

**POWER DENSITY ESTIMATIONS BASED ON POWER OUTPUT, ANTENNA GAIN, AND
DISTANCE FROM ANTENNA**

$$(P G) / (4 R^2 \pi) = S$$

where:	S =	maximum power density (mW/cm ²)	transmitter operating variables:	must be blank if dB values are entered
	P =	power input to the antenna ----->>	=	19 (dBm) - or - (mW)
	G =	gain of the antenna - worst case ----->>	=	6 (dBi) - or - (numeric gain)
	R =	distance to the center of the radiation of the antenna -->>	=	20 (cm)

$(P \ G) / (4 * R^2 * \pi)$	=	S (mW/cm ²)
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$(79.43282347 \ 3.98107) / (4 * 20^2 * \pi)$ (mw) (gain) (cm)	=	S (mW/cm ²)
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$(316.227766) / (4 * 400 * \pi)$	=	S (mW/cm ²)
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$(316.227766) / (5026.548246)$	=	0.062912 (mW/cm ²)
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