

MPE Calculation

Regulation(s): Part 1.1310, Part 2.1091

Method: KDB447498 D01v06

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.

$$\begin{aligned} \mathbf{S} &= \text{EIRP} / (4 R^2 \pi) \\ &= 45.604 / (4 \times R^2 \times \pi) \\ &= 0.009 \text{ mW/cm}^2 \end{aligned}$$

- 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)	Averageing time (minutes)
0.3 ~ 1.34	614	1.63	*100	3
1.34 ~ 30	824/f	2.19 / f	*180 / f ²	3
30 ~ 300	27.5	0.073	0.2	3
300 ~ 1,500			f / 1500	3
1,500 ~ 100,000			1.0	3

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