RF EXPOSURE REPORT FOR CERTIFICATION
On Behalf of

Lucent Trans Electronics Co., Ltd

Dual Wireless Charging Pad

Model Number: WC10WDUALGGL-AL

Additional Model: WC10WDUALGGLWH-AL, 7WH

FCC ID: UQ3DUAL10W

Prepared for:	Lucent Trans Electronics Co., Ltd
	9F-1, No. 16, Chien Pah Rd.,Chung Ho Dist.,New Taipei City,Taiwan
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
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Report Number:	ESTE-R2003002
Date of Test:	Feb. 19~Mar. 28, 2020
Date of Report:	Mar. 02, 2020

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Description Page

EST Technology Co., Ltd.

Applicant: **Address:**	Lucent Trans Electronics Co., Ltd 9F-1, No. 16, Chien Pah Rd.,Chung Ho Dist.,New Taipei City,Taiwan
Manufacturer: **Address:**	Lucent Trans Electronics Co., Ltd 9F-1, No. 16, Chien Pah Rd.,Chung Ho Dist.,New Taipei City,Taiwan
E.U.T:	Dual Wireless Charging Pad
Model Number:	WC10WDUALGGL-AL
Additional Model:	WC10WDUALGGLWH-AL, 7WH (They are identical except model name only.)
Power Supply:	DC 5V From Adapter Input AC 100-240V, 50-60Hz DC 9V From Adapter Input AC 100-240V, 50-60Hz DC 12V From Adapter Input AC 100-240V, 50-60Hz DC 15V From Adapter Input AC 100-240V, 50-60Hz
Trade Name:	Verizon Serial No.: ------
Date of Receipt:	Feb. 19, 2020 Date of Test: Feb. 19~Feb. 28, 2020
Test Specification:	FCC Part 15 Subpart C ANSI C63.10:2013
Test Result:	The device described above is tested by EST Technology Co., Ltd. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC Rules and Regulations Part 15 Subpart C requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. **Date:** Mar. 02, 2020

Prepared by:	Reviewed by:	Approved by:
Ring	Shawn	
Ring.Yang / Assistant	Shawn.Xiao / Engineer	Iceman Hu / Manager

Other Aspects:
None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

1. SUMMARY OF TEST

1.1. Summary of test result

Report Section	Description of Test Item	FCC Standard Section	Results
3	Maximum Permissible Exposure	Part 1.1307(b)&1.1310	PASS

1.2. Test Mode

Mode	Description
Charging mode with dummy load	Full Load
	Half Load
	Empty Load

1.3. Test Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Exposure Level Tester	Narda	ELT-400	EST-E105	Aug. 21,19	1 Year
B-Field Probe	Narda	ELT Probe	EST-E106	Aug. 30,19	1 Year

2. MAXIMUM PERMISSIBLE EXPOSURE

2.1. Limit

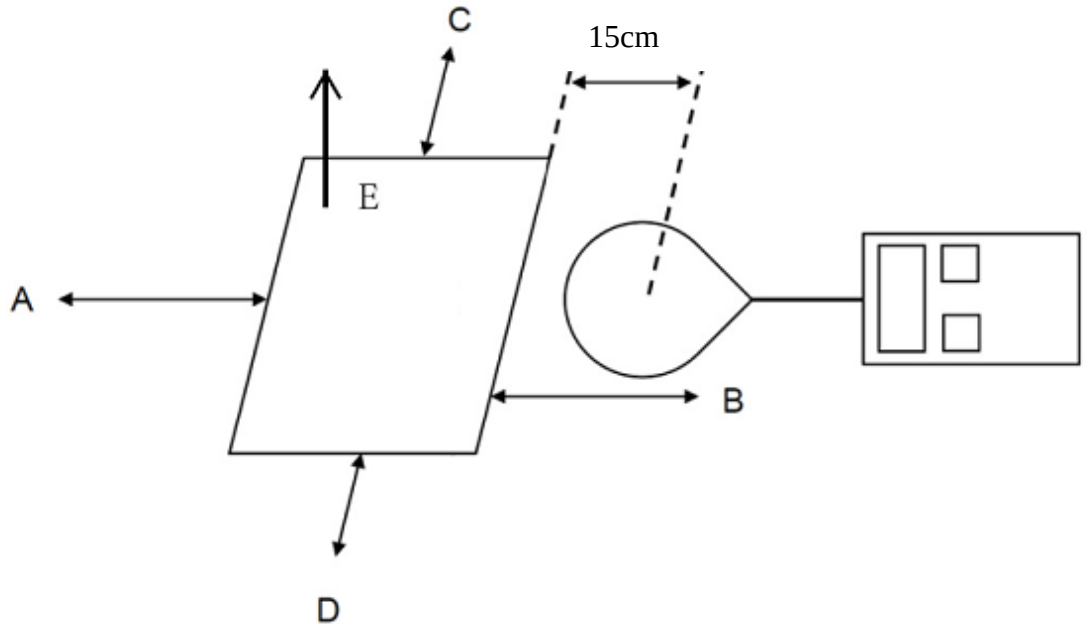
Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
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
(B) Limits for General Population/Uncontrolled Exposure				
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

