



RF Exposure Evaluation Report

Report No.: JYTSZ-R12-2301582
Applicant: Voxx Electronics Corporation
Address of Applicant: 2365 Pontiac Road, Auburn Hills, Michigan 48326 - USA
Equipment Under Test (EUT)
Product Name: AW18
Model No.: 2421Y
Trade mark: N/A
FCC ID: EZS2421Y
Applicable standards: FCC CFR Title 47 Part 2 (§2.1093)
Date of sample receipt: 16 Nov., 2023
Date of Test: 17 Nov., to 30 Nov., 2023
Date of report issue: 30 Nov., 2023
Test Result: PASS

Project by: Lucas Wang **Date:** 30 Nov., 2023
Reviewed by: Peter Chang **Date:** 30 Nov., 2023
Approved by: James Wei **Date:** 30 Nov., 2023
Manager

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.

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1 Version

Version No.	Date	Description
00	30 Nov., 2023	Original

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3 General Information

3.1 Client Information

Applicant:	Voxx Electronics Corporation
Address:	2365 Pontiac Road, Auburn Hills, Michigan 48326 - USA
Manufacturer:	Nutek Coropration
Address:	no. 167, Lane 235, Bauchiau Rd, Xindian District, New Taeipi City 23145, Taiwan
Factory:	Voxx Automotive Corporation
Address:	2351 J. Lawson Blvd, Orlando, FL 32824 - USA

3.2 General Description of E.U.T.

Product Name:	AW18
Model No.:	2421Y
Operation Frequency:	BLE: 2402MHz~2480MHz
Modulation technology:	BLE: GFSK
Antenna Type:	Inverted-F Antenna
Antenna gain:	BLE: 1.443 dBi (declare by Applicant)
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3.3 Operating Modes

Operating mode	Detail description
BLE mode	Keep the EUT in continuously transmitting in BLE 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
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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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 calculation
- The result is rounded to one decimal place for comparison

4.2 Result

Worse case for BLE as below:

[2442MHz: -1.357dBm (0.73 mW) output power]

$(0.73 \text{ mW} / 5\text{mm}) \cdot [\sqrt{2.442(\text{GHz})}] = 0.228 < 3.0$ for 1-g SAR

4.3 Conclusion

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

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