

FCC TEST REPORT

Test report
On Behalf of
BeSound Technology Co.,Ltd.
For
BLUETOOTH SPEAKER
Model No.: Rugby, BTM-720

FCC ID: 2AHX8-RUGBY

Prepared for : **BeSound Technology Co.,Ltd.**
Rm.2139B,Tian Sha International Center,No. 8 Taoyuan Rd.,Nanshan Dist.,
Shenzhen, Guangdong Province, China

Prepared By : **WST Certification & Testing (HK) Limited**
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Date of Test: **Apr. 03, 2016 ~ Apr. 08, 2016**

Date of Report: **Apr. 08, 2016**

Report Number: **WST160403063-E**

TEST RESULT CERTIFICATION**Applicant's name**..... BeSound Technology Co.,Ltd.Address..... Rm.2139B,Tian Sha International Center,No. 8 Taoyuan Rd.,Nanshan Dist.,
Shenzhen, Guangdong Province, China**Manufacture's Name** . DONGGUAN CITY YUANYU ELECTRONIC TECHNOLOGY CO.,LIMITEDAddress..... JINDUOGANG DEVELOPMENT ZONE, DATANG VILLAGE, DALINGSHAN
TOWN, DONGGUAN CITY, GUANGDONG, CHINA**Product description**

Trade Mark: BeSound

Product name BLUETOOTH SPEAKER

Model and/or type Rugby, BTM-720
reference**Standards**..... FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.10: 2013

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Date of Test.....Date (s) of performance of tests **Apr. 03, 2016 ~ Apr. 08, 2016**Date of Issue **Apr. 08, 2016**Test Result **Pass**

Testing Engineer :



(Eric Xie)

Technical Manager :



(Dora Qin)

Authorized Signatory :



(Kait Chen)

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1. TEST SUMMARY

1.1 TEST PROCEDURES AND RESULTS

DESCRIPTION OF TEST	RESULT
CONDUCTED EMISSIONS TEST	COMPLIANT
RADIATED EMISSION TEST	COMPLIANT
BAND EDGE	COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT	COMPLIANT
ANTENNA REQUIREMENT	COMPLIANT

1.2 TEST FACILITY

Test Firm : Shenzhen WST Testing Technology Co., Ltd.
Certificated by FCC, Registration No.: 939433
Address : 1F, No.9 Building, TKG Science & Technology Park, Yangtian Rd.,
NO.72 Bao'an Dist., Shenzhen, Guangdong, China. 518101
Tel : (86)755-33916437
Fax : (86)755-27822175

1.3 MEASUREMENT UNCERTAINTY

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. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	BLUETOOTH SPEAKER
Model Name	Rugby, BTM-720
Serial No	N/A
Model Difference	All model's the function, software and electric circuit are the same, only with a product color and model named different. Test sample model: Rugby.
FCC ID	2AHX8-RUGBY
Antenna Type	Internal Antenna
BT Operation frequency	2402-2480MHz
Number of Channels	40CH
Modulation Type	GFSK
Power Source	DC 12V from adapter
Power Rating	/
Adapter Model	EP29-120100WUCZ Input: 100-240V, 50-60Hz, 0.35A; Output 12V,1A

2.1.1 Carrier Frequency of Channels

Channel	Frequeney (MHz)	Channel	Frequeney (MHz)	Channel	Frequeney (MHz)	Channe 1	Frequeney (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

