



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

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

Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594
Email: ee.shenzhen@sgs.com

Report No.: SZEM151200759302

Page: 1 of 17

Human Exposure Report

Application No.: SZEM1512007593PS
Applicant: Dong Guan Arun Industrial Co., Ltd
Address of Applicant: NO.18, Xinfeng Street, Changlong Village, HuangjiangTown, Dongguan City
GuangDong
Manufacturer/Factory: Dong Guan Arun Industrial Co., Ltd
Address of Manufacturer/Factory: NO.18, Xinfeng Street, Changlong Village, HuangjiangTown, Dongguan City
GuangDong
Equipment Under Test (EUT):
EUT Name: WIRELESS CHARGER
Model No.: WX0001
Trade Mark: ABS, ARUN
FCC ID: 2AHCLWX0001
Standards: 47 CFR PART 1, Subpart I, Section 1.1310
Date of Receipt: 2015-12-09
Date of Test: 2015-12-30 to 2016-01-14
Date of Issue: 2016-01-19

Test Result :	Pass*
----------------------	--------------

* This report is just a test result base on the test method and limit requirement shown in the form on the second page. 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..

Authorized Signature:



Starry Li
EMC Laboratory Project Engineer



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

Report No.: SZEM151200759302
Page: 2 of 17

2 Contents

	Page
1 COVER PAGE	1
2 CONTENTS	2
3 GENERAL INFORMATION	3
3.1 DETAILS OF E.U.T.	3
3.2 DESCRIPTION OF SUPPORT UNITS	3
3.3 TEST LOCATION	3
3.4 TEST FACILITY	4
3.5 DEVIATION FROM STANDARDS	4
3.6 ABNORMALITIES FROM STANDARD CONDITIONS	4
4 EQUIPMENTS USED DURING TEST	4
5 TEST RESULTS	5
5.1 RF EXPOSURE TEST	5
5.1.1 E.U.T. Operation	5
Operating Environment:	5
EUT Operation:	5
5.1.2 Measurement Data	6
6 PHOTOGRAPHS	8
6.1 TEST PHOTOS	8
6.2 EUT PHOTOS	14-17



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

Report No.: SZEM151200759302
Page: 3 of 17

3 General Information

3.1 Details of E.U.T.

Power Supply: Input voltage: DC 5V 2A
Output voltage: DC 5V 0.7A
USB Cable: 150cm unshielded
Operation Frequency: 110kHz-205kHz

3.2 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
Cement resistor	Supplied by SGS	REF. No.:SEA0600
Adapter	Apple	A1357 W010A051
Wireless charging receiver	Supplied by client	N/A
Mobile Phone	SAMSUNG	GALAXY S5

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.



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

Report No.: SZEM151200759302

Page: 4 of 17

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 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 3m Semi-anechoic chambers and the 10m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-2, 4620C-3.

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 (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2016-06-10
2	Electric Filed Meter	Schaffner	EMC20	EMC068	2016-05-08
3	DC Electronic Load	PRODIGIT	3302F	30802F00533	2016-12-05



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

Report No.: SZEM151200759302
Page: 5 of 17

5 Test Results

5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310
Measurement Distance: 10cm
Test voltage: AC 120V 60Hz
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).				

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °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.



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

Report No.: SZEM151200759302
Page: 6 of 17

5.1.2 Measurement Data

1:Output Voltage=DC 5V; The max output power =3.5W;Calculation of resistor value=9.78Ω

Electric Field Emissions

Test Position	Probe Measure Result(V/m)	Limit(V/m)	30% Limit(V/m)
Side 1	4.34	614	184.2
Side 2	4.25	614	184.2
Side 3	4.52	614	184.2
Side 4	4.83	614	184.2
Top	6.64	614	184.2
Bottom	3.87	614	184.2

Magnetic Field Emissions

Test Position	Probe Measure Result(A/m)	Limit(A/m)	30% Limit(A/m)
Side 1	0.0813	1.63	0.489
Side 2	0.0853	1.63	0.489
Side 3	0.0836	1.63	0.489
Side 4	0.0864	1.63	0.489
Top	0.1022	1.63	0.489
Bottom	0.0667	1.63	0.489



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

Report No.: SZEM151200759302

Page: 7 of 17

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

Electric Field Emissions

Test Position	Probe Measure Result(V/m)			Limit(V/m)/ 30%Limit(V/m)
	zero charge	intermediate charge	full charge	
Side 1	3.92	4.68	3.36	614
Side 2	3.85	4.45	3.87	614
Side 3	4.57	4.57	4.47	614
Side 4	3.44	3.78	3.34	614
Top	5.36	5.34	5.65	614
Bottom	2.58	2.68	2.57	614

