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. :	CQASZ20210400416E-03
Applicant:	Shenzhen Yuangu Technology Co., Ltd.
Address of Applicant:	No.101, 1st Factory Building, Hebei Industrial Park, Ma'antang Community, Hebeizhongxing Road, Bantian Sub-district, Longgang District, Shenzhen,China
Equipment Under Test (EUT):	
Product:	TRULY WIRELESS EARBUDS
Model No.:	ET10
Brand Name:	AXLOIE
FCC ID:	2ATWG-ET10L 2ATWG-ET10R
Standards:	47 CFR Part 1.1307 47 CFR Part 1.1310 KDB447498D01 General RF Exposure Guidance v06
Date of Test:	2021-4-7 to 2021-4-29
Date of Issue:	2021-4-29
Test Result :	**PASS**

Tested By: Jun Li

(Jun Li)

Reviewed By: Ares Liu

(Ares Liu)

Approved By: Sheek Luo

(Sheek Luo)

1. Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20210400416E-03	Rev.01	Initial report	2021-4-25

2. Contents

3. General Information

4. Client Information

Applicant:	Shenzhen Yuangu Technology Co., Ltd.
Address of Applicant:	No.101, 1st Factory Building, Hebei Industrial Park, Ma'antang Community, Hebeizhongxing Road, Bantian Sub-district, Longgang District, Shenzhen,China
Manufacturer:	Shenzhen Yuangu Technology Co., Ltd.
Address of Manufacturer:	No.101, 1st Factory Building, Hebei Industrial Park, Ma'antang Community, Hebeizhongxing Road, Bantian Sub-district, Longgang District, Shenzhen,China
Factory:	Shenzhen Yuangu Technology Co., Ltd.
Address of Factory:	No.101, 1st Factory Building, Hebei Industrial Park, Ma'antang Community, Hebeizhongxing Road, Bantian Sub-district, Longgang District, Shenzhen,China

5. General Description of EUT

Product Name:	TRULY WIRELESS EARBUDS
Model No.:	ET10
Trade Mark:	AXLOIE
Hardware Version:	V0.4
Software Version:	V1.1.9
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π/4DQPSK, 8DPSK
Transfer Rate:	1Mbps/2Mbps/3Mbps
Number of Channel:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
Antenna Type:	PCB antenna
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Power Supply:	lithium battery:500mAh/1.85Wh, Charge by DC5.0V 200mA

RF Exposure Evaluation

RF Exposure Compliance Requirement

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.

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 calculation17

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

EUT RF Exposure

1) For BT（left ear）

Measurement Data

GFSK mode				
Test Channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	6.230	5±1	6	3.981
Middle(2441MHz)	6.560	5.5±1	6.5	4.467
Highest(2480MHz)	6.970	6±1	7	5.012
π/4DQPSK mode				
Lowest(2402MHz)	6.230	5±1	6	3.981
Middle(2441MHz)	6.580	5.5±1	6.5	4.467
Highest(2480MHz)	6.960	6±1	7	5.012
8DPSK mode				
Lowest(2402MHz)	6.240	5±1	6	3.981
Middle(2441MHz)	6.610	6±1	7	5.012
Highest(2480MHz)	6.990	6±1	7	5.012

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tuneup Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	6.240	5±1	6	3.981	1.234	3.0
Middle (2441MHz)	6.610	6±1	7	5.012	1.566	
Highest (2480MHz)	6.990	6±1	7	5.012	1.579	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20210400416E-01

1) For BT（Right ear）

Measurement Data

GFSK mode				
Test Channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	6.320	5.5±1	6.5	4.467
Middle(2441MHz)	6.810	6±1	7	5.012
Highest(2480MHz)	7.150	6±1	7	5.012
π/4DQPSK mode				
Lowest(2402MHz)	6.300	5.5±1	6.5	4.467
Middle(2441MHz)	6.800	6±1	7	5.012
Highest(2480MHz)	7.200	6±1	7	5.012
8DPSK mode				
Lowest(2402MHz)	6.320	5.5±1	6.5	4.467
Middle(2441MHz)	6.800	6±1	7	5.012
Highest(2480MHz)	7.180	6±1	7	5.012

Worst case:π/4DQPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tuneup Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	6.300	5.5±1	6.5	4.467	1.385	3.0
Middle (2441MHz)	6.800	6±1	7	5.012	1.566	
Highest (2480MHz)	7.200	6±1	7	5.012	1.579	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20210400416E-02