APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
Recordex USA, Inc.

Wireless Microphone
Model No.: ST-MIC-RF-R

FCC ID: 2ADKE-ST-MIC-R

Prepared for	:	Recordex USA, Inc.
Address	:	10-50 46th Avenue, Long Island City, New York United States 11101
Prepared by	:	ACCURATE TECHNOLOGY CO., LTD
Address	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China Tel: +86-755-26503290 Fax: +86-755-26503396

Report No.	:	ATE20151826
Date of Test	:	Aug 19-29, 2015
Date of Report	:	Aug 31, 2015

TABLE OF CONTENTS

Description Page

Test Report Certification

Applicant : Recordex USA, Inc.

Manufacturer : Recordex USA, Inc.

EUT Description : Wireless Microphone

(A) MODEL NO.: ST-MIC-RF-R

(B) Trade Name.: RECORDEX

(C) POWER SUPPLY: Model:BYX0900500(Adapter)
INPUT: 100-240V~50/60Hz
OUTPUT: 9V/500mA

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.10: 2013

The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : Aug 19-29, 2015
Date of Report : Aug 31, 2015

Prepared by : Mark Chen
(Mark Chen, Engineer)

Approved & Authorized Signer :
(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Wireless Microphone
Model Number	:	ST-MIC-RF-R
Frequency Range	:	2405-2480MHz
Number of Channels	:	16
Antenna Gain	:	2dBi
Type of Antenna	:	Reverse Polarity Antenna
Adapter	:	Model:BYX-090500 INPUT:100-240V~50/60Hz OUTPUT:9V/500mA
Adapter information	:	/
Data Rate	:	250Mbps
Modulation Type	:	OQPSK
Applicant	:	Recordex USA, Inc.
Address	:	10-50 46th Avenue, Long Island City, New York United States 11101
Manufacturer	:	Recordex USA, Inc.
Address	:	10-50 46th Avenue, Long Island City, New York United States 11101
Date of sample received	:	Aug 19, 2015
Date of Test	:	Aug 19-29, 2015

1.2.Accessory and Auxiliary Equipment

Wireless Microphone Model: ST-MIC-RF-T

1.3.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.4.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 11, 2015	Jan. 10, 2016
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 11, 2015	Jan. 10, 2016
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 11, 2015	Jan. 10, 2016
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 11, 2015	Jan. 10, 2016
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2015	Jan. 14, 2016
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2015	Jan. 14, 2016
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2015	Jan. 14, 2016
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 15, 2015	Jan. 14, 2016
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 11, 2015	Jan. 10, 2016
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 11, 2015	Jan. 10, 2016
Highpass Filter	Wainwright Instruments	WHKX3.6/18G-10SS	N/A	Jan. 11, 2015	Jan. 10, 2016
Band Reject Filter	Wainwright Instruments	WRCG2400/2485-2375/2510-60/11SS	N/A	Jan. 11, 2015	Jan. 10, 2016

3. OPERATION OF EUT DURING TESTING

3.1. Operating Mode

The mode is used: **Transmitting mode**

Low Channel: 2405MHz
Middle Channel: 2440MHz
High Channel: 2480MHz

3.2. Configuration and peripherals

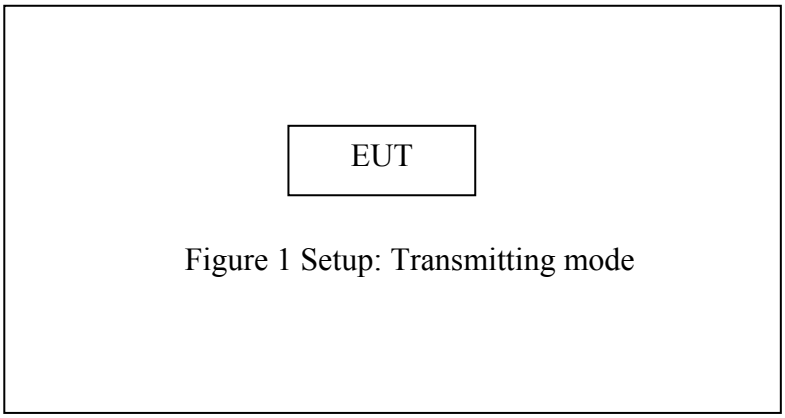


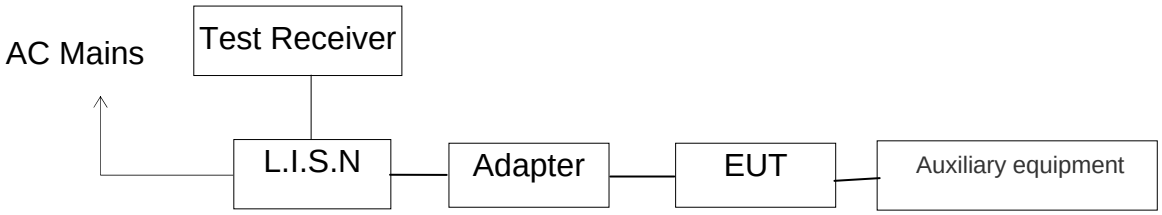
Figure 1 Setup: Transmitting mode

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Power Line Conducted Emission	Compliant
Section 15.247(a)(2)	6DB&20DB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. POWER LINE CONDUCTED MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: ST-MIC-RF-R)

5.2.Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies. NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

5.3.Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in test mode and measure it.

5.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2014 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

5.6.Power Line Conducted Emission Measurement Results

PASS

The frequency range from 150kHz to 30MHz is checked.

Test mode : Charging& Zigbee TX（120V/60HZ）

MEASUREMENT RESULT: "REC002_fin"

2015-8-21 8:41

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	36.50	10.4	66	29.3	QP	L1	GND
0.408000	27.10	11.3	58	30.6	QP	L1	GND
19.523000	26.40	11.9	60	33.6	QP	L1	GND

MEASUREMENT RESULT: "REC002_fin2"

2015-8-21 8:41

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.152000	21.10	10.4	56	34.8	AV	L1	GND
0.430000	19.00	11.4	47	28.3	AV	L1	GND
24.000500	18.90	12.0	50	31.1	AV	L1	GND

MEASUREMENT RESULT: "REC001_fin"

2015-8-21 8:39

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	36.70	10.4	66	29.1	QP	N	GND
0.410000	27.20	11.3	58	30.4	QP	N	GND
19.095500	24.10	11.9	60	35.9	QP	N	GND

MEASUREMENT RESULT: "REC001_fin2"

2015-8-21 8:39

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.152000	20.80	10.4	56	35.1	AV	N	GND
0.410000	15.70	11.3	48	31.9	AV	N	GND
24.000500	17.10	12.0	50	32.9	AV	N	GND

Test mode : Charging& Zigbee TX（240V/60HZ）

MEASUREMENT RESULT: "WMI003_fin"

2015-8-26 17:12

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.434000	27.00	11.4	57	30.2	QP	L1	GND
1.216000	23.60	11.6	56	32.4	QP	L1	GND
20.981000	28.80	12.0	60	31.2	QP	L1	GND

MEASUREMENT RESULT: "WMI003_fin2"

2015-8-26 17:12

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.736000	19.00	11.5	46	27.0	AV	L1	GND
4.349000	15.90	11.8	46	30.1	AV	L1	GND
20.882000	15.70	12.0	50	34.3	AV	L1	GND

MEASUREMENT RESULT: "WMI004_fin"

2015-8-26 17:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.424000	27.20	11.3	57	30.2	QP	N	GND
3.890000	23.10	11.7	56	32.9	QP	N	GND
21.039500	25.40	12.0	60	34.6	QP	N	GND

MEASUREMENT RESULT: "WMI004_fin2"

2015-8-26 17:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.408000	16.40	11.3	48	31.3	AV	N	GND
3.872000	12.90	11.7	46	33.1	AV	N	GND
26.363000	13.20	12.0	50	36.8	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

