

### 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 isotropic

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: **24.56** (dBm)

Maximum peak output power at antenna input terminal: **285.8** (mW)

Antenna gain(typical): **0** (dBi)

Maximum antenna gain: **1.000** (numeric)

Prediction distance: **20** (cm)

Source Based Time Average Duty Cycle: **100** (%)

Prediction frequency: **1745** (MHz)

MPE limit for uncontrolled exposure at prediction frequency: **1.000** (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.05685** (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.5685** (W/m<sup>2</sup>)

Margin of Compliance: **12.45** (dB)

Simultaneously transmission LTE+WiFi = 0.05685 + 0.15231 = 0.20916 mW/cm<sup>2</sup> < 1 mW/cm<sup>2</sup>