



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Doble Engineering Company
1520 S Hellman Avenue, Ontario, CA 91761

*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:

Dimensional, Electrical, Time & Frequency 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:

Tracy Szerszen
President

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

Initial Accreditation Date:

September 30, 2017

Issue Date:

October 05, 2025

Expiration Date:

January 31, 2028

Accreditation No.:

85299

Certificate No.:

L25-744

*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.pjllabs.com*



Certificate of Accreditation: Supplement

Doble Engineering Company

1520 S Hellman Avenue, Ontario, CA 91761

Contact Name: Tim Nguyen Phone: 909-923-9390

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
Dimensional	Equipment to Measure Distance (Linear Transducer)	0.001 in to 1 in	0.01 in/in + 0.07 in	Vanguard CT-7500 Caliper Starrett 723	Proc. # 25" Linear Transducer Calibration,	F1, F3	F
Dimensional	Equipment to Measure Distance (Linear Transducer)	1 in to 2 in	0.008 in/in + 0.06 in	Vanguard CT-7500 Caliper Starrett 723	Proc. # 25" Linear Transducer Calibration,	F1, F3	F
Dimensional	Equipment to Measure Distance (Linear Transducer)	2 in to 3 in	0.012 in/in + 0.21 in	Vanguard CT-7500 Caliper Starrett 723	Proc. # 25" Linear Transducer Calibration,	F1, F3	F
Electrical	Equipment to Measure DC Voltage	100 mV to 1 V	267 μ V/V + 1.1 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	1 V to 10 V	331 μ V/V + 1.4 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	10 V to 100 V	15.5 mV/V + 272 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	100 V to 200 V	19.7 mV/V + 346 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	200 V to 250 V	15.5 mV/V + 272 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	250 V to 300 V	35 mV/V + 623 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	300 V to 1 kV	42 mV/V + 742 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	1 kV to 10 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VBT-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	10 kV to 20 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VBT-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	20 kV to 30 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VBT-75 Procedure	F1, F3	F



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Electrical	Equipment to Measure DC Voltage	30 kV to 40 kV	17.32 mV/V + 303.6 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	40 kV to 50 kV	23.09 mV/V + 404.8 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	50 kV to 60 kV	11.3 mV/V + 202.4 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	60 kV to 70 kV	11.5 mV/V + 202.4 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Voltage	70 kV to 75 kV	5.77 mV/V + 101.2V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	0.1 V to 1 V	267 μ V/V + 1.1 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	1 V to 10 V	331 μ V/V + 1.4 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	10 V to 100 V	15.5 mV/V + 272 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	100 V to 200 V	19.7 mV/V + 346 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	200 V to 250 V	15.5 mV/V + 272 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	250 V to 300 V	35 mV/V + 623 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	300 V to 1 kV	42 mV/V + 742 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F



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Electrical	Equipment to Output DC Voltage	1 kV to 10 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	10 kV to 20 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	20 kV to 30 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	30 kV to 40 kV	17.32 mV/V + 303.6 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	40 kV to 50 kV	23.09 mV/V + 404.8 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	50 kV to 60 kV	11.53 mV/V + 202.4 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	60 kV to 70 kV	11.5 mV/V + 202.4 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Output DC Voltage	70 kV to 75 kV	5.77 mV/V + 101.2 V	CPS HVP-500 High Voltage Probe with Fluke 8845A	VB-T-75 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Current	1 mA to 10 mA	4.1 μ A/A + 7.1 μ A	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Current	10 mA to 1 A	602 μ A/A + 10.5 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure DC Current	1 A to 5 A	3.5 mA/A + 61 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F



