

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640 Fax: +86-755-26648637

Website: www.cga-cert.com

Report Template Version: V05
Report Template Revision Date: 2021-11-03

# **RF Exposure Evaluation Report**

Report No.: CQASZ20240100028E-02

Applicant: eMoMo Technology Co., Ltd

Address of Applicant: 4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'an

District , Shen Zhen, 518100, Guangdong, China

**Equipment Under Test (EUT):** 

**Product**: Q-cup

Model No.: E201CRRW-WBO1, E201CW-HL06, E201LRRW-ARO5, E201CRRWA,

E201LHCW, E201TRW-MRO3, E201LHCW-PMO4, E201LHCWA, E201CW, E201CRRLWA-FSO8, E201LHRCW, E201LHC, E201CRRW-HN, E201LHRCW-

OD03, E201CRRLWA, E201CHRRLW, E201CHW-HL06, E201CRRW, E201CRRW-MRO3, E201F, E201LRRE201CRRLW7C-T, E201CRRLW, E201LRCW, E201CRRLW7C, E201LHRC, E20124CHRRLW, E20124CHRLW, E201LHCWA-PMO4, E201LHCW-RMO1, E201CRRL, E20124CHHRLW, E20124LHCW, E201CRRLWB, E201CRL2W, E201LRW, E201LRRW

Test Model No.: E20124CHHRLW

Brand Name: EMOMO

FCC ID: A4E-E20124CHHRLW

**Standards:** 47 CFR Part 1.1307 47 CFR Part 1.1310

KDB 680106 D01 RF Exposure Wireless Charging Base App v04r01

**Date of Receipt**: 2024-3-29

**Date of Test:** 2024-3-29 to 2024-4-3

Date of Issue: 2024-4-3
Test Result: PASS\*

\*In the configuration tested, the EUT complied with the standards specified above

Tested By:

( Joe Wang )

Reviewed By:

(Timo Lei)

Approved By: \_\_\_\_\_Alex

( Alex Wang )





1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640 Fax: +86-755-26648637

Report Template Version: V05 Website: Report Template Revision Date: 2021-11-03 www.cqa-cert.com

# **RF Exposure Evaluation Report**

### Version

#### **Revision History Of Report**

Report No.	Version	Description	Issue Date
CQASZ20240100028E-02	Rev.01	Initial report	2024-4-3





## 2 Contents

	Page
1 VERSION	2
2 CONTENTS	
3 GENERAL INFORMATION	4
3.1 CLIENT INFORMATION	4
3.2 GENERAL DESCRIPTION OF EUT	4
3.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	
3.4 Test Environment	5
3.5 DESCRIPTION OF SUPPORT UNITS	
3.6 TEST LOCATION	
3.8 EQUIPMENT LIST	
3.9 Test Software	
4 RF EXPOSURE EVALUATION	
4.1 RF EXPOSURE COMPLIANCE REQUIREMENT	
4.1.1 Limits	
4.1.3 Test Setup	
4.1.4 Test Results	
4.2 TEST CONDITION: MODE C	
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	12



Report No.: CQASZ20240100028E-02

# 3 General Information

## 3.1 Client Information

Applicant:	eMoMo Technology Co., Ltd	
Address of Applicant:	4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'ar District ,Shen Zhen, 518100, Guangdong, China	
Manufacturer:	eMoMo Technology Co., Ltd	
Address of Manufacturer:	4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'a District ,Shen Zhen, 518100, Guangdong, China	
Factory:	eMoMo Technology Co., Ltd	
Address of Factory:	4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'an District ,Shen Zhen, 518100, Guangdong, China	

# 3.2 General Description of EUT

Product Name:	Q-cup
Model No.:	E201CRRW-WBO1, E201CW-HL06, E201LRRW-ARO5, E201CRRWA, E201LHCW, E201TRW-MRO3, E201LHCW-PMO4, E201LHCWA, E201CW, E201CRRLWA-FSO8, E201LHRCW, E201LHC, E201CRRW-HN, E201LHRCW-OD03, E201CRRLWA, E201CHRRLW, E201CHW-HL06, E201CRRW, E201CRRW-MRO3, E201F, E201LRRE201CRRLW7C-T, E201CRRLW, E201LRCW, E201CRRLW7C, E201LHRC, E20124CHRRLW, E20124CHRLW, E201LHCWA-PMO4, E201LHCW-RMO1, E201CRRL, E20124CHHRLW, E20124LHCW, E201CRRLWB, E201CRL2W, E201LRW, E201LRRW
Test Model No.:	E20124CHHRLW
Brand Name:	ЕМОМО
Software Version:	V1.0
Hardware Version:	V1.0
EUT Power Supply:	Adapter DC 29V 2A

# 3.3 Product Specification subjective to this standard

Equipment Category:	Non-ISM frequency	
Operation Frequency range:	115kHz~205kHz	
Modulation Type:	Induction	
Antenna Type:	Induction coil	
Antenna Gain:	0dBi	
Power:	Output: 10W(Max)	

#### Note:

1. In section 15.31(m), regards to the operating frequency range less 1 MHz.



Report No.: CQASZ20240100028E-02

## 3.4 Test Environment

Operating Environment	
Temperature:	25.5 °C
Humidity:	53 % RH
Atmospheric Pressure:	1009 mbar
Test Mode:	
Mode a:	Keep the EUT Wireless Charging pad for Phone Out Put 5W
Mode b:	Keep the EUT Wireless Charging pad for Phone Out Put 7.5W
Mode c:	Keep the EUT Wireless Charging pad for Phone Out Put 10W

# 3.5 Description of Support Units

The EUT has been tested with associated equipment below.

1) Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
Wireless charge load	/	1	1	CQA

2) Cable

Cable No.	Description	Manufacturer	Cable Type/Length	Supplied by
1	/	1	1	1



Report No.: CQASZ20240100028E-02

#### 3.6 Test Location

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

## 3.7 Test Facility

#### • A2LA (Certificate No. 4742.01)

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

#### • FCC Registration No.: 522263

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.:522263

### 3.8 Equipment List

Test Equipment	Manufacturer	Model No.	Instrument No.	Calibration Date	Calibration Due Date
Magnetic	Schmid &				
Amplitude and	Partner				
Gradient	Engineering	MAGPy-8H3D+E3D	3096	2024/3/12	2025/3/12
Probe	AG				
System					
Magnetic	Schmid &				
Amplitude and	Partner				
Gradient	Engineering	MAGPy-DAS	3093	2024/3/12	2025/3/12
Probe	AG				
System					



Report No.: CQASZ20240100028E-02

# 3.9 Test Software

Software name	Manufacturer	Model	Version
MAGPy V2.0	Schmid & Partner Engineering AG	MAGPy V2.0	V2.0





## 4 RF Exposure Evaluation

### 4.1 RF Exposure Compliance Requirement

#### **4.1.1 Limits**

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
(A) Lim	its for Occupational	/Controlled Exposure	es	
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	osure	
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

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 v04 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 2 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit .

#### 4.1.2 Test Procedure

- a. The RF exposure test was performed in anechoic chamber.
- b. Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm.
- c. The highest emission level was recorded and compared with limit.
- d. The EUT was measured according to the dictates of TCB

Workshop "41-Part-18-&-Wireless-Power-Transfer - April 27,2022"

Equipment Approval Considerations item 5 b) of KDB 680106 D01 Wireless Power Transfer v04

Requirement	Device
1.Power transfer frequency is less than 1 MHz	Yes. The operating frequencies are. Operating
	Frequency: 115 kHz - 205KHz
2. Output power from each primary coil is less than	Yes. The maximum output power is:Wireless
or equal to 15 watts.	Output: 10W(Max)



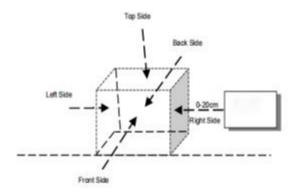
Report No.: CQASZ20240100028E-02

3. The system may consist of more than one	Yes. EUT has a source primary coil
source primary coils, charging one or more clients.  If more than one primary coil is present,the coil	
pairs may be powered on at the sametime.	
4. Client device is placed directly in contact with	Yes. The client device is placed directly in contact
the transmitter.	with the transmitter.
5.Mobile exposure conditions only (portable	No, This EUT is mounted under a desk/table and
exposure conditions are not covered by this	the user's legs may be in direct contact with the
exclusion)	device for long periods of time, so this device was
	evaluated as a portable WPT
6. The aggregate H-field strengths anywhere at or	Yes, The H-field measurements for each edge/top
beyond 20 cm surrounding the device, and 20cm	surface of the host/client pair at every 2cm, starting
away from the surface from all coils that by design	from as close as possible out to 20cm were also
can simultaneously transmit, and while those coils	evaluated for portable usecondition.
are simultaneously energized, are demonstrated to	
be less than 50% of the applicable MPE limit.	





#### 4.1.3 Test Setup



Note: Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm, starting from as close as possible out to 20 cm

#### 4.1.4 Test Results

For portable exposure condition:

The client running mode (no load, half load, full load) only shows that the client device is in the worst state when it is fully loaded.

H-field measurements taken every 2 cm (starting as close to 20 cm as possible) on each edge/top surface of the host/client pair were also evaluated for portable use conditions. The report reflects data for the worst 0 cm test distance mode only.

Test condition 1: Mode c operating mode with client device (full load status of client device) -test distance: 0cm



Report No.: CQASZ20240100028E-02

Test condition: Mode c

H-field strength test result:

test distance: 0cm

I-Measurement results directly tested using MAGPy.

Maximum permissible Exposure						
Battery levels	Test sides	Test distance(cm)	E -field(V/m)	H-field(A/m)		
<1%	Тор	0	21.4	0.14		
<1%	Left	0	15.6	0.19		
<1%	Right	0	15.3	0.13		
<1%	Front	0	46.4	0.21		
<1%	Back	0	48.6	0.21		
<1%	Bottom	0	54.3	0.24		
Limit			307	0.815		
test result		PASS	PASS			

J-When setting MAGPy to select compliance location as probe tip, the K-measured value is extrapolated to 0mm as the result.

Maximum permissible Exposure						
Battery levels	Test sides	Test distance(cm)	E -field(V/m)	H-field(A/m)		
<1%	Тор	0	27.2	0.23		
<1%	Left	0	16.6	0.19		
<1%	Right	0	18.1	0.14		
<1%	Front	0	51.7	0.35		
<1%	Back	0	49.4	0.26		
<1%	Bottom	0	60.7	0.47		
Limit			307	0.815		
test result		PASS	PASS			



# **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**



\*\*\* END OF REROPT \*\*\*