



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

2.4GHz 802.11 b/g radio RF exposure: 0.0082 mW/cm^2

900MHz RFID RF exposure: 0.38 mW/cm^2

Overall RF exposure

0.0082/1 +0.38/0.6=0.64 <1

