

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 =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	112	mW	EUT power:	20.5	dBm
Frequency =	2412	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	245.47	mW		245.47	mW
R (cm) =	4.4197232		S (20cm) =	0.049	

2437 MHz (802.11b)

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	123	mW	EUT power:	20.9	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	269.15	mW		269.15	mW
R (cm) =	4.6280183		S (20cm) =	0.054	

2462 MHz (802.11b)

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	105	mW	EUT power:	20.2	dBm
Frequency =	2462	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	229.09	mW		229.09	mW
R (cm) =	4.2696775		S (20cm) =	0.046	

2412 MHz (802.11g)

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	107	mW	EUT power:	20.28	dBm
Frequency =	2412	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	233.35	mW		233.35	mW
R (cm) =	4.3091843		S (20cm) =	0.046	

2437 MHz (802.11g)

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	178	mW	EUT power:	22.51	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	389.94	mW		389.94	mW
R (cm) =	5.5705114		S (20cm) =	0.078	

2462 MHz (802.11g)

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.4	dBi
Power =	69	mW	EUT power:	18.41	dBm
Frequency =	2462	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	151.71	mW		151.71	mW
R (cm) =	3.4745220		S (20cm) =	0.030	

2412 MHz (802.11n) 20 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	16	mW	EUT power:	12.16	dBm
Frequency =	2412	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	35.65	mW		35.65	mW
R (cm) =	1.6842054		S (20cm) =	0.007	

2437 MHz (802.11n) 20 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	44	mW	EUT power:	16.45	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	95.72	mW		95.72	mW
R (cm) =	2.7599109		S (20cm) =	0.019	

2462 MHz (802.11n) 20 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	13	mW	EUT power:	11.16	dBm
Frequency =	2462	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	28.31	mW		28.31	mW
R (cm) =	1.5010497		S (20cm) =	0.006	

2422 MHz (802.11n) 40 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	49	mW	EUT power:	16.9	dBm
Frequency =	2422	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	106.17	mW		106.17	mW
R (cm) =	2.9066656		S (20cm) =	0.021	

2437 MHz (802.11n) 40 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	68	mW	EUT power:	18.3	dBm
Frequency =	2437	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	146.55	mW		146.55	mW
R (cm) =	3.4150343		S (20cm) =	0.029	

2452 MHz (802.11n) 40 MHz

Enter Data in Linear Units					
Gain =	2.2	Numeric	EUT ant.:	3.36	dBi
Power =	24	mW	EUT power:	13.8	dBm
Frequency =	2452	MHz	MPE limit:	1	mW/cm ²
Cable Loss =		dB			
EIRP =	52.00	mW		52.00	mW
R (cm) =	2.0342066		S (20cm) =	0.010	