



RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2205000607AT
Applicant: ASAP Technology(Jiangxi) Co. Ltd.
Address of Applicant: Ji'an Industrial Park, Ji'an, Jiangxi 343100, China
Manufacturer: ASAP Technology(Jiangxi) Co. Ltd.
Address of Manufacturer: Ji'an Industrial Park, Ji'an, Jiangxi 343100, China
Equipment Under Test (EUT):
EUT Name: Wireless Charger
Model No.: WIBWHT100093011
Trade Mark: Onn.
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
47 CFR PART 2, Subpart J, Section 2.1091
Date of Receipt: 2022-05-06
Date of Evaluation: 2022-05-08 to 2022-05-29
Date of Issue: 2022-05-30

Evaluation Result:

Pass*

* In the configuration evaluated, the EUT complied with the standards specified above.

Kobe Jian

Kobe Jian
EMC Laboratory Manager



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

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-05-30		Original

Authorized for issue by				
				
		Curry Wu/Project Engineer		
				
		Ricky Liu/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.

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4 General Information

4.1 Details of E.U.T.

Power supply:	Adapter Model: WIBWHT100093997 Input: 100-240V~50/60Hz 0.75A Output: 9V/3.3A Wireless Input: 9V/3.3A Wireless Output 1: 15W Max. Wireless Output 2: 2.5W Max. Wireless Output 3: 5W Max.
Cable(s):	DC Cable; 150cm unshielded
Modulation Type:	Load modulation
Antenna Type:	Loop antenna
Operation Frequency:	Output 1: 118.6kHz to 121.0kHz Output 2: 325.2kHz to 327.8kHz Output 3: 126.8kHz to 129.0kHz

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Earphone	Apple	A2566	REF. No.SEA10D00
iPhone 12	Apple	MGGU3CH/A	REF. No.SEA16M00
Watch	Apple	Series 5	REF. No.SEA32A00
E-loading	SGS	N/A	REF. No.SEA42A00
E-loading	SGS	N/A	REF. No.SEA42A01
E-loading	SGS	N/A	REF. No.SEA42A02



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4.3 Test modes description:

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 5W).
Pre-scan	01	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 7.5W).
Pre-scan	02	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 10W).
Pre-scan	03	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 15W).
Pre-scan	04	Operation(Wireless):Keep the EUT pairing with other devices(Output2: 2.5W).
Pre-scan	05	Operation(Wireless):Keep the EUT pairing with other devices(Output3: 5W).
Pre-scan	06	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 5W+Output2: 2.5W).
Pre-scan	07	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 7.5W+Output2: 2.5W).
Pre-scan	08	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 10W+Output2: 2.5W).
Pre-scan	09	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 15W+Output2: 2.5W).
Pre-scan	10	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 5W+Output 3: 5W).
Pre-scan	11	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 7.5W+Output3: 5W).
Pre-scan	12	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 10W+Output 3: 5W).
Pre-scan	13	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 15W+Output 3: 5W).
Pre-scan	14	Operation(Wireless):Keep the EUT pairing with other devices(Output2: 5W+Output 3: 5W).
Pre-scan	15	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 5W+Output2: 2.5W+Output 3: 5W).
Pre-scan	16	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 7.5W+Output2: 2.5W+Output 3: 5W).
Pre-scan	17	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 10W+Output2: 2.5W+Output 3: 5W).
Final test	18	Operation(Wireless):Keep the EUT pairing with other devices(Output1: 15W+Output2: 2.5W+Output 3: 5W).

4.4 Measurement Uncertainty

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

5 Equipments Used during Test

RF Exposure					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
743 Compact 3m Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	EMC0525	2019-10-20	2022-10-19
Electric and Magnetic Field Analyzer	Narada	NBM-550	EMC2143	2022-01-06	2023-01-05
Probe	Narada	EHP-50F	EMC2143	2022-01-06	2023-01-05

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2021-07-08	2022-07-07
DMM	Fluke	73	EMC0007	2021-07-08	2022-07-07



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5.1 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

5.2 Facility

The facility is recognized, certified, or accredited by the following organizations:

- **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.



