



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

ECS Metrology
600 Eagleview Blvd., Suite 300, Exton, PA 19341

*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:

***Chemical, Electrical, Fluid Quantities, Mass, Force, and Weighing Devices,
Thermodynamic, and Time and 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 29, 2017

Issue Date:

December 02, 2025

Expiration Date:

January 31, 2028

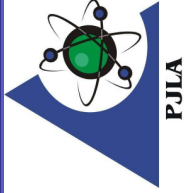
Accreditation No.:

94034

Certificate No.:

L25-894

*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*



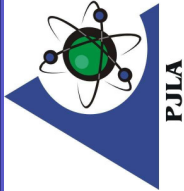
Certificate of Accreditation: Supplement

ECS Metrology

600 Eagleview Blvd., Suite 300, Exton, PA 19341
Contact Name: Scott French Phone: 610-880-4170

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 (±) ¹	CALIBRATION EQUIPMENT REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Fluid Quantities	Pipettes	0.2 µL to 10 µL	0.11 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	10 µL to 20 µL	0.13 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	20 µL to 50 µL	0.15 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	50 µL to 100 µL	0.15 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	100 µL to 200 µL	0.17 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	200 µL to 500 µL	0.22 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	500 µL to 1 000 µL	2.5 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	1 000 µL to 2 500 µL	5 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	2 500 µL to 5 000 µL	13 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Fluid Quantities	Pipettes	5 000 µL to 10 000 µL	25 µL	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O



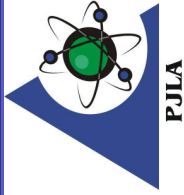
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Fluid Quantities	Pipettes (Fixed Points)	10 000 μ L	50 μ L	High Resolution Micro Balances, Liquid Thermometers, and Evaporation Traps;	ECS SOP-001 IAW ISO 8655	F1, F2, F3	F, O
Mass, Force, and Weighing Devices	Balances	10 mg to 60 g	(0.2 + 1.86 x 10 ⁻³ Wt) mg	Class 1 Test Weights	ECS SOP-003	F1, F3	O
Mass, Force, and Weighing Devices	Balances	60 g to 200 g	(0.1 + 2.58 x 10 ⁻³ Wt) mg	Class 1 Test Weights	ECS SOP-003	F1, F3	O
Mass, Force, and Weighing Devices	Balances	200 g to 5 kg	(4.14 + 2.03 x 10 ⁻³ Wt) mg	Class 1 Test Weights	ECS SOP-003	F1, F3	O
Mass, Force, and Weighing Devices	Mass	1 mg to 5 g	0.007 mg	AnD BM-22, Class 1 Weight Class 5, 6, and NIST Class F Weights	ECS SOP-009	F1, F3	F
Mass, Force, and Weighing Devices	Mass	5 g to 22 g	0.015 mg	AnD BM-22, Class 1 Weight Class 5, 6, and NIST Class F Weights	ECS SOP-009	F1, F3	F
Mass, Force, and Weighing Devices	Mass	10 g to 60 g	0.036 mg	Radwag AS 60/220.R2 AnD GR-200 Class 5, 6, and NIST Class F Weights	ECS SOP-009	F1, F3	F
Mass, Force, and Weighing Devices	Mass	60 g to 220 g	0.14 mg	Radwag AS 60/220.R2 AnD GR-200 Class 5, 6, and NIST Class F Weights	ECS SOP-009	F1, F3	F
Mass, Force, and Weighing Devices	Mass	220 g to 1 000 g	2 mg	Radwag AS 60/220.R2 AnD GR-200 Class 5, 6, and NIST Class F Weights	ECS SOP-009	F1, F3	F



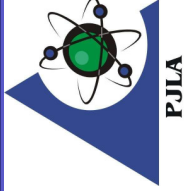
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Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	-20 °C to 150 °C	0.09 °C	Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O
Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	-200 °C to 0 °C	0.93 °C	Type K, T, J Thermocouples Martel Multifunction Calibrator MC-1210 Graphtec Calibrator GL240 Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O
Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	0 °C to 300 °C	0.71 °C	Type K, T, J Thermocouples Martel Multifunction Calibrator MC-1210 Graphtec Calibrator GL240 Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O
Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	300 °C to 600 °C	1.7 °C	Type K, T, J Thermocouples Martel Multifunction Calibrator MC-1210 Graphtec Calibrator GL240 Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O
Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	600 °C to 1 000 °C	4.5 °C	Type K, T, J Thermocouples Martel Multifunction Calibrator MC-1210 Graphtec Calibrator GL240 Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O
Thermodynamic	Equipment to Measure Temperature Thermometer/Sensor	1 000 °C to 1 372 °C	5.0 °C	Type K, T, J Thermocouples Martel Multifunction Calibrator MC-1210 Graphtec Calibrator GL240 Platinum RTD Water baths	ECS SOP-005	F1, F3	F, O



