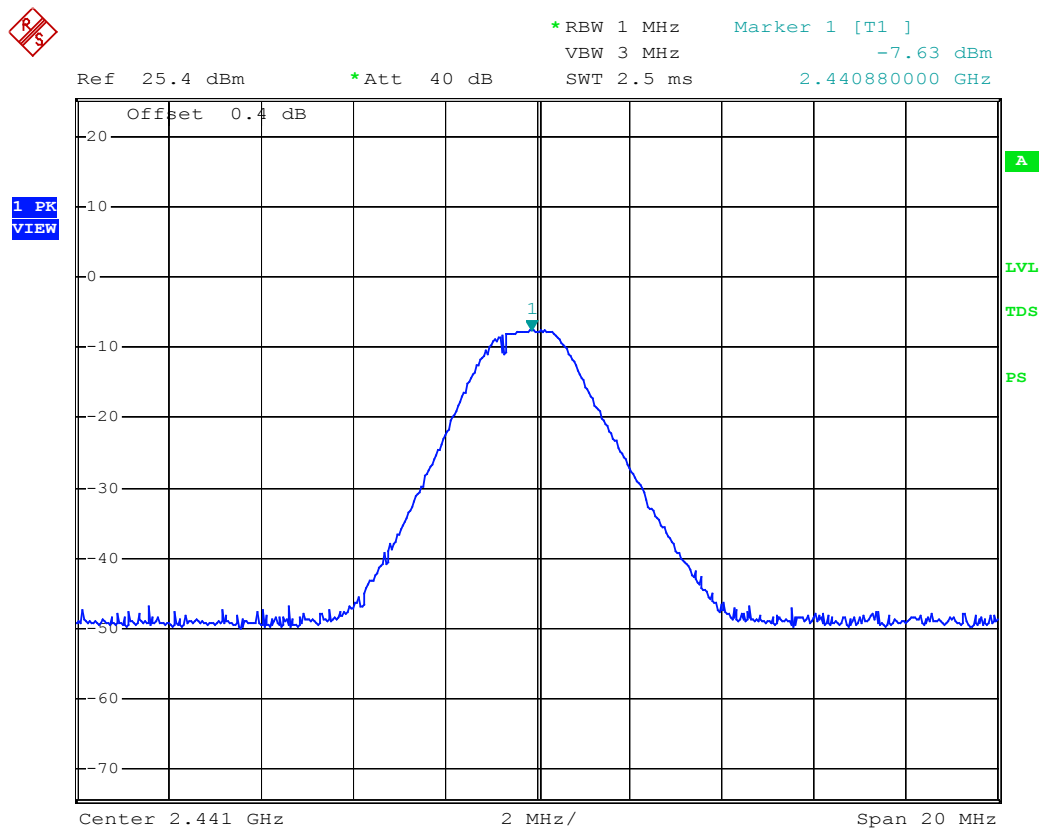
Channel	Frequency (MHz)	Peak output Power Reading (dBm)	Antenna Gain (dB)	Peak output Power (dBm)	Peak Output Power (mW)	Limit (W)
MI9535						
Low channel	2402	-8.06	1	-7.06	0.197	1
Middle channel	2441	-7.63	1	-6.63	0.217	1
High channel	2480	-6.87	1	-5.87	0.259	1
MS9535						
Low channel	2402	-3.65	1	-2.65	0.543	1
Middle channel	2441	-4.67	1	-3.67	0.430	1
High channel	2480	-6.56	1	-5.56	0.278	1



