



RF EXPOSURE REPORT

Applicant: Guangzhou Smamao Electronic Technology Co.,Ltd
Address of Applicant: Room 811, Building 8, No.315, Central City Middle Road, Yuexiu District, Guangzhou, China
Manufacturer: Guangzhou Smamao Electronic Technology Co.,Ltd
Address of Manufacturer: Room 811, Building 8, No.315, Central City Middle Road, Yuexiu District, Guangzhou, China
Equipment Under Test (EUT)

Product Name: Fast Wireless Charger

Model No.: Q550, S110, S220, S440, S550, S660, S770, S880, S990, S100, S200, S300, S400, S500, S600, S700, S800, S900, SNPA087AB, GEPA090AB

FCC ID: 2AKQO-Q550

Applicable standards: FCC CFR Title 47 Part 15 Subpart C:2016

Date of sample receipt: May 04, 2017

Date of Test: May 05-11, 2017

Date of report issued: May 12, 2017

Test Result : PASS *

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

Authorized Signature:

Robinson Lo

Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	May 12, 2017	Original

Prepared By:

Tiger Chen

Project Engineer

Date:

May 12, 2017

Check By:

Andy. Wu

Reviewer

Date:

May 12, 2017

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4 General Information

4.1 General Description of EUT

Product Name:	Fast Wireless Charger
Model No.:	Q550, S110, S220, S440, S550, S660, S770, S880, S990, S100, S200, S300, S400, S500, S600, S700, S800, S900, SNPA087AB, GEPA090AB
Test Model No.:	Q550
<i>Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The only differences are the model name and appearance color for commercial purpose.</i>	
Operation Frequency:	120kHz ~ 205KHz
Modulation type:	Backscatter modulation
Antenna Type:	Inductive loop coil antenna
Antenna gain:	0dBi (declared by manufacturer)
Power supply:	Charging voltage: DC 5.0V/2A or DC 9V/1.8A

4.2 Test Facility

- **FCC —Registration No.: 600491**

Global United Technology 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 files. Registration 600491, June 22, 2016.

- **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2, August 15, 2016

4.3 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

4.4 Other Information Requested by the Customer

None.

4.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC Approval
N/A	Load	N/A	N/A	VOC

5 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)*6.4(H)	N/A	July 03 2015	July 02 2020
2	Exposure Level Tester	Narda	ELT-400	N-0231	June 29 2016	June 28 2017
3	Magnetic field probe 100cm ²	Narda	ELT probe 100cm ²	M0675	June 29 2016	June 28 2017

6 Method of measurement

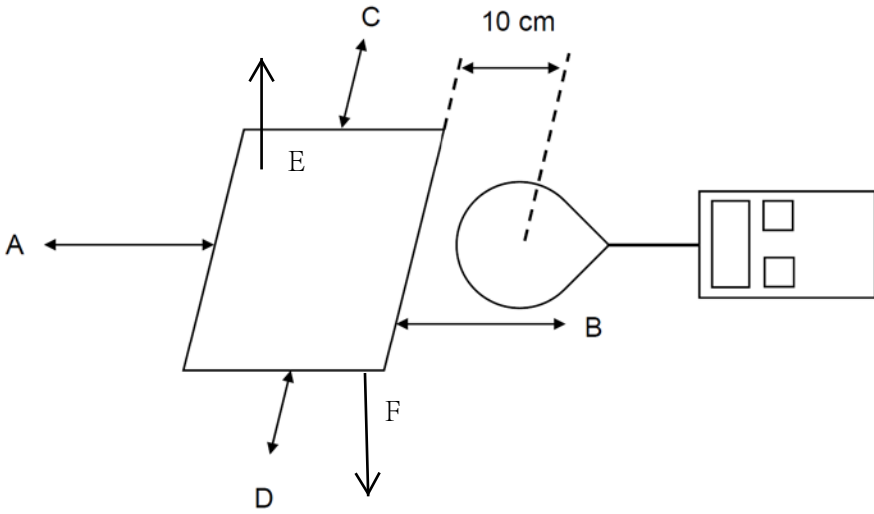
6.1 Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1093 RF exposure is calculated.