ACCURATE TECHNOLOGY CO.,LTD

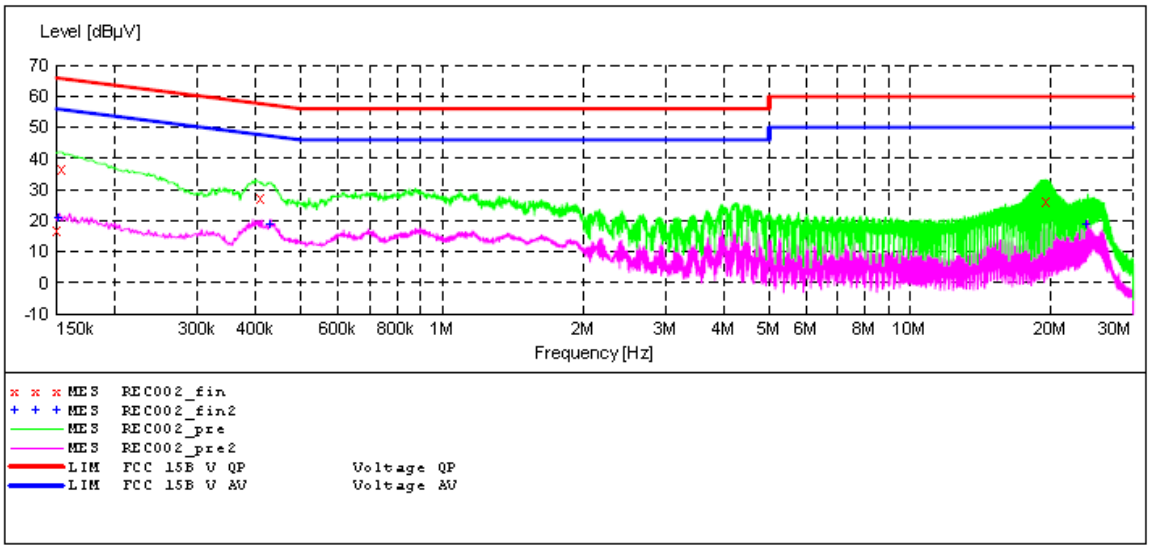
CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Wireless Microphone     M/N:ST-MIC-RF-R
Manufacturer:         Recordex
Operating Condition:  Charging&Zigbee TX
Test Site:            2#Shielding Room
Operator:             star
Test Specification:   L 120V/60Hz
Comment:              Report No.:ATE20151826
Start of Test:        2015-8-21 / 8:40:12
```

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	LISN(ESH3-Z5)



MEASUREMENT RESULT: "REC002_fin"

2015-8-21 8:41

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	36.50	10.4	66	29.3	QP	L1	GND
0.408000	27.10	11.3	58	30.6	QP	L1	GND
19.523000	26.40	11.9	60	33.6	QP	L1	GND

MEASUREMENT RESULT: "REC002_fin2"

2015-8-21 8:41

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.152000	21.10	10.4	56	34.8	AV	L1	GND
0.430000	19.00	11.4	47	28.3	AV	L1	GND
24.000500	18.90	12.0	50	31.1	AV	L1	GND

ACCURATE TECHNOLOGY CO.,LTD

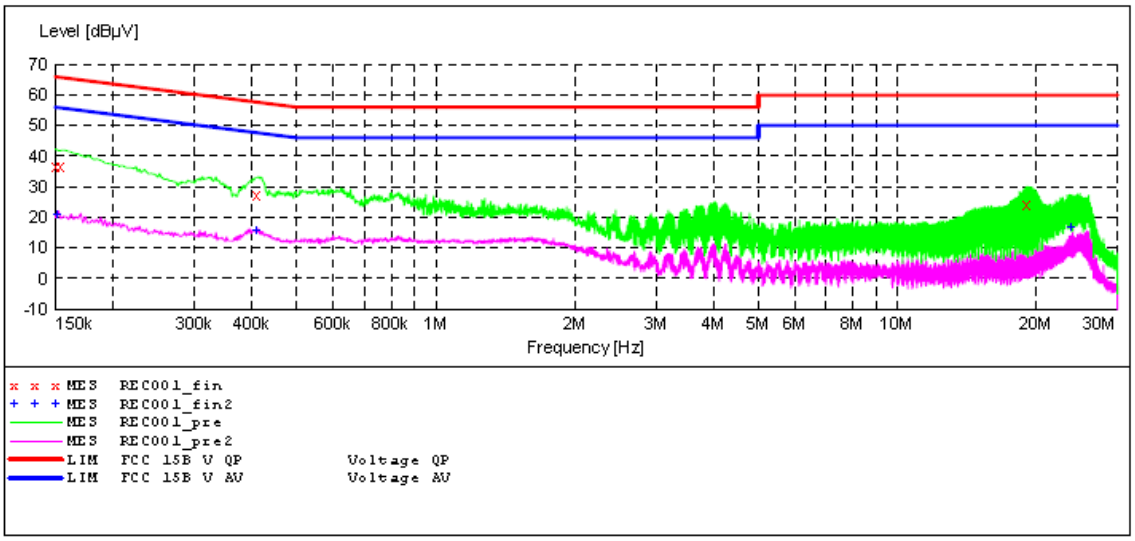
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT:	Wireless Microphone	M/N:ST-MIC-RF-R
Manufacturer:	Recordex	
Operating Condition:	Charging&Zigbee TX	
Test Site:	2#Shielding Room	
Operator:	star	
Test Specification:	N 120V/60Hz	
Comment:	Report No.:ATE20151826	
Start of Test:	2015-8-21 / 8:37:19	

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	LISN(ESH3-Z5)



MEASUREMENT RESULT: "REC001_fin"

2015-8-21 8:39

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	36.70	10.4	66	29.1	QP	N	GND
0.410000	27.20	11.3	58	30.4	QP	N	GND
19.095500	24.10	11.9	60	35.9	QP	N	GND

MEASUREMENT RESULT: "REC001_fin2"

2015-8-21 8:39

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.152000	20.80	10.4	56	35.1	AV	N	GND
0.410000	15.70	11.3	48	31.9	AV	N	GND
24.000500	17.10	12.0	50	32.9	AV	N	GND

ACCURATE TECHNOLOGY CO.,LTD

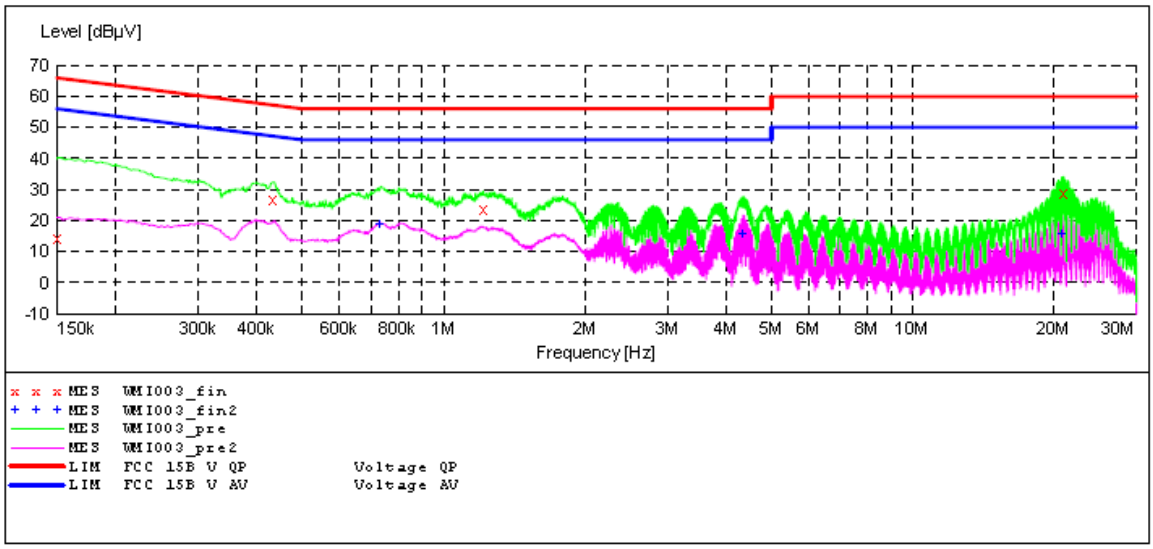
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless Microphone M/N:ST-MIC-R
Manufacturer: Recordex
Operating Condition: Charging&Zigbee TX
Test Site: 2#Shielding Room
Operator: Star
Test Specification: L 240V/60Hz
Comment: Report No.:ATE20151826
Start of Test: 2015-8-26 / 17:10:31

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	LISN(ESH3-Z5)



MEASUREMENT RESULT: "WMI003_fin"

2015-8-26 17:12

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.434000	27.00	11.4	57	30.2	QP	L1	GND
1.216000	23.60	11.6	56	32.4	QP	L1	GND
20.981000	28.80	12.0	60	31.2	QP	L1	GND

MEASUREMENT RESULT: "WMI003_fin2"

2015-8-26 17:12

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.736000	19.00	11.5	46	27.0	AV	L1	GND
4.349000	15.90	11.8	46	30.1	AV	L1	GND
20.882000	15.70	12.0	50	34.3	AV	L1	GND

ACCURATE TECHNOLOGY CO.,LTD

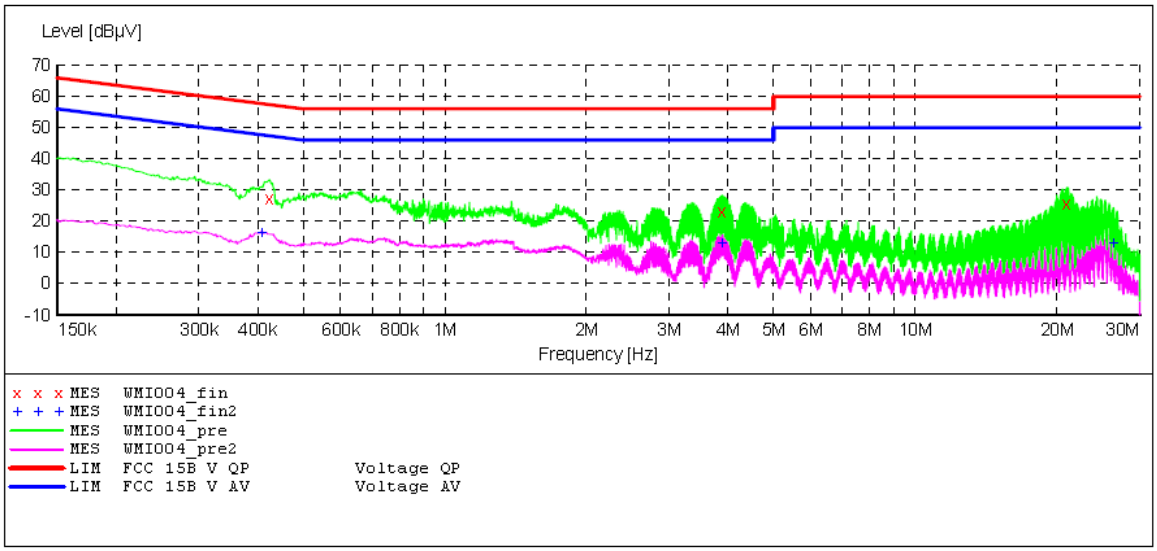
CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                    Wireless Microphone     M/N:ST-MIC-R
Manufacturer:           Recordex
Operating Condition:    Charging&Zigbee TX
Test Site:              2#Shielding Room
Operator:               Star
Test Specification:     N  240V/60Hz
Comment:                Report No.:ATE20151826
Start of Test:          2015-8-26 / 17:12:29
```

SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	LISN(ESH3-Z5)



MEASUREMENT RESULT: "WMI004_fin"

2015-8-26 17:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.424000	27.20	11.3	57	30.2	QP	N	GND
3.890000	23.10	11.7	56	32.9	QP	N	GND
21.039500	25.40	12.0	60	34.6	QP	N	GND

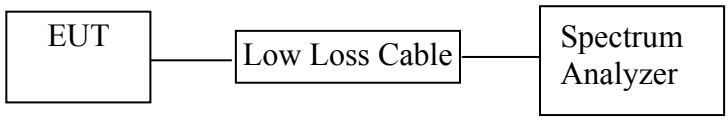
MEASUREMENT RESULT: "WMI004_fin2"

2015-8-26 17:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.408000	16.40	11.3	48	31.3	AV	N	GND
3.872000	12.90	11.7	46	33.1	AV	N	GND
26.363000	13.20	12.0	50	36.8	AV	N	GND

6. 6DB&20DB BANDWIDTH MEASUREMENT

6.1.Block Diagram of Test Setup



6.2.The Requirement For Section 15.247(a)(2)

Section 15.247(a) (2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

6.3.EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 5.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2405-2480. We select 2405MHz, 2440MHz, 2480MHz TX frequency to transmit.

6.5.Test Procedure

1. Set resolution bandwidth (RBW) = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

20dB bandwidth

1. Set resolution bandwidth (RBW) = 1%-5% OBW.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.

4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst-case (i.e., the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at the －20 dB levels with respect to the reference level

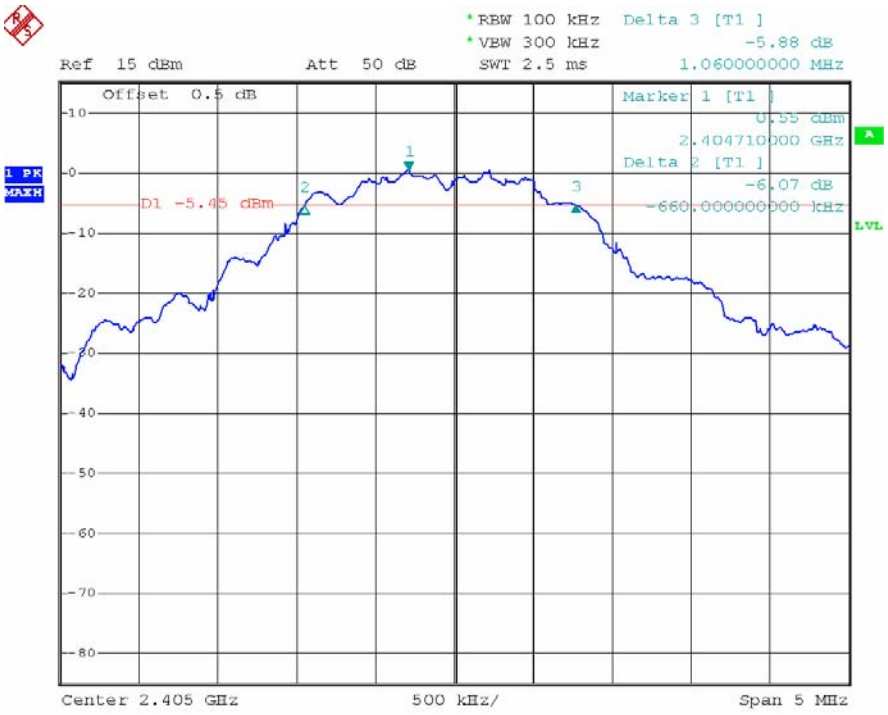
6.6. Test Result

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	20dB Bandwidth (MHz)	Limit (MHz)
Low	2405	1.72	2.97	> 0.5MHz
Middle	2440	1.72	2.70	> 0.5MHz
High	2480	1.63	2.74	> 0.5MHz

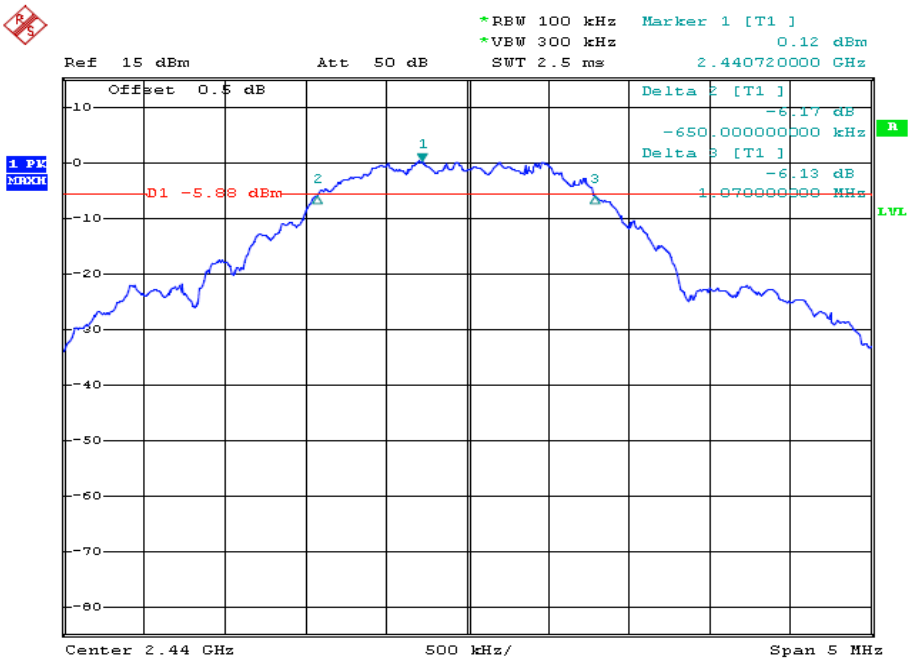
The spectrum analyzer plots are attached as below.

