19.   MPE Calculations

The MPE calculations are based on the
Johnson Technology Brand antenna, part number: 2450AT18A100
Ceramic Chip Antenna

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:	14.60	(dBm)
Maximum peak output power at antenna input terminal:	28.840	(mW)
Antenna gain(typical):	0.5	(dBi)
Maximum antenna gain:	1.122	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2400	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency: 0.006438 (mW/cm^2)

Maximum allowable antenna gain: 22.4 (dBi)

Margin of Compliance at 20 cm = 21.9 dB