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 --------------------------------- >>	=	10.106 (dBm) - or -	(mW)
	G =	gain of the antenna - worst case ------------------------ >>	=	0.5 (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)

(	10.247077 (mw)	1.12202 (gain)	) / (4 * 20 ^{2} (cm) * π)	=	S	(mW/cm^2)

(	11.49740951	) / (4 * 400 * π 3)	=	S	(mW/cm^2)

(	11.49740951	) / (5026.548246)	=	0.002287	(mW/cm^2)