

RF exposure Estimation for CP60

1. Introduction

Product:	HUAWEI WIRELESS CHARGER
Model no.:	CP60
FCC ID:	QISCP60
Options and accessories:	Adapter and USB Cable
Rating:	5-12Vdc 2A Max supplied by an external adapter
Adapter information:	Manufacturer: Huawei Technologies Co.,Ltd. Model: HW-100400U00 Input voltage:100-240V 50/60Hz 1.2A Output voltage:5V === 2A or 9V === 2A or 10V === 4A Max
RF Transmission Frequency:	111-148KHz
Antenna Type:	Integrated coil antenna
Description of the EUT:	The Equipment Under Test (EUT) is a wireless charger which operated at 111-148kHz.

2. Limit and Guidelines on Exposure to Electromagnetic Fields

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 ²)	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

f = frequency in MHz

* = Plane-wave equivalent power density

3. Test Result

Electric Field Emissions					
Test Position	Test Distance (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	39.09	614	307	Pass
Rear	15	40.40	614	307	Pass
Right	15	31.95	614	307	Pass
Left	15	37.96	614	307	Pass
Top	15	42.47	614	307	Pass
Bottom	15	35.33	614	307	Pass
Magnetic Field Emissions					
Test Position	Test Distance (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Front	15	0.104	1.63	0.815	Pass
Rear	15	0.109	1.63	0.815	Pass
Right	15	0.085	1.63	0.815	Pass
Left	15	0.101	1.63	0.815	Pass
Top	15	0.113	1.63	0.815	Pass
Bottom	15	0.094	1.63	0.815	Pass

Remark: test standard refers to KDB 680106 D01 v03.

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