

MPE Calculation

RF function or Mode	Frequency range (MHz)	Max. tune-up EIRP (dBm) ^{Note1}	Max. tune-up EIRP (mW)	Maximum power density (mW/cm ²)	Requirement (mW/cm ²)
802.11ad	58320 ~ 64800	37.00	5011.8724	0.9971	1.000
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Note1: Please refer to the Operational Description for Max tune-up EIRP.

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.

The MPE sample calculation for this exposure is shown below.

$$\begin{aligned}
 S &= \text{EIRP} / (4 R^2 \pi) & \text{- Note} \\
 &= 5011.8724 / (4 \times 20^2 \times \pi) & S = \text{Maximum power density(mW/cm}^2\text{)} \\
 &= 0.9971 \text{ mW/cm}^2 & \text{EIRP} = \text{Equivalent Isotropic Radiated Power(mW)} \\
 & & R = \text{Distance to the center of the radiation of the antenna(20cm)}
 \end{aligned}$$

▪ **Limits for General Population/Uncontrolled Exposure**

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

f = frequency in MHz * = Plane-wave equivalent power density

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