



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017  
& ANSI/NCSL Z540-1-1994

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CALIBRATION

Valid To: May 31, 2025

Certificate Number: 3781.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1, 10</sup>:

I. Dimensional

Parameter/Equipment	Range	CMC <sup>2, 4</sup> ( $\pm$ )	Comments
3-Point Bore Micrometers –			
Digital	(1 to 6) in	(86 + 8L) $\mu$ in	Master setting rings
Vernier	(1 to 6) in	(120 + 5L) $\mu$ in	
Angle Blocks	Up to 45°	3"	Sine bar, dial indicator, gage blocks
Calipers <sup>3</sup> –			
Digital	Up to 24 in (24 to 48) in	(280 + 2.7L) $\mu$ in (190 + 6.1L) $\mu$ in	Mic-Trac universal measuring machine, gage blocks
Dial/Vernier	Up to 24 in (24 to 48) in	(580 + 0.67L) $\mu$ in (500 + 4.3L) $\mu$ in	

Parameter/Equipment	Range	CMC <sup>2, 4</sup> ( $\pm$ )	Comments
Dial Indicators <sup>3</sup>	Up to 1 in (1 to 4) in	21 $\mu$ in 24 $\mu$ in	Mic-Trac universal measuring machine
Gage Blocks –			
Length	(0.50 to 4) in (4 to 12) in	(2.6 + 3.1L) $\mu$ in (1.9 + 4.2L) $\mu$ in	Mechanical comparison
Flatness	Up to 12 in	1.7 $\mu$ in	Optical flat
Glass Scales	Up to 16 in	(26 + 1.2L) $\mu$ in	Mic-Trac universal measuring machine, microscope
Height Gages <sup>3</sup> –			
Digital	Up to 24 in	(300 + 1.8L) $\mu$ in	Gage blocks
Dial / Vernier	Up to 24 in	(550 + 4.5L) $\mu$ in	
Micrometer Length Standards <sup>3</sup>	Up to 1 in (1 to 80) in	21 $\mu$ in (14 + 3.6L) $\mu$ in	Mic-Trac universal measuring machine, gage blocks
Micrometers <sup>3</sup> –			
Inside	Up to 1 in (1 to 80) in	38 $\mu$ in (40 + 3.9L) $\mu$ in	Mic-Trac universal measuring machine, gage blocks
Outside	Up to 2 in (2 to 80) in	41 $\mu$ in (27 + 3.9L) $\mu$ in	
Depth	Up to 80 in	(35 + 7L) $\mu$ in	
Plain Ring Gages <sup>3</sup>	(0.20 to 4) in (4 to 36) in	(36 + 4.5L) $\mu$ in (46 + 1.6L) $\mu$ in	Mic-Trac universal measuring machine, gage blocks

Parameter/Equipment	Range	CMC <sup>2, 4, 6</sup> ( $\pm$ )	Comments
Protractors, Levels & Clinometers	(0 to 360) $^{\circ}$	3"	Sine bar, gage blocks, angle blocks, dial indicator
Rigid Rules/Tapes <sup>3</sup>	Up to 80 in	(130 + 1.6L) $\mu$ in	Mic-Trac universal measuring machine, microscope
Sine Bars –  Flatness/Parallelism & Parallelism Cylinder to Base	Up to 5 in	47 $\mu$ in	Mic-Trac universal measuring machine, test indicator
Spheres / Ball Gages <sup>3</sup>	Up to 1 in (1 to 2) in	20 $\mu$ in 23 $\mu$ in	Mic-Trac universal measuring machine
Squares –  Parallelism & Flatness  Angle	Up to 48 in  90 $^{\circ}$	120 $\mu$ in  0.0012 $^{\circ}$	Mic-Trac universal measuring machine, test indicator
Parallel Bars	Up to 48 in	120 $\mu$ in	Test Indicator, surface plate
Stage Micrometers	Up to 10 mm	83 $\mu$ m	Mic-Trac universal measuring machine, microscope
Surface Plates <sup>3</sup> –  Flatness  Repeatability	Up to 72 in $\times$ 72 in  Up to 72 in $\times$ 72 in	37 $\mu$ in  48 $\mu$ in	Electronic level system  Repeat-O-Meter

