

## FCC PART 15.247


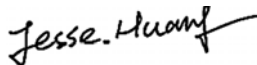
## TEST REPORT

For

### Ninebot (Tianjin) Tech Co., Ltd.

11 Tianrui Rd., Auto Industrial Park, Wuqing Dist., Tianjin, China.

**FCC ID: 2AF2B-NB01**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Bluetooth 4.0 BLE Module
<b>Test Engineer:</b> Matt Yao	
<b>Report Number:</b> RKS150827001-00A	
<b>Report Date:</b> 2015-09-14	
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**Note:** This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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## GENERAL INFORMATION

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### Product Description for Equipment under Test (EUT)

The Ninebot (Tianjin) Tech Co., Ltd.'s product, Test model number: NB-01 (FCC ID: 2AF2B-NB01) or the "EUT" in this report was a Bluetooth 4.0 BLE Module, which was measured approximately: 25mm (W) x 18mm (L) x 1.5mm (H), 0.65g, rated with charging voltage: DC 3.3V, rated power: 0.0165W, current power: 0.005A, the highest operating frequency: 16 MHz.

#### *Manufacture information:*

Company name: Ninebot (Tianjin) Tech Co., Ltd. / Company address: 11 Tianrui Rd., Auto Industrial Park, Wuqing Dist., Tianjin, China.

*\*All measurement and test data in this report was gathered from production sample serial number: 20150826001 (Assigned by BACL, Kunshan). The EUT supplied by the applicant was received on 20150826*

### Objective

This report is prepared on behalf of Ninebot (Tianjin) Tech 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 C63.4-2009, 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. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement uncertainty with radiated emission is 5.87 dB for 30MHz-1GHz, and 4.84 dB for above 1GHz, 1.85dB for conducted measurement.

## **Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the Chenghu Road, Kunshan Development Zone No.248, Kunshan, Jiangsu, China.

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) 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 December 06, 2014. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 815570. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineer mode.

### EUT Exercise Software

Bluetest 3.

BLE: Power level 4

### Special Accessories

No special accessory.

### Equipment Modifications

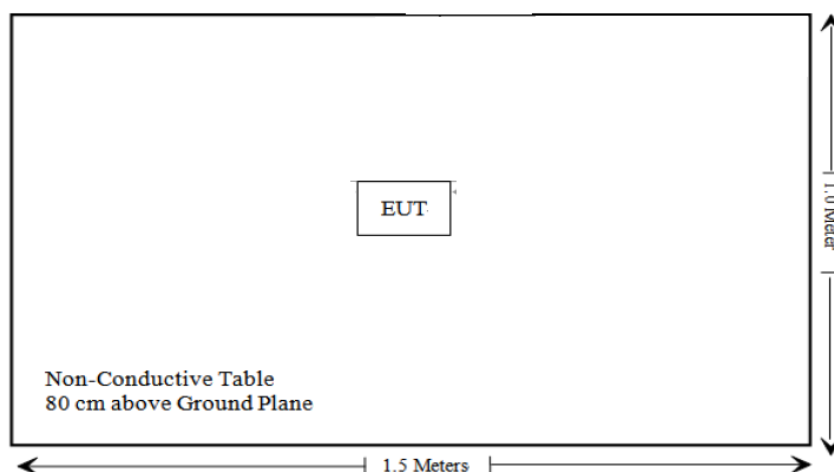
No modification was made to the EUT tested.

### External I/O Cable

Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	0.9	EUT	PC

### Block Diagram of Test Setup

Radiation emission



**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Result
FCC§15.247 (i), §1.1310& §2.1091	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a),	AC Line Conducted Emissions	Not Applicable*
§15.247(d)	Spurious Emissions at Antenna Port	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance
§15.247(b)(3)	Maximum Peak Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

\* Not Applicable: the EUT was powered by button battery only and working in stand alone.

## FCC§15.247 (i), §1.1310& §2.1091 –MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart 15.247(i) and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/		f/1500	30
1500-100,000	/		1.0	30

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

### Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

### Measurement Result

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2440	5	3.162	1.67	1.47	20	0.001	1.0

**Result:** The device meet FCC MPE at 20 cm distance



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**FCC §15.203 - ANTENNA REQUIREMENT**

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**Applied Standard**

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. 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

**Antenna Connector Construction**

The EUT has one integral antenna arrangement for bluetooth, which was permanently attached and the antenna gain is 5 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

