

Prüfbericht-Nr.: Test report no.:	CN24NKRJ 001	Auftrags-Nr.: Order no.:	168482522	Seite 1 von 17 Page 1 of 17
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2024-04-30	
Auftraggeber: Client:	FORYOU MULTIMEDIA ELECTRONICS CO., LTD Plant 4, Area B, Foryou Ind. Zone, No. 1, North Shangxia Road, DongjiangHi-Tech Industry Park Huizhou city 516005 China			
Prüfgegenstand: Test item:	WIRELESS CHARGER			
Bezeichnung / Typ-Nr.: Identification / Type no.:	W2BSTLAV1 (Trademark: ADAYO)			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.215 CFR47 FCC Part 15: Subpart C Section 15.209			
Wareneingangsdatum: Date of sample receipt:	2024-07-28	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003781634-001~002			
Prüfzeitraum: Testing period:	2024-08-01 to 2024-08-27			
Ort der Prüfung: Place of testing:	See item 2.1			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	genehmigt von: authorized by:			
X 		X 		
Datum: Date:	2024-11-15	Ausstellungsdatum: Issue date:	2024-11-15	
Signed by: Breeze Jiang		Signed by: Bell Hu		
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / Other:	FCC ID: PUZ-W2BSTLAV1			
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				
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Anmerkungen
Remarks

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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>

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Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 99% BANDWIDTH

RESULT: Pass

5.1.3 20dB BANDWIDTH

RESULT: Pass

5.1.4 RADIATED SPURIOUS EMISSION

RESULT: Pass

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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: Test Results of FCC Part 15C.

Appendix B: Photographs of the Test Set-up.

2 Test Sites

2.1 Test Facilities

Shenzhen PSI Testing Co., Ltd.

1-2F, Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

A2LA CAB identifier: CN0158

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing							
For RF Test Equipment							
Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2023.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2023.12.19	1 Year
3.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2023.04.03	2 Year
4.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2022.12.26	2 Year
5.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2023.12.19	1 Year
6.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2022.12.26	2 Year
7.	Amplifier	SKET	LAPA_01G18G-45dB	SK2022032901	/	2023.12.19	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2022.12.26	2 Year
9.	Amplifier	SKET	LNPA_0118G-45	SK2020010801	/	2023.12.19	1 Year
10.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-117725-vh	/	2023.12.19	1 Year
11.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-1111533-Fz	/	2023.12.19	1 Year
12.	Vector Signal Generator	Agilent	N5182A	MY47420724	/	2023.12.19	1 Year
13.	Analog signal generator	Agilent	N5181A	MY50145363	/	2023.12.19	1 Year
14.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2023.12.19	1 Year
15.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2023.12.19	1 Year
16.	Temp. & Humid	Auchno	9606	/	/	2023.12.19	1 Year

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	Chamber						
17	Regulated DC Power Supply	Xinouhua	ADC120V10A	20221125163 8	/	2023.12.19	1 Year

For Test Software Information

Item	Software Name	Manufacturer	Version
RE	EZ_EMCC	Farad	PSI-3A1
RF	RTS	TACHOY	V1.0.0

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 Measurement Uncertainty

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

Table 2: Measurement Uncertainty

Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Radiation Emission test in 3m chamber (30MHz to 1GHz)	2.74dB(Polarize: V)
	2.76dB(Polarize: H)
Radiation Emission test in 3m chamber (1GHz to 18GHz)	4.29dB(Polarize: V)
	4.82dB(Polarize: H)
Radio frequency	48.24KHz
Conducted RF Power	0.41dB
Occupied-Bandwidth	968Hz
Conducted-Spurious Emission	1.26dB
(95% confidence levels, k=2)	

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2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B 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.

2.7 Status of Facility Used for Testing

The Shenzhen PSI Testing Co., Ltd. Test facility located at 1-2F, Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104, 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 charger, the power 15W wireless charger (compatible with low power 5W) and NFC(13.56 MHz) suitable for cars with 12V power supply system.

