

RF Exposure Calculation

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 calculation for this exposure is shown below.

Power density at the specific separation

$$S = P G / (4 R^2 \pi)$$

- Note

S = Maximum power density(mW/cm²)

P = Power input to the antenna(mW)

G = Numeric power gain of the antenna

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

	2.4GHz Band DTS	5GHz Band NII	5GHz Band DTS
Max. target power & Tolerance	Target Power: 15.0 dBm Tolerance: + 2 dB / - 4 dB 11.0 dBm ~ 17.0 dBm	Target Power: 11.0 dBm Tolerance: + 2 dB / - 4 dB 7.0 dBm ~ 13.0 dBm	Target Power: 11.0 dBm Tolerance: + 2 dB / - 4 dB 7.0 dBm ~ 13.0 dBm
Aggregated Power (P)	Max. 20.000 dBm 100.000 mW Aggregated Power	Max. 16.000 dBm 39.811 mW Aggregated Power	Max. 16.000 dBm 39.811 mW Aggregated Power
Antenna gain (G)	Max. 2.570 dBi 1.808 numeric Directional antenna gain	Max. 2.167 dBi 1.648 numeric Directional antenna gain	Max. 1.891 dBi 1.546 numeric Directional antenna gain
Calculated power density	0.036 mW/cm ²	0.014 mW/cm ²	0.013 mW/cm ²

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

The maximum permissible exposure(MPE) of the general population/Uncontrolled for this device is 1.0 mW/cm²

The power density at 20cm does not exceed the 1.0mW/cm².