

# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

# Certificate of Accreditation

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

Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

## ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Chemical, Dimensional, Electrical, Mass, Force, and Weighing, Mechanical and Thermodynamic Calibration (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen

President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084 Initial Accreditation Date: December 9, 2011 Issue Date:

August 01, 2022

*Expiration Date:* September 30, 2024

Accreditation No.: 69815

Certificate No.: L22-526

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: <u>www.pjlabs.com</u>



## Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Chemical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Gas Detectors <sup>F</sup>			
Carbon Monoxide <sup>F</sup>	80 ppm to 120 ppm	1.2 % of reading	Gas Mixtures
Hydrogen Sulfide <sup>F</sup>	25 ppm to 35 ppm	1.2 % of reading	
Oxygen <sup>F</sup>	15 % to 21 %	1.3 % of reading	WEC-CP-GAS-1
Methane <sup>F</sup>	2 % Volume to	1.3 % of reading	Gas Mixtures with
	3% Volume		Correction Factors for
			Hydrogen
			Propane
			N-Butane
			N-Pentane
			N-Hexane
			N-Octane
			Methanol
			Ethanol
			Isopropyl Alcohol
			Acetone
			Ammonia
			Toluene
			Gasoline
			WEC-CP-GAS-1

Dimensional			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Indicators FO	0.01 in to 1 in	83 µin	Gage Blocks
Micrometer FO	0.01 in to 12 in	78 µin	WEC-CP-IND-1 WEC-CP-MIC-1
Calipers <sup>FO</sup>	0.01 in to 12 in	139 µin	WEC-CP-MIC-1 WEC-CP-CALIPER-1
Coating Thickness	3.09 mL	0.2 mils	Coated Metal Plates
Gages Nonferrous and Ferrous <sup>FO</sup>	10.05 mL	1.4 mils	WEC-CP-CTTHK-1
renous	50.30 mL	1.9 mils	



Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Accreditation is granted to the facility to perform the following calibrations:

Electrical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Output	0.01 mV to 100 mV	0.058 mV + 0.07 % of reading	Fluke 8845A
DC Voltage FO	0.1 V to 1 V	0.058 V + 0.01 % of reading	OEM Procedures
	1 V to 10 V	0.058 V + 0.01 % of reading	- WEC-CP-DMM-1 WEC-CP-PROCESS-1
	10 V to 100 V	0.058 V + 0.03 % of reading	WEC-CP-MEGGER-1
	100 V to 1 000 V	0.056 V + 0.23 % of reading	WEC-CP-PWRSPLY-1 WEC-CP-RC/RTD/RTD1
Equipment to Measure	0.1 mV to 202 mV	4.44 µV + 0.001 7 % of reading	Transmille 25PPM Multi-
DC Voltage FO	0.2 V to 2.02 V	15.31 µV + 0.001 3 % of reading	Product Calibrator
	20 V to 202 V	8.04 mV + 0.001 9 % of reading	- OEM Procedures WEC-CP-DMM-1
	200 V to 1 025 V	10.6 mV + 0.003 % of reading	WEC-CP-CLAMP-1
Equipment to Measure	3 µA to 202 µA	34.82 nA + 0.006 % of reading	WEC-CP-MEGGER-1
DC Current FO	0.2 mA to 2.02 mA	137.07 nA + 0.002 2 % of reading	WEC-CP-PWRSPLY-1 WEC-CP-
	2 mA to 20.2 mA	444.62 nA + 0.002 5 % of reading	RC/RTD/RDOUT-1
	20 mA to 202 mA	21.27 µA + 0.12 % of reading	WEC-CP-PROCESS-1
	0.2 A to 2.02 A	99.63 µA + 0.006 % of reading	-
	2 A to 30 A	1.44 mA + 0.001 8 % of reading	-
Equipment to Output AC			Fluke 8845A
At the Listed Frequencies 5 Hz to 10 Hz	0.01 mV to 100 mV	0.033 mV + 0.37 % of reading	OEM Procedures WEC-CP-DMM-1
10 Hz to 20 kHz	0.01 mV to 100 mV	0.046  mV + 0.069 % of reading	WEC-CP-CLAMP-1
20 kHz to 50 kHz	0.01 mV to 100 mV	0.040  mV + 0.009 % of reading 0.058 mV + 0.13 % of reading	WEC-CP-MEGGER-1
50 kHz to 100 kHz	0.01 mV to 100 mV	0.092 mV + 0.069 % of reading	WEC-CP-PWRSPLY-1
100 kHz to 300 kHz	0.01 mV to 100 mV		WEC-CP- RC/RTD/RDOUT-1
		0.58 mV + 4.61 % of reading	WEC-CP-PROCESS-1
Equipment to Output AC At the Listed Frequencies			
3 Hz to10 Hz	0.1 V to 1 V	0.21 V + 0.071 % of reading	-
10 Hz to 20 kHz	0.1 V to 1 V	0.035 V + 0.069 % of reading	-
20 kHz to 50 kHz	0.1 V to 1 V	0.081 V + 0.099 % of reading	-
50 kHz to 100 kHz	0.1 V to 1 V	0.49 V + 0.13 % of reading	-
100 kHz to 300 kHz	0.1 V to 1 V	0.058 V + 0.46 % of reading	-
Equipment to Output AC At the Listed Frequencies			
5 Hz to 10 Hz	1 V to 10 V	0.003 5 V + 0.4 % of reading	4
10 Hz to 20 kHz	1 V to 10 V	0.035  V + 0.069 % of reading	4
20 kHz to 50 kHz	1 V to 10 V	0.058  V + 0.13 % of reading	4
50 kHz to 100 kHz	1 V to 10 V	0.092  V + 0.69 % of reading	-
100 kHz to 300 kHz	1 V to 10 V	0.58  V + 4.61 %  of reading	4
	1	<i>0</i>	

