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APPLICATION CERTIFICATION FCC Part 15C On Behalf of GOOD EVER TRADING LIMITED

Mini BT Speaker

Model No.: CB-335096, CPP-4502, CPP-4661, CPP-4668, CP-4672, CPP-4502, CPP-335115B, 1033, 17759, CPP-4664, CPP-4676, CPP-4681, CPP-4687, CPP-4692, 74521, 74522, 74525, 74526

FCC ID: 2AM7T-CB-335096

Prepared for : GOOD EVER TRADING LIMITED

Address : RM 1701, Zhuoyue Building, Fuhua Yi Rd., Futian Central Zone,

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Report No. : ATE20172165

Date of Test : November 6-13, 2017 Date of Report : November 20, 2017

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Test Report Certification

Applicant : GOOD EVER TRADING LIMITED

Manufacturer : GOOD EVER TRADING LIMITED

EUT Description: Mini BT Speaker

CB-335096, CPP-4502, CPP-4661, CPP-4668, CP-4672,

Model No. : CPP-4502, CPP-335115B, 1033, 17759, CPP-4664, CPP-4676,

CPP-4681, CPP-4687, CPP-4692, 74521, 74522, 74525, 74526

Trade Mark : n.a.

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247: 2017 ANSI C63.10: 2013

The EUT was tested according to DTS test procedure of Apr 05, 2017 KDB558074 D01 DTS Meas Guidance v04 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:	November 6-13, 2017
Date of Report:	November 20, 2017
	BobWard
Prepared by :	TECHNOLOGICAL CONTRACTOR OF THE PARTY OF THE
	(Balanti eer)
	APPROVED
Approved & Authorized Signer : _	Temo
	(Sean Liu, Manager)



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1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Mini BT Speaker

Model Number : CB-335096, CPP-4502, CPP-4661, CPP-4668, CP-4672,

CPP-4502, CPP-335115B, 1033, 17759, CPP-4664, CPP-4676, CPP-4681, CPP-4687, CPP-4692, 74521,

74522, 74525, 74526

(Note: We hereby state that these models are identical in interior

structure, electrical circuits and components, and just model names are different for the marketing requirement. The EMC

test model is CB-335096.)

Trade Mark : n.a.

Bluetooth version : BT V4.2

Frequency Range : 2402MHz-2480MHz

Number of Channels : 40 Antenna Gain : 1dBi

Antenna type : PCB Antenna

Power Supply : DC 3.7V & DC 5V(Power by USB port)

Modulation mode : GFSK

Applicant : GOOD EVER TRADING LIMITED

Address : RM 1701, Zhuoyue Building, Fuhua Yi Rd., Futian

Central Zone, Shenzhen, China

Manufacturer : GOOD EVER TRADING LIMITED

Address : RM 1701, Zhuoyue Building, Fuhua Yi Rd., Futian

Central Zone, Shenzhen, China

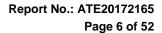
Date of sample received: November 3, 2017
Date of Test: November 6-13, 2017

Sample No. : 1701761

1.2. Special Accessory and Auxiliary Equipment

Adapter: Model:BEK-QC-001

INPUT: 120V~60Hz OUTPUT:5V/1A





1.3. Carrier Frequency of Channels

Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channe 1	Frequeeny (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



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1.4.Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications

Commission (FCC)

The Designation Number is CN1189 The Registration Number is 708358

Listed by Innovation, Science and Economic Development

Canada (ISEDC)

The Registration Number is 5077A-2

Accredited by China National Accreditation Service for

Conformity Assessment (CNAS)

The Registration Number is CNAS L3193

Accredited by American Association for Laboratory

Accreditation (A2LA)

The Certificate Number is 4297.01

Name of Firm : Shenzhen Accurate Technology Co., Ltd.

Site Location : 1/F., Building A, Changyuan New Material Port, Science

& Industry Park, Nanshan District, Shenzhen, Guangdong,

P.R. China

1.5. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2

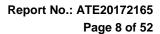
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

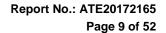




2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Туре	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 7, 2017	1 Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 7, 2017	1 Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 7, 2017	1 Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 7, 2017	1 Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 13, 2017	1 Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 13, 2017	1 Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 13, 2017	1 Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 13, 2017	1 Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 7, 2017	1 Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 7, 2017	1 Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 7, 2017	1 Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 7, 2017	1 Year





3. OPERATION OF EUT DURING TESTING

3.1. Operating Mode

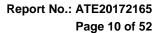
The mode is used: **BLE Transmitting mode**

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

3.2.Configuration and peripherals

EUT

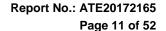
Figure 1 Setup: Transmitting mode





4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB 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 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

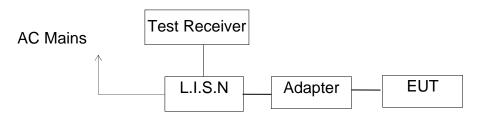




5. POWER LINE CONDUCTED MEASUREMENT

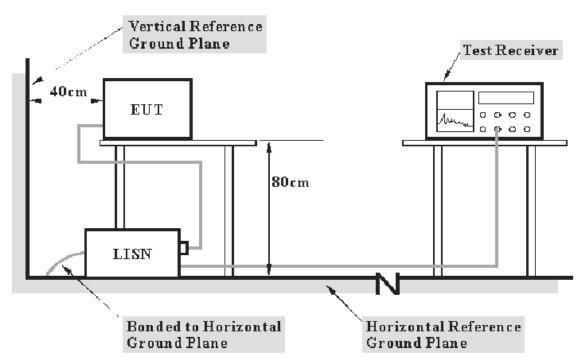
5.1.Block Diagram of Test

5.1.1.Block diagram of connection between the EUT and simulators



(EUT: Color Changing BT Speaker)

5.1.2. Test System Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.



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5.2. Power Line Conducted Emission Measurement Limits

Frequency	Limit dB(μV)				
(MHz)	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 C63.10 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.



