Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

<u>20.00</u> (dBm)	Worst case antenna gain
<u>100</u> (mW)	used at 5GHz channel
<u>6</u> (dBi)	Worst case power used from
3.981071706 (numeric)	FCC ID: RTP55010016-5
20 (cm)	
5150 (MHz)	
1 (mW/cm^2)	
0.079201 (mW/cm^2)	
17.01269855 (dBi)	
	100 (mW) 6 (dBi) 3.981071706 (numeric) 20 (cm) 5150 (MHz) 1 (mW/cm^2) 0.079201 (mW/cm^2)