

# Test Report

**Report No.:** MTi221018019-02E2

**Date of issue:** 2022-11-21

**Applicant:** Shenzhen XinZhaoYi Technology Co., LTD

**Product:** 3 IN 1 Wireless Charger

**Model(s):** Y9, Y91, Y92, Y93, Y95, Y96, Y97, Y98, Y9-X01, Y9-X02, Y9-X03, Y9-X05, Y9-Lite, Y9-Plus, Y9-Pro

**FCC ID:** 2AZKN-Y9

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>

## Instructions

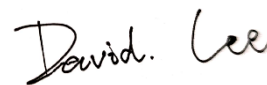
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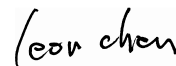
Test Result Certification	
<b>Applicant:</b>	<b>Shenzhen XinZhaoYi Technology Co., LTD</b>
<b>Address:</b>	North Complete Set of No 13 Yueming Street, Baoan District, Shenzhen, China.
<b>Manufacturer:</b>	<b>Shenzhen XinZhaoYi Technology Co., LTD</b>
<b>Address:</b>	North Complete Set of No 13 Yueming Street, Baoan District, Shenzhen, China.
<b>Factory:</b>	<b>Shenzhen XinZhaoYi Technology Co., LTD</b>
<b>Address:</b>	North Complete Set of No 13 Yueming Street, Baoan District, Shenzhen, China.
<b>Product description</b>	
<b>Product name:</b>	3 IN 1 Wireless Charger
<b>Trademark:</b>	N/A
<b>Model name:</b>	Y9
<b>Series Model:</b>	Y91, Y92, Y93, Y95, Y96, Y97, Y98, Y9-X01, Y9-X02, Y9-X03, Y9-X05, Y9-Lite, Y9-Plus, Y9-Pro
<b>Standards:</b>	FCC CFR 47 PART 1, § 1.1310
<b>Test method:</b>	KDB 680106 v03r01
<b>Date of Test</b>	
<b>Date of test:</b>	2022-10-25 ~ 2022-11-21
<b>Test result:</b>	Pass

Test Engineer :



(David Lee)

Reviewed By :



(Leon Chen)

Approved By :



(Tom Xue)

## 1 General Description

### 1.1 Description of the EUT

Product name:	3 IN 1 Wireless Charger
Model name:	Y9
Series Model:	Y91, Y92, Y93, Y95, Y96, Y97, Y98, Y9-X01, Y9-X02, Y9-X03, Y9-X05, Y9-Lite, Y9-Plus, Y9-Pro
Model difference:	All the models are the same circuit and module, except the model name color and package Logo.
Electrical rating:	Input: DC 9V/2A Output: Phone charger transmitter 1: 5W/7.5W/10W/15W Phone charger transmitter 2: 5W/7.5W/10W/15W Watch transmitter 3: 2W Earbuds transmitter 4: 3W
Accessories:	N/A
Hardware version:	IP6829
Software version:	Y9_VJHJG
<b>RF specification:</b>	
Operation frequency:	Phone charger transmitter 1: 115 kHz – 205 kHz Phone charger transmitter 2: 115 kHz – 205 kHz Watch transmitter 3: 300 kHz ~350 kHz Earbuds transmitter 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
Mode 1	Wireless output(Phone charger transmitter1 5W)
Mode 2	Wireless output(Phone charger transmitter1 7.5W)
Mode 3	Wireless output(Phone charger transmitter1 10W)
Mode 4	Wireless output(Phone charger transmitter1 15W)
Mode 5	Wireless output(Phone charger transmitter2 5W)
Mode 6	Wireless output(Phone charger transmitter2 7.5W)
Mode 7	Wireless output(Phone charger transmitter2 10W)
Mode 8	Wireless output(Phone charger transmitter2 15W)
Mode 9	Wireless output(Watch 2W)
Mode 10	Wireless output(Earbuds 3W)
Mode 11	Wireless output(Watch 2W+ Earbuds 3W)
Mode 12	Wireless output(Phone charger transmitter1 5W+ Watch 2W)

Mode 13	Wireless output(Phone charger transmitter1 7.5W+ Watch 2W)
Mode 14	Wireless output(Phone charger transmitter1 10W+ Watch 2W)
Mode 15	Wireless output(Phone charger transmitter1 15W+ Watch 2W)
Mode 16	Wireless output(Phone charger transmitter1 5W+ Watch 2W+ Earbuds 3W)
Mode 17	Wireless output(Phone charger transmitter1 7.5W+ Watch 2W+ Earbuds 3W)
Mode 18	Wireless output(Phone charger transmitter1 10W+ Watch 2W+ Earbuds 3W)
Mode 19	Wireless output(Phone charger transmitter1 15W+ Watch 2W+ Earbuds 3W)
Mode 20	Wireless output(Phone charger transmitter2 5W+ Watch 2W)
Mode 21	Wireless output(Phone charger transmitter2 7.5W+ Watch 2W)
Mode 22	Wireless output(Phone charger transmitter2 10W+ Watch 2W)
Mode 23	Wireless output(Phone charger transmitter2 15W+ Watch 2W)
Mode 24	Wireless output(Phone charger transmitter2 5W+ Watch 2W+ Earbuds 3W)
Mode 25	Wireless output(Phone charger transmitter2 7.5W+ Watch 2W+ Earbuds 3W)
Mode 26	Wireless output(Phone charger transmitter2 10W+ Watch 2W+ Earbuds 3W)
Mode 27	Wireless output(Phone charger transmitter2 15W+ Watch 2W+ Earbuds 3W)
Mode 28	Wireless output(Phone charger transmitter1 5W+ Earbuds 3W)
Mode 29	Wireless output(Phone charger transmitter1 7.5W+ Earbuds 3W)
Mode 30	Wireless output(Phone charger transmitter1 10W+ Earbuds 3W)
Mode 31	Wireless output(Phone charger transmitter1 15W+ Earbuds 3W)
Mode 32	Wireless output(Phone charger transmitter2 5W+ Earbuds 3W)
Mode 33	Wireless output(Phone charger transmitter2 7.5W+ Earbuds 3W)
Mode 34	Wireless output(Phone charger transmitter2 10W+ Earbuds 3W)
Mode 35	Wireless output(Phone charger transmitter2 15W+ Earbuds 3W)
Mode 36	Stand-by
<b>The test data only show worst test mode: Mode 19</b>	

