



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994

LUDLUM MEASUREMENTS INC. KNOXVILLE CALIBRATION DIVISION
 10744 Dutchtown Road
 Knoxville, TN 37932
 Richard Lewis Phone: 325 235 5494

CALIBRATION

Valid To: September 30, 2018

Certificate Number: 4084.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Ionizing Radiation & Radioactivity

Parameter/Equipment	Range	CMC ² (±)	Comments
Radiation Protection Survey Instruments			
Gamma Exposure Cs-137	100 µR /hr to 800 R/hr 1 µSv/hr to 8 Sv/hr	5 % of reading	Beam calibrator
Contamination Instruments	(1 to 9.9 x 10 ⁶) cpm	4 % of reading	Ludlum model 500 pulser
M 500 Series Pulser	(1 to 9.999 x 10 ⁶) cpm	2.4 % of reading	Precision counter

¹ This laboratory offers commercial calibration service.

² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.



Accredited Laboratory

A2LA has accredited

LUDLUM MEASUREMENTS INC. KNOXVILLE CALIBRATION DIVISION

Knoxville, TN

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSLI Z540-1-1994 and R205 – *Specific Requirements: Calibration Laboratory Accreditation Program*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 22nd day of November 2016.

A handwritten signature in black ink, appearing to be 'L. S. ...', written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 4084.02
Valid to September 30, 2018

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.