Prediction of MPE Limit OET Bulletin 65, Edition 97-01

2.00

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

$$R = \sqrt{\frac{PG}{4 \pi S}}$$

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

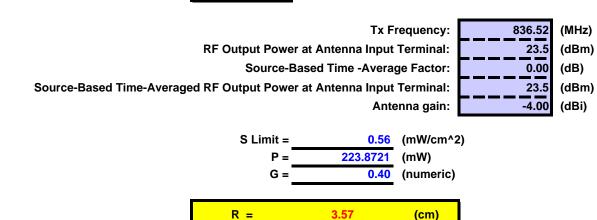
Occupational/Controlled \bigcirc \odot **General Population/Uncontrolled**

Ratio of Time on vs Total TX Time

1.00

R =

850 Band



S at 20cm:

(cm)

0.017711664 (mW/cm²)

1900 Band

Tx Frequency:

1880.00 (MHz) 24.0 (dBm)

0.00

RF Output Power at Antenna Input Terminal:

Source-Based Time -Average Factor:

Source-Based Time-Averaged RF Output Power at Antenna Input Terminal:

Antenna gain:

(dB) (dBm)

(dBi)

24.0 -4.00

(mW/cm^2) S Limit = 1.00 251.1886 P = (mW)

G = 0.40 (numeric)

R = 2.82 (cm)

S at 20cm:

0.019872814 (mW/cm^2)

Band / Mode	Power Density Limit	RF Conducted Output Power	Antenna Gain	MPE Distance	Power Density at 20 cm
	mW/cm ²	dBm	dBi	cm	mW/cm ²
850 Band	0.56	23.5	-4.00	3.57	0.017712
1900 Band	1.00	24.0	-4.00	2.82	0.019873