

# RF EXPOSURE REPORT FOR CERTIFICATION On Behalf of

**Eaton Corporation** 

30W Travel Charger

Model Number: U280MS-2N1-WH2

FCC ID: 2AV4C-CU8AC2

Applicant:	Eaton Corporation		
Address:	10000 Woodward Avenue Woodridge, IL 60517 USA		
Prepared By:	EST Technology Co., Ltd.		
Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China			
Tel: 86-769-83081888-808			

Report Number:	ESTE-R2406171		
Date of Test:	May. 25, 2024~ Jun. 11, 2024		
Date of Report:	Jun. 11, 2024		



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Applicant: Address:	Eaton Corporation 10000 Woodward Avenue Woodridge, IL 60517 USA		
Manufacturer: Address:	Eaton Corporation 10000 Woodward Avenue Woodridge, IL 60517 USA		
Factory 1: Address:	SuiChuan CE LINK LIMITED SuiChuan county industrial park east zone, ji' an city, Jiangxi province, China		
Factory 2: Address:	CE LINK VIET NAM COMPANY LIMITED. Lot CNSG04&CNSG06 Van Trung Industrial Zone, Viet Yen district, Bac Giang Province, Vietnam		
E.U.T:	30W Travel Charger		
Model Number:	U280MS-2N1-WH2		
Power Supply:	Input: 100-240V~ 50-60Hz 0.85A Max Output: USB-C1: (PD) 5V==3A 15W, 9V==3A 27W, 12V==2.5A 30W, 15V==2A 30W, 20V==1.5A 30W PPS: 5-11V==3A 30W Max Wireless Charger: 3W Max		
Trade Name:	Eaton Tripp Lite Series		
Date of Receipt:	May. 25, 2024 Date of Test: May. 25, 2024~ Jun. 11, 2024		
Test Specification:	FCC CFR 47 Part 1.1307(b)&1.1310 KDB 680106 D01 Wireless Power Transfer v04		
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 CFR 47 Part 1.1307(b)&1.1310 requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd.		
Prepared by:	Reviewed by:  Dette Jun. 14 2024  Approved by:		
Ring Yang / Assistant	Seven Wang / Engineer Iceman Hu / Wanager		
	Seven Wang / Engineer Iceman Hu / Manager		
Other Aspects: None.	V		

Abbreviations: OK/P=passed

fail/F=failed

n.a/N=not applicable

E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.





# 1. SUMMARY OF TEST

# 1.1. Summary of test result

No.	Description of Test Item	FCC Standard Section	Results
1	Maximum Permissible Exposure	Part 1.1307(b)&1.1310	PASS

### 1.2. Test Mode

Test Item	Test Mode	
Maximum Permissible Exposure	Wireless Charging(1.778MHz)	
Waximum Permissible Exposure	Wireless Charging(326.5KHz)	

### 1.3. Test Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electric and Magnetic Field Probe-Analyzer	Narda S.T.S./PMM	EHP-200A	EST-E106	June 12,23	1 Year
Watch	Apple	Apple watch Series 8	N/A	N/A	N/A
Test Software	Narda	EHP200-TS	Rel 1.92	N/A	N/A



### 2. MAXIMUM PERMISSIBLE EXPOSURE

#### 2.1. Limit

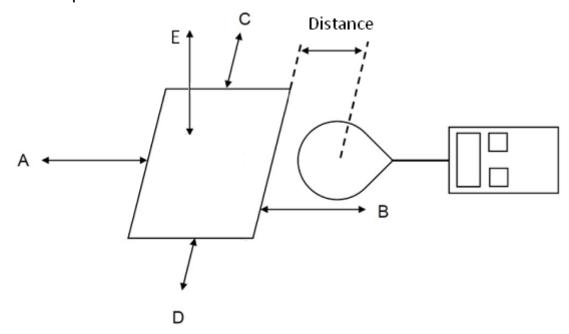
#### **Limits for Maximum Permissible Exposure (MPE)**

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)		
	(A) Limits for O	ccupational/Cont	rolled Exposure			
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)	(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 <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		

#### 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





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2.3.	Test	Pro	ceau	re

- 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. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D, E were completed.



### 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.

4	Power transfer frequency is less that 1 MHz.			
•	No.			
2	Output power from each primary coil is less than or equal to 15 watts.			
_	YES; the maximum output power of the primary coil is 3W.			
	The system may consist of more than one source primary coils, charging one or			
3	more clients. If more than one primary coil is present, the coil pairs may be			
3	powered on at the same time.			
	YES; the transfer system includes only single primary and secondary coils.			
Client device is placed directly in contact with the transmitter.				
4	YES; Client device is placed directly in contact with the transmitter.			
	Mobile exposure conditions only (portable exposure conditions are not covered			
5 by this exclusion).				
	YES.			
	The aggregate H-field strengths at 15 cm surrounding the device and 20 cm			
6	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.			

