



RF Exposure Report

For

Applicant name: Shenzhen Torras Technology Co., Ltd.
Address: RM1215, BLK C, Zhantao Technology BLDG, Minzhi Avenue, Minzhi ST, Longhua DIST, Shenzhen, China
EUT name: Charger
Brand name: TORRAS
Model number: CQ21
Series model number: N/A
FCC ID: 2AN4Y-CQ21

Issued By

Company name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: 101/201/301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China
Report number: BTF251112R00302
Test standards: 47 CFR Part 1 Subpart I Section 1.1310
KDB 680106 D01 v04
Test conclusion: Pass
Date of sample receipt: 2025-11-12
Test date: 2025-11-12 to 2025-11-22
Date of issue: 2025-12-10

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Chris.Liu / Project engineer

Approved by: 
Ryan.GJ / EMC manager



Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.

Revision History		
Version	Issue Date	Revisions Content
R_V0	2025-12-10	Original
Note:		Once the revision has been made, then previous versions reports are invalid.

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1. Introduction

1.1 Laboratory Location

Test location:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	101/201/301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China
Phone number:	+86-0755-23146130
Fax number:	+86-0755-23146130

1.2 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1409**
BTF Testing Lab (Shenzhen) Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 695374.
- **CNAS - Registration No.: CNAS L17568**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L17568.
- **A2LA - Registration No.: 6660.01**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

1.3 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.
- (7) All entrusted information in this report is provided by the client and has been confirmed through consultation with the client; The testing items for this report have been discussed and confirmed with the client, and our company is only responsible for the content reflected in the report.

2. Product Information

2.1 Application Information

Company name:	Shenzhen Torras Technology Co., Ltd.
Address:	RM1215, BLK C, Zhantao Technology BLDG, Minzhi Avenue, Minzhi ST, Longhua DIST, Shenzhen, China

2.2 Manufacturer Information

Company name:	Shenzhen Torras Technology Co., Ltd.
Address:	RM1215, BLK C, Zhantao Technology BLDG, Minzhi Avenue, Minzhi ST, Longhua DIST, Shenzhen, China

2.3 Factory Information

Company name:	Shenzhen Torras Technology Co., Ltd.
Address:	RM1215, BLK C, Zhantao Technology BLDG, Minzhi Avenue, Minzhi ST, Longhua DIST, Shenzhen, China

2.4 General Description of Equipment under Test (EUT)

EUT name:	Charger
Under test model name:	CQ21
Series model name:	N/A
Description of model name differentiation:	N/A
Hardware version:	N/A
Software version:	N/A
Rating:	Input: 100-240v~50/60Hz 1.0A USB-C Output/(USB-C): 5.0V $\overline{\text{---}}$ 3.0A/9.0V $\overline{\text{---}}$ 3.0A/10.0V $\overline{\text{---}}$ 2.25A/12.0V $\overline{\text{---}}$ 3.0A/15.0V $\overline{\text{---}}$ 3.0A/20.0V $\overline{\text{---}}$ 2.25A/AVS: 9.0-15V $\overline{\text{---}}$ 3.0A/AVS: 15.0-20.0V $\overline{\text{---}}$ 2.25A Wireless Charging Output: 5W MAX USB-C+Wireless Charging Output: 27W(5.0V $\overline{\text{---}}$ 3.0A/9.0V $\overline{\text{---}}$ 3.0A)+5W Output Power: 45W MAX

2.5 Test Auxiliary Equipment

Description	Manufacturer	Model	Serial No.	Length	Description
Apple Watch	Apple Inc.	A2980	N/A	N/A	/

2.6 Test mode

No.	Test Modes	
TM1	EUT stand alone, standby.powered by AC input.	
TM2	Direct contact duringcharging/operating between the EUT& Watch is poweredby AC input.	Using a Watch (Battery Status:99%)
TM3		Using a Watch (Battery Status:50%)
TM4		Using a Watch (Battery Status:1%)
Remark: @326.175kHz-326.283kHz, 1.759939MHz-1.778403MHz(326.234KHz, 1.775Mhz)		

Note: All modes have been tested, only the worst case in the report.

