

RF Exposure Report

For

Applicant name: Limitless Innovations, Inc.
Address: 4800 Metalmaster Way, McHenry, IL 60050
EUT name: Desktop Wireless Charger With Retractable Cables
Brand name: LIMITLESS
Model number: LIM-DTCRC-M001
Series model number: Refer to section 2
FCC ID: 2AQ9A-LIMDTCRCM001

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: BTF250812R00902
Test standards: 47 CFR Part 1 Subpart I Section 1.1310
KDB 680106 D01 v04
Test conclusion: Pass
Date of sample receipt: 2025-08-12
Test date: 2025-08-13 to 2025-08-25
Date of issue: 2025-09-12

Prepared by:



Chris Liu / Project engineer

Approved
by:



Ryan.CJ /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	2025-09-12	Original
<i>Note:</i>	<i>Once the revision has been made, then previous versions reports are invalid.</i>	

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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:	Limitless Innovations, Inc.
Address:	4800 Metalmaster Way, McHenry, IL 60050

2.2 Manufacturer Information

Company name:	SHENZHEN CHIFROG TECHNOLOGY CO., LTD
Address:	402, BLD B, Bafang Industrial Park, 13 Lingxia Rd, Fenghuang, Fuyong, Bao'An District, Shenzhen, China PostCode: 518103

2.3 Factory Information

Company name:	SHENZHEN CHIFROG TECHNOLOGY CO., LTD
Address:	402, BLD B, Bafang Industrial Park, 13 Lingxia Rd, Fenghuang, Fuyong, Bao'An District, Shenzhen, China PostCode: 518103

2.4 General Description of Equipment under Test (EUT)

EUT name:	Desktop Wireless Charger With Retractable Cables	
Under test model name:	LIM-DTCRC-M001	
Series model name:	LIM-DTCRC-M002, LIM-DTCRC-M005, LIM-DTCRC-M015, LIM-DTCRC-M098	
Description of model name differentiation:	All models are identical except for the name and color of the model. LIM-DTCRC-M001 Black Metallic LIM-DTCRC-M002 White Metallic LIM-DTCRC-M005 Pink Metallic LIM-DTCRC-M015 Navy Metallic LIM-DTCRC-M098 Espresso Metallic	
Hardware version:	N/A	
Software version:	N/A	
Rating:	AC Input: 100V-240Vac 50/60Hz 2A Output: Type-C Output: PD65W 5V= 3A, 9V= 3A, 12V= 3A, 15V= 3A, 20V= 3.25A, PPS 5-21V= 3A. USB-A1/A2 Output: QC3.0 5V/3.0A, 9V/2.0A, 12V/1.5A; 22.5W. MAX Wireless Charging Output: 5W/7.5W/15W	

2.5 Test Auxiliary Equipment

Description	Manufacturer	Model	Serial No.	Length	Description
mobile phone	XIAOMI	XIAOMI 14	N/A	N/A	/

2.6 Test mode

No.	Test Modes	
TM1	EUT stand alone, standby.powered by AC input.	
TM2	Direct contact during charging/operating between the EUT & Mobile phone is powered by AC input.	Using a mobile phone load (Battery Status:99%)
TM3		Using a mobile phone load (Battery Status:50%)
TM4		Using a mobile phone load (Battery Status:1%)

Remark: @120kHz-205kHz (144.5kHz)

