Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
            P = power input to the antenna
            G = power gain of the antenna in the direction of interest relative to isotropic
            R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	30.58	(dBm)
Maximum peak output power at antenna input terminal:	1142.9	(mW)
Antenna gain(typical):	2.15	(dBi)
Maximum antenna gain:	1.641	(numeric)
Prediction distance:	20	(cm)
Sourse Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	836.6	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.558	(mW/cm^2)
Power density at prediction frequency:	0.37302	(mW/cm^2)
Power density at prediction frequency:	3.7302	(W/m^2)
Margin of Compliance:	1.75	(dB)

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Simultaneous transmission with WiFi: 0.37302+ 0.05817 = 0.43119 < 0.558 mW/cm2
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