RF EXPOSURE REPORT

Applicant	:	CUKTECH Technology Co., Ltd.
Address of Applicant	:	4F Building B4, No. 19 Suyuan Avenue, Jiangning District, Nanjing City, Jiangsu Province, P. R. China
Manufacturer	:	CUKTECH Technology Co., Ltd.
Address of Manufacturer	:	4F Building B4, No. 19 Suyuan Avenue, Jiangning District, Nanjing City, Jiangsu Province, P. R. China
Equipment under Test	:	CUKTECH Magnetic Power Bank CP132ML
Model No.	:	WPB100L
FCC ID	:	2BLH6-WPB100L
Test Standard(s)	:	FCC CFR 47 part1, 1.1307(b), 1.1310; KDB680106 DR03-44118
Report No.	:	DDT-RE24102104-1E04
Issue Date	:	2024/10/31
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

Table of Contents

Test Report Declare

Applicant	:	CUKTECH Technology Co., Ltd.
Address of Applicant	:	4F Building B4, No. 19 Suyuan Avenue, Jiangning District, Nanjing City, Jiangsu Province, P. R. China
Equipment under Test	:	CUKTECH Magnetic Power Bank CP132ML
Model No.	:	WPB100L
Manufacturer	:	CUKTECH Technology Co., Ltd.
Address of Manufacturer	:	4F Building B4, No. 19 Suyuan Avenue, Jiangning District, Nanjing City, Jiangsu Province, P. R. China

Test Standard Used:

FCC CFR 47 part1, 1.1307(b), 1.1310; KDB680106 DR03-44118

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE24102104-1E04		
Date of Receipt:	2024/10/21	**Date of Test:**	2024/10/21~2024/10/31

Prepared By:

Tiger Mo

Tiger Mo/Engineer

Approved By:

Damon Hu

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2024/10/31	

1. General Test Information

1.1. Description of EUT

EUT Name	:	CUKTECH Magnetic Power Bank CP132ML
Model Number	:	WPB100L
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	Input: IN1/IN2(Type-C1/Type-C2 Cable) 5V⎓3A, 9V⎓2.22A or DC 3.65V 36.5Wh 10000mAh Lithium-ion polymer cell Output: 22.5W MAX OUT1/OUT2(Type-C1/Type-C2 Cable): 5V⎓3A, 9V⎓2.22A, 10V⎓2.25A Wireless Output: 7.5 MAX Wired + Wireless Output: 5V⎓3A MAX
Hardware Version	:	V1.3
Software Version	:	1.29
Wireless charging Operation frequency	:	115kHz-205kHz
Antenna Type	:	Inductive loop coil antenna

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

"☒" means to be chosen or applicable; "□" means don't to be chosen or not applicable; This note applies to entire report.

1.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

1.3. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

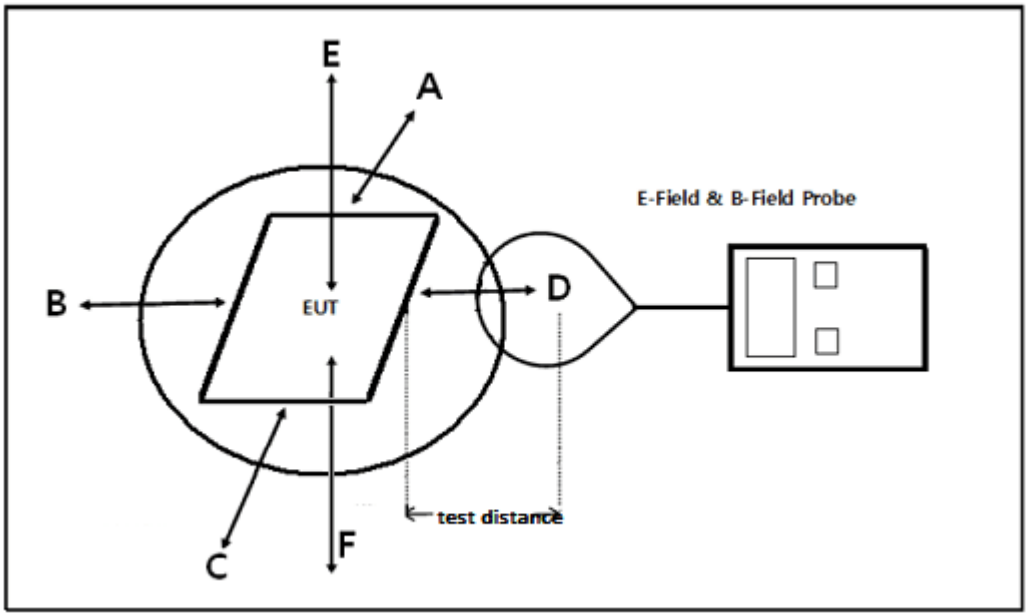
VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2. RF Exposure evaluation for FCC