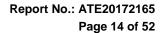
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5.6.Data Sample

Frequency (MHz)	Transducer value (dB)	QuasiPeak Level (dB _u V)	Average Level (dB _u V)	QuasiPeak Limit (dB _u V)	Average Limit (dB _u V)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.4500	10.7	38.20	32.20	57	47	-18.7	-14.7	Pass

Frequency(MHz) = Emission frequency in MHz Transducer value(dB) = Insertion loss of LISN + Cable Loss Level(dB μ V) = Quasi-peak Reading/Average Reading + Transducer value Limit (dB μ V) = Limit stated in standard Margin = Limit (dB μ V) - Level (dB μ V)

Calculation Formula: Margin = Limit ($dB\mu V$) - Level ($dB\mu V$)





5.7. Power Line Conducted Emission Measurement Results **PASS.**

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

Test mode : Charging (AC 120V/60Hz)									
EUT mode : CI	B-33509 RESULT	6 : "2165	-1_fin	1"					
11/13/2017 9: Frequency MHz		Transd dB	Limit dBµV	_	Detector	Line	PE		
0.290000 0.450000 1.350000 3.130000 5.290000 19.495000	29.20 38.20 35.60 30.70 31.80 28.90	10.6 10.7 10.9 11.1 11.2 11.4	56 56 60	31.3 18.7 20.4 25.3 28.2 31.1	QP QP QP	L1 L1 L1 L1 L1	GND GND GND GND GND GND		
MEASUREMENT	RESULT	: "2165	-1_fin	2"					
11/13/2017 9: Frequency MHz		Transd dB		Margin dB	Detector	Line	PE		
0.360000 0.450000 1.350000 3.130000 5.330000	19.90 32.20 26.70 16.50 20.90	10.6 10.7 10.9 11.1 11.2		28.8 14.7 19.3 29.5 29.1	AV AV	L1 L1 L1 L1	GND GND GND GND GND		
MEASUREMENT	RESULT	: "2165	-2_fin	1"					
11/13/2017 9: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE		
0.360000 0.445000 1.345000 3.150000 7.670000 14.350000	27.50 39.70 41.80 33.90 28.20 30.40	10.6 10.7 10.9 11.1 11.2 11.4	59 57 56 56 60	31.2 17.3 14.2 22.1 31.8 29.6	QP QP QP	N N N N N	GND GND GND GND GND GND		
MEASUREMENT	RESULT	: "2165	-2_fin	n2"					
11/13/2017 9: Frequency MHz	26AM Level dBμV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE		
0.355000 0.445000 1.345000 2.250000 8.970000 19.075000	17.70 34.90 33.30 23.70 25.00 17.60	10.6 10.7 10.9 11.0 11.3	49 47 46 46 50 50	31.1 12.1 12.7 22.3 25.0 32.4	AV AV AV AV AV	N N N N N	GND GND GND GND GND GND		

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

The spectral diagrams are attached as below.

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ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

Mini BT Speaker M/N:CB-335096 Manufacturer: GOOD EVER TRADING LIMITED

Operating Condition: Charging

Test Site: 1#Shielding Room

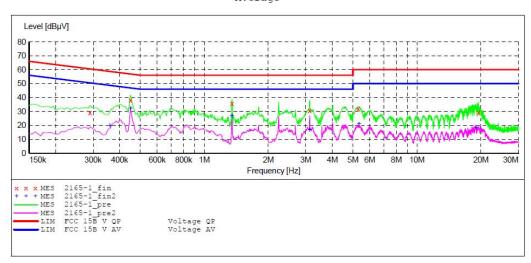
Operator: Frank

Test Specification: L 120V/60Hz

Report NO.:ATE20172165 11/13/2017 / 9:20:46AM Comment: Start of Test:

SCAN TABLE: "V 9K-30MHz fin"

_SUB_STD_VTERM2 1.70 Short Description: Start Stop Step Detector Meas. IF Transducer Frequency Frequency Width Time Bandw. 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008 Average 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008 Average



MEASUREMENT RESULT: "2165-1 fin"

11/13/2017 9: Frequency MHz	22AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.290000	29.20	10.6	61	31.3	QP	L1	GND
0.450000	38.20	10.7	57	18.7	QP	L1	GND
1.350000	35.60	10.9	56	20.4	QP	L1	GND
3.130000	30.70	11.1	56	25.3	QP	L1	GND
5.290000	31.80	11.2	60	28.2	QP	L1	GND
19.495000	28.90	11.4	60	31.1	QP	L1	GND

MEASUREMENT RESULT: "2165-1_fin2"

11/13/2017 9:	22AM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.360000	19.90	10.6	49	28.8	AV	L1	GND
0.450000	32.20	10.7	47	14.7	AV	L1	GND
1.350000	26.70	10.9	46	19.3	AV	L1	GND
3.130000	16.50	11.1	46	29.5	AV	L1	GND
5.330000	20.90	11.2	50	29.1	AV	L1	GND
18.925000	18.10	11.4	50	31.9	AV	T.1	GND

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ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

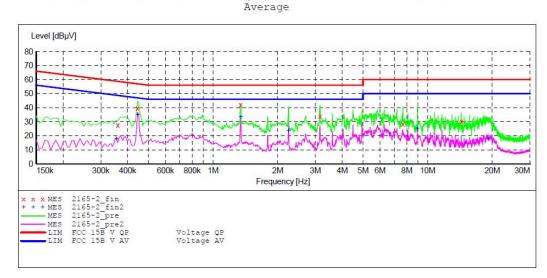
Mini BT Speaker M/N:CB-335096 GOOD EVER TRADING LIMITED EUT: Manufacturer:

Operating Condition: Charging

Test Site: 1#Shielding Room Operator: Frank Test Specification: N 120V/60Hz

Report NO.:ATE20172165 11/13/2017 / 9:23:13AM Comment: Start of Test:

SCAN TABLE: "V 9K-30MHz fin"
Short Description: _SU _SUB_STD_VTERM2 1.70 Start Stop Step Detector Meas. IF Transducer Bandw. Frequency Frequency Width Time 200 Hz NSLK8126 2008 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s Average 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008



MEASUREMENT RESULT: "2165-2 fin"

11/13/2017 9:	26AM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.360000	27.50	10.6	59	31.2	QP	N	GND
0.445000	39.70	10.7	57	17.3	QP	N	GND
1.345000	41.80	10.9	56	14.2	QP	N	GND
3.150000	33.90	11.1	56	22.1	QP	N	GND
7.670000	28.20	11.2	60	31.8	QP	N	GND
14.350000	30.40	11.4	60	29.6	QP	N	GND

MEASUREMENT RESULT: "2165-2 fin2"

11/13/2 Freq	017 9: uency MHz	26AM Level dBμV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.3	55000	17.70	10.6	49	31.1	AV	N	GND
0.4	45000	34.90	10.7	47	12.1	AV	N	GND
1.3	45000	33.30	10.9	46	12.7	AV	N	GND
2.2	50000	23.70	11.0	46	22.3	AV	N	GND
8.9	70000	25.00	11.3	50	25.0	AV	N	GND
19.0	75000	17.60	11.4	50	32.4	AV	N	GND



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6. 6DB BANDWIDTH MEASUREMENT

6.1.Block Diagram of Test Setup



(EUT: Mini BT Speaker)

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

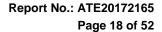
The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown as Section 6.1.
- 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 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

6.5. Test Procedure

- 6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 6.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.
- 6.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.