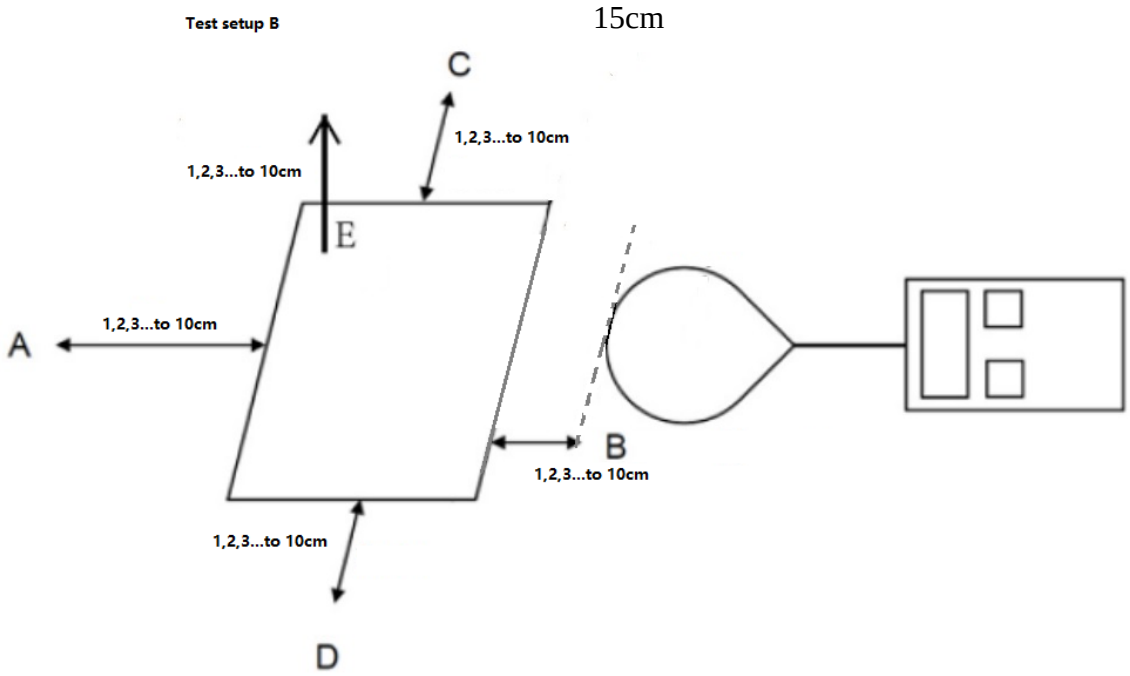
Note:

1. f = frequency in MHz * = Plane-wave equivalent power density.
2. For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. 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.

2.2. Test Setup A



2.3. Test Setup B



a. The test was performed on 360 degree turn table in anechoic chamber.
b. The probe was placed at 15 cm surrounding the device and 20 cm above the top of the charger and the geometric centre of the probe, for test setup A.
c. Measure magnetic and electrical field strength at a distance 10cm to 1cm at 1cm iteration, Which is between the edge of the charger and the edge of of probe, for test setup B.
d. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D, E were completed.
e. The EUT was measured according to the dictates of KDB680106D01v03;

2.4. Equipment Approval Considerations

Inductive wireless power transfer applications with supporting field strength results and meeting all of the following requirements are not required to submit a KDB inquiry for devices approved using SDoC or a PAG for equipment approved using certification to address RF exposure compliance.

1	Power transfer frequency is less that 1 MHz
	YES; the device operated in the frequency range from 110.5-205KHz.
2	Output power from each primary coil is less than or equal to 15 watts.
	NO; the maximum output power of the primary coil is 20W.
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
4	Client device is 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
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 50% x MPE limts.

2.5. Test Result for Test setup A:

E-field strength			
Frequency range (KHz)	110.5 to 205		
Test Mode	Full Load	Half Load	Empty Load
Position A(V/m)	2.202	1.625	1.057
Position B(V/m)	2.325	1.709	1.224
Position C(V/m)	2.219	1.653	1.111
Position D(V/m)	2.328	1.805	1.269
Position E(V/m)	2.209	1.531	1.189
Limits (V/m)	614		
50% Limits(V/m)	307		

H-field strength			
Frequency range (KHz)	110.5 to 205		
Test Mode	Full Load	Half Load	Empty Load
Position A(A/m)	0.496	0.365	0.216
Position B(A/m)	0.491	0.343	0.223
Position C(A/m)	0.433	0.330	0.231
Position D(A/m)	0.438	0.331	0.226
Position E(A/m)	0.449	0.388	0.225
Limits (A/m)	1.630		
50% Limits (A/m)	0.815		

2.6. Test Result for Test setup B:

Empty , Half , Full load all have been tested ,only worse case Max load (Full) is reported.

