

MPE Limit Calculation: EUT's operating frequencies are between 2412 and 2462 MHz inclusive. Highest conducted power = 21.0 dBm (peak) therefore, **Limit for Uncontrolled exposure: 1 mW/cm²**.

EUT maximum antenna gain = 7.4 dBi.

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

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

where,

S = Power Density mW/m²

P = Power Input to antenna mili Watts

G = Numeric Antenna Gain

R = Distance to the center of radiation of the antenna (20 cm for Mobile minimum distance)

$$\text{Antenna Numeric Gain} = 10^{\text{dBi}/10}$$

Power at antenna port = 126.2 mW

Antenna Gain = 7.4 dBi

$$\text{Numeric antenna gain} = 10^{7.4/10} = 5.5$$

$$S = (126.2)(5.5) / 4(3.1416)(20)^2$$

$$S = 0.138 \text{ mW/cm}^2$$

Therefore, EUT meets the Uncontrolled Exposure limit.