# **FCC Test Report**

Report No.: AGC00924150603FE03

FCC ID : QIFAF-MCB11

**APPLICATION PURPOSE**: Class II Permissive Change

**PRODUCT DESIGNATION**: Bluetooth Speaker

**BRAND NAME** : My Music

MODEL NAME : B39

**CLIENT** : My Music Group Limited

**DATE OF ISSUE** : June 20,2015

STANDARD(S)

TEST PROCEDURE(S) : FCC Part 15 Rules

**REPORT VERSION**: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

## **CAUTION:**

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## **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	July 08,2015	Valid	Original Report

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## **Product Change Record**

The original report can be referred to AGC00924130801FE03
Only Radiated Emission below 1GHz was verified for the differences based on the original product.
Compared to original product, Only battery capacity and appearance different, while PCB board and Bluetooth module are same

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## 1. VERIFICATION OF CONFORMITY

Applicant	My Music Group Limited	
Address Room2026, Global Logistics Service Center, China South City, Pingh Long Gang District, Shenzhen 518111, China		
Manufacturer	Dongguan Fulun Electronic Co.,Limited	
Address	4F,Building A,Huangjinye Industrial Park,No.216Shaxin Road,Keyuan City,Tangxia, Dongguan.CN	
Product Designation Bluetooth Speaker		
Brand Name	My Music	
Test Model	B39	
Date of test	June 19,2015	
Deviation	None	
Condition of Test Sample	Normal	
Report Template	AGCRT-US-BR/RF	

We hereby certify that:

The above equipment was tested by Compliance Certification Service(Shenzhen) Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2009) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Time Huang June 20,2015

Checked By

Forrest Lei June 20,2015

Authorized By

Solger Zhang June 20,2015

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## 2. GENERAL INFORMATION

## 2.1. PRODUCT DESCRIPTION

The EUT is "Bluetooth Speaker" designed as a "Communication Device". It is designed by way of utilizing the FHSS technology to achieve the system operation.

A major technical description of EUT is described as following

A major teermiear description of 2011's described as following				
Operation Frequency	2.402 GHz to 2.480GHz			
Bluetooth Version	V3.0			
Modulation	GFSK, π /4-DQPSK, 8DPSK			
Number of channels	79			
Hardware Version	V1.0			
Software Version	V1.0			
Antenna Designation	PCB Antenna			
Antenna Gain	0dBi			
Power Supply	DC3.7V			

## 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
	0	2402MHZ
	1	2403MHZ
	:	:
	38	2440 MHZ
2402~2480MHZ	39	2441 MHZ
	40	2442 MHZ
	:	:
	77	2479 MHZ
	78	2480 MHZ

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## 3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 2.75dB Radiated measurement: +/- 3.2dB

## 4. DESCRIPTION OF TEST MODES

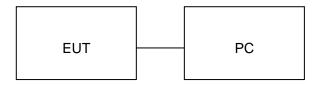
NO.	TEST MODE DESCRIPTION		
1	Normal operation (BT Link)		
<del>                                    </del>			

Note: For Radiated Emission, 3axis were chosen for testing for each applicable mode. The data below 1GHz recorded in this report, the other please refer to original report.

## 5. SYSTEM TEST CONFIGURATION

## **5.1. CONFIGURATION OF EUT SYSTEM**

Configure 1: (BT Link)



#### **5.2. EQUIPMENT USED IN EUT SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Bluetooth Speaker	My Music	B39	EUT
2	PC	Dell	A1465	A.E
3	Control box	N/A	N/A	A.E
4	USB cable	N/A	0.6m,unshielded	A.E

## **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.209	Radiated Emission	Compliant

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## **6. TEST FACILITY**

Site	Compliance Certification Service(Shenzhen) Inc.	
Location	No.10-1 Mingkeda Logistics Park, No.18 Huanguan South RD. Guan lan Town,Baoan Distr	
FCC Registration No.	441872	
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.	

## **ALL TEST EQUIPMENT LIST**

Radiated Emission Test Site 966(2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	03/01/2015	03/01/2016
EMI TEST RECEIVER	ROHDE&SCHWAR Z	ESCI	100783	03/09/2015	03/08/2016
Amplifier	MITEQ	AM-1604-3000	1123808	03/18/2015	03/17/2016
High Noise Amplifier	Agilent	8449B	3008A01838	03/18/2015	03/17/2016
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	07/10/2014	07/09/2015
Bilog Antenna	SCHAFFNER	CBL6143	5082	03/01/2015	03/01/2016
Horn Antenna	SCHWARZBECK	BBHA9120	D286	03/01/2015	03/01/2016
Loop Antenna	COM-POWER	AL-130	121044	09/27/2014	09/26/2015
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R
Controller	СТ	N/A	N/A	N.C.R	N.C.R
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/28/2015	02/27/2016
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD		LZ-RF / CCS	S-SZ-3A2	

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#### 7. RADIATED EMISSION

#### 7.1. MEASUREMENT PROCEDURE

- 1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported for above 1GHz, and the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

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The following table is the setting of spectrum analyzer and receiver.

