

RF Exposure Requirements – 1.1307(b)(2); 1.1310

Specification: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's Guidelines.

MPE CALCULATION

MPE Limit Calculation: EUT's operating frequencies @ 2410 – 2470 MHz; Peak Power Output = 24.5 dBm
therefore, **Limit for Uncontrolled exposure: 1 mW/cm² or 10 W/m²**

Equation from page 18 of OET 65, Edition 97-01

$$S = PG / 4\pi R^2$$

where, S = Power Density (**10 W/m²**)

P = Power Input to antenna (0.2818 Watts)

G = Antenna Gain (8 dBi)

R = distance to the center of radiation of the antenna (20 cm or 0.2 m)

$$S = 0.2818W * 8dBi / 4 * 3.14 * (0.2m)^2 = 2.2547W / 0.5027m^2 = 4.4856 W/m^2$$

EUT comply with 20cm distance exposure.