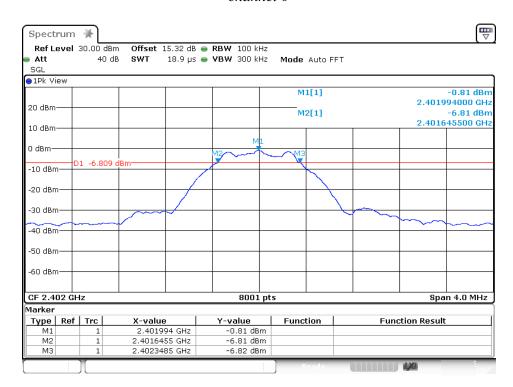


6.6.Test Result

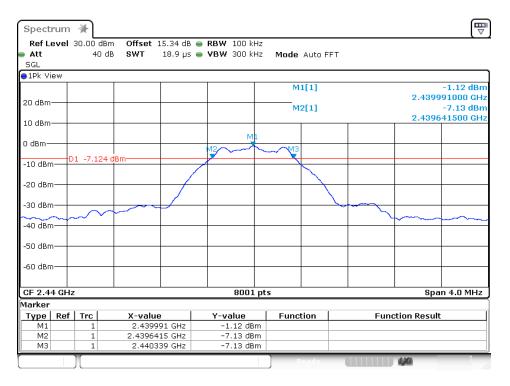
Channel	Frequency (MHz)	6 dB Bandwith (MHz)	Minimum Limit(MHz)	PASS/FAIL
0	2402	0.703	0.5	PASS
19	2440	0.697	0.5	PASS
39	2480	0.693	0.5	PASS

The spectrum analyzer plots are attached as below.

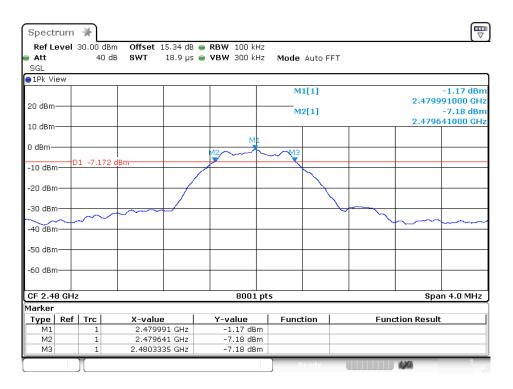
channel 0

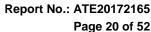






channel 39







7. MAXIMUM PEAK OUTPUT POWER

7.1.Block Diagram of Test Setup



(EUT: Mini BT Speaker)

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

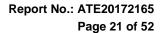
The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

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- 7.4.1. Setup the EUT and simulator as shown as Section 7.1.
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- 7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

7.5.Test Procedure

- 7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 7.5.2.Set RBW of spectrum analyzer to 3 MHz and VBW to 3 MHz.
- 7.5.3.Measurement the maximum peak output power.



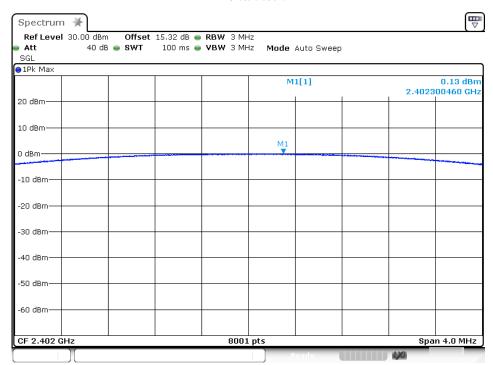


7.6.Test Result

Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
0	2402	0.13	30	PASS
19	2440	-0.30	30	PASS
39	2480	-0.41	30	PASS

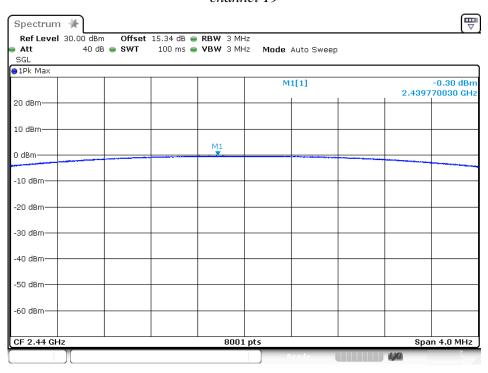
The spectrum analyzer plots are attached as below.

channel 0

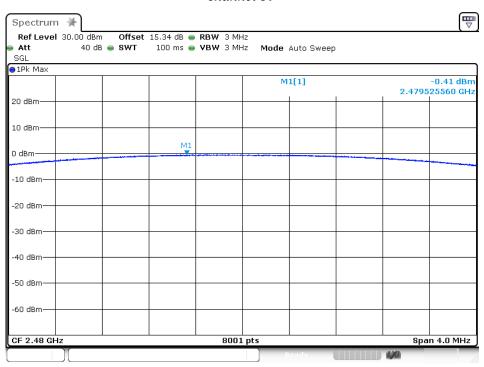


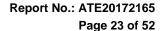


channel 19



channel 39







8. POWER SPECTRAL DENSITY MEASUREMENT

8.1.Block Diagram of Test Setup



(EUT: Mini BT Speaker)

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 2402-2480. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.



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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:
- 8.5.3. 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 to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
 - 4. Set the VBW \geq 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.
- 8.5.4.Measurement the maximum power spectral density.

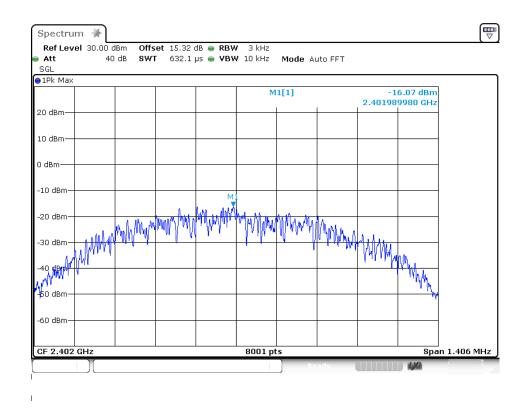


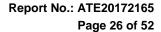
8.6.Test Result

CHANNEL NUMBER	FREQUENCY (MHz)	PSD (dBm/3KHz)	LIMIT (dBm/3KHz)	PASS/FAIL
0	2402	-16.070	8	PASS
19	2440	-16.400	8	PASS
39	2480	-16.400	8	PASS

The spectrum analyzer plots are attached as below.

