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/cm<sup>2</sup> or 10 W/m<sup>2</sup>

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

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

where,  $S = Power Density (10 W/m^2)$ 

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.