Magnetic Field Emissions

Test Position	Probe Measure Result(A/m)			Limit(A/m)/ 30%Limit(A/m)
	zero charge	intermediate charge	full charge	
Side 1	0.0186	0.0157	0.0189	1.63
Side 2	0.0166	0.0166	0.0187	1.63
Side 3	0.0188	0.0132	0.0198	1.63
Side 4	0.0177	0.0135	0.0176	1.63
Top	0.0275	0.0265	0.0297	1.63
Bottom	0.0153	0.0175	0.0190	1.63

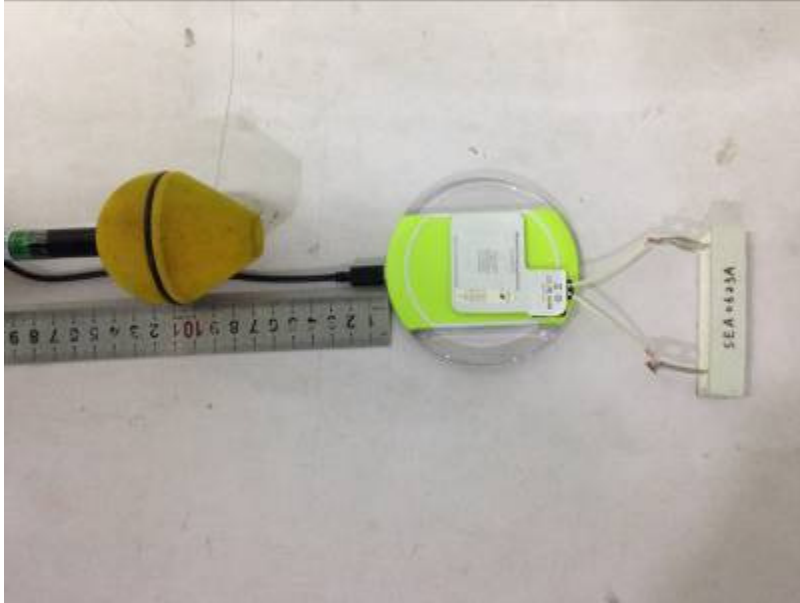
6 Photographs

6.1 Test photos

