



FCC TEST REPORT
FCC ID: 2AQ93-WP08A01

On Behalf of

SHENZHEN GOODWIN TECHNOLOGY CO.,LTD

Wireless Charger

Model No.: WP08, 78516, 78566

Prepared for : SHENZHEN GOODWIN TECHNOLOGY CO.,LTD
Address : 4/F,Buiding A,Huayuan Industrial park,Fenghuang No.1
Industrial Area,Fuyong,Baoan Dist., Shenzhen, China

Prepared By : Shenzhen Alpha Product Testing Co., Ltd.
Address : Building i, No.2, Lixin Road, Fuyong Street, Bao'an District,
518103, Shenzhen, Guangdong, China

Report Number : A1908172-C02-R02
Date of Receipt : September 06, 2019
Date of Test : September 06, 2019–September 06, 2019
Date of Report : September 06, 2019
Version Number : V0

TABLE OF CONTENTS

1. Test Result Summary	5
2. EUT Description.....	6
2.1. DESCRIPTION OF DEVICE (EUT).....	6
2.2. ACCESSORIES OF DEVICE (EUT).....	7
2.3. TESTED SUPPORTING SYSTEM DETAILS	7
2.4. BLOCK DIAGRAM OF CONNECTION BETWEEN EUT AND SIMULATORS	7
2.5. DESCRIPTION OF TEST MODES	7
2.6. TEST CONDITIONS	7
2.7. TEST FACILITY	8
2.8. MEASUREMENT UNCERTAINTY	8
3. Test Results and Measurement Data	9
3.1. RF EXPOSURE TEST	9
4. Photos of test setup	12
5. Photographs of EUT	13

TEST REPORT DECLARATION

Applicant : SHENZHEN GOODWIN TECHNOLOGY CO.,LTD
Address : 4/F,Buiding A,Huayuan Industrial park,Fenghuang No.1 Industrial Area,Fuyong,Baoan Dist., Shenzhen, China
Manufacturer : SHENZHEN GOODWIN TECHNOLOGY CO.,LTD
Address : 4/F,Buiding A,Huayuan Industrial park,Fenghuang No.1 Industrial Area,Fuyong,Baoan Dist., Shenzhen, China
EUT Description : Wireless Charger
(A) Model No. : WP08, 78516, 78566
(B) Trademark : N/A

Measurement Standard Used:

FCC CFR Title 47 Part 15 Subpart C

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC CFR Title 47 Part 15 Subpart C requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....: Ella Liang
Project Engineer


.....

Approved by (name + signature).....: Simple Guan
Project Manager


.....

Date of issue.....: September 06, 2019

Revision History

Revision	Issue Date	Revisions	Revised By
V0	September 06, 2019	Initial released Issue	Simple Guan

1. Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1) & KDB680106	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

2. EUT Description

2.1. Description of Device (EUT)

EUT Name	:	Wireless Charger
Model No.	:	WP08, 78516, 78566
DIFF.	:	All model's the function, software and electric circuit are the same, except the model number and Appearance color are difference. This report performs the model WP08.
Trademark	:	N/A
Power supply	:	Input : DC 5V/2.0A, 9V/1.67A Output : DC 5V/1A, 9V/1A
Operation frequency	:	125-205KHz
Modulation	:	MSK
Antenna Type	:	Coil Antenna
Software version	:	V1.0
Hardware version	:	GW-WP08-A1 2E6A2

Conditions requirement	Answers
Power transfer frequency is less than 1 MHz.	After measuring the product the transfer frequency is 125-205KHz
Output power from each primary coil is less than or equal to 15 watts.	After measuring the product the each primary coil power is 5 watts
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 wireless charger has two primary coils, two primary coils work together when TX.
Client device is placed directly in contact with the transmitter.	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Mobile exposure conditions only.
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.	After measuring the product the Max H-field Strength is 0.25A/m Far less than 50% of the MPE limit.

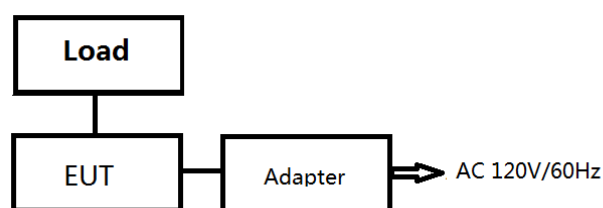
2.2. Accessories of Device (EUT)

Accessories1 : /
 Manufacturer : /
 Model : /
 Ratings : /

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or DOC
1	mobile phone	SAMSUNG	SM-G9350	--	--
2	Adapter	--	--	--	--

2.4. Block Diagram of connection between EUT and simulators



2.5. Description of Test Modes

Channel	Frequency (KHz)	Channel	Frequency (KHz)	Channel	Frequency (KHz)	Channel	Frequency (KHz)
1	125	6	150	11	175	16	200
2	130	7	155	12	180	17	205
3	135	8	160	13	185	18	
4	140	9	165	14	190	19	
5	145	10	170	15	195	20	

