RF Exposure Evaluation Report

Applicant:	SWAGTEK
Address of Applicant:	10205 NW 19th Street, STE 101, Miami, FL33172, USA
Equipment Under Test (EUT)	
Product Name:	True Wireless Stereo Earbuds
Model No.:	TW5, ZONIC, IVO
Trade mark:	LOGIC, iSWAG, UNONU
FCC ID:	O55TW5122
Applicable standards:	FCC CFR Title 47 Part 2 (§2.1093)
Date of sample receipt:	30 Aug., 2022
Date of Test:	31 Aug., to 28 Sep., 2022
Date of report issue:	29 Sep., 2022
Test Result:	PASS

Tested by:	Mike.ou ***Test Engineer***	***Date:***	*29 Sep., 2022*
Reviewed by:	Winner Zhang ***Project Engineer***	***Date:***	*29 Sep., 2022*
Approved by:	***Manager***	***Date:***	*29 Sep., 2022*

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

1 Version

Version No.	Date	Description
00	*29 Sep., 2022*	*Original*

2 Contents

3 General Information

3.1 Client Information

Applicant:	SWAGTEK
Address:	10205 NW 19th Street, STE 101, Miami, FL33172, USA
Manufacturer/Factory:	SWAGTEK
Address:	10205 NW 19th Street, STE 101, Miami, FL33172, USA

3.2 General Description of E.U.T.

Product Name:	True Wireless Stereo Earbuds
Model No.:	TW5, ZONIC, IVO
Operation Frequency:	Bluetooth: 2402MHz~2480MHz
Modulation technology:	Bluetooth BDR: GFSK, Bluetooth EDR: π/4-DQPSK, 8DPSK
Antenna Type:	PCB Antenna
Antenna gain:	BT: -0.68 dBi
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3.3 Operating Modes

Operating mode	Detail description
BT mode	Keep the EUT in continuously transmitting in BT mode

3.4 Additions to, deviations, or exclusions from the method

No

3.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

3.6 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

4 Technical Requirements Specification

4.1 Limits

According to 447498 D01 General RF Exposure Guidance v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.
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, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

4.2 Result

Worse case for BT as below:
[2402MHz: 1.7dBm (1.48 mW) output power]
(1.48 mW /5mm) •[√2.402(GHz)]=0.459 <3.0 for 1-g SAR

4.3 Conclusion

The device is exempt from the SAR test and satisfies RF exposure evaluation.

------End of report------