

Prüfbericht-Nr.: Test report no.:	CN23AMIA 002	Auftrags-Nr.: Order no.:	168425712	Seite 1 von 10 Page 1 of 10
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2023-05-08	
Auftraggeber: Client:	NanJing CukTech Electronics Technology Co., Ltd. 16F Building A1, Huizhi Technology Park, No. 8 Hengtai Road, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, P.R. China			
Prüfgegenstand: Test item:	CUKTECH Power Bank P+Series 40000mAh 300W			
Bezeichnung / Typ-Nr.: Identification / Type no.:	P01CT			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 1.1310 CFR47 FCC Part 2.1091 KDB 680106 D01 RF Exposure Wireless Charging			
Wareneingangsdatum: Date of sample receipt:	2023-05-08	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003470541-001~002			
Prüfzeitraum: Testing period:	2023-05-18 - 2023-05-24			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:			genehmigt von: authorized by:	
Datum: Date:	2023-07-07	Signed by: Bell Hu	Ausstellungsdatum: Issue date:	2023-07-07
Stellung / Position: Sachverständige(r)/Expert		Stellung / Position: Sachverständige(r)/Expert		
Sonstiges / FCC ID: 2BA5V-P01CT Other:				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

V05

Prüfbericht-Nr.: CN23AMIA 002
Test report no.:

Seite 2 von 10
Page 2 of 10

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. <i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i>
3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Prüfbericht - Nr.: CN23AMIA 002
Test Report No.:

Seite 3 von 10
Page 3 of 10

Test Summary

4.1.1 ELECTROMAGNETIC FIELDS

RESULT: Pass

Contents

1	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
2	TEST SITES	6
2.1	TEST FACILITIES.....	6
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS	6
2.3	TRACEABILITY.....	6
2.4	CALIBRATION.....	6
2.5	LOCATION OF ORIGINAL DATA	6
2.6	STATUS OF FACILITY USED FOR TESTING	6
3	GENERAL PRODUCT INFORMATION.....	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
4	SAFETY HUMAN EXPOSURE.....	8
4.1	RADIO FREQUENCY EXPOSURE COMPLIANCE	8
4.1.1	Electromagnetic Fields	8
5	PHOTOGRAPHS OF THE TEST SET-UP	10
6	LIST OF TABLES	10

Prüfbericht - Nr.: CN23AMIA 002
Test Report No.:

Seite 5 von 10
Page 5 of 10

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China

FCC Accreditation Designation No.: CN1260

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

EMF				
Equipment	Manufacturer	Model	Serial No.	Cal. until
Electric and Magnetic Field Analyzer	Narda	EHP200A	180ZX20517	2023-09-28

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.6 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The Product is a Power Bank, which supports wireless charging (WPT) function.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	CUKTECH Power Bank P+Series 40000mAh 300W
Type Designation:	P01CT
FCC ID:	2BA5V-P01CT
Power Supply:	INPUT (TYPE-C1) DC 5V/3A 9V/3A 12V/3A 20V5A INPUT (TYPE-C2) DC 5V/3A 9V/3A 12V/3A 20V5A 28V/5A OUT1 (USB-A1) DC 5V/3A 9V/2.23A 12V/1.67A 10V/2.25A 22.5W MAX OUT2 (USB-C1) DC 5V/3A 9V/3A 12V/3A 15V/3A 20V/5A 100W MAX OUT3 (USB-C2) DC 5V/3A 9V/3A 12V/3A 15V/3A 20V/5A 28C/5A140W MAX OUT4 (USB-A2) DC 5V/3A 9V/3A 12V/3A 15V/3A 20V/6A 120W MAX FOUR PORT OUTPUT DC 5V/6A (OUT1 1.5V/1.5A, OUT2 5V/1.5A, OUT3 5V/1.5A, OUT4 5V/1.5A) DC 9V/6A (OUT1 9.0V/1.5A, OUT2 9.0V/1.5A, OUT3 9.0V/1.5A, OUT4 9.0V/1.5A) DC 12V/6A (OUT1 12V/1.5A, OUT2 12V/1.5A, OUT3 12V/1.5A, OUT4 12V/1.5A) DC 15V/6A (OUT2 15V/2.0A, OUT3 15V/2.0A, OUT4 15V/2.0A) DC 20V/15A (OUT2 20V/5.0A, OUT3 20V/5.0A, OUT4 20V/5.0A) WIRELESS OUTPUT 20W MAX
Battery:	Cell type: lithium-ion cell Cell capacity (rated/typical): 141Wh/144Wh 14.4V Rated capacity: 22,000mAh (5V/6A)
Operating Temperature Range:	5°C ~ +35 °C
Technical Specification of WPT	
Frequency Range:	110~148KHz
Type of Modulation:	FSK
Antenna Type:	Integral Antenna

