The following MPE calculations are based on the printed circuit board antenna with a measured field strength of 108.6 dBμV/m, at 3 meters, and conducted RF power of +10.9 dBm as presented to the antenna. The calculated gain (measured over conducting ground plane) of this antenna, based on the measurement is 2.47dBi.

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:	10.90	(dBm)
Maximum peak output power at antenna input terminal:	12.303	(mW)
Antenna gain(typical):	2.47	(dBi)
Maximum antenna gain:	1.766	(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:	0.004322	(mW/cm^2)
Maximum allowable antenna gain:	23.9	(dBi)
Margin of Compliance at 20 cm =	21.4	dB