



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Organization of:

END LAB, S.A. de C.V.

Av. 517 # 80, Col. San Juan de Aragón

Deleg. Gustavo Madero, Ciudad de Mexico, Mexico. C.P. 07969

*and hereby declares that the Organization is accredited in accordance with
the recognized International Standard:*

ISO/IEC 17025:2017

Whereby, technical competence has been confirmed for the associated scope supplement, in the fields of:

Electrical, Optical, Mechanical and Dimensional Calibration
(As detailed in the supplement)

Accreditation claims for conformity assessment activities shall only be made from the addresses referenced within this certificate and shall apply solely to those activities identified in the related scope. This Accreditation is granted subject to the Accreditation Body rules governing the Accreditation referred to above, and the Organization hereby commits to observing and complying with those rules in their entirety.

For PJLA:

Initial Accreditation Date:

Issue Date:

Expiration Date:

June 18, 2012

July 08, 2026

August 31, 2028

Accreditation No.:

Certificate No.:

72269

L26-637

Tracy Szerszen
President

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

*The validity of this certificate is maintained through ongoing assessments based
on a continuous accreditation cycle. The validity of this certificate should be
confirmed through the PJLA website: www.pjlabs.com*



Certificate of Accreditation: Supplement

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Av. 517 # 80, Col. San Juan de Aragón

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Contact Name: Joaquin Gutierrez. Phone: 551-114-8355

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY ($\pm$) ¹	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Magnetic Particle Inspection Devices (AC & DC Current)	Up to 10 000 A	9.1 A	Digital Ammeter Magnaflux Magwerks SMTS-25	ASTM-E709 ASTM-E1444	F1, F2	O
Electrical	Magnetic Particle Inspection Devices (Time)	0.5 s to 3 s	0.038 s	Digital Ammeter Magnaflux Magwerks SMTS-25	ASTM-E709 ASTM-E1444	F1, F2	O
Electrical	Gauss Meters (Magnetometers)	Up to 100 G	0.058 G	Magwerks HPS1-3059A Helmoltz System Power	PR-TR-27	F1, F3	F
Optical	Light Meter (Irradiance) (Ultraviolet Light) (@ 320 nm to 380 nm)	200 $\mu\text{W}/\text{cm}^2$ to 7 000 $\mu\text{W}/\text{cm}^2$	13 $\mu\text{W}/\text{cm}^2$	CIE 69 Radiometer Photometer Model XR-3000	DSE-2000 Spectroline PR-TR-28	F1, F2, F3	F
Optical	Light Meter (Illuminance) (Visible Light) (@ 380 nm to 760 nm)	5.38 Lux to 4 843.76 Lux	0.89 Lux	CIE 69 Radiometer Photometer Model XR-3000	DSE-2000 Spectroline PR-TR-28	F1, F2, F3	F
Mechanical	Indirect Verification of Leeb Hardness Tester (HLD)	785 HLD	16 HLD	Ld Test Block	ASTM-A 956	F1, F2	F, O
Dimensional	Ultrasonic Thickness Gages	2.5 mm to 12.5 mm	35 μm	PH-Tool Master Step	PR-TR-26	F1, F3	F, O
Dimensional	Ultrasonic Flaw Detector	25 mm to 250 mm	35 μm	PH-Tool IIW Type I	PR-TR-26	F1, F3	F, O

1. The CMC (Calibration and Measurement Capability) is expressed in terms of measurement instrument/aspect being calibrated, range, expanded measurement uncertainty, equipment, and method/procedure. The expanded measurement uncertainty stated for calibrations included on this scope of accreditation represents the smallest measurement



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uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the measurement uncertainty included on this scope for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.

- The laboratory's range of calibration capability for all disciplines for which it is accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.

- Location of activity:

Location Code	Location
F	Conformity assessment activity is performed at the CAB's fixed facility
O	Conformity assessment activity is performed onsite at the CAB's customer location

- Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratory's fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratory's fixed location.

- Flex Codes

F0: When no flexibility is identified. There are no changes to items calibrated, characteristics identified or versions of methods except for updating to the most recent version of a standard method after verification.

F1: The laboratory has the capability to introduce a new instrument, quantity, or gauge for an accredited calibration method.

F2: The laboratory has the capability to introduce the newest revision of an accredited authoritative standard method (with no modifications) identified on the scope

F3: The laboratory has the capability to introduce a new revision of an accredited non-standard method using the same technology or technique identified on the scope

F4: The laboratory has the capability to introduce a validated method that is equivalent to an accredited method (using the same Calibration Equipment or Reference Standards identified on the scope for the same parameter, component, or analyte identified on the line item of the scope.