

**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<sup>2</sup>) = .020 m

Enter Data in Linear Units			
Gain =	6	Numeric	8 dBi
Power =	182	mW	22.6 dBm
<b>Frequency =</b>	<b>1850</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	1148.15	mW	1148.15 mW
R (cm) =	9.5586172	S (20cm) =	0.228

Enter Data in Linear Units			
Gain =	10	Numeric	10 dBi
Power =	141	mW	21.5 dBm
<b>Frequency =</b>	<b>1880</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	1412.54	mW	1412.54 mW
R (cm) =	10.6021774	S (20cm) =	0.281

Enter Data in Linear Units			
Gain =	10	Numeric	10 dBi
Power =	107	mW	20.3 dBm
<b>Frequency =</b>	<b>1910</b>	<b>MHz</b>	1.000 mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>	
EIRP =	1071.52	mW	1071.52 mW
R (cm) =	9.2341105	S (20cm) =	0.213

Enter Data in Linear Units					
Gain =	5	Numeric		7	dBi
Power =	62	mW		17.9	dBm
<b>Frequency =</b>	<b>1930</b>	<b>MHz</b>		1.000	mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	309.03	mW		309.03	mW
R (cm) =	4.9590110			S (20cm) =	0.061

Enter Data in Linear Units					
Gain =	5	Numeric		7	dBi
Power =	141	mW		21.5	dBm
<b>Frequency =</b>	<b>1950</b>	<b>MHz</b>		1.000	mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	707.95	mW		707.95	mW
R (cm) =	7.5057668			S (20cm) =	0.141

Enter Data in Linear Units					
Gain =	5	Numeric		7	dBi
Power =	186	mW		22.7	dBm
<b>Frequency =</b>	<b>1990</b>	<b>MHz</b>		1.000	mW/cm <sup>2</sup>
<b>Cable Loss =</b>	<b>0</b>	<b>dB</b>			
EIRP =	933.25	mW		933.25	mW
R (cm) =	8.6177734			S (20cm) =	0.186