



NVLAP LAB CODE 200707-0



FCC PART 15.247

MEASUREMENT AND TEST REPORT

For

Zoom Telephonics Inc

207 South Street, Boston, Ma, 02111, USA

FCC ID: BDNZOOMKBTPV12011

Report Type: Original Report	Product Type: Wireless Keyboard
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Report Number: <u>RXM10012152</u>	
Report Date: <u>2010-03-08</u>	
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* This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "*" (Rev.2)

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The Zoom Telephonics Inc's product, model number: 9005 Series 1078 (FCC ID: BDNZOOMKBTPV12011) or the "EUT" as referred to in this report is a *Wireless keyboard*, which measures approximately: 31.0 cm L x 21.6 cm W x 1.4 cm H, rated input voltage: DC 3.0V=2*1.5 AAA battery.

** All measurement and test data in this report was gathered from production sample serial number: 1001010 (Assigned by BAEL). The EUT was received on 2010-01-21.*

Objective

This Type approval report is prepared on behalf of Zoom Telephonics Inc 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 Laboratories 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 Laboratories 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, China.

Test site at Bay Area Compliance Laboratories 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 21, 2007. 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 Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



NVLAP LAB CODE 200707-0

The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

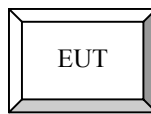
Description of Test Configuration

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

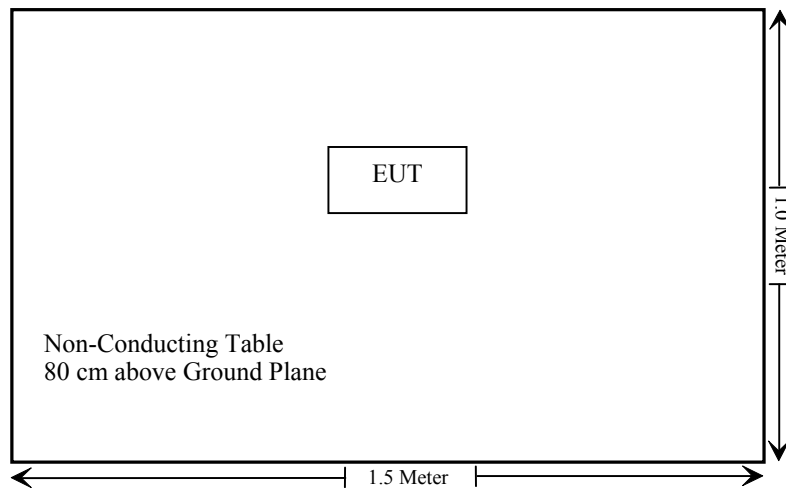
Equipment Modifications

No modification was made to the unit tested.

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §2.1093	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	Conducted Emissions	N/A
§15.205, §15.209, §15.109, §15.247(d)	Radiated Emissions	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	Compliant

FCC §15.247 (i) & §2.1093 - RF EXPOSURE

According to FCC §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 Mobile Portable RF Exposure v03r03, no SAR required if power is lower than the flowing threshold:

Measurement Result:

Max Peak Output Power:

$P = -4.91 \text{ dBm} = 0.323 \text{ mW}$

SAR Threshold: $60/f_{\text{GHz}} = 60/2402 = 24.98 \text{ mW}$

$P < 60/f_{\text{GHz}}$

SAR evaluation is not necessary.

FCC §15.203 - ANTENNA REQUIREMENT

Standard Applicable

According to CFR47 § 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. 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Antenna Connector Construction

The EUT has a printed antenna soldered to the PCB, which in accordance to section 15.203, the maximum gain is 0 dBi; please refer to the internal photos.

Result: Compliant.

