RF EXPOSURE Test Report

Product:	MAGSAFE COMPATIBLE WIRELESS CHARGER+STAND
Trade Mark:	CQ
Model Number:	QIMSPP3KBK-CQ
FCC ID:	2AOAF-741

Prepared for

TYLT, inc.

685 Cochran St., Suite 200 Simi Valley, California 93065, United States

Prepared by

Shenzhen HongBiao Certification& Testing Co., Ltd
Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
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TEST RESULT CERTIFICATION

Applicant's Name	:	TYLT, inc.
Address	:	685 Cochran St., Suite 200 Simi Valley, California 93065, United States
Manufacturer's Name	:	SHENZHEN KAIYUE CENTURY TECHNOLOGY CO., LTD
Address	:	4/F, Building B, Junweixing Industrial Park, Zhenmeitong Fuyu Industrial Park, Xinhu Street, Guangming District, Shenzhen
Product description		
Product name	:	MAGSAFE COMPATIBLE WIRELESS CHARGER+STAND
Model Number	:	QIMSPP3KBK-CQ
Standards	:	FCC CFR 47 PART 1 , 1.1310
Test procedure	:	KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01

This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test	:	
Date (s) of performance of tests	:	September 12, 2023~September 21, 2023
Test Result	:	**Pass**

Testing Engineer : Zoe Su

(Zoe Su)

Technical Manager : Gary Lu

(Gary Lu)

Authorized Signatory : Leo Su

(Leo Su)

Revision History

Revised No.	Date of Issue	Description
01	September 22. 2023	Original

1 General Description

1.1 Description of EUT

Product name:	MAGSAFE COMPATIBLE WIRELESS CHARGER+STAND
Model name:	QIMSPP3KBK-CQ
Series Model:	QIMSPP3KW-CQ
Different of series model:	The color of appearance and model name of series models listed are different from the main model, but the circuit and the electronic construction are the same, declared by the manufacturer.
Operation frequency:	110–205 kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Input:	DC 5V/2A from USB
Battery:	DC 3.7V/3000mAh
Power supply:	USB-C Input: DC 5V/2A Wireless Output: 5W
Adapter information:	N/A

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	Wireless charging
2	/
3	/

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
Dummy load	DL01	/	/

2 Test Facilities and Accreditations

2.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15ºC~35ºC
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 Measurement Uncertainty

The reported uncertainty of measurement y ± 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 %.

Measurement Frequency Range	U，(dB)	Note
RF frequency	2x 10^{-5}	
RF power, conducted	± 0.57 dB	
Conducted emission(150kHz~30MHz)	± 2.5 dB	
Radiated emission(30MHz~1GHz)	± 4.2 dB	
Radiated emission (above 1GHz)	± 4.7 dB	
Temperature	±1 degree	
Humidity	± 5 %	

2.4 Test Software

Software name	Manufacturer	Model	Version
EHP200-TS	Narda	EHP-200A	Rel 1.95

3 List of Test Equipment

Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E073	Electric and Magnetic Field Analyzer	Narda	EHP-200A	180ZX11013	2023-06-09	2024-06-08

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4 RF Exposure

4.1 Maximum Permissible Exposure

4.1.1. Limit

Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm2)	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposure				
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	6
300-1500			f/300	6
1500-100000			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
1500-100000			1	30
f = frequency in MHz * = Plane-wave equivalent power density				

4.1.2. Test Procedures

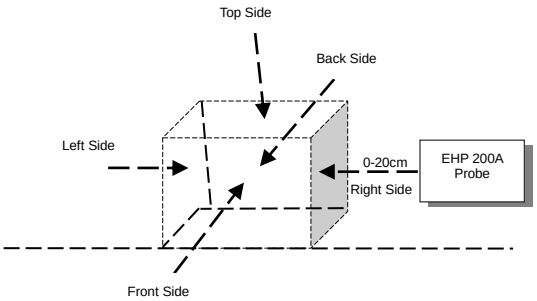
a. The RF exposure test was performed in anechoic chamber.

b. Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm.

c. The highest emission level was recorded and compared with limit.

d. The EUT was measured according to the dictates of TCB Workshop “41-Part-18-&-Wireless-Power-Transfer - April 27, 2022”

4.1.3. Test Setup



4.1.4. Test Result

Maximum permissible Exposure									
Battery levels	Field Strength	Test sides					Test distance(cm)	50% Limits	Limits
		Top	Left	Right	Front	Back			
<1%	A/m	0.471	0.482	0.473	0.487	0.484	0	0.815	1.63
<1%	V/m	1.372	1.396	1.385	1.395	1.393	0	307	614
<1%	A/m	0.472	0.483	0.474	0.485	0.482	2	0.815	1.63
<1%	V/m	1.380	1.392	1.385	1.393	1.390	2	307	614
<1%	A/m	0.465	0.483	0.476	0.486	0.481	4	0.815	1.63
<1%	V/m	1.372	1.394	1.382	1.392	1.386	4	307	614
<1%	A/m	0.465	0.479	0.473	0.485	0.472	6	0.815	1.63
<1%	V/m	1.375	1.385	1.383	1.387	1.383	6	307	614
<1%	A/m	0.463	0.472	0.473	0.481	0.472	8	0.815	1.63
<1%	V/m	1.377	1.381	1.384	1.385	1.383	8	307	614
<1%	A/m	0.462	0.471	0.475	0.479	0.470	10	0.815	1.63
<1%	V/m	1.375	1.383	1.382	1.382	1.381	10	307	614
<1%	A/m	0.454	0.473	0.471	0.477	0.468	12	0.815	1.63
<1%	V/m	1.373	1.384	1.371	1.383	1.378	12	307	614
<1%	A/m	0.455	0.473	0.472	0.475	0.466	14	0.815	1.63
<1%	V/m	1.373	1.384	1.375	1.381	1.376	14	307	614
<1%	A/m	0.452	0.467	0.472	0.475	0.464	16	0.815	1.63
<1%	V/m	1.374	1.373	1.373	1.379	1.373	16	307	614
<1%	A/m	0.455	0.467	0.474	0.473	0.462	18	0.815	1.63
<1%	V/m	1.362	1.377	1.361	1.376	1.371	18	307	614
<1%	A/m	0.455	0.462	0.462	0.470	0.459	20	0.815	1.63
<1%	V/m	1.366	1.375	1.365	1.375	1.368	20	307	614

