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Report No.: SZEM161201140606

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# SAR Evaluation Report

**Application No.:** SZEM1612011406CR  
**Applicant:** Zhejiang Fousine Science & Technology Co., Ltd.  
**Manufacturer:** Zhejiang Fousine Science & Technology Co., Ltd.  
**Factory:** Zhejiang Fousine Science & Technology Co., Ltd.  
**Product Name:** BLUETOOTH HEADPHONE  
**Model No.(EUT):** BWA17AV003-1  
**Trade Mark:** Blackweb  
**FCC ID:** 2AKP3-BWA17AV003-1  
**Standards:** 47 CFR Part 1.1307 (2016)  
47 CFR Part 2.1093 (2016)  
KDB447498D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2017-01-04  
**Date of Test:** 2017-01-10 to 2017-01-21  
**Date of Issue:** 2017-02-23

<b>Test Result :</b>	<b>PASS*</b>
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\* In the configuration tested, the EUT complied with the standards specified above. This report supersedes our previous report SZEM161201140603, issued on 2017-01-25, which is hereby deemed null and void

Authorized Signature:



Jack Zhang  
EMC Laboratory Manager

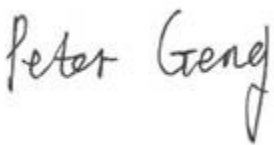
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## 2 Version

<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2017-02-23		Original

<b>Authorized for issue by:</b>			
<b>Tested By</b>		 <hr/> Peter Geng /Project Engineer	2017-01-21 <hr/> <b>Date</b>
<b>Checked By</b>		 <hr/> Eric Fu /Reviewer	2017-02-23 <hr/> <b>Date</b>



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## 4 General Information

### 4.1 Client Information

Applicant:	Zhejiang Fousine Science & Technology Co., Ltd.
Address of Applicant:	198 ChangYuan Rd, Yuyao, Zhejiang Prvn., China
Manufacturer:	Zhejiang Fousine Science & Technology Co., Ltd.
Address of Manufacturer:	198 ChangYuan Rd, Yuyao, Zhejiang Prvn., China
Factory:	Zhejiang Fousine Science & Technology Co., Ltd.
Address of Factory:	198 ChangYuan Rd, Yuyao, Zhejiang Prvn., China

### 4.2 General Description of EUT

Product Name:	BLUETOOTH HEADPHONE
Model No.:	BWA17AV003-1
Trade Mark:	Blackweb
Bluetooth Version	V4.2
Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Number of Channel:	79
Antenna Type:	Integral
Antenna Gain:	1.2dBi
Power Supply:	DC 3.7V 250 mAh rechargeable battery which charged by AC adapter



### 4.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China  
518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

### 4.4 Test Facility

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

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

### 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

##### 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.

#### 5.1.2 Limits

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

$$\left[ \frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \cdot \sqrt{f(\text{GHz})} \right] \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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 Max Conducted Peak Output Power is 4.23dBm in middle channel(2.402GHz);

4.23dBm logarithmic terms convert to numeric result is nearly 2.65mW

According to the formula. calculate the test exclusion thresholds:

$$\left[ \frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \cdot \sqrt{f(\text{GHz})} \right]$$

General RF Exposure =  $(2.65\text{mW} / 5 \text{ mm}) \times \sqrt{2.402\text{GHz}} = 0.82$  ①

SAR requirement:

S= 3.0

② ;

① < ②.

So the SAR report is not required.