

Prediction of MPE limit at a given distance

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

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

Equipment
Manufacturer

Wireless Broadband Router
Buffalo Inc.

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:	<u>24.10</u> (dBm)	Standard antenna Gain For US Model
Maximum peak output power at antenna input terminal:	<u>257.0395783</u> (mW)	
Antenna gain(typical):	<u>4</u> (dBi)	
Maximum antenna gain:	<u>2.511886432</u> (numeric)	
Prediction distance:	<u>20</u> (cm)	
Prediction frequency:	<u>2437</u> (MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> (mW/cm ²)	
Power density at prediction frequency:	0.128449 (mW/cm ²)	
Maximum allowable antenna gain:	12.91269855 (dBi)	
Margin of Compliance:	8.912698554	

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Maximum peak output power at antenna input terminal:	<u>27.21</u> (dBm)	Other Optional Antennas as tested in the test report
Maximum peak output power at antenna input terminal:	<u>526.0172664</u> (mW)	
Antenna gain(typical):	<u>6</u> (dBi)	
Maximum antenna gain:	<u>3.981071706</u> (numeric)	
Prediction distance:	<u>20</u> (cm)	
Prediction frequency:	<u>2437</u> (MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> (mW/cm^2)	
Power density at prediction frequency:	0.416610 (mW/cm^2)	
Maximum allowable antenna gain:	9.802698554 (dBi)	
Margin of Compliance:	3.802698554	