E-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ……. 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (V/m)

Test distance (cm)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Limits (V/m)
1	7.691	7.655	7.523	7.661	7.654	614
2	7.016	7.013	6.991	6.897	7.021	614
3	6.451	6.511	6.525	6.559	6.531	614
4	6.121	6.045	6.061	5.988	6.118	614
5	5.661	5.553	5.613	5.661	5.651	614
6	5.129	5.031	5.154	5.091	5.144	614
7	4.631	4.709	4.589	4.559	4.609	614
8	4.250	4.354	4.331	4.258	4.325	614
9	3.794	3.691	3.707	3.721	3.691	614
10	3.326	3.289	3.355	3.401	3.407	614

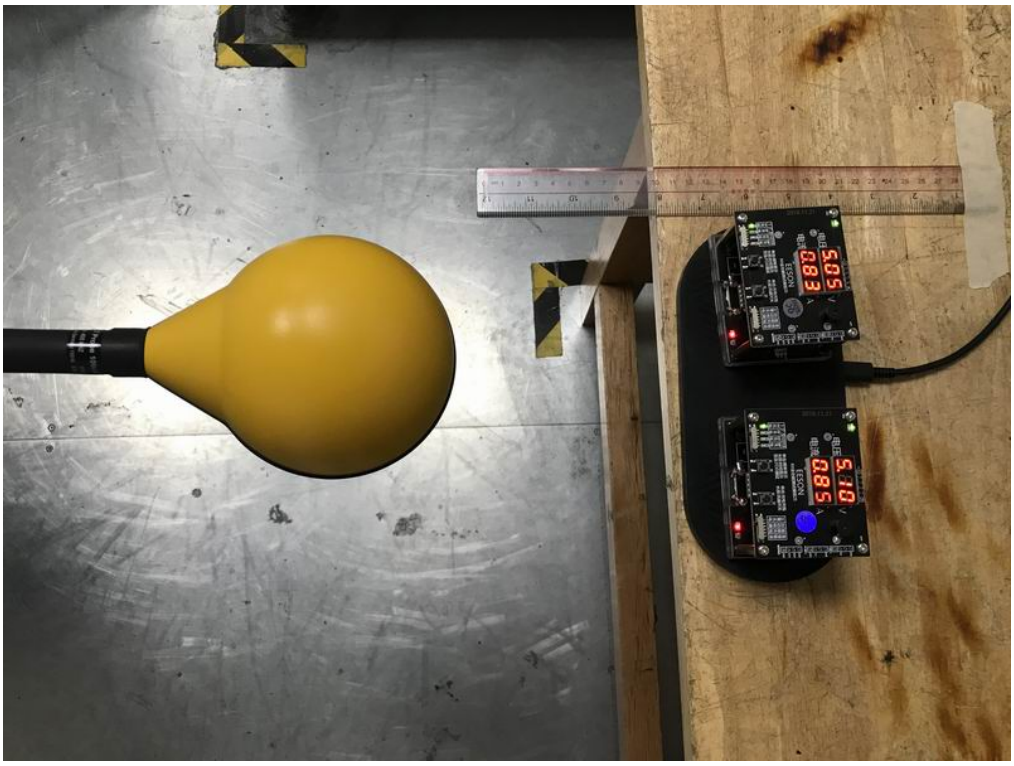
H-Filed Strength at (distance 10cm to 1cm at 1cm iteration, i.e. at a distance of 10cm, 9cm, 8cm, ……. 1cm, Which is between the edge of the charger and the edge of of probe,) surrounding the EUT (A/m)

Test distance (cm)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Limits (A/m)
1	0.709	0.697	0.696	0.708	0.704	1.63
2	0.691	0.685	0.684	0.685	0.683	1.63
3	0.675	0.671	0.679	0.681	0.665	1.63
4	0.661	0.665	0.665	0.661	0.658	1.63
5	0.653	0.659	0.651	0.655	0.643	1.63
6	0.641	0.634	0.631	0.639	0.636	1.63
7	0.623	0.625	0.625	0.625	0.615	1.63
8	0.609	0.611	0.599	0.597	0.613	1.63
9	0.595	0.594	0.587	0.590	0.605	1.63
10	0.588	0.581	0.581	0.575	0.584	1.63

