Prüfbericht - Produkte
Test Report - Products

TÜVRheinland®

Prüfbericht-Nr.: *Test report no.*:	**CN23JHXL 002**	**Auftrags-Nr.:** *Order no.*:	**168450593**	Seite 1 von 11 *Page 1 of 11*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2023-11-02	
Auftraggeber: *Client*:	**SRP Companies** 85 Rio Grande Drive, Second Floor, Castle Rock, CO 80104, USA			
Prüfgegenstand: *Test item*:	24/7 LIFE MGNTC WRLS CHRGR			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	EWL-23160-A, 052548506360, 608707678630			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 2.1091			

Wareneingangsdatum: *Date of sample receipt*:	2023-11-07
Prüfmuster-Nr.: *Test sample no:*	A003596938-002
Prüfzeitraum: *Testing period*:	2023-11-16 - 2023-11-16
Ort der Prüfung: *Place of testing*:	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result**:	Pass

Please refer to Photo Document

geprüft von: tested by:	X Andy Yan	**genehmigt von:** *authorized by*:	X Hardy Suo
Datum: *Date:* 2023-11-30		**Ausstellungsdatum:** *Issue date:* 2023-11-30	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*: FCC ID: 2ATF5-E50636

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*

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. *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.*
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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. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen 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 bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. 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.

Contents

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 Road Middle, Longhua District, 518110, Shenzhen, P. R. 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	2024-09-21

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 basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Uncertainty
Magnetic Field Emissions (A/m)	±1.2μT
Electric Field Emissions (V/m)	±18%

2.6 Location of Original Data

The original copies of all test data taken during actual testing were in 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.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. 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 EUT is a Wireless Charging intended to use with a minimum distance 20cm between the radiator and user body.

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

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	**Value**
Kind of Equipment:	24/7 LIFE MGNTC WRLS CHRGR
Type Designation:	EWL-23160-A, 052548506360, 608707678630 All models above are same in electronic aspect, the difference is only model number for market strategy.
FCC ID:	2ATF5-E50636
Operating Voltage:	DC 5V@2A / 9V@2A
Technical Specification of WPT	
Frequency Range:	110.5~205KHz
Type of Modulation:	FSK
Antenna Type:	Coil antenna
Wireless output power:	15W/10W/7.5W/5W

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Wireless charging

3.4 Noise Generating and Noise Suppressing Parts

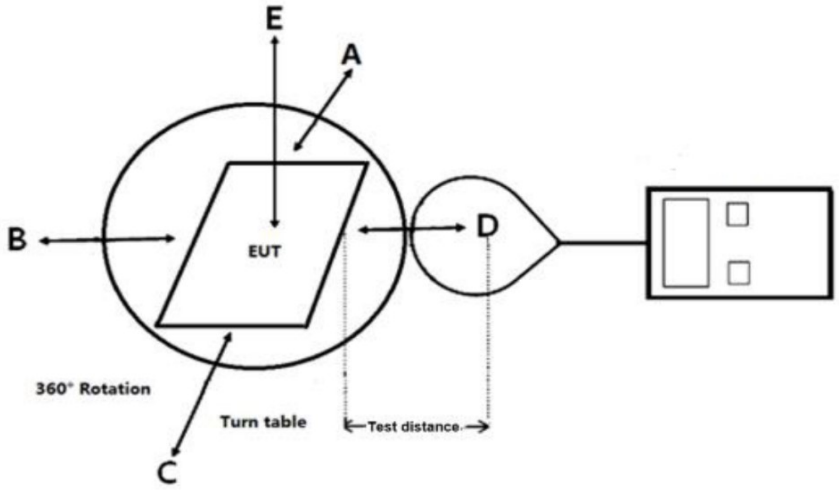
Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- ID Label and Location Info

3.6 Test Setup Diagram

Diagram of Measurement Configuration



4 Safety Human Exposure

4.1 Radio Frequency Exposure Compliance

4.1.1 Test procedures according to the technical standards

Standards	Test Item	Judgment	Remark
FCC CFR 47 part1, 1.1310 KDB680106 D01v03r01	Electric Field Strength (E) (V/m)	PASS	-
	Magnetic Field Strength (H) (A/m)	PASS	-

4.1.2 Limit of Maximum Permissible Exposure

Limit of Maximum Permissible Exposure

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

Note 1: f = frequency in MHz ; *Plane-wave equivalent power density.
Note 2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v03.
Note 3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.
Note 4: The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from the transmitting coils are demonstrated to be less than 50% of the MPE limit.