2.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
Isotropic EM Field Probe	Wavecontrol	WP400	DDT-ZC02464	2025/06/28

2.2. Block diagram of test setup



2.3. Limits

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.According KDB 680106 D01 Wireless Power Transfer v04.

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/f2	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/f2	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

2.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Dummy load	N/A	N/A	N/A	N/A

2.5. Test procedure

a)The RF exposure test was performed in shielded chamber.
b)The measurement probe was placed at test distance (0cm ,2cm, 4cm, 6cm, 8cm, 10cm, 20 cm) which is between the edge of the charger and the geometric centre of probe.
c)The measurement probe used to search of highest strength.
d)The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.
e)The EUT were measured according to the dictates of KDB 680106 D01 Wireless Power Transfer v04.

Equipment approval considerations:
The EUT does comply with section 5.2 of KDB 680106 D01 Wireless Power Transfer v04.
(1) Power transfer frequency is less than 1 MHz.
Yes, the device operates in the frequency range from 115 kHz - 205 kHz
(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.
Yes, the maximum output power of the primary coil is 7.5 W.
(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter(i.e., the surfaces of the transitter and client device enclosures need to be in physical contact)
Yes. client device is placed directly in contact with the transmitter.
(4) Only §2.1091-Mobile exposure conditions apply (i.e, this provision does not cover §2.1093-Portableexposure conditions).
No, the EUT is for portable exposure.

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. Thesemeasurements shall be taken along the principal axes of the device, with one axis oriented along thedirection of the estimated maximum field strength, and for three points per axis or until a l/d (inversedistance from the emitter structure) field strength decay is observed. Symmetry considerations may be usedor test reduction purposes. The device shall be operated in documented worst-case compliance scenariosi.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coilsor antennas) that by design can simultaneously transmit are energized at their nominal maximum power.
Yes, the E-field and H-field strengths levels are less than 50% of MPE limit.
(6) For systems with more than onc radiating structure, the conditions specified in (5) must be met whenthe system is fully loaded (i.e, clients absorbing maximum power available), and with all the radiatingstructures operating at maximum power at the same time, as per design conditions. If the design allows oneor more radiating structures to be powered at a higher level while other radiating structures are not powered.then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, orone coil powered at 15 W: in this case, both scenarios shall be tested.
No, the transfer system only includes one primary coils.

2.6. Test result

Dummy load is working on 5W load, 7.5W.
All test modes were pre-tested, but we only recorded the worst case in this report.