FCC §15.205, §15.209 & §15.247 - RADIATED EMISSIONS

Applicable Standard

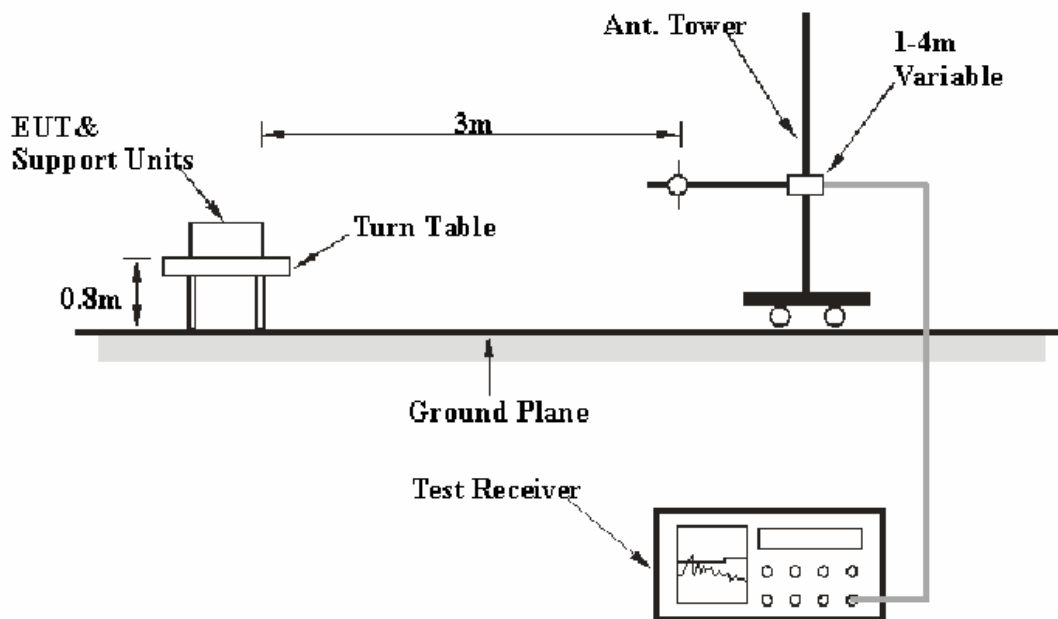
FCC §15.205; §15.209; §15.247 (d)

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 Laboratories Corp. (Shenzhen) is ± 4.0 dB.

EUT Setup



The radiated emission tests were performed in the 3 meters chamber B test site, 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:

<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
HP	Amplifier	HP8447D	2944A09795	2009-08-02	2010-08-02
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2009-11-07	2010-11-06
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2009-03-11	2010-03-11
HP	Amplifier	8449B	3008A00277	2009-09-12	2010-09-11
Sunol Sciences	Horn Antenna	DRH-118	A052604	2009-05-05	2010-05-04
Rohde & Schwarz	Spectrum Analyzer	FSEM30	849720/019	2009-07-08	2010-07-07

* **Statement of Traceability:** Bay Area Compliance Laboratories 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.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

Corrected Amplitude & Margin Calculation

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

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

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:

Transmitting mode (Below 1 GHz):

21.6 dB at 160.488000 MHz in the Horizontal polarization

Transmitting mode (Above 1 GHz):

7.76 dB at 4804 MHz in the Horizontal polarization (Low Channel)
7.25 dB at 4882 MHz in the Horizontal polarization (Middle Channel)
6.61 dB at 4958 MHz in the Horizontal polarization (High Channel)

Test Data

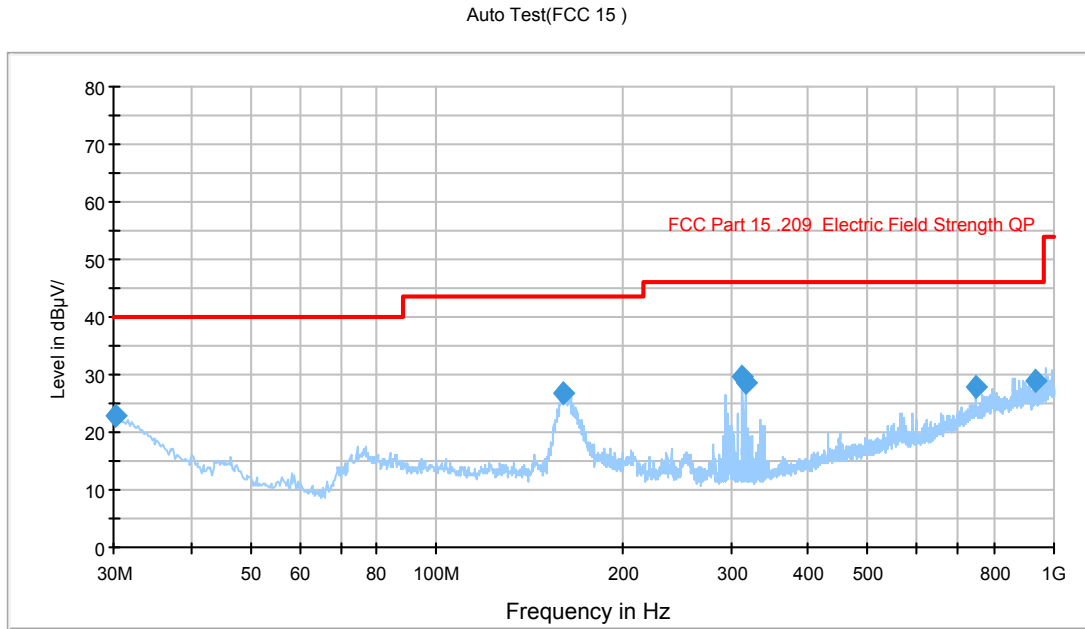
Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-01.