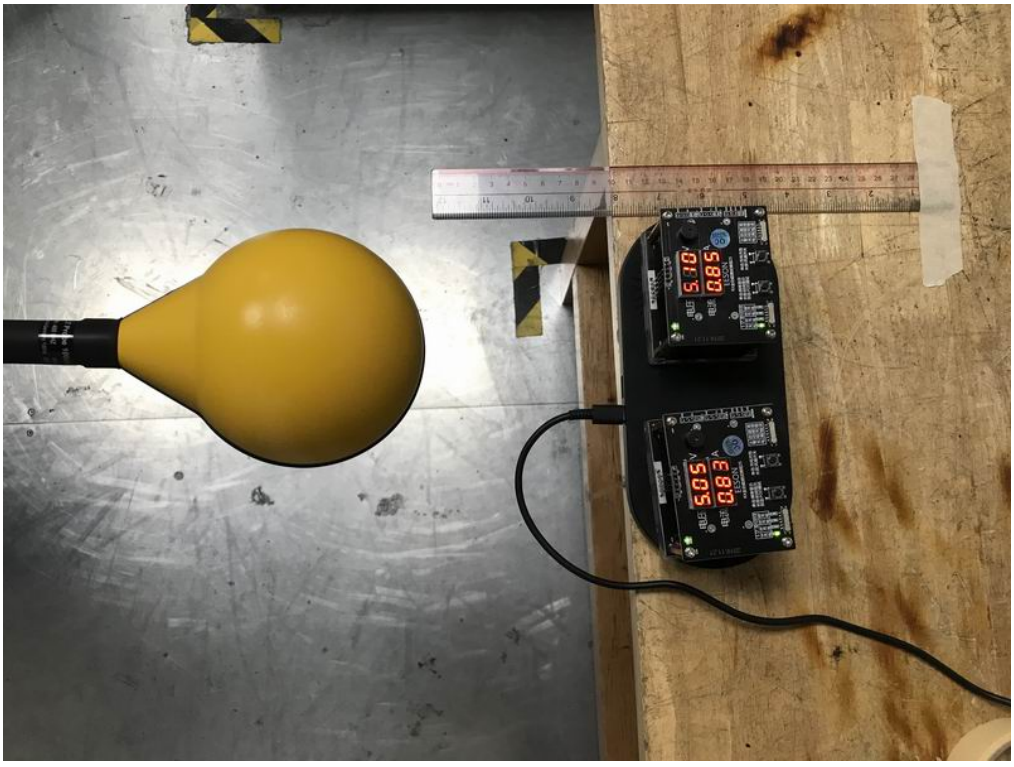
3. TEST SETUP PHOTO

Test setup B

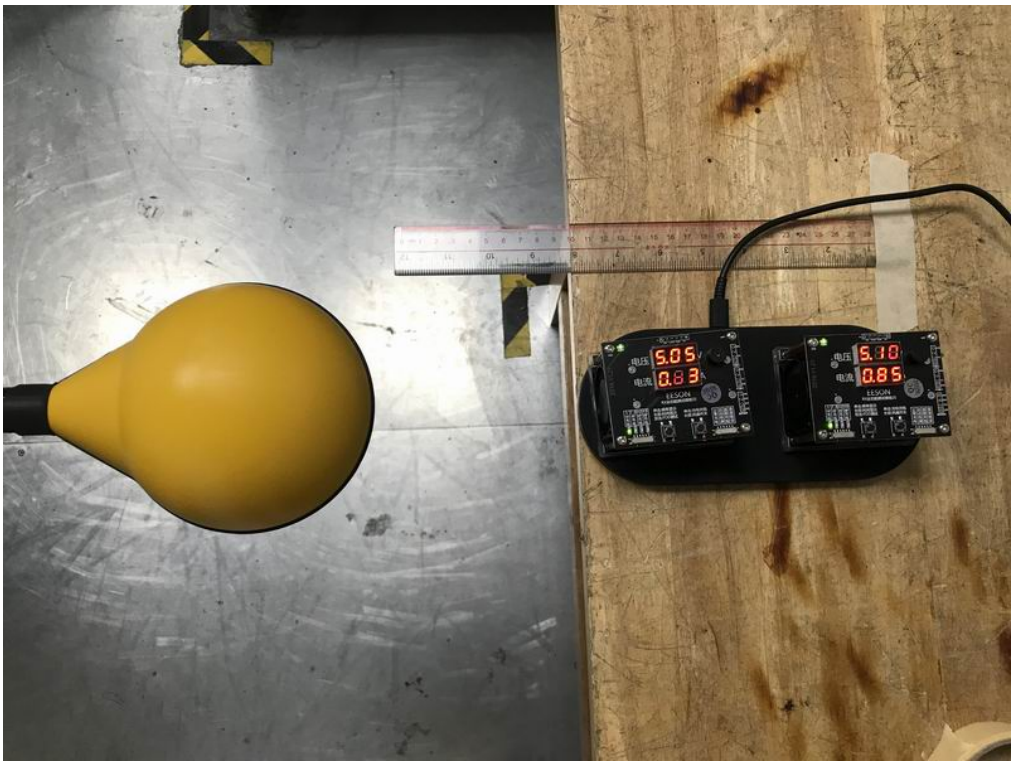