Operation of EUT during testing

Operating Mode

The mode is used: **Transmitting mode**

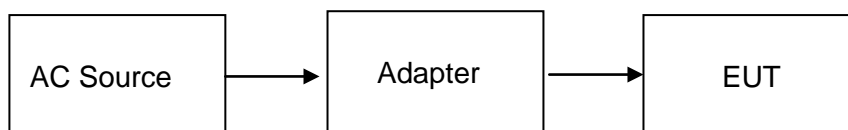
Low Channel: 2402MHz

Middle Channel: 2442MHz

High Channel: 2480MHz

2.2 DESCRIPTION OF TEST SETUP

Operation of EUT during testing



2.3 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
2.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
4.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
5.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
6.	Trilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 17, 2015	1 Year
7.	Pre-amplifier	Compliance Direction	PAP-0203	22008	May 19, 2015	1 Year
8.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
9.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
10.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
11.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
12.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
13.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
14.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
15.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
16.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
17.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
18.	Programmable AC Power source	SOPH POWER	PAG-1050	630250	May 26, 2015	1 Year
19.	Harmonic and Flicker Analyzer	LAPLACE	AC2000A	272629	May 26, 2015	1 Year
20.	Harmonic and Flicker Test Software AC 2000A	LAPLACE	N/A	N/A	N/A	N/A
21.	ESD Simulators	KIKUSUI	KES4021	LJ003477	May 25, 2015	1 Year
22.	EFT Generator	EMPEK	EFT-4040B	0430928N	May 19, 2015	1 Year
23.	Shielding Room	ChangZhou ZhongYu	JB88	SEL0166	May 19, 2015	1 Year
24.	Signal Generator 9KHz~2.2GHz	R&S	SML02	SEL0143	May 19, 2015	1 Year
25.	Signal Generator 9KHz~1.1GHz	R&S	SML01	SEL0135	May 19, 2015	1 Year
26.	Power Meter	R&S	NRVS	SEL0144	May 19, 2015	1 Year
27.	RF Level Meter		URV35	SEL0137	May 19, 2015	1 Year
28.	Audio Analyzer	R&S	UPL	SEL0136	May 19, 2015	1 Year
29.	RF-Amplifier 150KHz~150MH Z	BONN Elektronik	BSA1515-25	SEL0157	May 19, 2015	1 Year

30.	Stripline Test Cell	Erika Fiedler	VDE0872	SEL0167	N/A	N/A
31.	TV Test Transmitter	R&S	SFM	SEL0159	May 17, 2015	1 Year
32.	TV Generator PAL	R&S	SGPF	SEL0138	May 19, 2015	1 Year
33.	TV Generator Ntsc	R&S	SGMF	SEL0140	May 19, 2015	1 Year
34.	TV Generator Secam	R&S	SGSF	SEL0139	May 19, 2015	1 Year
35.	TV Test Transmitter 0.3MHz~3300MHz	R&S	SFQ	SEL0142	May 19, 2015	1 Year
36.	MPEG2 Measurement Generator	R&S	DVG	SEL0141	May 19, 2015	1 Year
37.	Spectrum Analyzer	R&S	FSP	SEL0177	May 19, 2015	1 Year
38.	Matching	R&S	RAM	SEL0146	N/A	N/A
39.	Matching	R&S	RAM	SEL0148	N/A	N/A
40.	Absorbing Clamp	R&S	MDS21	SEL0158	May 17, 2015	1 Year
41.	Coupling Set	Erika Fiedler	Rco, Rci, MC, AC, LC	SEL0149	N/A	N/A
42.	Filters	Erika Fiedler	Sr, LBS	SEL0150	N/A	N/A
43.	Matching Network	Erika Fiedler	MN, T1	SEL0151	N/A	N/A
44.	Fully Anechoic Room	ChangZhou ZhongYu	854	SEL0169	Jun. 10, 2015	1 Year
45.	Signal Generator	R&S	SML03	SEL0068	May 17, 2015	1 Year
46.	RF-Amplifier 30M~1GHz	Amplifier Reasearch	250W1000A	SEL0066	Oct. 24, 2015	1 Year
47.	RF-Amplifier 0.8~3.0GHz	Amplifier Reasearch	60S1G3	SEL0065	Oct. 24, 2015	1 Year
48.	Power Meter	R&S	NRVD	SEL0069	May 17, 2015	1 Year
49.	Power Sensor	R&S	URV5-Z2	SEL0071	May 17, 2015	1 Year
50.	Power Sensor	R&S	URV5-Z2	SEL0072	May 17, 2015	1 Year
51.	Software EMC32	R&S	EMC32-S	SEL0082	N/A	N/A
52.	Log-periodic Antenna	Amplifier Reasearch	AT1080	SEL0073	N/A	N/A
53.	Antenna Tripod	Amplifier Reasearch	TP1000A	SEL0074	N/A	N/A
54.	High Gain Horn Antenna(0.8-5G Hz)	Amplifier Reasearch	AT4002A	SEL0075	N/A	N/A

