

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 radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal: 19.15 (dBm)
Maximum peak output power at the antenna terminal: 82.22426499 (mW)
Antenna gain(typical): 0 (dBi)
Maximum antenna gain: 1 (numeric)
Prediction distance: 20 (cm)
Prediction frequency: 2470 (MHz)
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: **0.016358** (mW/cm²)

Therefore device complies with FCC's RF radiation exposure limits at 20cm.