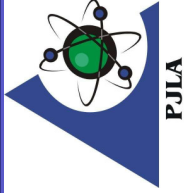
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Thermodynamic	Infrared Devices	-20 °C to 300 °C	1.7 °C	REED Instruments BX 500 Black Body Calibrator	ECS SOP-005	F1, F3	F
Chemical	pH Meter	4.00 pH	0.05 pH	pH Buffer Solutions	ECS SOP-006	F1, F3	F, O
Chemical	pH Meter	7.00 pH	0.05 pH	pH Buffer Solutions	ECS SOP-006	F1, F3	F, O
Chemical	pH Meter	10.00 pH	0.05 pH	pH Buffer Solutions	ECS SOP-006	F1, F3	F, O
Time and Frequency	Tachometer	10 RPM to 99 999 RPM	0.17 % of Reading	Transmille 3041 Multifunction Calibrator	ECS SOP-008	F1, F3	F, O
Time and Frequency	Timers	1 s to 24 hours	11.2 s/Day	Stopwatch	ECS-SOP-007	F1, F3	F, O
Time and Frequency	Centrifuge, (Rate of Rotation)	10 to 99 999 RPM	2.3 % of Reading	Photo tachometer	ECS SOP-004	F1, F3	F, O
Time and Frequency	Equipment to Measure Frequency	1 Hz to 10 kHz	0.05 % of Reading + 0.1 Hz	Martel MC 1210 Calibrator	ECS SOP-008	F1, F3	F, O
Time and Frequency	Equipment to Measure Frequency	10 Hz to 500 kHz	0.000 02 % of Reading	Transmille 3041 Multifunction Calibrator	ECS SOP-008	F1, F3	F
Electrical	Equipment to Measure Resistance	0.05 Ω to 4 000 Ω	0.25 % of Reading + 0.5 Ω	Martel MC 1210 Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Source DC Voltage	2 mV to 20 V	0.015 % of Reading + 2 mV	Keithly 2001	ECS SOP-010	F1, F3	F
Electrical	Equipment to Source DC Current	0.002 mA to 24 mA	0.15 % of Reading + 0.002 mA	Keithly 2001	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type K	-200 °C to 0 °C	0.49 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type K	0 °C to 1 000 °C	0.52 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



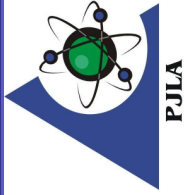
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Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type K	1 000 °C to 1 372 °C	0.71 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type J	-210 °C to 0 °C	0.47 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type J	0 °C to 800 °C	0.56 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type J	800 °C to 1 200 °C	0.65 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type T	-200 °C to 0 °C	0.46 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type T	0 °C to 400 °C	0.47 °C	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	pH Meter by Electrical Simulation	1 pH to 14 pH	0.04 pH	pH Simulator	ECS SOP-006	F1, F3	F
Electrical	Equipment to Measure DC Voltage	0mV to 200 mV	31 uV/V + 4.4 uV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Voltage	0.2 V to 2 V	31 uV/V + 27 uV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



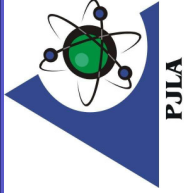
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Electrical	Equipment to Measure DC Voltage	2 V to 20 V	25 μ V/V + 0.24 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Voltage	20 V to 200 V	31 μ V/V + 0.95 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Voltage	200 V to 1 025 V	31 μ V/V + 6.0 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	20 μ A to 200 μ A	0.012 % of Reading + 0.04 μ A	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	0.2 mA to 2 mA	0.009 2 % of Reading + 0.086 μ A	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	2 mA to 20 mA	0.005 7 % of Reading + 1.4 μ A	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	20 mA to 200 mA	0.009 2 % of Reading + 49 μ A	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	0.2 A to 2 A	0.017 % of Reading + 0.36 mA	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	2 A to 30 A	0.046 % of Reading + 2.0 mA	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure DC Current	30 A to 1 500 A	0.5 % of Reading	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 44 Hz)	0 mV to 202 mV	0.23 % of Reading + 59 μ V	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O



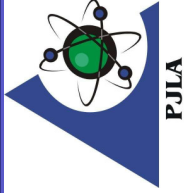
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Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 999 Hz)	0 mV to 202 mV	0.046 % of Reading + 26 uV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 19,999 kHz)	0 mV to 202 mV	0.1 % of Reading + 53 uV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 99,999 kHz)	0 mV to 202 mV	0.35 % of Reading + 0.13 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 100 kHz to 500 kHz)	0 mV to 202 mV	0.92 % of Reading + 0.60 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 44 Hz)	0.2 V to 2.02 V	0.23 % of Reading + 0.41 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 999 Hz)	0.2 V to 2.02 V	0.046 % of Reading + 0.11 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 19,999 kHz)	0.2 V to 2.02 V	0.1 % of Reading + 0.34 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 99,999 kHz)	0.2 V to 2.02 V	0.29 % of Reading + 2.4 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 100 kHz to 500 kHz)	0.2 V to 2.02 V	0.52 % of Reading + 24 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 44 Hz)	2 V to 20.2 V	0.23 % of Reading + 3.5 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O



