

## Prediction of MPE limit at a given distance

MW-CBDA-SMR-800-900-16W80A Outdoor Base Antenna 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 antenna input terminal: 24.00 (dBm)

Maximum peak output power at antenna input terminal: <u>251.1886432</u> (mW)

Antenna gain(typical): 10 (dBi)

Maximum antenna gain: 10 (numeric)

Prediction distance: 50 (cm)

Prediction frequency: 806 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: \_\_\_\_0.537333333 (mW/cm^2)

Power density at prediction frequency: 0.079956 (mW/cm^2)

Maximum allowable antenna gain: 18.27393655 (dBi)

Margin of Compliance: 8.273936554