



## Human Exposure Report

**Application No.:** SZEM2003001670CR  
**Applicant:** Voxx Accessories Corp  
**Address of Applicant:** 3502 Woodview Trace, Suite 220, Indianapolis, Indiana 46268, United States  
**Manufacturer:** Shenzhen Shuo Yu Technology Co., Ltd.  
**Address of Manufacturer:** Room 1416, Xin'an Building, No.3009 Renmin South Road, Luohu District, Shenzhen, Guangdong, China 518005  
**Equipment Under Test (EUT):**  
**EUT Name:** Alarm Clock Wireless Charger  
**Model No.:** RCQ520  
**Trade Mark:** RCA  
**FCC ID :** VIXRCQ520  
**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310  
47 CFR PART 2, Subpart J, Section 2.1091  
**Date of Receipt:** 2020-03-20  
**Date of Test:** 2020-03-23 to 2020-04-23  
**Date of Issue:** 2020-04-24

|                      |              |
|----------------------|--------------|
| <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



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

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| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2020-04-24 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                          |  |                                                                                     |  |
|--------------------------|--|-------------------------------------------------------------------------------------|--|
| Authorized for issue by: |  |                                                                                     |  |
|                          |  |   |  |
|                          |  | Leo Li /Project Engineer                                                            |  |
|                          |  |  |  |
|                          |  | Eric Fu /Reviewer                                                                   |  |



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### 3 General Information

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

|                      |                                                                                                                                                                                                                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Supply:        | Adapter Model: S-TR-151QU<br>Input: AC 100-240V~, 50/60Hz 0.5A Max<br>QC Output: DC 3.6-6V 3A, DC 6-9V 2A, DC 9-12V 1.5A<br>3V DC (1 x 3V "CR2032" Button cell) for clock Back-up<br>EUT Input: Type-C Port DC 5V/2A, 9V1.67A<br>Output: USB Port: DC 5V/1A(MAX)<br>WPC: 5W(DC 5V/1A); 7.5W(DC 5V/1.5A); 10W(DC 9V/1.1A) |
| Cable:               | Type-C cable: 100cm shielded                                                                                                                                                                                                                                                                                             |
| Operation Frequency: | 111.06kHz to 171.47kHz                                                                                                                                                                                                                                                                                                   |
| 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(9V/1.1A) is reported only.                                                                                                                                                     |

#### 3.2 Description of Support Units

| Description       | Manufacturer | Model No. | Serial No.   |
|-------------------|--------------|-----------|--------------|
| iPhone 8          | Apple        | A1863     | F4GVQ656JC6D |
| SAMSUNG Galaxy S8 | SAMSUNG      | SM-G9500  | R28J9140LPB  |





### 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.



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## 4 Equipments Used during Test

| Item | Test Equipment                       | Manufacturer | Model No. | Inventory No. | Cal. Due date |
|------|--------------------------------------|--------------|-----------|---------------|---------------|
| 1    | 3m Semi-Anechoic Chamber             | ETS-LINDGREN | N/A       | SEL0017       | 2020-06-10    |
| 2    | Electric and Magnetic Field Analyzer | Narda        | EHP-50F   | EMC092        | 2020-11-27    |





## 5 Test Results

### 5.1 RF Exposure test

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

Measurement Distance: 15cm

Limit:

| Frequency range<br>(MHz)                                       | Electric field strength<br>(V/m) | Magnetic field strength<br>(A/m) | Power density<br>(mW/cm <sup>2</sup> ) | Averaging time<br>(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: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

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 9V; The max output power =10W;Calculation of resistor value=8.1Ω

### Magnetic Field Emissions

| Operation frequency | Test Distance (cm) | Test Position | Probe Measure Result (A/m) | 50% Limit (A/m) |
|---------------------|--------------------|---------------|----------------------------|-----------------|
| 131.22 kHz          | 15                 | Side 1        | 0.0504                     | 0.815           |
|                     |                    | Side 2        | 0.0592                     | 0.815           |
|                     |                    | Side 3        | 0.0499                     | 0.815           |
|                     |                    | Side 4        | 0.0527                     | 0.815           |
|                     |                    | Top           | 0.0384                     | 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 |                |
| 131.22 kHz          | 15                 | Side 1        | 0.0609                    | 0.0498              | 0.0455      | 0.815          |
|                     |                    | Side 2        | 0.0698                    | 0.0551              | 0.0503      | 0.815          |
|                     |                    | Side 3        | 0.0601                    | 0.0457              | 0.0418      | 0.815          |
|                     |                    | Side 4        | 0.0632                    | 0.0496              | 0.0448      | 0.815          |
|                     |                    | Top           | 0.0475                    | 0.0345              | 0.0310      | 0.815          |

## 6 Photographs

### 6.1 Test setup photos

Please refer to RF exposure test setup photo.

- End of the Report -

