EXHIBIT 14. MPE CALCULATIONS

The following MPE calculations are based on the LDA 8220D muRata chip antenna, with a measured ERP of104.5 dBµV/m at 3 meters, and conducted RF power of +16.7 dBm as presented to the antenna. The gain of this antenna, based on the data sheet is 1.15dBi.

Prediction of MPE limit at a given distance

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:	16.70	(dBm)
Maximum peak output power at antenna input terminal:	46.774	(mW)
Antenna gain(typical):	1.15	(dBi)
Maximum antenna gain:	1.303	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	915	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.62	(mW/cm^2)
Power density at prediction frequency:	0.012126	(mW/cm^2)
Maximum allowable antenna gain:	18.2	(dBi)
Margin of Compliance at 20 cm =	17.1	dB