Shenzhen Huaxia Testing Technology Co., Ltd

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640
Fax: +86-755-26648637
Website: www.cqa-cert.com

Report Template Version: V04
Report Template Revision Date: 2018-07-06

RF Exposure Evaluation Report

Report No.:	CQASZ20200800797E-02
Applicant:	iLUV Creative Technology
Address of Applicant:	2 Harbor Park Drive, Port Washington, NY11050, USA
Equipment Under Test (EUT):	
EUT Name:	SmartShaker 3
Model No.:	SS3
Brand Name:	iLUV
FCC ID:	ATL-SMARTSHAKER3
Standards:	47 CFR Part 1.1307
	47 CFR Part 2.1093
	KDB447498D01 General RF Exposure Guidance v06
Date of Receipt:	2020-08-04
Date of Test:	2020-08-04 to 2020-08-12
Date of Issue:	2020-08-12
Test Result:	**PASS***

***In the configuration tested, the EUT complied with the standards specified above**

Tested By: Martin Lee

(Martin Lee)

Reviewed By: Sheek Luo

(Sheek Luo)

Approved By:

(Jack Ai)

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20200800797E-02	Rev.01	Initial report	2020-08-12

2 Contents

3 General Information

3.1 Client Information

Applicant:	iLUV Creative Technology
Address of Applicant:	2 Harbor Park Drive, Port Washington, NY11050, USA
Manufacturer:	Wai Hang Electronic Co., Ltd.
Address of Manufacturer:	Room 1807-1808, 18/F., New Trade Plaza, Block B, 6 On Ping Street, Siu Lek Yuen, Shatin, NT., Hong Kong

3.2 General Description of EUT

Product Name:	SmartShaker 3
Model No.:	SS3
Trade Mark:	iLUV
Hardware Version:	REV1.0
Software Version:	1.0
Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	V5.2
Modulation Type:	GFSK
Transfer Rate:	1Mbps
Number of Channel:	40
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Test Software of EUT:	Nordic_radio_test.bsp (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	0dBi
EUT Power Supply:	lithium battery: DC 3.7V, 1500mA, Charge by DC 5V

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

4.1.2 Limits

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)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, 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

4.1.3 EUT RF Exposure

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	2.81	2.0±1	3.0	1.995
Middle(2441MHz)	2.5	2.0±1	3.0	1.995
Highest(2480MHz)	2.39	1.5±1	2.5	1.778

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	2.81	2.0±1	3.0	1.995	0.618	3.0
Middle (2441MHz)	2.5	2.0±1	3.0	1.995	0.623	
Highest (2480MHz)	2.39	1.5±1	2.5	1.778	0.560	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20200800797E-01