



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: 31,00 (dBm)

Maximum peak output power at antenna input terminal: 1258,925412 (mW)

Antenna gain(maximum): 16 (dBi)

Maximum antenna gain: 39,81071706 (numeric)

Time Averaging: 100 (%)

Prediction distance: 100 (cm)

Prediction frequency: 862 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0,575 (mW/cm²)

Power density at prediction frequency: 0,398832 (mW/cm²)

Margin of compliance: -1,6 (dB)

This equates to: 3,988321282 W/m²



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Maximum peak output power at antenna input terminal: 31,00 (dBm)

Maximum peak output power at antenna input terminal: 1258,925412 (mW)

Antenna gain(maximum): 20 (dBi)

Maximum antenna gain: 100 (numeric)

Time Averaging: 100 (%)

Prediction distance: 100 (cm)

Prediction frequency: 2690 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1,000 (mW/cm²)

Power density at prediction frequency: 1,001821 (mW/cm²)

Margin of compliance: 0,0 (dB)

This equates to: 10,01821011 W/m²