Parameter/Equipment	Range	CMC <sup>2, 4, 6</sup> ( $\pm$ )	Comments
Coating Thickness Gages – Ferrous Only	Up to 184 mils	0.67 % + 0.13 mils	Coating thickness standards
Coating Thickness Standards – Ferrous Only	Up to 184 mils	0.05 mils	Test indicator
Thread Wires/Pin Gages	Up to 1.0 in	19 $\mu$ in	Mic-Trac universal measuring machine
Feeler Gages	(0.0010 to 0.025) in	19 $\mu$ in	Mic-Trac universal measuring machine
Radius Gages	Up to 8 in	0.000 47 in	Radius overlay & optical comparator
Lead Gage Standards	Up to 6 in	(40 + 30L) $\mu$ in	Mic-Trac universal measuring machine
Optical Comparator <sup>3</sup> –			
Linear Axis	Up to 30 in	120 $\mu$ in	Ball checker, glass scale, & gage blocks
Magnification	10x, 20x, 31.25x, 50x, 62.5x, 100x	130 $\mu$ in	Master magnification scale
Angle	Up to 360°	50"	Angle blocks

## II. Dimensional Testing/Calibration

Parameter/Equipment	Range	CMC <sup>2, 4, 11</sup> ( $\pm$ )	Comments
Length <sup>8</sup> – 1D Linear Measurement <sup>3</sup>	Up to 1 in (1 to 80) in	8 $\mu$ in (7.7 + 0.8L) $\mu$ in	Renishaw laser system
Length <sup>8</sup> – One Dimensional <sup>3</sup>	Up to 1 in (1 to 80) in Up to 10 in	22 $\mu$ in (17 + 3.9L) $\mu$ in 280 $\mu$ in	Mic-Trac universal measuring machine  Optical comparator
Angular Measurement <sup>8</sup>	Up to 180°	0.031°	Optical comparator

## III. Dimensional Testing

Parameter/Equipment	Range	Comments
Thread Profile – Visual Inspection <sup>7</sup>	(2 to 20) pitch	Comparison to MFR standard template & optical comparator

## IV. Electrical – DC/Low Frequency

Parameter/Equipment	Range	CMC <sup>2, 5</sup> ( $\pm$ )	Comments
DC Voltage – Generate <sup>3</sup>	(0 to 330) mV (0.33 to 33) V (3.3 to 33) V (33 to 330) V (330 to 1020) V	73 $\mu$ V/V + 3 $\mu$ V 61 $\mu$ V/V + 5 $\mu$ V 61 $\mu$ V/V + 50 $\mu$ V 67 $\mu$ V/V + 500 $\mu$ V 66 $\mu$ V/V + 1500 $\mu$ V	Fluke 5500A

Parameter/Equipment	Range	CMC <sup>2, 5</sup> (±)	Comments
DC Voltage – Measure <sup>3</sup>	Up to 200 mV 200 mV to 2 V (2 to 20) V (20 to 200) V (200 to 1050) V	9.4 µV/V + 0.1 µV 4.6 µV/V + 0.4 µV 4.4 µV/V + 4 µV 6.6 µV/V + 40 µV 6.7 µV/V + 500 µV	Fluke 8508A

Parameter/Range	Frequency	CMC <sup>2, 5</sup> (±)	Comments
AC Voltage – Generate <sup>3</sup>			
Up to 33 mV	(10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz	0.47 % + 20 µV 0.19 % + 20 µV 0.25 % + 20 µV 0.31 % + 20 µV 0.47 % + 33 µV 1.2 % + 60 µV	Fluke 5500A
(33 to 330) mV	(10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz	0.31 % + 50 µV 0.07 % + 20 µV 0.14 % + 20 µV 0.33 % + 40 µV 0.4 % + 170 µV 2.2 % + 330 µV	
(0.33 to 3.3) V	(10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz	0.12 % + 250 µV 0.05 % + 60 µV 0.12 % + 60 µV 0.31 % + 300 µV 0.4 % + 1700 µV 2.2 % + 3300 µV	
(3.3 to 33) V	(10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz	0.28 % + 2.5 mV 0.08 % + 0.6 mV 0.012 % + 2.6 mV 0.43 % + 5 mV 0.5 % + 17 mV	
(33 to 330) V	45 Hz to 1 kHz (1 to 10) kHz (10 to 20) kHz	0.09 % + 6.6 mV 0.14 % + 15 mV 0.17 % + 33 mV	
(330 to 1020) V	45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.09 % + 80 mV 0.33 % + 100 mV 0.33 % + 500 mV	

