# Certificate of Calibration

**Certificate No.:** 972193-001
**Serial No.:** 972193
**Model:** 2938-R
**Part No.:** 7Z01706
**Description:**
**Second Channel:** Activated


**Calibrated at:**
Calibration Lab
Ophir Optronics Solutions
10 Hartom Street
Jerusalem, Israel
www.ophiropt.com/photonics
Tel: +972-2-548-7407
Email: calibrationlab@ophiropt.com


ISRAC Israel Laboratory Accreditation Authority ISO/IEC 17025 No. 376

## Measurement Uncertainty

| 0.2 % |
|---|

## Standards Used for Calibration

| | |
|---|---|
| Current Source | CBOX2- 804-GM |
| Next Cal. Date | 22-JAN-2023 |

## Calibration Measurements

**Channel 1**

| Range | Test Value | Measured | Deviation | Tolerance | Pass/Fail |
|---|---|---|---|---|---|
| High Analog Range | 403.547 uA | 403.599 uA | 0.013 % | ± 0.25 % | PASS |
| Upper Mid-Range | 13.8386 uA | 13.8380 uA | -0.004 % | ± 0.25 % | PASS |
| Mid-Range | 243.724 nA | 243.669 nA | -0.023 % | ± 0.25 % | PASS |
| Lower Mid-Range ** | 21.3661 nA | 21.3750 nA | 0.042 % | ± 0.25 % | PASS |

**Channel 2**

| Range | Test Value | Measured | Deviation | Tolerance | Pass/Fail |
|---|---|---|---|---|---|
| High Analog Range | 403.547 uA | 403.492 uA | -0.014 % | ± 0.25 % | PASS |
| Upper Mid-Range | 13.8386 uA | 13.8363 uA | -0.017 % | ± 0.25 % | PASS |
| Mid-Range | 243.724 nA | 243.682 nA | -0.017 % | ± 0.25 % | PASS |
| Lower Mid-Range ** | 21.3661 nA | 21.3682 nA | 0.010 % | ± 0.25 % | PASS |

Notes: ** Not included in ISRAC accreditation.

Outgoing Result: **PASS**

**Calibration Procedure: QA-103**

| | | | | | |
|---|---|---|---|---|---|
| Performed By: | Giora Behar - Q.A. 60 | Calibration Date: | 11-FEB-2021 | Temperature: | 23 °C |
| | | Recommended Recal. Date: | AUG 2022 | Humidity: | 32 % RH |

For data sheets of all standard Ophir products, please go to the relevant product page at: http://www.ophiropt.com/laser--measurement

The results reported on this certificate apply only to the item calibrated at the specified calibration points. Conformity to product specification is determined by a binary guard band decision rule for normal distributions as defined by JCGM 106:2012 with at least 97.5 % confidence for measurement results at acceptance limit. The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95 %. Permitted range of ambient temperature during calibration: 19 – 28 °C.
For information about uncertainty of measurement, please refer to: http://www.ophiropt.com/laser--measurement/knowledge-center/article/1110
Recommended calibration intervals and the resulting due dates are 18 months for new products and 12 months for recalibrated products. The calibration interval can be changed by the customer at their own discretion but Ophir Optronics will not guarantee the calibration after the stated intervals. All standards used are traceable to NIST and/or other national and international standards. The entire traceability chart and certifications are available on request.

The Israel Laboratory accreditation authority (ISRAC) is one of the signatories of the International Accreditation Cooperation (ILAC) arrangement for the mutual recognition of testing results. The use of ISRAC symbol relates to tests/calibrations which are included in the organization scope of accreditation, and performed according to the accreditation rules as detailed in the accreditation certificate. ISRAC is not responsible for the testing results conducted by the laboratory and the laboratory's accreditation is not considered as an approval of ISRAC or a different party related to the assessed. This document must be referred to entirely and copying of any part of it to other documents is forbidden.

**End of certificate**