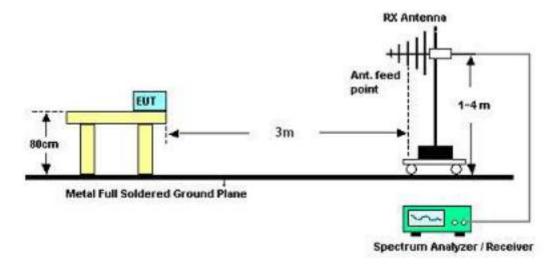
Spectrum Parameter	Setting		
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP		
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP		
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/1MHz for Peak, 1MHz/10Hz for Average		

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

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## 7.2. TEST SETUP

## RADIATED EMISSION TEST SETUP 30MHz-1000MHz



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## 7.3. TEST RESULT

## **RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

## **RADIATED EMISSION BELOW 1GHZ**

## RADIATED EMISSION TEST- (30MHZ-1GHZ)-HORIZONTAL



Site: site #1

Limit: FCC Class B 3M Radiation

EUT: Bluetooth Speaker

M/N: B39

Mode: Normal operation

Note:

Polarization:	Horizontal	Temperatur	e: 23.8
Power:		Humidity: 5	58.9 %

Distance: 3m

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Antenna Detector Height	Table Degree	Comment	
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		146.4000	10.58	15.24	25.82	43.50	-17.68	peak			
2		264.4166	21.43	14.34	35.77	46.00	-10.23	peak			
3		288.6666	19.49	15.07	34.56	46.00	-11.44	peak			
4	*	387.2833	23.73	18.99	42.72	46.00	-3.28	peak			
5		502.0667	9.14	21.19	30.33	46.00	-15.67	peak			
6		799.5333	1.98	27.31	29.29	46.00	-16.71	peak			

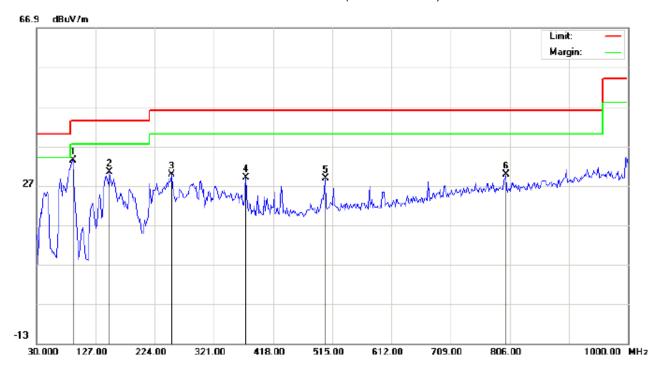
**RESULT: PASS** 

Temperature: 23.8

Humidity: 58.9 %

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## RADIATED EMISSION TEST- (30MHZ-1GHZ) -VERTICAL



Polarization: Vertical

Site: site #1 Limit: FCC Class B 3M Radiation

EUT: Bluetooth Speaker

M/N: B39

Mode: Normal operation

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	89.8167	28.14	5.31	33.45	43.50	-10.05	peak			
2		149.6333	15.13	15.26	30.39	43.50	-13.11	peak			
3		251.4833	15.77	13.94	29.71	46.00	-16.29	peak			
4		372.7333	10.18	18.89	29.07	46.00	-16.93	peak			
5		503.6833	7.52	21.23	28.75	46.00	-17.25	peak			
6		799.5333	2.48	27.31	29.79	46.00	-16.21	peak			

Power:

Distance: 3m

## **RESULT: PASS**

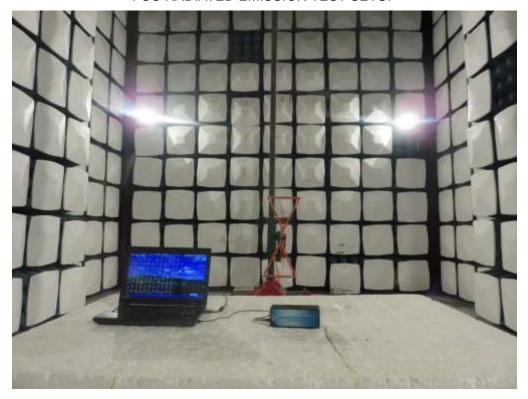
Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The "Factor" value can be calculated automatically by software of measurement system.

