

### Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

<u>Equipment</u>	MW-260
<u>Manufacturer</u>	Brother Industries, Ltd.

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: -0.08 (dBm)

Maximum peak output power at antenna input terminal: 0.981747943 (mW)

Antenna gain(typical): 9.8 (dBi)

Maximum antenna gain: 9.54992586 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2441 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1.00245043 (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.001865** (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: **37.10332762** (dBi)

Margin of Compliance: **27.30332762**