2.6. Test Conditions

Items	Required	Actual
Temperature range:	15-35°C	24°C
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa

2.7. Test Facility

Shenzhen Alpha Product Testing Co., Ltd
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen,
Guangdong, China

June 21, 2018 File on Federal Communication Commission
Registration Number: 293961

July 15, 2019 Certificated by IC
Registration Number: CN0085

2.8. Measurement Uncertainty

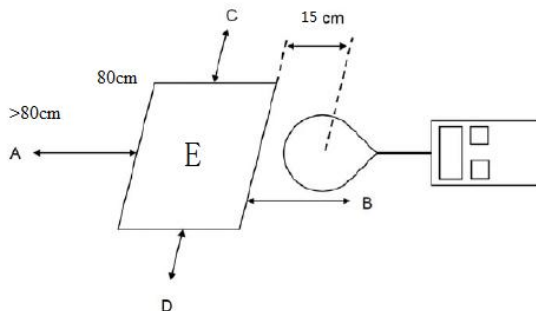
(95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for Conducted Emission Test	2.74dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.77dB
	3.80dB
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	4.16dB
	4.13dB
Uncertainty for radio frequency Uncertainty for Conducted Emission Test	5.4×10^{-8}
	2.74dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.77dB
Uncertainty for conducted RF Power	0.65dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

3. Test Results and Measurement Data

3.1. RF EXPOSURE TEST

3.1.1. Test Specification

Test Requirement:	FCC Rules and Regulations KDB680106
Test Method:	§1.1307(b)(1) & KDB680106
Limits:	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 D01v03: RF Exposure Wireless Charging Apps v02.
Test Setup:	 E to position is 20cm.
Test Procedure:	1. The RF exposure test was performed on 360 degree turn table in anechoic chamber. 2. The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe. 3. The turn table was rotated 360d degree to search of highest strength. 4. The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed. 5. The EUT were measured according to the dictates of KDB 680106D01v03.
Test Result:	PASS

3.1.2. Test Instruments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Exposure Level Tester	narda	ELT-400	N-0231	2018.09.26	1 Year
2	Magnetic field probe 100cm2	narda	ELT probe 100cm2	M0675	2018.09.26	1 Year

3.1.3. Test data

For Full load mode:

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

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (V/m)	Limits Test (V/m)
0.205	0.98	0.97	0.97	0.96	0.97	307	614

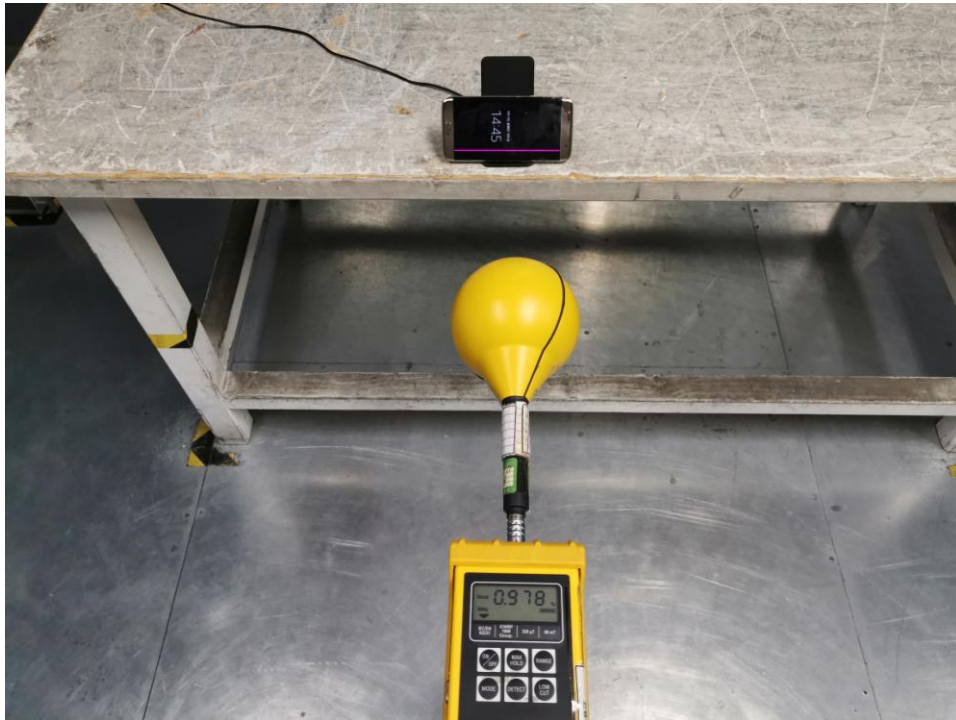
H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (A/m)	Limits Test (A/m)
0.205	0.25	0.24	0.23	0.25	0.24	0.815	1.63

Remark: All modes have been tested. This Report only show the test result of the worst case (Full load).

4. Photos of test setup

For Full load mode



For No load mode



5. Photographs of EUT

Refer to test report A1908172-C02-R01.

-----End-----