Issue 08/2022

This supplement is in conjunction with certificate #L22-526



## Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Electrical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Output AC			Fluke 8845A
At the Listed Frequencies			OEM Procedures
10 Hz to 20 kHz	10 V to 100 V	0.035 V + 0.069 % of reading	WEC-CP-DMM-1
20 kHz to 50 kHz	10 V to 100 V	0.058 V + 0.13 % of reading	WEC-CP-CLAMP-1 WEC-CP-MEGGER-1
Equipment to Output AC V At the Listed Frequencies	FO		WEC-CP-PWRSPLY-1 WEC-CP-
10 Hz to 20 kHz	100 V to 750 V	0.035 V + 0.069 % of reading	RC/RTD/RDOUT-1
20 kHz to 50 kHz	100 V to 750 V	0.058 V + 0.13 % of reading	
Equipment to Measure AC At the Listed Frequencies	FO		Transmille 25PPM Multi- Product Calibrator
10 Hz to 44 Hz	0.1 mV to 202 mV	65.28 μV + 0.11 % of reading	OEM Procedures
44 Hz to 999 Hz	0.1 mV to 202 mV	33.03 µV + 0.02 % of reading	WEC-CP-DMM-1
1 kHz to 19.999 kHz	0.1 mV to 202 mV	47.78 μV + 0.049 % of reading	- WEC-CP-CLAMP-1 WEC-CP-MEGGER-1
20 kHz to 99.999 kHz	0.1 mV to 202 mV	90.98 µV + 0.17 % of reading	WEC-CP-
100 kHz to 500 kHz	0.1 mV to 202 mV	564.67 μV + 0.42 % of reading	RC/RTD/RDOUT-1
Equipment to Measure AC At the Listed Frequencies			WEC-CP-PROCESS-1
10 Hz to 44 Hz	0.2 V to 2.02 V	1.18 mV + 0.077 % of reading	
44 Hz to 999 Hz	0.2 V to 2.02 V	281.83 µV + 0.015 % of reading	
1 kHz to 19.999 kHz	0.2 V to 2.02 V	535.58 µV + 0.034 % of reading	
20 kHz to 99.999 kHz	0.2 V to 2.02 V	3.2 mV + 0.1 % of reading	
100 kHz to 500 kHz	0.2 V to 2.02 V	6.56 mV + 0.17 % of reading	
Equipment to Measure AC At the Listed Frequencies	FO		
10 Hz to 44 Hz	2 V to 20.2 V	6.55 mV + 0.1 % of reading	
44 Hz to 999 Hz	2 V to 20.2 V	1.93 mV + 0.016 % of reading	
1 Hz to 19.999 kHz	2 V to 20.2 V	3.2 mV + 0.033 % of reading	
20 kHz to 100 kHz	2 V to 20.2 V	45.92 mV + 0.1 % of reading	]
Equipment to Measure AC At the Listed Frequencies			
30 Hz to 44Hz	20 V to 202 V	13.46 mV + 0.028 % of reading	
45 Hz to 999 Hz	20 V to 202 V	12 mV + 0.018 % of reading	
1 kHz to 20 kHz	20 V to 202 V	23.56 mV + 0.041 % of reading	



## Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Electrical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Measure AC At the Listed Frequencies			Transmille 25PPM Multi- Product Calibrator
30 Hz to 44 Hz	200 V to 1 020 V	133.14 mV + 0.059 % of reading	OEM Procedures
45 Hz to 999 Hz	200 V to 1 020 V	159.68  mV + 0.035 % of reading	WEC-CP-DMM-1
1 kHz to10 kHz	200 V to 1 020 V	70.04  mV + 0.17 % of reading	WEC-CP-CLAMP-1
Equipment to Measure AC At the Listed Frequencies			WEC-CP-MEGGER-1 WEC-CP- RC/RTD/RDOUT-1
10 Hz to 44 Hz	20 µA to 202 µA	0.35 µA + 0.000 09 % of reading	WEC-CP-PROCESS-1
45 Hz to 999 Hz	20 µA to 202 µA	0.33 μA + 0.000 032 % of reading	-
1 kHz to 10 kHz	20 µA to 202 µA	0.44 µA + 0.000 39 % of reading	
Equipment to Measure AC At the Listed Frequencies			
10 Hz to 44Hz	0.2 mA to 2.02 mA	1.95 µA + 0.064 % of reading	
45 Hz to 999 Hz	0.2 mA to 2.02 mA	1.35 µA + 0.015 % of reading	
1 kHz to 10 kHz	0.2 mA to 2.02 mA	3.75 µA + 0.26 % of reading	
Equipment to Measure AC At the Listed Frequencies			
10 Hz to 44 Hz	2 mA to 20.2 mA	8.97 μA + 0.1 % of reading	
45 Hz to 999 Hz	2 mA to 20.2 mA	5.85 µA + 0.029 % of reading	
1 Hz to 10 Hz	2 mA to 20.2 mA	17.56 µA + 0.24 % of reading	
Equipment to Measure AC At the Listed Frequencies	FO		
10 Hz to 44 Hz	20 mA to 202 mA	89.68 µA + 0.1 % of reading	
45 Hz to 999 Hz	20 mA to 202 mA	58.53 µA + 0.029 % of reading	
1 kHz to 10 kHz	20 mA to 202 mA	188.61 µA + 0.3 % of reading	
Equipment to Measure AC At the Listed Frequencies			
10 Hz to 44 Hz	0.2 A to 2.02 A	1.37 mA + 0.077 % of reading	
45 kHz to 2 kHz	0.2 A to 2.02 A	0.84 mA + 0.034 % of reading	
Equipment to Measure AC At the Listed Frequencies	FO		
30 Hz to 44 Hz	2 A to 30 A	10.89 mA + 0.009 % of reading	
45 Hz to 99 Hz	2 A to 30 A	4.64 mA + 0.004 1 % of reading	
100 kHz to 1 kHz	2 A to 30 A	131.14 mA + 0.16 % of reading	



Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Electrical MEASURED INSTRUMENT,	RANGE OR NOMINAL	CALIBRATION AND MEASUREMENT	CALIBRATION
QUANTITY OR GAUGE	DEVICE SIZE AS APPROPRIATE	CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Measure	0.1 Hz to 5 Hz	0.25 mHz + 0.000 28 % of reading	Transmille 25PPM Multi-
Frequency FO	5 Hz to 50 Hz	1.44 mHz + 0.000 26 % of reading	Product Calibrator
	50 Hz to 500 Hz	11.83 mHz + 0.000 25 % of reading	OEM Procedures WEC-CP-DMM-1
	0.5 kHz to 5 kHz	0.27 Hz + 0.000 29 % of reading	WEC-CP-CLAMP-1
	5 kHz to 50 kHz	1.44 Hz + 0.000 26 % of reading	WEC-CP-MEGGER-1
	50 kHz to 500 kHz	12.68 Hz + 0.000 26 % of reading	WEC-CP- RC/RTD/RDOUT1
	0.5 MHz to 1 MHz	210.56 Hz + 0.044 % of reading	WEC-CP-PROCESS-1
Equipment to Output	0.01 Ω to 100 Ω	0.89 Ω + 0.000 1 % of reading	Fluke 8845A
Resistance FO	100 Ω to1 kΩ	$0.001 \ 6 \ k\Omega + 0.011 \ \%$ of reading	OEM Procedures WEC-CP-DMM-1
	1 k $\Omega$ to 10 k $\Omega$	$0.08 \text{ k}\Omega + 0.000 3 \%$ of reading	WEC-CP-DMM-1 WEC-CP-CLAMP-1
	10 kΩ to 100 kΩ	$0.064 \ \Omega + 0.001 \ 3 \ \%$ of reading	WEC-CP-MEGGER-1
	$0.1 \text{ M}\Omega$ to $1 \text{ M}\Omega$	0.001 2 MΩ + 0.011 % of reading	WEC-CP- RC/RTD/RDOUT-1 WEC-CP-PROCESS-1
	1 MΩ to 10 MΩ	$0.001 \ 2 \ M\Omega + 0.011 \ \%$ of reading	
Equipment to Measure	Up To 1 Ω	6 mΩ	Transmille 25PPM Multi- Product Calibrator OEM Procedures WEC-CP-DMM-1 WEC-CP-CLAMP-1 WEC-CP-MEGGER-1 WEC-CP- RC/RTD/RDOUT-1
Resistance <sup>FO</sup> (4 Wire	1 Ω to 10 Ω	$5.89 \text{ m}\Omega + 0.001 1 \%$ of reading	
Simulated)	10 Ω to 100 Ω	$5.89 \text{ m}\Omega + 0.005 7 \%$ of reading	
	$0.1 \text{ k}\Omega$ to $1 \text{ k}\Omega$	47.63 mΩ + 0.004 6 % of reading	
	1 kΩ to 10 kΩ	0.48 Ω + 0.004 5 % of reading	
	$10 \text{ k}\Omega$ to $100 \text{ k}\Omega$	$4.82 \Omega + 0.004 5 \%$ of reading	
			WEC-CP-PROCESS-1
Equipment to Measure	Up To 1 Ω	6 mΩ	Transmille 25PPM Multi-
Resistance <sup>FO</sup> (2 Wire Simulated)	1 $\Omega$ to 10 $\Omega$	$2.4 \text{ m}\Omega + 0.002 3 \%$ of reading	Product Calibrator
(2 wire Simulated)	$10 \Omega$ to $100 \Omega$	$6 \text{ m}\Omega + 0.005 7 \%$ of reading	OEM Procedures WEC-CP-DMM-1
	$0.1 \text{ k}\Omega$ to $1 \text{ k}\Omega$	13.37 mΩ + 0.000 54 % of reading	WEC-CP-CLAMP-1
	$1 \text{ k}\Omega$ to $10 \text{ k}\Omega$	475.81 mΩ + 0.004 6 % of reading	WEC-CP-MEGGER-1
	$10 \text{ k}\Omega$ to $100 \text{ k}\Omega$	1.31 Ω + 0.000 025 % of reading	WEC-CP-PWRSPLY-1 WEC-CP-
	$0.1 \text{ M}\Omega$ to $1 \text{ M}\Omega$	49.10 <b>Ω</b> + 0.011 % of reading	RC/RTD/RDOUT-1
	1 M $\Omega$ to 10 M $\Omega$	189.29 Ω + 0.000 6 % of reading	WEC-CP-PROCESS-1
	$10 \text{ M}\Omega$ to $100 \text{ M}\Omega$	$3.04 \text{ k}\Omega + 0.35 \%$ of reading	]
	$0.1 \text{ G}\Omega$ to $1 \text{ G}\Omega$	108.5 kΩ + 1.15 % of reading	1
Equipment to Measure	-140 °C to 200 °C	0.19 °C	1
Type K Thermocouple <sup>FO</sup>	200 °C to 1 340 °C	0.48 °C	



Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Measure	10.071 nF	1.2 nF	Transmille 25PPM Multi-
Capacitance FO	19.973 nF	1.2 nF	Product Calibrator
(at fixed point)	50.61 nF	1.2 nF	- OEM Procedures
	99.24 nF	1.2 nF	WEC-CP-DMM-1 WEC-CP-CLAMP-1
	0.991 2 µF	4.8 nF	WEC-CP-MEGGER-1
	9.864 μF	74 nF	-
Equipment to Output DC	0.1 mA to 100 mA	0.029 µA + 0.057 % of reading	Fluke 8845A
Current <sup>FO</sup>	0.1 mA to 1 mA	0.006 mA + 0.053 % of reading	OEM Procedures
	1 mA to 10 mA	0.023 mA + 0.057 % of reading	WEC-CP-DMM-1 WEC-CP-CLAMP-1
	10 mA to 400 mA	0.007 mA + 0.057 % of reading	WEC-CP-MEGGER-1
	0.4 A to 1 A	0.006 A + 0.057 % of reading	WEC-CP-PWRSPLY-1
	1 A to 3 A	0.023 A + 0.11 % of reading	WEC-CP-
	3A to 10 A	0.009 A + 0.17 % of reading	RC/RTD/RDOUT-1 WEC-CP-PROCESS-1
Equipment to Output AC At the Listed Frequencies			_
5 Hz to10 Hz	0.01 mA to 10 mA	0.069 mA + 0.4 % of reading	
10 kHz to 5 kHz	0.01 mA to 10 mA	0.069 mA + 0.17 % of reading	
5 kHz to 10 kHz	0.01 mA to 10 mA	0.081 mA + 0.4 % of reading	
Equipment to Output AC At the Listed Frequencies			Fluke 8845A OEM Procedures
5 Hz to 10 Hz	10 mA to 100 mA	0.046 mA + 0.35 % of reading	WEC-CP-DMM-1
10 kHz to 5 kHz	10 mA to 100 mA	0.047 mA + 0.12 % of reading	WEC-CP-CLAMP-1 WEC-CP-MEGGER-1
5 kHz to 10 kHz	10 mA to 100 mA	0.29 mA + 0.23 % of reading	WEC-CP-PWRSPLY-1
Equipment to Output AC At the Listed Frequencies			WEC-CP- RC/RTD/RDOUT-1
5 Hz to 10 Hz	100 mA to 400 mA	0.12 mA + 0.35 % of reading	WEC-CP-PROCESS-1
10 Hz to 1 kHz	100 mA to 400 mA	0.12 mA + 0.12 % of reading	7
1 kHz to 10 kHz	100 mA to 400 mA	0.81 mA + 0.23 % of reading	]
Equipment to Output AC At the Listed Frequencies			
5 Hz to 10 Hz	0.4 A to 1A	0.056 A + 0.29 % of reading	
10 Hz to 5 kHz	0.4 A to 1A	0.047 A + 0.11 % of reading	1
5 kHz to 10 kHz	0.4 A to 1A	0.81 A + 0.4 % of reading	7



## Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Accreditation is granted to the facility to perform the following calibrations:

