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 -------------------------------- >>	=	29.09 (dBm) - or -		(mW)
	G =	gain of the antenna - worst case -------------------------- >>	=	5.16 (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)

(	810.961058 (mw)	3.28095 (gain)	) / (4 * 20 ^{2} (cm) * π)	=	S	(mW/cm^2)

(	2660.72506	) / (4 * 400 * π ₃)	=	S	(mW/cm^2)

(	2660.72506	) / (	5026.548246	)	=	0.529334	(mW/cm^2)