



SCOPE OF ACCREDITATION TO ISO/IEC 17025: 2017

NEWPORT CORPORATION OPHIR USA
3050 N 300 W
North Logan, UT 84341
Justin Palmer Phone: 435 755 5455

CALIBRATION

Valid To: March 31, 2027

Certificate Number: 4261.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with R205 – A2LA's Calibration Program Requirements), accreditation is granted to this laboratory at the location listed above as well as the satellite laboratory locations listed below to perform the following calibrations^{1,4}:

I. Optical Quantities

| Parameter/Equipment | Range | CMC ^{2,3,5} (±) | Comments |
|---|----------------|--------------------------|--------------------------|
| Thermal Laser – Measurement (Wavelength From 193 to 10 600 nm) | | | |
| Power | 10 μW to 30 kW | 2.2 % | OSI silver master sensor |
| Energy | 15 μJ to 10 kJ | 2.7 % | |
| Photodiode Laser Power Measurement – | | | |
| Wavelength: (210 to 220) nm | 20 pW to 3 W | 4.3 % | OSI silver master sensor |
| (220 to 255) nm | | 3.6 % | |
| (255 to 285) nm | | 2.9 % | |
| (285 to 430) nm | | 2.2 % | |
| (430 to 1000) nm | | 1.1 % | |
| (1000 to 1030) nm | | 3.2 % | |
| (1030 to 1070) nm | | 4.6 % | |
| (1070 to 1100) nm | 5.8 % | | |
| (1101 to 1600) nm | 5 nW to 3 W | 3.0 % | |

| Parameter/Equipment | Range | CMC ^{2, 3, 5} (±) | Comments |
|---|---|----------------------------|--------------------------|
| Pyroelectric Laser Energy Measurement – Wavelength: (193, 248, 532, 1064) nm (250 to 2200) nm | (1 to 100) mJ (1 to 100) mJ | 2.6 % 2.8 % | OSI silver master sensor |
| Electrical Calibration of Laser Power Meters DC Current Accuracy DC Voltage Accuracy & Analogue Output Accuracy | 30 nA to 13.5 mA 1.25 mV to 20 V | 0.17 % 0.18 % | OSI silver master C-BOX |



SATELLITE LABORATORY

OPHIR JAPAN
 Towa-Daiichi Building 1F 4-384 Sakuragi-cho
 Omiya-ku, Saitama City
 JAPAN 330-0854
 Justin Palmer Phone: 435 755 5455

I. Optical Quantities

| Parameter/Equipment | Range | CMC ^{2,3,5} (±) | Comments |
|---|----------------|--------------------------|-------------------------|
| Thermal Laser – Measurement (Wavelength From 193 to 10 600 nm) | | | |
| Power | 10 μW to 30 kW | 2.2 % | OJ silver master sensor |
| Energy | 15 μJ to 10 kJ | 2.7 % | |
| Photodiode Laser Power Measurement – | | | |
| Wavelength: (210 to 220) nm | 20 pW to 3 W | 4.3 % | OJ silver master sensor |
| (220 to 255) nm | | 3.6 % | |
| (255 to 285) nm | | 2.9 % | |
| (285 to 430) nm | | 2.2 % | |
| (430 to 1000) nm | | 1.1 % | |
| (1000 to 1030) nm | | 3.2 % | |
| (1030 to 1070) nm | | 4.6 % | |
| (1070 to 1100) nm | 5.8 % | | |
| (1101 to 1600) nm | 5 nW to 3 W | 3.0 % | |
| Pyroelectric Laser Energy Measurement – | | | |
| Wavelength: (193, 248, 532, 1064) nm | (1 to 100) mJ | 2.6 % | OJ silver master sensor |
| (250 to 2200) nm | (1 to 100) mJ | 2.8 % | |

| Parameter/Equipment | Range | CMC ^{2,3} (±) | Comments |
|--|------------------|------------------------|------------------------|
| Electrical Calibration of Laser Power Meters | | | |
| DC Current Accuracy | 30 nA to 13.5 mA | 0.17 % | OJ silver master C-BOX |
| DC Voltage Accuracy & Analogue Output Accuracy | 1.25 mV to 20 V | 0.18 % | |



SATELLITE LABORATORY

OPHIR SPIRICON EUROPE GMBH
 7 Guerickeweg, Darmstadt
 GERMANY 64291
 Thomas Zorn Phone: +49 6151708141

I. Optical Quantities

| Parameter/Equipment | Range | CMC ^{2, 3, 5} (±) | Comments |
|---|----------------|----------------------------|--------------------------|
| Thermal Laser – Measurement (Wavelength From 193 to 10 600 nm) | | | |
| Power | 10 µW to 30 kW | 2.2 % | OSE silver master sensor |
| Energy | 15 µJ to 10 kJ | 2.7 % | |
| Photodiode Laser Power Measurement – | | | |
| Wavelength: (210 to 220) nm | 20 pW to 3 W | 4.3 % | OSE silver master sensor |
| (220 to 255) nm | | 3.6 % | |
| (255 to 285) nm | | 2.9 % | |
| (285 to 430) nm | | 2.2 % | |
| (430 to 1000) nm | | 1.1 % | |
| (1000 to 1030) nm | | 3.2 % | |
| (1030 to 1070) nm | | 4.6 % | |
| (1070 to 1100) nm | | 5.8 % | |
| (1101 to 1600) nm | 5 nW to 3 W | 3.0 % | |
| Pyroelectric Laser Energy Measurement – | | | |
| Wavelength: (193, 248, 532, 1064) nm | (1 to 100) mJ | 2.6 % | OSE silver master sensor |
| (250 to 2200) nm | (1 to 100) mJ | 2.8 % | |



| Parameter/Equipment | Range | CMC ^{2,3} (±) | Comments |
|--|------------------|------------------------|-------------------------|
| Electrical Calibration of Laser Power Meters | | | |
| DC Current Accuracy | 30 nA to 13.5 mA | 0.17 % | OSE silver master C-BOX |
| DC Voltage Accuracy & Analogue Output Accuracy | 1.25 mV to 20 V | 0.18 % | |

¹ This laboratory offers commercial calibration service at both its main facility and at its satellite locations.

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 percentages of reading, unless otherwise indicated.

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

⁵ 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

NEWPORT CORPORATION OPHIR USA.

North Logan, UT

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 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 12th day of February 2025.

A blue ink signature of Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4261.01
Valid to March 31, 2027

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