3. CONDUCTED EMISSIONS TEST

3.1 Conducted Power Line Emission Limit

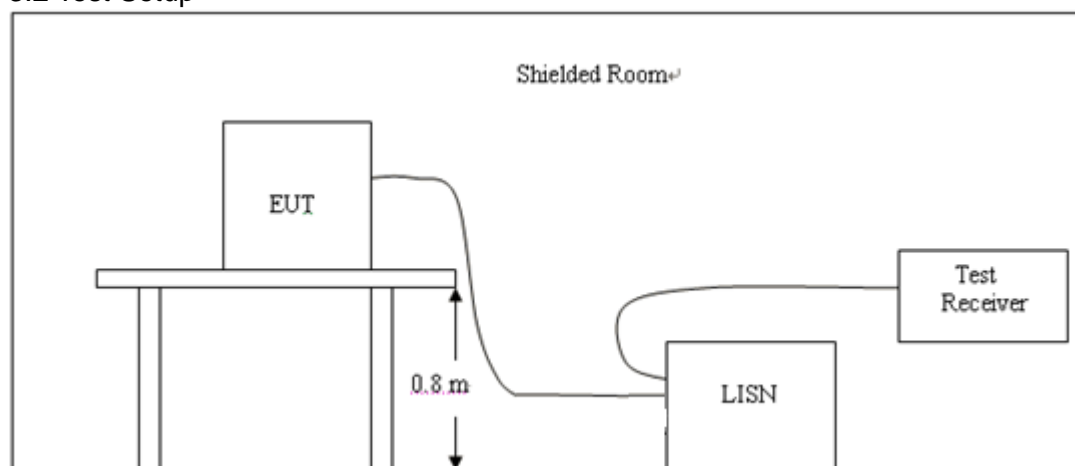
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

3.2 Test Setup



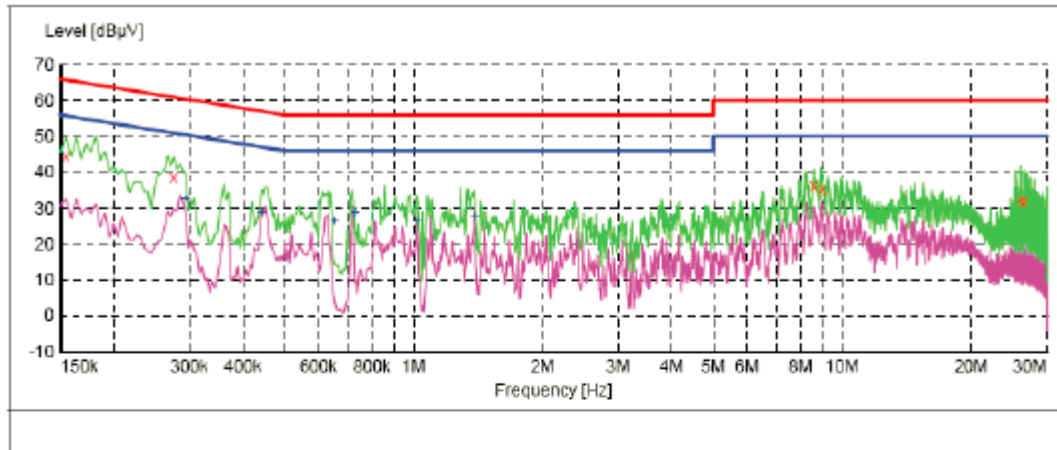
3.3 Test Procedure

- 1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5, All support equipments received AC power from a second LISN, if any.
- 6, The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes

3.4 Test Result

PASS

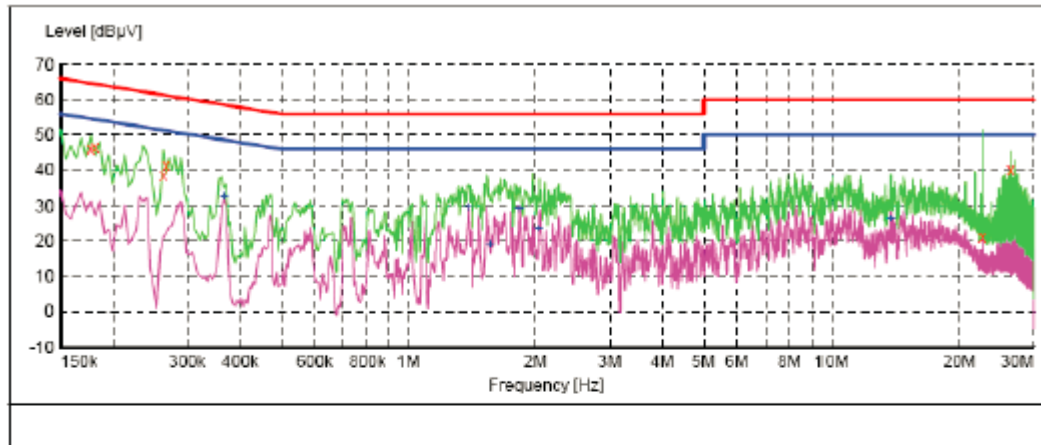
All the test modes completed for test. The worst case of Radiated Emission is CH2402; the test data of this mode was reported.

