Shenzhen GUOREN Certification Technology Service Co., Ltd.

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China

RF Exposure evaluation

Report Reference No.....:	**GRCTR250402017-02**
FCC ID..... :	**2BPAK-CH311**
Compiled by (position+printed name+signature)..:	Testing Engineer Jimmy Wang
Supervised by (position+printed name+signature)..:	Project Engineer Kelley Zhang
Approved by (position+printed name+signature)..:	Manager Sam Wang
Date of issue.....:	Apr. 30, 2025

Testing Laboratory Name.....:	**Shenzhen GUOREN Certification Technology Service Co., Ltd.**
Address..... :	101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China
Applicant's name.....:	**Shenzhen Yongshi Technology Co., Ltd.**
Address..... :	Shenzhen Shi Longgang Qu Bantian Jiedao Nankeng Shequ Wuhe Dadao (Nan) 2 Hao Wanke Xinghuo 7 Dong 1 Ceng 107 Danyuan - A
Test specification.....:	**FCC CFR 47 PART 1, § 1.1310**
Standard.....:	**KDB 680106 D01 Wireless Power Transfer v04**

Test item description.....:	**Wireless charger**
Trade Mark.....:	/
Manufacturer.....:	Shenzhen Yongshi Technology Co., Ltd.
Model/Type reference..... :	CH311
Listed Models ..... :	CH307,CH3071,CH308,CH309,CH312,CH313,CH314,CH315,CH316,CH317,CH318
Modulation Type..... :	ASK
Operation Frequency..... :	From 110KHz~148.5KHz
Rating.....:	Input:DC 5V/2A,9V/1A,9V/2A
Result.....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	Wireless charger
Model /Type	:	CH311
Listed Models	:	CH307,CH3071,CH308,CH309,CH312,CH313,CH314,CH315,CH316,CH317,CH318
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Test Result:	**PASS**

Contents

1. SUMMARY

1.1. General Remarks

Date of receipt of test sample	:	Apr. 15, 2025
Testing commenced on	:	Apr. 15, 2025
Testing concluded on	:	Apr. 30, 2025

1.2. Product Description

Product Name:	Wireless charger
Model/Type reference:	CH311
Listed Models:	CH307,CH3071,CH308,CH309,CH312,CH313,CH314,CH315,CH316,CH317,CH318
Power supply:	Input:DC 5V/2A,9V/1A,9V/2A Wireless Output:5W/7.5W/10W/15W
Car Charger information:	M/N:TE-092 Input:DC 12-32V Output:DC 5V/6.2A,9V/2A,12V/1.6A
Test samples ID:	GRCTR250402017-1#
Operation frequency:	110KHz~148.5KHz
Modulation type:	ASK
Antenna type:	Loop coil antenna
Remark:The products are identical in interior structure, electrical circuits and components, just model name is different.	

1.3. Equipment Under Test

Power supply system utilised

Power supply voltage	:	○	230V / 50 Hz	○	120V / 60Hz
		○	12 V DC	○	24 V DC
		●	Other (specified in blank below)		

DC 5V from car charger

1.4. Short description of the Equipment under Test (EUT)

This is a Wireless charger.
For more details, refer to the user's manual of the EUT.

1.5. Modifications

No modifications were implemented to meet testing criteria.

2. TEST ENVIRONMENT

2.1. Address of the test laboratory

Shenzhen GUOREN Certification Technology Service Co., Ltd.
101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community, Fenghuang Street, Guangming District, Shenzhen, China

2.2. Test Facility

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

FCC-Registration No.: 920798 Designation Number: CN1304

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6202.01

Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

ISED#: 27264 CAB identifier: CN0115
Shenzhen GUOREN Certification Technology Service Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

CNAS-Lab Code: L15631
Shenzhen GUOREN Certification Technology Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories for the Competence of Testing and Calibration Laboratories.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

2.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

2.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen GUOREN Certification Technology Service Co., Ltd.quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen GUOREN Certification Technology Service Co., Ltd.:

Test Items	Measurement Uncertainty	Notes
Magnetic field measurement (9kHz~30MHz)	±7.5%	(1)
Electric field measurements (9kHz~ 30MHz)	±7.5%	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. Method of measurement

3.1. Applicable Standard

§1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

Table 1 to §1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

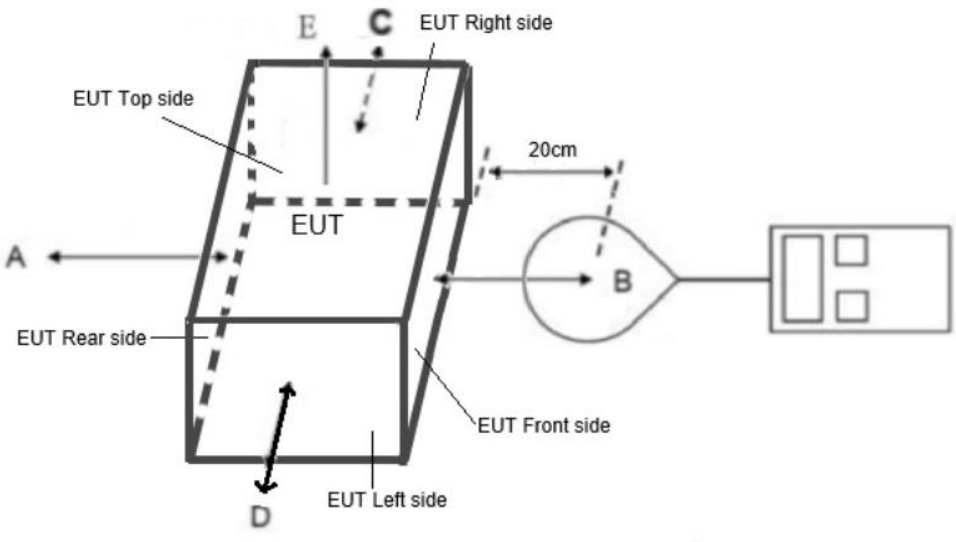
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	⩽6
3.0-30	1842/f	4.89/f	*(900/f2)	<6
30-300	61.4	0.163	1.0	<6
300-1500	/	/	f/300	<6
1500-100000	/	/	5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f2)	<30
30-300	27.5	0.073	0.2	<30
300-1500	/	/	f/1500	<30
1500-100000	/	/	1.0	<30