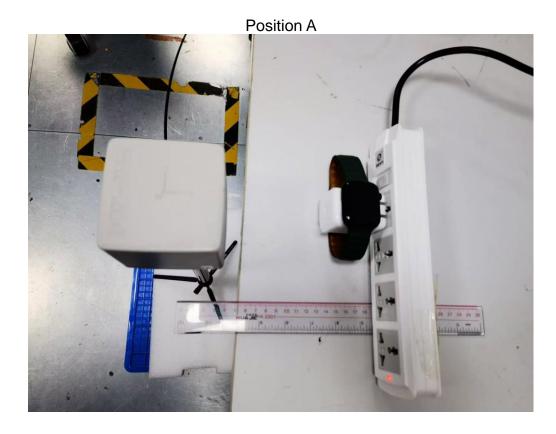


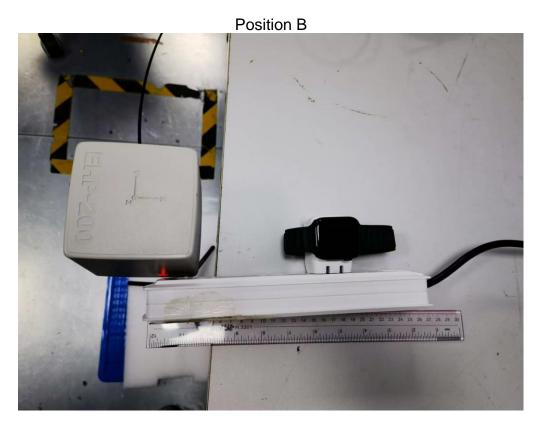
# 2.5. Test Result for Test setup A:

E-field strength				
Test Frequency	326.5KHz	1.778MHz		
Position A(V/m)	0.289	0.317		
Position B(V/m)	0.295	0.358		
Position C(V/m)	0.302	0.336		
Position D(V/m)	0.275	0.326		
Position E(V/m)	0.305	0.328		
Limits (V/m) 614				
50% Limits(V/m)	307			
H-f	ield strength			
Test Frequency	326.5KHz	1.778MHz		
Position A(A/m)	0.038	0.038		
Position B(A/m)	0.040	0.048		
Position C(A/m)	0.035	0.048		
Position D(A/m)	0.037	0.046		
Position E(A/m)	0.039	0.042		
Limits (A/m)	1.630			
50% Limits (A/m)	0.815			

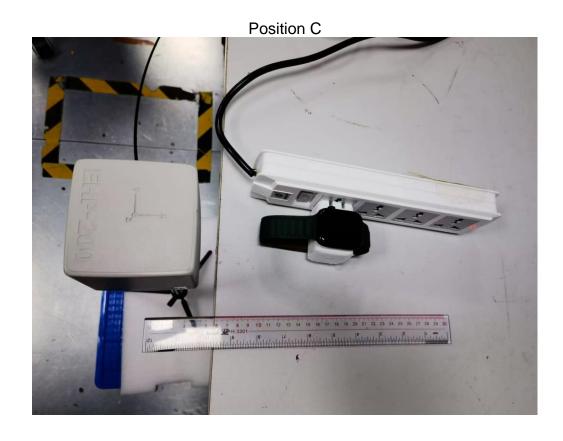


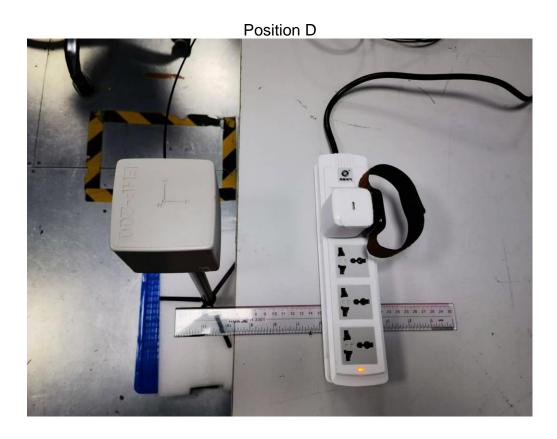
# 3. TEST SETUP PHOTO



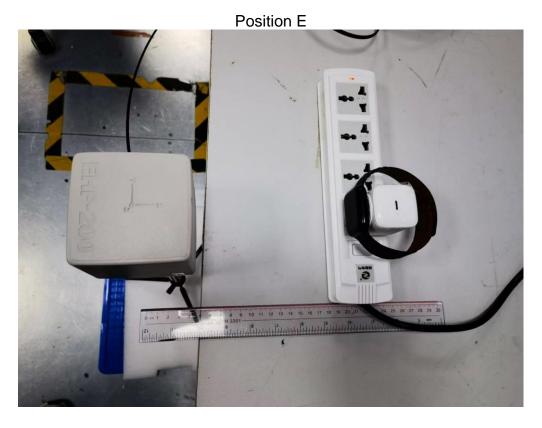












**End of Test Report**