Test Mode: Transmitting (Worst case)

Below 1 GHz:



Frequency (MHz)	Corrected Amp. (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Position (deg)	Correction Factor (dB)	Limit (dBµV/m)	Margin (dB)
160.488000	26.9	203.0	H	300.0	-15.4	43.5	21.6
936.869500	29.1	216.0	H	200.0	-0.7	46.0	21.9
30.177500	22.7	166.0	V	61.0	-6.0	40.0	22.3
748.285500	27.9	175.0	H	218.0	-3.0	46.0	23.1
316.043000	28.6	101.0	H	254.0	-14.1	46.0	31.4
313.132750	29.7	118.0	H	287.0	-14.2	46.0	33.3

Above 1 GHz:

Freq. (MHz)	S.A. Reading (dBµV/m)	Detector (PK/QP/AV)	Table Direction Degree	Test Antenna			Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBµV/m)	FCC Part 15.247/209		
				Height (m)	Polar (H/V)	Factor (dB)				Limit (dBµV/m)	Margin (dB)	Comment
Low Channel (2402 MHz)												
4804	36.08	AV	240	1.02	H	36.3	7.56	33.7	46.24	54	7.76	harmonic
4804	36.77	AV	180	1.05	V	35.0	7.56	33.7	45.63	54	8.37	harmonic
4804	46.05	PK	240	1.02	H	36.3	7.56	33.7	56.21	74	17.79	harmonic
4804	46.78	PK	180	1.05	V	35.0	7.56	33.7	55.64	74	18.36	harmonic
1128	37.87	AV	175	1.55	V	24.0	4.90	34.8	31.97	54	22.03	spurious
1128	36.40	AV	225	1.40	H	25.2	4.90	34.8	31.70	54	22.30	spurious
1128	52.41	PK	175	1.55	V	24.0	4.90	34.8	46.51	74	27.49	spurious
1128	49.52	PK	225	1.40	H	25.2	4.90	34.8	44.82	74	29.18	spurious
Middle Channel (2441 MHz)												
4882	36.45	AV	250	1.00	H	36.3	7.7	33.7	46.75	54	7.25	harmonic
4882	36.15	AV	283	1.13	V	35.0	7.7	33.7	45.15	54	8.85	harmonic
4882	46.67	PK	250	1.00	H	36.3	7.7	33.7	56.97	74	17.03	harmonic
4882	45.98	PK	283	1.13	V	35.0	7.7	33.7	54.98	74	19.02	harmonic
1128	38.02	AV	130	1.07	V	24.0	4.9	34.8	32.12	54	21.88	spurious
1128	36.72	AV	175	1.37	H	25.2	4.9	34.8	32.02	54	21.98	spurious
1128	53.16	PK	130	1.07	V	24.0	4.9	34.8	47.26	74	26.74	spurious
1128	49.98	PK	175	1.37	H	25.2	4.9	34.8	45.28	74	28.72	spurious
High Channel (2479 MHz)												
4958	36.89	AV	35	1.10	H	36.4	7.90	33.8	47.39	54	6.61	harmonic
4958	36.03	AV	355	1.10	V	35.2	7.90	33.8	45.33	54	8.67	harmonic
4958	47.16	PK	35	1.10	H	36.4	7.90	33.8	57.66	74	16.34	harmonic
4958	46.52	PK	355	1.10	V	35.2	7.90	33.8	55.82	74	18.18	harmonic
1402	35.64	AV	150	1.15	H	26.7	5.37	34.6	33.11	54	20.89	spurious
1402	34.69	AV	280	1.20	V	25.8	5.37	34.6	31.26	54	22.74	spurious
1402	49.10	PK	150	1.15	H	26.7	5.37	34.6	46.57	74	27.43	spurious
1402	47.53	PK	280	1.20	V	25.8	5.37	34.6	44.10	74	29.90	spurious

Spurious emission in restricted band

Freq. (MHz)	S.A. Reading (dBµV/m)	Detector (PK/QP/AV)	Table Direction Degree	Test Antenna			Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBµV/m)	FCC Part 15.247/209	
				Height (m)	Polar (H/V)	Factor (dB)				Limit (dBµV/m)	Margin (dB)
Out of left side band (2310MHz-2390MHz)											
2388.05	55.52	PK	180	1.6	H	30.9	7.6	33.9	60.12	74	13.88
2388.05	34.46	AV	180	1.6	H	30.9	7.6	33.9	39.06	54	14.94
2389.62	34.39	AV	354	1.2	V	30.3	7.6	33.9	38.39	54	15.61
2389.62	51.66	PK	354	1.2	V	30.3	7.6	33.9	55.66	74	18.34
Out of left side band (2483.5MHz-2500MHz)											
2486.14	34.25	AV	0	1.8	H	30.9	8.0	33.9	39.25	54	14.75
2484.79	34.28	AV	360	1.2	V	30.3	8.0	33.9	38.68	54	15.32
2486.14	47.26	PK	0	1.8	H	30.9	8.0	33.9	52.26	74	21.74
2484.79	47.39	PK	360	1.2	V	30.3	8.0	33.9	51.79	74	22.21

FCC §15.247(a)(1) - CHANNEL SEPARATION TEST

Applicable Standard

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	100035	2009-11-24	2010-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories 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, set OBW of spectrum analyzer as 100 kHz.
2. Set the adjacent channel of the EUT, maxhold another trace.
3. Measure the channel separation.