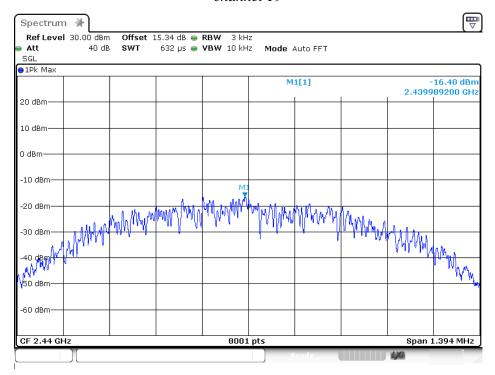
channel 0



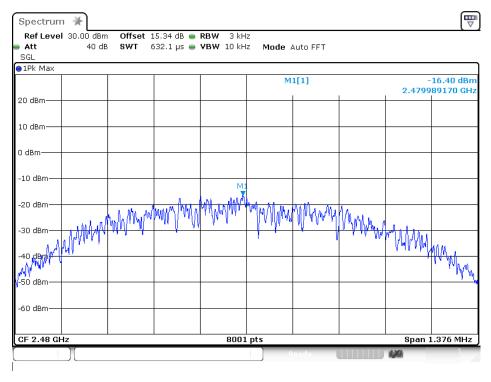




channel 19



channel 39

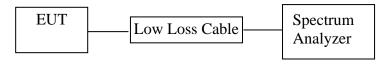




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9. BAND EDGE COMPLIANCE TEST

9.1.Block Diagram of Test Setup



(EUT: Mini BT Speaker)

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 2402-2480 MHz. We select 2402MHz, 2480MHz TX frequency to transmit.



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9.5.Test Procedure

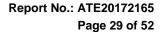
Conducted Band Edge:

- 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 100 kHz and VBW to 300 kHz.
- 9.5.3. Radiate Band Edge:
- 9.5.4. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 9.5.5. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 9.5.6.EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 9.5.7. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- 9.5.8.RBW=100kHz, VBW=300kHz
- 9.5.9. The band edges was measured and recorded.

9.6.Test Result

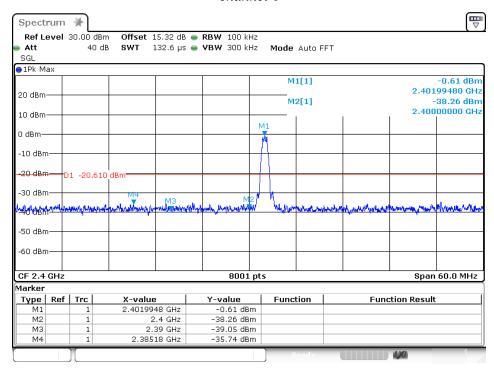
Pass

Channel	Frequency	Delta peak to band emission	Limit(dBc)
0	2.4GHz	37.65	20
39	2.4835GHz	37.34	20

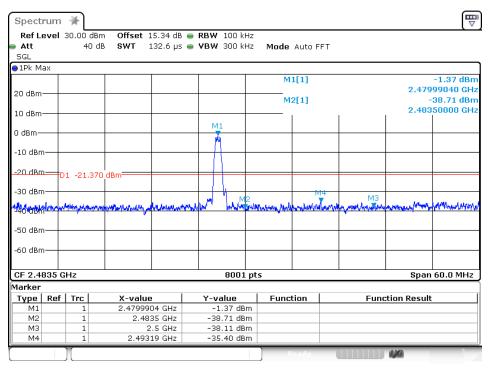




channel 0



channel 39





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Radiated Band Edge Result

Date of Test:November 6, 2017Temperature:25°CEUT:Mini BT SpeakerHumidity:50%Model No.:CB-335096Power Supply:AC 120V/60HzTest Mode:TX (2402MHz) GFSKTest Engineer:Frank

Frequency	Reading	(dBµV/m)	Factor(dB)	Result(dBµV/m)		Limit(d)	BμV/m)	Margi	n(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2390.000	34.42	38.14	-3.96	30.46	34.18	54.00	74.00	-43.54	-39.82	Vertical
2400.000	45.78	53.51	-3.91	41.87	49.60	54.00	74.00	-32.13	-24.40	Vertical
2390.000	30.15	38.14	-3.96	26.19	34.18	54.00	74.00	-27.81	-39.82	Horizontal
2400.000	43.15	53.01	-3.91	39.24	49.10	54.00	74.00	-14.76	-24.90	Horizontal

Date of Test:November 6, 2017Temperature:25°CEUT:Mini BT SpeakerHumidity:50%Model No.:CB-335096Power Supply:AC 120V/60HzTest Mode:TX (2480MHz) GFSKTest Engineer:Frank

Frequency	Reading((dBµV/m)	Factor(dB)	Result(dBμV/m)		Limit(d)	BμV/m)	Margi	n(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	45.18	48.55	-3.50	41.68	45.05	54.00	74.00	-12.32	-28.95	Vertical
2500.000	35.48	39.58	-3.42	32.06	36.16	54.00	74.00	-21.94	-37.84	Vertical
2483.500	39.45	43.05	-3.50	35.95	39.55	54.00	74.00	-18.05	-34.45	Horizontal
2500 000	35 48	39 58	-3 42	32.06	36 16	54.00	74 00	-21 94	-37 84	Horizontal

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.



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Report No.: ATE20172165

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Job No.: frank2017 #1490 Polarization: Horizontal Standard: FCC PK Power Source: DC 3.7V

 Test item:
 Radiation Test
 Date: 17/11/06/

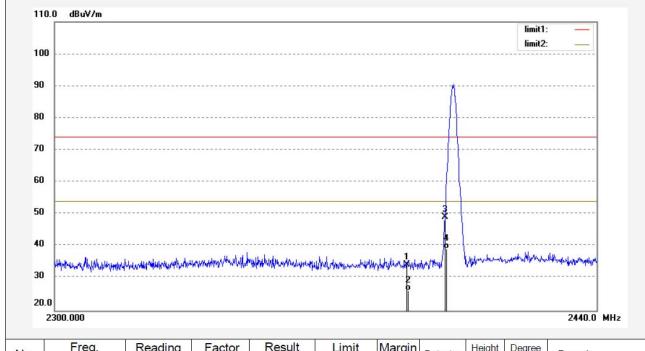
 Temp.(
 C)/Hum.(%)
 25
 C / 55 %
 Time: 11/24/08

EUT: Mini BT Speaker Engineer Signature: Frank
Mode: TX2402MHz Distance: 3m

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

Note: Report NO.:ATE20172165



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	38.14	-3.96	34.18	74.00	-39.82	peak	200	146	
2	2390.000	30.15	-3.96	26.19	54.00	-27.81	AVG	200	146	
3	2400.000	53.01	-3.91	49.10	74.00	-24.90	peak	200	135	
4	2400.000	43.15	-3.91	39.24	54.00	-14.76	AVG	200	135	



