Accredited Laboratory

A2LA has accredited

ABSOLUTE CLARITY & CALIBRATION LLC

Southington, CT

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 the requirements of 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 4th of April 2025.

Mr. Trace McInturff Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6140.01
Valid to April 30, 2027

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ABSOLUTE CLARITY & CALIBRATION LLC
76 North Main St.
Southington, CT 06489
Brent Neilsen Phone: 860-620-0615

CALIBRATION

Valid To: April 30, 2027 Certificate Number: 6140.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's - R025 Calibration Program Requirements), accreditation is granted to this laboratory at the location listed above to perform the following calibrations[1, 5]:

I. Dimensional

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments
Stereo Microscopes[3] –			
Reticle	Up to 1 in Up to 25 mm	200 µin 3.5 µm	Glass stage micrometer
Flatfield/Compound Microscopes[3] –			
Reticle	Up to 1 in Up to 25 mm	0.000 20 in 0.0035 mm	Glass stage micrometer
Optical Comparators[3] –			
Length (X, Y)	Up to 12 in	(140 + 8.0*L*) µin	Glass stage micrometer
Angular	Up to 360°	0.84′	Steel square
Magnification	10X 20X 31.25X 50X 62.5X 100X	630 µin 310 µin 220 µin 130 µin 110 µin 63 µin	Glass magnification checker

5202 Presidents Court, Suite 220 | Frederick, MD 21703-8515 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments
Toolscopes[3] –			
Length (X, Y)	Up to 12 in	(140 + 8.0*L*) µin	Glass stage micrometer
Field of View	Up to 1 in (1 to 2) in (2 to 4) in	200 µin 150 µin 140 µin	Glass stage micrometer
Angular	Up to 360°	0.84′	Steel square
Reticle	Up to 1 in Up to 25 mm	200 µin 3.5 µm	Glass stage micrometer

---

[1] This laboratory offers commercial calibration service and field 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] Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g., resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

[4] In the statement of CMC, L is the numerical value of the nominal length of the device measured in inches.

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