Position A



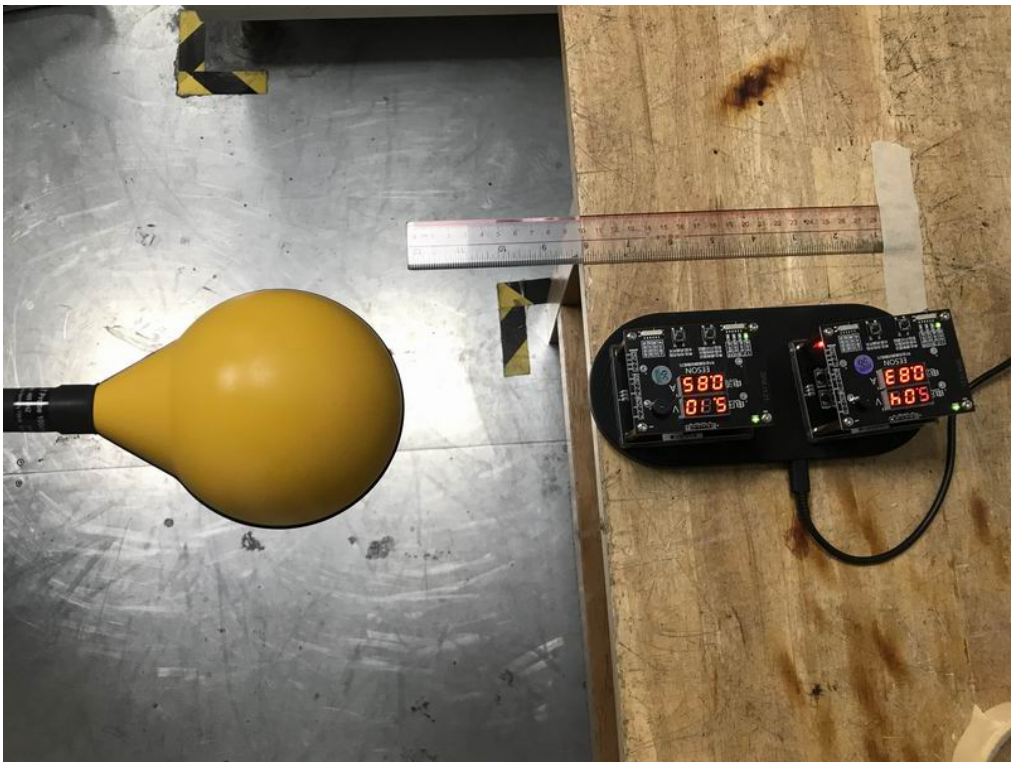
Position B



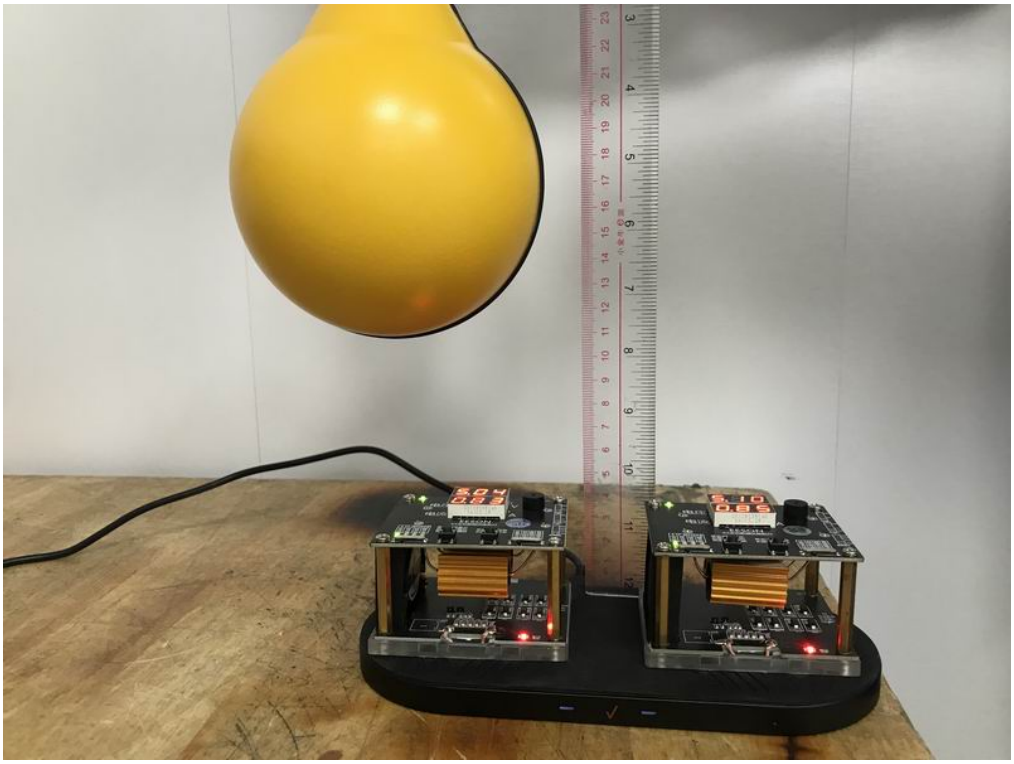