4.1.3 Test Result

RF Exposure Evaluation - Magnetic Field Emissions

Test Mode	Test Position	Test Distance (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Charging mode	Front	15	0.303	1.63	0.815	PASS
	Rear	15	0.312	1.63	0.815	PASS
	Left	15	0.306	1.63	0.815	PASS
	Right	15	0.311	1.63	0.815	PASS
	Top	20	0.301	1.63	0.815	PASS

RF Exposure Evaluation - Electric Field Emissions

Test Mode	Test Position	Test Distance (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Charging mode	Front	15	2.347	614	307	PASS
	Rear	15	2.352	614	307	PASS
	Left	15	2.345	614	307	PASS
	Right	15	2.349	614	307	PASS
	Top	20	2.342	614	307	PASS

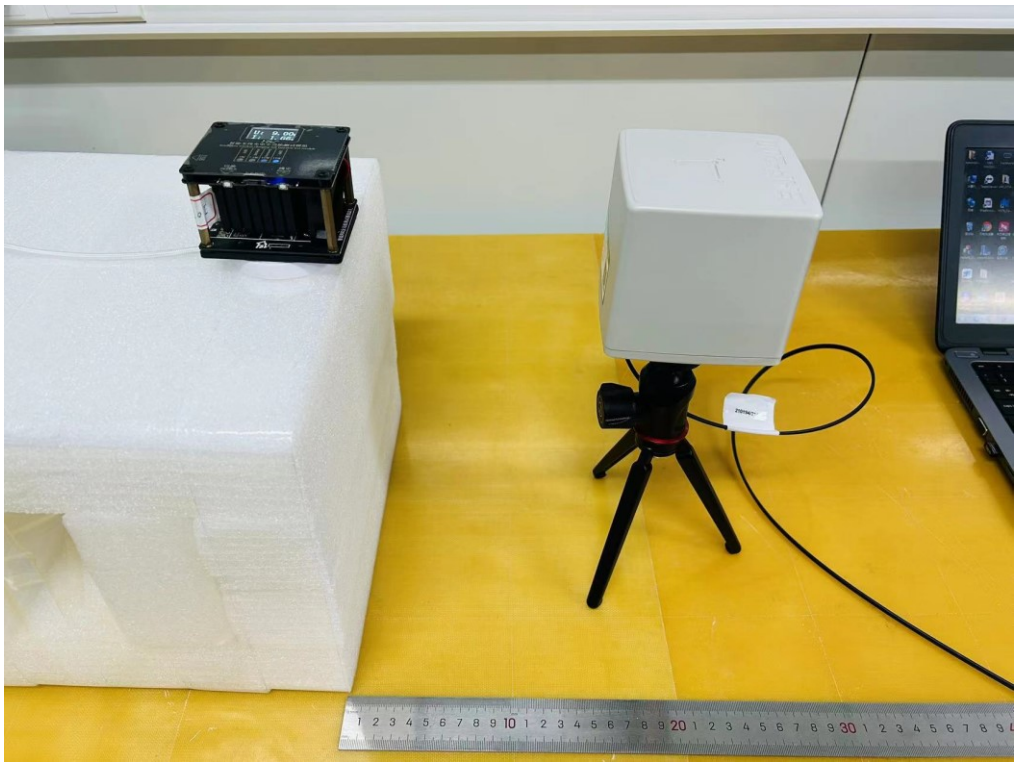
5 Photographs of the Test Set-Up

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

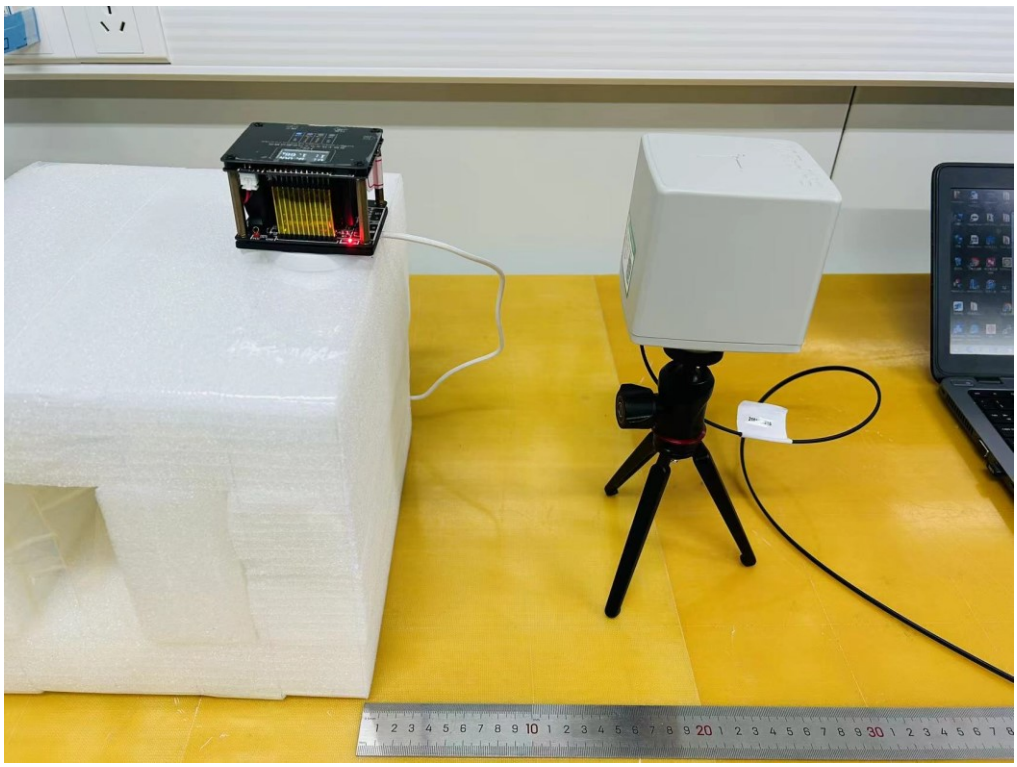
6 List of Tables

Appendix A: Photographs of the Test Set-Up

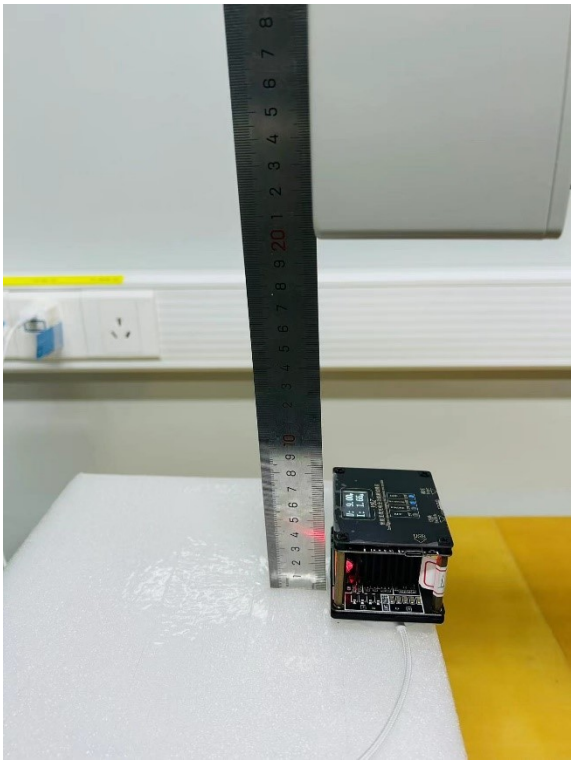
Photograph: Set-up photo for Safety Human Exposure



