

Ptx := 17	TX power [dBm]	CM09CPUS
Ga := 3.0	Antenna gain [dBm]	2450AT45A100 Johanson Technology
d := 0.2	Distance [m]	

EiRP := Ptx + Ga [dBm]

$$eIrp := 10^{\frac{EiRP-30}{10}}$$
 [W]

$$PD(d) := \frac{eIrp}{4\pi \cdot d^2}$$
 [W/m^2]

$$pd(d) := PD(d) \cdot \frac{1000}{10000}$$
 [mW/cm^2]

pd(0.2) = 0.02 [mW/cm^2]

limit power density: 1 mW/cm^2