



Human Exposure Report

Application No.: SZEM1910019401CR
Applicant: Hubbell Incorporated (Delaware) Wiring Device-Kellems Division
Address of Applicant: 40 Waterview Drive, Shelton, Connecticut, United States 06484
Manufacturer: Hubbell Incorporated (Delaware), Wiring Device Kellems Division
Address of Manufacturer: 40 Waterview Dr Shelton, CT 06484 United States
Factory: Dongguan Hubbell Electrical Products Co Ltd
Address of Factory: XINCHENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN GUANGDONG 523460 CHINA

Equipment Under Test (EUT):
EUT Name: Countertop Pop Up Tripower
Model No.: RCT600+, RCT620+, RCT600C+, RCT620C+ ♣
♣ Please refer to section 3.2 of this report which indicates which model was actually tested and which were electrically identical.

Trade mark: HUBBELL
FCC ID: GX7RCT600
Standards: 47 CFR PART 1, Subpart I, Section 1.1310
Date of Receipt: 2019-10-17
Date of Test: 2019-10-29 to 2019-11-04
Date of Issue: 2019-11-06

Test Result :	Pass*
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* In the configuration tested, the EUT complied with the standards specified above

Kenx. Xu

Keny Xu
EMC Laboratory Manager



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Shenzhen Branch EMC Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2019-11-06		Original

Authorized for issue by:			
			
		Powell Bao /Project Engineer	
			
		Eric Fu /Reviewer	



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3 General Information

3.1 Details of E.U.T.

Power supply: Input: AC120V, 60Hz
Wireless charger Output: 10W max (rated 5W).
USB type A: DC5V/ 2.1A
USB Type C: DC5V/2.1A or 9VDC/2A
Work power 5W, 7.5W, 10W
Operation Frequency: 112.82kHz to 239.42kHz
Modulation Type: Load Modulation
Antenna Type: Loop Antenna

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
iPhone 8	Apple	A1863	F4GVQ656JC6D
SAMSUNG Galaxy S8	SAMSUNG	SM-G9500	R28J9140LPB
XIAOMI MI 9	XIAOMI	M1902F1A	22006/K9SH01862

Declaration of EUT Family Grouping:

Model No.: RCT600+, RCT620+, RCT600C+, RCT620C+

Only the model RCT620C+ was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on colour of plastic parts and USB output interface circuitry.



3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

• **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.



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4 Equipments Used during Test

Item	Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
1	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2019-05-06	2020-05-06
2	Shielding Room	SAEMC	MSR733	SEM001-09	2019-05-09	2020-05-09



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5 Test Results

5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15cm

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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
300-1500	/	/	f/300	6
1500-100,000	/	/	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
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

This device has been tested with mobile phone at zero charge, intermediate charge, and full charge.



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5.1.2 Measurement Data

Output Voltage=DC 5V; The max output power =10W;Calculation of resistor value=5Ω

Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50% Limit (A/m)
239.39 kHz	15	Side 1	0.0831	0.815
		Side 2	0.0647	0.815
		Side 3	0.0813	0.815
		Side 4	0.0628	0.815
		Top	0.0474	0.815

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50%Limit (A/m)
			zero charge	intermediate charge	full charge	
239.39 kHz	15	Side 1	0.0919	0.0813	0.0664	0.815
		Side 2	0.0745	0.0584	0.0449	0.815
		Side 3	0.0904	0.0758	0.0605	0.815
		Side 4	0.0732	0.0617	0.0490	0.815
		Top	0.0588	0.0427	0.0283	0.815





6 Photographs- RF exposure setup

Refer to RF Exposure Setup Photos.

- End of the Report -



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