

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 ----->>	=	10.23	(dBm) - or -	(mW)
$G =$	gain of the antenna - worst case ----->>	=	1.6	(dBi) - or -	(numeric gain)
$R =$	distance to the center of the radiation of the antenna -->>	=	20		(cm)

(P G) / (4 * R ^ 2 * π)		=	S	(mW/cm ²)
10.54386896 (mw)	1.44544 (gain)	() / (4 * 20 (cm) ^ 2 * π)	=	S (mW/cm ²)
(15.24052754) / (4 * 400 * π)		=	S	(mW/cm ²)
(15.24052754) / (5026.548246)		=	0.003032	(mW/cm ²)