

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

Report No.: FYCR221000042302

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# RF EXPOSURE EVALUATION REPORT

**Application No.:** FYCR2210000423AT **Applicant:** Scosche Industries Inc.

Address of Applicant: 1550 Pacific Ave. Oxnard CA 93033 USA

**Manufacturer:** Scosche Industries Inc.

Address of Manufacturer: 1550 Pacific Ave. Oxnard CA 93033 USA

Factory: AQUILSTAR TECHNOLOGY (VIET NAM) CO.,LTD

Address of Factory: Hamlet Ve, Dong Tam Commune, Ninh Giang District, Hai Duong Province,

Viet Nam.

**Equipment Under Test (EUT):** 

EUT Name: BaseLynx 2.0 Watch Magnetic Charger for Apple Watch®

Model No.: BL2AW, BL2AWWT-AP, BL2AWWT-XV

Please refer to section 2 of this report which indicates which model was

actual tested and which were electrically identical.

FCC ID: IKQBL2AW

**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310

47 CFR PART 2, Subpart J, Section 2.1091

**Date of Receipt:** 2022-10-27

**Date of Evaluation:** 2022-11-03 to 2023-11-16

**Date of Issue:** 2023-11-19

Evaluation Result: Pass\*



**EMC Technical Manager** 



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<sup>\*</sup> In the configuration evaluated, the EUT complied with the standards specified above.



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	Revision Record							
Version	Version Chapter Date Modifier F							
01		2023-11-19		Original				

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



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# 2 Evaluation Summary

Radio Spectrum Matter Part								
Item	Standard	Method	Requirement	Result				
RF Exposure	47 CFR PART 1, Subpart I, Section 1.1310	KDB 680106 D01  TCB Workshop  Presentation  November 2019 RF  Exposure	CFR 47 Part 1.1310	Pass				

#### Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

#### **Declaration of EUT Family Grouping:**

Model No.: BL2AW, BL2AWWT-AP, BL2AWWT-XV

Only the model BL2AW was tested, since according to the declaration from the applicant, the electrical circuit design, PCB layout, components used and internal wiring and functions were identical for the above models, with only difference on color and market needs.

Details as below.

BL2AWWT-AP: Gift box

BL2AWWT-XV: Gift box with premium sleeve



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### 4 General Information

### 4.1 Details of E.U.T.

AC Socket Input: 100-240V 50/60Hz 2.5A
AC output:100-240V 50/60Hz 1.5A
Output: 5V1A
AC 120V/60Hz
AC cable: 180cm shielded
325.4-327.8kHz & 1.77616-1.77936MHz
Load modulation
Loop Antenna

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.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Watch	Apple	Series 5	REF. No.SEA32A00
Watch	Apple	A2474	REF. No.SEA32A01
E-Loading	SGS	N/A	REF. No.SEA42A00

### 4.3 Test modes description:

Pre-scan / Final test	Mode Code	Description
Final test	00	Charge mode_Keep the EUT charging(5W)

### 4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
RF Exposure Evaluation	MF: 0.13dB, EF: 0.4dB





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### 4.5 Evaluating 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.

### 4.6 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.

### 4.7 Deviation from Standards

None

#### 4.8 Abnormalities from Standard Conditions

None





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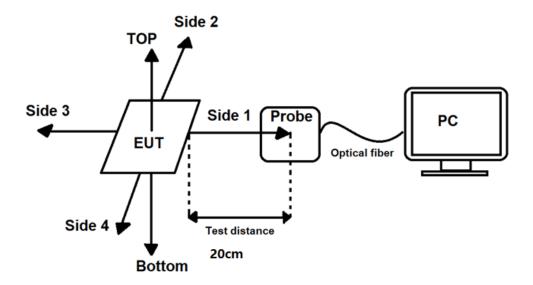
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# 5 Equipments Used during Test

RF Exposure					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi- Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12
Electric and Magnetic				2022/4/2	2023/4/1
Field Probe - Analyzer(3kHz-30MHz)	Narda	EHP-200AC	SEM022-20	2023/4/1	2024/3/31

### 5.1 Test Block Diagram







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### 6 Test Results

### 6.1 RF Exposure test

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

Measurement Distance: 20cm

Limit:

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in Part1.1307(b)

#### TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)				
(A) Limits for Occupational/Controlled Exposures								
0.3-3.0	614	1.63	*(100)	6				
3.0-30	1842/f	4.89/f	*(900/f²)	6				
30-300	61.4	0.163	1.0	6				
300-1500	/	/	f/300	6				
1500-100,000	/	/	5	6				
	(B) Limits for Genera	l Population/Uncontrolle	ed Exposure					
0.3-1.34	614	1.63	*(100)	30				
1.34-30	824/f	2.19/f	*(180/f²)	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

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).

