



Product Name:	3 In 1 Magnetic Wireless
Product Model No.:	TX05-I3-QI2 TX05-I3, TX05-i2, TX05-I3-Q, TX05-I2-Q
Model Difference:	TX05-I3-QI2 is tested model, other models are derivative models. The models are identical in circuit, only different on the model names. So the test data of TX05-I3-QI2 can represent the remaining models.
Transmitting mode:	Keep the EUT in continuously wireless charging mode
Operation Frequency:	iPhone coil: 128-360kHz AirPods coil: 115-205kHz Apple Watch coil: 320-330kHz
Power supply:	Input: 5.0 V $\overline{\text{---}}$ 3.0 A / 9.0 V $\overline{\text{---}}$ 3.0 A / 12.0 V $\overline{\text{---}}$ 2.5 A Power: 22.5 W MAX(iPhone:15 W MAX) Apple Watch: 2.5 W AirPods: 5.0 W

Test Modes:

Mode 1	AC Adapter + iPhone Output(15W) + AirPods Output(5W) + Apple Watch(2.5 W)
Mode 2	AC Adapter + iPhone Output(10W) + AirPods Output(5W) + Apple Watch(2.5 W)
Mode 3	AC Adapter + iPhone Output(7.5W) + AirPods Output(5W) + Apple Watch(2.5 W)
Mode 4	AC Adapter + iPhone Output(5W) + AirPods Output(5W) + Apple Watch(2.5 W)
Mode 5	AC Adapter + iPhone Output(15W) + AirPods Output(5W)
Mode 6	AC Adapter + iPhone Output(10W) + AirPods Output(5W)
Mode 7	AC Adapter + iPhone Output(7.5W) + AirPods Output(5W)
Mode 8	AC Adapter + iPhone Output(5W) + AirPods Output(5W)
Mode 9	AC Adapter + iPhone Output(15W) + Apple Watch(2.5 W)
Mode 10	AC Adapter + iPhone Output(10W) + Apple Watch(2.5 W)
Mode 11	AC Adapter + iPhone Output(7.5W) + Apple Watch(2.5 W)
Mode 12	AC Adapter + iPhone Output(5W) + Apple Watch(2.5 W)
Mode 13	AC Adapter + iPhone Output(15W)
Mode 14	AC Adapter + iPhone Output(10W)
Mode 15	AC Adapter + iPhone Output(7.5W)



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Mode 16	AC Adapter + iPhone Output(5W)
Mode 17	AC Adapter + AirPods Output(5W)
Mode 18	AC Adapter + Apple Watch(2.5 W)
Mode 19	Standby
Note: All modes were tested, only the worst-case was recorded in the report. Mode 1 is the worst mode.	

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	3 In 1 Magnetic Wireless	Gaoyi Electronic	TX05-I3-QI2	/	EUT
E-2	AC ADAPTER	/	G301CU	/	AE
E-3	Wireless charging load	/	EESON	/	AE
E-4	AirPods	Apple	A2031	/	AE
E-5	Wireless charging load	/	YBZ	/	AE



1 Measuring Standard

KDB 680106 D01 Wireless Power Transfer v04

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 128-360kHz , 115-205kHz, 320-330kHz.
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 aggregate H-field and E-field strengths anywhere at or beyond 20 cm surrounding the device, and 20 cm away from the top surface.



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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)

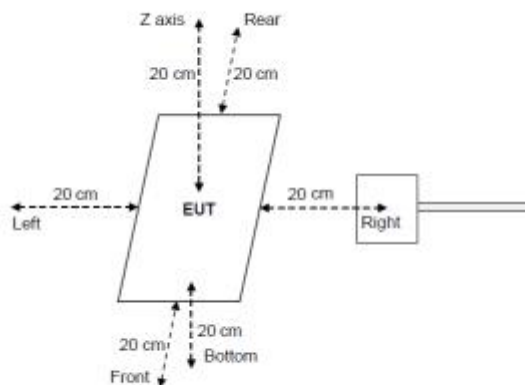
Limits for Maximum Permissible Exposure (MPE)

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).

4 Test Setup

For mobile exposure conditions:



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.

6 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended 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	H-field	$\pm 0.7\text{dB}$
2	E-field	$\pm 1.06\text{dB}$

Decision Rule

- ☒ Uncertainty is not included
☐ Uncertainty is included



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7 Test Instruments list

Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Near-field Electric and Electric Field Sensor System	SPEAG	MAGPy- 8H3D+ED3 V2	3101	Mar. 12, 2024	Mar. 11, 2026
Test software: MAGPY.exe V2.6					



8 Test Result

We have evaluated mode 1 to mode 19 and the worst mode 1 is showed in this report.

E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	50%Limits (V/m)	Limits (V/m)	test result
0.115-0.205	0.34	0.14	0.74	0.64	0.52	307	614	PASS
0.320-0.330	0.32	0.16	0.73	0.56	0.50	307	614	PASS
0.128-0.360	0.35	0.18	0.79	0.67	0.56	307	614	PASS

H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	50%Limits (A/m)	Limits (A/m)	test result
0.115-0.205	0.65	0.37	0.57	0.35	0.33	0.815	1.63	PASS
0.320-0.330	0.61	0.34	0.52	0.38	0.23	0.815	1.63	PASS
0.128-0.360	0.63	0.32	0.53	0.31	0.27	0.815	1.63	PASS



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9 Test Set-up Photo

