



## SAR Evaluation Report

**Application No.:** SZEM1912020761CR  
**Applicant:** Voxx Accessories Corp  
**Address of Applicant:** 3502 Woodview Trace, Suite 220, Indianapolis, Indiana, United States 46268  
**Manufacturer:** Voxx Accessories Corp  
**Address of Manufacturer:** 3502 Woodview Trace, Suite 220, Indianapolis, Indiana, United States 46268  
**Factory:** Smart Glory Electronics (Shenzhen) Co., Ltd  
**Address of Factory:** Building Four, No.63, Zhangqi Road, Qiping Village, Daping Community, Guanlan Street, Longhua New District, Shenzhen, China

**Equipment Under Test (EUT):**  
**EUT Name:** Portable Bluetooth® Speaker  
**Model No.:** AWSF6R  
**Trade mark:** AR (Acoustic Research)  
**FCC ID:** VIXAWSF6R  
**Standards:** 47 CFR Part 1.1310  
47 CFR Part 2.1093  
KDB447498D01 General RF Exposure Guidance v06

**Date of Receipt:** 2019-12-02  
**Date of Test:** 2019-12-02 to 2019-12-09  
**Date of Issue:** 2019-12-11

|                      |              |
|----------------------|--------------|
| <b>Test Result :</b> | <b>Pass*</b> |
|----------------------|--------------|

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

Keny Xu

Keny Xu  
EMC Laboratory Manager



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

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Report No.: SZEM191202076103

Page: 2 of 6

## 2 Version

| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2019-12-11 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                          |  |                                                                                     |  |  |
|--------------------------|--|-------------------------------------------------------------------------------------|--|--|
| Authorized for issue by: |  |                                                                                     |  |  |
|                          |  |   |  |  |
|                          |  | Calvin Weng /Project Engineer                                                       |  |  |
|                          |  |  |  |  |
|                          |  | Eric Fu /Reviewer                                                                   |  |  |



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Report No.: SZEM191202076103  
Page: 3 of 6

## 3 Contents

|                                                       | Page |
|-------------------------------------------------------|------|
| 1 COVER PAGE .....                                    | 1    |
| 2 VERSION .....                                       | 2    |
| 3 CONTENTS .....                                      | 3    |
| 4 GENERAL INFORMATION .....                           | 4    |
| 4.1 GENERAL DESCRIPTION OF EUT .....                  | 4    |
| 4.2 TEST LOCATION .....                               | 5    |
| 4.3 TEST FACILITY .....                               | 5    |
| 4.4 DEVIATION FROM STANDARDS .....                    | 5    |
| 4.5 ABNORMALITIES FROM STANDARD CONDITIONS .....      | 5    |
| 4.6 OTHER INFORMATION REQUESTED BY THE CUSTOMER ..... | 5    |
| 5 SAR EVALUATION.....                                 | 6    |
| 5.1 RF EXPOSURE COMPLIANCE REQUIREMENT .....          | 6    |
| 5.1.1 Standard Requirement .....                      | 6    |
| 5.1.2 Limits .....                                    | 6    |
| 5.1.3 EUT RF Exposure.....                            | 6    |



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## 4 General Information

### 4.1 General Description of EUT

|                     |                                                                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply:       | DC7.4V Li-polymer battery(2000mAh)<br>DC14V,1000mA by power adapter<br>Adapter input: AC100-240V, 50/60Hz, 0.6A<br>Adapter Model No.: BLJ15W140100P1-U |
| Frequency Range:    | 2402MHz to 2480MHz                                                                                                                                     |
| Bluetooth Version:  | 4.2                                                                                                                                                    |
| Modulation Type:    | GFSK, $\pi/4$ DQPSK, 8DPSK                                                                                                                             |
| Number of Channels: | 79                                                                                                                                                     |
| Antenna Type:       | PCB antenna                                                                                                                                            |
| Antenna Gain:       | 0dBi                                                                                                                                                   |



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## 4.2 Test Location

All tests were performed at:

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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.

## 4.3 Test Facility

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

- **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 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

## 4.4 Deviation from Standards

None.

## 4.5 Abnormalities from Standard Conditions

None.

## 4.6 Other Information Requested by the Customer

None.



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## 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:

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

$f(\text{GHz})$  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. power (including tune-up tolerance) is 4.11 dBm on the lowest channel 2.402 GHz (\*)

4.11 dBm logarithmic terms convert to numeric result is nearly 2.58 mW

According to the formula. calculate the test exclusion thresholds:

$$\text{General RF Exposure} = \frac{(\text{Max. Power of channel, including tune-up tolerance, mW}) \cdot \sqrt{f(\text{GHz})}}{(\text{min. test separation distance, mm})}$$

$$\text{General RF Exposure} = (2.58 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.402 \text{ GHz}} = 0.80 \quad (1)$$

SAR requirement:

$$S = 3.0 \quad (2)$$

$$(1) < (2)$$

So the SAR report is not required.

(\*) Max. power refer to Report No.: SZEM191202076102

- End of the Report -