**Result:** Compliant.

## **FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS**

### **Applied Standard**

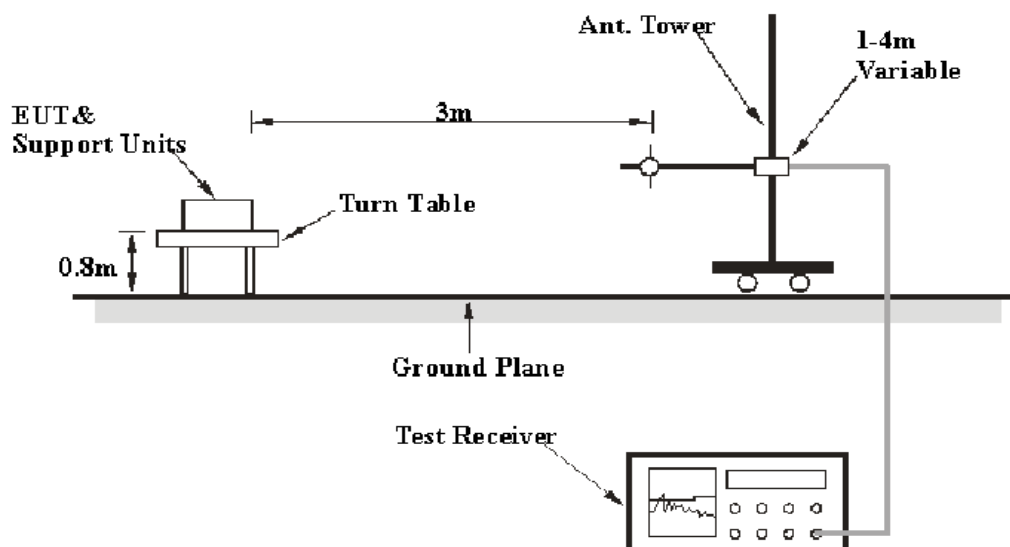
FCC §15.247 (d); §15.209; §15.205;

### **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 CISPR 16-4-2:2011, the expanded combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Kunshan) is 5.91 dB for 30MHz-1GHz, and 4.92 dB for above 1GHz. And this uncertainty will not be taken into consideration for the test data recorded in the report.

### **EUT Setup**



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

## 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	IF B/W	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1 MHz	10 Hz	/	Ave.

## 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 and peak and Average detection modes for frequencies above 1 GHz.

## 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 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

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

**Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sonoma Instrunent	Amplifier	330	171377	2014-9-16	2015-9-16
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2015-5-20	2016-5-19
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2014-11-7	2015-11-6
ETS	Horn Antenna	3115	6229	2014-11-7	2015-11-6
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3
Mini	Pre-amplifier	ZVA-183-S+	857001418	2014-9-16	2015-9-16
R&S	Auto test Software	EMC32	V 09.10.0	-	-
ETS-LINDGREN	LINE PROBE	3701	169306	2015-4-10	2016-4-9
EMCO	ACTIVE LOOP	6502	9011-2560	2015-6-23	2016-6-22
ETS-LINDGREN	PASSIVE LOOP	6512	108100	/	/

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).

**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, the worst margin reading as below:

**9.34 dB at 335.989650 MHz in the Horizontal polarization at Low channel**

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

In BACL,  $U_{(Lm)}$  is less than  $U_{cispr}$ , if  $L_m$  is less than  $L_{lim}$ , it implies that the EUT complies with the limit.

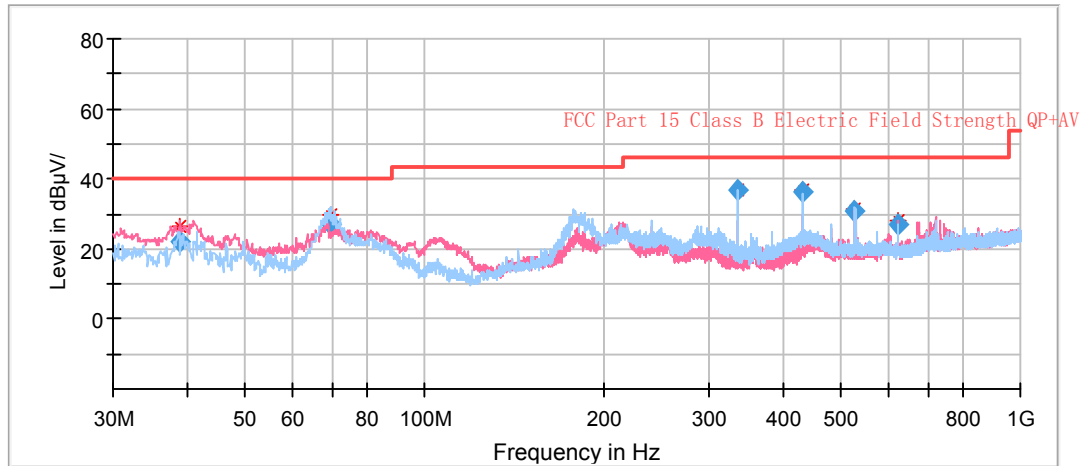
**Test Data****Environmental Conditions**

<b>Temperature:</b>	27 °C
<b>Relative Humidity:</b>	56 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Matt Yao on 2015-09-08.*

*EUT operation mode: Normal operation*

**30MHz-1GHz:**



Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
38.927400	32.33	QP	80.0	100.0	V	-10.3	22.03	40.00	17.97
69.467800	43.98	QP	37.0	200.0	H	-17.0	26.98	40.00	13.02
335.989650	46.16	QP	40.0	100.0	H	-9.5	36.66	46.00	9.34
432.008850	43.66	QP	50.0	100.0	H	-7.4	36.26	46.00	9.74
527.997750	36.27	QP	351.0	200.0	H	-5.3	30.97	46.00	15.03
624.007350	31.06	QP	100.0	100.0	V	-4.3	26.76	46.00	19.24

