

**MPE Exposure Formula:**

$$S = ( P \times G ) / ( 4 \times \pi \times d^2 )$$

where:

S = power density

P = transmitter conducted power in (mW)

G = antenna numeric gain

d = distance to radiation center (m) or  $(.02^2) = .020$  m

**802.11b (2412 MHz)**

Enter Data in Linear Units			
Gain =	1.26	Numeric	1 dBi
Power =	105	mW	20.2 dBm
<b>Frequency =</b>	<b>2412</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	131.83	mW	131.83 mW
R (cm) =	3.2388816		S (20cm) = 0.026

**802.11b (2437 MHz)**

Enter Data in Linear Units			
Gain =	1.26	Numeric	1 dBi
Power =	412	mW	26.15 dBm
<b>Frequency =</b>	<b>2437</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	518.80	mW	518.80 mW
R (cm) =	6.4253245		S (20cm) = 0.103

**802.11b (2462 MHz)**

Enter Data in Linear Units			
Gain =	1.26	Numeric	1 dBi
Power =	102	mW	20.1 dBm
<b>Frequency =</b>	<b>2462</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	128.82	mW	128.82 mW
R (cm) =	3.2018064		S (20cm) = 0.026

### 802.11g (2412 MHz)

Enter Data in Linear Units					
Gain =	1.26	Numeric	1	dBi	
Power =	398	mW	26	dBm	
<b>Frequency =</b>	<b>2412</b>	<b>MHz</b>	1.000	mW/cm <sup>2</sup>	
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	501.19	mW		501.19	mW
R (cm) =	6.3153157		S (20cm) =	0.100	

### 802.11g (2437 MHz)

Enter Data in Linear Units					
Gain =	1.26	Numeric	1	dBi	
Power =	398	mW	26	dBm	
<b>Frequency =</b>	<b>2437</b>	<b>MHz</b>	1.000	mW/cm <sup>2</sup>	
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	501.19	mW		501.19	mW
R (cm) =	6.3153157		S (20cm) =	0.100	

### 802.11g (2462 MHz)

Enter Data in Linear Units					
Gain =	1.26	Numeric	1	dBi	
Power =	398	mW	26	dBm	
<b>Frequency =</b>	<b>2462</b>	<b>MHz</b>	1.000	mW/cm <sup>2</sup>	
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	501.19	mW		501.19	mW
R (cm) =	6.3153157		S (20cm) =	0.100	