

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 =	1.6	Numeric	EUT ant.:	2	dBi
Power =	69	mW	EUT power:	18.4	dBm
			MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	109.65	mW		109.65	mW
R (cm) =	2.9538951		S (20cm) =	0.022	

2437 MHz (802.11b)

Enter Data in Linear Units					
Gain =	1.6	Numeric	EUT ant.:	2	dBi
Power =	251	mW	EUT power:	24	dBm
			MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	398.11	mW		398.11	mW
R (cm) =	5.6285311		S (20cm) =	0.079	

2462 MHz (802.11b)

Enter Data in Linear Units					
Gain =	1.6	Numeric	EUT ant.:	2	dBi
Power =	71	mW	EUT power:	18.5	dBm
			MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	112.20	mW		112.20	mW
R (cm) =	2.9880996		S (20cm) =	0.022	

R (cm) = Refers to the calculated safe distance (Formula is $\text{SQRT}(\text{EIRP}/(4 \times \pi \times \text{MPE limit (mW/CM}^2)))$)

S (20cm) = Refers to the calculated power density at 20cm distance

2412 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.6	Numeric	EUT ant.:	2	dBi
Power =	110	mW	EUT power:	20.4	dBm
		MHz	MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	173.78	mW		173.78	mW
R (cm) =	3.7187336		S (20cm) =	0.035	

2437 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.6	Numeric	EUT ant.:	2	dBi
Power =	398	mW	EUT power:	26	dBm
		MHz	MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	630.96	mW		630.96	mW
R (cm) =	7.0859008		S (20cm) =	0.126	

2462 MHz (802.11g)

Enter Data in Linear Units					
Gain =	1.6	Numeric	EUT ant.:	2	dBi
Power =	100	mW	EUT power:	20	dBm
		MHz	MPE limit:	1	mW/cm ²
Cable Loss =	0	dB			
EIRP =	158.49	mW		158.49	mW
R (cm) =	3.5513630		S (20cm) =	0.032	

R (cm) = Refers to the calculated safe distance (Formula is $\text{SQRT}(\text{EIRP}/(4 \cdot \text{PI}() \cdot \text{MPE limit (mW/CM}^2)))$)

S (20cm) = Refers to the calculated power density at 20cm distance