The following MPE calculations are based on the Johanson Technology ceramic antenna, with a measured conducted RF power of -1.6 dBm as presented to the antenna. The declared maximum gain of this antenna is -1.0 dBi.

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:	-1.60	(dBm)
Maximum peak output power at antenna input terminal:	0.692	(mW)
Antenna gain(typical):	-1	(dBi)
Maximum antenna gain:	0.794	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	900	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm^2)
Power density at prediction frequency:	0.000109	(mW/cm^2)
Maximum allowable antenna gain:	36.4	(dBi)
Margin of Compliance at 20 cm =	37.4	dB