6dB Bandwidth

Channel Low 2405MHz

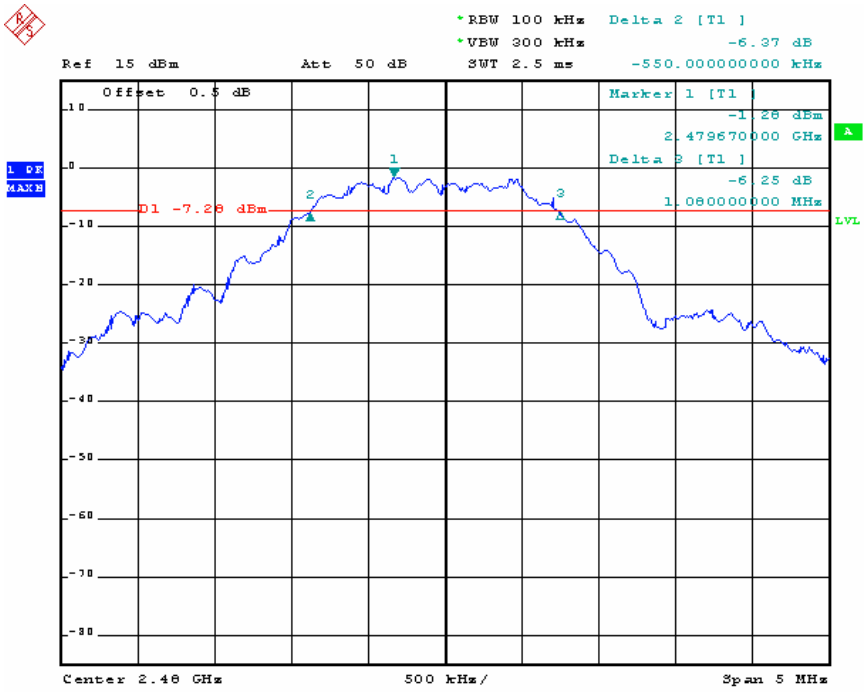


Channel Middle 2440MHz



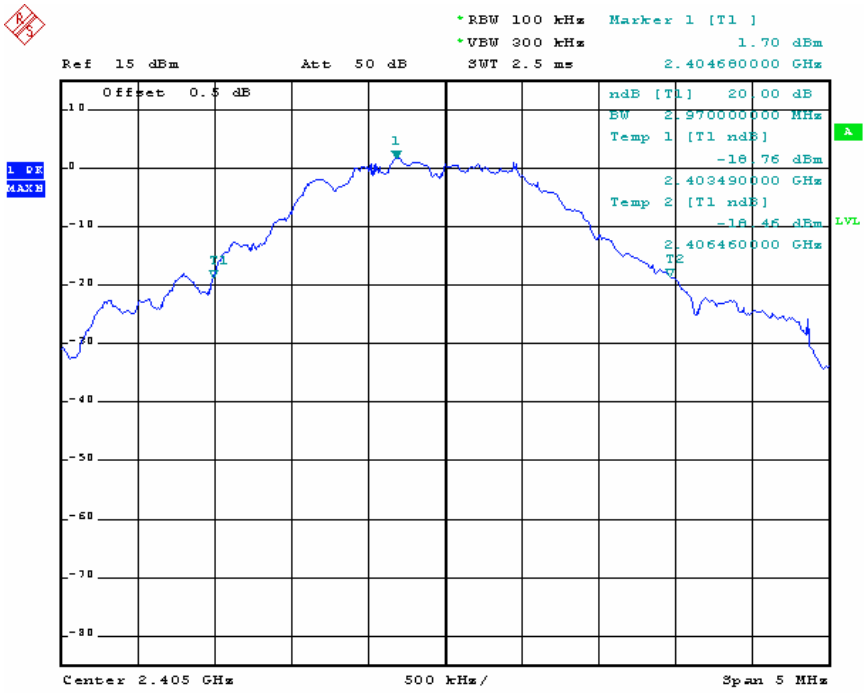
Date: 21.AUG.2015 17:47:57

Channel High 2480MHz

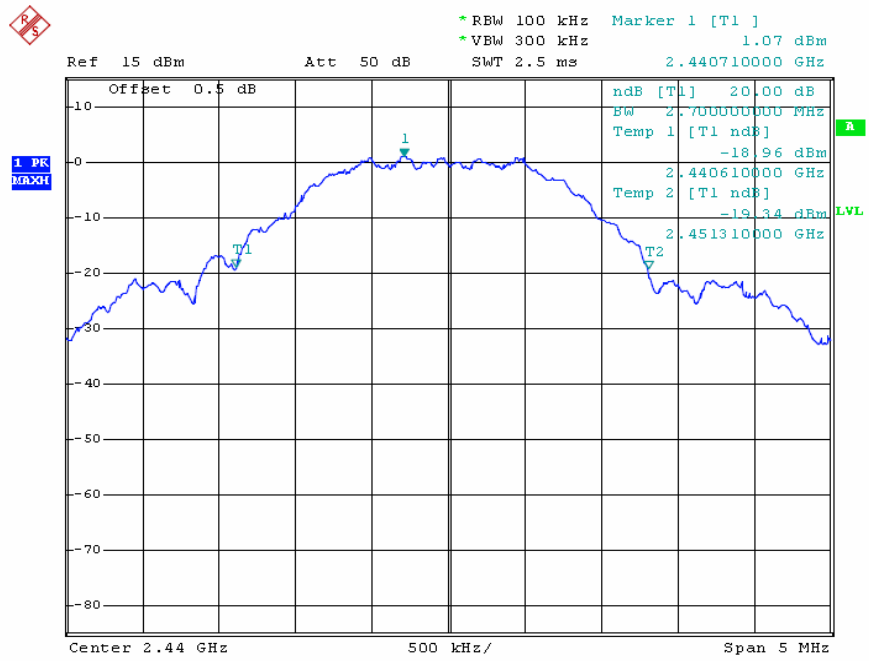


20dB Bandwidth

Channel Low 2405MHz

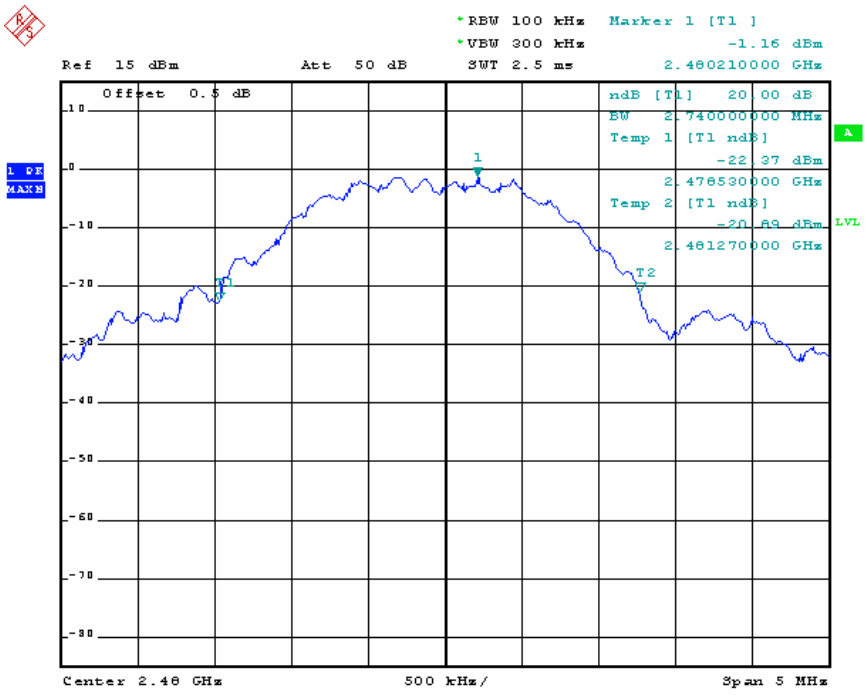


Channel Middle 2440MHz



Date: 21.AUG.2015 18:05:47

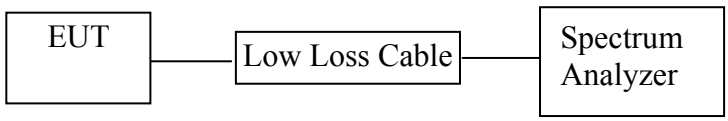
Channel High 2480MHz



Date: 21.AUG.2015 18:01:40

7. MAXIMUM CONDUCTED (PEAK) OUTPUT POWER

7.1. Block Diagram of Test Setup



7.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

7.3. EUT Configuration on Measurement

The equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2405-2480MHzMHz. We select 2405MHz, 2440MHz, 2480MHz TX frequency to transmit.

7.5. Test Procedure

7.5.1. The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements.

7.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.3. Set the RBW ≥ *DTS bandwidth*, Set VBW ≥ 3 × RBW. Set span ≥ 3 x RBW, Sweep time = auto, Detector = peak, Trace mode = max hold, Allow trace to fully stabilize, Use peak marker function to determine the peak amplitude level.

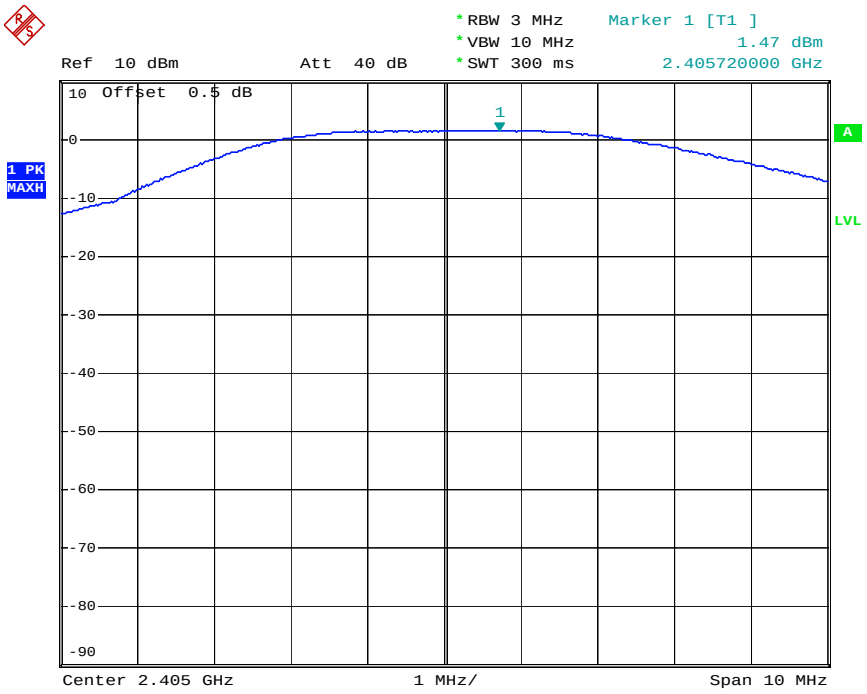
7.5.4. Measurement the Maximum conducted (Peak) output power.

7.6. Test Result

Channel	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Limits dBm / W
Low	2405	1.47	1.40	30 dBm / 1 W
Middle	2440	3.55	2.26	30 dBm / 1 W
High	2480	1.14	1.30	30 dBm / 1 W

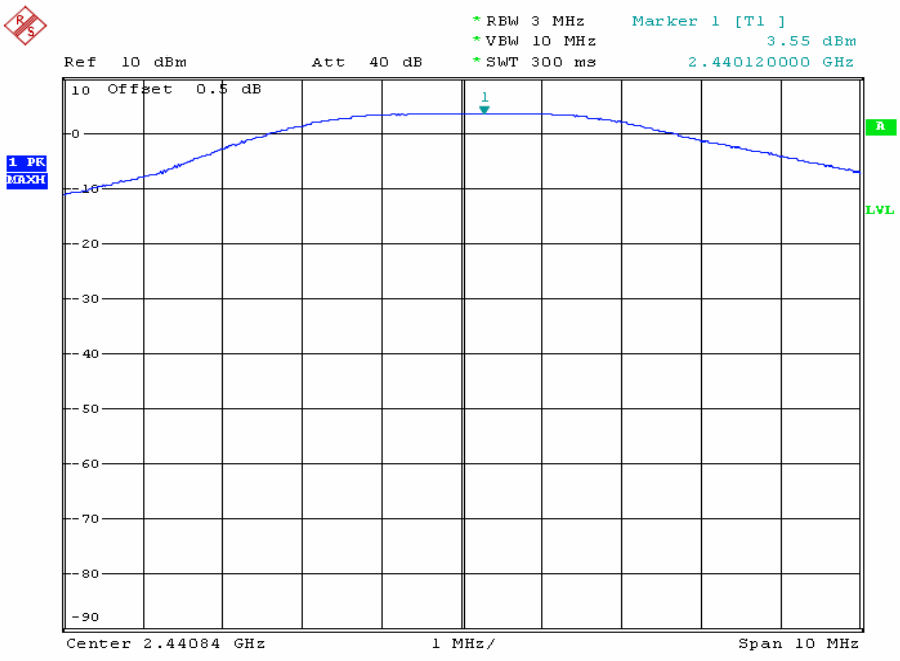
The spectrum analyzer plots are attached as below.

Channel Low 2405MHz



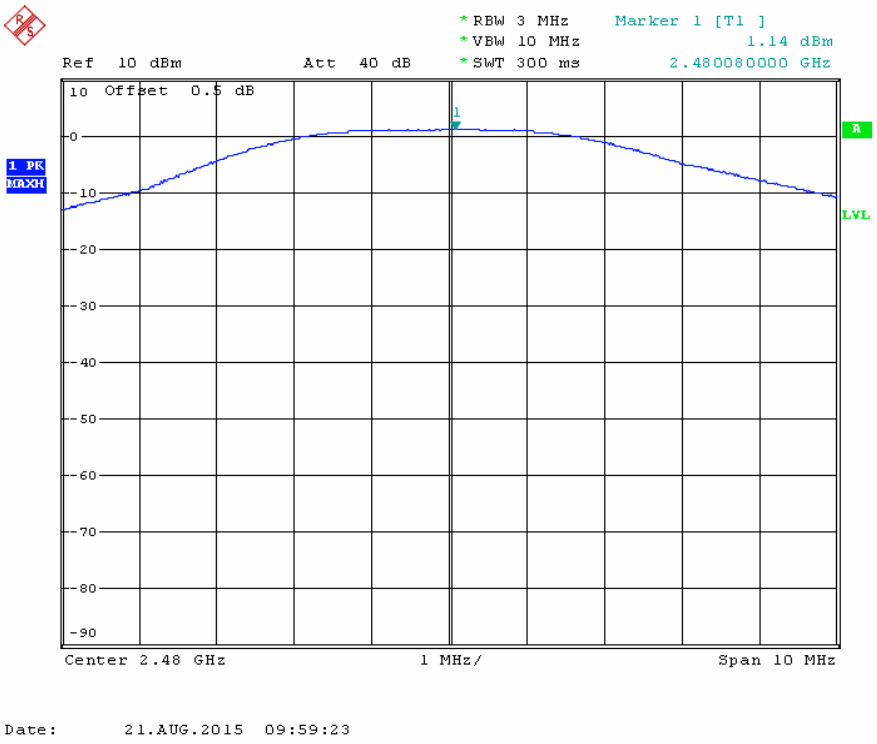
Date: 11.SEP.2015 09:57:26

Channel Middle 2440MHz



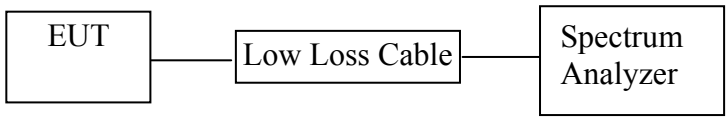
Date: 21.AUG.2015 09:58:24

Channel High 2480MHz



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Block Diagram of Test Setup



8.2. The Requirement For Section 15.247(e)

Section 15.247(e): 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.