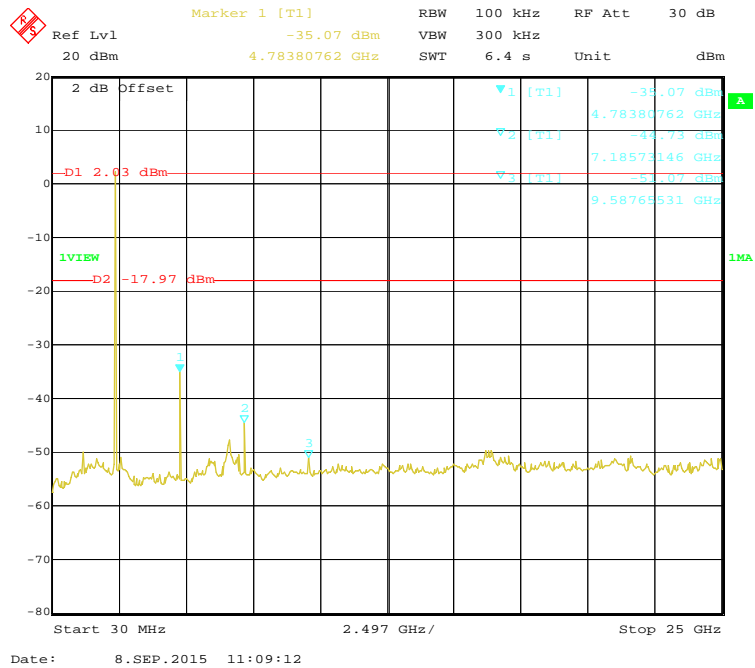
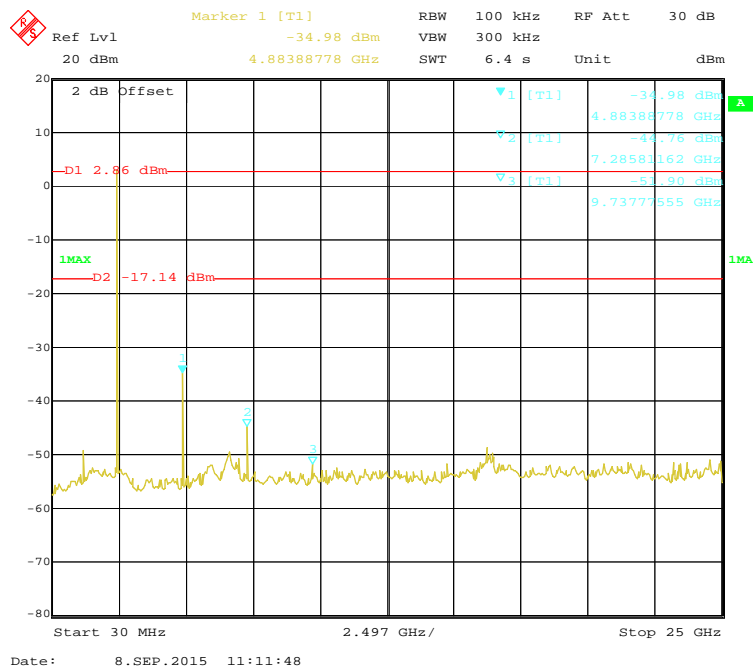
EUT operation mode: Transmitting

## 1GHz-25 GHz

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Low Channel (2402 MHz)									
2402.224449	88.71	PK	160	100	V	3	91.71	/	/
2402.224449	86.35	Ave	160	100	V	3	89.35	/	/
2402.224449	87.38	PK	220	100	H	3	90.38	/	/
2402.224449	85.31	Ave	220	100	H	3	88.31	/	/
2328.757515	40.84	PK	332	139	V	2.9	43.74	73.9	30.16
2328.757515	22.4	Ave	332	139	V	2.9	25.3	53.9	28.6
2355.310621	39.86	PK	34	134	V	3	42.86	73.9	31.04
2355.310621	25.76	Ave	34	134	V	3	28.76	53.9	25.14
4804.509018	40.9	PK	180	200	V	11.6	52.5	73.9	21.4
4804.509018	30.58	Ave	180	200	V	11.6	42.18	53.9	11.72
5990.440881	39.02	PK	4	100	V	15	54.02	73.9	19.88
5990.440881	26.51	Ave	4	100	V	15	41.51	53.9	12.39
7206.827655	31.88	PK	75	146	V	17.2	49.08	73.9	24.82
7206.827655	18.06	Ave.	75	146	V	17.2	35.26	53.9	18.64