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 Pe

ak output power Low channel

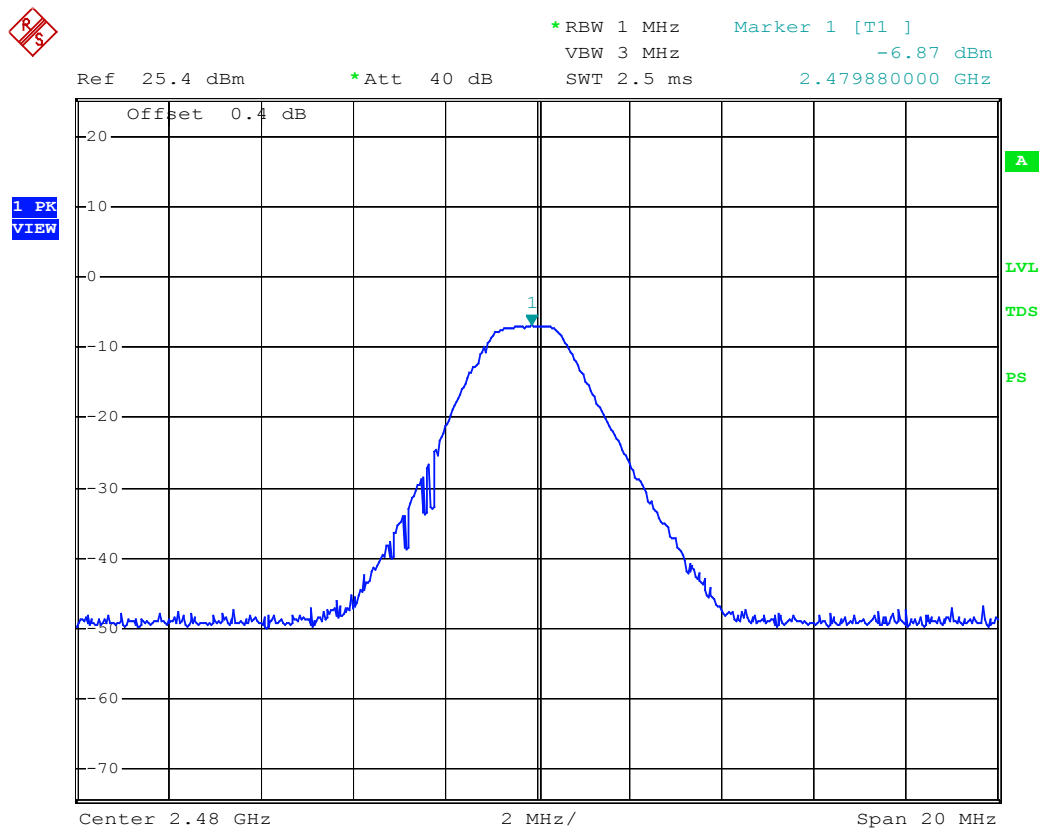
Date: 23.FEB.2006 15:50:54



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 Pe

ak output power Mid channel

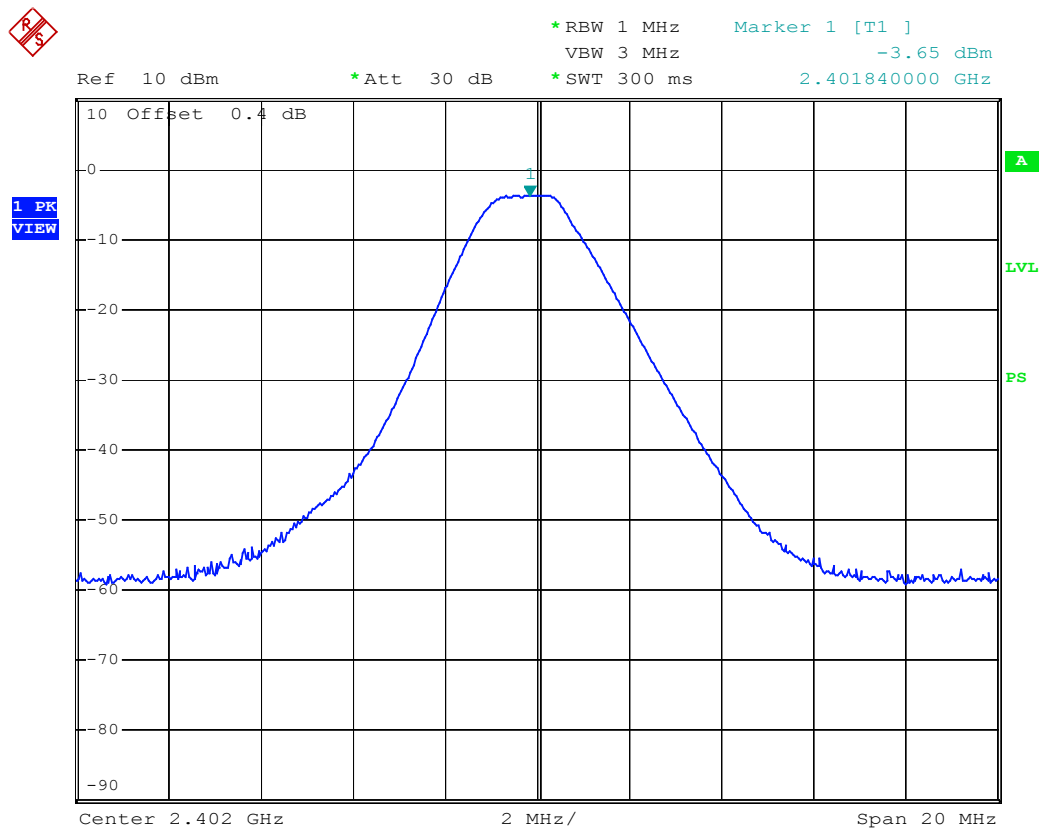