8.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.4. Operating Condition of EUT

8.4.1. Setup the EUT and simulator as shown as Section 8.1.

8.4.2. Turn on the power of all equipment.

8.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2405-2480MHz. We select 2405MHz, 2440MHz, 2480MHz TX frequency to transmit.

8.5. Test Procedure

8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.2. Measurement Procedure PKPSD:

This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

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 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 x 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 amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

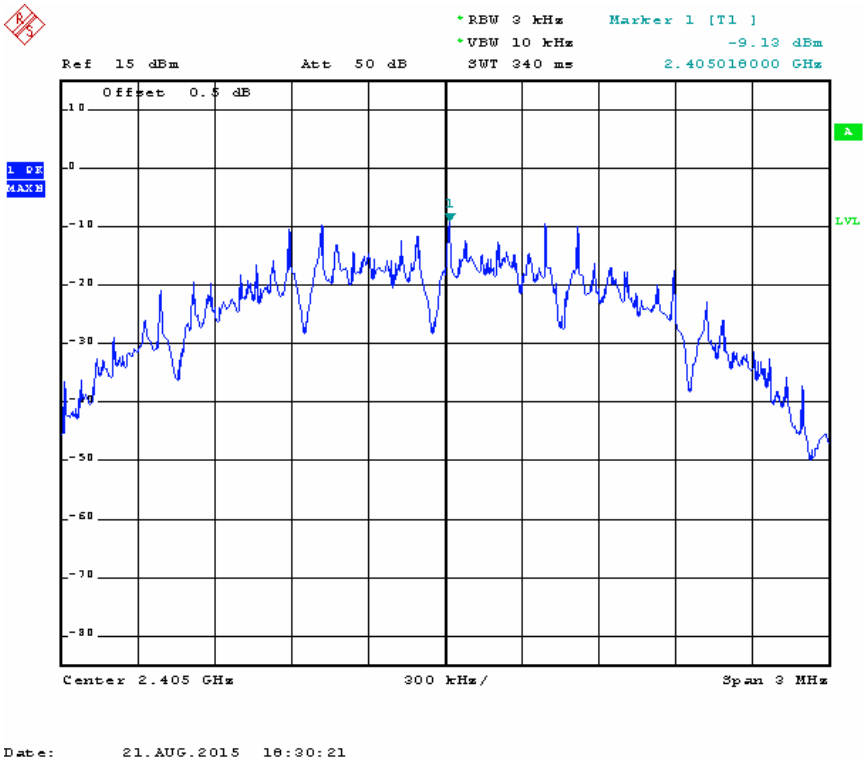
8.5.3.Measurement the maximum power spectral density.

8.6.Test Result

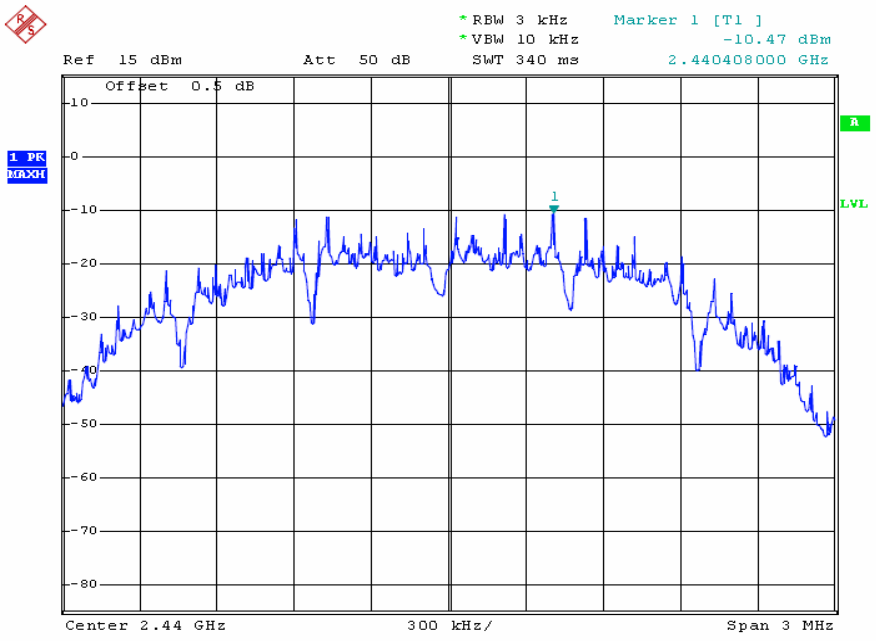
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2405	-9.13	8 dBm
Middle	2440	-10.47	8 dBm
High	2480	-10.18	8 dBm

The spectrum analyzer plots are attached as below.

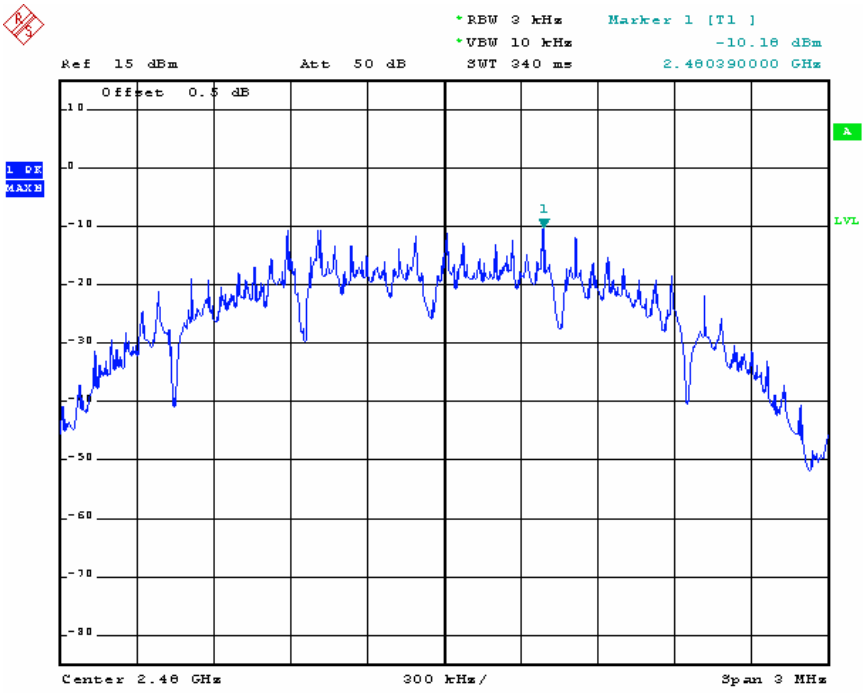
Channel Low 2405MHz



Channel Middle 2440MHz

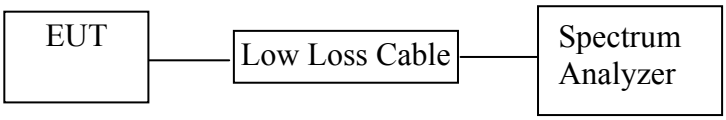


Channel High 2480MHz



9. BAND EDGE COMPLIANCE TEST

9.1. Block Diagram of Test Setup



9.2. The Requirement For Section 15.247(d)

Section 15.247(d): 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4. Operating Condition of EUT

9.4.1. Setup the EUT and simulator as shown as Section 9.1.

9.4.2. Turn on the power of all equipment.

9.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2405-2480MHz MHz. We select 2405MHz, 2480MHz, TX frequency to transmit.

9.5. Test Procedure

Conducted Band Edge:

9.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

9.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

Radiate Band Edge:

9.5.3. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

9.5.4. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

9.5.5. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

9.5.6. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

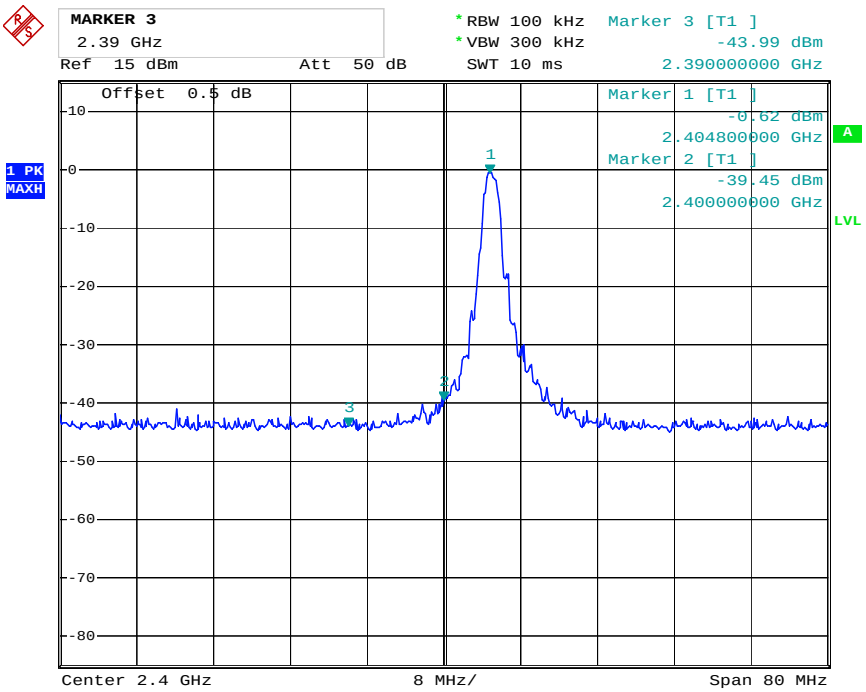
9.5.7. RBW=1MHz, VBW=1MHz

9.5.8. The band edges was measured and recorded.

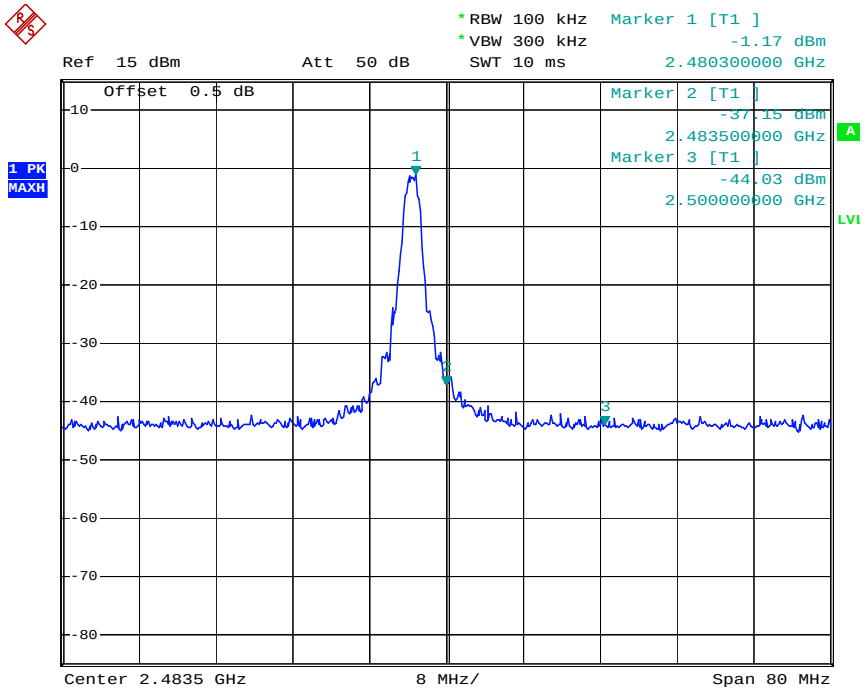
9.6. Test Result

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2405	38.83	> 20dBc
2480	35.98	> 20dBc

Channel Low 2405MHz



Channel High 2480MHz



Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

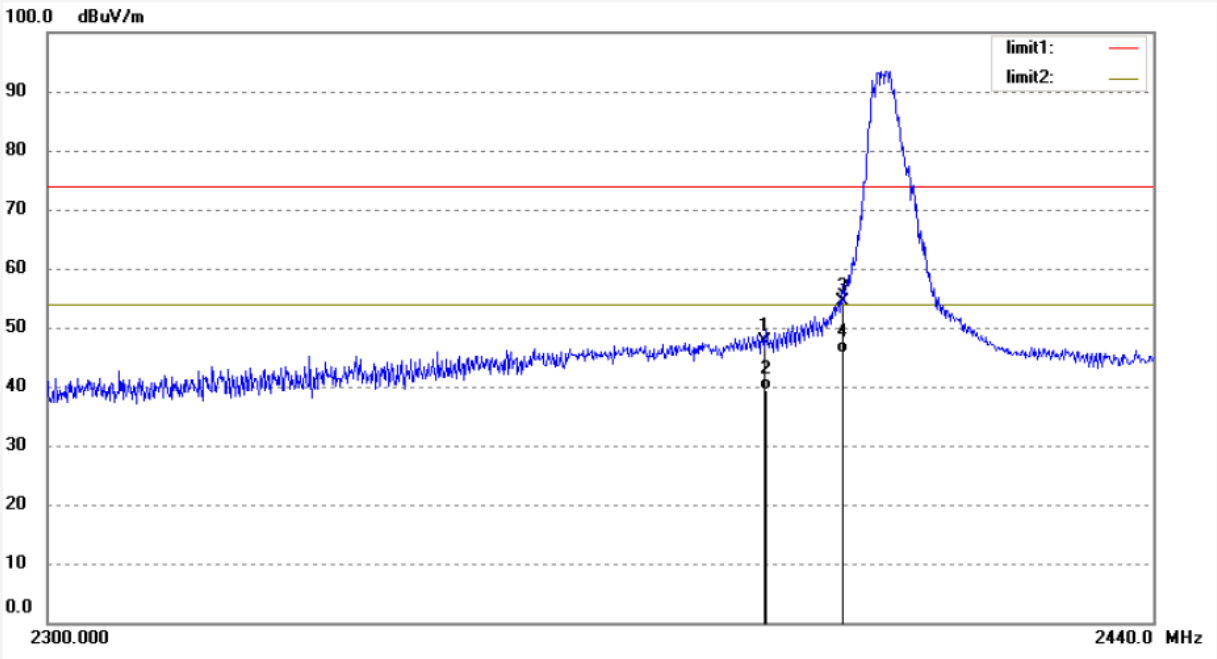
Let the EUT work in TX modes then measure it.
We select 2405MHz, 2480MHz TX frequency to transmit

During the radiated emission test, the spectrum analyzer was set with the following configurations:
1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
3.All modes of operation were investigated and the worst-case emissions are reported.