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## **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**

FCC RADIATED EMISSION TEST SETUP



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## **APPENDIX B: PHOTOGRAPHS OF EUT**

All VIEW OF EUT

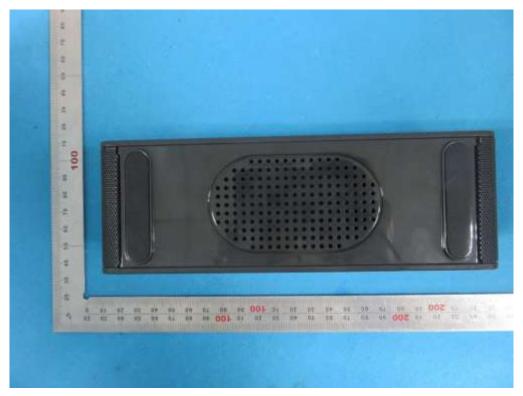


TOP VIEW OF EUT



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## **BOTTOM VIEW OF EUT**



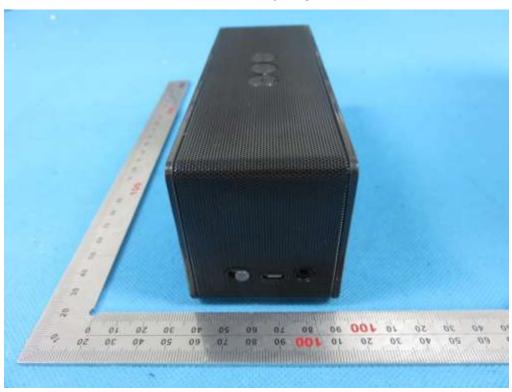
FRONT VIEW OF EUT



**BACK VIEW OF EUT** 

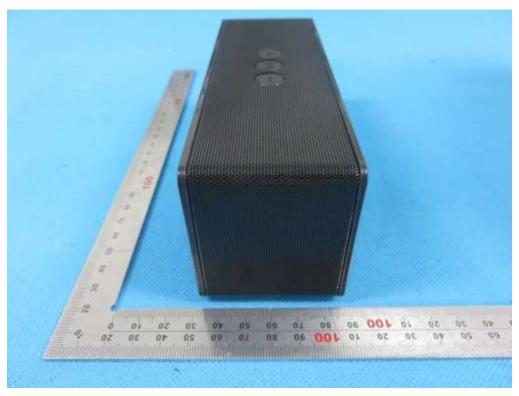


LEFT VIEW OF EUT



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RIGHT VIEW OF EUT

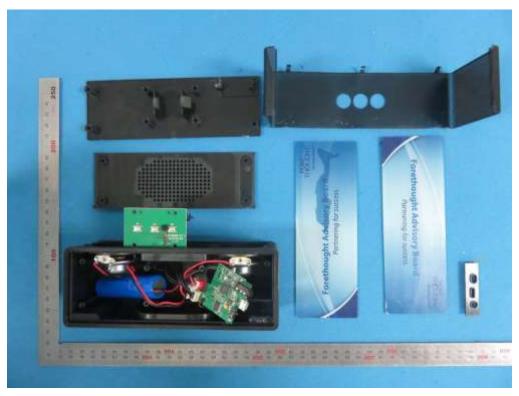


VIEW OF EUT (Port)

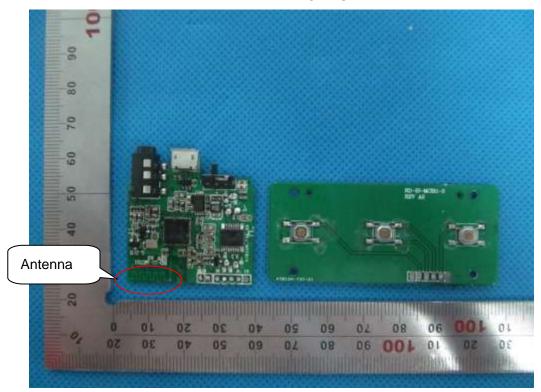


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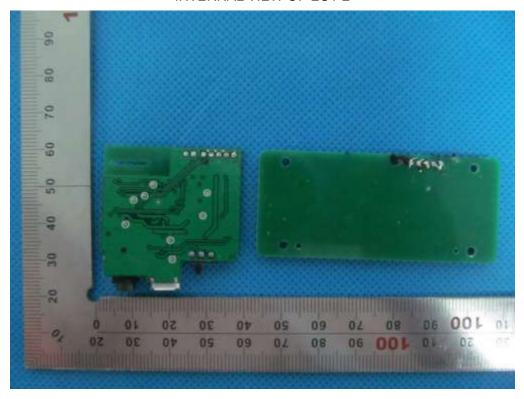
## **OPEN VIEW OF EUT**



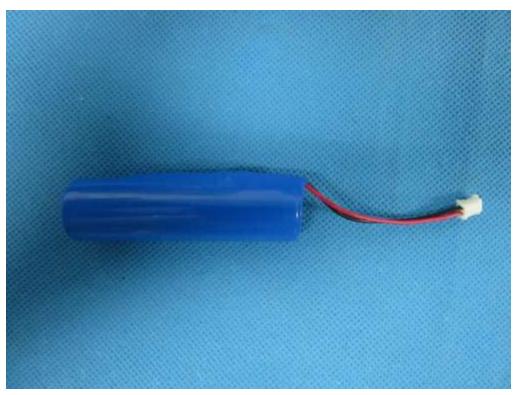
**INTERNAL VIEW OF EUT-1** 



## **INTERNAL VIEW OF EUT-2**



**BATTERY OF EUT** 



----END OF REPORT----