# How is the Intensity of EMF Radiation Measured?

The intensity is measured as power density, which is defined as power per unit area. It is expressed in Watts per square meter (W/m^2) or as power ratio in decibels (dBm).

Number of Times Above Nature	Engineering Units	Key Thresholds
1,000,000,000,000,000	35 dBm = 1,800 W/m^2 = 180 mW/cm^2	
300,000,000,000,000	30 dBm = 580 W/m^2 = 58 mW/cm^2	thermal limit
100,000,000,000,000	25 dBm = 180 W/m^2 = 18 mW/cm^2	
30,000,000,000,000	20 dBm = 58 W/m^2 = 5.8 mW/cm^2	
10,000,000,000,000	15 dBm = 18 W/m^2 = 1.8 mW/cm^2	
3,000,000,000,000	10 dBm = 5.8 W/m^2 = 580 $\mu W/cm^2$	USA, Canada
1,000,000,000,000	5 dBm = 1.8 W/m^2 = 180 $\mu W/cm^2$	
300,000,000,000	0 dBm = 580 mW/m^2 = 58 $\mu W/cm^2$	
100,000,000,000	-5 dBm = 180 mW/m^2 = 18 $\mu W/cm^2$	
30,000,000,000	-10 dBm = 58 mW/m^2 = 5.8 $\mu W/cm^2$	China, Russia, Switzerland
10,000,000,000	-15 dBm = 18 mW/m^2 = 1.8 $\mu W/cm^2$	
3,000,000,000	-20 dBm = 5.8 mW/m^2 = 580 nW/cm^2	
1,000,000,000	-25 dBm = 1.8 mW/m^2 = 180 nW/cm^2	extreme anomaly*
300,000,000	-30 dBm = 580 $\mu W/m^2$ = 58 nW/cm^2	
100,000,000	-35 dBm = 180 $\mu W/m^2$ = 18 nW/cm^2	
30,000,000	-40 dBm = 58 $\mu W/m^2$ = 5.8 nW/cm^2	
10,000,000	-45 dBm = 18 $\mu W/m^2$ = 1.8 nW/cm^2	severe anomaly*
3,000,000	-50 dBm = 5.8 $\mu W/m^2$ = 580 pW/cm^2	
1,000,000	-55 dBm = 1.8 $\mu W/m^2$ = 180 pW/cm^2	White ZONE
300,000	-60 dBm = 580 nW/m^2 = 58 pW/cm^2	
100,000	-65 dBm = 180 nW/m^2 = 18 pW/cm^2	slight anomaly*
30,000	-70 dBm = 58 nW/m^2 = 5.8 pW/cm^2	
10,000	-75 dBm = 18 nW/m^2 = 1.8 pW/cm^2	
3,000	-80 dBm = 5.8 nW/m^2 = 580 fW/cm^2	
1,000	-85 dBm = 1.8 nW/m^2 = 180 fW/cm^2	
300	-90 dBm = 580 pW/m^2 = 58 fW/cm^2	
100	-95 dBm = 180 pW/m^2 = 18 fW/cm^2	
30	-100 dBm = 58 pW/m^2 = 5.8 fW/cm^2	
10	-105 dBm = 18 pW/m^2 = 1.8 fW/cm^2	
3	-110 dBm = 5.8 pW/m^2 = 580 aW/cm^2	
1	-115 dBm = 1.8 pW/m^2 = 180 aW/cm^2	Nature

*according to Building Biology guidelines
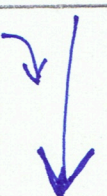
Governmentally Approved Safe Limits of Exposure

In the USA a comprehensive report was issued by the FCC and can be found at:
http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf