

# **Test Report**

**Report No.:** MTi220407001-04E2

**Date of issue:** 2022-05-20

**Applicant:** Shenzhen Yifeng Intelligent Technology Co., Ltd.

**Product:** 3 in 1 Wireless Charging Station

**Model(s):** T15, T17

FCC ID: 2AXY5-T15

Shenzhen Microtest Co., Ltd. http://www.mtitest.com



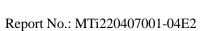
# Instructions

- 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.



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Test Result Certification				
Applicant:	Shenzhen Yifeng Intelligent Technology Co., Ltd.			
Address:	10th Floor, Building 2, Chaxi, Zone B, Huafeng First Science Park, Hangcheng Street, Gushu, Baoan District, Shenzhen, China.			
Manufacturer:	Shenzhen Yifeng Intelligent Technology Co., Ltd.			
Address:	10th Floor, Building 2, Chaxi, Zone B, Huafeng First Science Park, Hangcheng Street, Gushu, Baoan District, Shenzhen, China.			
Factory:	Shenzhen Yifeng Intelligent Technology Co., Ltd.			
Address:	10th Floor, Building 2, Chaxi, Zone B, Huafeng First Science Park, Hangcheng Street, Gushu, Baoan District, Shenzhen, China.			
Product description				
Product name:	3 in 1 Wireless Charging Station			
Trademark:	YFZN			
Model name:	T15			
Serial Model:	T17			
Standards:	FCC CFR 47 PART 1, § 1.1310			
Test method:	KDB 680106 v03r01			
Date of Test				
Date of test:	2022-04-19 ~ 2022-05-20			
Test result:	Pass			

Test Engineer	:	Yanice Xie
		(Yanice Xie)
Reviewed By:	:	leor chen
		(Leon Chen)
Approved By:	:	Tom Xue
		(Tom Xue)



## 1 General Description

## 1.1 Description of the EUT

Product name:	3 in 1 Wireless Charging Station
Model name:	T15
Series Model:	T17
Model difference:	All the models are the same circuit and module, except the model name.
Electrical rating:	Input: 9V/2A, 12V/1.5A Wireless Output:3W(Watch) Wireless Output: 5W(Earphone) Wireless Output:5W/7.5W/10W/15W(Phone)
Accessories:	N/A
Hardware version:	V20
Software version:	V67.23
RF specification:	
Operation frequency:	transmitter 1: 322 kHz transmitter 2: 115 kHz – 205 kHz transmitter 3: 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
Mode 1	Wireless Output(3W)-watch
Mode 2	Wireless Output(5W)-Air pods
Mode 3	Wireless Output((5W)
Mode 4	Wireless Output(7.5W)
Mode 5	Wireless Output(10W)
Mode 6	Wireless Output(15W)
Mode 7	Wireless Output Watch+ Air pods
Mode 8	Wireless Output(5W)+Watch
Mode 9	Wireless Output(7.5W)+Watch
Mode 10	Wireless Output(10W)+Watch
Mode 11	Wireless Output(15W)+Watch
Mode 12	Wireless Output(5W)+ Air pods

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China Tel: (86-755)88850135 Fax: (86-755) 88850136 Web: www.mtitest.com E-mail: mti@51mti.com



Mode 13	Wireless Output(7.5W)+ Air pods		
Mode 14	Wireless Output(10W)+ Air pods		
Mode 15	Wireless Output(15W)+ Air pods		
Mode 16	Wireless Output(5W)+Watch+ Air pods		
Mode 17	Wireless Output(7.5W)+Watch+ Air pods		
Mode 18	Wireless Output(10W)+Watch+ Air pods		
Mode 19	Wireless Output(15W)+Watch+ Air pods		
Mode 20	Stand-by		
The worst test mode of conducted emissions: Mode 19			



#### 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				
Mobile phone	Mobile phone P30 PRO		HUAWEI				
Adapter	HW-090200CH0	/	Huizhou BYD Electronics Co., Ltd.				
Watch	/	/	Apple				
Air Pods	/	/	Apple				
Support cable list							
Description	Length (m)	From	То				
/	/	/	/				



## 2 Test facilities and accreditations

## 2.1 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

# 3 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
MTI-E115	Electric and Magnetic Field Probe – Analyzer		EHP-200A	101166	2021/06/02	2022/06/01

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China Tel: (86-755)88850135 Fax: (86-755) 88850136 Web: www.mtitest.com E-mail: mti@51mti.com

#### 4 Test result

#### 4.1.1 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/cm²)	Averaging time (minutes)				
(i) Limits for Occupational/Controlled Exposure								
0.3-3.0	.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 Genera	l Population/Uncontrolled E	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

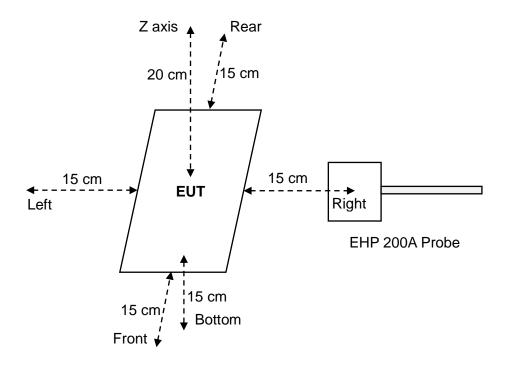
**Note 1:** Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

**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.

<sup>\* =</sup> Plane-wave equivalent power density



#### 4.2 Test setup



#### **4.3 Test Procedures**

- 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 15 cm surrounding the device and 20 cm above the top surface of the primary/client pair.
- c. The highest emission level was recorded and compared with limit.
- d. The EUT was measured according to the dictates of KDB 680106 v03r01.



### 4.4 Equipment Approval Considerations item 5 b) of KDB 680106 D01 v03r01

	·
Requirement	Device
Power transfer frequency is less than 1 MHz.	Yes. The operating frequencies are: transmitter 1: 322 kHz transmitter 2: 115 kHz – 205 kHz transmitter 3: 115 kHz – 205 kHz
2. Output power from each primary coil is less than or equal to 15 watts	Yes. The maximum output power is: transmitter 1: 3W transmitter 2: 5W transmitter 3: 15W
3. The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.	Yes. The EUT has three source primary coils.
4. Client device is placed directly in contact with the transmitter.	Yes. The client device is placed directly in contact with the transmitter.
5. Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes. Mobile exposure conditions only.
6. The aggregate H-field strengths anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.	Yes. See the test result in item 4.5.

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#### 4.5 Test results

#### Test condition 1: Mode 19 operating mode with client device (1 % battery status of client device)

	Probe E –field (V/m)			H-field (A/m)				
Antenna	Position Measurement		Limit	Max. Percentage (%)	Measurement	Limit	Max. Percentage (%)	
	Z axis	2.2313			0.1208			
	Left	0.7624	614		0.0635			
,	Right	2.6431		614	0.420/	0.051	4.00	7.440/
1	Front	1.2719			014	0.43%	0.0774	1.63
	Rear	2.6525			0.0653			
	Bottom	2.3698			0.067			

#### Test condition 2: Mode 19 operating mode with client device (50 % battery status of client device)

Antenna	Probe Position	E –field (V/m)			H-field (A/m)		
		Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
1	Z axis	2.2229	614	0.43%	0.1173	1.63	7.20%
	Left	0.757			0.0615		
	Right	2.6344			0.0498		
	Front	1.264			0.0834		
	Rear	2.6404			0.0643		
	bottom	2.3622			0.0645		

#### Test condition 3: Mode 19 operating mode with client device (99 % battery status of client device)

Antenna	Probe Position	E –field (V/m)			H–field (A/m)		
		Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
1	Z axis	2.2201	614	0.43%	0.1154	1.63	7.08%
	Left	0.7726			0.0623		
	Right	2.6574			0.0423		
	Front	1.2652			0.0681		
	Rear	2.6681			0.0615		
	bottom	2.3517			0.0573		



## **Photographs of the Test Setup**

See the Appendix - Test Setup Photos.

## Photographs of the EUT

See the Appendix - EUT Photos.

----End of Report----