Parameter/Range	Frequency	CMC <sup>2, 5, 6</sup> (±)	Comments
AC Voltage – Measure <sup>3</sup>			
200 mV	(1 to 10) Hz (10 to 40) Hz (40 to 100) Hz (100 to 2000) Hz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz	14 µV + 0.037 % 4 µV + 0.018 % 4 µV + 0.031 % 2 µV + 0.015 % 4 µV + 0.018 % 8 µV + 0.04 % 20 µV + 0.094 %	Fluke 8508A
2 V	(1 to 10) Hz (10 to 40) Hz (40 to 100) Hz (100 to 2000) Hz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz (100 to 300) kHz (300 to 1000) kHz	0.12 mV + 0.021 % 20 µV + 0.018 % 20 µV + 0.014 % 20 µV + 0.01 % 20 µV + 0.014 % 40 µV + 0.028 % 0.2 mV + 0.07 % 2 mV + 0.37 % 20 mV + 1.7 %	
20 V	(1 to 10) Hz (10 to 40) Hz (40 to 100) Hz (100 to 2000) Hz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz (100 to 300) kHz (300 to 1000) kHz	1.2 mV + 0.021 % 0.2 mV + 0.017 % 0.2 mV + 0.012 % 0.2 mV + 0.01 % 0.2 mV + 0.014 % 0.4 mV + 0.026 % 2 mV + 0.067 % 20 mV + 0.37 % 0.2 V + 1.2 %	
200 V	(1 to 10) Hz (10 to 40) Hz (40 to 100) Hz (100 to 2000) Hz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz (100 to 300) kHz (300 to 1000) kHz	12 mV + 0.03 % 2 mV + 0.016 % 2 mV + 0.014 % 2 mV + 0.012 % 2 mV + 0.015 % 4 mV + 0.027 % 20 mV + 0.067 % 200 mV + 0.37 % 2 V + 1.2 %	

Parameter/Range	Frequency	CMC <sup>2, 5, 6</sup> (±)	Comments
AC Voltage – Measure <sup>3</sup> (cont)	1000 V  (1 to 10) Hz (10 to 40) Hz (40 to 10 000) Hz (10 to 30) kHz (30 to 100) kHz	70 mV + 0.019 % 21 mV + 0.016 % 20 mV + 0.015 % 40 mV + 0.032 % 0.2 V + 0.077 %	Fluke 8508A

Parameter/Equipment	Range	CMC <sup>2, 5, 6</sup> (±)	Comments
DC Current – Generate <sup>3</sup>	(0 to 3.3) mA (3.3 to 33) mA (33 to 330) mA (0.33 to 2.2) A (2.2 to 11) A	0.016 % + 150 µA 0.023 % + 120 µA 0.046 % + 120 µA 0.06 % + 470 µA 0.13 % + 710 µA	Fluke 5500A
DC Current – Measure <sup>3</sup>	(0 to 200) µA (0.2 to 2) mA (2 to 20) mA 200 mA 2 A 20 A	18 µA/A + 0.4 nA 19 µA/A + 4 nA 17 µA/A + 40 nA 97 µA/A + 0.8 µA 220 µA/A + 20 µA 470 µA/A + 0.4 mA	Fluke 8508A

Parameter/Range	Frequency	CMC <sup>2, 5, 6</sup> (±)	Comments
AC Current – Generate <sup>3</sup>			
Up to 330 µA	(10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.37 % + 0.15 µA 0.27 % + 0.15 µA 0.27 % + 0.25 µA 0.53 % + 0.15 µA 0.37 % + 0.15 µA	Fluke 5500A
(0.33 to 3.3) mA	(10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.32 % + 0.3 µA 0.23 % + 0.3 µA 0.23 % + 0.3 µA 0.31 % + 0.3 µA 0.73 % + 0.3 µA	
(3.3 to 33) mA	(10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.97 % + 3 µA 0.26 % + 3 µA 0.26 % + 3 µA 0.33 % + 3 µA 0.73 % + 3 µA	
(33 to 330) mA	(10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.36 % + 30 µA 0.26 % + 30 µA 0.26 % + 30 µA 0.33 % + 30 µA 0.73 % + 30 µA	
(0.33 to 2.2) A	40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.28 % + 300 µA 0.2 % + 300 µA 0.9 % + 300 µA	
(2.2 to 11) A	(10 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz	0.25 % + 2 mA 0.26 % + 2 mA 0.45 % + 2 mA	

