

Cixi Mingye Communication and Electronic Co.,Ltd.

MPE ASSESSMENT REPORT

Report Type:

FCC MPE assessment report

Model:

53-2AC1Q,53-2AC1Q-01

REPORT NUMBER:

240400245SHA-002

ISSUE DATE:

July 5, 2024

DOCUMENT CONTROL NUMBER:

TTRFFCCMPE-02_V1 © 2018 Intertek



Applicant : Cixi Mingye Communication and Electronic Co.,Ltd.
West Industrial District,Guanhaiwei Town,CIXI CITY Zhejiang Province
315315

Manufacturer : Cixi Mingye Communication and Electronic Co.,Ltd.
West Industrial District,Guanhaiwei Town,CIXI CITY Zhejiang Province
315315

Manufacturer Site : Cixi Mingye Communication and Electronic Co.,Ltd.
West Industrial District,Guanhaiwei Town,CIXI CITY Zhejiang Province
315315

Type/Model: : 53-2AC1Q,53-2AC1Q-01

FCC ID : 2A2N8-532AC1Q

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

FCC PART 1 SECTION 1.1310
KDB447498 D01 General RF Exposure Guidance v06
KDB 680106 D01 RF Exposure Wireless Charging App v04

PREPARED BY:

Project Engineer
Dylan Tang

REVIEWED BY:

Reviewer
Wakeyou Wang

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Revision History

Report No.	Version	Description	Issued Date
240400245SHA-002	Rev. 01	Initial issue of report	July 5, 2024

Measurement result summary

TEST ITEM	FCC REFERENCE	TEST RESULT	NOTE
RF Exposure	1.1310	Pass	-

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

3: Additions, Deviations and Exclusions from Standards: None.

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Wireless charger
Type/Model:	53-2AC1Q,53-2AC1Q-01
Description of EUT:	The EUT is a Wireless charger which supports Wireless Charger function. 53-2AC1Q-01 has input type C cable, and 53-2AC1Q does not have input type C cable, the PCB is the same, so choose 53-2AC1Q-01 to test as representative.
Rating:	Input:5.0V 3A, 9.0V 2.22A,12.0V 1.67A Output Type A + Type C: 5VDC, 3A Wireless Charger:15W
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	V1.1
Hardware Version:	V2.0 for 53-2AC1Q-01 V1.1 for 53-2AC1Q
Sample received date:	December 1, 2023
Date of test:	December 1, 2023 ~ May 22, 2024

1.2 Technical Specification

Frequency Range:	111kHz – 205kHz
Modulation:	FSK
Antenna:	Coil antenna

TEST REPORT

1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

2 TEST SPECIFICATIONS

2.1 Standards or specification

FCC PART 1 SECTION 1.1310

KDB 680106 D01 RF Exposure Wireless Charging App v04

KDB447498 D01 General RF Exposure Guidance v06

2.2 Mode of operation during the test

Within this test report, EUT was tested under all modes and tested under its rating voltage and frequency. Other voltage and frequency are specified if used. The worst data was listed in the report.

2.3 Test peripherals list

Item No.	Name	Band and Model	Description
1	Wireless load	iphone x	100% power level
2	Wireless load	iphone x	50% power level
3	Wireless load	iphone x	0% power level

2.4 Record of climatic conditions

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (kPa)
RF Exposure	24	53	101

2.5 Instrument list

Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Exposure Level Tester	Narda	NBM-550	EC 6113	2025-04-07
<input checked="" type="checkbox"/>	E-Field sensor(100kHz-3GHz)	Narda	EF 0391	EC 6113-1	2025-04-07
<input checked="" type="checkbox"/>	H-Field sensor(300kHz-30MHz)	Narda	HF 3061	EC 6113-2	2025-04-07
<input checked="" type="checkbox"/>	Exposure Level Tester(1Hz-400kHz)	Narda	ELT-400	EC 2928	2024-07-02

2.6 Measurement uncertainty

Test Items	Expanded Uncertainty (k=2)
H-field	0.9 dB
E-field	1.1 dB

TEST REPORT

3 RF Exposure Assessment

Test result: Pass

3.1 Assessment Limit

Reference: 47 CFR §1.1310, KDB 680106

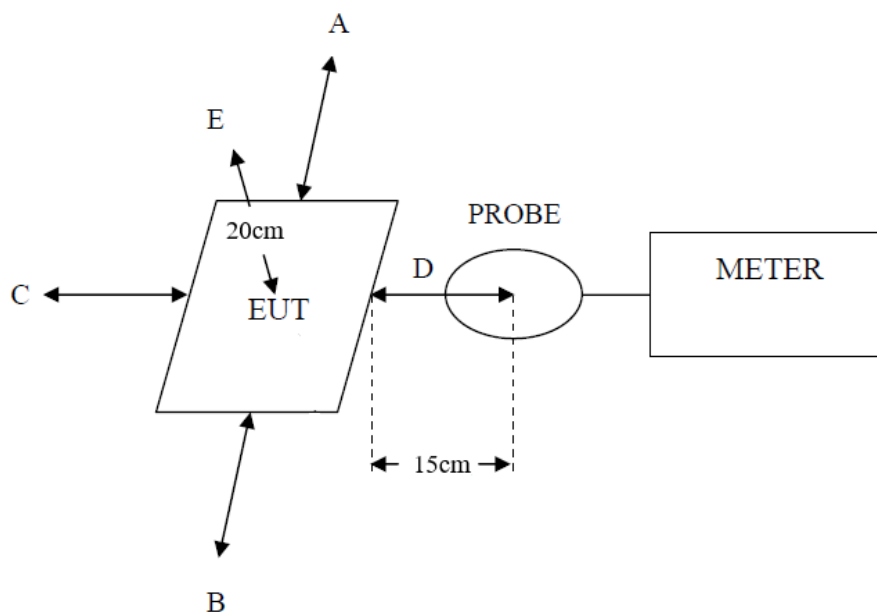
Limits for General Population/Uncontrolled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	30
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

Limits for Occupational/Controlled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	6
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

3.2 Assessment Configuration



TEST REPORT

3.3 Assessment Results

Test result of Magnetic Field Strength:

Test Position	Test distance (cm)	Test result (A/m)	Limit (A/m)	Result (Pass/Fail)
A: Right	15	0.225	1.63 *0.5	Pass
B: Left	15	0.236	1.63 *0.5	Pass
C: Front	15	0.382	1.63 *0.5	Pass
D: Back	15	0.211	1.63 *0.5	Pass
E: Top	20	0.195	1.63 *0.5	Pass

Test result of Electric Field Strength:

Test Position	Test distance (cm)	Test result (V/m)	Limit (V/m)	Result (Pass/Fail)
A: Right	15	4.35	614 *0.5	Pass
B: Left	15	3.95	614 *0.5	Pass
C: Front	15	4.02	614 *0.5	Pass
D: Back	15	3.75	614 *0.5	Pass
E: Top	20	3.19	614 *0.5	Pass

***** END *****