

Regulation(s): Part 1.1310, Part 2.1091

Method: KDB447498 D01v06

MPE Calculation

RF feature(Worst Mode)	Frequency range (MHz)	Nominal Target Power(dBm) ^{Note1}	Tolerance (dB)	ANT Gain (dBi) ^{Note2}	Maximum EIRP (dBm)	Maximum EIRP (mW)	Maximum power density (mW/cm ²)	Requirement (mW/cm ²)
NR Band n2	1850.00 ~ 1910.00	23.0	2.7	-0.9	24.80	301.996	0.060 1	1.000 0
NR Band n5	824.00 ~ 849.00	23.0	2.7	-0.7	25.00	316.228	0.063 0	0.549 0
NR Band n12	699.00 ~ 716.00	23.0	2.7	-0.9	24.80	301.996	0.060 1	0.466 0
NR Band n66	1710.00 ~ 1780.00	23.0	2.7	0.1	25.80	380.190	0.075 7	1.000 0
NR Band n77	3450.00 ~ 3550.00	22.5	2.5	-3.5	21.50	141.254	0.028 2	1.000 0
NR Band n77	3700.00 ~ 3980.00	22.5	2.5	-4.8	20.20	104.713	0.020 9	1.000 0
Band14	788.00 ~ 798.00	23.0	2.7	-0.3	25.40	346.737	0.069 0	0.525 0
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Note1: Please refer to the operation description for Max tune-up power.

Note2: including path loss between conducted test point and antenna terminal

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.

$$\begin{aligned}
 S &= \text{EIRP} / (4 R^2 \pi) \\
 &= 301.996 / (4 \times 20^2 \times \pi) \\
 &= 0.060 \text{ mW/cm}^2
 \end{aligned}$$

- Note

S= Maximum power density(mW/cm²)

EIRP= Equivalent Isotropic Radiated Power(mW)

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

▪ 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