4   FCC §15.247 (i) & § 2.1091 - RF Exposure

According to §15.247(i) and §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

 f = frequency in MHz
 * = Plane-wave equivalent power density

4.1   MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

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

Where: S = power density
      P = power input to antenna
      G = power gain of the antenna in the direction of interest relative to an isotropic radiator
      R = distance to the center of radiation of the antenna

4.2   MPE Results

Mode	Frequency Band	MPE Distance (cm)	Output Power (dBm)	Antenna Gain (dBi)	Power Density (mw/cm^2)	Result
WLAN	2.4 GHz	20	20.05	5	0.064	Compliance

The predicted power density level at 20 cm is 0.064 mw/cm^2 which is below the uncontrolled exposure limit of 1.0 mW/cm^2. The EUT is used at least 20 cm away from user's body. It is determined as mobile equipment and complies with the MPE limit.