SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LANDAUER IONIZING RADIATION CALIBRATION FACILITY
2 Science Road
Glenwood, IL 60425
Abdallah Mirza Phone: 708 441 8436

CALIBRATION

Valid To: July 31, 2024 Certificate Number: 3028.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1, 4]:

I. Ionizing Radiation & Radioactivity

Parameter/Equipment	Range	CMC[2, 3] (±)	Comments
Irradiation of Personnel Dosimeters –			
Cs^{137} Air Kerma	9.8 mGy/min	3.4 % of rdg	NMI traceable reference class ionization chambers calibrated in reproduced beams using replacement technique
X-ray Air Kerma	(30 to 300) kVp	3.7 % of rdg	
Radiation Protection Survey Instruments –			
Cs^{137} Exposure	(0.05 to 0.5) mR/hr	4.5 % of rdg	NMI traceable reference class ionization chambers used to calibrate radiation beam air kerma or exposure rate
Cs^{137} Exposure	0.5 mR/hr to 35 R/hr	3.3 % of rdg	

[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.

[3] The contributions from the "best existing device" are not included in the CMC claim.

[4] This scope meets A2LA's *P112 Flexible Scope Policy*.

Accredited Laboratory

A2LA has accredited

LANDAUER IONIZING RADIATION CALIBRATION FACILITY

Glenwood, IL

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories.* This laboratory also meets 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 April 2017*).

Presented this 30th day of June 2022.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3028.01
Valid to July 31, 2024

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