

FCC Test Report

Applicant : Shenzhen Runyunteng Technology Co., Ltd

Address : 712, No. 23, North District, Fuquan Xincun,
Helian Community, Longhua Street, Longhua
District, Shenzhen, China

Product Name : Wireless charging bracket (007)

Report Date : July. 21, 2023

Shenzhen Anbotek Compliance Laboratory Limited



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TEST REPORT

Applicant : Shenzhen Runyunteng Technology Co., Ltd
Manufacturer : Shenzhen Runyunteng Technology Co., Ltd
Product Name : Wireless charging bracket (007)
Model No. : RYT007
Trade Mark : THL/ Soporter/ ROFAREE/ SEAFREE FVH/ ATEVENSE/ ATEVENSEE/
Deepwill/ HJY
Input: 5V= 3A/9V= 2A/12V= 1.5A(Type-C)
Battery Type: Lithium Polymer
Output: 5V= 2.4A/9V= 2A/12V= 1.5A(USB-A)
Rating(s) : 5V= 2.4A/9V= 2.2A/12V= 1.67A(Type-C)
Wireless: 5W/7.5W/10W/15W
Battery Capacity: 10000mAh/37Wh/ 3.7VDC
Rated Capacity: 5800mAh(5V= 2.4A)
Test Standard(s) : FCC Part 1.1310, 1.1307(b)
Test Method(s) : KDB680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Shenzhen Anbotek 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 Anbotek 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 FCC Part 1.1307 & KDB680106 D01 requirements.

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

Date of Receipt

Jun. 25, 2023

Date of Test

Jun. 25~ July. 21, 2023

Prepared By

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Approved & Authorized Signer

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Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Jul. 07, 2023



1. General Information

1.1. Client Information

Applicant	:	Shenzhen Runyunteng Technology Co., Ltd
Address	:	712, No. 23, North District, Fuquan Xincun, Helian Community, Longhua Street, Longhua District, Shenzhen, China
Manufacturer	:	Shenzhen Runyunteng Technology Co., Ltd
Address	:	712, No. 23, North District, Fuquan Xincun, Helian Community, Longhua Street, Longhua District, Shenzhen, China
Factory	:	Shenzhen Runyunteng Technology Co., Ltd
Address	:	712, No. 23, North District, Fuquan Xincun, Helian Community, Longhua Street, Longhua District, Shenzhen, China

1.2. Description of Device (EUT)

Product Name	:	Wireless charging bracket (007)
Model No.	:	RYT007
Trade Mark	:	THL/ Soporter/ ROFAREE/ SEAFREE FVH/ ATEVENSE/ ATEVENSEE/ Deepwill/ HJY
Test Power Supply	:	AC 120V, 60Hz for adapter
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A
RF Specification		
Operation Frequency	:	110-205kHz
Modulation Type	:	magnetic coupling
Antenna Type	:	Inductive loop coil Antenna
Antenna Gain(Peak)	:	0 dBi (Provided by customer)
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

Description	Rating(s)
Wireless charging load	Manufacturer: Shenzhen Ouju Technology Co., Ltd. M/N: CD2577 Power: 5W/7.5W/10W/15W
Apple Watch	M/N: WR-50M
Mobile Phone	iPhone 12
Adapter	Model: MDY-11-EX Input: 100-240VAC, 50-60Hz, 0.7A Output: 5V= 3A, 9V= 3A, 12V= 2.25A, 20V= 1.35A, 11V= 3A

1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Electric and Magnetic field Analyzer	NARDA	EHP-200A	180ZX10202	Oct. 17, 2022	1 Year
2	Electric and Magnetic field Analyzer	NARDA	EHP-200A	180ZX11013	May. 26 2023	1 Year

1.5. Measurement Uncertainty

Magnetic Field Reading(A/m)	:	+/-0.04282(A/m)
Electric Field Reading(V/m)	:	+/-0.03679(V/m)



1.6. 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.

ISED-Registration No.: 8058A

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.

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. Measurement and Result

2.1. Requirements

According to the item 5.b) of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

- 1) Power transfer frequency is less than 1 MHz
- 2) Output power from each primary coil is less than or equal to 15 watts.
- 3) 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
- 4) Client device is inserted in or placed directly in contact with the transmitter
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
- 6) 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.