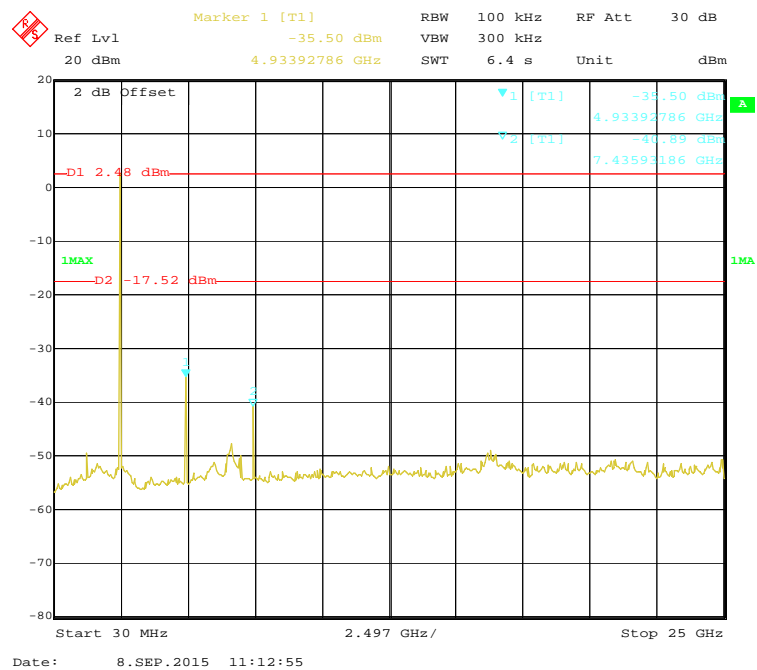
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Middle Channel (2440MHz)									
2440.175321	88.82	PK	168	100	V	2.6	91.42	/	/
2440.175321	87.06	Ave	168	100	V	2.6	89.66	/	/
2440.232411	87.61	PK	168	100	H	2.6	90.21	/	/
2440.232411	85.78	Ave	168	100	H	2.6	88.38	/	/
1332.184369	50.35	PK	315	100	H	-2	48.35	73.9	25.55
1332.184369	27.71	Ave	315	100	H	-2	25.71	53.9	28.19
1649.97996	50.21	PK	356	100	H	0.1	50.31	73.9	23.59
1649.97996	27.28	Ave	356	100	H	0.1	27.38	53.9	26.52
4880.260521	43.9	PK	321	200	H	11.7	55.6	73.9	18.3
4880.260521	34.97	Ave	321	200	H	11.7	46.67	53.9	7.23
5991.002004	38.62	PK	295	100	H	15	53.62	73.9	20.28
5991.002004	29.58	Ave	295	100	H	15	44.58	53.9	9.32
7320.436874	30.89	PK	288	199	H	17.5	48.39	73.9	25.51
7320.436874	17.93	Ave.	288	199	H	17.5	35.43	53.9	18.47

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
High Channel (2480 MHz)									
2480.939479	88.4	PK	36	100	V	3.2	91.6	/	/
2480.939479	85.92	Ave	36	100	V	3.2	89.12	/	/
2480.939479	87.64	PK	36	100	H	3.2	90.84	/	/
2480.939479	85.35	Ave	36	100	H	3.2	88.55	/	/
2502.78557	37.39	PK	290	110	V	3.3	40.69	73.9	33.21
2502.78557	23.94	Ave	290	110	V	3.3	27.24	53.9	26.66
2532.444889	35.85	PK	283	150	V	3.4	39.25	73.9	34.65
2532.444889	22.44	Ave	283	150	V	3.4	25.84	53.9	28.06
3967.274549	31.51	PK	16	200	V	10	41.51	73.9	32.39
3967.274549	17.95	Ave	16	200	V	10	27.95	53.9	25.95
4960.380762	40.29	PK	174	200	H	11.9	52.19	73.9	21.71
4960.380762	30.78	Ave	174	200	H	11.9	42.68	53.9	11.22
7457.57515	31.84	PK	263	200	H	17.7	49.54	73.9	24.36
7457.57515	17.98	Ave	263	200	H	17.7	35.68	53.9	18.22

**Conducted Spurious Emissions at Antenna Port****Low Channel****Middle Channel**



High Channel



## FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

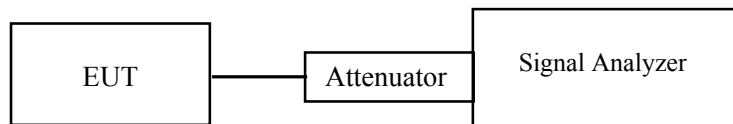
### Applied Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

### Test Procedure

According to KDB 558074 D01 DTS Meas Guidance v03r03

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 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.



### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).

### Test Data

#### Environmental Conditions

Temperature:	26 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Matt Yao on 2015-09-08.*