Position C



Position D

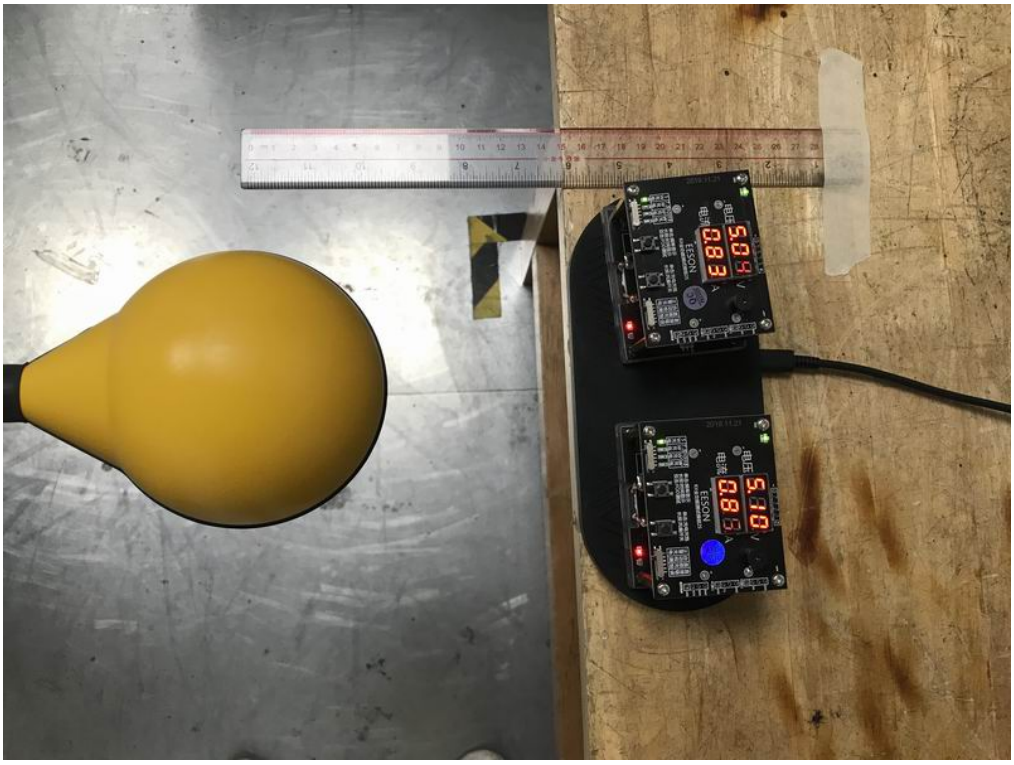


Position E

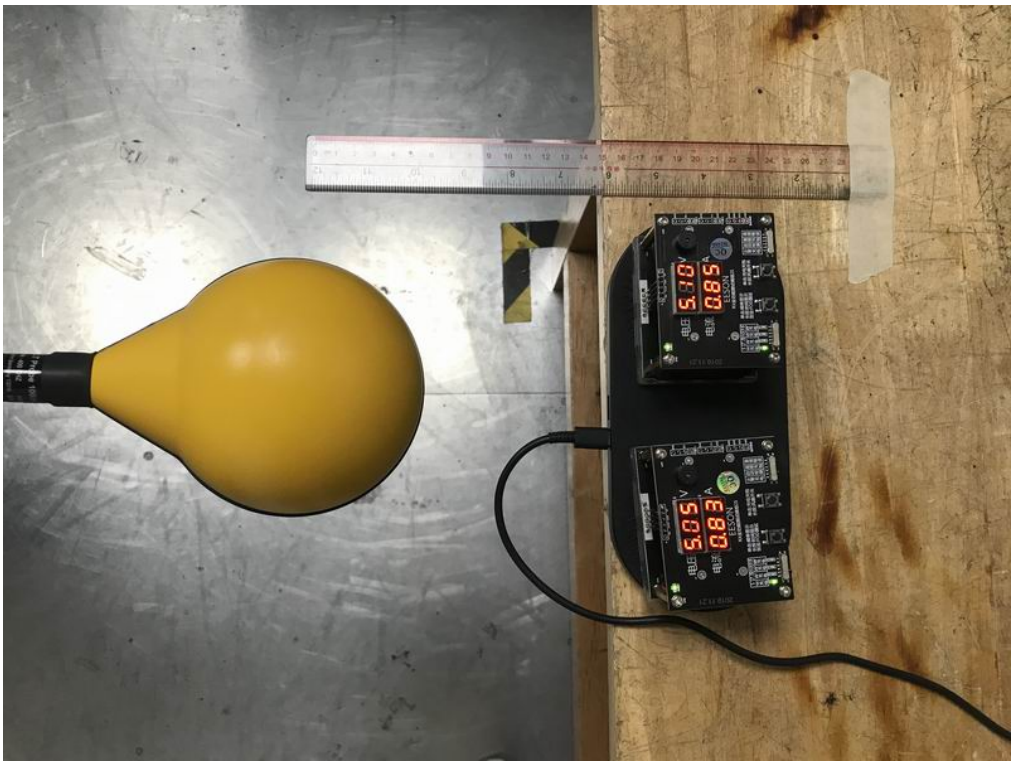


