

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	31.00	1258.9255	0.2505	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.

$$S = \text{EIRP} / (4 R^2 \pi)$$

$$= 1258.9255 / (4 \times 20^2 \times \pi)$$

$$= 0.2505 \text{ mW/cm}^2$$

- Note

S= Maximum power density(mW/cm²)

EIRP= Equivalent Isotropic Radiated Power(mW)

R= Distance to the center of the radiation of the antenna(20cm)

▪ 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