**MEASUREMENT RESULT:**

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.154501	44.50	10.2	66	21.3	QP	L1	GND
0.276001	38.50	10.2	61	22.4	QP	L1	GND
8.587501	36.30	10.6	60	23.7	QP	L1	GND
8.988001	35.40	10.6	60	24.6	QP	L1	GND
26.052001	32.30	11.2	60	27.7	QP	L1	GND
26.592001	31.80	11.2	60	28.2	QP	L1	GND

MEASUREMENT RESULT:

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.294001	32.60	10.2	50	17.8	AV	L1	GND
0.442501	28.60	10.2	47	18.4	AV	L1	GND
0.654001	26.20	10.2	46	19.8	AV	L1	GND
0.730501	28.70	10.2	46	17.3	AV	L1	GND
1.018501	26.30	10.3	46	19.7	AV	L1	GND
1.387501	27.40	10.3	46	18.6	AV	L1	GND



MEASUREMENT RESULT :

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.177001	46.00	10.2	65	18.6	QP	N	GND
0.181501	46.60	10.2	64	17.8	QP	N	GND
0.262501	38.50	10.2	61	22.9	QP	N	GND
0.267001	41.20	10.2	61	20.0	QP	N	GND
22.623001	21.20	11.0	60	38.8	QP	N	GND
26.412001	40.00	11.2	60	20.0	QP	N	GND

MEASUREMENT RESULT :

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.366001	32.80	10.2	49	15.8	AV	N	GND
1.387501	29.60	10.3	46	16.4	AV	N	GND
1.563001	19.30	10.3	46	26.7	AV	N	GND
1.828501	28.90	10.3	46	17.1	AV	N	GND
2.035501	23.70	10.4	46	22.3	AV	N	GND
13.735501	26.30	10.6	50	23.7	AV	N	GND

4 RADIATED EMISSION TEST

4.1 Radiation Limit

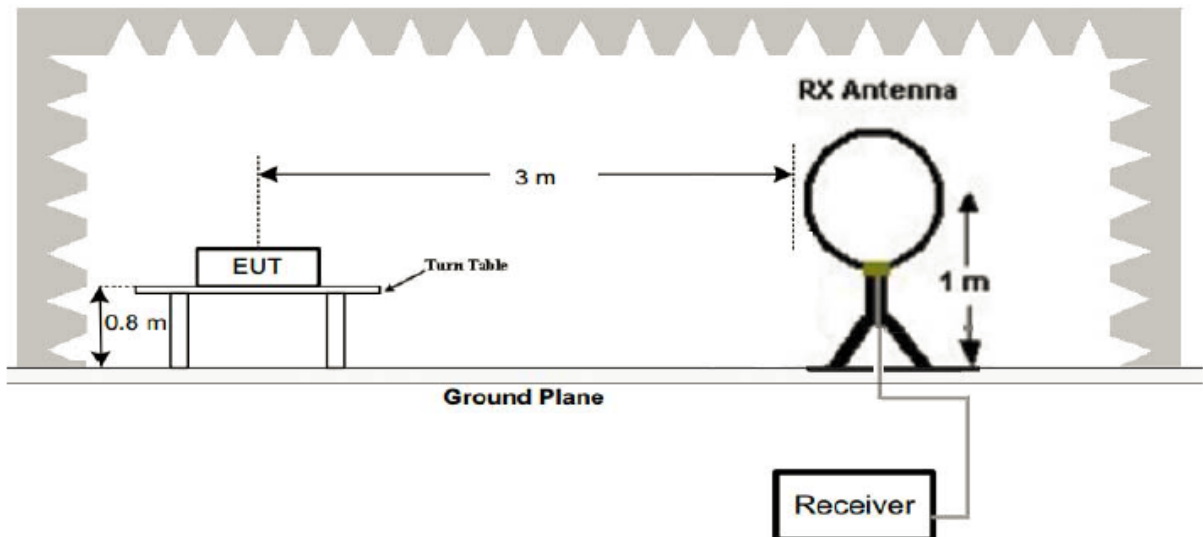
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dB μ V/m)	Radiated (μ V/m)
30-88	3	40	100
88-216	3	43.5	150
216-960	3	46	200
Above 960	3	54	500

