

Registration number: W6M21909-19340-C-1
FCC ID: LEA-BOOSTER

12. Maximum Permissible Exposure

12.1 Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 30 cm normally can be maintained between the user and the device.

12.2 MPE Calculation Method

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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

$$E \text{ (V/m)} \cdot \frac{\sqrt{30 \times P \times G}}{d}$$

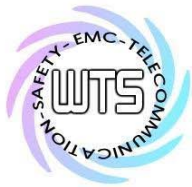
$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} \cdot \frac{E^2}{377}$$

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to mW/cm^2 .

$$Pd \cdot \frac{30 \times P \times G}{377 \times d^2}$$



Worldwide Testing Services(Taiwan) Co., Ltd.

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EIRP = max. conducted output power + antenna gain

EIRP = 12.48 dBm + (4 dBi [antenna gain claimed by manufacturer] = 16.48 dBm = 44.4631 mW

Established separation distance is 20 cm.

Operating frequency band: 150.053125 MHz, 161.725 MHz, 173.396875 MHz, 758.003125 MHz,
766.5 MHz, 774.996875 MHz, 851.003125MHz, 856.5MHz,
861.996875 MHz

The product meets RF exposure requirement.

Because the power density of 0.0088 mW/cm^2 at 861.996875 MHz is below the power density limit of 2.87 mW/cm^2 .