Test setup B

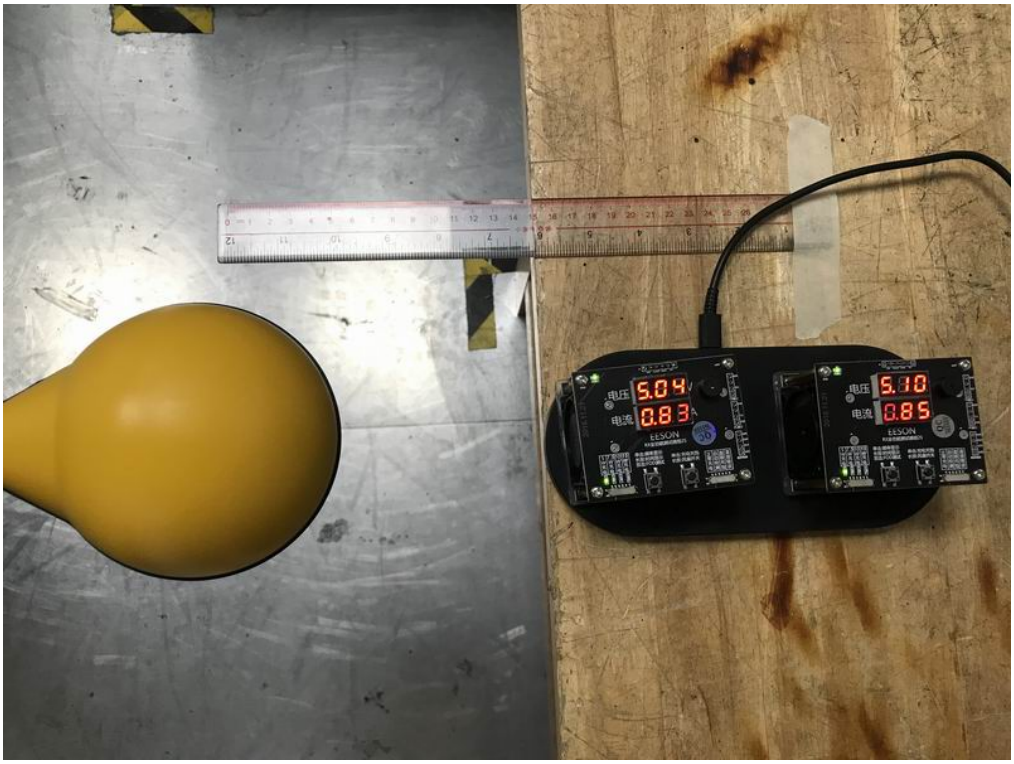
Position A



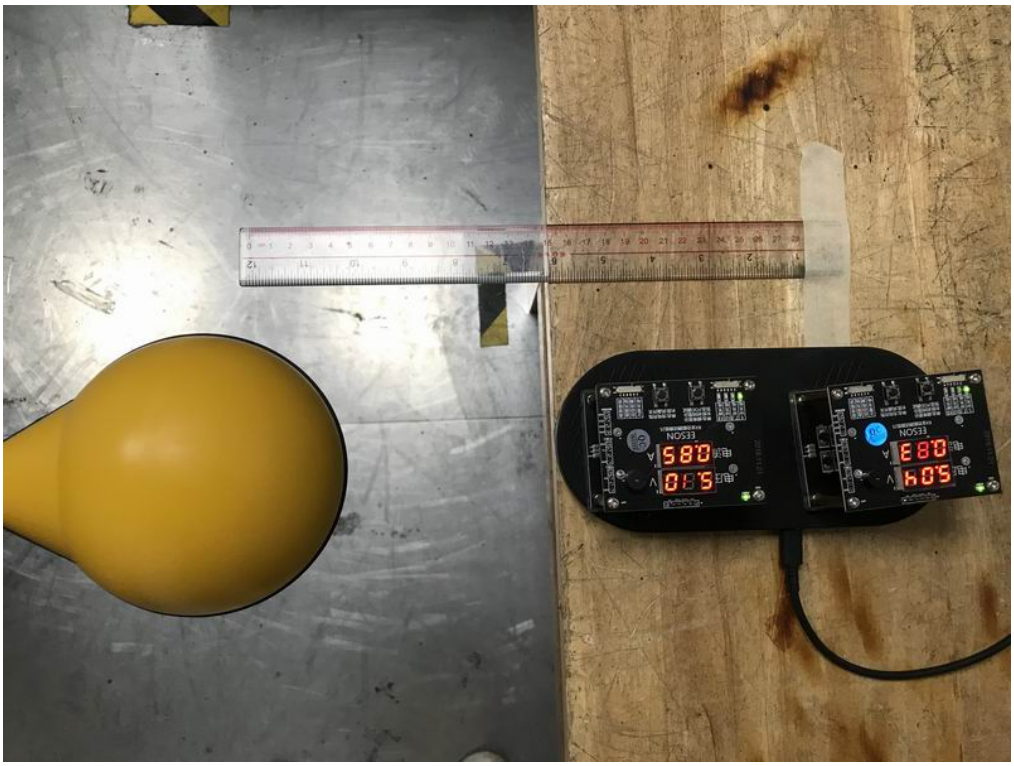