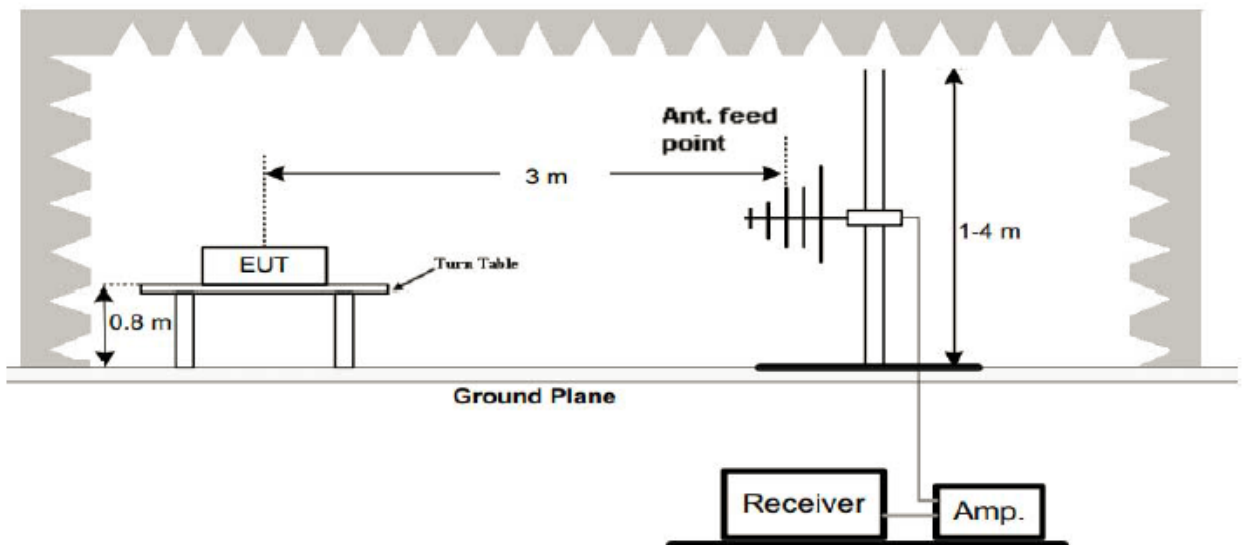
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

4.2 Test Setup

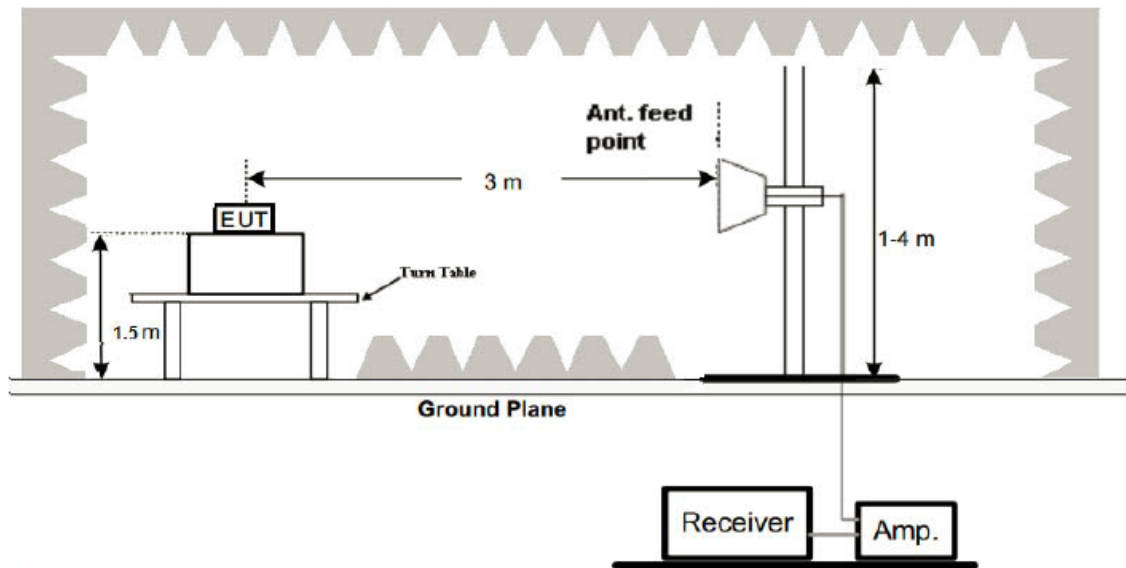
(1) Radiated Emission Test-Up Frequency Below 30MHz



