

# **Measurement and Test Report**

### For

### **CE LINK LIMITED**

Building G, Li Cheng Technology Industrial Zone, Gong He

Village, Sha Jing Town, Shen Zhen City, China

FCC ID: A4XWPC10-2TX01

FCC Rule(s): KDB 680106 D01 V03

Product Description: Wireless Charger

Tested Model: WPC10-2TX01

**Report No.:** <u>WTX19X01001939W-2</u>

**Tested Date:** <u>2019-01-09</u>

**Issued Date:** <u>2019-01-10 to 2019-01-18</u>

**Tested By:** <u>2019-01-18</u>

Reviewed By: Silin Chen / EMC Manager

Approved & Authorized By: <u>Jandy So / PSQ Manager</u>

Prepared By:

Shenzhen SEM Test Technology Co., Ltd.

1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road,

Jasan Su Fili-Chen Jamely 80

Bao'an District, Shenzhen, P.R.C. (518101)

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM Test Technology Co., Ltd.



# TABLE OF CONTENTS

ENERAL INFORMATION	3
1 Product Description for Equipment Under Test (EUT)	3
F EXPOSURE TEST REPORT	4
1 Standard Applicable	
2 Test Conditions	4
3 TEST PROCEDURE	
4 Test Result	5
4 Test Photos	7



### 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment Under Test (EUT)

**Client Information** 

Applicant: CE LINK LIMITED

Address of applicant: Building G, Li Cheng Technology Industrial Zone,

Gong He Village, Sha Jing Town, Shen Zhen City,

China

Manufacturer: CE LINK LIMITED

Address of manufacturer: Building G, Li Cheng Technology Industrial Zone,

Gong He Village, Sha Jing Town, Shen Zhen City,

China

General Description of EUT	
Product Name:	Wireless Charger
Trade Name:	CE-LINK
Model No.:	WPC10-2TX01
Adding Model(s):	/
Note: The test data is gathered from a pr	roduction sample, provided by the manufacturer.

Technical Characteristics of EU	IT
Wireless Charger Transmit	110~205KHz
Frequency Range:	110-2001(112
Antenna Type:	Coil Antenna
Voltage:	Input 5V/9V
Current:	2A/1.8A
Output Power:	5W/7.5W/10W



# 2. RF Exposure Test Report

### 2.1 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

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) Limits for C	Occupational/Controlled Expo	osure	
0.3-3.0	614	1.63	*100	6
3.0-30	1842/	f 4.89/f	*900/f <sup>2</sup>	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 Gene	ral Population/Uncontrolled	Exposure	
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
300-1,500			f/1500	30
1,500-100,000			1.0	30

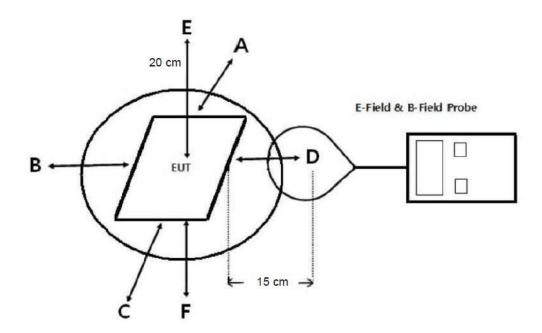
f = frequency in MHz \* = Plane-wave equivalent power density

### 2.2 Test Conditions

Test Mode	Description	Remark	Power Supply Mode
TM1	Working	Connect to wireless load	DC 5V (with a adapter input AC 120V/60Hz)
TM2	Working	Connect to wireless load	DC 9V (with a adapter input AC 120V/60Hz)
Measurement Distance:		15 cm	



#### 2.3 Test Procedure



- a. The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
- b. The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
- c. The EUT was measured according to the distance of KDB 680106 D01 V03.

#### 2.4 Test Result

The EUT dose comply with item 5.2 of KDB 680106 D01V03

- 1. Power transfer frequency is less that 1 MHz Yes, the device operate in the frequency range from  $110\,\mathrm{kHz}$  to  $205\,\mathrm{kHz}$ .
- 2. Output power from each primary coil is less than 15 watts

  Yes, the maximum output power of the primary coil is less than 15W.
- 3. The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils

  Yes, the client device includes only single primary coils.
- 4. Client device is inserted in or placed directly in contact with the transmitter Yes, Client device is placed directly in contact with the transmitter.
- 5. Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Yes, It is mobile exposure conditions only.



6. The aggregate H-field strengths at 15 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.

Yes, The EUT field strength levels are less than 50% of the MPE limit, refer to test TM1, TM2 list, and the coils can't transmitted simultaneous.

*Test Mode: TM1 (with mobile phone)* 

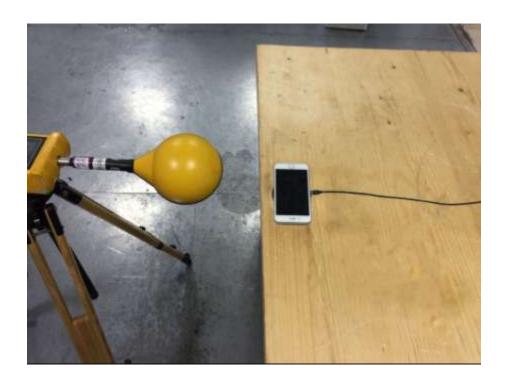
	Electric Field Emiss	sions	
<b>Test Position</b>	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Тор	3.62	614	307
Bottom	4.02	614	307
Side 1	5.11	614	307
Side 2	3.72	614	307
Side 3	4.05	614	307
Side 4	3.77	614	307
	Magnetic Field Emis	ssions	
<b>Test Position</b>	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m
Тор	0.0165	1.63	0.815
D - 44	0.0150	1.62	
Bottom	0.0178	1.63	0.815
Side 1	0.0178	1.63	0.815
Side 1	0.0161	1.63	0.815



*Test Mode: TM2(with mobile phone)* 

	Electric Field Emis	sions	
<b>Test Position</b>	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Тор	3.52	614	307
Bottom	3.98	614	307
Side 1	3.74	614	307
Side 2	4.05	614	307
Side 3	3.64	614	307
Side 4	4.23	614	307
	Manualia Eiald Engl		
	Magnetic Field Emis	1	T
Test Position	Magnetic Field Emis Measure Value (A/m)	Ssions  Limit(A/m)	50% Limit (A/m)
Test Position Top		1	50% Limit (A/m) 0.815
	Measure Value (A/m)	Limit(A/m)	, ,
Тор	Measure Value (A/m) 0.0171	Limit(A/m) 1.63	0.815
Top Bottom	Measure Value (A/m) 0.0171 0.0181	1.63 1.63	0.815 0.815
Top Bottom Side 1	Measure Value (A/m)  0.0171  0.0181  0.0168	Limit(A/m)  1.63  1.63  1.63	0.815 0.815 0.815

### 2.4 Test Photos



\*\*\*\*\* END OF REPORT \*\*\*\*\*