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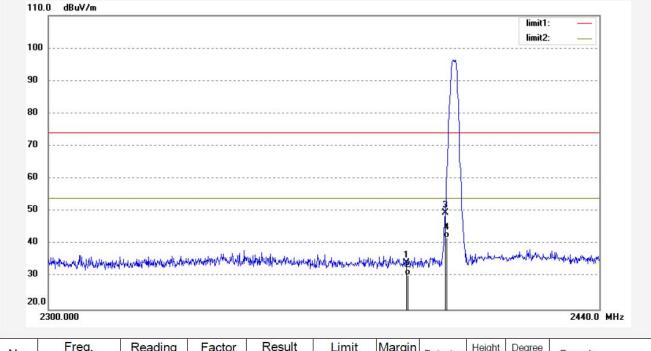
Job No.: frank2017 #1491 Polarization: Vertical Standard: FCC PK Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/24/08

EUT: Mini BT Speaker Engineer Signature: Frank
Mode: TX2402MHz Distance: 3m

Model: CB-335096





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	38.14	-3.96	34.18	74.00	-39.82	peak	150	157	
2	2390.000	34.42	-3.96	30.46	74.00	-43.54	QP	150	157	
3	2400.000	53.51	-3.91	49.60	74.00	-24.40	peak	300	321	
4	2400.000	45.78	-3.91	41.87	74.00	-32.13	QP	300	321	



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Frank

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Site: 1# Chamber

Job No.: frank2017 #1492 Polarization: Vertical Standard: FCC PK Power Source: DC 3.7V

 Test item:
 Radiation Test
 Date: 17/11/06/

 Temp.(C)/Hum.(%)
 25 C / 55 %
 Time: 11/30/18

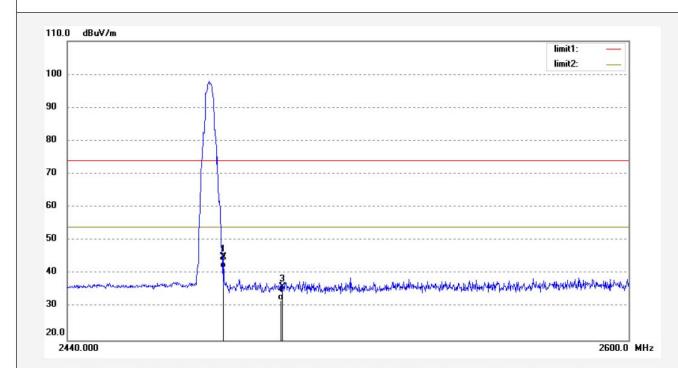
EUT: Mini BT Speaker Engineer Signature:

Mode: TX2480MHz Distance: 3m

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

Note: Report NO.:ATE20172165



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	48.55	-3.50	45.05	74.00	-28.95	peak	250	113	
2	2483.500	45.18	-3.50	41.68	54.00	-12.32	AVG	250	113	
3	2500.000	39.58	-3.42	36.16	74.00	-37.84	peak	200	329	
4	2500.000	35.48	-3.42	32.06	54.00	-21.94	AVG	200	329	



Site: 1# Chamber

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> Horizontal Polarization: Power Source: DC 3.7V

Date: 17/11/06/ Time: 11/30/18

Engineer Signature: Frank

Distance: 3m

Job No.: frank2017 #1493 Standard: FCC PK

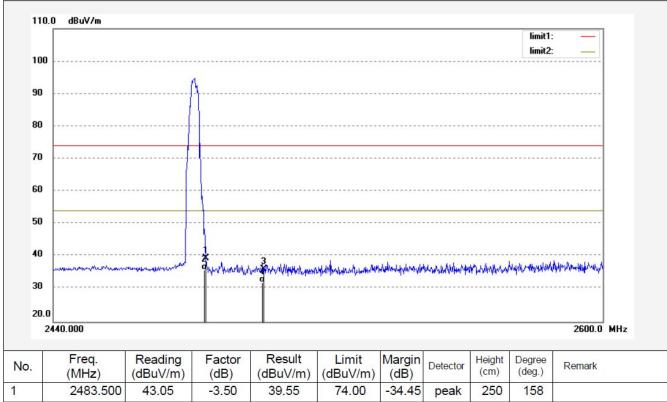
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 % EUT: Mini BT Speaker

Mode: TX2480MHz Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

Note: Report NO.:ATE20172165



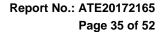
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2483.500	43.05	-3.50	39.55	74.00	-34.45	peak	250	158		
2	2483.500	39.45	-3.50	35.95	54.00	-18.05	AVG	250	158		
3	2500.000	39.58	-3.42	36.16	74.00	-37.84	peak	200	123		
4	2500.000	35.48	-3.42	32.06	54.00	-21.94	AVG	200	123		

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.

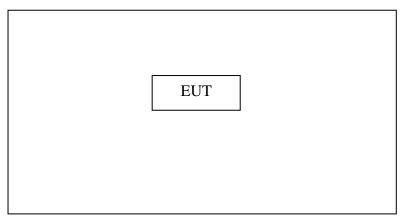




10. RADIATED SPURIOUS EMISSION TEST

10.1.Block Diagram of Test Setup

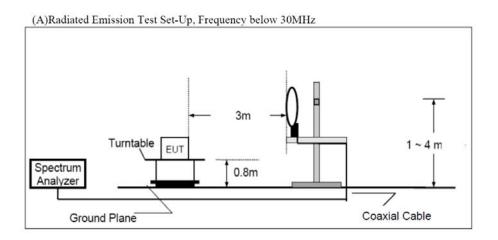
10.1.1.Block diagram of connection between the EUT and peripherals



Setup: Transmitting mode

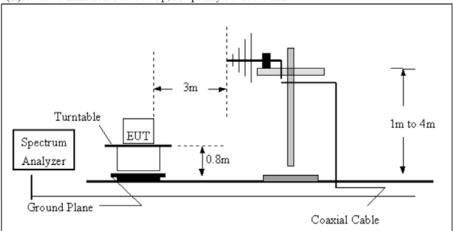
(EUT: Mini BT Speaker)

10.1.2.Semi-Anechoic Chamber Test Setup Diagram

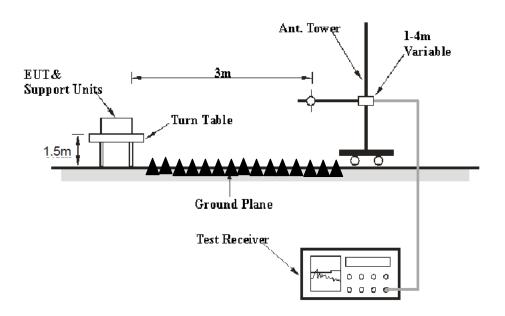




(B)Radiated Emission Test Set-Up, Frequency 30-1000MHz



(C) Radiated Emission Test Set-Up, Frequency 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).



