UNII MPE CALCULATIONS

The following MPE calculations are based on a measured conducted RF power of 14.1dBm at 5260MHz as presented to the antenna. The peak antenna gain is 5.5dBi.

Prediction of MPE limit at a given distance

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

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the 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

Maximum peak output power at antenna input terminal:	14.10	(dBm)
Maximum peak output power at antenna input terminal:	25.704	(mW)
Antenna gain(typical):	5.5	(dBi)
Maximum antenna gain:	3.548	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5260	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency:	0.018144	(mW/cm^2)
Maximum allowable antenna gain:	22.9	(dBi)
Margin of Compliance at 20 cm =	17.4	dB