3. Test Requirement

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

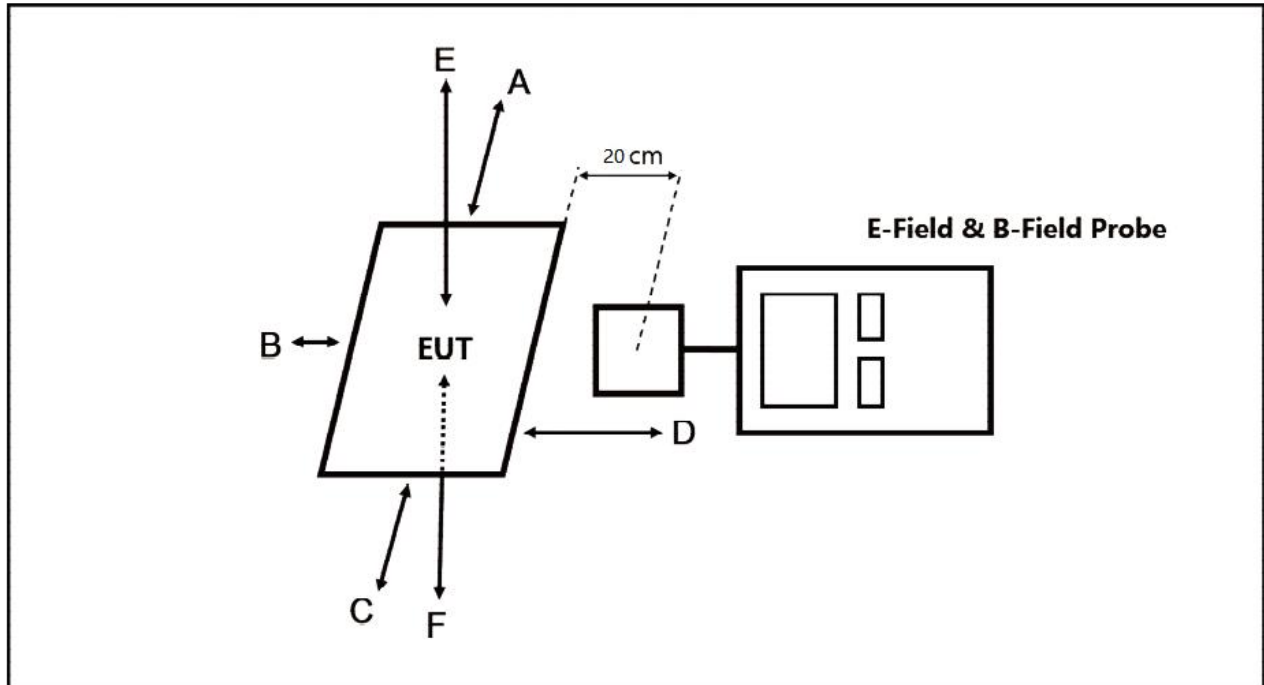
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

4. Test Equipment List

Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
Electric and Magnetic Field Analyzer	Narda	EHP-200A	180ZX11001	2025/11/16	2026/11/15

5. Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 20cm measured from the center of the probe(s) to the edge of the device.

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20cm) 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.

6. Assessment Result

6.1 E-Field And H-Field Strength Test Date:

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

Test Modes	Test Frequency (kHz)	Measured Distance (cm)	Measured E-Field Strength Values (V/m)					50% FCC E-Field Strength Limits (V/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	
TM2	326.234	20	0.3512	0.1245	0.1679	0.1761	0.1236	307
TM3	326.234	20	0.2234	0.1036	0.1613	0.1397	0.0943	307
TM4	326.234	20	0.1613	0.0846	0.1067	0.0976	0.0604	307

Test Modes	Test Frequency (MHz)	Measured Distance (cm)	Measured E-Field Strength Values (V/m)					50% FCC E-Field Strength Limits (V/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	
TM2	1.775	20	0.5745	0.2944	0.3168	0.3246	0.2835	232
TM3	1.775	20	0.4135	0.2642	0.3278	0.3199	0.1967	232
TM4	1.775	20	0.3014	0.1846	0.1952	0.2018	0.1632	232

6.2 H-Field Strength Test Date:

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

Test Modes	Test Frequency (kHz)	Measured Distance (cm)	Unit	Measured H-Field Strength Values (A/m)					50% FCC H-Field Strength Limits (A/m)
				Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	
TM2	326.234	20	uT	0.0210	0.0228	0.0251	0.0240	0.0246	0.815
			A/m	0.0168	0.0182	0.0201	0.0192	0.0197	
TM3	326.234	20	uT	0.0194	0.0213	0.0201	0.0191	0.0186	0.815
			A/m	0.0155	0.0170	0.0161	0.0153	0.0149	
TM4	326.234	20	uT	0.0123	0.0142	0.0125	0.0116	0.0110	0.815
			A/m	0.0098	0.0114	0.0100	0.0093	0.0088	

Test Modes	Test Frequency (MHz)	Measured Distance (cm)	Unit	Measured H-Field Strength Values (A/m)					50% FCC H-Field Strength Limits (A/m)
				Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	
TM2	1.775	20	uT	0.0597	0.0578	0.0607	0.0554	0.0571	0.617
			A/m	0.0478	0.0462	0.0486	0.0443	0.0457	
TM3	1.775	20	uT	0.0487	0.0457	0.0426	0.0409	0.0381	0.617
			A/m	0.0390	0.0366	0.0341	0.0327	0.0305	

TM4	1.775	20	uT	0.0375	0.0363	0.0377	0.0327	0.0322	0.617
			A/m	0.0300	0.0290	0.0302	0.0362	0.0258	

Note: $A/m = uT/1.25$

7. Conclusion

When charging a smartphone, the minimum safe distance between the device and the antenna is 20 centimeters, and the emission is below the FCC KDB 680106 limit.

8. Test Set-up Photo



Side(C)



Side(A)



Side(B)



Side(D)



Top(E)



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