



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HUNTER ASSOCIATES LABORATORY, INC.

11491 Sunset Hills Rd

Reston, VA 20190

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CALIBRATION

Valid To: April 30, 2025

Certificate Number: 6005.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,5}:

I. Optical Quantities

Parameter/Equipment	Range ⁶	CMC ^{2, 4, 7} ($\pm$)	Comments
di:8 RSIN Spectral Reflectance Factor ³ – Measuring Equipment, Xenon Illumination	(80 to 100) % <i>R</i> (350 to 375) nm (380 to 400) nm (405 to 460) nm (465 to 795) nm (800 to 1000) nm	2.8 % 1.5 % 0.65 % 0.46 % 1.6 %	Reflectance standard white tile
de:8 RSEX Spectral Reflectance Factor ³ – Measuring Equipment, Xenon Illumination	(80 to 100) % <i>R</i> (350 to 375) nm (380 to 400) nm (405 to 460) nm (765 to 795) nm (800 to 1000) nm	2.8 % 1.5 % 0.65 % 0.46 % 1.6 %	Reflectance standard white tile
0:45 Spectral Reflectance Factor ³ – Measuring Equipment, LED Illumination	(80 to 100) % <i>R</i> (400) nm (410 to 460) nm (470 to 700) nm	1.4 % 0.75 % 0.75 %	Reflectance standard white tile
45:0 Spectral Reflectance Factor ³ – Measuring Equipment, Xenon Illumination	(80 to 100) % <i>R</i> (400 to 420) nm (430 to 680) nm (690 to 700) nm	1.4 % 0.75 % 0.75 %	Reflectance standard white tile

Parameter/Equipment	Range ⁶	CMC ^{2, 4, 7} (±)	Comments
8:T Spectral Transmittance Factor ³ – Measuring Equipment, Xenon Illumination	(60 to 100) % <i>T</i> (350 to 385) nm (390 to 800) nm (805 to 840) nm (845 to 1000) nm	0.31 % 0.32 % 0.28 % 1.2 %	Neutral density filter NG11
0:T Spectral Transmittance Factor ³ – Measuring Equipment, LED Illumination	100 % <i>T</i> (400 to 420) nm (430 to 680) nm (690 to 700) nm	0.85 % 0.58 % 0.78 %	Diffuse illumination sphere

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 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 Calibration and Measurement Capability Uncertainty (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 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, percentages are percentage of reading, unless otherwise indicated.

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

⁶ In the statement of range, *R* is defined as reflectance and *T* is defined as transmittance.

⁷ The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



Accredited Laboratory

A2LA has accredited

HUNTER ASSOCIATES LABORATORY, INC

Reston, VA

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 28th day of February 2023.

A blue ink signature of Mr. Trace McIntruff, written in a cursive style.

Mr. Trace McIntruff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6005.01
Valid to April 30, 2025

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