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:	WIRELESS CHARGER
Type Designation:	W2BSTLAV1
Trademark:	ADAYO
FCC ID:	PUZ-W2BSTLAV1
Operating Voltage:	DC 8-16V
Testing Voltage:	DC 12V
Technical Specification of WPT	
Frequency Range:	110~148KHz
Type of Modulation:	ASF, FSK
Antenna Type:	Coil antenna
Wireless output power:	15W Max

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wireless charging (15W Max.)
- B. Off

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
- Schematics
- Operation Description
- Block Diagram
- PCB Layout

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5 & 6. All testing were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model W2BSTLAV1 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Wireless charge Load	YBZ	N/A	N/A	15W Max.
Mobile Phone	SAMSUNG	S8+	N/A	N/A
Dummy Load	LING OU RESISTOR	BX 7-24	N/A	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

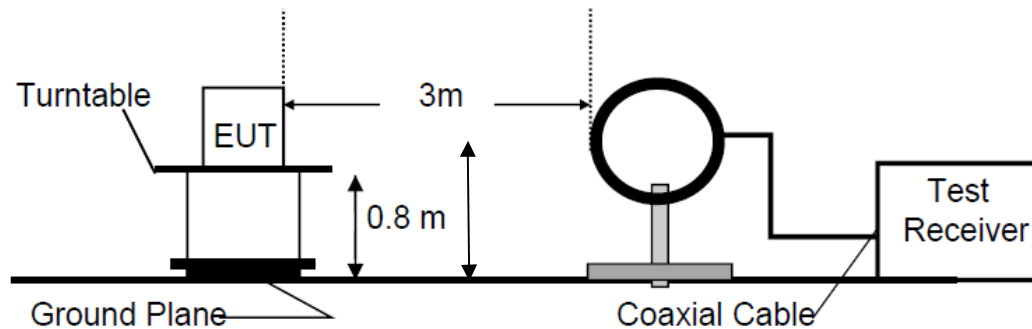
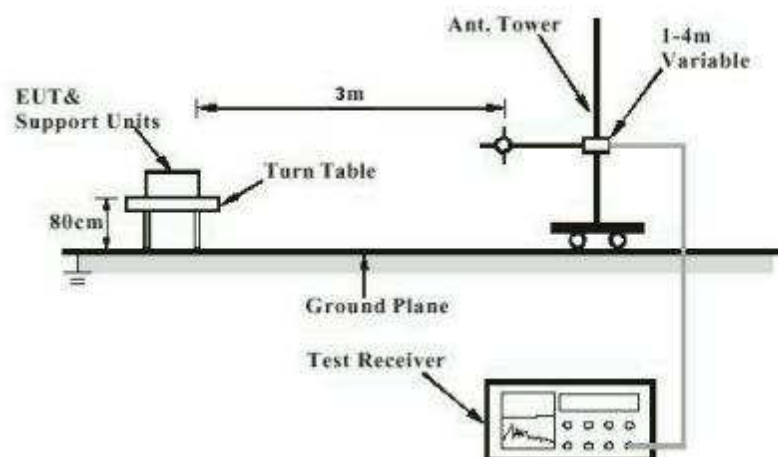


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : Part 15.203
the use of antennas with directional gains that do not exceed 6 dBi

The EUT has one internal antenna, and the antenna is permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

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5.1.2 99% Bandwidth

RESULT:

Pass

Test Specification

Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-08-05
Input voltage : DC 12V
Operation mode : A
Ambient temperature : 25.6 °C
Relative humidity : 51.8 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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5.1.3 20dB Bandwidth

RESULT: Pass

Test Specification

Test standard : FCC Part 15.215(c)
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-08-05
Input voltage : DC 12V
Operation mode : A
Ambient temperature : 25.6 °C
Relative humidity : 51.8 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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5.1.4 Radiated Spurious Emission

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.209 & 15.205
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a)
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2024-07-31
Input voltage	: DC 12V
Operation mode	: A
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

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

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