



Prediction of MPE limit at a given distance

1W-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:	<u>13.10</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>20.41737945</u>	(mW)
Antenna gain(typical):	<u>3.5</u>	(dBi)
Maximum antenna gain:	<u>2.238721139</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>2400</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u>	(mW/cm ²)
Power density at prediction frequency:	0.009093	(mW/cm ²)
Maximum allowable antenna gain:	23.91269855	(dBi)
Margin of Compliance:	20.41269855	