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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:

	MIL-	•	CII-
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	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	$\binom{2}{}$
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

(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

²Above 38.6



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2402-2480MHz. We select 2402MHz, 2440MHz, and 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 bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

10.7.Data Sample

Frequency	Reading	Factor	Result	Limit	Margin	Remark
(MHz)	(dBμv)	(dB/m)	(dBμv/m)	(dBμv/m)	(dB)	
35.7616	0.92	17.04	17.96	40.00	-22.04	QP

Frequency(MHz) = Emission frequency in MHz

Reading($dB\mu\nu$) = Uncorrected Analyzer/Receiver reading

Factor (dB/m) = Antenna factor + Cable Loss - Amplifier gain

Result($dB\mu v/m$) = Reading($dB\mu v$) + Factor(dB/m)

Limit $(dB\mu v/m) = Limit$ stated in standard

Margin (dB) = Result(dB μ v/m) - Limit (dB μ v/m)

QP = Quasi-peak Reading

Calculation Formula:

 $Margin(dB) = Result (dB\mu V/m) - Limit(dB\mu V/m)$

Result($dB\mu V/m$)= Reading($dB\mu V$)+ Factor(dB/m)

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.



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10.8. The Field Strength of Radiation Emission Measurement Results PASS.

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

- 2. *: Denotes restricted band of operation.
- 3. The radiation emissions from 18-25GHz are not reported, because the test values lower than the limits of 20dB.



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Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

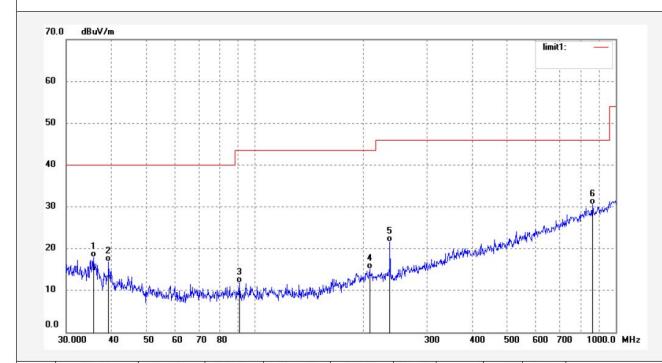
Job No.: frank2017 #1477 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/02/40

EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2402MHz Distance: 3m Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.7616	0.92	17.04	17.96	40.00	-22.04	QP	100	134	
2	39.3203	1.27	15.58	16.85	40.00	-23.15	QP	100	286	
3	90.7379	0.19	11.59	11.78	43.50	-31.72	QP	100	360	
4	207.9260	0.17	15.03	15.20	43.50	-28.30	QP	100	180	
5	236.7927	6.28	15.28	21.56	46.00	-24.44	QP	100	167	
6	862.8015	1.45	29.07	30.52	46.00	-15.48	QP	100	141	





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Job No.: frank2017 #1478 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 3.7V

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

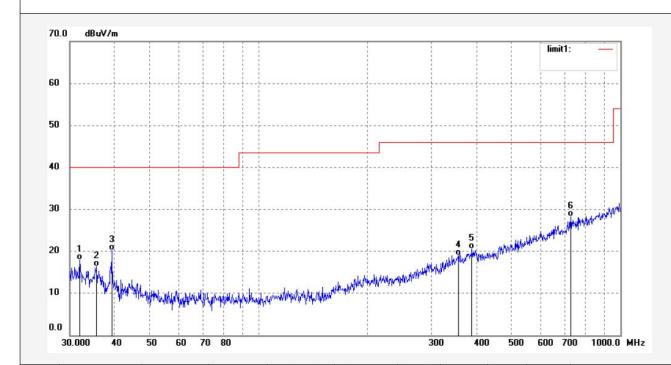
Date: 17/11/06/

Time: 11/03/19

EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2402MHz Distance: 3m Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	31.9586	-0.20	18.11	17.91	40.00	-22.09	QP	200	123	
2	35.6362	-0.71	17.09	16.38	40.00	-23.62	QP	200	112	
3	39.1824	4.51	15.64	20.15	40.00	-19.85	QP	200	345	
4	355.9397	-0.61	19.60	18.99	46.00	-27.01	QP	200	97	
5	388.6195	0.49	20.11	20.60	46.00	-25.40	QP	200	248	
6	728.8971	1.50	26.82	28.32	46.00	-17.68	QP	200	344	





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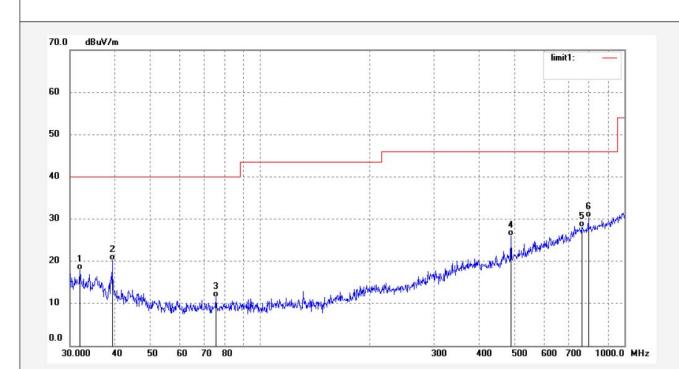
Job No.: frank2017 #1479 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/03/34

EUT: Mini BT Speaker Engineer Signature: Frank
Mode: TX2440MHz Distance: 3m

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	3 <mark>1</mark> .9586	-0.20	18.11	17.91	40.00	-22.09	QP	200	247	
2	39.1824	4.51	15.64	20.15	40.00	-19.85	QP	200	301	
3	75.5858	0.31	11.23	11.54	40.00	-28.46	QP	200	167	
4	488.3263	4.10	21.94	26.04	46.00	-19.96	QP	200	186	
5	762.9628	0.72	27.42	28.14	46.00	-17.86	QP	200	325	
6	795.8192	2.39	27.99	30.38	46.00	-15.62	QP	200	123	



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Job No.: frank2017 #1480

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Mini BT Speaker Mode: TX2440MHz

