

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 (.02²) = .020 m

802.11a (5270 MHz)

Enter Data in Linear Units			
Gain =	199.53	Numeric	23 dBi
Power =	4	mW	6.2 dBm
Frequency =	5270	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	831.76	mW	831.76 mW
R (cm) =	8.1357027	S (20cm) =	0.165

802.11a (5330 MHz)

Enter Data in Linear Units			
Gain =	199.53	Numeric	23 dBi
Power =	5	mW	6.8 dBm
Frequency =	5330	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	954.99	mW	954.99 mW
R (cm) =	8.7175625	S (20cm) =	0.190

802.11a (5257 MHz)

Enter Data in Linear Units			
Gain =	199.53	Numeric	23 dBi
Power =	2	mW	3.3 dBm
Frequency =	5257	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	426.58	mW	426.58 mW
R (cm) =	5.8263298	S (20cm) =	0.085

802.11a (5750 MHz)

Enter Data in Linear Units					
Gain =	199.53	Numeric	23	dB	
Power =	151	mW	21.8	dBm	
Frequency =	5750	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	30199.52	mW		30199.52	mW
R (cm) =	49.0224563		S (20cm) =	6.008	

802.11a (5733 MHz)

Enter Data in Linear Units					
Gain =	199.53	Numeric	23	dB	
Power =	178	mW	22.5	dBm	
Frequency =	5733	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	35481.34	mW		35481.34	mW
R (cm) =	53.1367598		S (20cm) =	7.059	

802.11a (5768 MHz)

Enter Data in Linear Units					
Gain =	199.53	Numeric	23	dB	
Power =	151	mW	21.8	dBm	
Frequency =	5768	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	30199.52	mW		30199.52	mW
R (cm) =	49.0224563		S (20cm) =	6.008	