

### Prediction of MPE limit at a given distance

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



S = power density

P = power input to the antenna

G = antenna gain

R = distance

EIRP	<b>28.00</b>	(dBm)
EIRP	<b>0.631</b>	(W)
ERP	<b>0.386</b>	(W)
Distance:	<b>20</b>	(cm)
Duty Cycle:	<b>100</b>	(%)
Frequency:	<b>5500</b>	(MHz)
MPE Limit:	<b>1</b>	(mW/cm <sup>2</sup> )
Power density:	<b>0.126</b>	(mW/cm <sup>2</sup> )
Power density:	<b>1.26</b>	(W/m <sup>2</sup> )
Margin	<b>9.0</b>	(dB)