



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

OPTRONIC LABORATORIES INC.
 4632 36th St.
 Orlando, FL 32811
 Richard Pollard Phone: 407 785 6030

CALIBRATION

Valid To: June 30, 2023

Certificate Number: 6064.01

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. Optical Quantities

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Total Luminous Flux – Measurement of Incandescent Lamps 45 W 75 W 200 W	(550 to 790) lm (1135 to 1270) lm (4440 to 5850) lm	1.2 %	Comparison to spectral radiance flux lamp
Total Spectral Radiant Flux – Measurement of 45 W, 75 W, & 200 W Incandescent Lamps. Up to 30 mW/nm	(300 to 320) nm (330 to 350) nm (360 to 410) nm (420 to 460) nm (470 to 580) nm (590 to 820) nm (830 to 930) nm (940 to 1040) nm (1050 to 1100) nm	3.5 % 3.0 % 2.5 % 2.0 % 1.5 % 1.3 % 1.5 % 2.0 % 2.5 %	Comparison to spectral radiance flux lamp. Reported in W/nm within wavelength range.

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Spectral Irradiance – Measurement of 45 W, 200 W, & 1000 W Incandescent Lamps. Up to 25 μW/(cm ² nm)	250 nm 260 nm (270 to 280) nm (290 to 300) nm (310 to 320) nm (330 to 350) nm (360 to 370) nm (380 to 450) nm (500 to 600) nm (654.6 to 1100) nm	6.5 % 5.6 % 4.8 % 4.1 % 3.4 % 2.9 % 2.5 % 2.4 % 1.7 % 1.3 %	Comparison to NIST FEL 100 W lamp. Reported in W/(cm ² nm) within wavelength range.
Integrated Spectral Irradiance Response – Measurement of Checkplate TM Radiometer (340 to 350) nm	(0.093 to 0.104) V	4.5 %	Comparison to Xenon transfer lamp

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 In the statement of CMC, percentages are defined as percent of reading, unless otherwise noted.

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



Accredited Laboratory

A2LA has accredited

OPTRONIC LABORATORIES INC

Orlando, FL

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 24th day of June 2021.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6064.01
Valid to June 30, 2023

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