

FCC - TEST REPORT

Report Number : **60.790.18.007.01E01** Date of Issue : March 29, 2018

Model : **SF543/BTS**

Product Type : **BT speaker**

Applicant : Homsquare International Limited

Address : 1308 Tower 2, Ever Gain Plaza, 88 Container Port Road, Kwai Chung, Hong Kong

Production Facility : SHENZHEN MUSOS ELECTRONIC CO., LTD

Address : Floor 5, No. 6, Puyuwei Road, Shangliao, Shajing Town, Baoan District, Shenzhen, China 518125

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : 15

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2 Description of Equipment Under Test

Description of the Equipment Under Test

Product: BT speaker

Model no.: SF543/BTS

Rating: 1) 3.7VDC (1 x 3.7VDC Rechargeable battery)
2) 5.0VDC (USB port)

3 Summary of Test Standards

Test Standards
FCC Part 15 Subpart B 10-1-17 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart B — Unintentional Radiators

4 Details about the Test Laboratory

Site 1

Company name: TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Lakeside 2,
10 Science Park West Avenue,
Science Park, Shatin, Hong Kong

Site 2

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13 Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2,
Shenzhen 518052, P.R.China
FCC Registration Number: 502708

Emission Tests	
Test Item	Test Site
FCC Part 15 Subpart B	
FCC Title 47 Part 15.109 Radiated Emission 30MHz-1000MHz	Site 2
FCC Title 47 Part 15.109 Radiated Emission 1000MHz-18000MHz	Site 2

4.1 Test Equipment Site List

Radiated emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	07-July-18
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	07-July-18
Horn Antenna	Rohde & Schwarz	HF907	102294	07-July-18
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	07-July-18
3m Semi-anechoic chamber	TDK	9X6X6	----	14-July-20

Conducted emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	101782	14-July-18
LISN	Rohde & Schwarz	ENV4200	100249	14-July-18
LISN	Rohde & Schwarz	ENV216	100326	14-July-18
ISN	Rohde & Schwarz	ENY81	100177	14-July-18
ISN	Rohde & Schwarz	ENY81-CAT6	101664	14-July-18
High Voltage Probe	Rohde & Schwarz	TK9420(VT9420)	9420-58	14-July-18
RF Current probe	Rohde & Schwarz	EZ-17	100816	14-July-18

4.2 Measurement System Uncertainty

Measurement System Uncertainty Emissions

System Measurement Uncertainty	
Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-18000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;
Uncertainty for Conducted Emission 150kHz-30MHz	3.50dB

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart B				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
FCC Title 47 Part 15.109 Radiated Emission	10-11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 General Remarks

Remarks

NIL

SUMMARY:

- All tests according to the regulations cited on page 5 were

☒ - Performed

☐ - **Not** Performed

- The Equipment Under Test

☒ - **Fulfills** the general approval requirements.

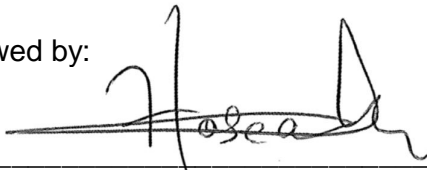
☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: December 15, 2017

Testing Start Date: March 5, 2018

Testing End Date: March 12, 2018

Reviewed by:



Hosea CHAN
EMC Project Engineer

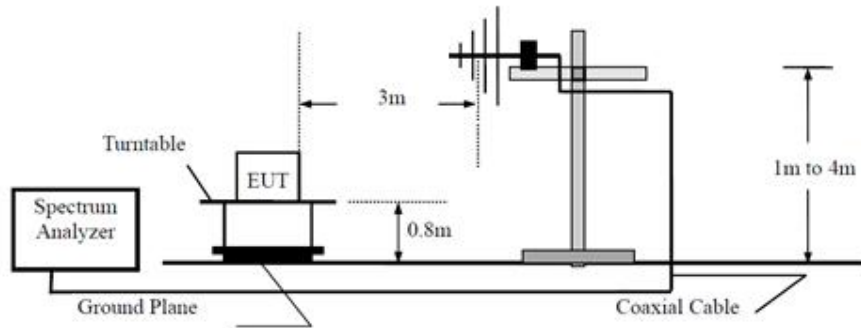
Prepared by:



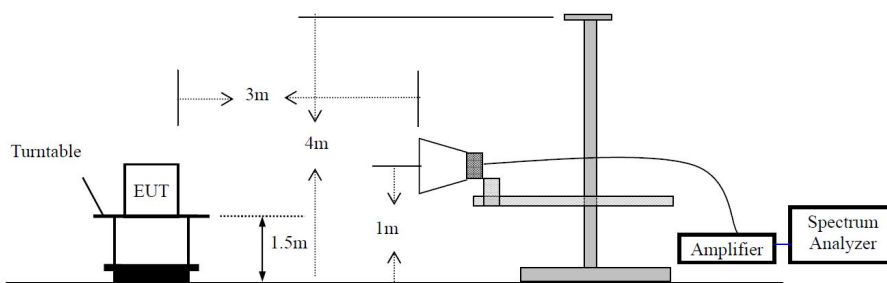
Eric LI
EMC Senior Project Engineer

Test Setups

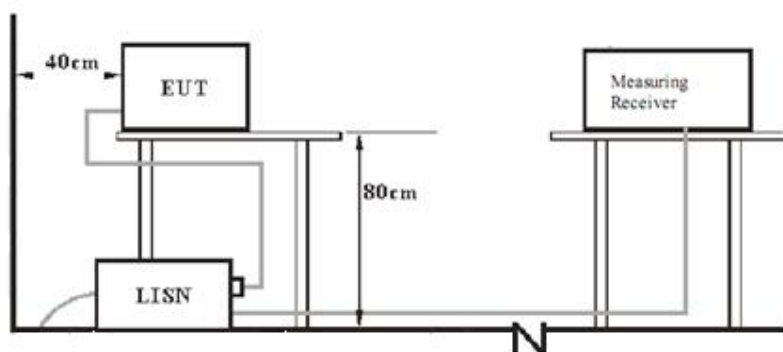
7.1. Below 1GHz



7.2. Above 1GHz



7.3. AC Power Line Conducted Emission test setups



Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFAC-TURER	MODEL NO. (SHIELD)	S/N (LENGTH)	PARAMETERS
NA	---	---	-	---
NA	---	---	-	---

7 Emission Test Results

7.1 Radiated Emission

EUT: SF543/BTS
 Op Condition: BT Rx
 Test Specification: Antenna: Horizontal
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
58.612	16.32	40.0	-23.68	Peak
266.231	20.12	46.0	-25.88	Peak
439.157	24.33	46.0	-21.67	Peak
875.344	29.32	46.0	-16.68	Peak
2248.070	28.71	54.0	-25.29	Peak
3000.070	24.95	54.0	-29.05	Peak
4842.984	35.00	54.0	-19.00	Peak

Radiated Emission

EUT: SF543/BTS
 Op Condition: BT Rx
 Test Specification: Antenna: Vertical
 Comment: 3.7VDC

Test Result	
<input checked="" type="checkbox"/>	Passed
<input type="checkbox"/>	Not Passed

Frequency MHz	Result dB μ V/m	Limit dB μ V/m	Margin dB	Detector
168.009	18.25	40.0	-21.75	Peak
276.487	29.43	46.0	-16.57	Peak
566.625	27.52	46.0	-18.48	Peak
885.270	30.61	46.0	-15.39	Peak
1598.883	28.14	54.0	-25.86	Peak
2722.476	20.21	54.0	-33.79	Peak
5575.523	20.64	54.0	-33.36	Peak