

RF EXPOSURE Test Report

Product: Wall Charger

Trade Mark: N/A

Model Number: TC251-CU-30W

FCC ID: 2BLZQ-251CU30W

Prepared for

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F/6 Building A, JingFaZhiZao Park, Gushu Community, Baoan District,
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Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name : Shenzhen Shenchuang Hi-Tech Electronics Co.,Ltd
Address : F/6 Building A, JingFaZhiZao Park, Gushu Community, Baoan District, Shenzhen 518126, China
Manufacturer's Name : Shenzhen Tongketai electronic Technology Co.. LTD
Address : Floor 2, workshop C, zhuangbian industrial park, hangcheng avenue,sanwei community, hangcheng street, bao 'an district, shenzhen

Product description

Product name : Wall Charger
Model Number : TC251-CU-30W

Standards : FCC CFR 47 PART 1 , 1.1310

Test procedure : KDB 680106 D01 Wireless Power Transfer v04

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 : Oct. 16, 2024~ Jan. 03, 2025

Test Result..... : **Pass**

Testing Engineer :

Zoe Su

(Z o e S u)

Technical Manager :

Ming Liu

(M i n g L i u)

Authorized Signatory :

Leo Su

(L e o S u)

[illegible]

1 General Description

1.1 Description of EUT

Product name:	Wall Charger
Model name:	TC251-CU-30W
Series Model:	TC251-CU-20W, TC251-CU-25W, TC251-C-20W, TC251-C-25W, TC251-C-30W
Different of series model:	All the models are the same circuit and module, except the output PDO (firmware) is different and model No..
Operation frequency:	319.1kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Input:	AC 100-240V, 50/60Hz, 0.7A
Battery:	N/A
Power supply:	Input: AC 100-240V, 50/60Hz, 0.7A Output: DC 5V/3A, DC 9V/3A, DC 12V/2.5A, PPS DC 5-5.9V/3A, DC 3-11V/2.75A Wireless Output: 2.5W
Adapter information:	N/A

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	Wireless Output: 2.5W
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
Watch	A2859	M69PQQ7J2 T	Apple Inc.

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:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 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 %.

The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.

In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
E-field	± 1.06 dB	
H-field	± 0.7 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	2024-05-21	2025-05-20

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

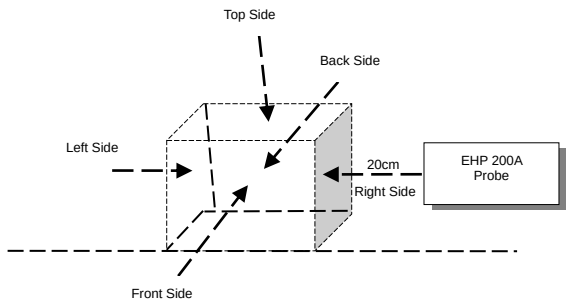
4.1 Maximum Permissible Exposure

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 Setup



4.1.3. Test Result

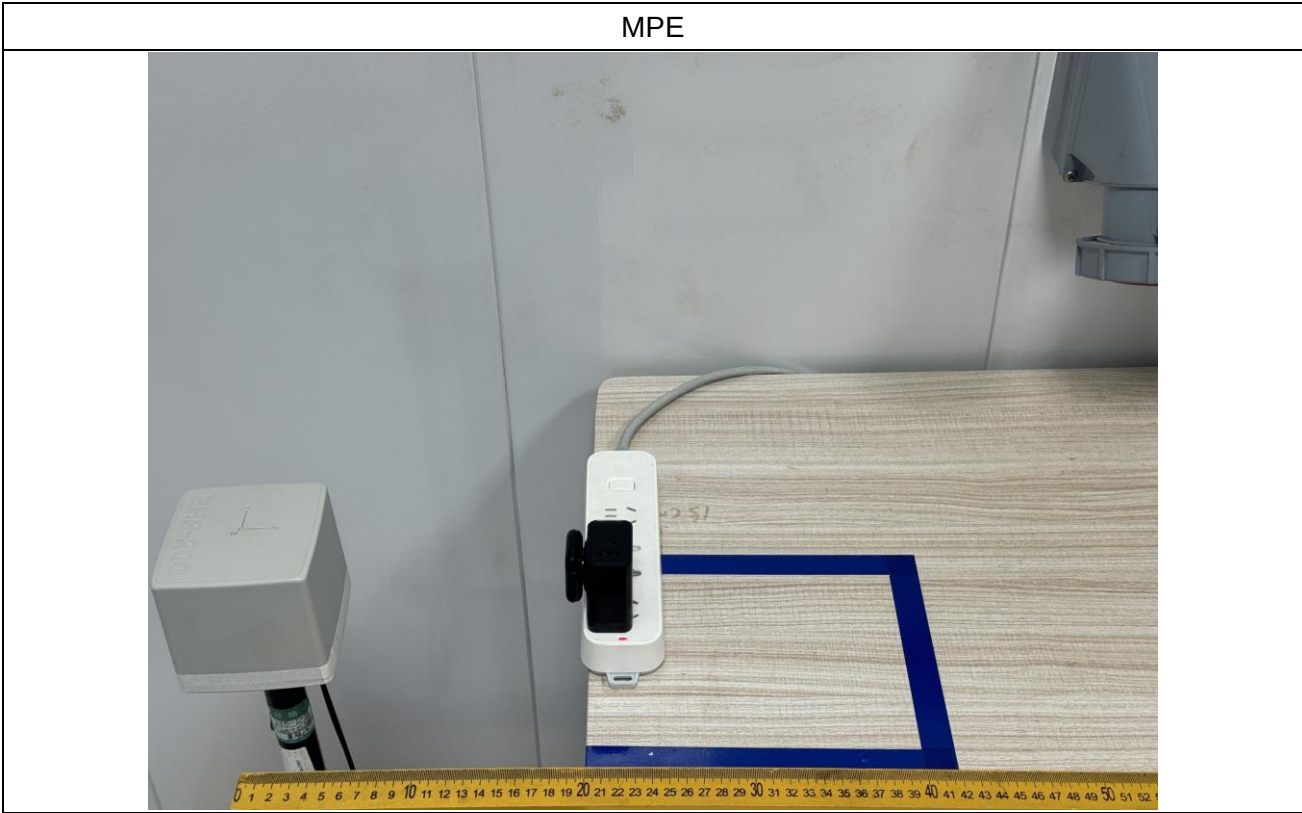
Test condition: Mode 1 operating mode with client device (1 %, 50%, 99% battery status of client device)

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<1%	Top	20	0.4542	0.0454
<1%	Left	20	0.4824	0.0452
<1%	Right	20	0.4793	0.0456
<1%	Front	20	0.8931	0.0456
<1%	Back	20	0.3891	0.0470
Limit			614	1.63
Margin Limit (%)			0.15%	2.88%

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<50%	Top	20	0.4535	0.0431
<50%	Left	20	0.4812	0.0433
<50%	Right	20	0.4784	0.0439
<50%	Front	20	0.8924	0.0426
<50%	Back	20	0.3881	0.0460
Limit			614	1.63
Margin Limit (%)			0.15%	2.82%

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<99%	Top	20	0.4515	0.0428
<99%	Left	20	0.4808	0.0429
<99%	Right	20	0.4769	0.0432
<99%	Front	20	0.8910	0.0417
<99%	Back	20	0.3877	0.0455
Limit			614	1.63
Margin Limit (%)			0.15%	2.79%

5 Photographs of the Test Setup



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