

Prediction of MPE limit at a given distance

MW-CSR-800AB-25W90, with Indoor DownLink 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: 36.00 (dBm)

Maximum peak output power at antenna input terminal: 3981.071706 (mW)

Antenna gain (typical): 2 (dBi)

Maximum antenna gain: 1.584893192 (numeric)

Prediction distance: 30 (cm)

Prediction frequency: 869 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.579333333 (mW/cm^2)

Power density at prediction frequency: 0.557889 (mW/cm^2)

Maximum allowable antenna gain: 2.163808909 (dBi)

Margin of Compliance: 0.163808909 (dB)