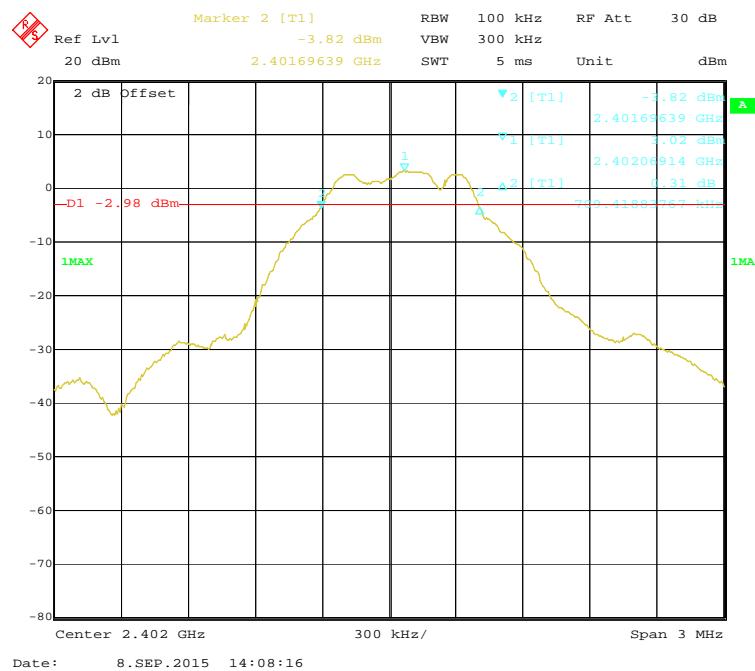
*EUT operation mode: Transmitting*

**Test Result:** Compliance

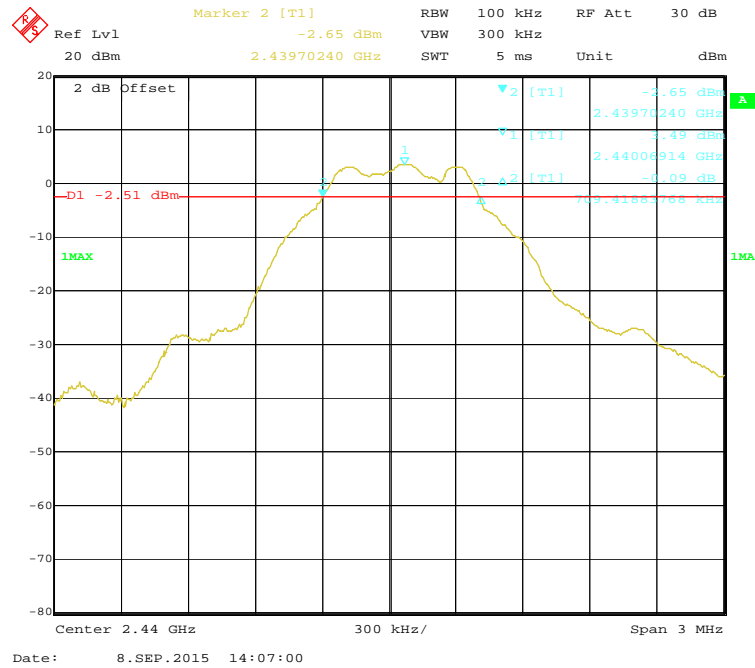
Please refer to the following tables and plots.

Channel	Channel Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (kHz)
Low	2402	0.709	≥500
Middle	2440	0.709	≥500
High	2480	0.709	≥500

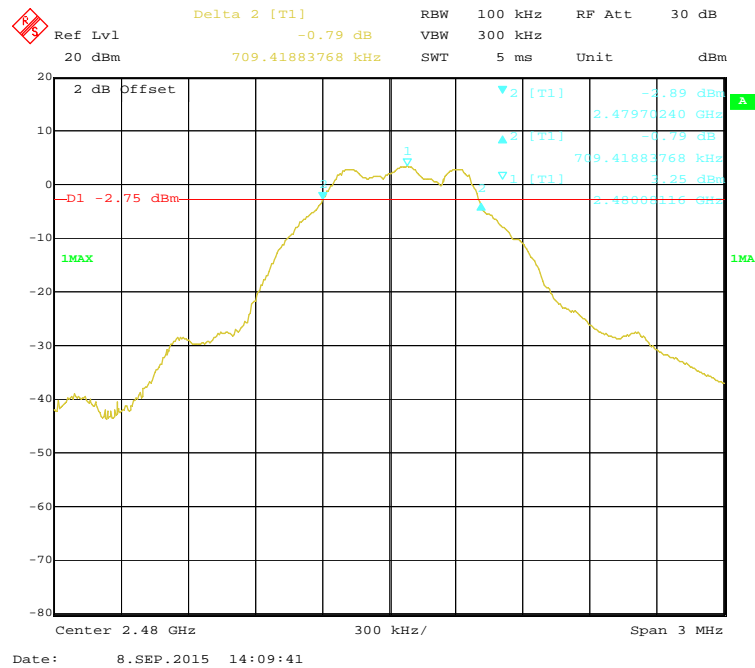
### Low Channel



### Middle Channel



### High Channel



## FCC §15.247(b) (3) - MAXIMUM PEAK OUTPUT POWER

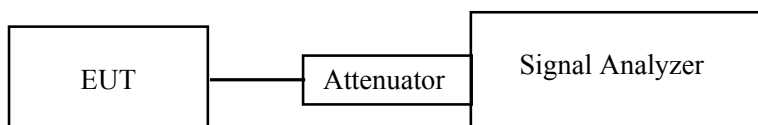
### Applicable Standard

According to §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

### Test Procedure

According to KDB 558074 D01 DTS Meas Guidance v03r03

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 test equipment.
3. Add a correction factor to the display.



### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).