Date: 23.FEB.2006 15:52:04



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 Pe

ak output power High channel

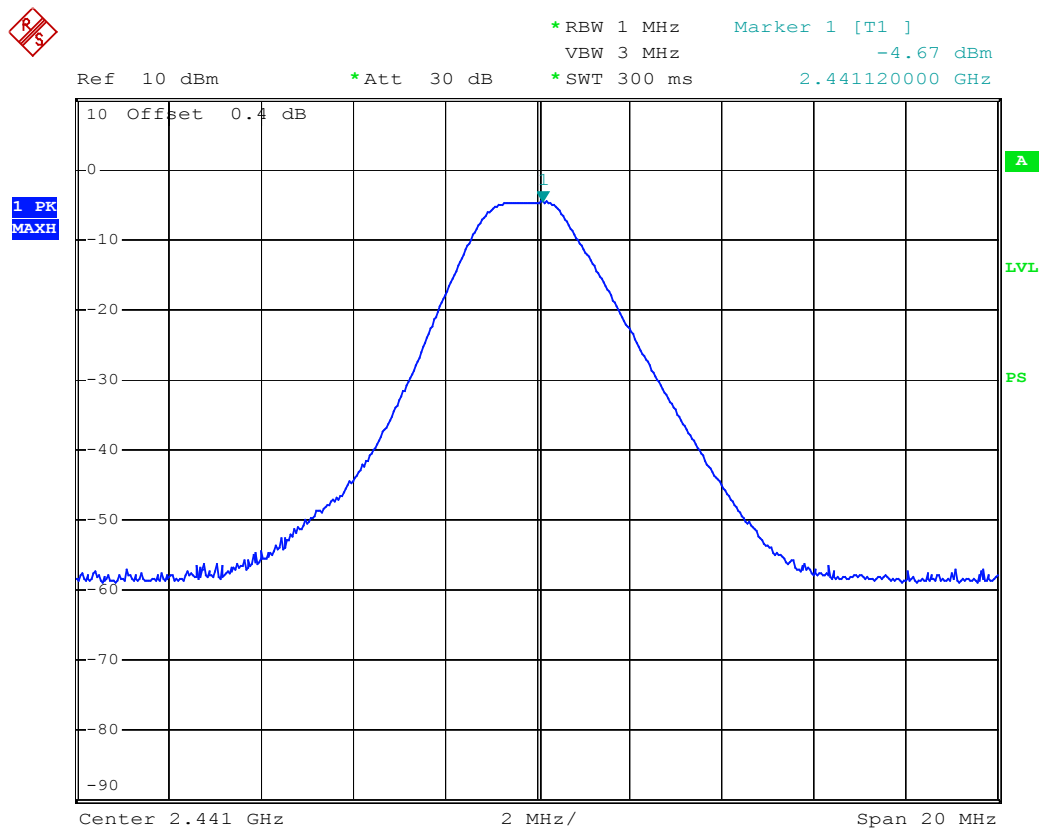
Date: 23.FEB.2006 15:52:45



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ou

tput power (L-CH)

