



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

Max. antenna gain at 20cm separation distance is 4 dBi

Maximum peak eirp: 34.00 (dBm) (30 dBm+4 dBi)

Maximum peak eirp: 2511.886432 (mW)

Time Averaging: 100 (%)

Prediction distance: 20 (cm)

Prediction frequency: 851 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.567333333 (mW/cm²)

Power density at prediction frequency: 0.499724 (mW/cm²)

Margin of compliance: -0.6 (dB)