

ACCREDITED
CERT #3816.01

Report No.: SZEM190101017503

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### **Human Exposure Report**

Application No.: SZEM1901010175CR

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 Wireless Charging Dock and Hub

Model No.: AWC1040
Trade mark: Ubiolabs

FCC ID: 2APNH-AWC1040

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

**Date of Receipt:** 2019-01-09

**Date of Test:** 2019-01-09 to 2019-05-14

**Date of Issue:** 2019-05-17

Test Result : Pass\*

Keny Xu EMC Laboratory Manager

Ceny. Ku



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



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Revision Record						
Version	Chapter	Modifier	Remark			
01		2019-05-17		Original		

Authorized for issue by:		
	Bim chen	
	Bill Chen /Project Engineer	_
	EvicFu	
	Eric Fu /Reviewer	



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#### 3 General Information

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

Power supply: Input:DC 5-15V/3.5A Max

Output:Wireless 5V 10W Max

Double USB 1/2: 5V2.4A each

Test voltage: 110V

Cable: USB cable:175cm unshielded

Antenna Type: Loop Antenna Modulation Type: Load Modulation

Operation Frequency: 110.77kHz to 206.15kHz

Remark: Tests were conducted in all three load modes and the worst case 10W(DC

9V/1.1A) is reported only.

#### 3.2 Description of Support Units

The EUT has been tested as an independent unit.



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#### 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:

#### • 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 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	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2020-02-06



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#### 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 (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 General Population/Uncontrolled 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).

#### 5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.5 °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.



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



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#### 5.1.2 Measurement Data

#### **Magnetic Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50% Limit (A/m)
		Side 1	0.0192	0.815
	15	Side 2	0.0237	0.815
147.2 kHz		Side 3	0.0212	0.815
		Side 4	0.0234	0.815
		Тор	0.0161	0.815

#### **Magnetic Field Emissions**

Operation	Test	Test	Probe Measure Result(A/m)			50%Limit
frequency	Distance (cm)	Position	zero charge	intermediate charge	full charge	(A/m)
	15	Side 1	0.0206	0.0177	0.0143	0.815
		Side 2	0.0244	0.0213	0.0192	0.815
147.2 kHz		Side 3	0.0225	0.0194	0.0177	0.815
		Side 4	0.0229	0.0218	0.0203	0.815
		Тор	0.0174	0.0156	0.0134	0.815



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### 6 Photographs

#### 6.1 Test setup photos

Please refer to RF Exposure Setup Photos.

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