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Electrical	Equipment to Measure DC Current	5 A to 10 A	6 mA/A + 105 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Current	1 mA to 10 mA	4.1 μ A/A + 7.1 μ A	Fluke 8845A with/Shunt	Auto-Ohm 200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Current	10 mA to 1 A	602 μ A/A + 10.5 mA	Fluke 8845A with/Shunt	Auto-Ohm 200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Current	1 A to 5 A	3.5 mA/A + 61 mA	Fluke 8845A with/Shunt	Auto-Ohm 200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output DC Current	5 A to 10 A	6 mA/A + 105 mA	Fluke 8845A with/Shunt	Auto-Ohm 200 S3 Procedure	F1, F3	F
Electrical	Equipment to Source Resistance	100 $\mu\Omega$	0.11 $\mu\Omega$	Shunt 100 $\mu\Omega$	Auto-Ohm 200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure Resistance	1 Ω to 10 Ω	1.04 m Ω / Ω + 8.05 m Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Measure Resistance	10 Ω to 100 Ω	0.82 m Ω / Ω + 6.3 m Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Measure Resistance	100 Ω to 1 000 Ω	1.06 m Ω / Ω + 17.8 m Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Measure Resistance	1 000 Ω to 1 900 Ω	2.43 m Ω / Ω + 26.5 m Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Measure Resistance	1.9 k Ω to 200 k Ω	0.2 Ω / Ω + 3.5 Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Measure Resistance	200 k Ω to 1 M Ω	0.51 Ω / Ω + 8.9 Ω	Fluke 8845A	Auto-Ohm 200 S3 Procedure	F1, F3	F,
Electrical	Equipment to Output AC Current	Up to 1 A	602 μ A/A + 10.5 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F
Electrical	Equipment to Output AC Current	1 A to 5 A	5.8 mA/A + 101 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F



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Electrical	Equipment to Output AC Current	5 A to 10 A	1.5 mA/A + 26 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F
Electrical	Equipment to Output AC Current	10 A to 100 A	10 mA/A + 175 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F
Electrical	Equipment to Output AC Current	100 A to 400 A	10 mA/A + 175 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F
Electrical	Equipment to Output AC Current	400 A to 600 A	10 mA/A + 175 mA	Fluke 8845A with/Shunt	RFD-200 S3 Auto-Ohm 200 S3 PCI-600 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 40 Hz to 100 Hz)	100 mA to 1A	602 μ A/A + 10.5 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 40 Hz to 100 Hz)	1 A to 5 A	5.8 mA/A + 101 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 40 Hz to 100 Hz)	5 A to 10 A	1.5 mA/A + 26 mA	Fluke 8845A with/Shunt	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	100 mV to 1 V	42.4 μ V/V + 214 μ V	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	1 V to 10 V	242.7 μ V/V + 4.2 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	10 V to 100 V	155.7 μ V/V + 2.7 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F



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Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	100 V to 200 V	2.18 mV/V + 38.2 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	200 V to 250 V	29.4 mV/V + 516.6 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 100 Hz)	250 V to 300 V	47.2 mV/V + 823.1 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	100 mV to 1 V	42.4 μ V/V + 214 μ V	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	1 V to 10 V	242.7 μ V/V + 4.2 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	10 V to 100 V	155.7 μ V/V + 2.7 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	100 V to 200 V	2.18 mV/V + 38.2 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	200 V to 250 V	29.4 mV/V + 516.6 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	250 V to 300 V	47.2 mV/V + 823.1 mV	Fluke 8845A	RFD-200 S3 Procedure	F1, F3	F
Time and Frequency	Equipment to Output Frequency	1 Hz to 15 Hz	0.36 mHz/Hz + 6.34 mHz	Rogol MSO5104	ATRT-01 S3 Procedure	F1, F3	F



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Time and Frequency	Equipment to Output Frequency	15 Hz to 60 Hz	1.86 mHz/Hz + 32.6 mHz	Rogol MSO5104	ATRT-01 S3 Procedure	F1, F3	F
Time and Frequency	Equipment to Output Frequency	60 Hz to 250 Hz	4.01 mHz/Hz + 70 mHz	Rogol MSO5104	ATRT-01 S3 Procedure	F1, F3	F
Time and Frequency	Equipment to Output Frequency	250 Hz to 500 Hz	9.5 mHz/Hz + 166.5 mHz	Rogol MSO5104	ATRT-01 S3 Procedure	F1, F3	F

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement 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 CMC 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.
2. The laboratories range of calibration capability for all disciplines for which they are 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.
3. Location of activity:

Location Code	Location
F	Conformity assessment activity is performed at the CABs fixed facility
4. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories 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 laboratories fixed location.