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

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

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Human Exposure Report

Application No.:	SZEM1806005084CR
Applicant:	SHENZHEN LANNENGSHITONG ELECTRONICS CO., LTD
Address of Applicant:	Floor3 No.40 xinhe road shangmugu village Pinghu neighborhood Longgang District, Shenzhen 518110, China
Manufacturer:	SHENZHEN LANNENGSHITONG ELECTRONICS CO., LTD
Address of Manufacturer:	Floor3 No.40 xinhe road shangmugu village Pinghu neighborhood Longgang District, Shenzhen 518110, China
Factory:	SHENZHEN LANNENGSHITONG ELECTRONICS CO., LTD
Address of Factory:	Floor3 No.40 xinhe road shangmugu village Pinghu neighborhood Longgang District, Shenzhen 518110, China
Equipment Under Test (EUT):	
EUT Name:	UbioLabs Fast Charge Wireless Charging Pad
Model No.:	AWC1018, AWC1019 ♣
♣	Please refer to section 2.1 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark:	UbioLabs
FCC ID:	2APNH-AWC1018
Standards:	47 CFR PART 1, SUBPART I, SECTION 1.1310
Date of Receipt:	2018-06-12
Date of Test:	2018-06-14 to 2018-06-15
Date of Issue:	2018-06-21
Test Result :	**Pass***

* In the configuration tested, the EUT complied with the standards specified above

SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. SHENZHEN BRANCH

Keny Xu
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

1 Contents

2 General Information

2.1 Details of E.U.T.

Power supply:	Input: DC 5-9V/ 2A MAX
	Output: DC 5W-10W MAX
	AC/DC adapter information:
	Model: CHG1045
	B/N: 050418HJT
	Input: AC 110-240V, 50/60Hz
	Output: DC 9V/2A
Cable:	DC cable: 180cm, unshielded
Operation frequency:	115.2-162.4 kHz
Modulation type:	Load modulation
Antenna type:	Inductive Loop Coil Antenna
Remark:	Tests were conducted in all three load modes(5W/7.5W/10W) and the worst case (5W) is reported only.

Remark:

Model No.: AWC1018, AWC1019

Only the model AWC1018 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, only different on model number, and enclosure color.

2.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
E-loading	provided by SGS	N/A	DC 5V/1A
iPhone 8	Apple	A1863	F4GVQ656JC6D
Mobile Phone	SAMSUNG	SM-G9500	R28J9140LPB

2.3 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, Shenzhen, Guangdong, China. 518057.

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

No tests were sub-contracted.

2.4 Test Facility

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

• **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• **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 10m Semi-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.: G-823, R-4188, T-1153 and C-2383 respectively.

• **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

• **Industry Canada (IC)**

The 10m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-3.

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

3 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2018-06-19
2	Electric Field Meter	Schaffner	EMC20	EMC068	2019-03-21

4 Test Results

4.1 RF Exposure test

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

Measurement Distance: 15cm

Limit:

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).				

4.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 51 % 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.

4.1.2 Measurement Data

1: Output Voltage=DC 5V; The max output current =1A;Calculation of resistor value=5.0Ω

Electric Field Emissions

Test frequency	Test Distance(cm)	Test Position	Probe Measure Result(V/m)	50% Limit (V/m)	Result
145.8 kHz	15	Side 1	1.23	307	Pass
		Side 2	1.54	307	Pass
		Side 3	1.15	307	Pass
		Side 4	1.37	307	Pass
		Top	1.33	307	Pass

Magnetic Field Emissions

Test frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50%Limit (A/m)	Result
145.8 kHz	15	Side 1	0.0045	0.815	Pass
		Side 2	0.0031	0.815	Pass
		Side 3	0.0049	0.815	Pass
		Side 4	0.0025	0.815	Pass
		Top	0.0037	0.815	Pass

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

Electric Field Emissions

Test frequency	Test Distance (cm)	Test Position	Probe Measure Result (V/m)			50% Limit (V/m)	Result
			zero charge	intermediate charge	full charge		
145.8 kHz	15	Side 1	1.26	1.21	1.26	307	Pass
		Side 2	1.58	1.56	1.51	307	Pass
		Side 3	1.19	1.11	1.18	307	Pass
		Side 4	1.33	1.31	1.36	307	Pass
		Top	1.32	1.33	1.36	307	Pass

Magnetic Field Emissions

Test frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)			50%Limit (A/m)	Result
			zero charge	intermediate charge	full charge		
145.8 kHz	15	Side 1	0.0040	0.0049	0.0046	0.815	Pass
		Side 2	0.0030	0.0037	0.0034	0.815	Pass
		Side 3	0.0047	0.0042	0.0044	0.815	Pass
		Side 4	0.0024	0.0020	0.0025	0.815	Pass
		Top	0.0032	0.0036	0.0036	0.815	Pass

- End of the Report -