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

Note: Report NO.:ATE20172165

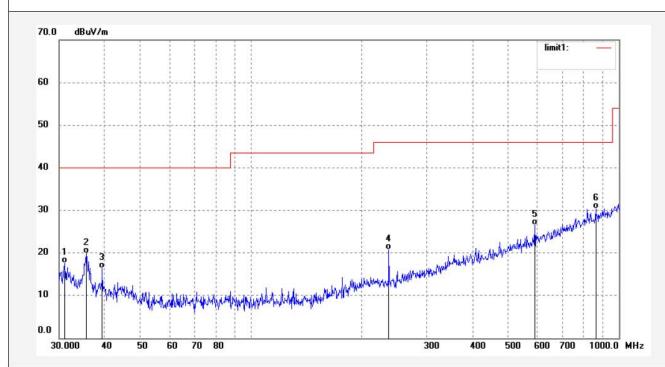
Polarization: Horizontal

Power Source: DC 3.7V

Date: 17/11/06/ Time: 11/04/00

Engineer Signature: Frank

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	31.0728	-0.75	18.33	17.58	40.00	-22.42	QP	100	133	
2	35.5112	2.72	17.15	19.87	40.00	-20.13	QP	100	27	
3	39.3203	0.75	15.58	16.33	40.00	-23.67	QP	100	134	
4	236.7927	5.47	15.28	20.75	46.00	-25.25	QP	100	258	
5	590.3510	2.31	24.22	26.53	46.00	-19.47	QP	100	167	
6	865.8383	1.32	29.12	30.44	46.00	-15.56	QP	100	241	



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Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: frank2017 #1481 Horizontal Polarization: Power Source: DC 3.7V

Date: 17/11/06/ Time: 11/04/32

> Engineer Signature: Frank

Distance: 3m

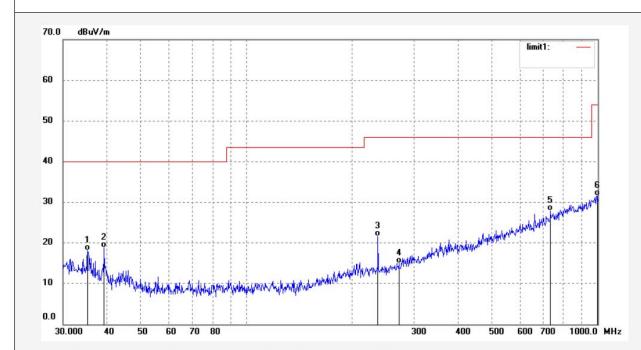
Standard: FCC Class B 3M Radiated Test item: Radiation Test

EUT: Mini BT Speaker Mode: TX2480MHz

Temp.(C)/Hum.(%) 25 C / 55 %

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.2625	0.88	17.25	18.13	40.00	-21.87	QP	100	124	
2	39.3203	3.31	15.58	18.89	40.00	-21.11	QP	100	347	
3	236.7927	6.33	15.28	21.61	46.00	-24.39	QP	100	92	
4	271.5686	-1.40	16.44	15.04	46.00	-30.96	QP	100	125	
5	734.0372	0.94	26.91	27.85	46.00	-18.15	QP	100	345	
6	992.9974	0.17	31.34	31.51	54.00	-22.49	QP	100	158	



Model:

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Time: 11/05/04

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Job No.: frank2017 #1482 Polarization: Vertical

Standard: FCC Class B 3M Radiated Power Source: DC 3.7V Test item: Radiation Test Date: 17/11/06/

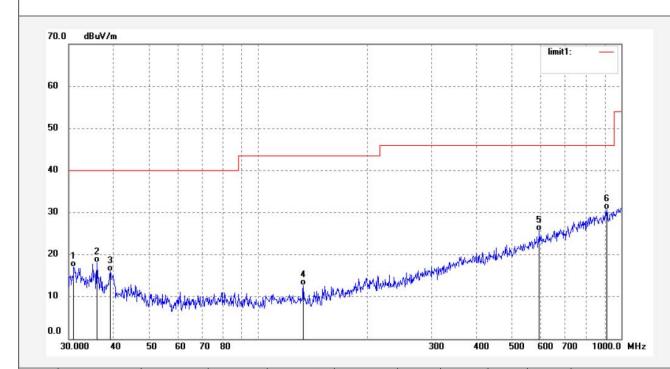
EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2480MHz Distance: 3m CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

Note: Report NO.:ATE20172165

Temp.(C)/Hum.(%) 25 C / 55 %



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.9637	-1.31	18.36	17.05	40.00	-22.95	QP	200	197	
2	35.8875	1.10	16.99	18.09	40.00	-21.91	QP	200	78	
3	39.0449	0.34	15.69	16.03	40.00	-23.97	QP	200	121	
4	133.0809	1.39	11.35	12.74	43.50	-30.76	QP	200	159	
5	594.5143	1.40	24.29	25.69	46.00	-20.31	QP	200	344	
6	912.6952	0.90	29.79	30.69	46.00	-15.31	QP	200	123	





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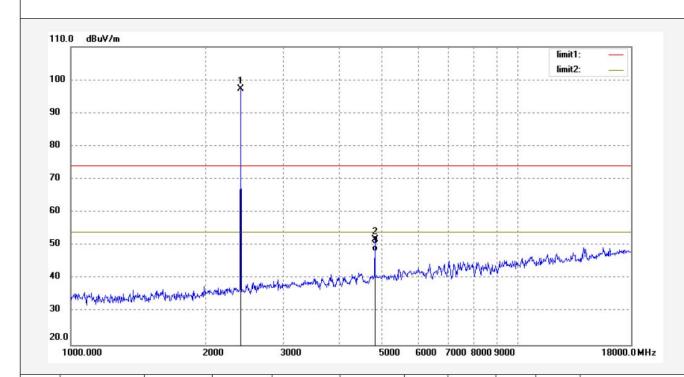
Job No.: frank2017 #1483 Polarization: Vertical Standard: FCC PK Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/09/05

EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2402MHz Distance: 3m Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	101.30	-3.91	97.39			peak	150	114	
2	4804.000	48.06	3.75	51.81	74.00	-22.19	peak	150	42	
3	4804.000	44.45	3.75	48.20	54.00	-5.80	AVG	150	42	



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Job No.: frank2017 #1484 Standard: FCC PK Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Mini BT Speaker Mode: TX2402MHz Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