Limits For Maximum Permissible Exposure (MPE)

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

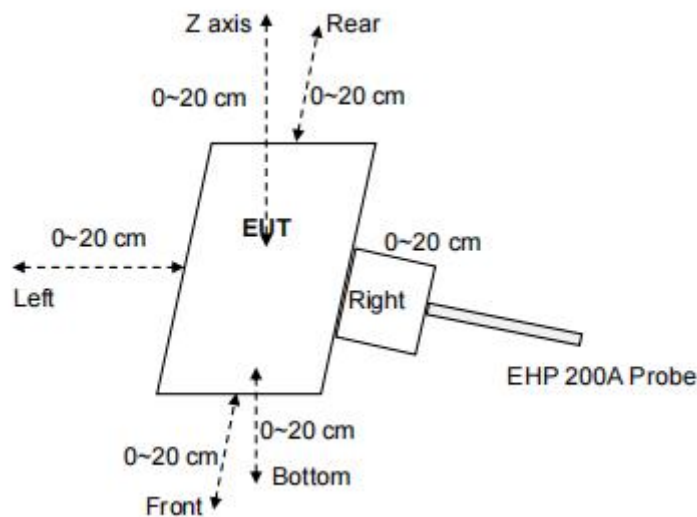
F=frequency in MHz

*=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).



The diagram shows a two-port network. The first block, labeled **EUT**, is a parallelogram with a thick border. It has four ports: **Left** (pointing left), **Right** (pointing right), **Top** (labeled **20 cm Top**, pointing up), and **Bottom** (pointing down). The **Right** port of the EUT block is connected to the **15 cm** port of a second block, labeled **D**. Block **D** is a parallelogram with a thin border. A line extends from the right side of block **D**.



Note2: Figure 2 should be measured at 0-20 cm around the tested equipment.



2.3. Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at required test distance which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points
(A, B, C, D, E) were completed.(A is the right, B is the back, C is the left, D is the front, and E is the top.)
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

Remark; The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

For portable exposure conditions:

- 1). The RF exposure test was performed in anechoic chamber.
- 2). Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm.
- 3). The highest emission level was recorded and compared with limit.
- 4). The EUT was measured according to the dictates of TCB Workshop"41-Part-18-&-Wireless-Power-Transfer - April 27, 2022"

2.4. Test Result

2.4.1. Equipment Approval Considerations item 5.b of KDB 680106 D01 v03.

- 1) Power transfer frequency is less than 1 MHz
 - The device operate in the frequency range 110-205kHz.
- 2) Output power from each primary coil is less than 15 watts
 - The maximum output power of the primary coil is 15W.
- 3) 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 sample has three coils, which can simultaneously power the equipment
- 4) Client device is inserted in or placed directly in contact with the transmitter
 - Client device is placed directly in contact with the transmitter.
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
 - The EUT is a Mobile exposure conditions.
- 6) 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.



- Conducted the measurement with the required distance and the test results please refer to the section 2.4.

2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 1.1310

Temperature:	22.5°C	Relative Humidity:	49 %
Pressure:	1012 hPa	Test Voltage:	AC 120V, 60Hz for adapter

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (kHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
1%	110-205	0.392	0.482	0.432	0.442	0.562	307	614
50%	110-205	1.473	1.913	1.403	1.533	1.703	307	614
99%	110-205	2.403	2.803	2.413	2.363	2.823	307	614
Stand-by	110-205	0.452	0.602	0.442	0.432	0.572	307	614

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (kHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
1%	110-205	0.025	0.047	0.053	0.037	0.047	0.815	1.63
50%	110-205	0.326	0.416	0.316	0.316	0.486	0.815	1.63
99%	110-205	0.434	0.614	0.504	0.324	0.314	0.815	1.63
Stand-by	110-205	0.508	0.328	0.428	0.548	0.408	0.815	1.63

Note: All the situation(full load, half load and empty load) has been tested,only the worst situation (full load MIMO 15W) was recorded in the report.



For portable exposure condition

Note: operating modes with client device (1 %, 50%, 99% battery status of client device) have been test, onlshow the data of worst case of 1% battery status of client device.

H-field measurements taken every 2 cm (starting as close to 20 cm as possible) on each edge/top surface ofthe host/client pair were also evaluated for portable use conditions. The report reflects data for the worst 0 cmtest distance mode only.

Test condition 1: Mode 1 operating mode with client device (1 % battery status of client device)test distance: 0cm

Antenna	Probe Position	H - field (A/m)		
		Measurement	Limit	Max. Percentage (%)
1	Z axis	0.3417	1.63	7.59%
	Left	0.4052		
	Right	0.3614		
	Front	0.4279		
	Rear	0.3897		
	Bottom	0.4011		



APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_MPE

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

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