Position B



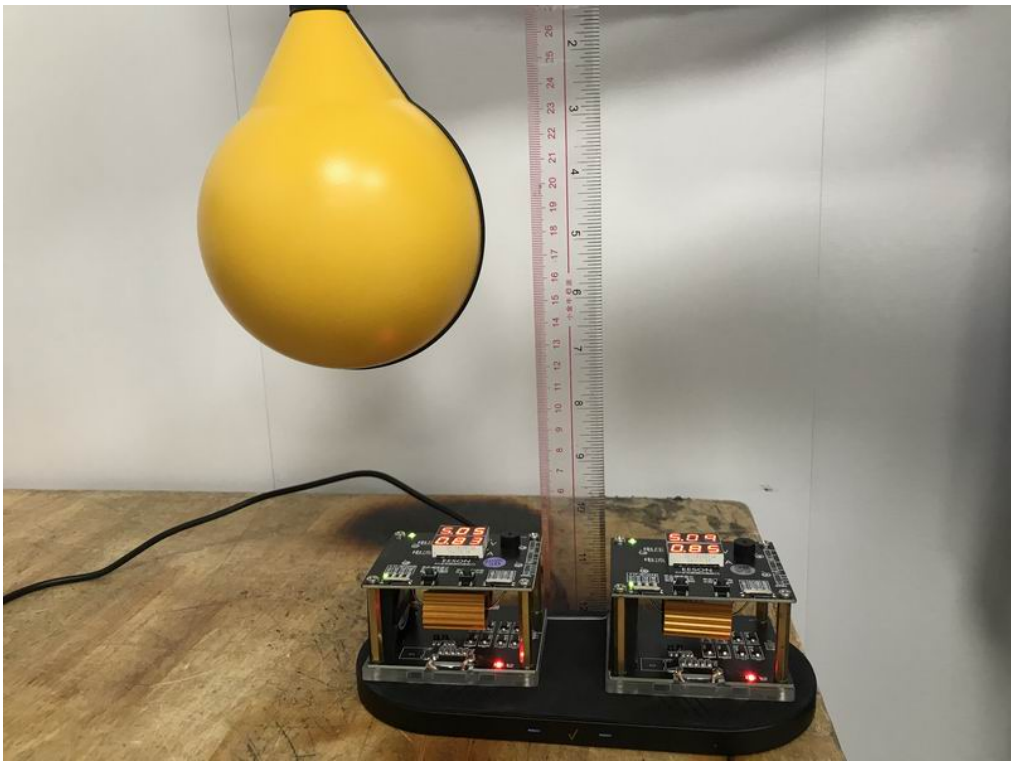
Position C



Position D



Position E



End of Test Report