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #576	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/31/26
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



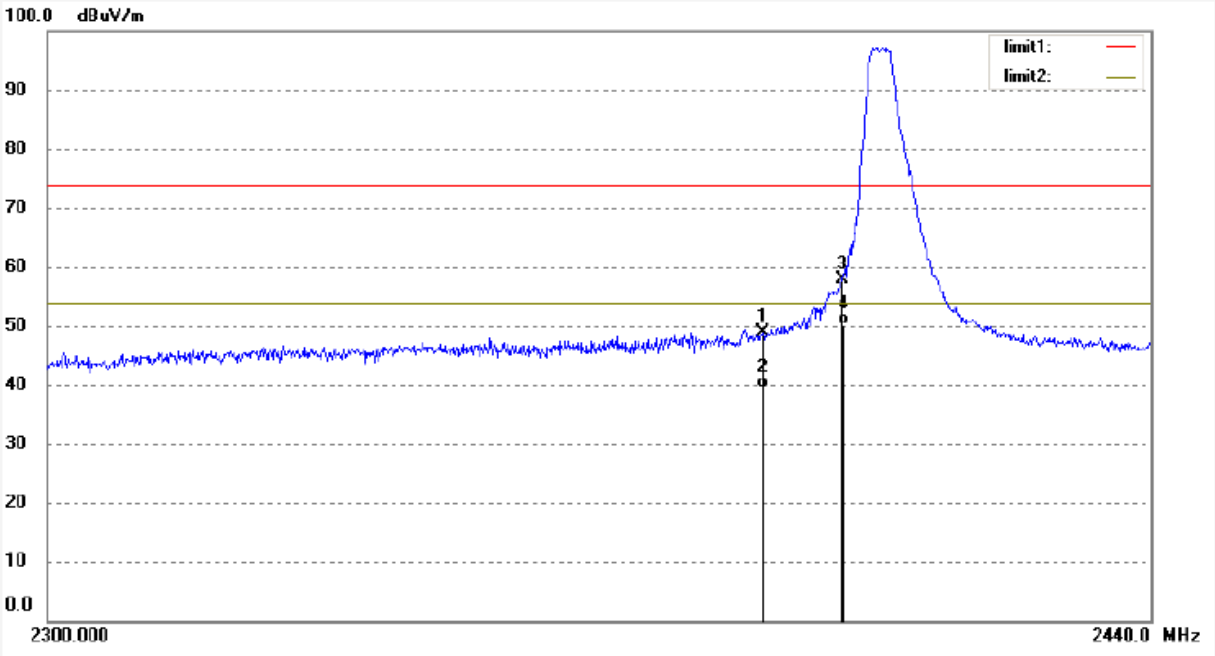
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	55.22	-7.53	47.69	74.00	-26.31	peak			
2	2390.000	46.90	-7.53	39.37	54.00	-14.63	AVG			
3	2400.000	61.82	-7.46	54.36	74.00	-19.64	peak			
4	2400.000	53.16	-7.46	45.70	54.00	-8.30	AVG			

Note: Average measurement with peak detection at No.2&4

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #575	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/30/00
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	56.29	-7.53	48.76	74.00	-25.24	peak			
2	2390.000	46.97	-7.53	39.44	54.00	-14.56	AVG			
3	2400.000	65.28	-7.46	57.82	74.00	-16.18	peak			
4	2400.000	57.61	-7.46	50.15	54.00	-3.85	AVG			

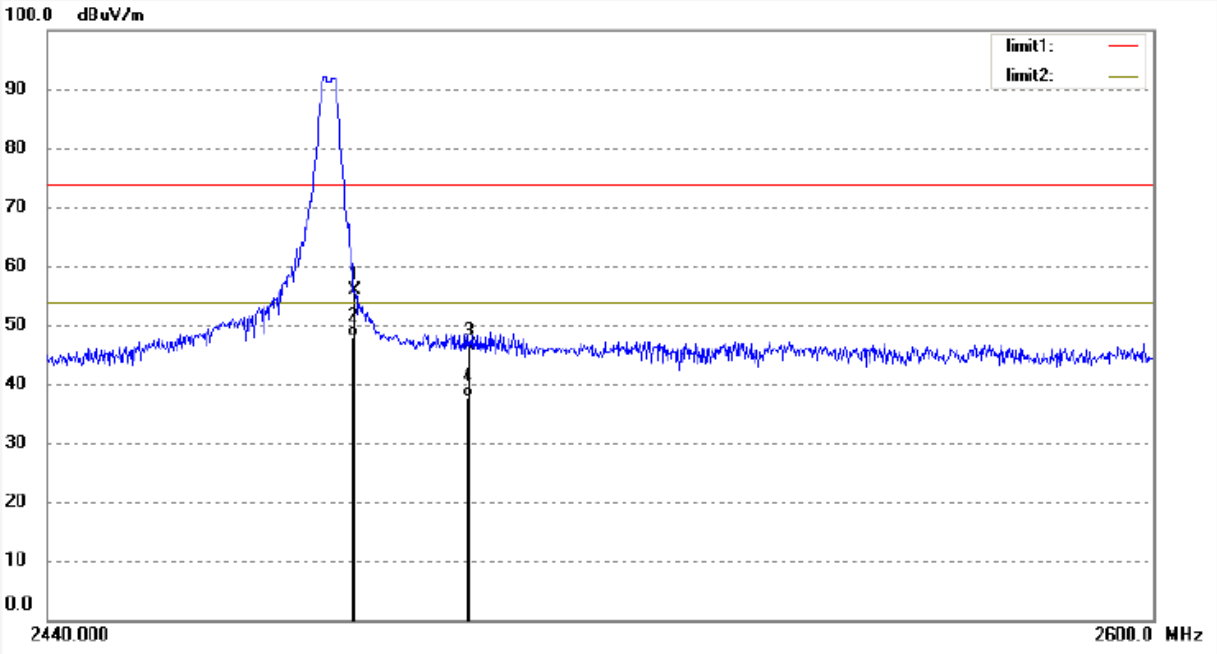
Note: Average measurement with peak detection at No.2&4

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #578
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Microphone
Mode: TX 2480MHz
Model: ST-MIC-RF-R
Manufacturer: Recordex

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 15/09/02/
Time: 9/38/49
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20151826



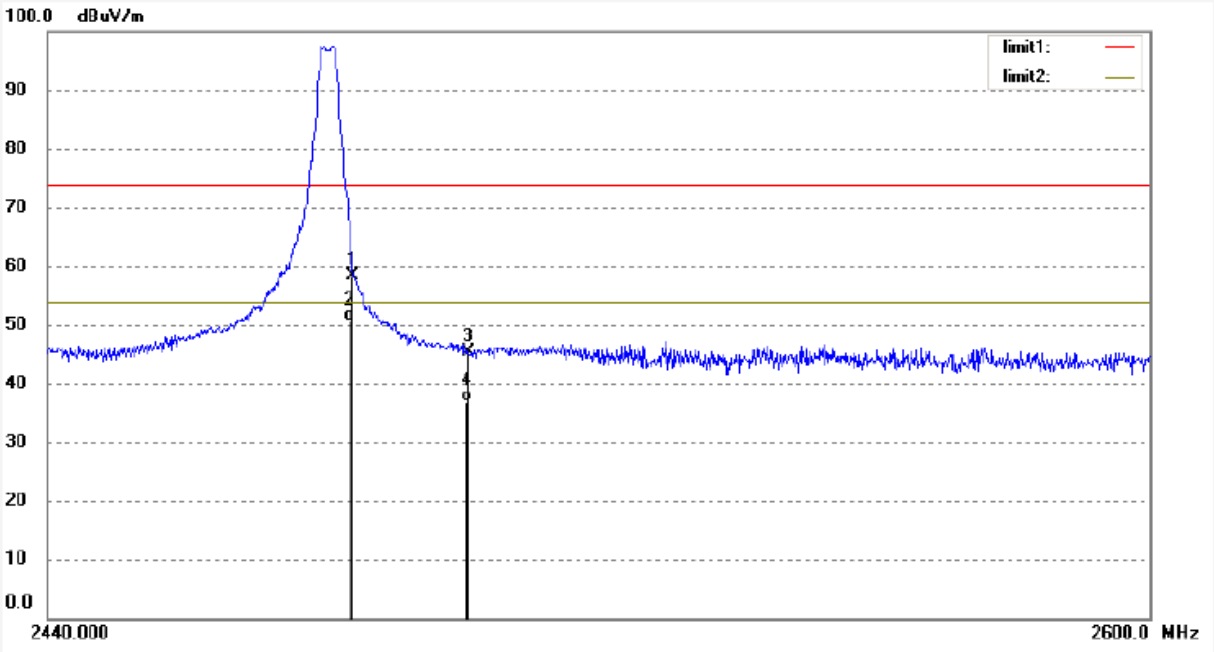
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	63.36	-7.37	55.99	74.00	-18.01	peak			
2	2483.500	55.36	-7.37	47.99	54.00	-6.01	AVG			
3	2500.000	53.74	-7.40	46.34	74.00	-27.66	peak			
4	2500.000	45.00	-7.40	37.60	54.00	-16.40	AVG			

Note: Average measurement with peak detection at No.2&4

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #577	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/36/43
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	65.82	-7.37	58.45	74.00	-15.55	peak			
2	2483.500	57.98	-7.37	50.61	54.00	-3.39	AVG			
3	2500.000	52.66	-7.40	45.26	74.00	-28.74	peak			
4	2500.000	44.32	-7.40	36.92	54.00	-17.08	AVG			

10.RADIATED SPURIOUS EMISSION TEST

10.1.Block Diagram of Test Setup

10.1.1.Block diagram of connection between the EUT and peripherals

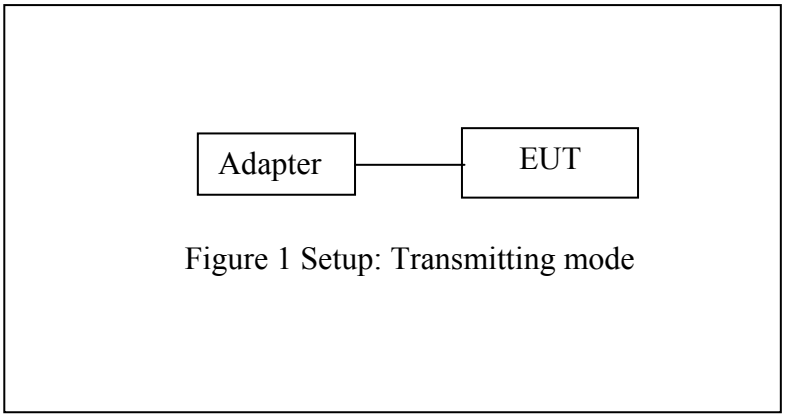
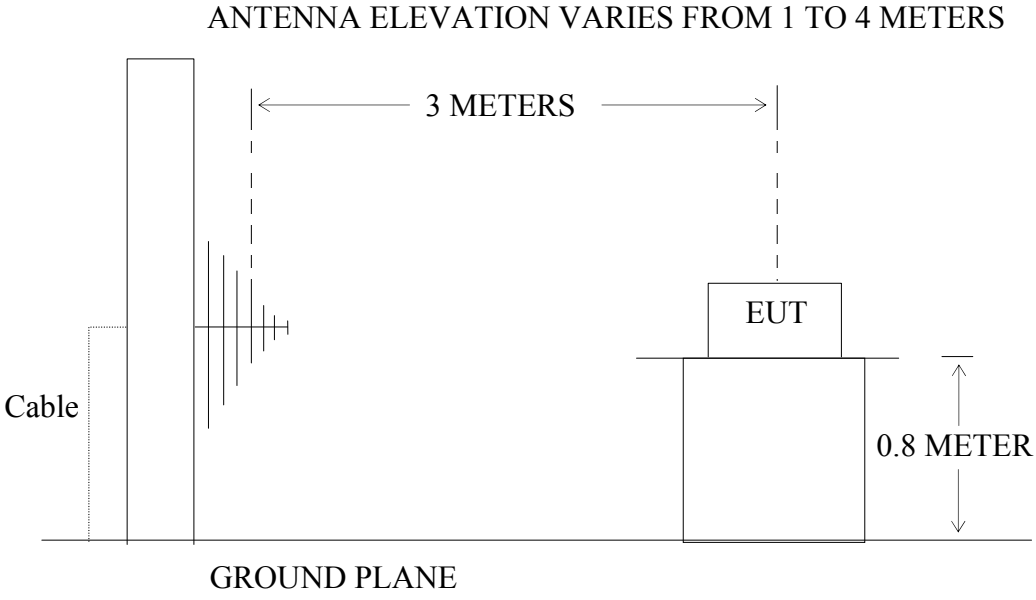


