

MPE Calculation

RF feature	Frequency range (MHz)	Separation distance(cm)	Max. tune-up EIRP (dBm) ^{Note1}	Maximum EIRP (mW)	Maximum power density(mW/cm ²)	Requirement (mW/cm ²)
802.11ad	58 320.0 ~ 69 120.0	25.15	39.00	7 943.283	0.999 4	1.000
	~					
	~					
	~					
	~					
	~					
	~					
	~					

Note1: Please refer to the operation description for Max tune-up power.

Note2: To comply with RF exposure requirements, a minimum separation distance of **25.15cm** must be maintained between the antenna and the body of the user.

The MPE sample calculation for this exposure is shown below.

$$\begin{aligned}
 S &= \text{EIRP} / (4 R^2 \pi) \\
 &= 7943.283 / (4 \times 25.15^2 \times \pi) \\
 &= 0.9994 \text{ mW/cm}^2
 \end{aligned}$$

- Note

S= Maximum power density(mW/cm²)

EIRP= Equivalent Isotropic Radiated Power(mW)

R= Distance to the center of the radiation of the antenna

▪ 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)
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

Conclusion : The exposure condition of this device is compliant with FCC