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

Test Result: Compliant.

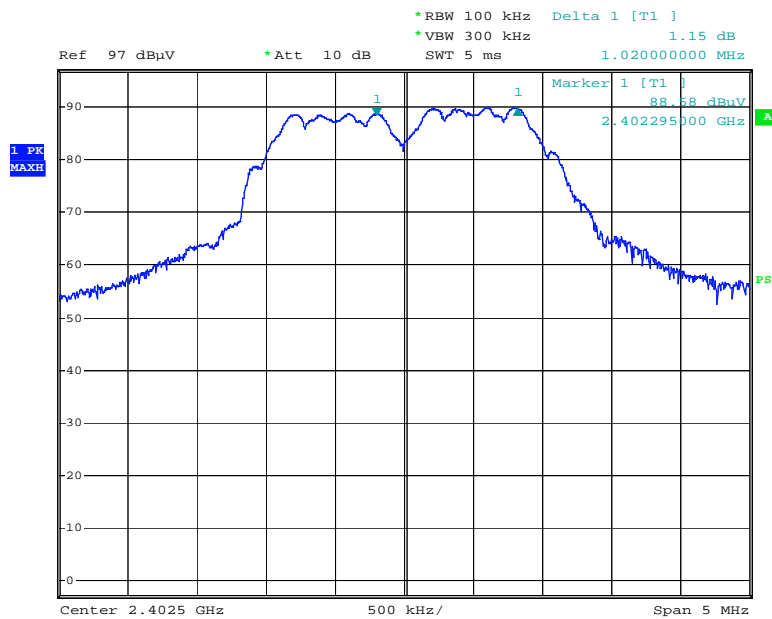
Please refer to following tables and plots

Test Mode: Transmitting

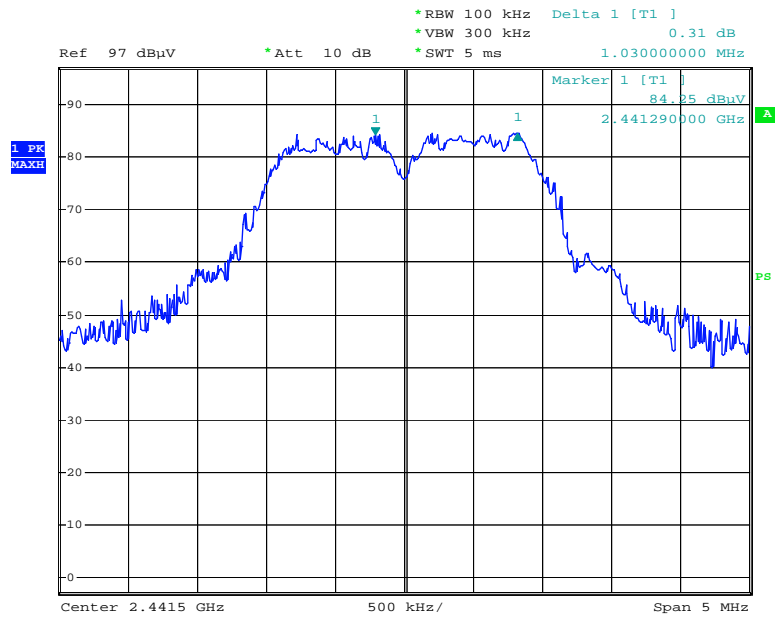
Channel	Channel Frequency (MHz)	Channel Separation (kHz)	Limit (kHz)	Result
Low Channel	2402	1020	974.67	Pass
Adjacent Channel	2403			
Mid Channel	2441	1030	869.33	Pass
Adjacent Channel	2442			
High Channel	2479	1010	944.00	Pass
Adjacent Channel	2478			

Please refer to the following plots.

