

**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

**2412 MHz (802.11b)**

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	89	mW	EUT power:	19.5	dBm
Frequency =	2412	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	112.20	mW		112.20	mW
R (cm) =	2.9880996		S (20cm) =	0.022	

**2437 MHz (802.11b)**

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	355	mW	EUT power:	25.5	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	446.68	mW		446.68	mW
R (cm) =	5.9620425		S (20cm) =	0.089	

**2462 MHz (802.11b)**

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	95	mW	EUT power:	19.8	dBm
Frequency =	2462	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	120.23	mW		120.23	mW
R (cm) =	3.0931079		S (20cm) =	0.024	

### 2412 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	12	mW	EUT power:	10.9	dBm
Frequency =	2412	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	15.49	mW		15.49	mW
R (cm) =	1.1101843		S (20cm) =	0.003	

### 2437 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	324	mW	EUT power:	25.1	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	407.38	mW		407.38	mW
R (cm) =	5.6937064		S (20cm) =	0.081	

### 2462 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.3	Numeric	EUT ant.:	1	dBi
Power =	12	mW	EUT power:	10.9	dBm
Frequency =	2462	MHz	MPE limit:	1	mW/cm <sup>2</sup>
Cable Loss =	0	dB			
EIRP =	15.49	mW		15.49	mW
R (cm) =	1.1101843		S (20cm) =	0.003	