Prediction of MPE limit at a given distance

MW-CBDA-SMR-10W80-PS8, Uplink Outdoor Donar Antenna

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 an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	21.46	(dBm)
Maximum peak output power at antenna input terminal:	139.9587323	(mW)
Antenna gain(typical):	6.3	(dBi)
Maximum antenna gain:	4.265795188	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2462	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)

Power density at prediction frequency:	0.118776	(mW/cm^2)
Maximum allowable antenna gain:	15.55269855	(dBi)
Margin of Compliance:	9.252698554	