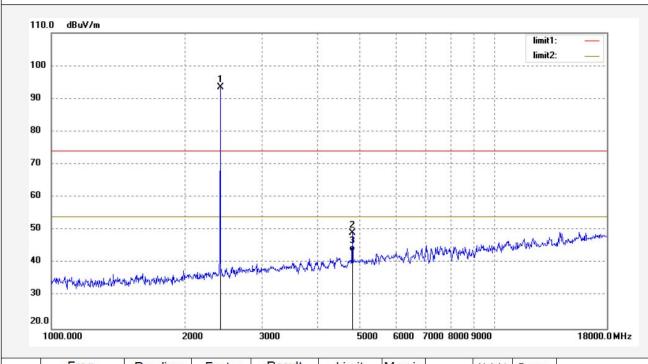
Report NO.:ATE20172165 Note:

Polarization: Horizontal Power Source: DC 3.7V

Date: 17/11/06/ Time: 11/09/05

Engineer Signature: Frank

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	97.26	-3.87	93.39			peak	150	155	
2	4804.000	45.44	3.70	49.14	74.00	-24.86	peak	250	121	
3	4804.000	39.77	3.70	43.47	54.00	-10.53	AVG	250	121	





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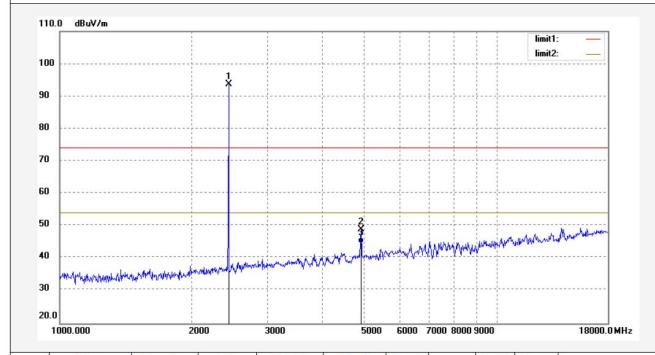
Job No.: frank2017 #1485 Polarization: Horizontal Standard: FCC PK Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/09/05

EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2440MHz Distance: 3m Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	97.31	-3.73	93.58			peak	150	147	
2	4880.000	44.74	4.18	48.92	74.00	-25.08	peak	200	135	
3	4880.000	40.42	4.18	44.60	54.00	-9.40	AVG	200	135	





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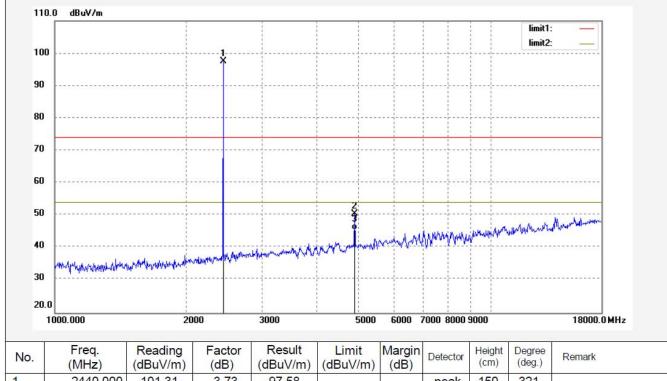
Job No.: frank2017 #1486 Polarization: Vertical Standard: FCC PK Power Source: DC 3.7V

Test item: Radiation Test Date: 17/11/06/
Temp.(C)/Hum.(%) 25 C / 55 % Time: 11/09/05

EUT: Mini BT Speaker Engineer Signature: Frank
Mode: TX2440MHz Distance: 3m

Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	101.31	-3.73	97.58			peak	150	321	
2	4880.000	46.31	4.11	50.42	74.00	-23.58	peak	150	317	
3	4880.000	41.37	4.11	45.48	54.00	-8.52	AVG	150	317	





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Report No.: ATE20172165

Job No.: frank2017 #1487

Standard: FCC PK
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Mini BT Speaker

Mode: TX2480MHz Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED

47.22

42.45

4.37

4.37

51.59

46.82

74.00

54.00

-22.41

-7.18

150

150

peak

AVG

315

315

4960,000

4960.000

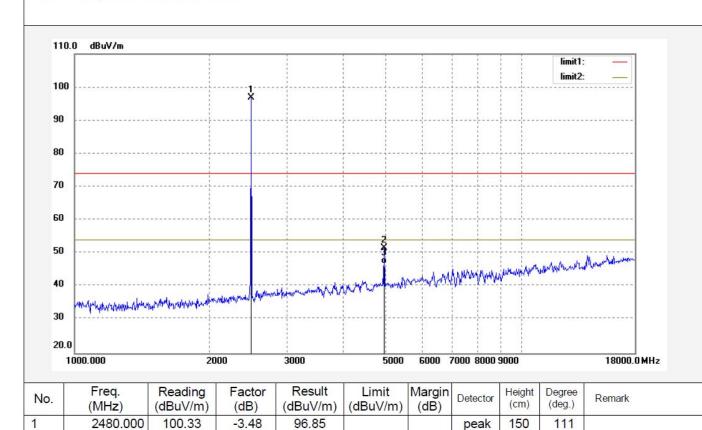
Note: Report NO.:ATE20172165

Polarization: Vertical Power Source: DC 3.7V

Date: 17/11/06/ Time: 11/09/05

Engineer Signature: Frank

Distance: 3m



2

3





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Job No.: frank2017 #1488 Polarization: Horizontal Standard: FCC PK Power Source: DC 3.7V

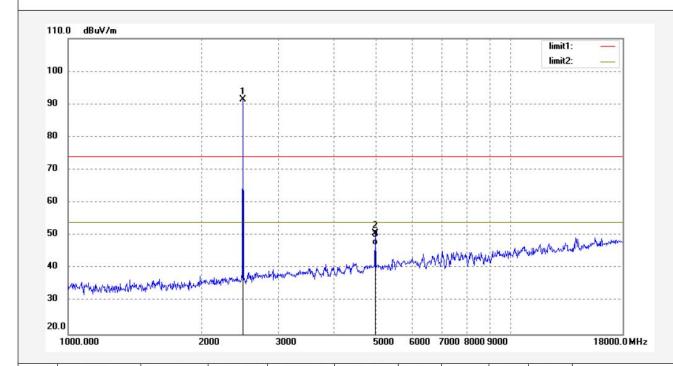
 Test item:
 Radiation Test
 Date: 17/11/06/

 Temp.(C)/Hum.(%)
 25 C / 55 %
 Time: 11/09/05

EUT: Mini BT Speaker Engineer Signature: Frank

Mode: TX2480MHz Distance: 3m Model: CB-335096

Manufacturer: GOOD EVER TRADING LIMITED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	94.83	-3.48	91.35			peak	150	126	
2	4960.000	46.31	4.42	50.73	74.00	-23.27	peak	250	345	
3	4960.000	42.78	4.42	47.20	54.00	-6.80	AVG	250	345	



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 external Antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 1.0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.

