Test Report

Report No.:	MTi230907015-02E2
Date of issue:	2023-11-23
Applicant:	Shenzhen Yongfengwang Technology Co., LTD
Product:	4 in 1 Wireless Charging Station
Model(s):	YFW-F188, TP_F188_WUK, UK_F188_LW, US-F188-SW, US_F188_LW, DE_F188_LW, TP_F188_WUS, TP_F142_WUK, YFW-F142, UK_F142_LW, US-F42-SW
FCC ID:	2AY3K-YFW-F188

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

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Instructions

1. This test report shall not be partially reproduced without the written consent of the laboratory.

2. The test results in this test report are only responsible for the samples submitted

3. This test report is invalid without the seal and signature of the laboratory.

4. This test report is invalid if transferred, altered, or tampered with in any form without authorization.

5. Any objection to this test report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

Contents

Test Result Certification	
Applicant:	Shenzhen Yongfengwang Technology Co., LTD
Address:	302 3/F,Buding B,NO.154,Huating Road,Langkou Community,Dalang Street,Longhua District,Shenzhen
Manufacturer:	Shenzhen Yongfengwang Technology Co., LTD
Address:	302 3/F,Buding B,NO.154,Huating Road,Langkou Community,Dalang Street,Longhua District,Shenzhen
Product description	
Product name:	4 in 1 Wireless Charging Station
Trademark:	YoFeW
Model name:	YFW-F188
Series Model:	TP_F188_WUK, UK_F188_LW, US-F188-SW, US_F188_LW, DE_F188_LW, TP_F188_WUS, TP_F142_WUK, YFW-F142, UK_F142_LW, US-F42-SW
Standards:	FCC CFR 47 PART 1, § 1.1310
Test method:	KDB 680106 D01 Wireless Power Transfer v04
Date of Test	
Date of test:	2023-09-18 to 2023-10-17
Test result:	Pass

Test Engineer : Letter. Lan.

(Letter Lan)

Reviewed By: : Leon chen

(Leon Chen)

Approved By: : Tom Xue

(Tom Xue)

1 General Description

1.1 Description of the EUT

Product name:	4 in 1 Wireless Charging Station
Model name:	YFW-F188
Series Model:	TP_F188_WUK, UK_F188_LW, US-F188-SW, US_F188_LW, DE_F188_LW, TP_F188_WUS, TP_F142_WUK, YFW-F142, UK_F142_LW, US-F42-SW
Model difference:	All the models are the same circuit and module, except the model name.
Electrical rating:	Input: 5V/3A,9V/3A(MAX) Output(Phone): 5W/7.5W/10W/15W Output(Watch): 2W Output(Buds): 3W
Accessories:	Adaptor: model: HJ-C30-01 Input: 100-240V~ 50/60Hz 0.8A MAX Output: 5V⎓3A 9V⎓3A 12V⎓2.5A 15V⎓2A 20V⎓1.5A manufacturer: Shenzhen Chengyue Electronic Co ., Ltd . Cable: USB-C to USB-C cable 1m
Hardware version:	F188-142-s1p1-v1.0
Software version:	V122.21
RF specification:	
Operation frequency:	Transmitter 1 2 3 4: 115 kHz – 205 kHz
Modulation type:	ASK
Antenna type:	coil antenna

1.2 Description of test modes

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

No.	Emission test modes
Mode1	Wireless output for ANT 1+ watch+ Buds (5W+2W+3W)
Mode2	Wireless output for ANT 1+ watch+ Buds (7.5W+2W+3W)
Mode3	Wireless output for ANT 1+ watch+ Buds (10W+2W+3W)
Mode4	Wireless output for ANT 1+ watch+ Buds (15W+2W+3W)
Mode5	Wireless output for ANT 2+ watch+ Buds (5W+2W+3W)
Mode6	Wireless output for ANT 2+ watch+ Buds (7.5W+2W+3W)
Mode7	Wireless output for ANT 2+ watch+ Buds (10W+2W+3W)
Mode8	Wireless output for ANT 2+ watch+ Buds (15W+2W+3W)
Mode9	Wireless output for ANT 1+ watch 5W+2W)
Mode10	Wireless output for ANT 1+ watch (7.5W+2W)
Mode11	Wireless output for ANT 1+ watch+ (10W+2W)
Mode12	Wireless output for ANT 1+ watch+ (15W+2W)
Mode13	Wireless output for ANT 2+ watch 5W+2W)
Mode14	Wireless output for ANT 2+ watch (7.5W+2W)
Mode15	Wireless output for ANT 2+ watch (10W+2W)
Mode16	Wireless output for ANT 2+watch+ (15W+2W)
Mode17	Wireless output for ANT 1+ Buds (5W+3W)
Mode18	Wireless output for ANT 1+ Buds (7.5W+3W)
Mode19	Wireless output for ANT 1+ Buds (10W+3W)
Mode20	Wireless output for ANT 1+ Buds (15W+3W)
Mode21	Wireless output for ANT 2+ Buds (5W+3W)
Mode22	Wireless output for ANT 2+ Buds (7.5W+3W)
Mode23	Wireless output for phone 2+ Buds (10W+3W)
Mode24	Wireless output for ANT 2+ Buds (15W+3W)
Mode25	Wireless output for ANT1 (5W)
Mode26	Wireless output for ANT 1 (7.5W)
Mode27	Wireless output for ANT 1 (10W)
Mode28	Wireless output for ANT 1 (15W)
Mode29	Wireless output for ANT 2 (5W)
Mode30	Wireless output for ANT 2 (7.5W)
Mode31	Wireless output for ANT 2 (10W)
Mode32	Wireless output for ANT 2+ (15W)
Mode33	Wireless output for Buds (3W)
Mode34	Wireless output for watch (2W)

