Prediction of MPE limit at a given distance

Mini-Repeater DEKO 2408/09 with 2 dBi Omni-directional Antenna (DownLink)

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:	24.10	(dBm)
Maximum peak output power at antenna input terminal:	257.0395783	(mW)
Antenna gain(typical):	2	(dBi)
Maximum antenna gain:	1.584893192	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	860	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.573333333	(mW/cm^2)
Power density at prediction frequency:	0.081046	(mW/cm^2)
Maximum allowable antenna gain:	10.49677048	(dBi)
Margin of Compliance:	8.496770475	(dB)