(2) Radiated Emission Test-Up Frequency 30MHz~1GHz



(3) Radiated Emission Test-Up Frequency Above 1GHz



4.3 Test Procedure

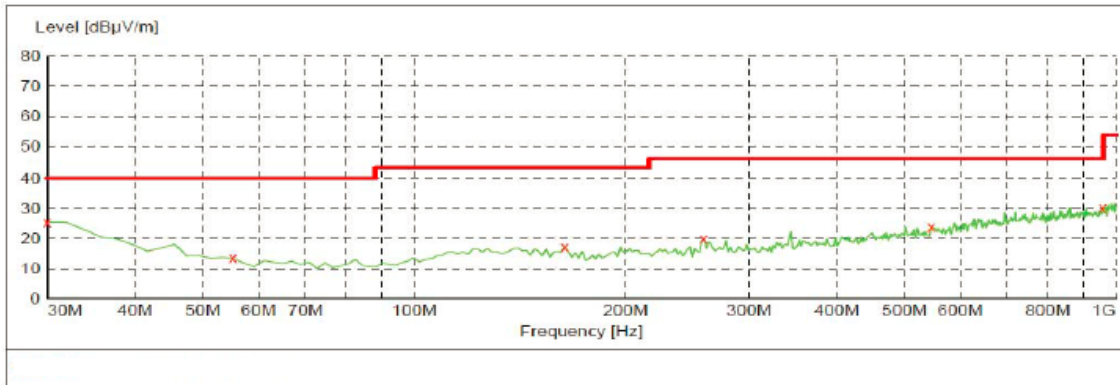
- 1, The EUT is placed on a turntable, which is 0.8m above ground plane below 1GHz and 1.5m above ground plane above 1GHz..
- 2, The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3, EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions
- 4, For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 5, Maximum procedure was performed on the six highest emissions to ensure EUT compliance
- 6, And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical
- 7, Repeat above procedures until the measurements for all frequencies are complete.
- 8, Based on the Frequency Generator in the device include 16MHz. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a)

4.4 Test Result

PASS

All the test modes completed for test. The worst case of Radiated Emission is CH 2480; the test data of this mode was reported.

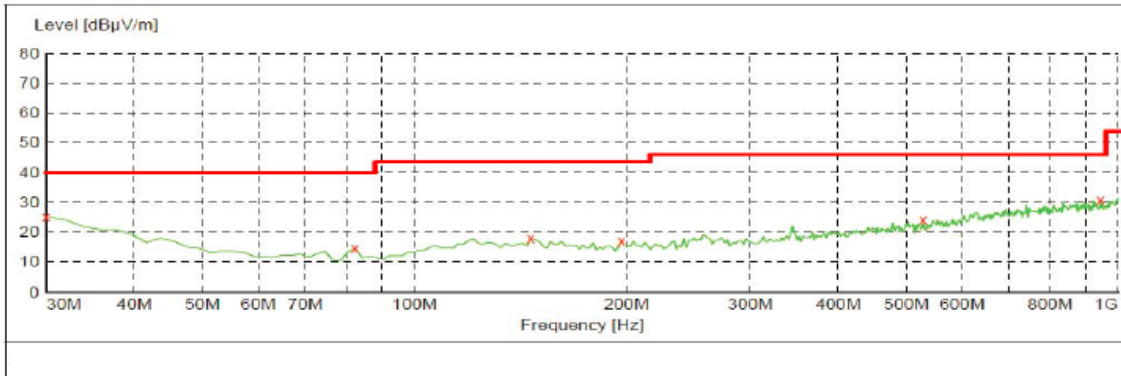
Below 1GHz Test Results:
Antenna polarity: H



MEASUREMENT RESULT:

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	25.30	20.8	40.0	14.7	---	0.0	0.00	HORIZONTAL
55.220000	13.40	8.0	40.0	26.6	---	0.0	0.00	HORIZONTAL
163.860000	17.30	13.6	43.5	26.2	---	0.0	0.00	HORIZONTAL
258.920000	19.80	14.6	46.0	26.2	---	0.0	0.00	HORIZONTAL
546.040000	23.80	20.8	46.0	22.2	---	0.0	0.00	HORIZONTAL
959.260000	30.20	26.6	46.0	15.8	---	0.0	0.00	HORIZONTAL

Antenna polarity: V



MEASUREMENT RESULT:

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	25.00	20.8	40.0	15.0	---	0.0	0.00	VERTICAL
82.380000	14.40	8.7	40.0	25.6	---	0.0	0.00	VERTICAL
146.400000	17.70	14.0	43.5	25.8	---	0.0	0.00	VERTICAL
196.840000	16.90	13.6	43.5	26.6	---	0.0	0.00	VERTICAL
528.580000	24.00	20.4	46.0	22.0	---	0.0	0.00	VERTICAL
943.740000	30.80	26.4	46.0	15.2	---	0.0	0.00	VERTICAL

Remark:

- (1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

Above 1 GHz Test Results:

CH Low

	Freq.	Receiver Reading	Detector	Polar	Corrected Factor	Emission Level	Limit	Result
	(MHz)	(dBμV)	(PK/QP/Ave)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	
Lower Channel 2402MHz	2402	91.35	PK	H	13.85	105.2	114	Pass
	2402	74.05	Ave	H	13.85	87.9	94	Pass
	4804	51.12	PK	H	19.36	70.48	74	Pass
	4804	28.47	Ave	H	19.36	47.83	54	Pass
	2402	90.99	PK	V	13.85	104.84	114	Pass
	2402	73.86	Ave	V	13.85	87.71	94	Pass
	4804	50.18	PK	V	19.36	69.54	74	Pass
	4804	28.59	Ave	V	19.36	47.95	54	Pass

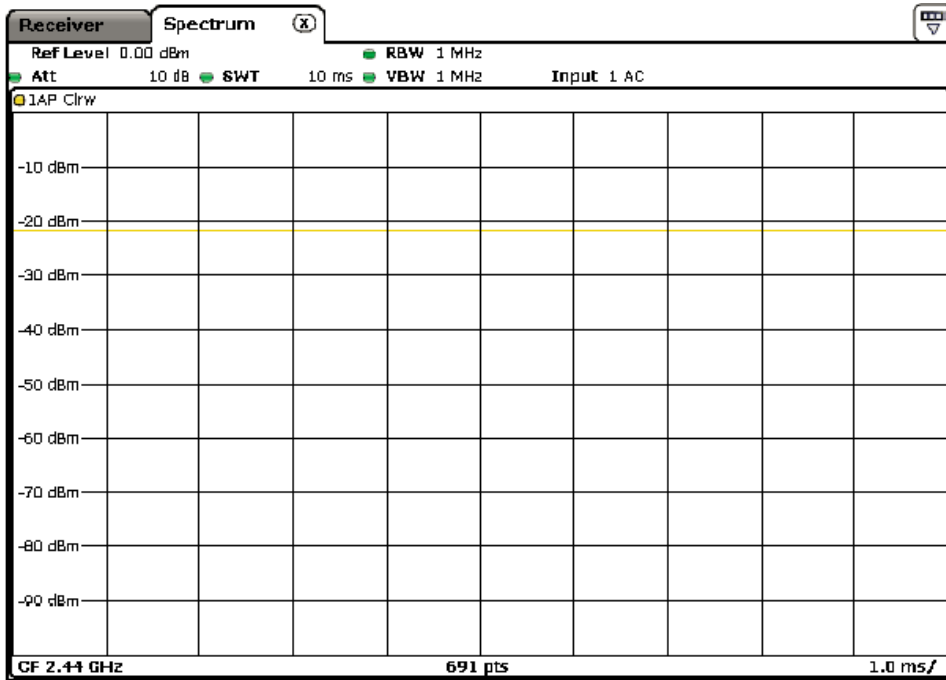
Middle Channel 2442MHz	2442	90.75	PK	H	13.94	104.69	114	Pass
	2442	71.85	Ave	H	13.94	85.79	94	Pass
	4884	48.69	PK	H	19.43	68.12	74	Pass
	4884	28.78	Ave	H	19.43	48.21	54	Pass
	2442	91.83	PK	V	13.94	105.77	114	Pass
	2442	69.45	Ave	V	13.94	83.39	94	Pass
	4884	46.62	PK	V	19.43	66.05	74	Pass
	4884	27.53	Ave	V	19.43	46.96	54	Pass

Upper Channel 2480MHz	2480	91.39	PK	H	14.02	105.41	114	Pass
	2480	73.78	Ave	H	14.02	87.8	94	Pass
	4960	44.39	PK	H	19.51	63.9	74	Pass
	4960	28.35	Ave	H	19.51	47.86	54	Pass
	2480	91.59	PK	V	14.02	105.61	114	Pass
	2480	74.63	Ave	V	14.02	88.65	94	Pass
	4960	44.56	PK	V	19.51	64.07	74	Pass
	4960	27.63	Ave	V	19.51	47.14	54	Pass

Remark:

- (1) Measuring frequencies from 1 GHz to the 25 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

5 Duty cycle measurement



Fundamental field strength measurement:

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type	Antenna polarization
2402.000	94.13	-5.68	88.45	114.00	-25.55	Peak	V
2402.000	81.62	-5.68	75.94	94.00	-18.06	AVG	V
2402.000	95.30	-5.68	89.62	114.00	-24.38	Peak	H
2402.000	81.79	-5.68	76.11	94.00	-17.89	AVG	H
2440.000	94.36	-5.36	89.00	114.00	-25.00	Peak	V
2440.000	80.58	-5.36	75.22	94.00	-18.78	AVG	V
2440.000	96.37	-5.36	91.01	114.00	-22.99	Peak	H
2440.000	81.25	-5.36	75.89	94.00	-18.11	AVG	H
2480.000	96.04	-5.01	91.03	114.00	-22.97	Peak	V
2480.000	82.57	-5.01	77.56	94.00	-16.44	AVG	V
2480.000	95.47	-5.01	90.46	114.00	-23.54	Peak	H
2480.000	82.36	-5.01	77.35	94.00	-16.65	AVG	H

Note: Measurement Level = Reading Level + Factor

Factor=Ant Factor + Cable Loss– Pre-amplifier.