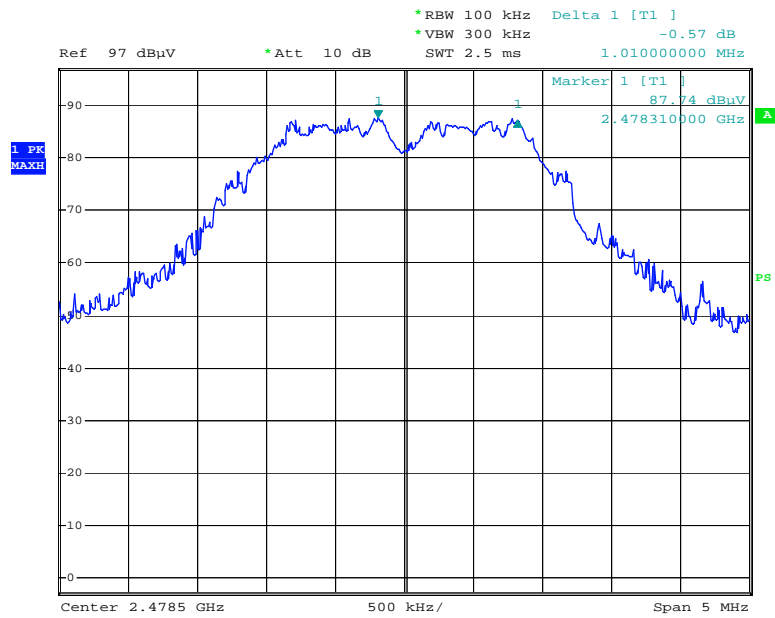
Low Channel



Middle Channel



High Channel



FCC §15.247(a)(1) – 20 dB BANDWIDTH TESTING

Applicable Standard

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 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125mW.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2009-11-24	2010-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories 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, set OBW of spectrum analyzer as 30 kHz.
2. Mark the 20 dB points above and below the central frequency.
3. Measure the 20 dB bandwidth.

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

Test Result: Compliant.

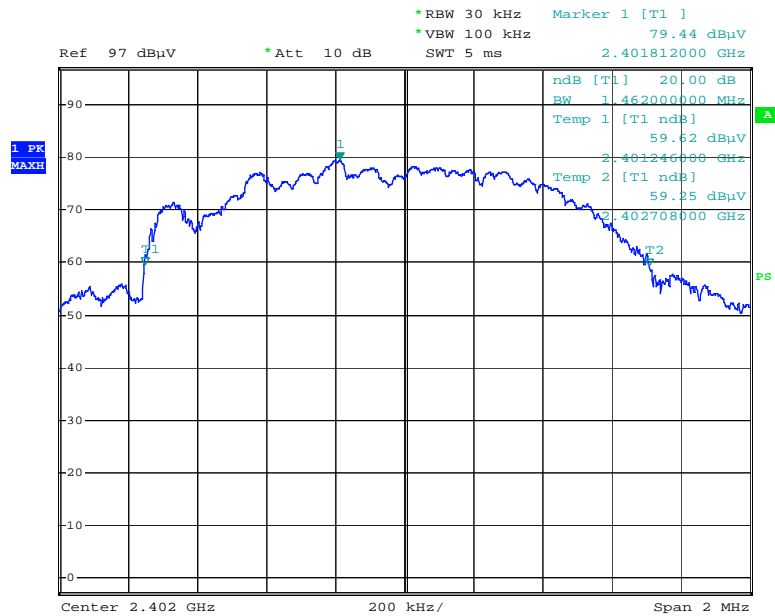
Please refer to following tables and plots

Test Mode: Transmitting

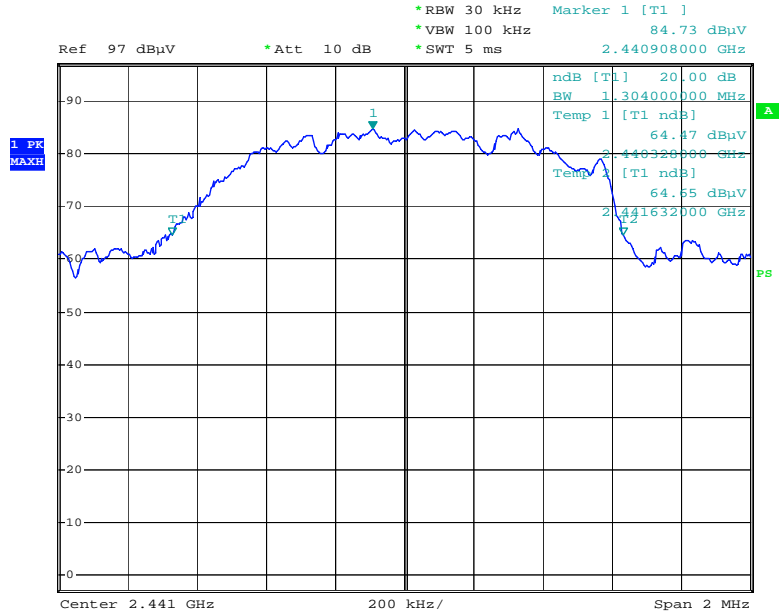
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	2402	1.462
Middle	2441	1.304
High	2479	1.416

Please refer to the following plots.

