

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 ----->>	=	25.493 (dBm) - or -		(mW)
G =	gain of the antenna - worst case ----->>	=	1.2 (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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$(\frac{354.241958}{(mw)} \quad \frac{1.31826}{(gain)}) / (4 * \frac{20}{(cm)}^2 * \pi)$	=	S	(mW/cm ²)
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$(466.9818486) / (4 * 400 * \pi)$	=	S	(mW/cm ²)
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$(466.9818486) / (5026.548246)$	=	0.092903	(mW/cm ²)
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