Parameter/Range	Frequency	CMC <sup>2, 5, 6</sup> (±)	Comments
AC Current – Measure <sup>3</sup>			
(0 to 200) µA	(1 to 10 000) Hz (10 to 30) kHz (30 to 100) kHz	0.056 % + 0.02 µA 0.068 % + 0.02 µA 0.47 % + 0.02 µA	Fluke 8508A
(0 to 2) mA	(1 to 10) Hz (10 to 10 000) Hz (10 to 30) kHz (30 to 100) kHz	0.037 % + 0.2 µA 0.047 % + 0.2 µA 0.1 % + 0.2 µA 0.47 % + 0.2 µA	
(0 to 20) mA	(1 to 10) Hz (10 to 10 000) Hz (10 to 30) kHz (30 to 100) kHz	0.04 % + 2 µA 0.033 % + 2 µA 0.08 % + 2 µA 0.47 % + 2 µA	
(0 to 200) mA	(1 to 10) Hz (10 to 10 000) Hz (10 to 30) kHz	0.04 % + 20 µA 0.055 % + 20 µA 0.08 % + 20 µA	
(0 to 2) A	(10 to 2000) Hz (2 to 10) kHz (10 to 30) kHz	0.07 % + 0.2 mA 0.092 % + 0.2 mA 0.37 % + 0.2 mA	
(0 to 20) A	(10 to 2000) Hz (2 to 10) kHz	0.1 % + 2 mA 0.29 % + 2 mA	

Parameter/Equipment	Range	CMC <sup>2, 5</sup> (±)	Comments
Resistance – Generate <sup>3</sup>	(0 to 11) Ω (11 to 33) Ω (33 to 110) Ω (110 to 330) Ω (0.33 to 1.1) kΩ (1.1 to 3.3) kΩ (3.3 to 11) kΩ (11 to 33) kΩ (33 to 110) kΩ (110 to 330) kΩ (0.33 to 1.1) MΩ (1.1 to 33) MΩ (3.3 to 11) MΩ (11 to 33) MΩ (33 to 110) MΩ (110 to 330) MΩ	0.019 % + 0.008 Ω 0.014 % + 0.015 Ω 0.011 % + 0.015 Ω 0.011 % + 0.015 Ω 0.011 % + 0.06 Ω 0.011 % + 0.06 Ω 0.011 % + 0.6 Ω 0.011 % + 0.6 Ω 0.014 % + 6 Ω 0.014 % + 6 Ω 0.028 % + 55 Ω 0.021 % + 55 Ω 0.07 % + 0.55 kΩ 0.15 % + 0.55 kΩ 0.59 % + 5.5 kΩ 1.2 % + 17 kΩ	Fluke 5500A

Parameter/Equipment	Range	CMC <sup>2, 5, 6</sup> (±)	Comments
Resistance – Measure <sup>3</sup>	(0 to 2) Ω (2 to 20) Ω (20 to 200) Ω (200 to 2000) Ω (2 to 20) kΩ (20 to 200) kΩ (200 to 2000) kΩ (2 to 20) MΩ (20 to 200) MΩ (200 to 2000) MΩ	0.0022 % + 4 μΩ 0.0014 % + 8 μΩ 0.0013 % + 50 μΩ 0.0012 % + 0.5 mΩ 0.001 % + 5 mΩ 0.0012 % + 50 mΩ 0.0014 % + 1 Ω 0.0024 % + 100 Ω 0.015 % + 10 kΩ 0.2 % + 1 MΩ	Fluke 8508A
Capacitance – Generate <sup>3</sup>	(0.33 to 0.5) nF (0.5 to 1.1) nF (1.1 to 3.3) nF (3.3 to 11) nF (11 to 33) nF (33 to 110) nF (110 to 330) nF (0.3 to 1.1) μF (1.1 to 3.3) μF (3.3 to 11) μF (11 to 33) μF (33 to 110) μF (110 to 330) μF 330 μF to 1.1 mF	0.59 % + 10 pF 0.6 % + 10 pF 0.6 % + 10 pF 0.6 % + 10 pF 0.32 % + 100 pF 0.33 % + 100 pF 0.30 % + 300 pF 0.31 % + 1 nF 0.42 % + 3 nF 0.41 % + 10 nF 0.48 % + 30 nF 0.59 % + 100 nF 0.85 % + 300 nF 1.2 % + 300 nF	Fluke 5500A
Capacitance – Measure <sup>3</sup>	Up to 100 pF 100 pF to 1 nF (1 to 10) nF (10 to 100) nF 100 nF to 100 mF	0.068 % 0.063 % 0.07 % 0.069 % 0.065 %	Precision LCR meter