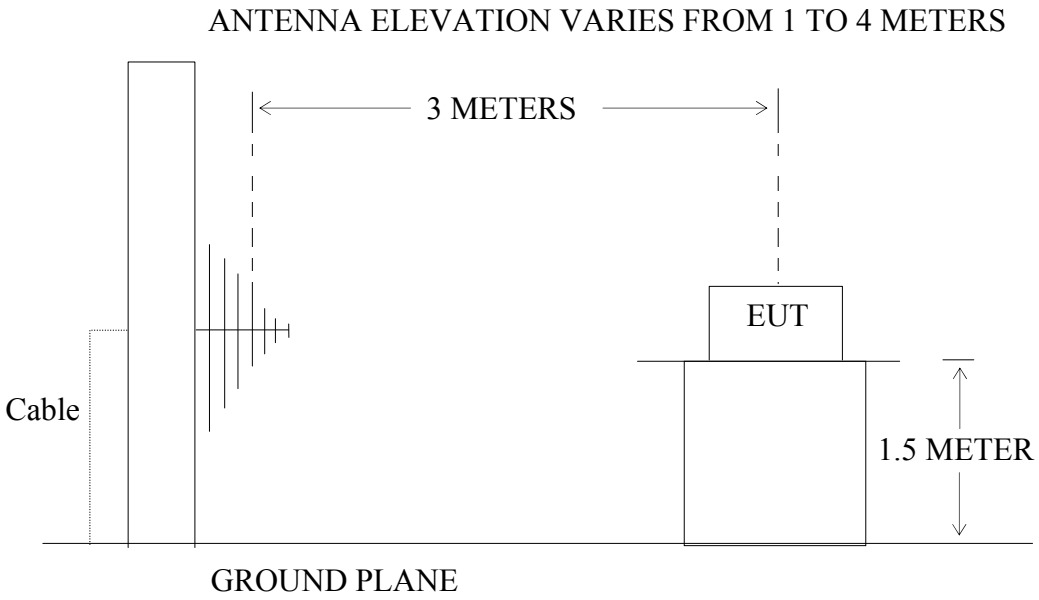
Figure 1 Setup: Transmitting mode

10.1.2.Semi-Anechoic Chamber Test Setup Diagram

Below 1GHz



Above 1GHz



10.2.The Limit For Section 15.247(d)

Section 15.247(d): 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3.Restricted bands of operation

10.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510
[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

10.4.Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.5. Operating Condition of EUT

10.5.1. Setup the EUT and simulator as shown as Section 10.1.

10.5.2. Turn on the power of all equipment.

10.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2405-2480MHz. We select 2405MHz, 2440MHz, 2480MHz TX frequency to transmit.

10.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground(Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The frequency range from 30MHz to 25000MHz is checked.
Result = Reading + Corrected Factor
Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain
During the radiated emission test, the spectrum analyzer was set with the following configurations:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

10.7.The Field Strength of Radiation Emission Measurement Results

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

4. The EUT is tested radiation emission at each test mode (TX) in three axes. The worst emissions are reported in all test mode and channels.

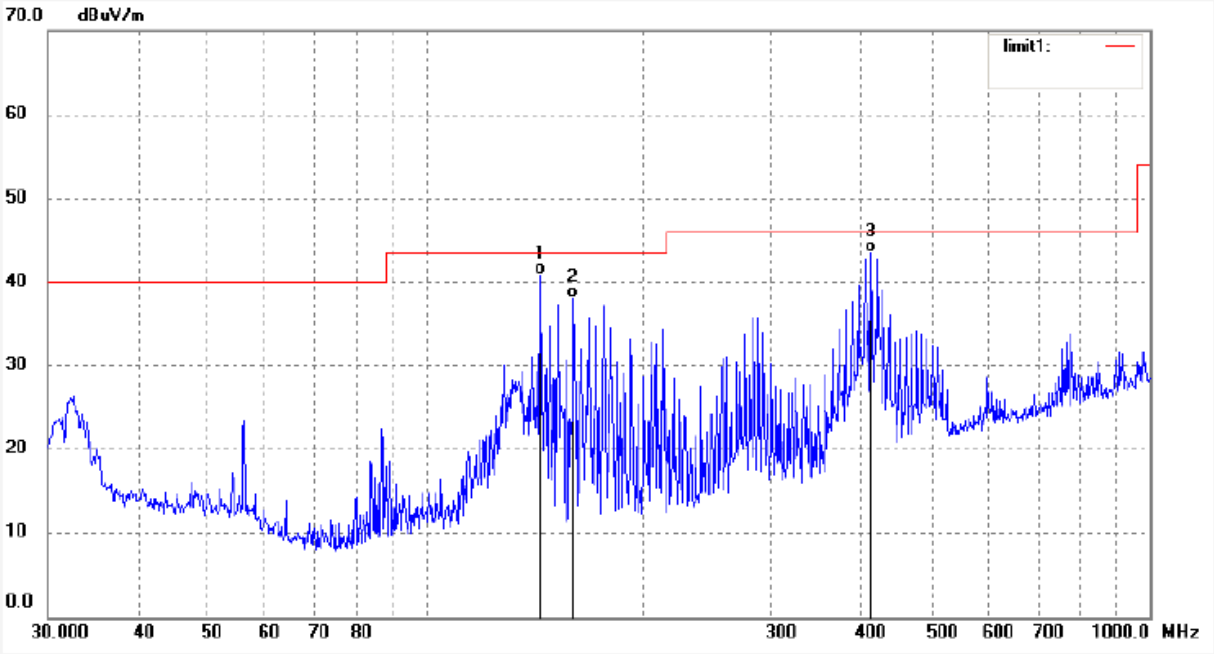
5. The radiation emissions from 18-25GHz are not reported, because the test values lower than the limits of 20dB.

Below 1G

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #563	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/07/31
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826

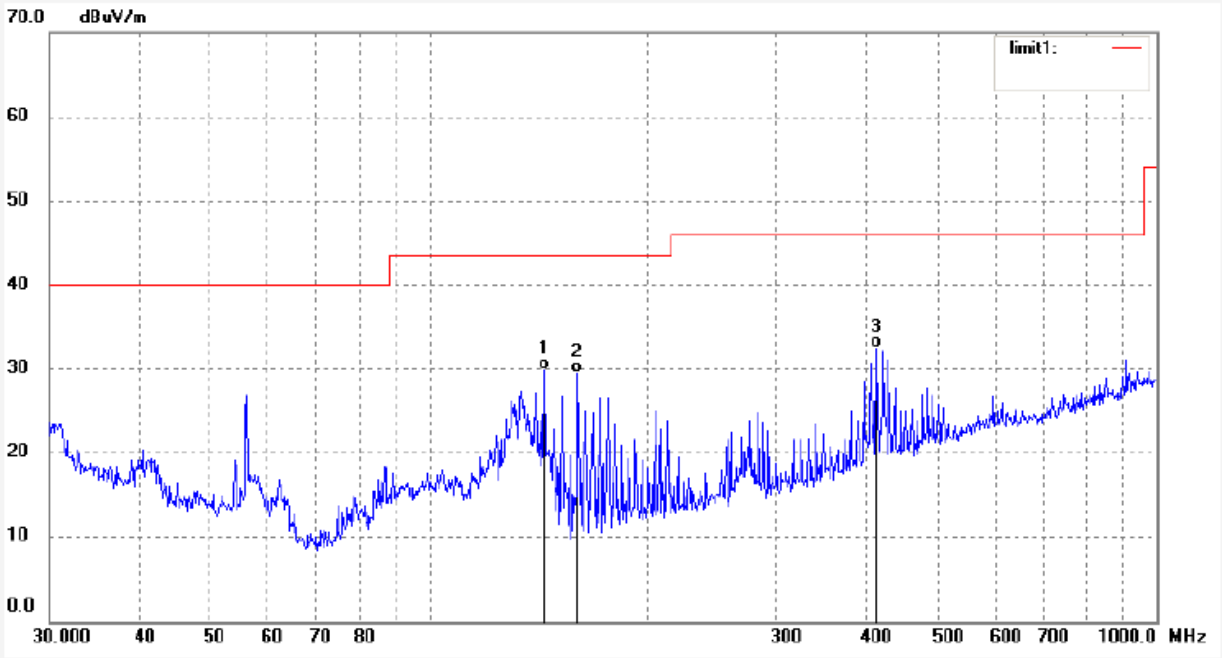


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8294	57.07	-16.23	40.84	43.50	-2.66	QP			
2	159.7844	53.70	-15.57	38.13	43.50	-5.37	QP			
3	411.8240	50.93	-7.50	43.43	46.00	-2.57	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #562	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/06/38
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826

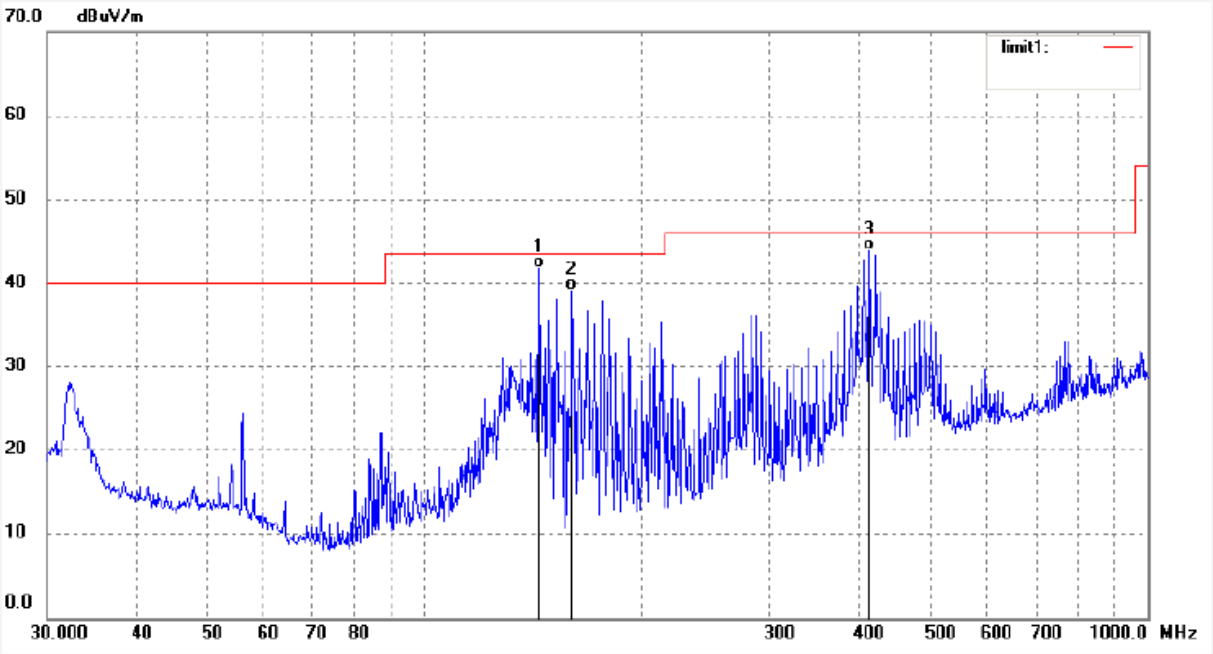


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8295	46.10	-16.23	29.87	43.50	-13.63	QP			
2	159.7844	45.01	-15.57	29.44	43.50	-14.06	QP			
3	411.8240	39.97	-7.50	32.47	46.00	-13.53	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #564	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/09/16
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2440MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



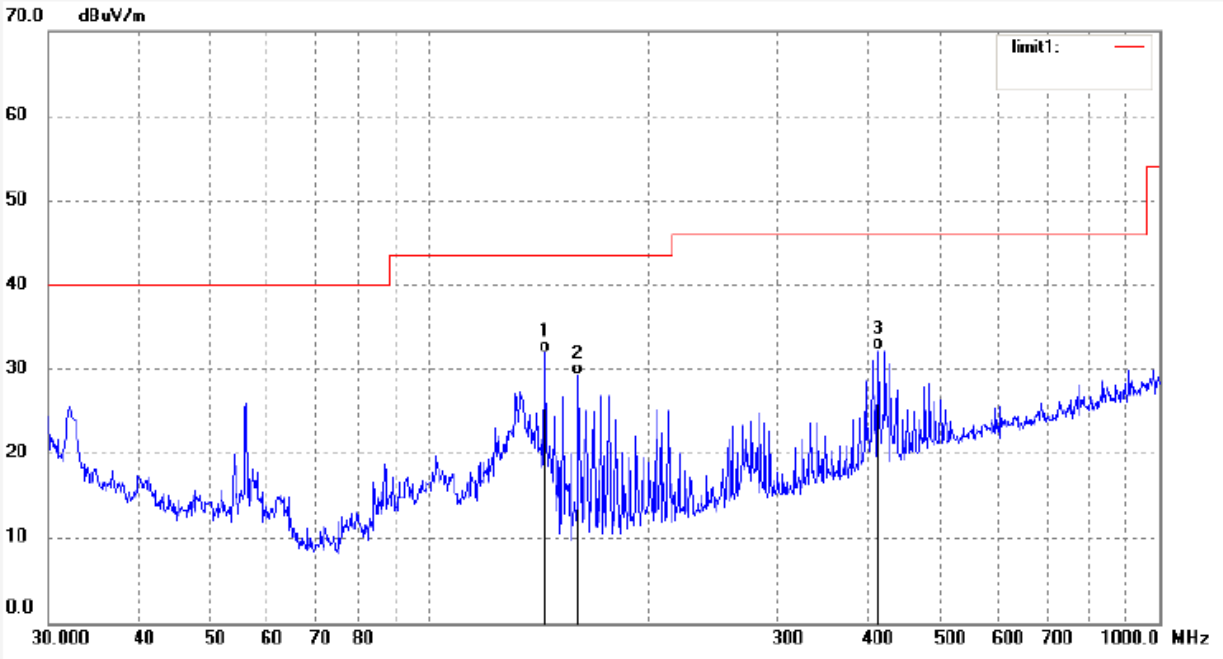
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8294	58.00	-16.23	41.77	43.50	-1.73	QP			
2	159.7844	54.60	-15.57	39.03	43.50	-4.47	QP			
3	411.8240	51.28	-7.50	43.78	46.00	-2.22	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #565	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/10/02
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2440MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