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

3. Test Requirement

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

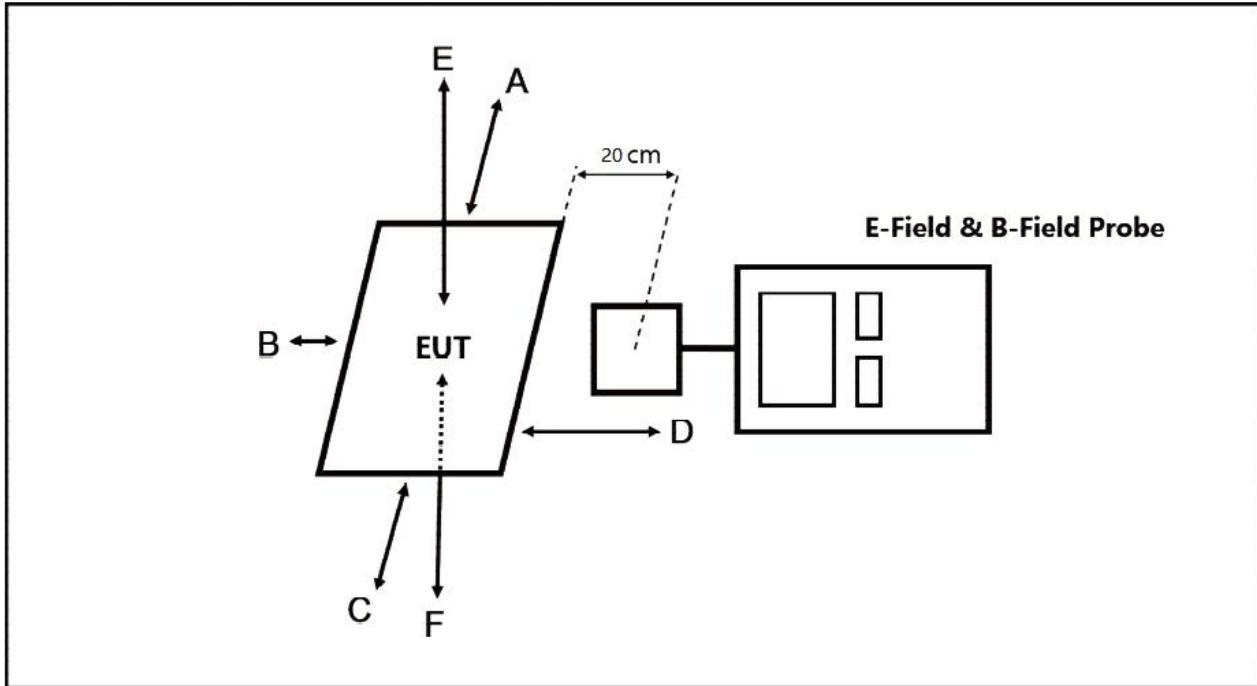
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	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	2024/11/16	2025/11/15

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	144.5	20	0.6482	0.1933	0.2558	0.2243	0.1639	307
TM3	144.5	20	0.5198	0.1550	0.2056	0.1816	0.1319	307
TM4	144.5	20	0.3570	0.1074	0.1431	0.1240	0.0906	307

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	144.5	20	uT	0.0250	0.0276	0.0293	0.0276	0.0271	0.815
			A/m	0.0200	0.0221	0.0234	0.0221	0.0217	
TM3	144.5	20	uT	0.0201	0.0223	0.0234	0.0221	0.0218	0.815
			A/m	0.0161	0.0178	0.0187	0.0177	0.0174	
TM4	144.5	20	uT	0.0139	0.0153	0.0161	0.0154	0.0149	0.815
			A/m	0.0111	0.0122	0.0129	0.0123	0.0119	

Note: A/m=uT/1.25

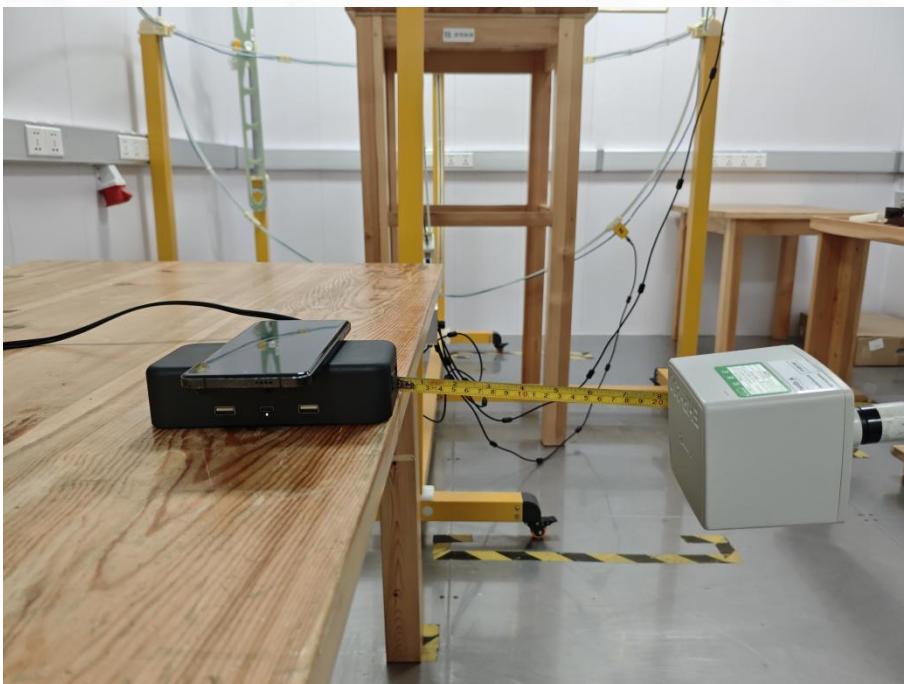
7. Conclusion

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)



Test Report Number: BTF250812R00902



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