### Test Data

#### Environmental Conditions

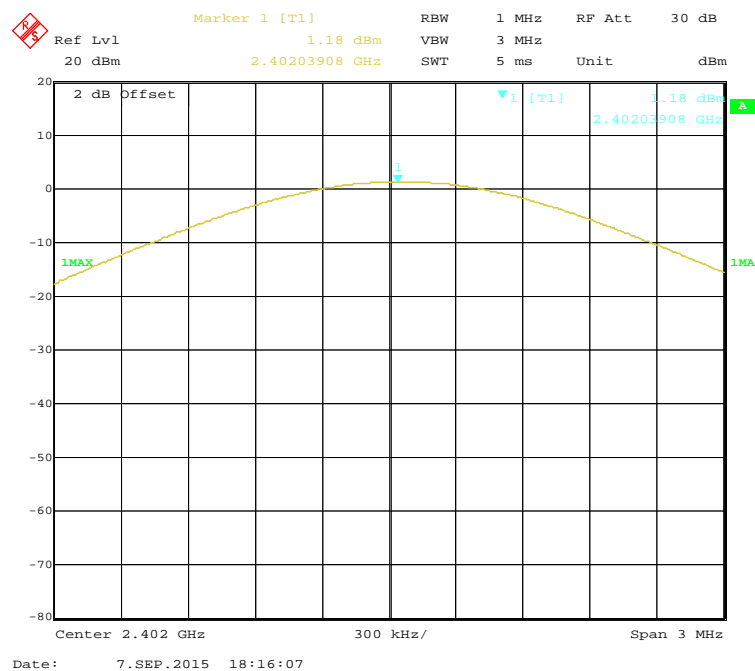
Temperature:	26 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Matt Yao on 2015-09-07*

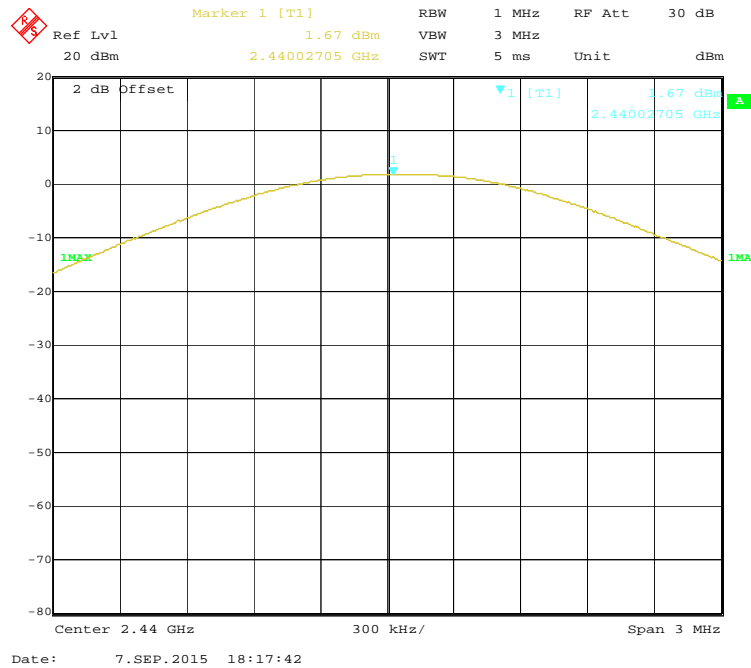
EUT operation mode: Transmitting

Channel	Frequency (MHz)	Max Peak Output Power (dBm)	Limit (dBm)	Result
Low	2402	1.18	30	Pass
Middle	2440	1.67	30	Pass
High	2480	1.43	30	Pass

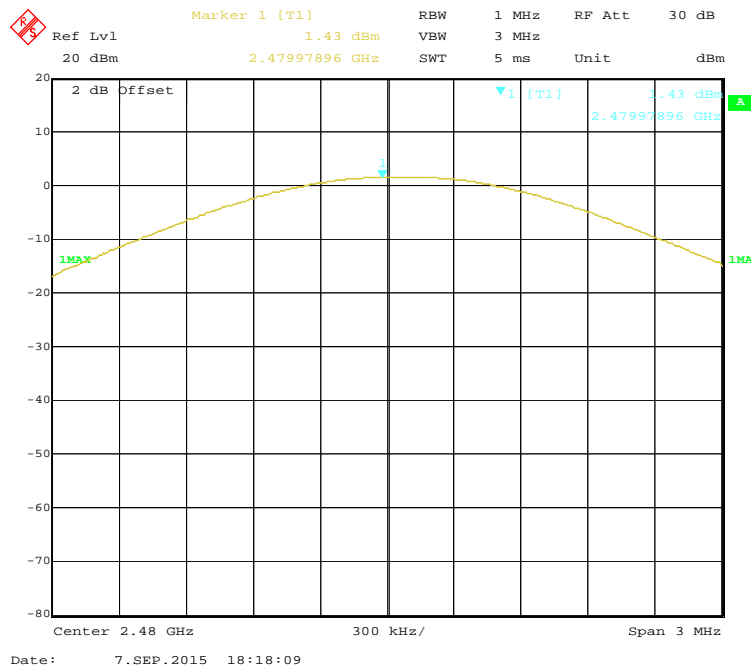
## RF Output Power, Low Channel



### RF Output Power, Middle Channel



### RF Output Power, High Channel



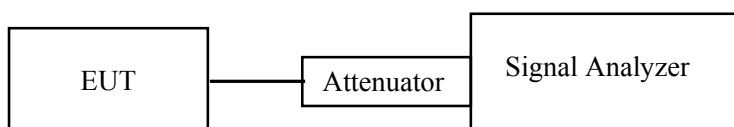
**FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE****Applied Standard**

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 Procedure**

According to KDB 558074 D01 DTS Meas Guidance v03r03

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 RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz 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 Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).