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
0	A	4.07	7.69	614	307
	B	3.19	7.71	614	307
	C	4.67	6.23	614	307
	D	2.78	3.66	614	307
	E	5.29	6.48	614	307
	F	3.42	3.83	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
0	A	0.14	0.19	1.63	0.815
	B	0.14	0.26	1.63	0.815
	C	0.15	0.27	1.63	0.815
	D	0.07	0.08	1.63	0.815
	E	0.13	0.19	1.63	0.815
	F	0.16	0.23	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
2	A	4.06	5.79	614	307
	B	1.76	7.62	614	307
	C	4.22	4.45	614	307
	D	1.23	3.58	614	307
	E	4.98	5.01	614	307
	F	2.03	3.34	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
2	A	0.13	0.16	1.63	0.815
	B	0.07	0.23	1.63	0.815
	C	0.08	0.16	1.63	0.815
	D	0.06	0.07	1.63	0.815
	E	0.12	0.18	1.63	0.815
	F	0.14	0.23	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
4	A	2.11	3.33	614	307
	B	1.38	3.78	614	307
	C	1.57	3.42	614	307
	D	1.21	2.99	614	307
	E	4.75	4.73	614	307
	F	0.93	3.22	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
4	A	0.13	0.09	1.63	0.815
	B	0.06	0.23	1.63	0.815
	C	0.06	0.14	1.63	0.815
	D	0.06	0.07	1.63	0.815
	E	0.12	0.18	1.63	0.815
	F	0.07	0.22	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
6	A	1.62	1.75	614	307
	B	1.06	3.24	614	307
	C	1.21	2.06	614	307
	D	0.48	2.38	614	307
	E	4.16	4.27	614	307
	F	0.75	2.08	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
6	A	0.05	0.08	1.63	0.815
	B	0.05	0.13	1.63	0.815
	C	0.05	0.10	1.63	0.815
	D	0.03	0.05	1.63	0.815
	E	0.10	0.21	1.63	0.815
	F	0.05	0.17	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
8	A	0.86	1.25	614	307
	B	0.85	1.61	614	307
	C	0.75	1.38	614	307
	D	0.33	0.73	614	307
	E	2.46	2.92	614	307
	F	0.62	1.56	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
8	A	0.03	0.06	1.63	0.815
	B	0.04	0.08	1.63	0.815
	C	0.04	0.07	1.63	0.815
	D	0.02	0.04	1.63	0.815
	E	0.07	0.15	1.63	0.815
	F	0.04	0.13	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
10	A	0.36	0.60	614	307
	B	0.35	0.73	614	307
	C	0.41	0.89	614	307
	D	0.22	0.37	614	307
	E	1.03	1.82	614	307
	F	0.36	0.91	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
10	A	0.01	0.03	1.63	0.815
	B	0.02	0.04	1.63	0.815
	C	0.02	0.05	1.63	0.815
	D	0.01	0.02	1.63	0.815
	E	0.04	0.10	1.63	0.815
	F	0.02	0.08	1.63	0.815

Test Distance (cm)	Test Position	Probe Measure Result(V/m)		Limits Test (V/m)	50% of Limit (V/m)
		5W	7.5W		
20	A	0.28	0.31	614	307
	B	0.26	0.30	614	307
	C	0.22	0.23	614	307
	D	0.14	0.19	614	307
	E	0.68	0.70	614	307
	F	0.22	0.36	614	307

Test Distance (cm)	Test Position	Probe Measure Result(A/m)		Limits Test (A/m)	Limits Test (A/m)
		5W	7.5W		
20	A	0.009	0.01	1.63	0.815
	B	0.01	0.02	1.63	0.815
	C	0.01	0.02	1.63	0.815
	D	0.006	0.01	1.63	0.815
	E	0.02	0.04	1.63	0.815
	F	0.01	0.02	1.63	0.815

The distance from the probe measuring point to the EUT surface is 5cm
(Estimated value) =2cm (actual value) *4cm (actual value) /6cm (actual value)
According to the following table, when we backward derivation 0cm, it should be 8.89(V/m), with a deviation from the actual test value of -15.3%.
(Estimated value) =4cm (actual value) *6cm (actual value) /8cm (actual value)
According to the following table, when we backward derivation 2cm, it should be 7.61(V/m), with a deviation from the actual test value of 0.17%.
(Estimated value) =2cm (actual value) *8cm (actual value) /6cm (actual value)
According to the following table, when we backward derivation 4cm, it should be 3.79(V/m), with a deviation from the actual test value of -0.17%

Measure Result V/m				
0cm	2cm	4cm	6cm	8cm
7.71	7.62	3.78	3.24	1.61

According to the following table, when we backward derivation 0cm, it should be 0.224(A/m), with a deviation from the actual test value of 17%.
According to the following table, when we backward derivation 2cm, it should be 0.200(A/m), with a deviation from the actual test value of -25%.
According to the following table, when we backward derivation 4cm, it should be 0.112(A/m), with a deviation from the actual test value of 20%.

Measure Result A/m				
0cm	2cm	4cm	6cm	8cm
0.27	0.16	0.14	0.10	0.07

5. Photos of the EUT

Please refer to DDT-Q24102104-2E appendix I

----------End Report----------