According to IEEE C95.3:2002 section 5.5.1.1, The power density S at a point on the axis at a distance d from a transmitting antenna is given by the Friis free-space transmission formula

 $S = power density (mW/cm^2)$ 

 $S = \frac{PG}{4\pi d^2}$  P =the net power delivered to the antenna (mW) G =gain of the antenna in linear scale

d = distance between observation point and center of the radiator (cm)



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<sup>\*=</sup>Plane-wave equivalent power density



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### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.9 °C Humidity: 51.4% RH Atmospheric Pressure: 1010 mbar

**EUT Operation:** 

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

#### 6.1.2 Measurement Data

For 326.5KHz

Mode 00:

The max output power =5W Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)			50 % Limit (A/m)	10 % Limit (A/m)
nequency		1 03111011	unload	Half load	full load		
326.5 kHz		Side 1	0.1183	0.1372	0.1571		
which is the worst		Side 2	0.1105	0.1271	0.1495		
case	00	Side 3	0.1182	0.1335	0.1574	0.045	0.400
within the	20	Side 4	0.1147	0.1294	0.1512	0.815	0.163
operation frequency range		Тор	0.1278	0.1473	0.1709		

#### **Magnetic Field Emissions**

Test Distance		Tool	Probe M	leasure Result(	A/m)	50 % Limit	10 % Limit
Operation frequency	(cm)	Test Position	zero charge	intermediate charge	full charge	( <b>A</b> /m)	(A/m)
326.5 kHz		Side 1	0.1613	0.1357	0.1075		
which is		Side 2	0.1532	0.1292	0.1022		
the worst case		Side 3	0.1674	0.1404	0.1115		
within the	20	Side 4	0.1631	0.1372	0.1094	0.815	0.163
operation frequency range		Тор	0.1786	0.1509	0.1193		





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#### **Electric Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (V/m)			50 % Limit (V/m)	10 % Limit (V/m)
			unload	Half load	full load		
326.5 kHz	20	Side 1	0.51	0.63	0.78	307	61.4
which is the worst		Side 2	0.63	0.77	0.89		
case within the		Side 3	0.52	0.61	0.77		
	20	20 Side 4	0.54	0.65	0.84		
operation frequency range		Тор	0.67	0.75	0.92		

#### **Electric Field Emissions**

O	Test Distance	Toot	Probe M	50 % Limit	10 % Limit		
Operation frequency	(cm)	Test Position	zero charge	intermediate charge	full charge	(V/m)	(V/m)
326.5 kHz which is		Side 1	0.79	0.61	0.49	307	61.4
		Side 2	0.86	0.72	0.64		
the worst case		Side 3	0.75	0.57	0.49		
within the	20	20 Side 4	0.68	0.55	0.46		
operation frequency range		Тор	0.93	0.71	0.61		



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For 1.778MHz:

Mode 00:

The max output power =5W Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position					10 % Limit (A/m)
			unload	Half load	full load		
1.778MHz which is the worst case within the operation frequency range		Side 1	0.0773	0.0907	0.1083	0.815	0.163
		Side 2	0.0722	0.0816	0.0992		
	20	Side 3	0.0314	0.0354	0.0479		
	20	Side 4 0.0723 0.0808 0.0982	0.0982	0.015	0.103		
		Тор	0.0874	0.0983	0.1157		

**Magnetic Field Emissions** 

Operation	Test Distance	Test	Probe M	50 % Limit	10 % Limit		
frequency	(cm)	Position	zero charge	intermediate charge	full charge	(A/m)	(A/m)
1.778MHz		Side 1	0.1073	0.0906	0.0714	0.815	0.163
which is the worst		Side 2	0.0924	0.0787	0.0623		
case	Side 4 0.0933 0.07	Side 3	0.0397	0.0332	0.0265		
within the operation frequency range		0.0787	0.0624	0.013	0.103		
		Тор	0.1129	0.0965	0.0882		





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#### **Electric Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (V/m)			50 % Limit (V/m)	10 % Limit (V/m)
			unload	Half load	full load		
1.778MHz		Side 1	0.53	0.64	0.79	307	61.4
which is the worst		Side 2	0.62	0.75	0.88		
case	20	Side 3	0.51	0.60	0.78		
within the	20	Side 4	0.55	0.67	0.86		
operation frequency range		Тор	0.68	0.77	0.94		

#### **Electric Field Emissions**

Lieuti i ieu Linissions									
Onevetien	Test Distance	Toot	Probe M	50 % Limit	10 % Limit				
Operation frequency	(cm)	Test Position	zero charge	intermediate charge	full charge	(V/m)	(V/m)		
1.778MHz		Side 1	0.78	0.60	0.47	307	61.4		
which is the worst		Side 2	0.87	0.71	0.63				
case	00	Side 3	0.76	0.56	0.47				
within the	20	Side 4	0.72	0.59	0.48				
operation frequency range		Тор	0.94	0.73	0.62				



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# 7 Photographs- RF exposure Setup photos

Refer to Appendix - RF Exposure Setup Photo for FYCR2210000423AT

- End of the Report -