1.3 Description of support units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support equipment list			
Description	Model	Serial No.	Manufacturer
adapter	HJ-C30-01	/	Shenzhen Chengyue Electronic Co ., Ltd
watch	/	/	Samsung
phone	Oppo find x3	/	Oppo
Air Pods	MQD83CH/A	/	Apple
Support cable list			
Description	Length (m)	From	To
/	/	/	/

2 Measurement uncertainty

Parameter	Expanded Uncertainty
Magnetic field measurement (9kHz~30MHz)	±18.6%
Electric field measurements (9kHz~30MHz)	±18.6%

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

3 Test facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
MTi-E115	Electric and Magnetic Field Probe – Analyzer	Narda	EHP-200A	101166	2023/08/15	2026/08/14

5 Test result

5.1.1 Requirement

§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)

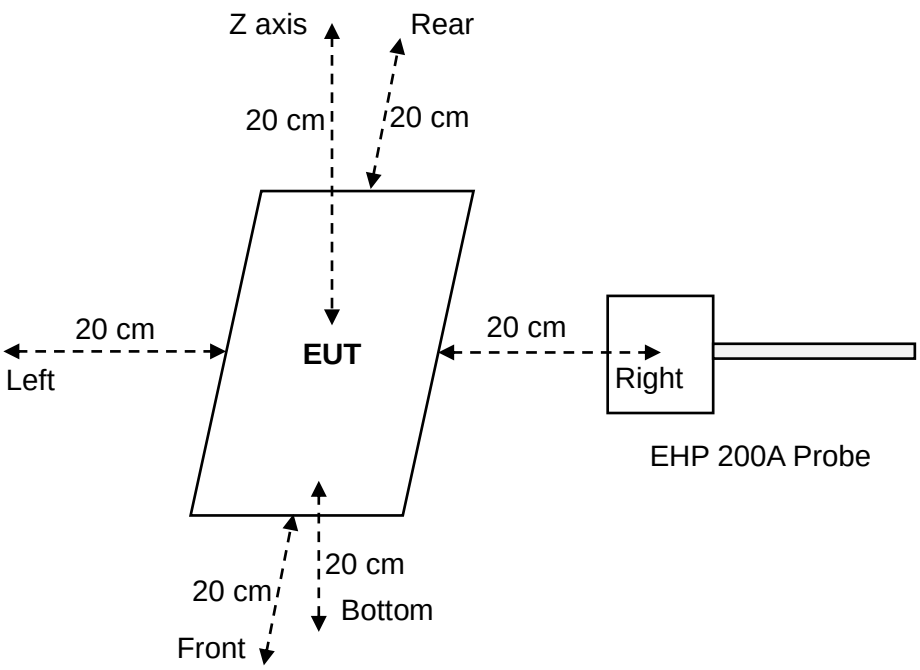
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1500			f/300	<6
1500-100000			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	*($180/f^2$)	<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.

5.2 Test setup



5.3 Test Procedures

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

b. E and H-field measurements should be made with these devices considered to meet the § 2.1091-Mobile conditions (“generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and [the nearest person]”).

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

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

5.4 Test results

Test condition 1: Mode 16 operating mode with client device (1 % battery status of client device)

Probe Position	E –field (V/m)			H–field (A/m)		
	Measurement	Limit	Max. Percentage (%)	Measurement	Limit	Max. Percentage (%)
Z axis	2.2131	614	1.01%	0.0513	1.63	3.71%
Left	3.7132			0.0604		
Right	3.5760			0.0532		
Front	2.1203			0.0505		
Rear	6.1835			0.0505		
Bottom	2.5575			0.0488		

Test condition 2: Mode 16 operating mode with client device (50 % battery status of client device)

Probe Position	E –field (V/m)			H–field (A/m)		
	Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
Z axis	2.2061	614	1.01%	0.0516	1.63	3.71%
Left	3.7181			0.0605		
Right	3.5801			0.0578		
Front	2.1358			0.0477		
Rear	6.1731			0.0444		
bottom	2.5592			0.0479		

Test condition 3: Mode 16 operating mode with client device (99 % battery status of client device)

Probe Position	E –field (V/m)			H–field (A/m)		
	Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
Z axis	2.2117	614	1.00%	0.0437	1.63	3.39%
Left	3.7044			0.0552		
Right	3.5646			0.0525		
Front	2.1046			0.0421		
Rear	6.1669			0.0429		
bottom	2.5461			0.0443		

Photographs of the Test Setup

See the Appendix - Test Setup Photos.

Photographs of the EUT

See the Appendix - EUT Photos.

----End of Report----