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02.

7 Test Result

Test setup:	
Test Procedure:	<p>a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.</p> <p>b) The measurement probe was placed at test distance (10cm) which is between the edge of the charger and the geometric centre of probe.</p> <p>c) The turn table was rotated 360d degree to search of highest strength.</p> <p>d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.</p> <p>e) The EUT were measured according to the dictates of KDB 680106D01v02.</p>

7.1 Equipment Approval Considerations:

The EUT does comply with item 5.2 of KDB 680106 D01v02	
a)	Power transfer frequency is less than 1MHz.
	Yes; the device operate in the frequency range from 120 KHz to 205 KHz
b)	Output power from each primary coil is less than 5 watts
	Yes; the maximum output power of the primary coil is 4W<5W.
c)	The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling only between individual pair of coils.
	Yes; the transfer system includes only single primary and secondary coils.
d)	Client device is inserted in or placed directly in contact with the transmitter.
	Yes; Client device is placed directly in contact with the transmitter.
e)	The maximum coupling surface area of the transmit (charging) device:
	Yes; The EUT coupling surface area was 82.6 cm ² >60cm ²
f)	Aggregate leakage fields at 10cm surrounding the device from all simultaneous transmitting coils are demonstrated to be less than 30% of the MPE limit.
	Yes; The EUT field strength levels are 30% x MPE limit.

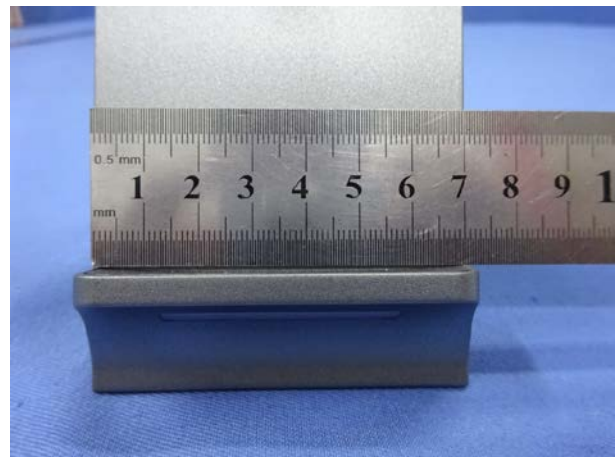
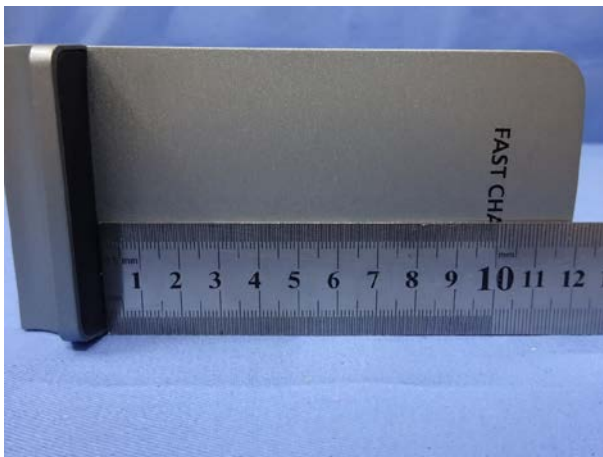
7.2 E and H field Strength

Frequency Range (MHz)	E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)						Limits (V/m)
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	
0.120-0.205	1.13	2.02	0.58	0.66	1.98	2.15	614

Frequency Range (MHz)	H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)						Limits (A/m)
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	
0.120-0.205	0.61	0.78	0.44	0.55	0.72	0.83	1.63

Note: Full load and no load mode all have been tested, only worse case full load mode is reported

8 Test Setup Photo



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