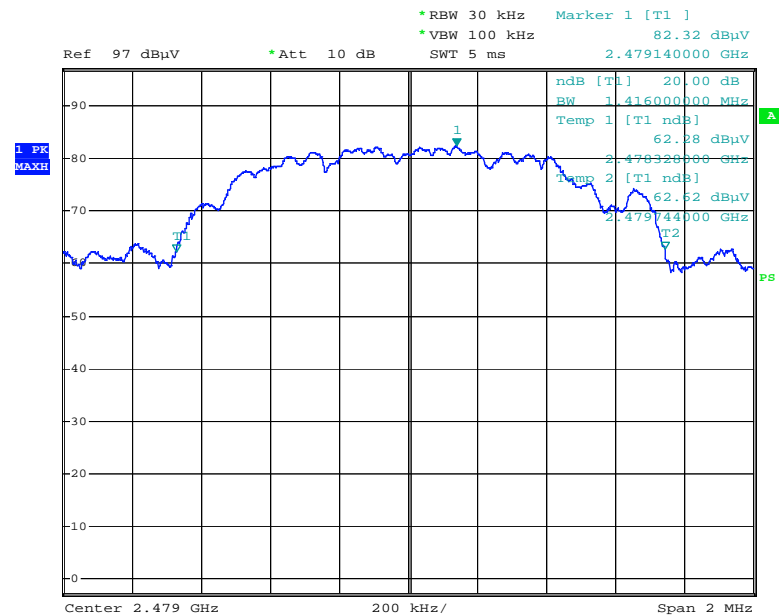
Low Channel



Middle Channel



High Channel



FCC §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	2009-11-24	2010-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories 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 hopping mode from first channel to last.
3. By using the Max-Hold function record the Quantity of the channel.

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

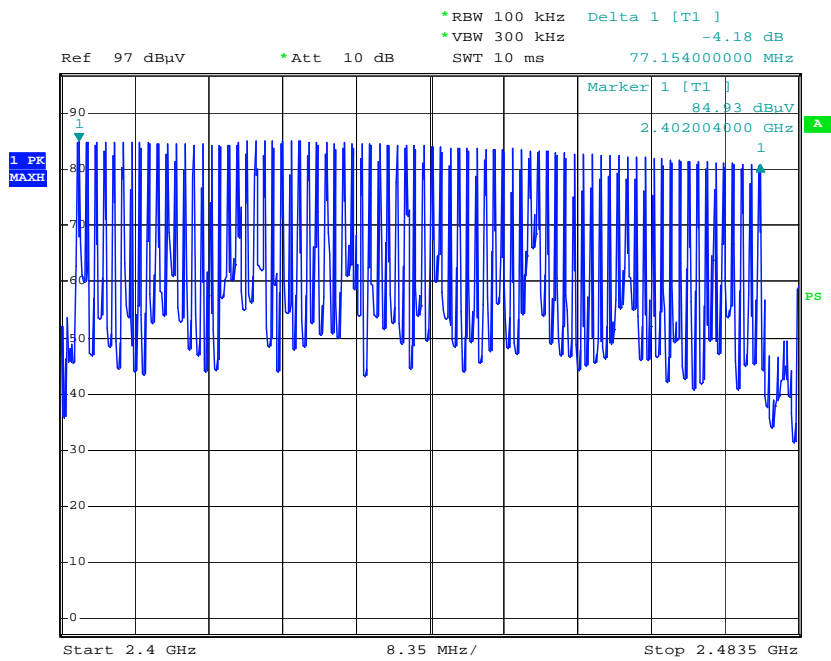
Test Result: Compliant.

Please refer to following tables and plots

Test Mode: Transmitting

Frequency Range (MHz)	Number of Hopping Channel	Limit
2400-2483.5	78	≥ 15

Number of Hopping Channels



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

Applicable Standard

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	2009-11-24	2010-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories 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 pulse was get from single sweep. In addition, the time of single pulses was tested.

Dwell Time= time slot length * hope rate/number of hopping channels * 31.2 s
Hop rate=1600/s

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

Test Result: Compliant.