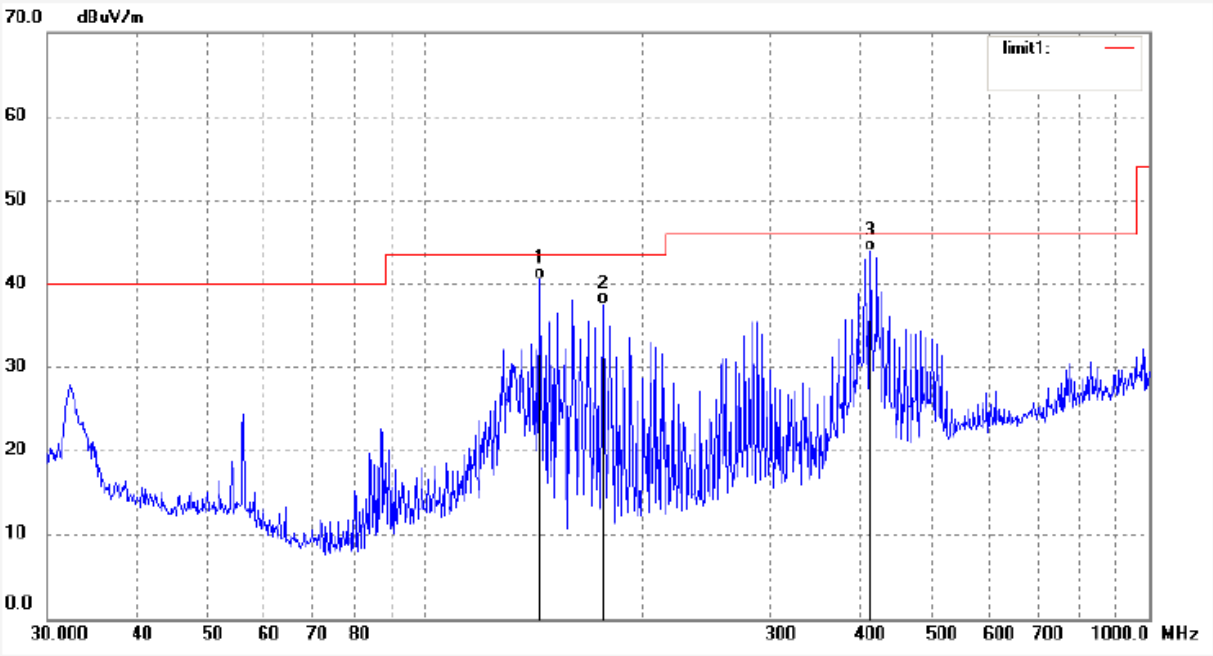
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8295	48.24	-16.23	32.01	43.50	-11.49	QP			
2	159.7844	44.84	-15.57	29.27	43.50	-14.23	QP			
3	411.8240	39.70	-7.50	32.20	46.00	-13.80	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #567	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/11/55
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8295	56.75	-16.23	40.52	43.50	-2.98	QP			
2	176.2686	52.08	-14.59	37.49	43.50	-6.01	QP			
3	411.8240	51.39	-7.50	43.89	46.00	-2.11	QP			

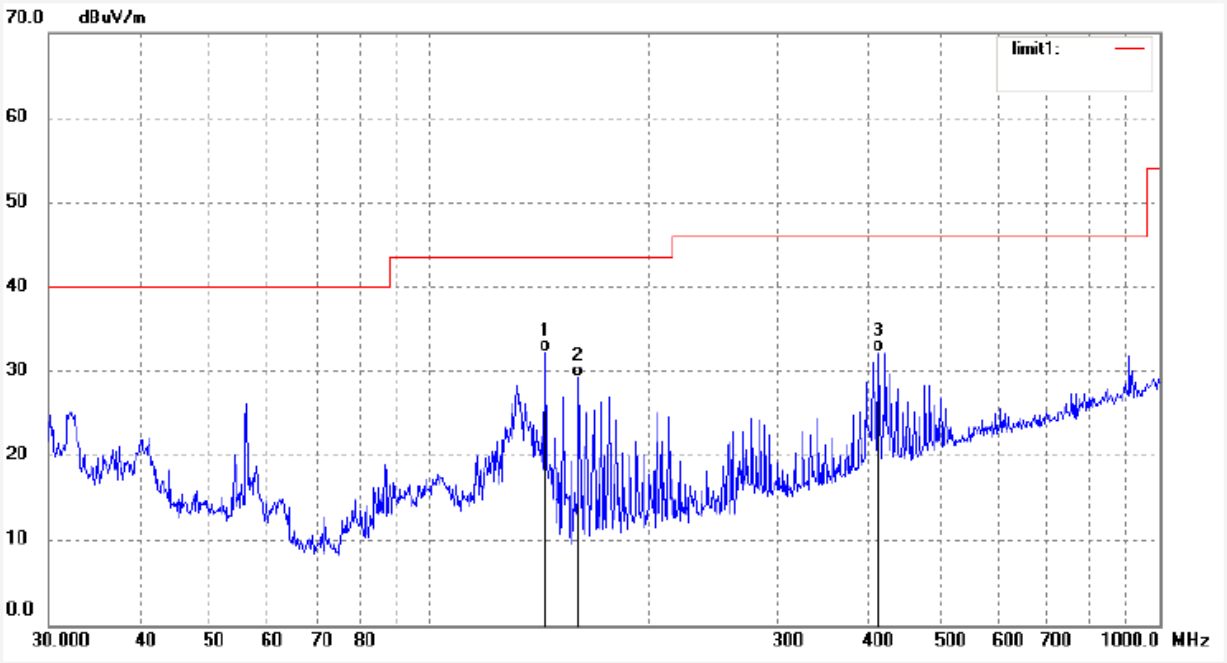
ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #566
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Microphone
Mode: TX 2480MHz
Model: ST-MIC-RF-R
Manufacturer: Recordex

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 15/09/02/
Time: 9/10/50
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20151826



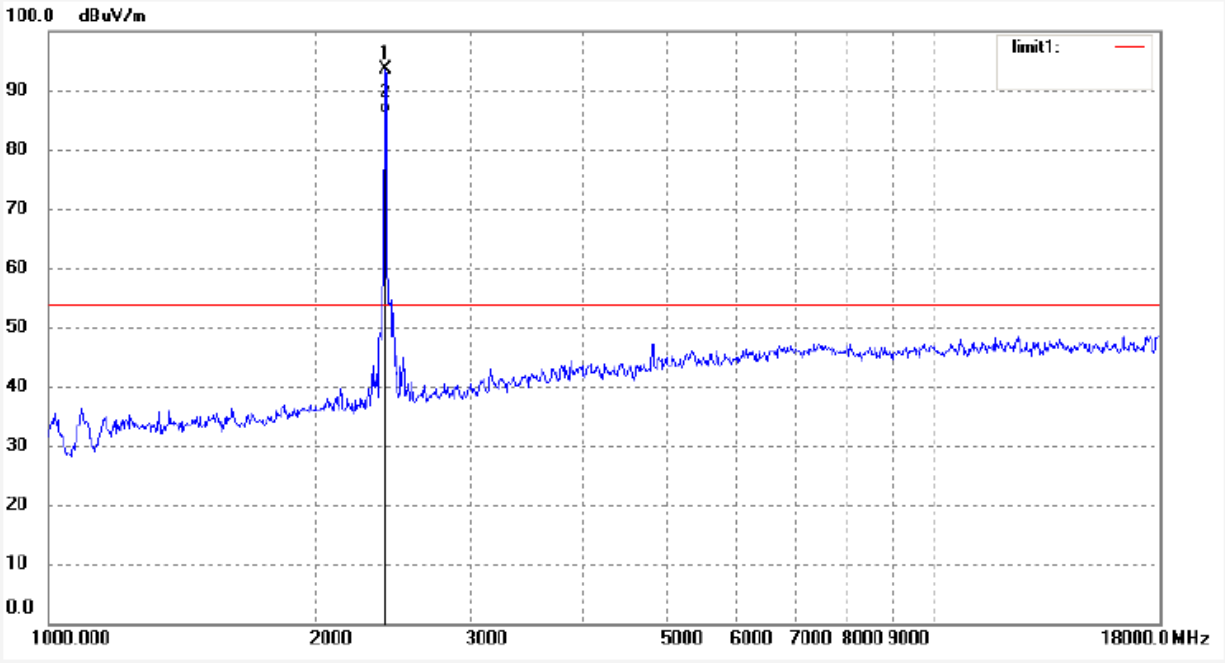
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	143.8295	48.48	-16.23	32.25	43.50	-11.25	QP			
2	159.7844	44.87	-15.57	29.30	43.50	-14.20	QP			
3	411.8240	39.70	-7.50	32.20	46.00	-13.80	QP			

Above 1G

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #573	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/25/03
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826

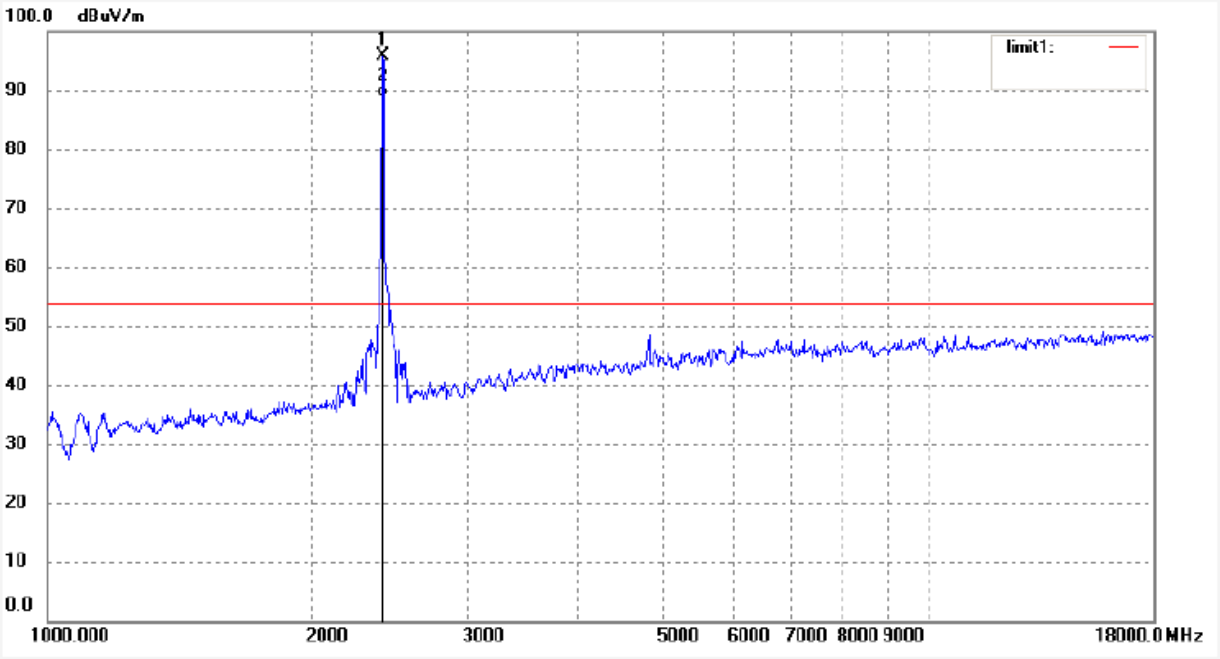


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.753	100.97	-7.46	93.51	54.00	39.51	peak			
2	2400.753	93.61	-7.46	86.15	54.00	32.15	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #574	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/26/32
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2405MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



