

**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 ----->>	=	13.04	(dBm) - or - (mW)
	G =	gain of the antenna - worst case ----->>	=	3.2	(dBi) - or - (numeric gain)
	R =	distance to the center of the radiation of the antenna -->>	=	20	(cm)

$(P \quad G) / (4 * R^2 * \pi)$	=	S	(mW/cm ²)
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$(\frac{20.1372425}{(mw)} \quad \frac{2.08930}{(gain)}) / (4 * \frac{20}{(cm)}^2 * \pi)$	=	S	(mW/cm ²)
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$(42.07266284) / (4 * 400 * \pi)$	=	S	(mW/cm ²)
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$(42.07266284) / (5026.548246)$	=	0.008370	(mW/cm ²)
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