

**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 ----->>	=	28.98 (dBm) - or -	(mW)
	G = gain of the antenna - worst case ----->>	=	4 (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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$(\text{790.678628 (mw)} \quad \text{2.51189 (gain)}) / (4 * \text{20 (cm)}^2 * \pi)$	=	S	(mW/cm ²)
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$(\text{1986.094917}) / (4 * \text{400} * \pi)$	=	S	(mW/cm ²)
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$(\text{1986.094917}) / (\text{5026.548246})$	=	0.395121	(mW/cm ²)
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