Maximum permissible Exposure									
Battery levels	Field Strength	Test sides					Test distance(cm)	50% Limits	Limits
		Top	Left	Right	Front	Back			
<50%	A/m	0.472	0.482	0.478	0.485	0.483	0	0.815	1.63
<50%	V/m	1.383	1.393	1.385	1.391	1.394	0	307	614
<50%	A/m	0.474	0.482	0.472	0.483	0.481	2	0.815	1.63
<50%	V/m	1.382	1.381	1.382	1.389	1.392	2	307	614
<50%	A/m	0.475	0.483	0.474	0.481	0.475	4	0.815	1.63
<50%	V/m	1.382	1.386	1.386	1.387	1.393	4	307	614
<50%	A/m	0.462	0.473	0.476	0.479	0.473	6	0.815	1.63
<50%	V/m	1.371	1.387	1.383	1.385	1.386	6	307	614
<50%	A/m	0.462	0.472	0.464	0.476	0.473	8	0.815	1.63
<50%	V/m	1.373	1.377	1.372	1.383	1.385	8	307	614
<50%	A/m	0.462	0.476	0.464	0.473	0.471	10	0.815	1.63
<50%	V/m	1.375	1.372	1.375	1.380	1.381	10	307	614
<50%	A/m	0.467	0.473	0.464	0.473	0.468	12	0.815	1.63
<50%	V/m	1.364	1.373	1.374	1.380	1.385	12	307	614

<50%	A/m	0.454	0.475	0.463	0.469	0.465	14	0.815	1.63
<50%	V/m	1.363	1.377	1.371	1.377	1.380	14	307	614
<50%	A/m	0.453	0.462	0.461	0.465	0.463	16	0.815	1.63
<50%	V/m	1.361	1.361	1.363	1.371	1.376	16	307	614
<50%	A/m	0.452	0.463	0.455	0.462	0.454	18	0.815	1.63
<50%	V/m	1.354	1.365	1.366	1.371	1.372	18	307	614
<50%	A/m	0.455	0.465	0.454	0.457	0.454	20	0.815	1.63
<50%	V/m	1.356	1.363	1.360	1.366	1.367	20	307	614

Maximum permissible Exposure									
Battery levels	Field Strength	Test sides					Test distance(cm)	50% Limits	Limits
		Top	Left	Right	Front	Back			
<99%	A/m	0.472	0.482	0.472	0.493	0.482	0	0.815	1.63
<99%	V/m	1.386	1.393	1.383	1.407	1.393	0	307	614
<99%	A/m	0.477	0.486	0.475	0.492	0.481	2	0.815	1.63
<99%	V/m	1.385	1.391	1.386	1.392	1.395	2	307	614
<99%	A/m	0.465	0.482	0.473	0.484	0.480	4	0.815	1.63
<99%	V/m	1.373	1.387	1.384	1.396	1.391	4	307	614
<99%	A/m	0.471	0.482	0.477	0.481	0.473	6	0.815	1.63
<99%	V/m	1.372	1.384	1.388	1.392	1.386	6	307	614
<99%	A/m	0.465	0.475	0.473	0.483	0.475	8	0.815	1.63
<99%	V/m	1.377	1.383	1.386	1.393	1.386	8	307	614
<99%	A/m	0.464	0.472	0.465	0.481	0.472	10	0.815	1.63
<99%	V/m	1.372	1.376	1.383	1.381	1.382	10	307	614
<99%	A/m	0.467	0.472	0.466	0.471	0.470	12	0.815	1.63
<99%	V/m	1.371	1.374	1.377	1.382	1.382	12	307	614
<99%	A/m	0.462	0.462	0.464	0.473	0.464	14	0.815	1.63
<99%	V/m	1.371	1.375	1.373	1.386	1.377	14	307	614
<99%	A/m	0.452	0.465	0.468	0.466	0.462	16	0.815	1.63
<99%	V/m	1.363	1.372	1.373	1.375	1.374	16	307	614
<99%	A/m	0.452	0.462	0.452	0.465	0.462	18	0.815	1.63
<99%	V/m	1.366	1.361	1.361	1.372	1.372	18	307	614
<99%	A/m	0.453	0.459	0.453	0.462	0.452	20	0.815	1.63
<99%	V/m	1.355	1.362	1.364	1.371	1.372	20	307	614

5 Photographs of the Test Setup

MPE


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