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:

Maximum peak output power at the antenna terminal:

Antenna gain(typical):

Maximum antenna gain:

Prediction distance:

Prediction frequency:

2.20 (dBm)

1.659586907 (mW)

1.258925412 (numeric)

Prediction frequency:

20 (cm)

Prediction frequency:

2450 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: _______1 (mW/cm^2)

Power density at prediction frequency: 0.000416 (mW/cm^2)

Therefore, device complies with FCC and Industry Canada RF radiation exposure limits for general population as a mobile device (d>20cm).