RF Exposure Evaluation Report

Product	:	Microphone Wireless System
Trade mark	:	SWIFF AUDIO
Model/Type reference	:	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10
Serial Number	:	N/A
Report Number	:	EED32M00042402
FCC ID	:	2ARWY-M1
Date of Issue	:	Apr. 15, 2020
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Test result	:	PASS

Prepared for:

SWIFF TECHNOLOGY CO., LTD.
5/F, Building B, Hengchangrong Industrial Park,
No.52 Huaning Road. Longhua, ShenZhen, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Tested By:	mark. chen.	Compiled by:	Sunlight Sun
	Mark Chen		Sunlight Sun
Reviewed by:	Ware Xin	Approved by:	Sam Chuang
	Ware Xin		Sam Chuang
Date:	Apr. 15, 2020		Check No.:2447624290

2 Version

Version No.	Date	Description
00	Apr. 15, 2020	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	SWIFF TECHNOLOGY CO., LTD.
Address of Applicant:	5/F, Building B, Hengchangrong Industrial Park, No.52 Huaning Road. Longhua, ShenZhen,China
Manufacturer:	SWIFF TECHNOLOGY CO., LTD.
Address of Manufacturer:	5/F, Building B, Hengchangrong Industrial Park, No.52 Huaning Road. Longhua, ShenZhen,China
Factory:	SWIFF TECHNOLOGY CO., LTD.
Address of Factory:	5/F, Building B, Hengchangrong Industrial Park, No.52 Huaning Road. Longhua, ShenZhen,China

4.2 General Description of EUT

Product Name:	Microphone Wireless System
Model No.(EUT):	M1
Test Model No.:	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10
Trade Mark:	SWIFF AUDIO
EUT Supports Radios application:	2409-2475MHz (2409MHz/2441MHz/2475MHz)

4.3 Product Specification subjective to this standard

Frequency Range:	2409-2475MHz	
Modulation Type:	GFSK	
Test Power Grade:	Default	
Test Software of EUT:	Default	
Antenna Type:	PCB Antenna	
Antenna Gain:	2.96 dBi	
Power Supply:	Battery	ZLY 602035 400mAh 3.7V 1.48Wh
Max Conducted Peak Output Power:	-4.403 dBm	
	The Max Conducted Peak Output Power data refer to the report EED32M00042401	
Sample Received Date:	Mar. 13, 2020	
Sample tested Date:	Mar. 13, 2020 to Apr. 03, 2020	
The tested sample(s) and the sample information are provided by the client. Model No.: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10 Only the model M1 was tested, Their electrical circuit design, layout, components used and internal wiring are identical, Only the color of the appearance is different.		

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
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.

5.1.2 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

5.1.3 EUT RF Exposure

The tune-up power is -4.5 dBm ±0.5dB, therefore the highest tune-up power is

-4.0 dBm	(0.40 mW)	@ 2441 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

(	0.40mW	/	5mm	) * (	2.441GHz	^0.5	)=	0.1

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] * [√f(GHz)] = 0.1 < 3.0

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00042401 for EUT external and internal photos.

*** End of Report ***