

**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

**802.11a (5257 MHz)**

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	0	mW	-7.6 dBm
Frequency =	5257	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	1000.00	mW	1000.00 mW
R (cm) =	8.9206206	S (20cm) =	0.199

**802.11a (5280 MHz)**

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	0	mW	-8 dBm
Frequency =	5280	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	912.01	mW	912.01 mW
R (cm) =	8.5191265	S (20cm) =	0.181

**802.11a (5343 MHz)**

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	0	mW	-7.8 dBm
Frequency =	5343	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	954.99	mW	954.99 mW
R (cm) =	8.7175625	S (20cm) =	0.190

### 802.11a (5750 MHz)

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	151	mW	21.8 dBm
Frequency =	5750	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	870963.59	mW	870963.6 mW
R (cm) =	263.2661777	S (20cm) =	173.273

### 802.11a (5733 MHz)

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	178	mW	22.5 dBm
Frequency =	5733	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	1023293.0	mW	1023293.0 mW
R (cm) =	285.3612955	S (20cm) =	203.578

### 802.11a (5768 MHz)

Enter Data in Linear Units			
Gain =	5754.40	Numeric	37.6 dBi
Power =	151	mW	21.8 dBm
Frequency =	5768	MHz	1.000 mW/cm <sup>2</sup>
Cable Loss =	0	dB	
EIRP =	870963.59	mW	870963.6 mW
R (cm) =	263.2661777	S (20cm) =	173.273