

RED-Health Test Report

For

Wireless charger

Model No.

Prepared For :

Address :

Prepared For :

Address :

Shenzhen Anbotech Compliance Laboratory Limited

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TEST REPORT

Applicant :
Manufacturer :
Product Name : Wireless charger
Model No. :
Trade Mark : N.A.
Rating(s) : Input: DC 5V, 1.5A
Output: 5W

Test Standard(s) : EN 62311: 2008

The device described above is tested by Shenzhen Anbotech Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotech Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the ETSI EN 62311:2008 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotech Compliance Laboratory Limited.

Date of Test

Nov. 21~Dec. 07, 2018

Prepared By



Oliay Yang

(Engineer / Oliay Yang)

Reviewer

Snowy Meng

(Supervisor / Snowy Meng)

Approved & Authorized Signer

Sally Zhang

(Manager / Sally Zhang)

1. GENERAL INFORMATION

1.1. Client Information

Applicant	:	
Address	:	
Manufacturer	:	
Address	:	
Factory	:	
Address	:	

1.2. Description of Device (EUT)

Product Name	:	Wireless charger	
Model No.	:		
Trade Mark	:	N.A.	
Test Power Supply	:	AC 230V, 50Hz for adapter	
Test Sample No.	:	S1(Normal Sample), S2(Engineering Sample)	
Product Description	:	Operation Frequency:	111-205KHz
		Modulation Type:	MSK
		Antenna Type:	Inductive loop coil Antenna
		Antenna Gain(Peak):	0 dBi
Remark: 1) For a more detailed features description, please refer to the manufacturer’s specifications or the User’s Manual.			

1.3. Auxiliary Equipment Used During Test

Adapter	:	Manufacturer: Samsung M/N: ETA-U90CBC S/N: RT6FB17ZS/B-E Input: 100-240V~ 50-60Hz, 0.35A Output: DC 5V, 2A
	:	
Mobile Phone	:	Samsung

1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Magnetic field meter	NARDA	ELT-400	423623	Nov.17, 2017	3 Year

1.5. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, 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. 184111, July 31, 2017.

ISED-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A-1, June 13, 2016.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102

2. GENERAL PRODUCT INFORMATION

2.1. Basic Restriction

The essential requirements of Directive 99/519/EC in the article 3.1(a) and the limits must be taken from Council Recommendation 99/519/EC for General Population or from the ICNIRP Guidelines for Occupational Exposure. EN 50371:2002 Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields. The average power of EUT is less than 20mW then comply with basic restriction (1999/519/EC) without test.

2.2. Table for Filed Antenna

No.	Antenna Type	Gain (dBi)
1.	Inductive loop coil Antenna	0

3. TEST RESULT

3.1. Limit

Council Recommendation 99/519/EC Annex III

Reference levels for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density Seq (W/m ²)
0-1Hz	-	$3,2 \times 10^4$	4×10^4	-
1-8Hz	1000	$3,2 \times 10^4 / f^2$	$4 \times 10^4 / f^2$	-
8-25Hz	1000	$4000 / f$	$5000 / f$	-
0.025Hz-0,8kHz	$250 / f$	$4 / f$	$5 / f^{6,25}$	-
0,8-3kHz	$250 / f$	5	6,25	-
3-150kHz	87	5	6,25	-
0,15-1MHz	87	$0,73 / f$	$0,92 / f$	-
1-10MHz	$87 / f^{1/2}$	$0,73 / f$	$0,92 / f$	-
10-400MHz	28	0.073	0,092	2
400-2000MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	$f / 200$
2-300GHz	61	0,16	0,20	10

Note:

(1) As indicated in the frequency range column.

(2) For frequencies between 100kHz and 10GHz, Seq, E2, H2 and B2 are to be averaged over any six-minute period.

(3) For frequencies exceeding 10GHz, Seq, E2, H2 and B2 are to be averaged over any 68/1.05-minute period (in GHz).

(4) No E-field value is provided for frequencies <1Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 20kV/m. Spark discharges causing stress or annoyance should be avoided.

3.2. Test results

Temperature:	25° C	Relative Humidity:	55 %
Pressure:	1012 hPa	Test Voltage:	AC 230V, 50Hz for adapter

E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

Test Position	Probe Measure Result (V/m)			Limits (V/m)	Result
	Full Load	Zero Charge	Intermediate Charge		
A	4.14	4.15	5.44	87	Pass
B	3.33	3.23	3.15	87	Pass
C	3.15	2.56	3.37	87	Pass
D	1.52	1.43	2.53	87	Pass
E	1.17	1.32	2.42	87	Pass
F	1.32	1.41	2.01	87	Pass

H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Test Position	H-Filed Strength Measure Result						Limits (A/m)	Result
	Full Load		Zero Charge		Intermediate Charge			
	uT	A/m	uT	A/m	uT	A/m		
A	0.065	0.052	0.054	0.043	0.187	0.150	5	Pass
B	0.077	0.062	0.034	0.027	0.198	0.158	5	Pass
C	0.012	0.010	0.064	0.051	0.075	0.060	5	Pass
D	0.042	0.034	0.063	0.050	0.123	0.098	5	Pass
E	0.026	0.021	0.041	0.033	0.063	0.050	5	Pass
F	0.176	0.141	0.165	0.132	0.145	0.116	5	Pass

Note: A/m = uT / 1.25

----- End of Report -----