

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 ----->>	=	17.51	(dBm) - or -
G =	gain of the antenna - worst case ----->>	=	2.1	(dBi) - or -
R =	distance to the center of the radiation of the antenna -->>	=	20	(cm)

$(P G) / (4 * R^2 * \pi)$	=	S	(mW/cm^2)
$(56.36376558 \text{ (mw)} \quad 1.62181 \text{ (gain)}) / (4 * 20^2 \text{ (cm)} * \pi)$	=	S	(mW/cm^2)
$(91.41132415) / (4 * 400 * \pi)$	=	S	(mW/cm^2)
$(91.41132415) / (5026.548246)$	=	0.018186	(mW/cm^2)

WiFi Portion

Note: The Transmitters for the EUT cannot transmit at the same time