f = frequency in MHz
* = Plane-wave equivalent power density

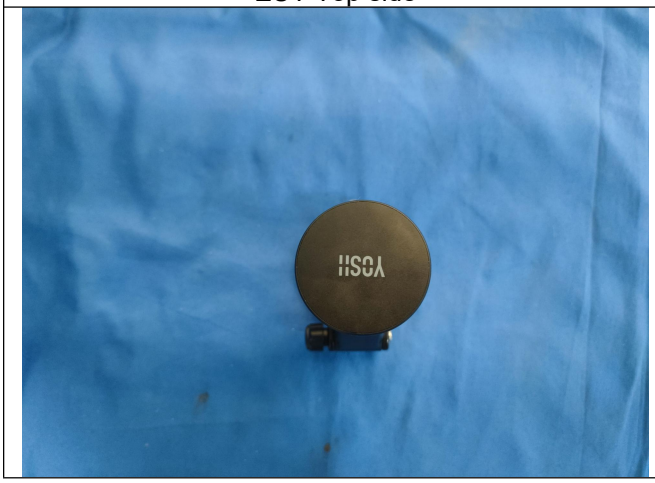
Note 1: Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

Note 2: General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

3.2. Test Setup



Note: The distance of the points A/B/C/D/E is 20cm.

EUT Front side	EUT Rear side
	
EUT Left side	**EUT Right side**
	
EUT Top side	
	

3.3. Test Procedure

For mobile exposure conditions:

a. The RF exposure test was performed in anechoic chamber.

b. E and H-field measurements should be made with the center of the probe at a distance of 20 cm surrounding the primary/client pair.

c. The highest emission level was recorded and compared with limit.

d. The EUT was measured according to the KDB 680106 D01 Wireless Power Transfer v04.

3.4. Equipment Approval Considerations

Requirements of KDB 680106 D01v04	Yes / No	Description
Mobile Device and Portable Device Configurations	Yes	Mobile Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range 110KHz - 148.5KHz
RF Exposure compliance may be ensured only for a minimum separation distance that is greater than 20 cm, while use conditions at smaller distances can still be considered unlikely.	Yes	The EUT H-field strengths at 20 cm surrounding the device.

3.5. Description of the test mode

Equipment under test was operated during the measurement under the following conditions:
☒ Charging and communication mode

Test Modes:		
Mode 1	Input DC 5V/2A + EUT + Without load	Pre-tested
Mode 2	Input DC 5V/2A + EUT + Wireless charger tester (Half Load)	Pre-tested
Mode 3	Input DC 5V/2A + EUT + Wireless charger tester (Full Load)	Pre-tested
Mode 4	Input DC 9V/1A + EUT + Without load	Pre-tested
Mode 5	Input DC 9V/1A + EUT + Wireless charger tester (Half Load)	Pre-tested
Mode 6	Input DC 9V/1A + EUT + Wireless charger tester (Full Load)	Pre-tested
Mode 7	Input DC 9V/2A + EUT + Without load	Record
Mode 8	Input DC 9V/2A + EUT + Wireless charger tester (Half Load)	Record
Mode 9	Input DC 9V/2A + EUT + Wireless charger tester (Full Load)	Record
Note: All test modes were pre-tested, but we only recorded the worst case in this report.		

3.6. Description of Support Units

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
Intelligent wireless charging full function test module	/	YBZ	5W/7.5W/9W/10W/12W/15W	/	Lab

3.7. Test Instruments list

Test Equipment	Manufacturer	Model No.	Equipment No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Exposure Level Tester	Narda	ELT-400	GRCTEE050	2024/09/19	2025/09/18
Magnetic field probe 100cm^2	Narda	ELT probe 100cm^2	GRCTEE056	2024/09/19	2025/09/18

3.8. Test Result

H-Field Strength at 20 cm from the edges surrounding the EUT

Charging Battery Level	Unit	Frequency Range (MHz)	Measured E-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.11807	0.554	0.549	0.546	0.541	0.560	--	--
1%	A/m	0.11807	0.443	0.439	0.437	0.433	0.448	0.815	1.63
50%	uT	0.11807	0.421	0.426	0.410	0.408	0.428	--	--
50%	A/m	0.11807	0.337	0.341	0.328	0.326	0.342	0.815	1.63
99%	uT	0.11807	0.226	0.229	0.220	0.216	0.231	--	--
99%	A/m	0.11807	0.181	0.183	0.176	0.173	0.185	0.815	1.63

Note1:A/m=uT/1.25
Note2:During test the frequencies less than 1 MHz and E/H ratio less than 1/10 of the 377-ohm free space wave impedance, only record H-field measurements result.

3.9. Conclusion

A minimum safety distance of 20 cm to the antenna is required when the device is charging a smart phone for mobile exposure. The detected emissions are below the limitations according FCC KDB 680106 D01v04 and confirmed by the FCC according to KDB Inquire.

3.10. Test Set-up Photo

.....End of Report.....