

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>	Wireless Broadband Router_WAP001
<u>Manufacturer</u>	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>21.16</u> (dBm)
Maximum peak output power at antenna input terminal:	<u>1.31E+02</u> (mW)
Antenna gain(typical):	<u>2.9</u> (dBi)
Maximum antenna gain:	<u>1.9498446</u> (numeric)
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>2412</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1.00245043</u> (mW/cm^2)
Power density at prediction frequency:	5.067E-02 (mW/cm^2)
Maximum allowable antenna gain:	15.86332762 (dBi)
Margin of Compliance:	12.96332762