

CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Loy Instrument, Inc. 8455 East 30th Street Indianapolis, IN 46219

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

<u>L2079-1</u> Certificate Number



Certificate Valid Through: 03/17/2021 Version No. 003 Issued: 12/30/2019





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Loy Instrument, Inc. 8455 East 30th Street

8455 East 30th Street Indianapolis, IN 46219 Denise Grafe 317-890-0474

CALIBRATION

Valid to: March 17, 2021 Certificate Number: L2079-1

Electrical – DC/Low Frequency

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|----------------------------|--|--|--|
| DC Current | (4 to 20) mA | 18 μΑ | |
| DC Voltage | (0 to 100) mV | 5.5 μV | Digital Multimeter |
| | (0 to 10) V | 6.2 mV | |
| Thermocouple mV Simulation | Type K (0 to 2 500) °F Type J (0 to 2 190) °F Type R (32 to 3 000) °F Type S (32 to 3 200) °F Type T (-320 to 750) °F Type N (0 to 2 370) °F Type B (500 to 3 000) °F Type C (600 to 4 200) °F Type E (-300 to 1 830) °F | 0.64 °F 0.64 °F 0.66 °F 0.7 °F 0.68 °F 0.65 °F 0.68 °F 0.63 °F | Precision Process Calibrator |
| RTD Simulation | PT100-385 (-200 to 850) °F | 0.71 °F | Precision Process Calibrator |





Thermodynamic

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|--|--|---|--|
| Temperature Measure | 32 °F | 0.67 °F | Ice Bath and Type T Thermocouple AMS 2750E |
| Temperature System Accuracy Tests ¹ | Types K, N (32 to 2 000) °F | 2.5 °F | Reference Thermocouple with Readout unit AMS 2750E |
| Temperature Uniformity Surveys ¹ | Types K, N (0 to 2 000) °F (2 000 to 2 400) °F | 2.5 °F 4.2 °F | Reference Thermocouple with Digital Recorder AMS 2750E |

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. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
- 2. This scope is formatted as part of a single document including Certificate of Accreditation No. L2079-1.



