

RF Exposure Evaluation

FCC ID:2ARZ5-Y309

Report No..... : ZHT-250923119W01-2

Product..... : 3in1 wireless charger

Trademark..... : /

Model(s)..... : Y309 qi2.2,
AluMag Trio 2, LW-01, T654-G, T654-F, MagW5C

Model Difference..... : Y309 qi2.2 is the test model, while other models are derivative models. These models are the same on the circuit, only with different model names. Therefore, the test data of Y309 qi2.2 can represent the remaining models.

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Date of Receipt..... : Sep. 23, 2025

Date of Test(s)..... : Sep. 23, 2025 to -Dec. 10, 2025

Date of Issue..... : Dec. 10, 2025

Test Standard(s)..... : KDB 680106 D01 Wireless Power Transfer v04

In the configuration tested, the EUT complied with the standards specified above.

Prepared by



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Note: This device described above has been tested by ZHT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report. This report shall not be reproduced except in full, without the written approval of ZHT, this document may be altered or revised by ZHT, personal only, and shall be noted in the revision of the document.

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1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	3in1 wireless charger
Test Model No.:	Y309 qi2.2
Hardware version:	V1.0
Software version:	V1.0
Operation Frequency:	Phone: 110.5-205kHz, 360KHz Earphone: 110.5-205kHz Watch: $325 \pm 2\text{kHz}$, $1.78 \pm 0.06\text{MHz}$
Modulation type:	ASK
Antenna Type:	Coil Antenna
Antenna gain:	0dBi
Ratings	Input: 9V  3A, 12V  3A, 15V  3A Phone Output: 25W / 15W / 7.5 / 5W Earphone Output: 5W Watch Output: 5W
Sample Number:	250923119YP001
Remark: The antenna gain is provided by the customer, if the data provided by the customer is not accurate, Guangdong Zhonghan Testing Technology Co., Ltd. does not assume any responsibility.	



1.2. TEST MODES

Test Modes:	
Mode 1	AC Mains + Mobile phone charging mode (110.5-205KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:≤1%)
Mode 2	AC Mains + Mobile phone charging mode (110.5-205KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:50%)
Mode 3	AC Mains + Mobile phone charging mode (110.5-205KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:≥98%)
Mode 4	AC Mains + Mobile phone charging mode (360KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:≤1%)
Mode 5	AC Mains + Mobile phone charging mode (360KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:50%)
Mode 6	AC Mains + Mobile phone charging mode (360KHz) + Earphone charging mode + Apple Watch charging mode (Battery Status:≥98%)
Mode 7	AC Mains + Mobile phone charging mode (110.5-205KHz Battery Status:≤1%) + Earphone charging mode (Battery Status:≤1%) + Wireless charging load (5W)
Mode 8	AC Mains + Mobile phone charging mode (110.5-205KHz Battery Status:50%) + Earphone charging mode (Battery Status:50%) + Wireless charging load (5W)
Mode 9	AC Mains + Mobile phone charging mode (110.5-205KHz Battery Status:≥98%) + Earphone charging mode (Battery Status:≥98%) + Wireless charging load (5W)
Mode 10	AC Mains + Mobile phone charging mode (360KHz Battery Status:≤1%) + Earphone charging mode (Battery Status:≤1%) + Wireless charging load (5W)
Mode 11	AC Mains + Mobile phone charging mode (360KHz Battery Status:50%) + Earphone charging mode (Battery Status:50%) + Wireless charging load (5W)
Mode 12	AC Mains + Mobile phone charging mode (360KHz Battery Status:≥98%) + Earphone charging mode (Battery Status:≥98%) + Wireless charging load (5W)
Note: All modes were tested, only the worst-case was recorded in the report. Mode 1 is the worst mode.	



1.3. AUXILIARY EQUIPMENT

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	AC Adapter	Huizhou Jinhu Industrial Development Co., Ltd.	VCBAJACH	/	/
2	Mobile phone	Xiaomi Communications Co., Ltd.	Xiaomi 13	/	/
3	Earphone	Apple Inc.	A2031	/	/
4	Apple Watch	Apple Inc.	ultra 2	/	/
5	Mobile phone	Apple Inc.	iPhone 16 PULS	/	/
6	Wireless charging load	/	V2.0.4	/	/

2. RF EXPOSURE TEST

2.1. MEASURING STANDARD

KDB 680106 D01 Wireless Power Transfer v04

2.2. REQUIREMENTS

According to the item 5 of KDB 680106 D01 v04:

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

Requirements of section 3 of KDB 680106 D01	Yes/ No	Description
Mobile Device and Portable Device Configurations	Yes	Mobile Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range: Phone: 110.5-205kHz, 360KHz Earphone: 110.5-205kHz Watch: $325 \pm 2\text{kHz}$, $1.78 \pm 0.06\text{MHz}$
RF Exposure compliance may be ensured only for a minimum conditions at smaller distances can still be considered unlikely.separation distance that is greater than 20 cm, while use	Yes	The EUT H-field and E-field strengths at 20 cm surrounding the device.

2.3. LIMITS

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)

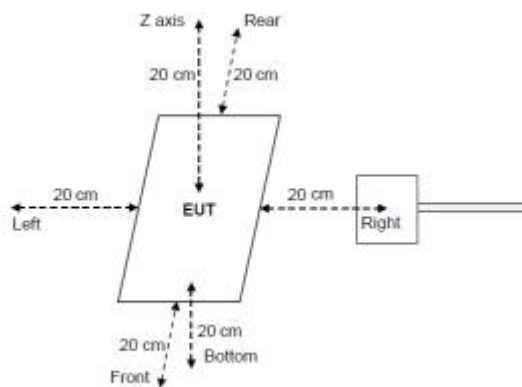
Limits for Maximum Permissible Exposure (MPE)

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).

2.4. TEST SETUP

For mobile exposure conditions:



2.5. TEST PROCEDURE

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20 cm from all sides and 20 cm from the top) 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.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

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

2.6. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	E-field	14.72%
2	H-field	15.48%
3	Temperature	$\pm 0.5^{\circ}\text{C}$
4	Humidity	$\pm 2\%$

Decision Rule

- ☒ Uncertainty is not included
☐ Uncertainty is included

2.7. TEST INSTRUMENTS LIST

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Next Cal.
Near-field Electric and Electric Field Sensor System	Schmid & Partner Engineering AG	MAGPy-8H3D+E3D V2	3127	September 09, 2025	September 08, 2026
Near-field Electric and Electric Field Sensor System	Schmid & Partner Engineering AG	MAGPy-DASV2	3121	September 09, 2025	September 08, 2026

2.8. TEST RESULT

H-Filed Strength at 20 cm from the edges surrounding the EUT

Test Mode	Unit	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	50%Limits (A/m)	Limits (A/m)	test result
Mode 1	(A/m)	0.48	0.50	0.25	0.41	0.37	0.41	0.815	1.63	PASS

E-Filed Strength at 20 cm from the edges surrounding the EUT

Test Mode	Unit	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	50%Limits (V/m)	Limits (V/m)	test result
Mode 1	(V/m)	1.41	1.38	1.45	1.52	1.53	1.41	307	614	PASS

3. Test Photo



***** END OF REPORT *****