Appendix G Continued **MPE Calculation**

47 CFR §§1.1310

Prediction of MPE limit at a given distance

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

$$S = \frac{EIRP}{4\pi R^2} \quad \text{re-arranged } R = \sqrt{\frac{EIRP}{S4\pi}}$$

where:

S = power density
R = distance to the centre of radiation of the antenna
EIRP = EUT Maximum power

Note:

The EIRP was calculated by addition on the maximum conducted carrier power and the antenna gain (1.5dBi).

Result

Prediction Frequency (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Maximum EIRP (mW)	Power density limit (S) (mW/cm^2)	Distance (R) cm Required to be less than 1 mW/cm^2
1921.536	18.66	1.5	103.75	1	2.9 cm
1924.992	18.52	1.5	100.46	1	2.9 cm
1928.448	18.50	1.5	100.00	1	2.9 cm