

RF EXPOSURE EVALUATION REPORT

Application No.: FYCR2211000468AT
Applicant: Voxx Accessories Corp.
Address of Applicant: 3502 Woodview Trace Suite 220, Indianapolis, Indiana 46268 United States
Manufacturer: Voxx Accessories Corp.
Address of Manufacturer: 3502 Woodview Trace Suite 220, Indianapolis, Indiana 46268 United States
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

Equipment Under Test (EUT):

EUT Name: Duo Wireless Speaker I Earbuds All-in-One
Model No.: ARTWS35
Trade Mark: AR (Acoustic Research)
FCC ID: VIXARTWS35EB
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
 47 CFR PART 2, Subpart J, Section 2.1093
 KDB447498D01 General RF Exposure Guidance v06
Date of Receipt: 2022-11-18
Date of Evaluation: 2022-11-23 to 2022-12-02
Date of Issue: 2022-12-09

Evaluation Result:	Pass*
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* In the configuration evaluated, the EUT complied with the standards specified above.



Winkey Wang
EMC Technical Manager



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Compliance Certification Services (Kunshan) Inc. Shenzhen Branch

SZCCS-TRF-01 Rev. A/0 Aug01,2022

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-12-09		Original

Authorized for issue by:				
		Tree Zhan		
		Tree Zhan/Project Engineer		
		Winkey Wang		
		Winkey Wang/Reviewer		



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3 General Information

3.1 Details of E.U.T.

Power Supply:	Left earbuds: Li-Ion Polymer Battery 3.7V 25mAh (Charge by speaker) Right earbuds: Li-Ion Polymer Battery 3.7V 25mAh (Charge by speaker)
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.3 Classic
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Number of Channels:	79
Channel Spacing:	1MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Antenna Type:	Chip Antenna
Antenna Gain:	5.12dBi

Remark: The information in this section is provided by the applicant or manufacturer, CCS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

Only the left earbuds was tested, the electrical circuit design, PCB layout, components used, internal wiring and functions were identical for left earbuds and right earbuds.



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3.2 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.3 Test Facility

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

- **A2LA (Certificate No. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 6606.01.

- **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

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

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



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4 Technical Requirements Specification

4.1 RF Exposure Evaluation

4.1.1 Limit & Test Method

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:

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

4.1.2 Conclusion

The Max. power (including tune-up tolerance) is 6.31 dBm on the highest channel 2.48 GHz (*)
6.31 dBm logarithmic terms convert to numeric result is nearly 4.28 mW

According to the formula. calculate the test exclusion thresholds:

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

$$\text{General RF Exposure} = (4.28 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.48 \text{ GHz}} = 1.35 \quad (1)$$

SAR requirement:

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

$(1) < (2)$

So the SAR report is not required.

(*) Max. power refer to Report No.:FYCR221100046803



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5 EUT Constructional Details (EUT Photos)

Refer to appendix - external and internal photos for FYCR2211000468AT.

- End of the Report -



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