

MPE Limit Calculation: EUT's operating frequencies @ 2412 and 2462 MHz; only channel 1 and 11 are active on this unit. Highest conducted power = 26.05 dBm (peak) therefore, **Limit for Uncontrolled exposure: 1 mW/cm²**.

The following antennas will be used under the Class II change:

6 dBi Omni directional antenna

9 dBi 120 degree antenna

EUT maximum antenna gain = 9 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

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

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

$$\text{Power at antenna port} = 403.7 \text{ mW}$$

$$\text{Antenna Gain} = 9 \text{ dBi}$$

$$\text{Numeric antenna gain} = 10^{9/10} = 7.94$$

$$S = (403.7)(7.94) / 4(3.1416)(20)^2$$

$$S = 0.638 \text{ mW/cm}^2$$

Therefore, EUT meets the Uncontrolled Exposure limit.