### 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
Earbuds	/	/	Apple
Mobile phone	Find X3	/	OPPO
Watch	/	/	Apple
Adapter	HW-090200CH0	/	Huizhou BYD Electronics Co., Ltd.
Support cable list			
Description	Length (m)	From	To
/	/	/	/

## 2 Measurement uncertainty

Parameter	Expanded Uncertainty
Magnetic field measurement (9kHz~30MHz)	$\pm 7.8\%$
Electric field measurements (9kHz~30MHz)	$\pm 7.8\%$

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	2022/08/15	2023/08/14

## 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 <sup>2</sup> )	Averaging time (minutes)
<b>(i) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6
30-300	61.4	0.163	1.0	<6
300-1500			f/300	<6
1500-100000			5	<6
<b>(ii) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30
30-300	27.5	0.073	0.2	<30
300-1500			f/1500	<30
1500-100000			1.0	<30

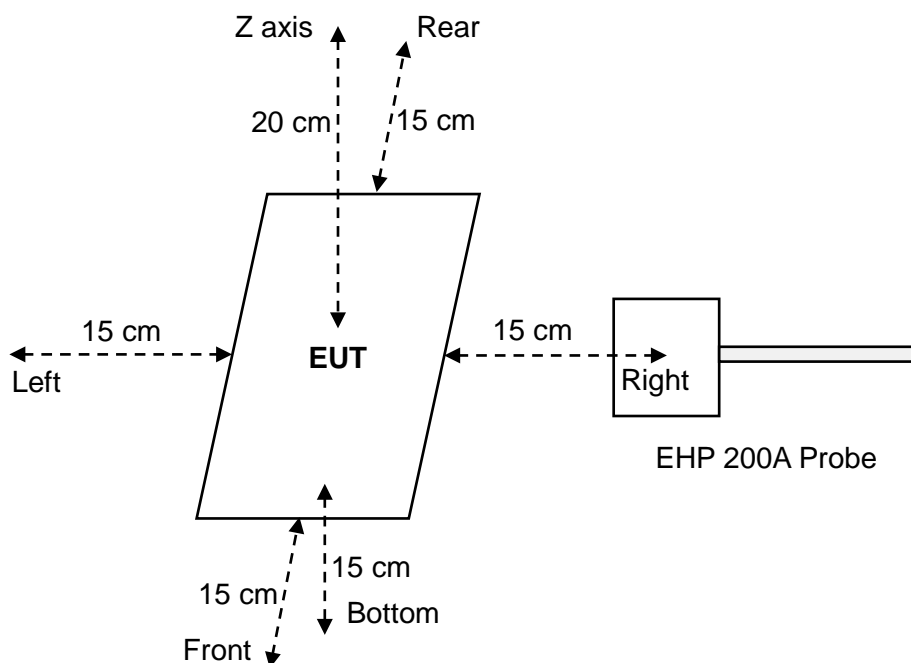
f = frequency in MHz

\* = 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

- The RF exposure test was performed in anechoic chamber.
- 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.
- The highest emission level was recorded and compared with limit.
- The EUT was measured according to the dictates of KDB 680106 v03r01.

**5.4 Equipment Approval Considerations item 5 b) of KDB 680106 D01 v03r01**

Requirement	Device
1. Power transfer frequency is less than 1 MHz.	Yes. The operating frequencies are: Phone charger transmitter 1: 115 kHz – 205 kHz Phone charger transmitter 2: 115 kHz – 205 kHz Watch transmitter 3: 300 kHz ~350 kHz Earbuds transmitter 4: 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: Phone charger transmitter 1: 15W Phone charger transmitter 2: 15W Watch transmitter 3: 2W Earbuds transmitter 4: 3W
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 one 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.

## 5.5 Test results

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

Antenna	Probe Position	E –field (V/m)			H–field (A/m)		
		Measurement	Limit	Max. Percentage (%)	Measurement	Limit	Max. Percentage (%)
1	Z axis	0.9491	614	0.17%	0.0550	1.63	3.54%
	Left	0.4780			0.0566		
	Right	0.8879			0.0505		
	Front	1.0197			0.0505		
	Rear	1.0369			0.0513		
	Bottom	0.9160			0.0577		

### 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	0.9455	614	0.17%	0.0539	1.63	3.89%
	Left	0.4582			0.0529		
	Right	0.8806			0.0427		
	Front	1.0336			0.0534		
	Rear	1.0507			0.058		
	bottom	0.9323			0.0634		

### 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	0.9477	614	0.17%	0.0468	1.63	3.02%
	Left	0.4648			0.0476		
	Right	0.872			0.0454		
	Front	1.0008			0.0483		
	Rear	1.0318			0.0461		
	bottom	0.8992			0.0493		

## **Photographs of the Test Setup**

See the Appendix - Test Setup Photos.

## **Photographs of the EUT**

See the Appendix - EUT Photos.

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