

# **CERTIFICATE OF ACCREDITATION**

## **The ANSI National Accreditation Board**

Hereby attests that

## Ocean Optics, Inc.

3500 Quadrangle Blvd. Orlando, FL 32817 (and satellite site as shown on the scope)

Fulfills the requirements of

## **ISO/IEC 17025:2017**

In the field of

## CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at <u>www.anab.org</u>.



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Jason Stine, Vice President

Expiry Date: 05 March 2026 Certificate Number: AC-2856

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).



### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### Ocean Optics, Inc.

3500 Quadrangle Blvd. Orlando, FL 32817 Laura Mayor (321) 304-4630 laura.mayor@oceanoptics.com

### CALIBRATION

Valid to: March 05, 2026

Certificate Number: AC-2856

#### **Photometry and Radiometry**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Spectral Responsivity <sup>1</sup> (QE PRO UV-NIR Spectrometer)	(1 E-10 to 1) µJ/count (350 to <400) nm (400 to <450) nm (450 to <500) nm (500 to <550) nm (550 to <600) nm (600 to <650) nm (650 to <700) nm (700 to <750) nm (750 to <800) nm (800 to <850) nm (850 to <900) nm (900 to <950) nm (950 to <1 000) nm	12 % of reading 7.9 % of reading 5.8 % of reading 4.6 % of reading 3.9 % of reading 3.4 % of reading 2.8 % of reading 3.3 % of reading 3.4 % of reading 3.4 % of reading	FEL Lamp
Spectral Responsivity <sup>1</sup> (NQ 512-1.7 Spectrometer)	$\begin{array}{c} (1 \ ^{\text{E-10}} \ \text{to} \ 1) \ \mu \text{J/count} \\ (950 \ \text{to} \ <1 \ 000) \ \text{nm} \\ (1 \ 000 \ \text{to} \ <1 \ 050) \ \text{nm} \\ (1 \ 050 \ \text{to} \ <1 \ 050) \ \text{nm} \\ (1 \ 050 \ \text{to} \ <1 \ 100) \ \text{nm} \\ (1 \ 100 \ \text{to} \ <1 \ 150) \ \text{nm} \\ (1 \ 150 \ \text{to} \ <1 \ 200) \ \text{nm} \\ (1 \ 200 \ \text{to} \ <1 \ 250) \ \text{nm} \\ (1 \ 250 \ \text{to} \ <1 \ 300) \ \text{nm} \\ (1 \ 300 \ \text{to} \ <1 \ 350) \ \text{nm} \\ (1 \ 350 \ \text{to} \ <1 \ 400) \ \text{nm} \\ (1 \ 400 \ \text{to} \ <1 \ 450) \ \text{nm} \\ (1 \ 450 \ \text{to} \ <1 \ 500) \ \text{nm} \end{array}$	5.9 % of reading 5.9 % of reading 6 % of reading 6.2 % of reading 5.9 % of reading 6.2 % of reading 6.4 % of reading 6 % of reading	FEL Lamp



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#### **Photometry and Radiometry**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Spectral Responsivity <sup>1</sup> (NQ 512-1.7 Spectrometer)	(1 500 to <1 550) nm (1 550 to <1 600) nm (1 600 to <1 650) nm (1 650 to <1 700) nm	6.1 % of reading 6 % of reading 6 % of reading 21 % of reading	FEL Lamp

#### Services performed at Satellite Laboratory

Maybachstrasse 11 Ostfildern, D-73760, Germany Local Contact Zimon Norlin <u>zimon.norlin@oceanoptics.com</u> +49 711 3416960

#### **Photometry and Radiometry**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Spectral Responsivity <sup>1</sup> (QE PRO UV-NIR Spectrometer)	(1 E-10 to 1) µJ/count (350 to <400) nm (400 to <450) nm (450 to <500) nm (500 to <550) nm (550 to <600) nm (600 to <650) nm (650 to <700) nm (700 to <750) nm (750 to <800) nm (800 to <850) nm (850 to <900) nm (900 to <950) nm (950 to <1 000) nm (1 000 to <1 050) nm	12 % of reading 7.9 % of reading 5.8 % of reading 4.6 % of reading 3.9 % of reading 3.4 % of reading 3 % of reading 2.8 % of reading 2.8 % of reading 2.8 % of reading 2.8 % of reading 3 % of reading 3 % of reading 3 % of reading 3 % of reading 3.4 % of reading	FEL Lamp





#### **Photometry and Radiometry**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Spectral Responsivity <sup>1</sup> (NQ 512-1.7 Spectrometer)	$(1 \ ^{\text{E-10}} \text{ to } 1) \ \mu J/\text{count}$ $(950 \ \text{to } <1 \ 000) \ \text{nm}$ $(1 \ 000 \ \text{to } <1 \ 050) \ \text{nm}$ $(1 \ 050 \ \text{to } <1 \ 050) \ \text{nm}$ $(1 \ 100 \ \text{to } <1 \ 150) \ \text{nm}$ $(1 \ 150 \ \text{to } <1 \ 200) \ \text{nm}$ $(1 \ 200 \ \text{to } <1 \ 250) \ \text{nm}$ $(1 \ 250 \ \text{to } <1 \ 300) \ \text{nm}$ $(1 \ 300 \ \text{to } <1 \ 350) \ \text{nm}$ $(1 \ 350 \ \text{to } <1 \ 400) \ \text{nm}$ $(1 \ 450 \ \text{to } <1 \ 450) \ \text{nm}$ $(1 \ 550 \ \text{to } <1 \ 550) \ \text{nm}$ $(1 \ 600 \ \text{to } <1 \ 650) \ \text{nm}$ $(1 \ 650 \ \text{to } <1 \ 700) \ \text{nm}$	5.9 % of reading 5.9 % of reading 6 % of reading 6.2 % of reading 6.2 % of reading 6.1 % of reading 6 % of reading 6 % of reading 6 % of reading 21 % of reading	FEL Lamp

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (*k*=2), corresponding to a confidence level of approximately 95%.

Notes:

- 1. This laboratory offers commercial calibration services for Ocean Optics equipment.
- 2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2856.

Jason Stine, Vice President





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