Please refer to following tables and plots

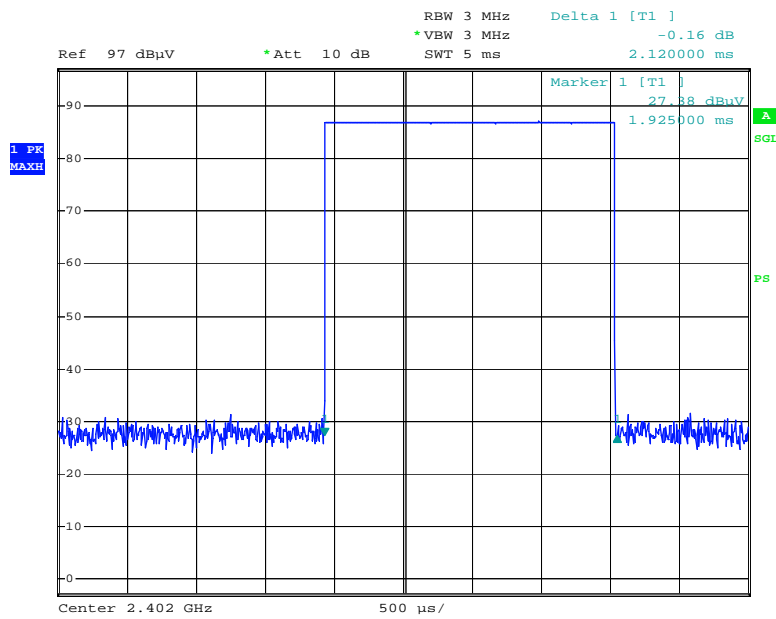
Test Mode: Transmitting

Dwell time = Pulse time*(1600/4/78)*78*0.4S

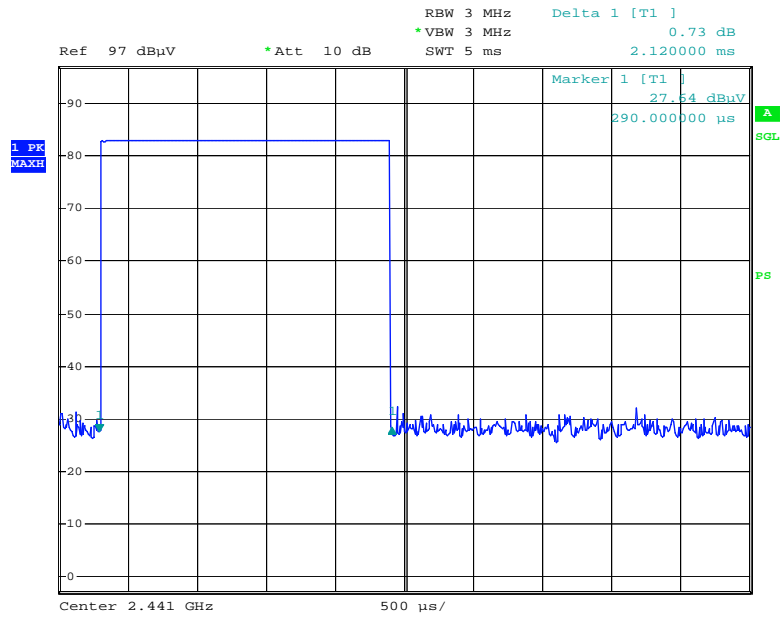
Channel	Pulse wide (ms)	Dwell time (s)	Limit (s)	Result
Low	2.120	0.3392	0.4	Pass
Mid	2.120	0.3392	0.4	Pass
High	2.140	0.3424	0.4	Pass

Please refer to the following plots.

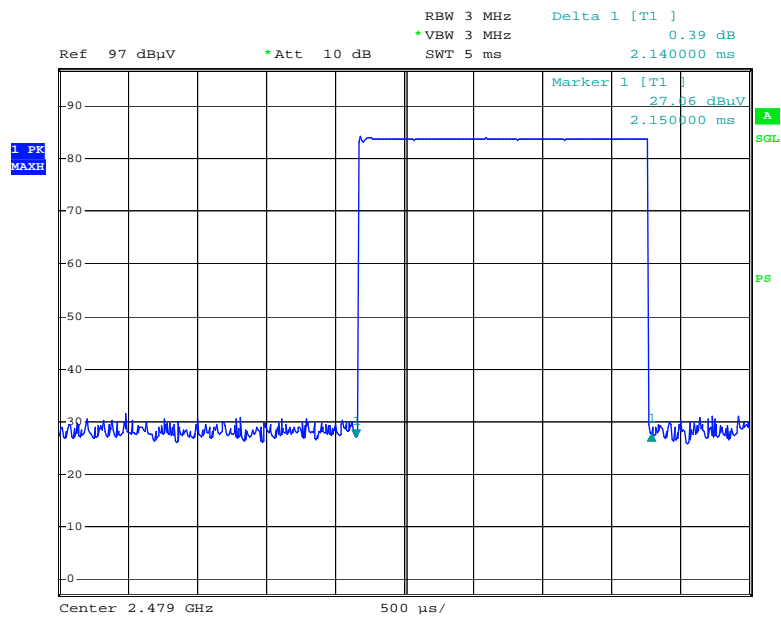
Low Channel



Middle Channel



High Channel



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

Applicable Standard

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	2009-11-24	2010-11-23
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2009-03-11	2010-03-11
HP	Amplifier	8449B	3008A00277	2009-09-12	2010-09-11
Sunol Sciences	Horn Antenna	DRH-118	A052604	2009-05-05	2010-05-04
Rohde & Schwarz	Spectrum Analyzer	FSEM30	849720/019	2009-07-08	2010-07-07

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

Test Procedure

FCC DA 00-705

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

Test Result: Compliant.

