

Test Report

Report No.: MTi240131011-07E2

Date of issue: 2024-03-19

Applicant: Shenzhen Xiangdangwen Technology Co.,Ltd.

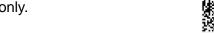
Product: Lisen 3-in-1 wireless charging station

Model(s): 2E563

FCC ID: 2AW73-2E563

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com







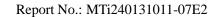
Instructions

- 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 Xiangdangwen Technology Co.,Ltd.					
Address:	106, 1/F, No.313-4 Building, Huachang Road, Langkou Community, Dalang Street, Longhua District, Shenzhen, China				
Manufacturer:	Huizhou Yimai Electronics Technology Co., Ltd.				
Address:	3rd Floor, Building B, Huakai High-tech Industrial Park, Electronic City Road, Longxi Street, Boluo Country				
Product description					
Product name:	Lisen 3-in-1 wireless charging station				
Trademark:	LISEN, AINOPE, VEICO				
Model name:	2E563				
Series Model:	N/A				
Standards:	FCC CFR 47 PART 1, § 1.1310				
Test method:	KDB 680106 D01 Wireless Power Transfer v04				
Date of Test					
Date of test:	2024-02-25 to 2024-03-19				
Test result: Pass					

Test Engineer	:	Jowid. Cel
		(David Lee)
Reviewed By:	:	leon chen
		(Leon Chen)
Approved By:	:	Tom Xue
		(Tom Xue)



1 General Description

1.1 Description of the EUT

Product name:	Lisen 3-in-1 wireless charging station		
Model name:	2E563		
Series Model:	N/A		
Model difference:	N/A		
Electrical rating:	Input: DC5V3A, 9V3A, 12V2.5A Wireless Output: Phone: 5W, 7.5W, 10W, 15W Earphone: 3W		
Accessories:	Cable: USB-C to USB-C Cable 100cm Watch Charger: Model: 2E563W FCC ID: 2AW73-2E563W Input: DC 5V1A Wireless output: 2.5W		
Hardware version:	V1.2		
Software version:	V1.2		
Test sample(s) number:	MTi240131011-07S1001		
RF specification:			
Operation frequency:	Coil1 (Phone): 115-205kHz Coil2 (Earphone): 115-205kHz		
Modulation type:	ASK		
Antenna type:	Coil		



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:

Emission test modes			
Wireless Output(Phone 5W)			
Wireless Output(Phone 7.5W)			
Wireless Output(Phone 10W)			
Wireless Output(Phone 15W)			
Wireless Output(Earphone 3W)			
Wireless Output(Phone 5W +Earphone 3W)			
Wireless Output(Phone 7.5W +Earphone 3W)			
Wireless Output(Phone 10W +Earphone 3W)			
Wireless Output(Phone 15W +Earphone 3W)			
Wireless Output(Earphone3W+ Watch 2.5W)			
Wireless Output(Phone 5W+ Watch 2.5W)			
Wireless Output(Phone 7.5W+ Watch 2.5W)			
Wireless Output(Phone 10W+ Watch 2.5W)			
Wireless Output(Phone 15W+ Watch 2.5W)			
Wireless Output(Phone 5W+ Earphone 3W+ Watch 2.5W)			
Wireless Output(Phone 7.5W+ Earphone 3W+ Watch 2.5W)			
Wireless Output(Phone 10W+ Earphone 3W+ Watch 2.5W)			
Wireless Output(Phone 15W+ Earphone 3W+ Watch 2.5W)			
stand by			

All of the listed test mode were tested, only the data of the worst mode (Mode18) is recorded in the report



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	Model Serial No.					
HUAWEI QUICK CHARGE(65W)	HW-200200ZP1	JN67LSN7N03451	HUAWEI				
Phone	12	MGYJ0HNQHL	iPhone				
iwatch	Series 7	/	Apple				
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.

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



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		EHP-200A	101166	2023/08/14	2026/08/13

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/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 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

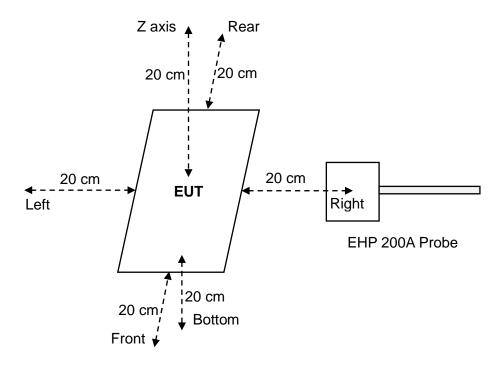
Note 1: Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

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.

^{* =} Plane-wave equivalent power density



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 Equipment Approval Considerations

Requirement	Device		
The power transfer frequency is below 1 MHz.	Yes. The operating frequencies are: Coil1 (Phone): 115-205kHz Coil2 (Earphone): 115-205kHz		
2. The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.	Yes. The maximum output power is: 15W		
3.A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)	Yes. The client device is placed directly in contact with the transmitter.		
4. Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).	Yes. Mobile exposure conditions only.		
5. The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.	Yes. See the test result in item 5.5.		
6.For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.	Yes. The EUT has two radiating structure and all scenarios have been tested.		

5.5 Test results

Test condition 1: Mode 18 operating mode with client device (1 % battery status of client device)

Probe		E –field (V/m)			H–field (A/m)	
Position	Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
Z axis	1.0740	614	0.17%	0.0518	1.63	3.47%
Left	0.7795			0.0513		
Right	0.7819			0.0501		
Front	0.9563			0.0488		
Rear	0.4601			0.0493		
bottom	0.5269			0.0566		

Test condition 2: Mode 18 operating mode with client device (50 % 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	1.0893	614	0.18%	0.0513	1.63	3.74%
Left	0.7957			0.0609		
Right	0.7696			0.0407		
Front	0.9517			0.0534		
Rear	0.4658			0.046		
Bottom	0.5417			0.0597		

Test condition 3: Mode 18 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	1.0555	614	0.17%	0.0485	1.63	3.12%
Left	0.7654			0.0509		
Right	0.77			0.0467		
Front	0.9483			0.0389		
Rear	0.4535			0.0471		
bottom	0.5176			0.0496		



Photographs of the Test Setup

See the Appendix - Test Setup Photos.

Photographs of the EUT

See the Appendix - EUT Photos.

----End of Report----