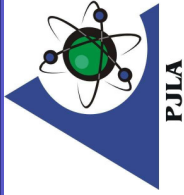
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Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 999 Hz)	2 V to 20.2 V	0.04 % of Reading + 1.1 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 19,999 kHz)	2 V to 20.2 V	0.08 % of Reading + 3.0 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 99,999 kHz)	2 V to 20.2 V	0.25 % of Reading + 38 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 44 Hz)	20 V to 202 V	0.07 % of Reading + 23 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 999 Hz)	20 V to 202 V	0.046 % of Reading + 9.2 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 19,999 kHz)	20 V to 202 V	0.1 % of Reading + 0.09 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 44 Hz)	200 V to 1 020 V	0.07 % of Reading + 0.25 V	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 999 Hz)	200 V to 1 020 V	0.046 % of Reading + 92 mV	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 10 kHz)	200 V to 1 020 V	0.17 % of Reading + 0.47 V	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F, O
Electrical	Equipment to Measure Resistance (Fixed Points)	0.1 Ω	5.8 mΩ	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



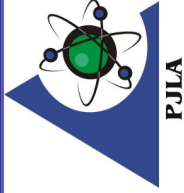
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Electrical	Equipment to Measure Resistance (Fixed Points)	1 Ω	0.9 m Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	10 Ω	6.8 m Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	100 Ω	12 m Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	1 k Ω	92 m Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	10 k Ω	0.92 Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	100 k Ω	9.2 Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	1 M Ω	0.16 k Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	10 M Ω	4.5 k Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	100 M Ω	0.58 M Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Resistance (Fixed Points)	1 G Ω	11 M Ω	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	1 nF	2.9 pF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	10 nF	29 pF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	20 nF	58 pF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	50 nF	0.29 nF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	100 nF	0.29 nF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



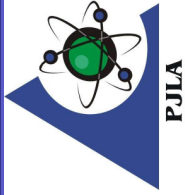
Certificate of Accreditation: Supplement

ECS Metrology

600 Eagleview Blvd., Suite 300, Exton, PA 19341
Contact Name: Scott French Phone: 610-880-4170

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	Equipment to Measure Capacitance (Fixed Points)	1 uF	4.6 nF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Capacitance (Fixed Points)	10 uF	70 nF	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	1 mH	5.8 uH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	10 mH	58 uH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	19 mH	0.11 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	29 mH	0.17 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	50 mH	0.29 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	100 mH	0.58 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	1 H	5.8 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure Inductance (Fixed Points)	10 H	58 mH	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 10 Hz to 44 Hz)	20 uA to 202 uA	0.23 % of Reading + 0.39 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	20 uA to 202 uA	0.08 % of Reading + 0.32 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	20 uA to 202 uA	0.92 % of Reading + 0.76 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



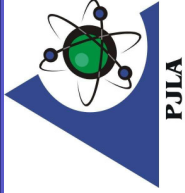
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Electrical	Equipment to Measure AC Current (@ 10 Hz to 44 Hz)	0.2 mA to 2.02 mA	0.23 % of Reading + 1.5 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	0.2 mA to 2.02 mA	0.07 % of Reading + 0.49 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	0.2 mA to 2.02 mA	0.92 % of Reading + 3.4 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 10 Hz to 44 Hz)	2 mA to 20.2 mA	0.23 % of Reading + 16 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	2 mA to 20.2 mA	0.07 % of Reading + 5.4 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	2 mA to 20.2 mA	0.58 % of Reading + 18 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 10 Hz to 44 Hz)	20 mA to 202 mA	0.23 % of Reading + 0.15 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	20 mA to 202 mA	0.07 % of Reading + 72 uA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	20 mA to 202 mA	0.7 % of Reading + 0.31 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 10 Hz to 44 Hz)	0.2 A to 2.02 A	0.23 % of Reading + 1.6 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F



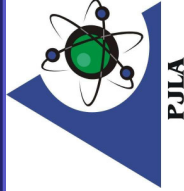
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Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	0.2 A to 2.02 A	0.1 % of Reading + 1.0 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	0.2 A to 2.02 A	0.7 % of Reading + 3.5 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 30 Hz to 44 Hz)	2 A to 30.0 A	0.1 % of Reading + 15 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 45 Hz to 999 Hz)	2 A to 30.0 A	0.1 % of Reading + 32 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 1 kHz to 10 kHz)	2 A to 30.0 A	0.35 % of Reading + 32 mA	Transmille 3041 Multifunction Calibrator	ECS SOP-010	F1, F3	F
Electrical	Equipment to Measure AC Current (@ 10 Hz to 500 Hz)	30 A to 1 500 A	5.8 % of Reading	Transmille 3041 Multifunction Calibrator Current Coils	ECS SOP-010	F1, F3	F



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

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
O	Conformity assessment activity is performed onsite at the CABs customer location
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.
5. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.