Electrical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Output AC (			Fluke 8845A
At the Listed Frequencies			OEM Procedures
5 Hz to10 Hz	1 A to 3A	0.069 A + 0.4 % of reading	WEC-CP-DMM-1
10 Hz to 5kHz	1 A to 3A	0.069 A + 0.17 % of reading	WEC-CP-CLAMP-1 WEC-CP-MEGGER-1
5 kHz to 10 kHz	1 A to 3A	0.81 A + 0.4 % of reading	WEC-CP-PWRSPLY-1
Equipment to Output AC 0	Current	•	WEC-CP-
At the Listed Frequencies	FO		RC/RTD/RDOUT-1
5 Hz to 10 Hz	3 A to 10A	0.069 A + 0.4 % of reading	WEC-CP-PROCESS-1
10 Hz to 5 kHz	3 A to 10A	0.07 A + 0.17 % of reading	
Photo Tachometers Rate	240 rpm to 60 000 rpm	0.34 rpm + 0.022 % of reading	Transmille 25PPM Multi-
of Rotation Electrical			Product Calibrator with
Simulation <sup>FO</sup>			Workstation EA015
Equipment to measure DC Current Coils <sup>FO</sup>	0.1 A to 4 A 2 Turn	0.13 A	OEM Procedures WEC-CP-DMM-1
DC Current Colls	4 A to 60 A 2 Turn	0.38 A	WEC-CP-DMM-1 WEC-CP-CLAMP-1
	0.1 A to 40 A 10 Turn	0.46 A	WEC-CP-MEGGER-1
	40 A to 300 A 10 Turn	1.7 A	WEC-CP-
	0.1 A to 200 A 50 Turn	1.7 A	RC/RTD/RDOUT-1
	200 A to 1 500 A 50 Turn	5.5 A	WEC-CP-TACH-1 WEC-CP-PROCESS-1
Equipment to measure	0.1 A to 4 A 2 Turn	0.13 A	
AC Current Coils FO	4 A to 60 A 2 Turn	0.38 A	
	0.1 A to 40 A 10 Turn	0.46 A	
	40 A to 300 A 10 Turn	1.7 A	
	0.1 A to 200 A 50 Turn	1.7 A	
	200 A to 1 500 A 50 Turn	5.5 A	

#### Mass, Force and Weighing Devices

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Small Capacity Scales & Balances <sup>FO</sup>	1 lb to 120 lb	0.12 lb	Class F Weights OEM Procedures WEC-CP-SCALE-1



Weedon Engineering

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

Accreditation is granted to the facility to perform the following calibrations:

Mechanical			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Output Torque <sup>FO</sup>	0.5 lbf•in to 750 lbf•ft	0.35 lbf•ft + 0.55 % of reading	Torque Transducer Norbar Smart Cell OEM Procedures WEC-CP-TWRENCH-1
	0.5 lbf•in to 50 lbf•in	0.54 lbf•in + 0.23 % of reading	Torque Analyzer Mountz TTL OEM Procedures WEC-CP-TWRENCH-1
	50 lbf•in to 1 000 lbf•in	0.37 lbf•in + 0.54 % of reading	Torque Analyzer AWS TT30100-ER OEM Procedures WEC-CP-TWRENCH-1
Equipment to Measure Pressure <sup>FO</sup>	5 psi to 10 000 psig	0.075 % + 0.072 psig of reading	Dead Weight Tester Ashcroft 1305D-100 OEM Procedures WEC-CP-PSI-1

#### Thermodynamic

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Equipment to Measure	29 to 37 % RH	1.1 % RH	Saturated Salts
Humidity <sup>FO</sup>	71 to 79 % RH	1.1 % RH	Magnesium Chloride,
(at fixed point)			Sodium Chloride with a
			Digital Hygrometer
			OEM Procedures
			WEC-CP-RH-TEMP-
			RCRD-1
Equipment to Generate	-20 °C to 260 °C	0.27 °C	PRT Omega PRTF-10-2-
Temperature <sup>FO</sup>			100-1/4-6-E
			OEM Procedures
			WEC-CP-TEMP-GENRT-1
Equipment to Measure	50 °C to 650 °C	1.17 °C + 0.067 % of reading	PRT Omega PRTF-10-2-
Temperature <sup>FO</sup>			100-1/4-6-E with Dry well
			Fluke 9141EZT
			OEM Procedures
			WEC-CP-TEMP-MSR-1



**Weedon Engineering** 

5105 Buffalo Avenue, Jacksonville, FL 32206 Contact Name: Greg Weedon Phone: 904-355-8411

- 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. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> would mean that the laboratory performs this calibration at its fixed location.
- 4. The presence of a superscript FO means that the laboratory performs calibration of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer<sup>FO</sup> would mean that the laboratory performs this calibration at its fixed location and onsite at customer locations.
- 5. 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.
- 6. The term L represents length in inches or millimeters as appropriate to the uncertainty statement.