





## **RF Exposure Report**

Applicant: Dong Guan Ya Li Electric Appliance Co., Ltd.

Address: THE FIVE STREET JINQIANLING JITIGANG HUANGJIANG TOWN,

DONGGUAN CITY, GUANGDONG 523000 CHINA

FCC ID: 2AZRWYL-889FI

Product: Wireless Charger

Brand: YALI

Test model(s): YL-889

Series model(s): N/A

Test Date: Apr. 23, 2021~ Apr. 27, 2021

Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd.

Lab Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang

Town, Dongguan, China

FCC Designation No.: CN1255

Standards: 47 CFR PART 1, Subpart I, Section 1.1310; KDB 680106 D01

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : \_\_\_\_\_ Date: \_\_\_\_ Apr. 28, 2021 \_\_\_\_\_ Tank Tan/ Project Engineer

Approved by : \_\_\_\_\_\_ Date: \_\_\_\_ Apr. 29, 2021

Harry Li/ Technical Director

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the federal government. The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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# **Table of contents**

Rele	ase control record	3
1 1.1	General Information	
2.1	Configuration of system under test  Description of support units	5
2.2	Equipments used during test	
3.1 3.2	Test setup for WPC Test point description	6
3.3	Test results	7
4 5	Photographs of the test configuration	
ວ	Appendix – Information on the Testing Laboratories	

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# Release control record

Issue No.	Reason for change	Date issued
210423VL03-FM	Original release	Apr. 29, 2021

Tel: <u>0769-83078199</u>



## 1 General Information

## 1.1 General Description of EUT

Product Name	Wireless Charger
Brand	YALI
FCC ID	2AZRWYL-889FI
Test Model	YL-889
Series Models	N/A
Power Supply Rating	Input: DC 5V 2A Output: DC 5V 1A
Modulation type	ASK
Operating frequency	110KHz ~ 180KHz
Antenna type	Coil Antenna

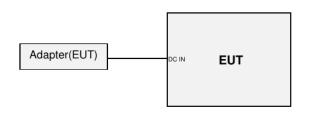
- 1. For a more detailed features description, please refer to the manufacturer's specification or the User's Manual.
- 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- 3. Please refer to the EUT photo document (Reference No.: 210423VL03) for detailed product photo.

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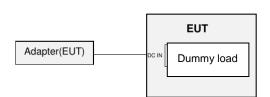


#### Configuration of system under test 2

Standby Mode



Charging Mode with iPhone X (centre)



#### 2.1 **Description of support units**

The EUT has been tested with associated equipment below:

No.	Unis description	Brand name	Model name	S/N No.	FCC ID
1	Dummy load	ADK	M2CW	N/A	N/A

#### 2.2 **Equipments used during test**

The antennas provided to the EUT, please refer to the following table:

item	Test Equipment	Manufacturer	Model No.	S/N	Date of Calibration
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	7m*4m*3m	NSEMC003	2021-03-14
2	B-field Probe	Narda	Y2006	L-0017	2021-03-14
3	E-Field probe	Narda	NBM-520	2403/01B	2021-03-14

### Note:

1. The test was performed in RS chamber.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

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#### 3 RF exposure limit

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field Magnetic field strength (V/m) (A/m)		Power density (mW/cm²)	Averaging time (minutes)					
(A) Limits for Occupational/Controlled Exposures									
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					
300-1500			f/300	6					
1500-100,000			5	6					
(B) Limits	for General Populati	on/Uncontrolled Exp	oosure						
0.3–1.34	614	1.63	*(100)	30					
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30					
30-300	27.5	0.073	0.2	30					
300-1500			f/1500	30					
1500-100,000			1.0	30					

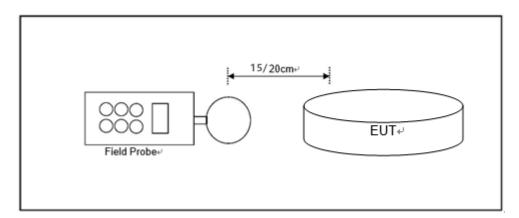
f = frequency in MHz

\* = Plane-wave equivalent power density
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for

exposure or can not exercise control over their exposure.

#### 3.1 Test setup for WPC



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15/20 cm (the top is 20cm, and the other five sides are 15cm) measured from the center of the probe(s) to the edge of the device.

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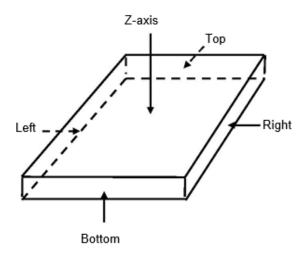
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#### **Test point description** 3.2



## **Test results**

## Standby mode:

E-Field Measurement								
Distance	15cm	15cm	15cm	15cm	20cm	15cm		
EUT Side	Front	back	Left	Right	Тор	Bottom		
Max E-field (V/m)	0.40	0.58	0.48	0.39	0.50	0.40		
Limit (V/m)	614	614	614	614	614	614		
50% Limit (V/m)	307	307	307	307	307	307		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

E-Field Measurement								
Distance	15cm	15cm	15cm	15cm	20cm	15cm		
EUT Side	Front	back	Left	Right	Тор	Bottom		
Max H-field (A/m)	0.011	0.019	0.028	0.014	0.013	0.021		
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	1.63		
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815	0.815		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

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## Charging mode:

E-Field Measurement								
Distance	15cm	15cm	15cm	15cm	20cm	15cm		
EUT Side	Front	back	Left	Right	Тор	Bottom		
Max E-field (V/m)	2.29	2.36	2.36	2.93	2.93	2.93		
Limit (V/m)	614	614	614	614	614	614		
50% Limit (V/m)	307	307	307	307	307	307		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

E-Field Measurement								
Distance	15cm	15cm	15cm	15cm	20cm	15cm		
EUT Side	Front	back	Left	Right	Тор	Bottom		
Max H-field (A/m)	0.056	0.062	0.038	0.078	0.078	0.078		
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	1.63		
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815	0.815		
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass		

## Note:

- 1. Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.
- 2. We have evaluated 1%, 50% and 99% battery charging mode, and the worst mode (99%) is showed in this report.



## 4 Photographs of the test configuration

Please refer to the attached file (Test Setup Photo).

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## 5 Appendix – Information on the Testing Laboratories

We, <u>Hwa-Hsing (Dongguan) Co., Ltd.</u>, A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values "HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT", commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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