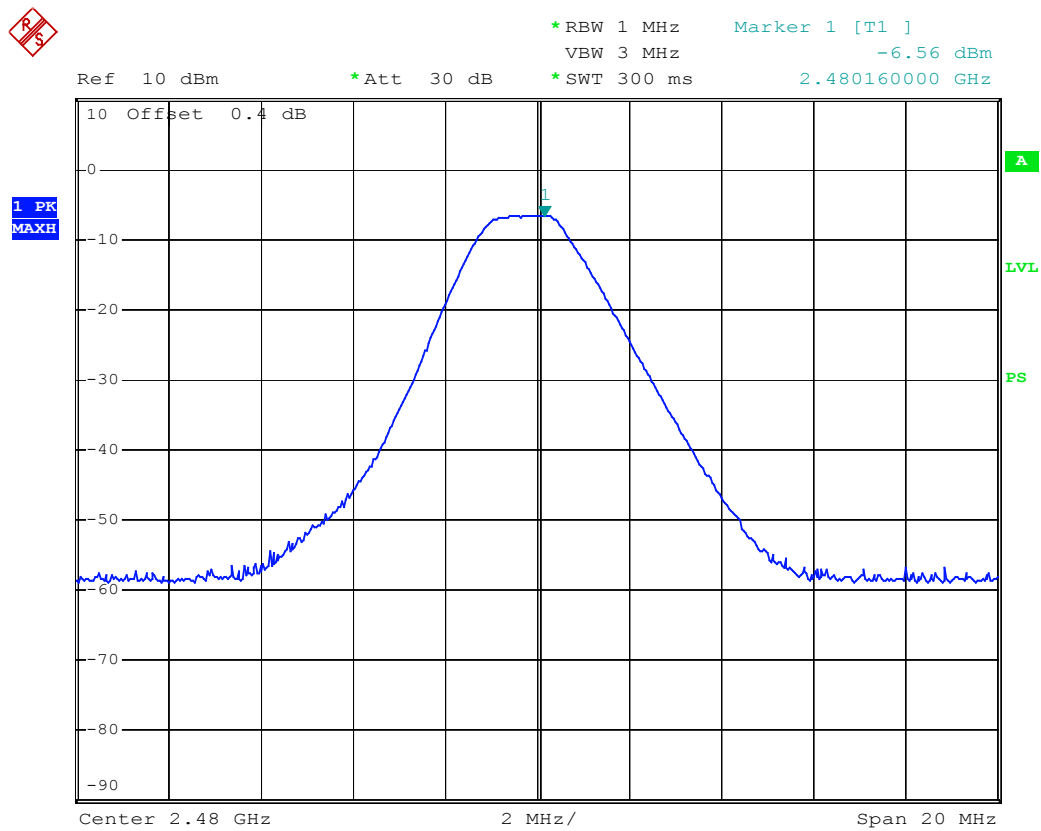
Date: 24.FEB.2006 13:57:03



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ou

tput power (M-CH)

Date: 24.FEB.2006 13:58:56



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 ou

tput power (H-CH)

Date: 24.FEB.2006 14:00:00

§15.247(d) - 100 KHZ BANDWIDTH OF BAND EDGES**Standard Applicable**

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 either an internal calibrator or 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. Then set it to any one measured frequency within its operating range, 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 highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data**Environmental Conditions**

