MPE Calculations

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure to 1mW/ cm^2 for systems operating in FCC Part 21. The distance, d(cm) from the antenna at which the power density, P_d (mW/cm^2) is below this limit is calculated from the maximum EIRP, P_t (mW) using the equation:

$$P_d = P_t / (4 \pi d^2)$$

Re-arranging for the distance at which the power density is 1mW/cm2 gives:

$$d = \sqrt{(P_t / (4 \pi))}$$

Frequency	Maximum Output Power (dBm)	Max. Antenna Gain (dBi)	EIRP (mW)	Pd at 20cm	Calculated distance (in cm) where Pd < 1mW/ cm2
2620 – 2686 MHz	43.3	19	1698243.7	337.858	367.5635

The minimum distance from the antenna that the power density is 1mW/ cm^2 and the calculated minimum distance is 367.5635 cm.

A warning label will be placed on all the outdoor, permanently fixed antennas that will be used with the transmitter. RF Exposure survey of the MMDS site will be taken care of by the licensee with the FCC Wireless Telecommunication Bureau.