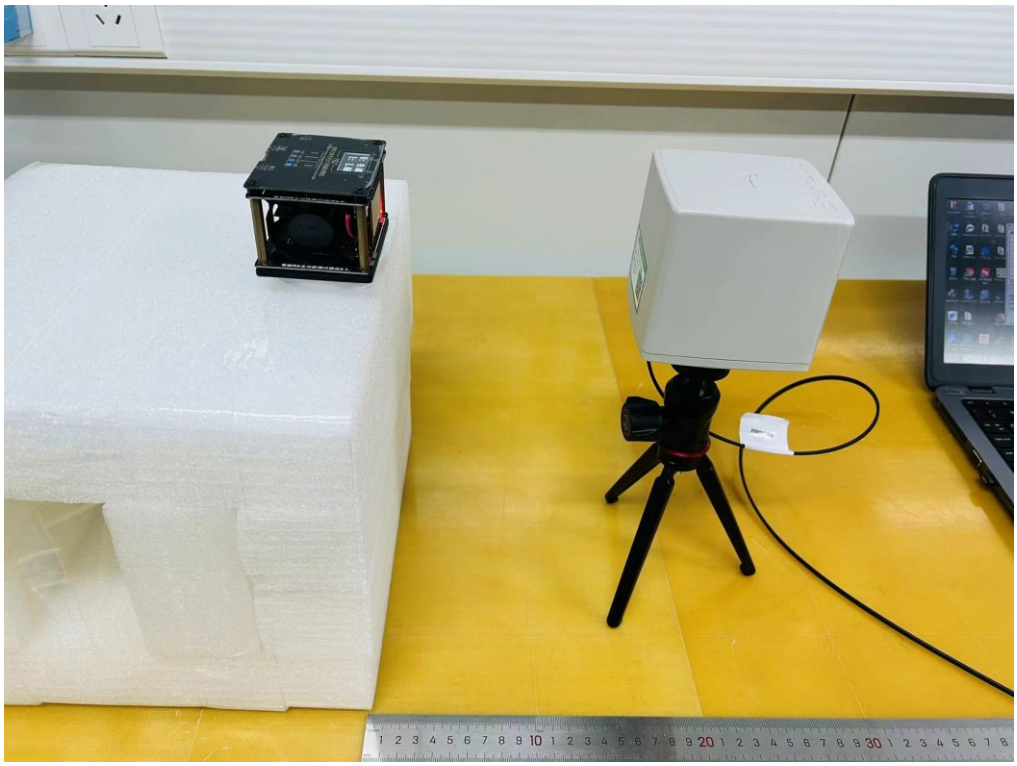
Front Side



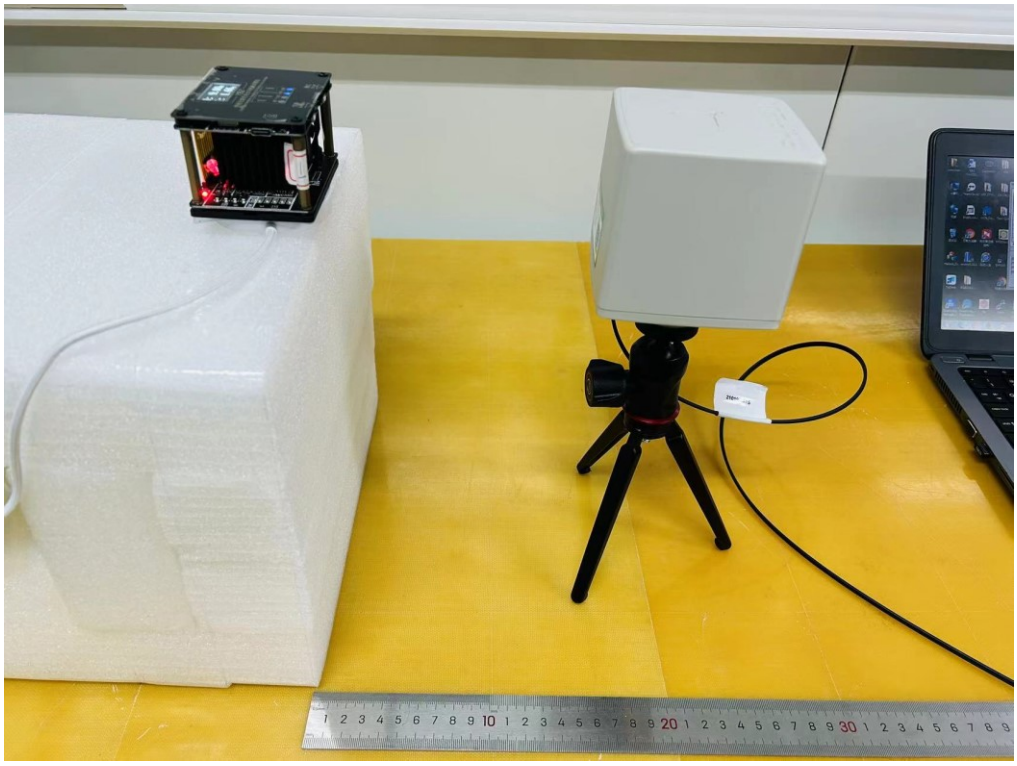
Rear Side



Top Side



Left Side



Right Side