4 Safety Human Exposure

4.1 Radio Frequency Exposure Compliance

4.1.1 Electromagnetic Fields

RESULT:

Pass

Test Specification

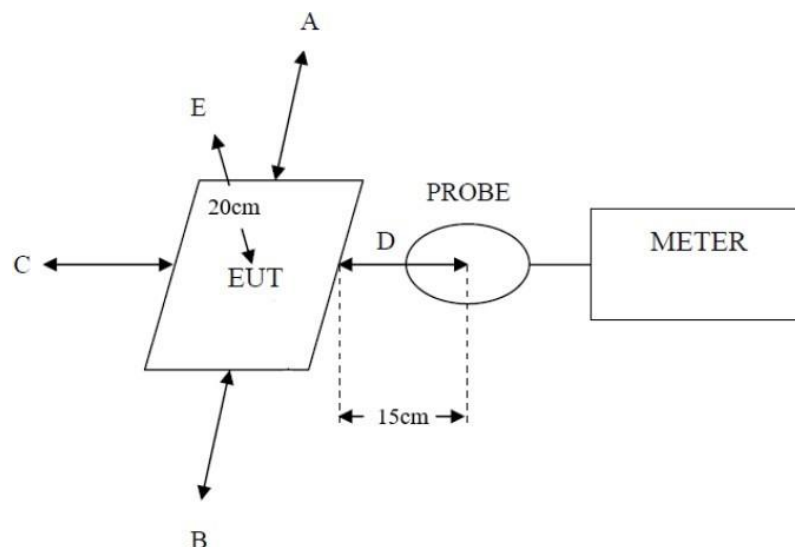
Test standard : CFR47 FCC Part 1: Subpart I Section 1.1310
FCC CFR 47 Part 1(1.1310) KDB 680106 D01 v03

According to the table 1 of FCC Part 2.1310, the reference limit as below:

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

Test Setup:



Test Result:

Table: The test conducted along all the three axes of the EUT from 0 to 20cm, in 2 cm iteration from the edge of the device with one axis coincident with the axis of the main coil. All test follow full battery charge level(100%).

Test distance	Measured H-Field Strength Values (A/m)					50% Limit (A/m)	Limit (A/m)	Result
	Test Position Top	Test Position Front	Test Position Rear	Test Position Left	Test Position Right			
0 cm	0.298	0.273	0.276	0.269	0.278	0.815	1.63	Pass
2 cm	0.296	0.267	0.271	0.265	0.274	0.815	1.63	Pass
4 cm	0.292	0.261	0.265	0.259	0.269	0.815	1.63	Pass
6 cm	0.286	0.254	0.258	0.253	0.262	0.815	1.63	Pass
8 cm	0.283	0.248	0.256	0.249	0.257	0.815	1.63	Pass
10 cm	0.278	0.244	0.252	0.245	0.255	0.815	1.63	Pass
12 cm	0.277	0.242	0.248	0.243	0.254	0.815	1.63	Pass
14 cm	0.275	0.238	0.246	0.239	0.251	0.815	1.63	Pass
16 cm	0.269	0.232	0.24	0.233	0.244	0.815	1.63	Pass
18 cm	0.265	0.228	0.235	0.231	0.242	0.815	1.63	Pass
20 cm	0.262	0.224	0.233	0.227	0.236	0.815	1.63	Pass

5 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

6 List of Tables

Table 1: List of Test and Measurement Equipment	6
Table 2: Technical Specification of EUT	7

Appendix A: Photographs of the Test Set-Up

APPENDIX A: PHOTOGRAPHS OF THE TEST SET-UP.....	1
PHOTOGRAPH 1: SET-UP PHOTO FOR SAFETY HUMAN EXPOSURE.....	2

Photograph 1: Set-up photo for Safety Human Exposure

