

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 =	1.62	Numeric	2.1 dBi
Power =	34	mW	15.3 dBm
Frequency =	2412	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	54.95	mW	54.95 mW
R (cm) =	2.0911976	S (20cm) =	0.011

802.11b (2437 MHz)

Enter Data in Linear Units			
Gain =	1.62	Numeric	2.1 dBi
Power =	48	mW	16.8 dBm
Frequency =	2437	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	77.62	mW	77.62 mW
R (cm) =	2.4853930	S (20cm) =	0.015

802.11b (2462 MHz)

Enter Data in Linear Units			
Gain =	1.62	Numeric	2.1 dBi
Power =	54	mW	17.3 dBm
Frequency =	2462	MHz	1.000 mW/cm ²
Cable Loss =	0	dB	
EIRP =	87.10	mW	87.10 mW
R (cm) =	2.6326618	S (20cm) =	0.017

802.11g (2412 MHz)

Enter Data in Linear Units					
Gain =	1.62	Numeric	2.1	dBi	
Power =	263	mW	24.2	dBm	
Frequency =	2412	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	

802.11g (2437 MHz)

Enter Data in Linear Units					
Gain =	1.62	Numeric	2.1	dBi	
Power =	239	mW	23.79	dBm	
Frequency =	2437	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	388.15	mW		388.15	mW
R (cm) =	5.5576996		S (20cm) =	0.077	

802.11g (2462 MHz)

Enter Data in Linear Units					
Gain =	1.62	Numeric	2.1	dBi	
Power =	257	mW	24.1	dBm	
Frequency =	2462	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	416.87	mW		416.87	mW
R (cm) =	5.7596364		S (20cm) =	0.083	

802.11a (5180 MHz)

Enter Data in Linear Units					
Gain =	2.69	Numeric	4.3	dBi	
Power =	49	mW	16.9	dBm	
Frequency =	5180	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	131.83	mW		131.83	mW
R (cm) =	3.2388816		S (20cm) =	0.026	

802.11a (5260 MHz)

Enter Data in Linear Units					
Gain =	2.69	Numeric	4.3	dBi	
Power =	46	mW	16.6	dBm	
Frequency =	5260	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	123.03	mW		123.03	mW
R (cm) =	3.1289244		S (20cm) =	0.024	

802.11a (5320 MHz)

Enter Data in Linear Units					
Gain =	2.69	Numeric	4.3	dBi	
Power =	120	mW	20.8	dBm	
Frequency =	5320	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	323.59	mW		323.59	mW
R (cm) =	5.0745212		S (20cm) =	0.064	

802.11a (5745 MHz)

Enter Data in Linear Units					
Gain =	2.63	Numeric	4.2	dBi	
Power =	190	mW	22.78	dBm	
Frequency =	5745	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	498.88	mW		498.88	mW
R (cm) =	6.3007909		S (20cm) =	0.099	

802.11a (5785 MHz)8

Enter Data in Linear Units					
Gain =	2.63	Numeric	4.2	dBi	
Power =	179	mW	22.52	dBm	
Frequency =	5260	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	469.89	mW		469.89	mW
R (cm) =	6.1149804		S (20cm) =	0.093	

802.11a (5825 MHz)

Enter Data in Linear Units					
Gain =	2.63	Numeric	4.2	dBi	
Power =	207	mW	23.16	dBm	
Frequency =	5320	MHz	1.000	mW/cm ²	
Cable Loss =	0	dB			
EIRP =	544.50	mW		544.50	mW
R (cm) =	6.5825637		S (20cm) =	0.108	