Global EMC Scott Dry

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 radia

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:21.10 (dBm)Maximum peak output power at antenna input terminal:128.8249552 (mW)Antenna gain(typical):2 (dBi)Maximum antenna gain:1.584893192 (numeric)Time Averaging:100 (%)Prediction distance:20 (cm)Prediction frequency:2460 (MHz)

Power density at prediction frequency: 0.040619 (mW/cm^2)

Margin of compliance: -13.9 (dB)

This equates to 0.406190858 W/m^2 PASS

For information This equates to 12.37473044 V/m