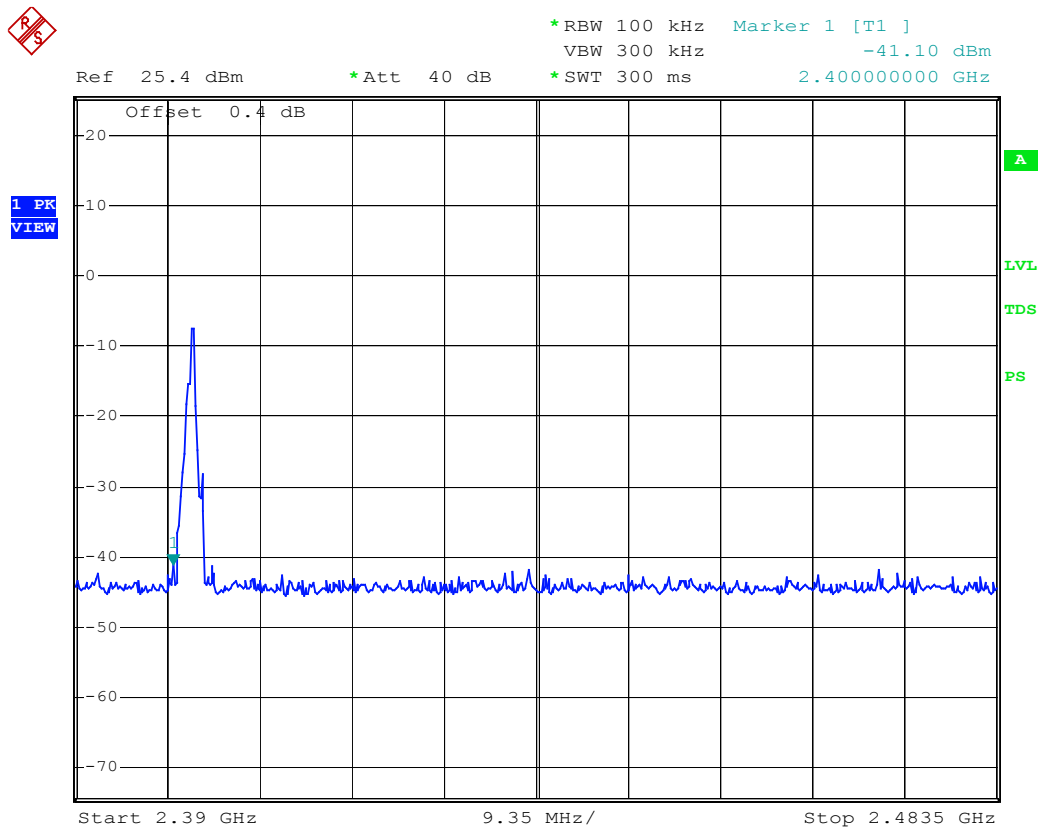
Temperature:	18 °C
Relative Humidity:	53 %
ATM Pressure:	1009mbar

The testing was performed by Charmi Peng on 2006-2-23, 2006-2-24.

