Global EMC Ashwani

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:2.00 (dBm)Maximum peak output power at antenna input terminal:1.584893192 (mW)Antenna gain(typical):1.5 (dBi)Maximum antenna gain:1.412537545 (numeric)Time Averaging:100 (%)

Prediction frequency: 100 (%)

Prediction frequency: 2450 (MHz)

Power density at prediction frequency: 0.178152 (mW/cm^2)

Margin of compliance: -7.5 (dB)

This equates to 1.781517677 W/m^2 Complies

For information This equates to 25.91586704 V/m

Note: This device does not exceed the 60 / f (GHz) in mW limit as per FCC KDB 447498 2(a)(i), so it is allowable to be used in portable exposure conditions with no restrictions on host platforms