



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240400159002

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## Human Exposure Report

**Application No.:** SZCR2404001590AT (SGS SZ NO.: T52410280250EM)  
**Applicant:** SCX DESIGN  
**Address of Applicant:** 44 rue de la Jonquiere, Paris 75017, France  
**Manufacturer:** SCX DESIGN  
**Address of Manufacturer:** 44 rue de la Jonquiere, Paris 75017, France  
**Equipment Under Test (EUT):**  
**EUT Name:** SCX DESIGN(TM) FULL COLOR BAMBOO15W WIRELESS CHARGER, SCX DESIGN(TM) FULL COLOR METAL 15W WIRELESS CHARGER  
**Model No.:** W31.00L/32527, W32.00L/32528 ♣  
 ♣ Please refer to section 3.1 of this report which indicates which model was actually tested and which were electrically identical.  
**Trade Mark:** SCX Design™  
**FCC ID:** 2A2OH-W31W32  
**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310  
 47 CFR PART 2, Subpart J, Section 2.1091  
**Date of Receipt:** 2024-04-29  
**Date of Test:** 2024-05-08 to 2024-07-09  
**Date of Issue:** 2024-07-15

<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 Technical Services Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-07-15		Original

<b>Authorized for issue by:</b>			
		<i>Martin Tang</i>	
		<b>Martin Tang/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:	USB-C input: DC 5V/2A or DC9V/2.4A Wireless charger output: 5W,15W
Cable(s):	Type-C USB cable:about 105cm unshielded
Operation frequency:	123.4kHz to 173.2kHz
Modulation type:	Load modulation
Antenna type:	Loop Antenna

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

#### Declaration of EUT Family Grouping:

Model No.: W31.00L/32527, W32.00L/32528

Only the model W32.00L/32528 was tested, since according to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on model No., color, decoration and material of shell.

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
iPhone 12	Apple	MGGU3CH/A	REF. No.SEA16M00
E-loading	SGS	N/A	REF. No.SEA02A400
Adapter	XIAOMI	MDY-08	REF. No.SEA05M02F



### 3.3 Test Location

All tests were performed at:

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

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, 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 (Member No. 1937)**

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. Shenzhen EMC laboratory 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: CN1336**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• **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

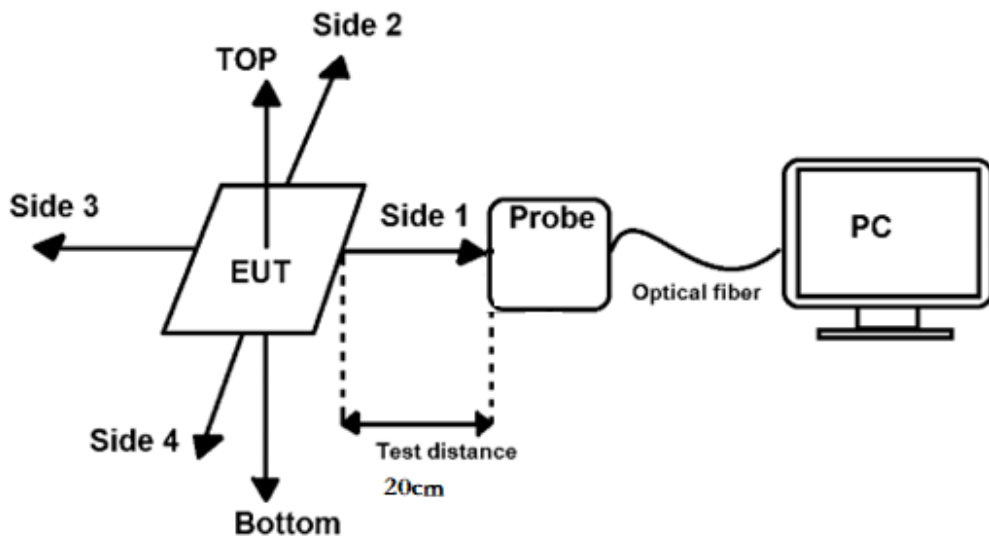
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	3m Anechoic Chamber	AUDIX	N/A	SEM001-02	2025-04-01
2	MAGPy-8H3D+E3D	SPEAG	3061	SEM060-31	2025/04/11
3	MAGPy-DAS	SPEAG	3063	SEM060-32	2025/04/11

## 5 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Charge mode_Keep the EUT charging(5W)
Final test	01	Charge mode_Keep the EUT charging(15W)



## 6 Test Block Diagram



## 7 Test Results

### 7.1 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: 20cm

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).





**7.1.1 E.U.T. Operation**

**Operating Environment:**

Temperature: 22.3 °C Humidity: 52.2 % RH Atmospheric Pressure: 1020 mbar

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.

**7.1.2 Measurement Data**

Test mode : 01

**E-loading has been charged at unload, half load and full load.**

**Magnetic Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)			50 % Limit (A/m)	Verdict
			unload	Half load	full load		
127 kHz which is the worst case within the operation frequency range	20	Side 1	0.011	0.026	0.039	0.815	Pass
		Side 2	0.013	0.049	0.076		
		Side 3	0.019	0.042	0.073		
		Side 4	0.016	0.046	0.085		
		Top	0.017	0.134	0.290		

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

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50 % Limit (A/m)	Verdict
			zero charge	intermediate charge	full charge		
129 kHz which is the worst case within the operation frequency range	20	Side 1	0.024	0.013	0.009	0.815	Pass
		Side 2	0.022	0.015	0.010		
		Side 3	0.036	0.027	0.008		
		Side 4	0.027	0.044	0.012		
		Top	0.061	0.057	0.020		



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**Mobile phone has been charged at zero charge, intermediate charge, and full charge.  
Electric Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (V/m)			50 % Limit (V/m)	Verdict
			unload	Half load	full load		
127 kHz which is the worst case within the operation frequency range	20	Side 1	0.023	0.943	1.521	307	Pass
		Side 2	0.019	0.875	1.583		
		Side 3	0.013	0.692	1.112		
		Side 4	0.016	0.971	1.527		
		Top	0.021	2.163	3.446		

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(V/m)			50 % Limit (V/m)	Verdict
			zero charge	intermediate charge	full charge		
129 kHz which is the worst case within the operation frequency range	20	Side 1	0.593	0.315	0.063	307	Pass
		Side 2	0.612	0.368	0.075		
		Side 3	0.375	0.161	0.043		
		Side 4	0.524	0.262	0.070		
		Top	1.203	0.713	0.129		

## 8 Test Setup Photos

Refer to Appendix - Test Setup Photo for SZCR2404001590AT

- End of the Report -



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