

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 ----->>	=	14.27	(dBm) - or -		(mW)
G =	gain of the antenna - worst case ----->>	=	0	(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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$(26.73006409 \text{ (mw)} * 1.00000 \text{ (gain)}) / (4 * 20^2 \text{ (cm)} * \pi)$	=	S	(mW/cm ²)
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$(26.73006409) / (4 * 400 * \pi)$	=	S	(mW/cm ²)
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$(26.73006409) / (5026.548246)$	=	0.005318	(mW/cm ²)
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