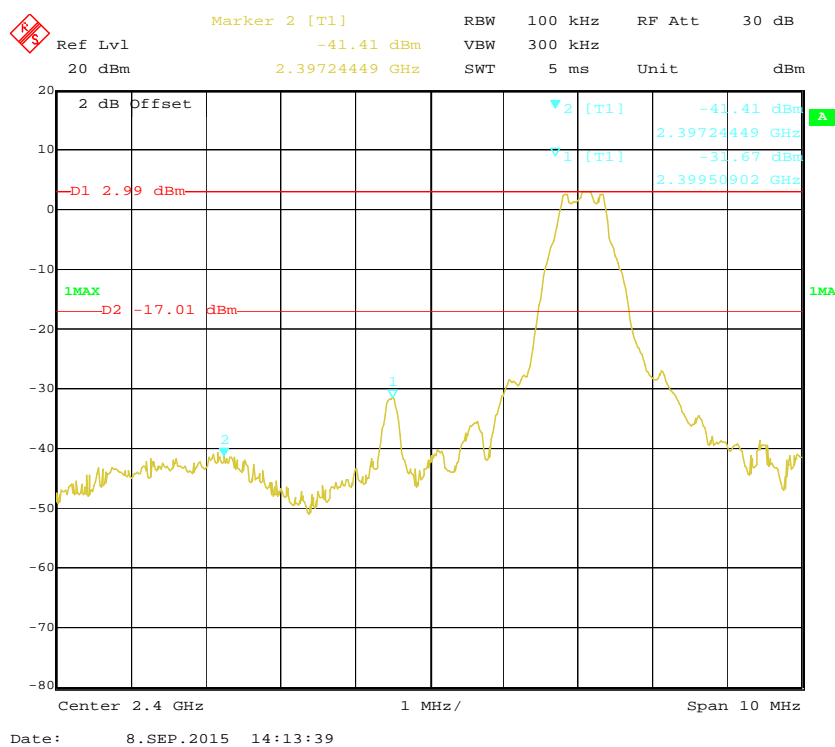
**Test Data****Environmental Conditions**

Temperature:	26 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

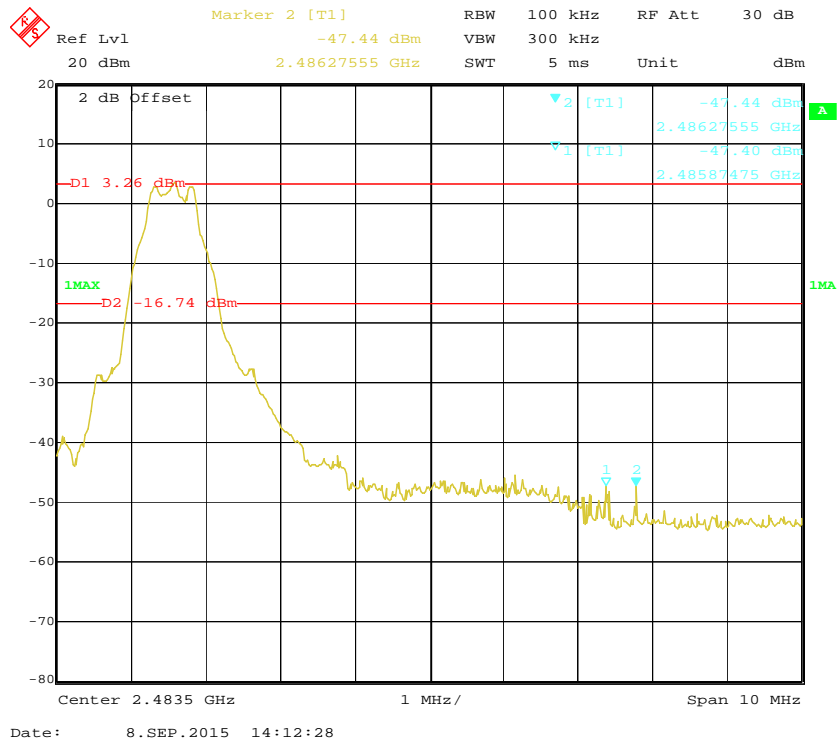
The testing was performed by Matt Yao on 2015-09-08.

EUT operation mode: Transmitting

Test Result: Compliance. Please refer to following plots.

**Band Edge, Left Side**

### Band Edge, Right Side



## FCC §15.247(e) - POWER SPECTRAL DENSITY

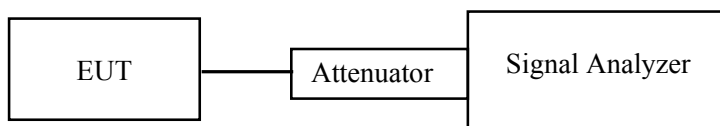
### Applied Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

### Test Procedure

According to KDB 558074 D01 DTS Meas Guidance v03r03

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW  $\geq 3$  kHz.
4. Set the VBW  $\geq 3 \times$  RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum power level.
10. If measurement value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.



### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).

### Test Data

#### Environmental Conditions

Temperature:	26 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Matt Yao on 2015-09-08.*

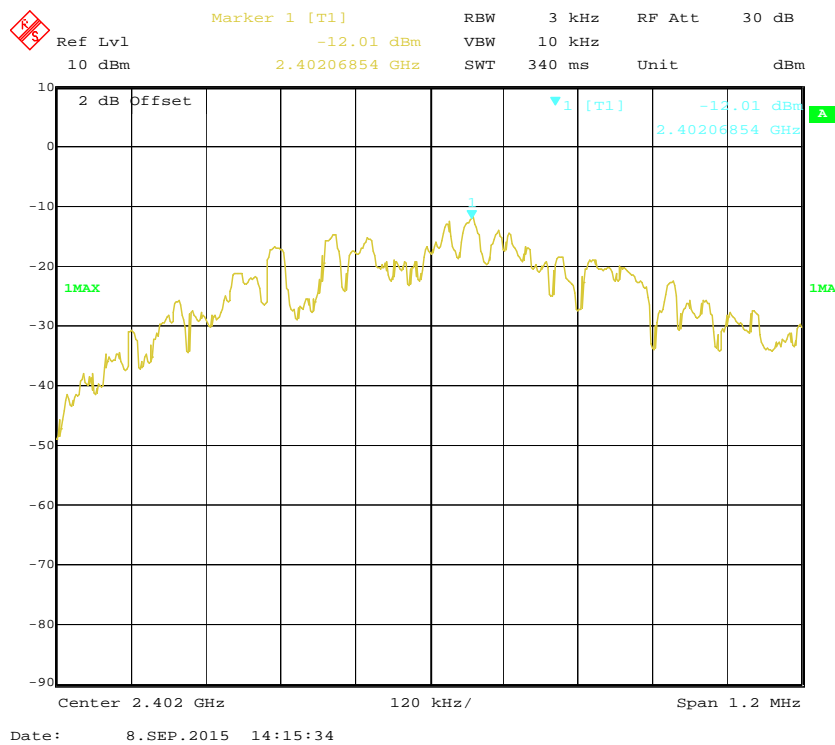
EUT operation mode: Transmitting

Test Result: Pass.

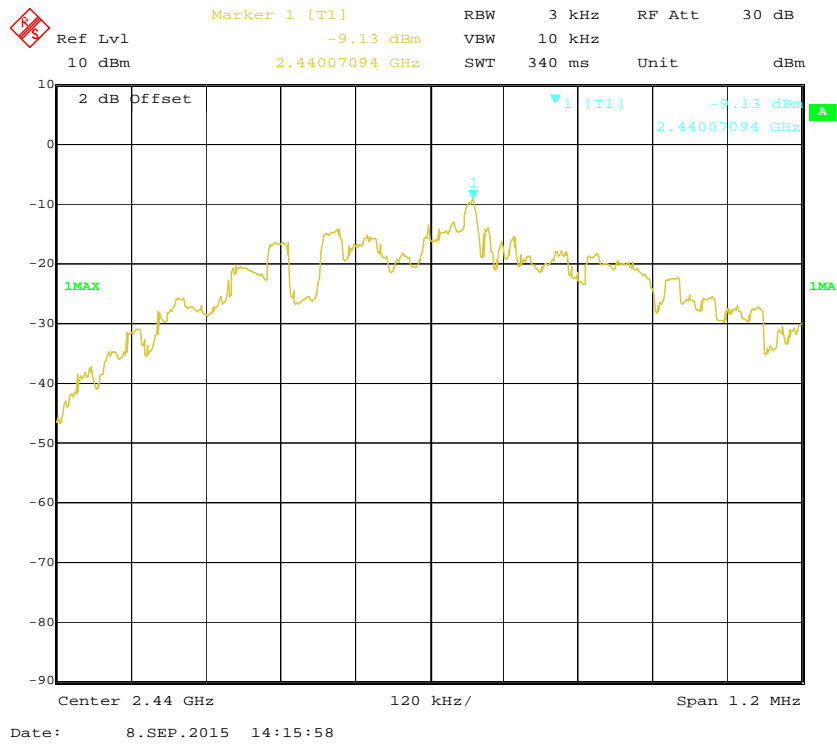
Please refer to following table and plots.

Channel	Frequency (MHz)	Power spectral density (dBm/3kHz)	Limit (dBm/3kHz)
Low	2402	-12.01	≤8
Middle	2440	-9.13	≤8
High	2480	-8.60	≤8

### Low Channel



### Middle Channel



### High Channel

