

# Radio RF Safety Calculator

## Calculation Results

Average Power at the Antenna	0.417 watts
Antenna Gain in dBi	10.00 dBi
Distance to the Area of Interest	0.66 feet
Frequency of Operation	2400.000 MHz
Are Ground Reflections Calculated?	No
Estimated RF Power Density	0.8200 mw/cm <sup>2</sup>

	Controlled Environment	Uncontrolled Environment
Maximum Permissible Exposure (MPE)	5.00 mw/cm <sup>2</sup>	1.00 mw/cm <sup>2</sup>
Distance to Compliance From Center of Antenna	0.32 feet	0.65 feet
Does the Area of Interest Appear to be in Compliance?	yes	yes

## Interpretation of Results

1. Remember that the power value entered into these calculations should be the [average power](#) seen at the antenna, and not Peak Envelope Power (PEP). You may also consider feedline loss in calculating your average power at the antenna.
2. If you wish to estimate the power density at a point below the main lobe of a directional antenna, and if the antenna's vertical pattern is known, recalculate using the antenna's gain in the relevant direction.
3. Please also consult FCC OET Bulletin 65. It contains a thorough discussion of the RF Safety regulations as they apply to exposure limits and contains numerous charts, tables, worksheets, and other data to help determine station compliance.

approx 10dBi for compliance at 417 mWatts and 2400 MHz @ 20cm.