6 BAND EDGE

5.1 Limits

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength. The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBM to 300 KHz, to measure the conducted peak band edge.

5.3 Test Result

PASS

Frequency (MHz)	Antenna polarization (H/V)	Meter Reading (dBμV)	Factor (dB)	Emission (dBuV/m)	Band edge Limit (dBuV/m)		Result
				PK	PK	AV	
<2400	H	36.05	13.83	49.88	74.00	54.00	Pass
<2400	V	35.65	13.83	49.48	74.00	54.00	Pass
>2483.5	H	35.48	13.85	49.33	74.00	54.00	Pass
>2483.5	V	35.57	13.85	49.42	74.00	54.00	Pass
<2400	H	34.71	14.02	48.73	74.00	54.00	Pass
<2400	V	34.37	14.02	48.39	74.00	54.00	Pass
>2483.5	H	34.56	14.04	48.60	74.00	54.00	Pass
>2483.5	V	34.38	14.04	48.42	74.00	54.00	Pass

7 OCCUPIED BANDWIDTH MEASUREMENT

7.1 Test Setup

Same as Radiated Emission Measurement

7.2 Test Procedure

1. The EUT was placed on a turn table which is 1.5m above ground plane.
2. Set EUT as normal operation.
3. Based on FCC Part15 C Section 15.239(a): RBW= 10KHz. VBW= 30 KHz, Span=1MHz.
4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

7.3 Measurement Equipment Used

Same as Radiated Emission Measurement

6.4 Test Result

PASS

CH: 2402MHz



CH: 2442MHz



CH: 2480MHz



8 ANTENNA REQUIREMENT

Standard Applicable

For intentional device, according to FCC 47 CFR 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. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

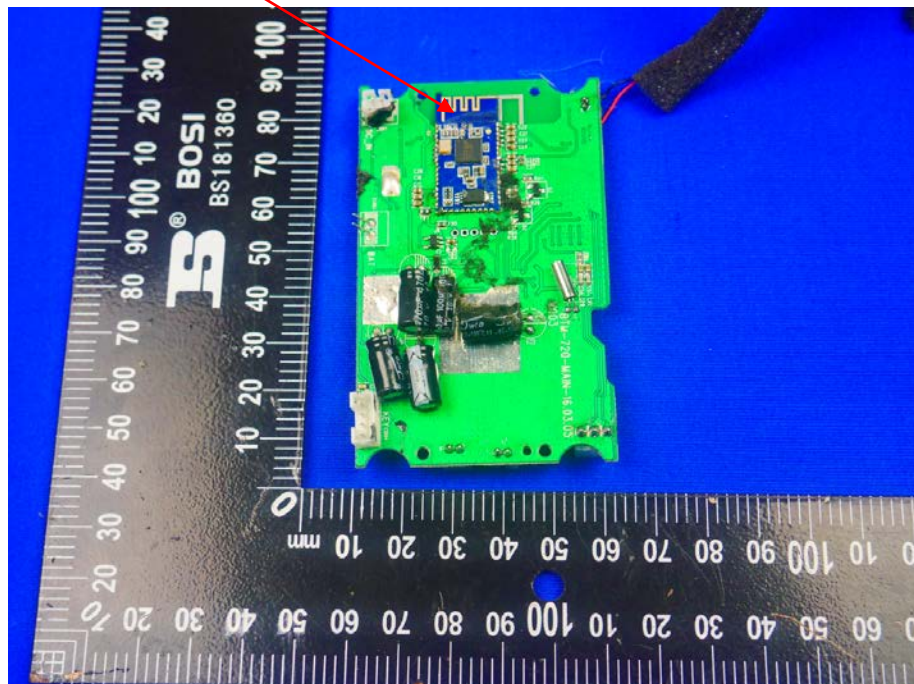
Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Antenna Connected Construction

The antenna used in this product is a PCB Antenna, The directional gains of antenna used for transmitting is 0dBi.

ANTENNA



9 PHOTOGRAPH OF TEST

9.1 Radiated Emission



9.2 Conducted Emission

