



FCC RF EXPOSURE REPORT

For

Wireless Charging Stand with USB Charging Ports

**MODEL NUMBER: AWC1053, AWC1053AW, AWC1053SG, AWC1053XX
(X would be any Arabian number or English letter or blank)**

FCC ID: 2ATGY-AWC1053

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Prepared for

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Prepared by

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	06/25/2018	Initial Issue	



TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. REQUIREMENT	6



1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Ubio Labs, Inc.
Address: 2821 Northup Way, Suite 250, Bellevue, WA 98004, USA

Manufacturer Information

Company Name: Shenzhen PYS Industrial Co., LTD
Address: Floor 3,8,12 · Bldg 9#, Lianhua Industrial Zone, Loangyuan Road, Longhua Street, Longhua District, Shenzhen

EUT Description

EUT Name: Wireless Charging Stand with USB Charging Ports
Model: AWC1053, AWC1053AW, AWC1053SG, AWC1053XX
(X would be any Arabian number or English letter or blank)
Model Difference: All the same except for the model number and color.
Brand Name: /
Sample Status: Normal
Sample ID: 2313714
Sample Received Date: May 24, 2019
Date of Tested: June 3, 2019 ~ June 24, 2019

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§1.1307	PASS
FCC 47CFR§1.1310	PASS
FCC 47CFR§2.1093	PASS
FCC 47CFR§2.1091	PASS

Tested By:

Checked By:

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Project Engineer
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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC 47CFR§1.1307(b)(1), FCC 47CFR§1.1310, FCC 47CFR§2.1093, 680106 D01 RF Exposure wireless charging apps v03.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p>IC (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
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Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

4. REQUIREMENT

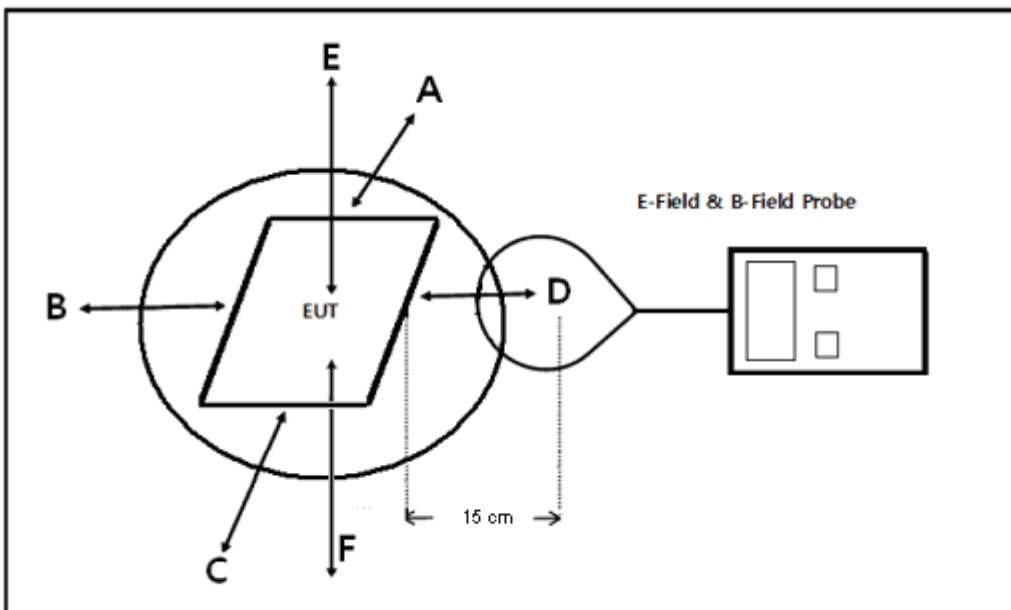
RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (Minutes)
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

METHOD OF MEASUREMENT

- The RF exposure test was performed in shielded chamber.
- The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.
- The measurement probe used to search of highest strength.
- The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- The EUT were measured according to the dictates of KDB 680106D01v03.

BLOCK DIAGRAM OF TEST SETUP



Note: As bottom point is not required to test for desktop devices, so we scanning all the surfaces and recorded the worst level in F.



EQUIPMENT APPROVAL CONSIDERATIONS

The EUT does comply with KDB 680106D01v03.