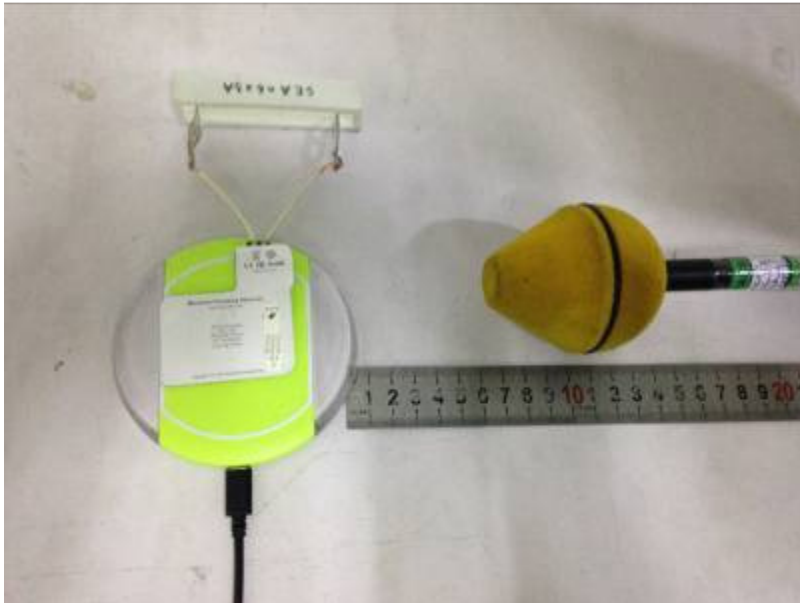
Test Model No.: WX0001

Test with full load

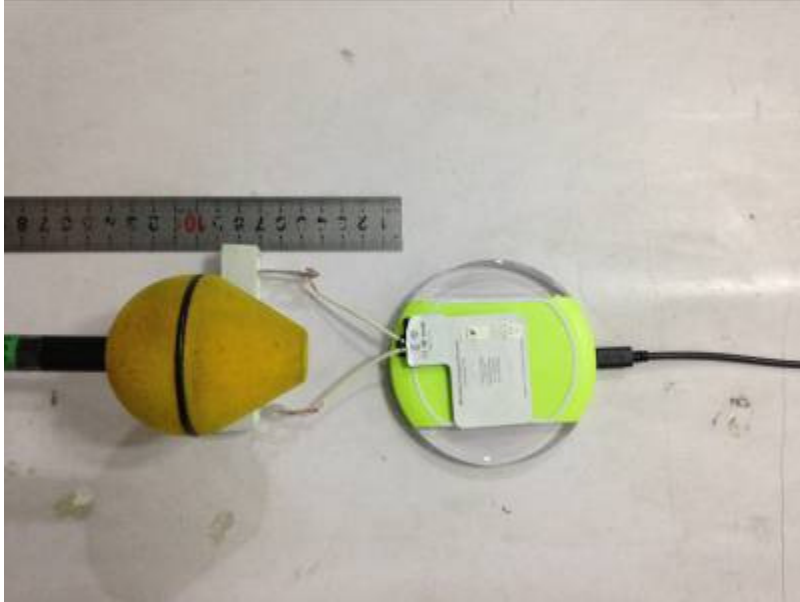
Side 1



Side 2



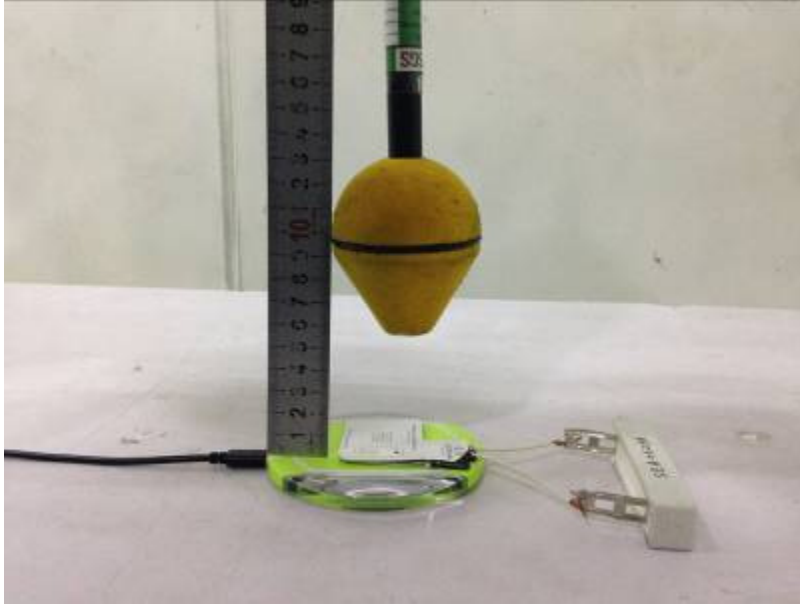
Side 3



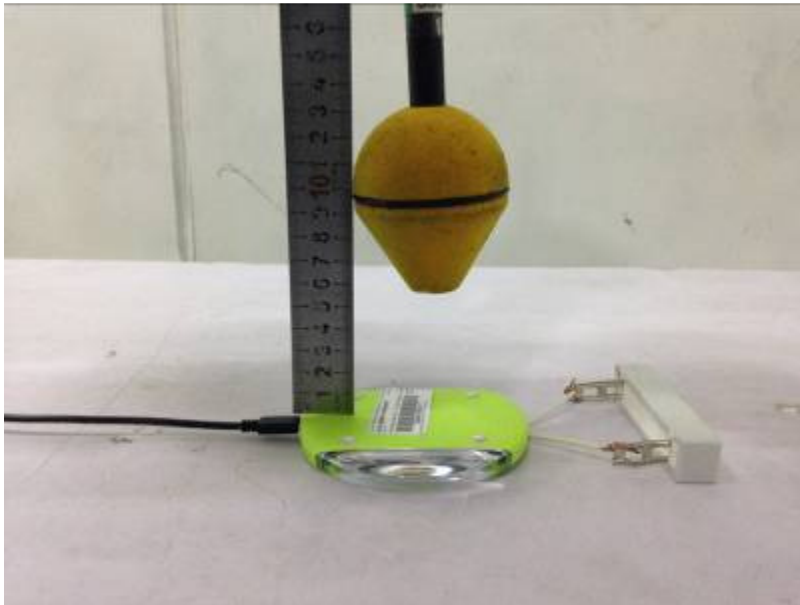
Side 4



Top



Bottom



Test with mobile phone at zero charge,intermediate charge,full charge

Side 1



Side 2



Side 3



Side 4



Top



Bottom



6.2 EUT photos

