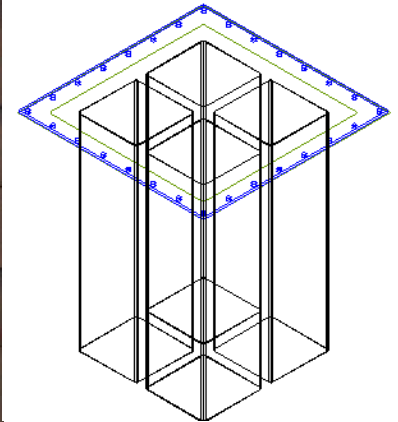
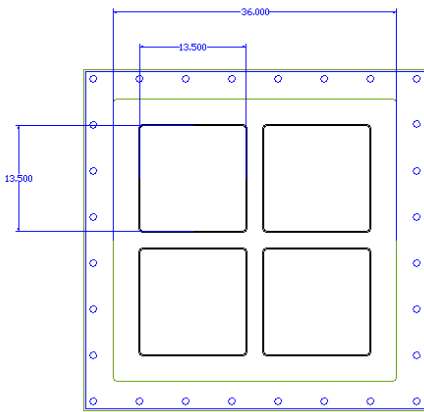


UNIVERSITY OF MASSACHUSETTS LOWELL RESEARCH REACTOR

Enhanced Low Dose Rate Sensitivity (ELDRS) Facility



- Meets MIL-STND 883 TM-1019 requirements
- Co-60 Gamma dose rates up to 0.01 Rad(Si)/sec
- Supports four simultaneous samples as large as 30cm x 30cm
- Uniform flux distribution to 10% of the average
- Fully characterized by experimental methods
- NIST traceable Alanine Dosimetry available
- Conduits for in-situ power and monitoring

To meet the need for Enhanced Low Dose Rate Sensitivity (ELDRS) testing, four large (30cm x 30cm) test chambers are available at the University of Massachusetts Lowell Radiation Laboratory (UMLRL). The ELDRS facility is located directly opposite to the UMLRL gamma cave (High Dose Rate) facility on the experimental level of the reactor building. It is designed for long-term irradiation of samples at dose rates of 0.01 R(Si)/sec. The ELDRS chambers have integrated spectral shielding to meet **MIL-SPEC 883 TM1019** requirements. Samples with a cross-sectional area as large as 30cm(13.5") x 30cm(13.5") can be irradiated within each chamber. The gamma flux distribution is designed to be nearly uniform over the 30cm(12") x 30cm(12") area facing the source. The ELDRS facility can also be configured for compliance with **ESCC Basic Specification No. 22900**

For Further Information about ELDRs Irradiation:

Call: (978)-934-3374, or email: Mary_Montesalvo@uml.edu, or write to: Radiation Services Manager, Radiation Laboratory, UMASS Lowell, Lowell, MA 01854