

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 isotropic

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: **30.65** (dBm)

Maximum peak output power at antenna input terminal: **1161.4** (mW)

Antenna gain(typical): **2.15** (dBi)

Maximum antenna gain: **1.641** (numeric)

Prediction distance: **20** (cm)

Source Based Time Average Duty Cycle: **100** (%)

Prediction frequency: **848.8** (MHz)

MPE limit for uncontrolled exposure at prediction frequency: **0.566** (mW/cm^2)

Power density at prediction frequency: **0.37908** (mW/cm^2)

Power density at prediction frequency: **3.7908** (W/m^2)

Margin of Compliance: **1.74** (dB)

Simultaneously transmission with WLAN: $0.379/0.566 + 0.056/1 = 0.726 < 1$