- 1) Power transfer frequency is less than 1 MHz.
Yes; the device operated in the frequency range from 110kHz to 205kHz.
- 2) Output power from each primary coil is less than or equal to 15 watts.
Yes; the maximum output power of each primary coil is 10 watts.
- 3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
The transmitter includes two coils.
- 4) Client device is placed directly in contact with the transmitter.
Yes; Client device is placed directly in contact with the transmitter.
- e) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
Yes; The EUT is a mobile devices.
- f) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.
The EUT field strength levels are bigger than 50% of the MPE limit.

MEASURING INSTRUMENT USED

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Electric and Magnetic Field Analyzer	Narda	EHP-200A	170WX90204	April 21, 2019	April 21, 2020



H FIELD STRENGTH

Test mode for wireless charger:

Config	Test Mode	Description
Mode 1	Standby	EUT alone powered by AC/DC adapter
Mode 2	Operating	EUT and iPhone powered by AC/DC adapter
Mode 3	Operating	EUT and 10W load powered by AC/DC adapter
Mode 4	Operating	EUT and 5W load powered by AC/DC adapter

The USB-A and USB-C loads will add to all test modes during test.

Test Result for Coil 1:

H-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT (A/m)

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 1		
	A/m		
A	0.2166		1.63
B	0.1721		1.63
C	0.5422		1.63
D	0.2988		1.63
E	0.1759		1.63
F	0.3877		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 3		
	A/m		
A	0.6133		1.63
B	0.5196		1.63
C	1.0240		1.63
D	0.7534		1.63
E	0.4638		1.63
F	0.8233		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 4		
	A/m		
A	0.3122		1.63
B	0.2866		1.63
C	0.7643		1.63
D	0.4211		1.63
E	0.2355		1.63
F	0.5125		1.63



E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 1		
	V/m		
A	2.5677		614
B	2.0544		614
C	4.3211		614
D	2.1789		614
E	0.6788		614
F	2.6574		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 3		
	V/m		
A	7.0408		614
B	6.9733		614
C	9.3503		614
D	5.5054		614
E	1.3569		614
F	4.3192		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 4		
	V/m		
A	4.8765		614
B	4.0755		614
C	5.5433		614
D	3.2311		614
E	0.8533		614
F	2.2355		614



Test Result for Coil 2:

H-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT (A/m)

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 1		
	A/m		
A	0.2158		1.63
B	0.1729		1.63
C	0.5417		1.63
D	0.2981		1.63
E	0.1752		1.63
F	0.3871		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 3		
	A/m		
A	0.6136		1.63
B	0.5199		1.63
C	1.0248		1.63
D	0.7527		1.63
E	0.4631		1.63
F	0.8227		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 4		
	A/m		
A	0.3131		1.63
B	0.2861		1.63
C	0.7654		1.63
D	0.4217		1.63
E	0.2363		1.63
F	0.5132		1.63



E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 1		
	V/m		
A	2.5683		614
B	2.0539		614
C	4.3217		614
D	2.1782		614
E	0.6785		614
F	2.6571		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 3		
	V/m		
A	7.0414		614
B	6.9727		614
C	9.3512		614
D	5.5059		614
E	1.3561		614
F	4.3186		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 4		
	V/m		
A	4.8757		614
B	4.0762		614
C	5.5439		614
D	3.2305		614
E	0.8527		614
F	2.2343		614



Test Result for put 2 loads at the EUT (only one coil will active):

H-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT (A/m)

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 1		
	A/m		
A	0.2166		1.63
B	0.1725		1.63
C	0.5424		1.63
D	0.2988		1.63
E	0.1757		1.63
F	0.3868		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 3		
	A/m		
A	0.6142		1.63
B	0.5194		1.63
C	1.0243		1.63
D	0.7521		1.63
E	0.4637		1.63
F	0.8221		1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 4		
	A/m		
A	0.3138		1.63
B	0.2865		1.63
C	0.7659		1.63
D	0.4212		1.63
E	0.2368		1.63
F	0.5125		1.63



E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 1		
	V/m		
A	2.5677		614
B	2.0531		614
C	4.3225		614
D	2.1773		614
E	0.6789		614
F	2.6577		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 3		
	V/m		
A	7.0411		614
B	6.9722		614
C	9.3518		614
D	5.5051		614
E	1.3567		614
F	4.3181		614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 4		
	V/m		
A	4.8751		614
B	4.0768		614
C	5.5432		614
D	3.2311		614
E	0.8533		614
F	2.2337		614

Note 1: All the modes had been tested, but only the worst data recorded in the report.

END OF REPORT