Test Mode: Transmitting

Channel	Channel Frequency (MHz)	Antenna Polar (H/V)	Cord. Field Strength (dB μ V/m)	Output Power (dBm)	FCC Limit (dBm)
Low	2402	H	88.45	-6.82	30
Low	2402	V	90.36	-4.91	30
Middle	2441	H	87.52	-7.75	30
Middle	2441	V	89.62	-5.65	30
High	2479	H	87.73	-7.54	30
High	2479	V	88.65	-6.62	30

Note: Output Power (dBm) = E (dB μ V/m) -95.27

FCC §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	2009-11-24	2010-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories 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. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel 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, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz.
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:	27 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

The testing was performed by Kvass Yang on 2010-03-05.

Test Result: Compliant

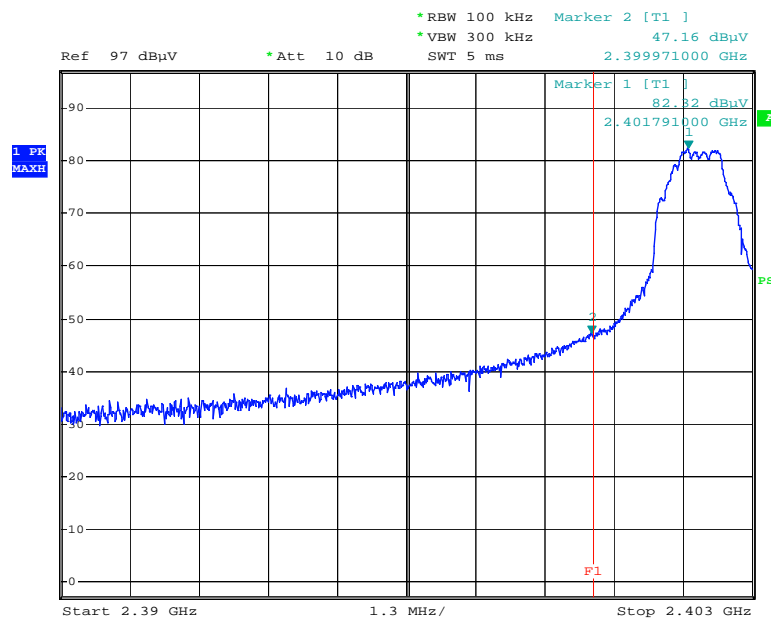
Please refer to the following table and plots.

Test Mode: Transmitting

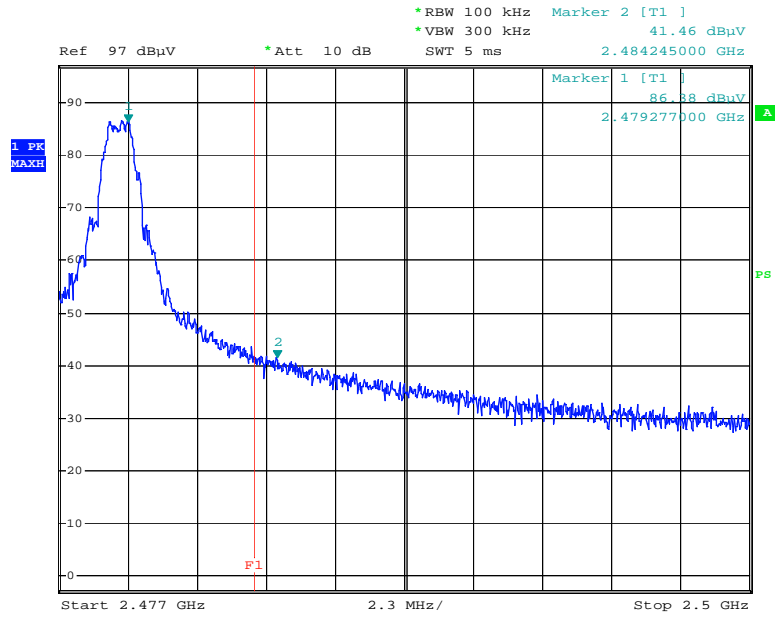
Frequency (MHz)	Delta Peak to Band Emission (dBc)	Limit (dBc)
2399.9710	35.16	20
2484.2450	44.92	20

Note: The point fall into the stricted band was in FCC 15.209, please refer to the restrict band testing.

Band Edge: Left Side



Band Edge: Right Side



***** END OF REPORT *****