Test Result: Pass

Test Mode: Transmitting

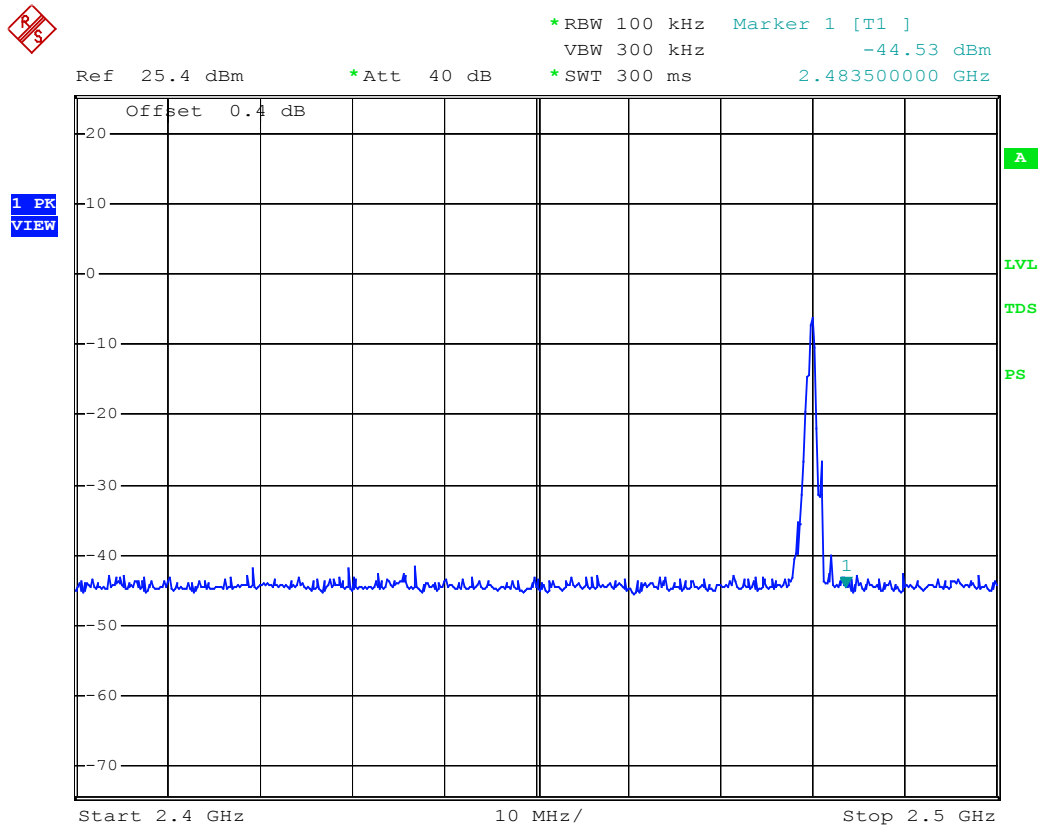
Frequency MHz	Delta of Peak to Edge Point dB	Limit dB
MI9535		
2400.00	34.0	≥ 20
2483.50	36.5	≥ 20
MS9535		
2400.00	33	≥ 20
2483.50	31.48	≥ 20



