RF EXPOSURE REPORT

Report No.: 17021567-FCC-H1
Supersede Report No.: N/A

Applicant	Shenzhen Shuaixian Electronic Equipment Co., Ltd.
Product Name	Bluetooth Earphones
Model No.	SX-808
Serial Model	N/A
Test Standard	FCC 2.1093
Test Date	November 20 to November 23, 2017
Issue Date	November 23, 2017
Test Result	☒ Pass ☐ Fail
Equipment complied with the specification	☒
Equipment did not comply with the specification	☐

Trety Lu	Deon Dai	
Trety Lu Test Engineer	Deon Dai Engineer Reviewer	

This test report may be reproduced in full only
Test result presented in this test report is applicable to the tested sample only

Issued by:
SIEMIC (Nanjing-China) Laboratories
2-1 Longcang Avenue Yuhua Economic and
Technology Development Park, Nanjing, China
Tel:+86(25)86730128/86730129 Fax:+86(25)86730127 Email: China@siemic.com.cn

Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

This page has been left blank intentionally.

CONTENTS

1 Report Revision History

Report No.	Report Version	Description	Issue Date
17021567-FCC-H1	NONE	Original	November 23, 2017

2 Customer information

Applicant Name	Shenzhen Shuaixian Electronic Equipment Co., Ltd.
Applicant Add	No.10 Lane 3, Longxing Rd., Dakang Long Village, Henggang Town, Longgang Dist., Shenzhen, China
Manufacturer	Shenzhen Shuaixian Electronic Equipment Co., Ltd.
Manufacturer Add	No.10 Lane 3, Longxing Rd., Dakang Long Village, Henggang Town, Longgang Dist., Shenzhen, China

3 Test site information

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and Technology Development Park, Nanjing, China
FCC Test Site No.	694825
IC Test Site No.	4842B-1
Test Software	EZ_EMC

4 Equipment under Test (EUT) Information

Description of EUT:	Bluetooth Earphones
Main Model:	SX-808
Serial Model:	N/A
Date EUT received:	November 20, 2017
Test Date(s):	November 20 to November 23, 2017
Output power	7.345dBm
Antenna Gain:	Bluetooth: 2dBi
Type of Modulation:	Bluetooth: GFSK, π/4-DQPSK, 8DPSK
RF Operating Frequency (ies):	Bluetooth: 2402-2480 MHz
Number of Channels:	Bluetooth: 79CH
Port:	Power Port
Power:	Input Power: DC5V Battery: 3.7V 500mAh 1.85Wh
Trade Name :	N/A
FCC ID:	UHB-SX-808

5 FCC §2.1093 - Radiofrequency radiation exposure evaluation: portable devices.

5.1 RF Exposure

Standard Requirement:

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[16] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[17]
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

result = $P\sqrt{F}/D$
P= Maximum turn-up power in mW
F= Channel frequency in GHz
D= Minimum test separation distance in mm

BT Mode:

Modulation	CH	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
GFSK	Low	2402	6.215	5.5±1	6.5	4.467	1.38	3
	Mid	2441	7.345	6.5±1	7.5	5.623	1.76	3
	High	2480	7.128	6.5±1	7.5	5.623	1.77	3
π/4-DQPSK	Low	2402	4.562	3.6±1	4.6	2.884	0.89	3
	Mid	2441	6.616	6.0±1	7.0	5.012	1.57	3
	High	2480	6.515	5.6±1	6.6	4.571	1.44	3
8DPSK	Low	2402	4.866	4.0±1	5.0	3.162	0.98	3
	Mid	2441	6.753	6.0±1	7.0	5.012	1.57	3
	High	2480	6.647	6.0±1	7.0	5.012	1.58	3

Result: Pass