

# Human Exposure Report

**Application No.:** SZCR2104020561AT  
**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:** Conference Hub  
**Model No.:** ARVS10  
**Trade Mark:** AR (Acoustic Research)  
**FCC ID:** VIXARVS10  
**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310  
 47 CFR PART 2, Subpart J, Section 2.1091

**Date of Receipt:** 2021-04-16  
**Date of Test:** 2021-04-20 to 2021-04-28  
**Date of Issue:** 2021-06-08

<b>Test Result :</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above



Keny Xu  
 EMC Laboratory Manager



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

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<i>Revision Record</i>				
<i>Version</i>	<i>Chapter</i>	<i>Date</i>	<i>Modifier</i>	<i>Remark</i>
01		2021-06-08		Original

<b>Authorized for issue by:</b>			
		<i>Bill Chen</i>	
		<b>Bill Chen/Project Engineer</b>	
		<i>Eric Fu</i>	
		<b>Eric Fu/Reviewer</b>	



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### 3 General Information

#### 3.1 Details of E.U.T.

Power supply:	Model:ZL-A024W1202000 Input:AC 100-240V 50/60Hz 1.0A Max Output:DC 12.0V 2000mA
Cable(s):	DC cable:145cm unshielded
Operation frequency:	114.4kHz to 143.6kHz
Modulation type:	Load modulation
Antenna type:	Loop Antenna
Remark:	This device has been tested the worst status of full load and the device has been tested with load at 5W, 7.5W and 10W, the worst case 10W is reported only. The EUT has two wireless charging coils, one horizontal and one vertical, both were tested, But only one of the worst level test data is horizontal wireless charging coils in the report.

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Load Resistor	SGS	N/A	REF. No.SEA06A00
Mobile Phone	SAMSUNG	SM-G9810	REF. No.SEA16K00



### 3.3 Test Location

All tests were performed at:

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

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

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

### 3.4 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.

### 3.5 Deviation from Standards

None.

### 3.6 Abnormalities from Standard Conditions

None.



## 4 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2021-11-26



## 5 Test Results

### 5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310  
 47 CFR PART 2, Subpart J, Section 2.1091

Measurement Distance: 15cm

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz  
 \*=Plane-wave equivalent power density  
 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

#### 5.1.1 E.U.T. Operation

**Operating Environment:**

Temperature: 22.3 °C Humidity: 52.9 % RH Atmospheric Pressure: 1015 mbar



Pre-scan / Final test	Mode Code	Description
Pre-scan	02	Wireless Charging mode_ Keep the EUT wireless charging(5W)
Pre-scan	03	Wireless Charging mode_ Keep the EUT wireless charging (7.5W)
Final test	04	Wireless Charging mode_ Keep the EUT wireless charging (10W)
Pre-scan	08	Wireless Charging + USB 1A Output _Keep the EUT wireless charging (5W) and USB 1A port full load output
Pre-scan	09	Wireless Charging + USB 2A Output _Keep the EUT wireless charging (5W) and USB 2A port full load output
Pre-scan	10	Wireless Charging + USB 1A and USB 2A _Keep the EUT wireless charging (5W) and full load output
Pre-scan	11	Wireless Charging + USB 1A Output _Keep the EUT wireless charging (7.5W) and USB 1A port full load output
Pre-scan	12	Wireless Charging + USB 2A Output _Keep the EUT wireless charging (7.5W) and USB 2A port full load output
Pre-scan	13	Wireless Charging + USB 1A and USB 2A _Keep the EUT wireless charging (7.5W) and full load output
Pre-scan	14	Wireless Charging + USB 1A Output _Keep the EUT wireless charging (10W) and USB 1A port full load output
Pre-scan	15	Wireless Charging + USB 2A Output _Keep the EUT wireless charging (10W) and USB 2A port full load output
Pre-scan	16	Wireless Charging + USB 1A and USB 2A _Keep the EUT wireless charging (10W) and full load output

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.

### 5.1.2 Measurement Data

**Output Voltage=DC 5V; The max output power =10W; Calculation of resistor value=2.5Ω**

#### Magnetic Field Emissions

Operation frequency	Test Distance	Test Position	Probe Measure Result (A/m)	50% Limit
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	(cm)			(A/m)
125 kHz	15	Side 1	0.07247	0.815
		Side 2	0.06937	0.815
		Side 3	0.07707	0.815
		Side 4	0.05717	0.815
		Top	0.04627	0.815

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

**Magnetic Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50%Limit (A/m)
			zero charge	intermediate charge	full charge	
125 kHz	15	Side 1	0.06878	0.05648	0.04558	0.815
		Side 2	0.06948	0.05328	0.04608	0.815
		Side 3	0.07398	0.05888	0.05338	0.815
		Side 4	0.05258	0.04128	0.03308	0.815
		Top	0.02418	0.03008	0.02508	0.815



## 6 Photographs- RF exposure setup

Refer to RF Exposure Setup Photos.

- End of the Report -