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 B

andedge Low Channel

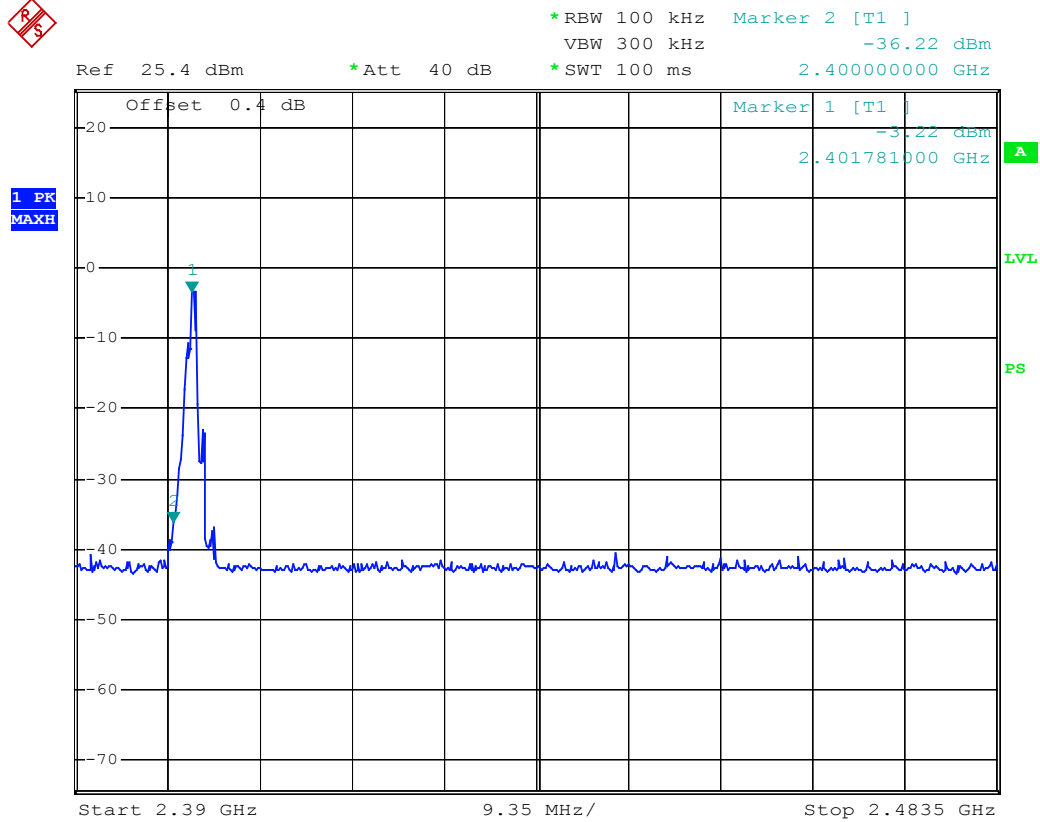
Date: 23.FEB.2006 16:11:34



Metro Bluetooth wireless laser barcode scanner M/N:MI9535 B

andedge High Channel

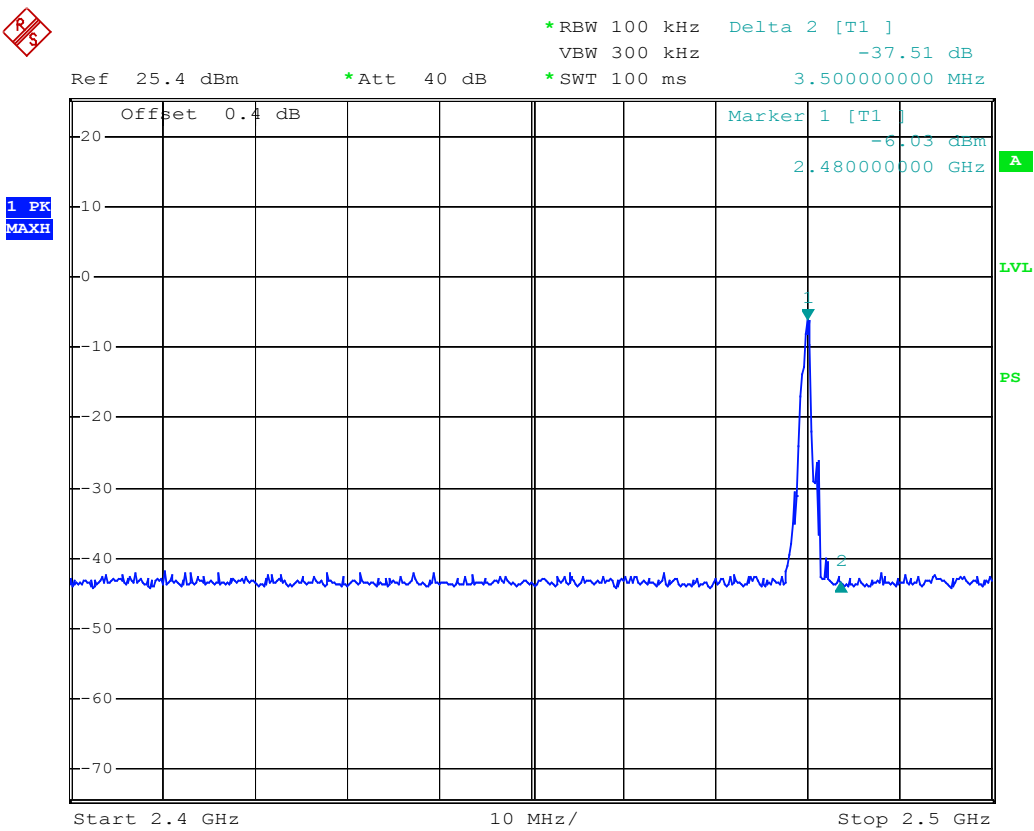
Date: 23.FEB.2006 16:12:41



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 10

0KHz bandwidth (L-CH)

Date: 24.FEB.2006 14:48:28



Metro Bluetooth wireless laser barcode scanner M/N:MS9535 10
0KHz bandwidth (H-CH)
Date: 24.FEB.2006 14:23:17