

MPE Calculation :

RF function or Mode	Frequency range (MHz)		Tune-up Max Conducted power(dBm) ^{Note 1}	Conducted power(dBm)	Measured EIRP (dBm)	Adjusted EIRP to tune-up Max(dBm)	Maximum power density (mW/cm ²)	Requirement (mW/cm ²)
WCDMA850	826.40	~ 846.60	25.00	24.96	28.48	28.520	0.1415	0.550
WCDMA1900	1852.40	~ 1907.60	25.00	24.98	27.65	27.670	0.1164	1.000
LTE Band 12(17)	699.70	~ 715.30	25.70	23.52	26.24	28.420	0.1383	0.466
LTE Band 5	824.70	~ 848.30	25.70	23.30	27.32	29.720	0.1866	0.549
LTE Band 4	1710.70	~ 1754.30	25.70	23.75	22.99	24.940	0.0621	1.000
LTE Band 2	1850.70	~ 1909.30	25.70	23.92	24.20	25.980	0.0789	1.000
LTE Band 7	2502.50	~ 2567.50	25.70	24.02	20.98	22.660	0.0368	1.000
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Note1: Please refer to the tune-up procedure for the max target power.

Where, Adjusted EIRP to tune-up Max = Measured EIRP + (Tune-up Max conducted power - conducted power)

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.

$$\begin{aligned}
 S &= \text{EIRP} / (4 R^2 \pi) \\
 &= 28.52 / (4 \times 20^2 \times \pi) \\
 &= 0.1415 \text{ mW/cm}^2
 \end{aligned}$$

- Note

S= Maximum power density(mW/cm²)

EIRP= Equivalent Isotropic Radiated Power(mW)

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

▪ 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	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