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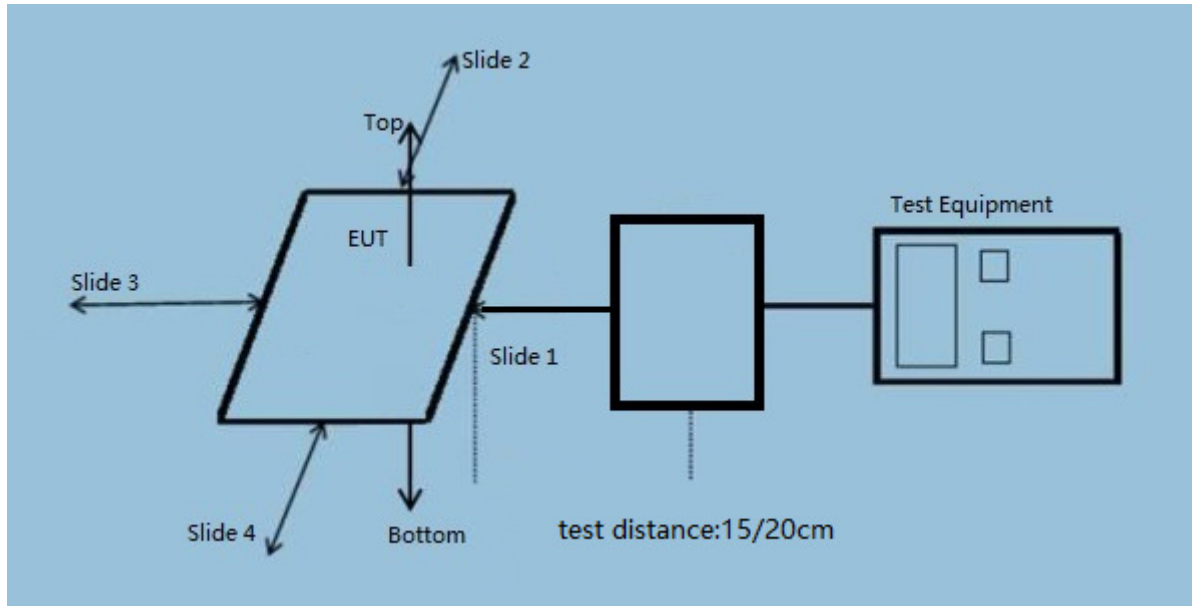
5.3 Deviation from Standards

None

5.4 Abnormalities from Standard Conditions

None

5.5 Test Block Diagram



6 Test Results

6.1 RF Exposure test

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

Measurement Distance: 15/20cm

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/cm ²)	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/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	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).

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

$$S = \frac{PG}{4\pi d^2}$$

S = power density (mW/cm²)
 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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6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.8 °C Humidity: 51.4% RH Atmospheric Pressure: 1010 mbar

EUT Operation:

This device has been tested with unload, half-load and full load, and the device has been tested with load at zero charge, intermediate charge, and full charge.

Remark: Both configuration which specified in the manual were pre-scan during the test, only the worst case data are shown in the test report. The worst case configuration please refer to the setup photos.

6.1.2 Measurement Data

Mode 18:

The max output 1 power =15W; The max output 2 power =2.5W; The max output 3 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)
			unload	Half load	full load		
119.3KHz	15	Side 1	0.122	0.139	0.166	0.815	0.163
		Side 2	0.119	0.137	0.157		
		Side 3	0.118	0.134	0.156		
		Side 4	0.120	0.138	0.160		
119.3KHz	20	Top	0.144	0.142	0.164		
128.5KHz			0.052	0.060	0.069		
326.4KHz			0.045	0.054	0.062		

Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50 % Limit (A/m)	10 % Limit (A/m)
			zero charge	intermediate charge	full charge		
119.2KHz	15	Side 1	0.165	0.139	0.111	0.815	0.163
		Side 2	0.160	0.135	0.108		
		Side 3	0.163	0.138	0.110		
		Side 4	0.163	0.138	0.110		
119.2KHz	20	Top	0.176	0.152	0.126		
128.2KHz			0.065	0.057	0.048		
326.3KHz			0.047	0.040	0.038		

7 Photographs- RF exposure Setup photos

Refer to Appendix – RF Exposure Setup Photo for GZCR2205000606AT

- End of the Report -