

Prediction of MPE limit at a given distance

Blue Tree 5600 EV-DO Wireless Modem

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: ______ 28.60 (dBm)

Antenna gain(typical): 3.9 (dBi)

Maximum antenna gain: 2.454708916 (numeric)

Prediction distance: 20 (cm)
Prediction frequency: 1900 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.353777 (mW/cm^2)

Maximum allowable antenna gain: 8.412698554 (dBi)

Margin of Compliance: 4.512698554 dB