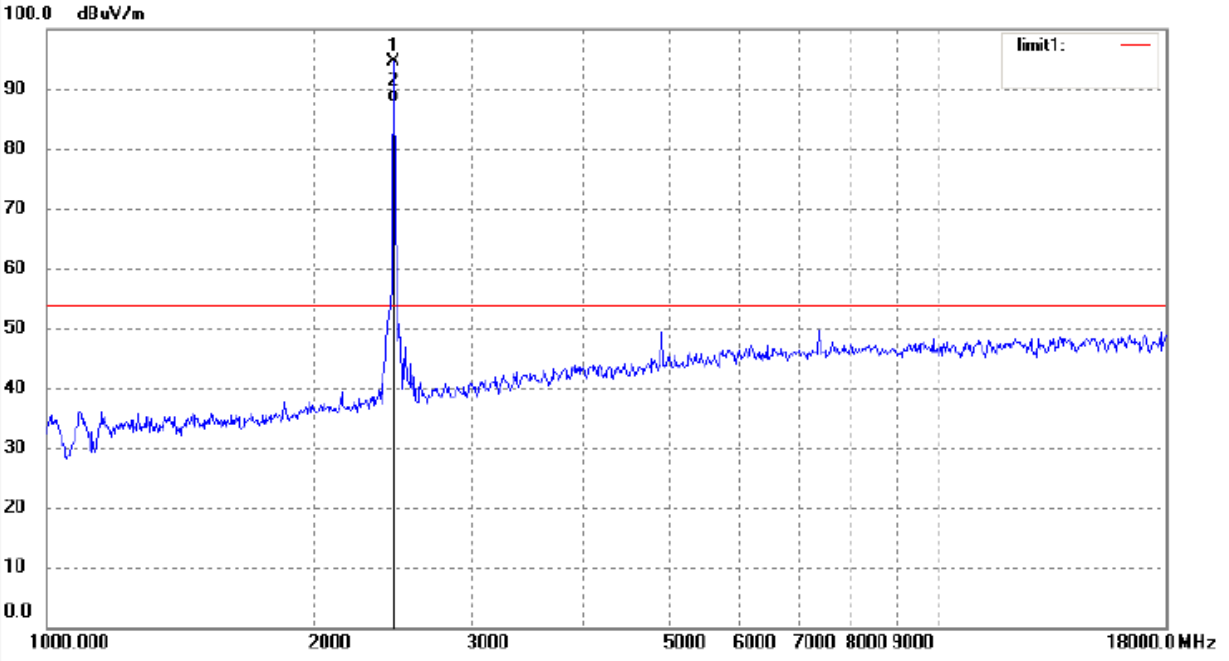
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.753	103.41	-7.46	95.95	54.00	41.95	peak			
2	2400.753	96.37	-7.46	88.91	54.00	34.91	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #572
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Microphone
Mode: TX 2440MHz
Model: ST-MIC-RF-R
Manufacturer: Recordex

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 15/09/02/
Time: 9/21/25
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20151826

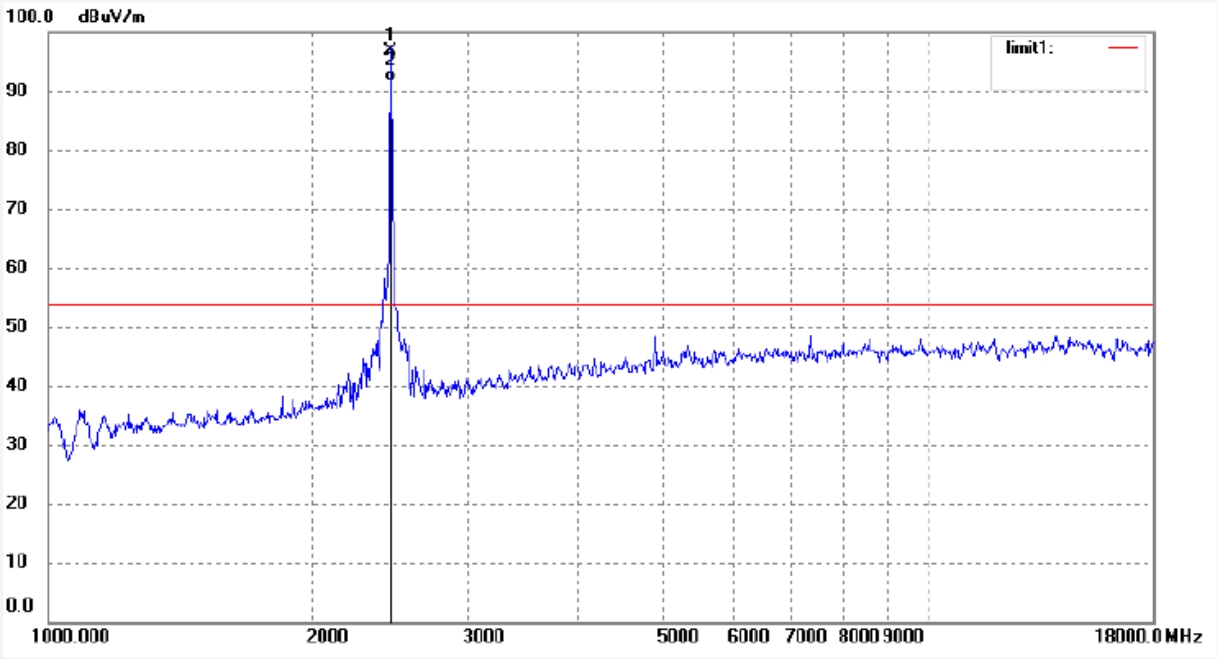


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2449.822	101.85	-7.33	94.52	54.00	40.52	peak			
2	2449.822	95.14	-7.33	87.81	54.00	33.81	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #571	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/19/31
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2440MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



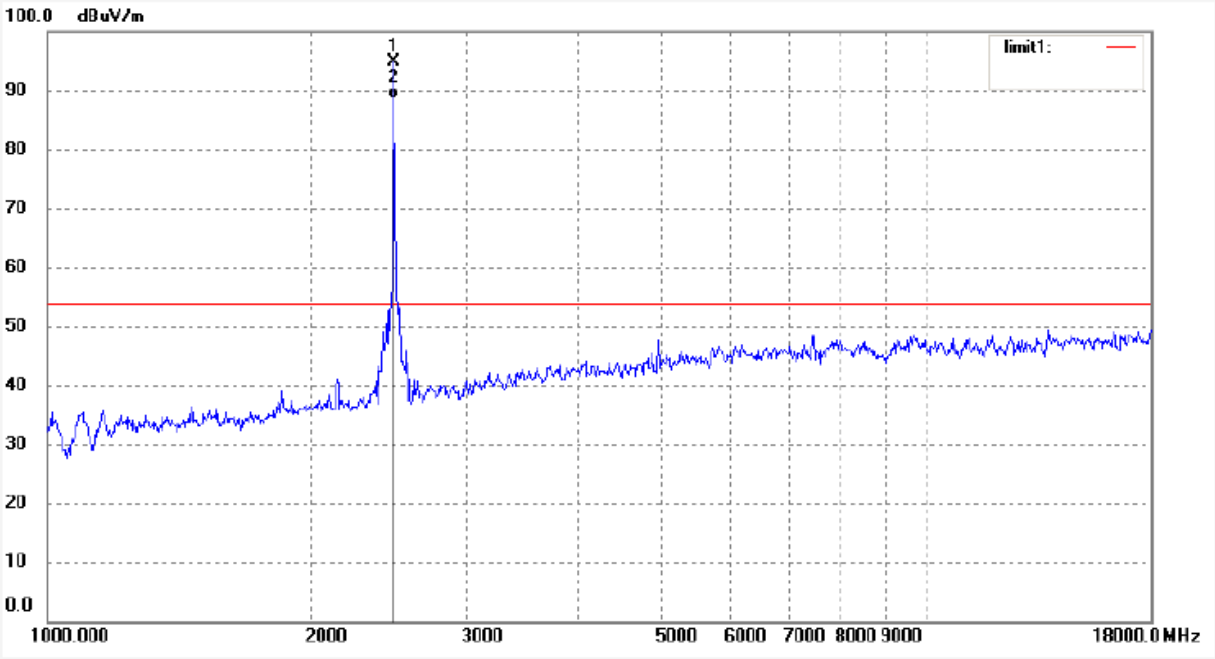
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2449.822	104.16	-7.33	96.83	54.00	42.83	peak			
2	2449.822	98.97	-7.33	91.64	54.00	37.64	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #569	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/09/02/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/16/14
EUT: Wireless Microphone	Engineer Signature:
Mode: TX 2480MHz	Distance: 3m
Model: ST-MIC-RF-R	
Manufacturer: Recordex	

Note: Report NO.:ATE20151826



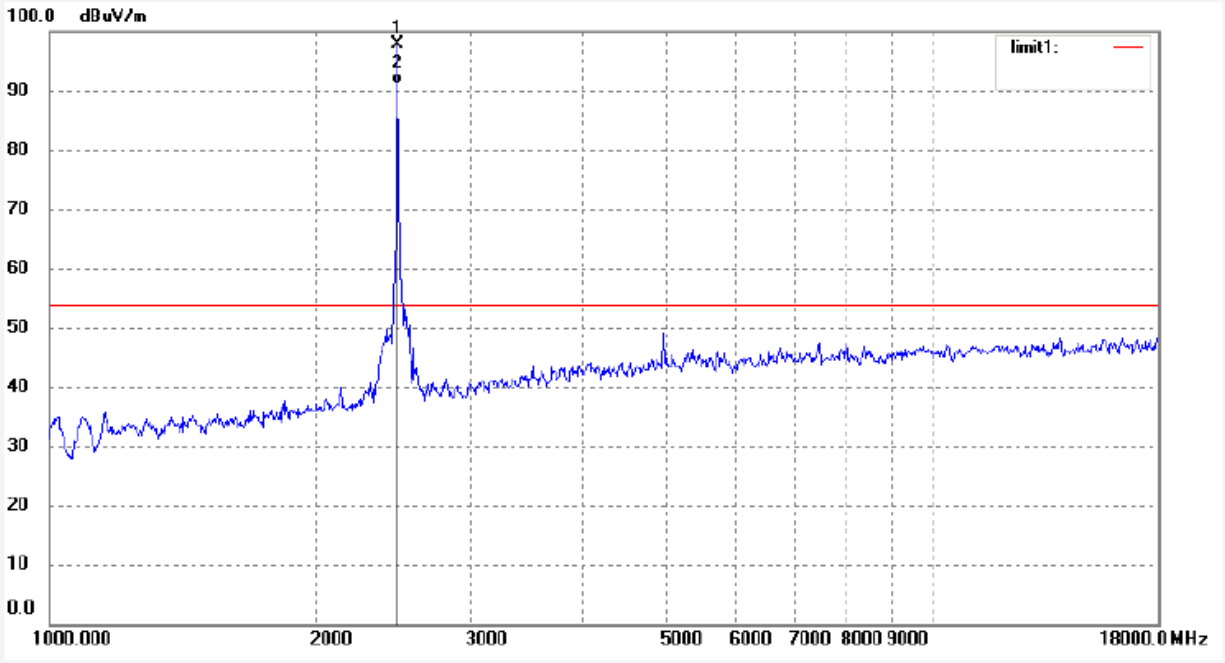
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2478.310	102.17	-7.37	94.80	54.00	40.80	peak			
2	2478.310	96.00	-7.37	88.63	54.00	34.63	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: STAR2015 #570
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Microphone
Mode: TX 2480MHz
Model: ST-MIC-RF-R
Manufacturer: Recordex

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 15/09/02/
Time: 9/17/25
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20151826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2478.310	105.24	-7.37	97.87	54.00	43.87	peak			
2	2478.310	98.61	-7.37	91.24	54.00	37.24	AVG			

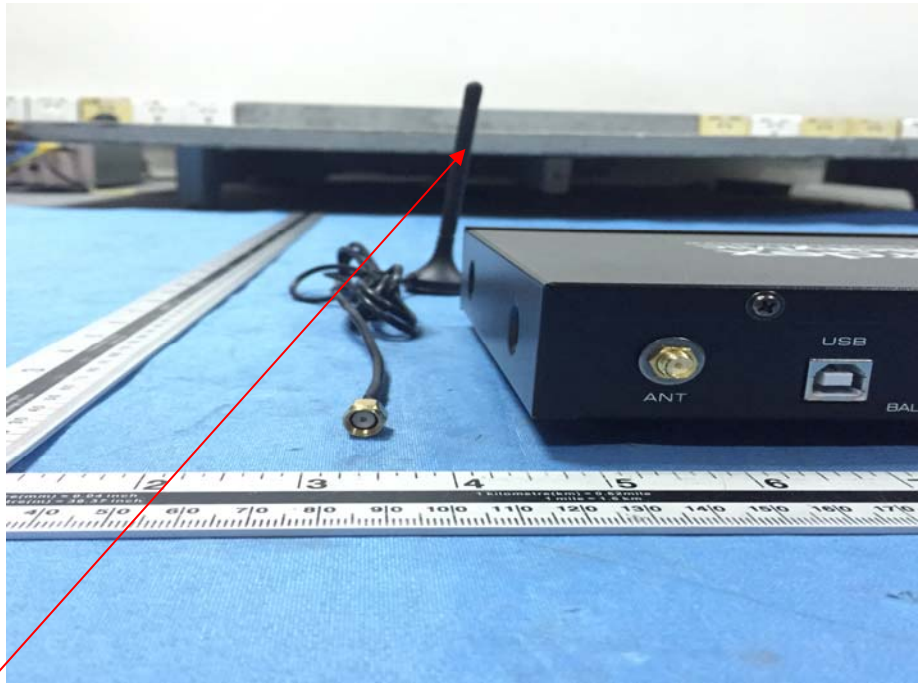
11. ANTENNA REQUIREMENT

11.1. The Requirement

According to Section 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.

11.2. Antenna Construction

Device is equipped with Reverse Polarity (RP-SMA) conneetors antenna, it is considered to meet antenna requirement of FCC. The Antenna gain of EUT is 2.0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna