



Prediction of MPE limit at a given distance

VTech Phoenix i5871, Base

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: 29.50 (dBm)

Maximum peak output power at antenna input terminal: 891.2509381 (mW)

Antenna gain(typical): 2.2 (dBi)

Maximum antenna gain: 1.659586907 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 5840 (MHz)

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

Power density at prediction frequency: 0.294259 (mW/cm²)

Maximum allowable antenna gain: 7.512698554 (dBi)

Margin of Compliance: 5.312698554