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Electrical Calibration of Thermocouple Indicators <sup>3</sup> – Generate & Measure			
Type J	(-210 to -100) °C (-100 to -30) °C (-30 to 150) °C (150 to 760) °C (760 to 1200) °C	0.32 °C 0.19 °C 0.17 °C 0.2 °C 0.27 °C	Fluke 5502A
Type K	(-200 to -100) °C (-100 to -25) °C (-25 to 120) °C (120 to 1000) °C (1000 to 1372) °C	0.39 °C 0.21 °C 0.19 °C 0.31 °C 0.48 °C	
Electrical Calibration of RTD Indicators <sup>3</sup> – Generate			
Pt 385, 100 Ω	(-200 to -80) °C (-80 to 0) °C (0 to 100) °C (100 to 300) °C (300 to 400) °C (400 to 630) °C (630 to 800) °C	0.06 °C 0.06 °C 0.08 °C 0.10 °C 0.12 °C 0.14 °C 0.27 °C	Fluke 5502A

V. Mechanical

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Direct Verification of Durometers – Type A, B, C, D			ASTM D2240
Indenter Geometry – Length Diameter Angle Radius	Up to 0.2 in Up to 0.5 in (30 to 35) <sup>o</sup> Up to 0.25 in	260 µin 260 µin 0.044° 260 µin	Optical comparator
Indenter Display	(0 to 100) duro units	32 µin	Gage blocks
Spring Calibration – Force	(0 to 4100) g	4 g	Weight scale
Ultrasonic Thickness Gages <sup>3</sup> – Ferrous Only	Up to 0.5 in	710 µin	Gage blocks
Mass <sup>3</sup>	1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 2000 g  1 lb 2 lb 5 lb 10 lb 20 lb 50 lb	0.61 mg 0.62 mg 0.66 mg 0.71 mg 0.99 mg 2.1 mg 4.1 mg 8.1 mg 60 mg 59 mg  0.0029 lb 0.0029 lb 0.0029 lb 0.0035 lb 0.0043 lb 0.007 lb	NIST Handbook 145 with Class F weights, digital scale

Parameter/Equipment	Range	CMC <sup>2, 6, 11</sup> ( $\pm$ )	Comments
Scales & Balances <sup>3</sup>	1 g to 2 kg	0.13 mg + 0.001 %	Class F weights
	Up to 600 lb	0.003 lb + 0.009 %	
Pressure – Vacuum Gages & Transducers <sup>3</sup>	Up to -25 inHg Up to 30 psi (30 to 400) psi (400 to 20 000) psi (20 000 to 30 000) psi (30 000 to 60 000) psi	0.007 inHg 0.032 % + 0.000 53 psi 0.021 % + 0.0022 psi 0.01 % + 0.14 psi 6.4 psi 71 psi	Pressure transducers / deadweight tester
Torque <sup>3</sup> – Measuring Equipment			
Torque Analyzers, Transducers	(5 to 30) lbf·in (30 to 400) lbf·in (80 to 1000) lbf·in (20 to 250) lbf·ft (100 to 1000) lbf·ft (200 to 2000) lbf·ft	0.24 % + 0.0085 lbf·in 0.02 % + 0.056 lbf·in 0.08 % 0.18 % 0.1 % 0.1 %	Torque arms w/ dead weight
Wrenches, Screwdrivers	(0.5 to 50) lbf·ft (4 to 2000) lbf·ft	0.3 lbf·in 0.7 %	Torque transducers

## VI. Thermodynamics

Parameter/Equipment	Range	CMC <sup>2, 11</sup> ( $\pm$ )	Comments
Relative Humidity – Measuring Equipment	(20 to 90) % RH	1.5 % RH	Thermohygrometer
Temperature – Measure	(-15 to 0) °C (0 to 100) °C (100 to 200) °C (200 to 400) °C	0.03 °C 0.03 °C 0.05 °C 0.06 °C	SRPRT w/ precision DMM
Temperature – Measuring Equipment	(0 to 350) °C (20 to 50) °C	0.15 °C 0.13 °C	Dry well Digital thermometer

Parameter/Equipment	Range	CMC <sup>2, 11</sup> ( $\pm$ )	Comments
IR Temperature – Measure	(100 to 400) °F	1.7 °F	Precision IR thermometer
Temperature – IR Systems – Measuring Equipment	(100 to 400) °F	3.9 °F	Blackbody calibrator $\varepsilon = 0.9$ to 1.0 $\lambda = (8$ to 14) $\mu\text{m}$

## VII. Time & Frequency

Parameter/Equipment	Range	CMC <sup>2, 6, 11</sup> ( $\pm$ )	Comments
Optical Tachometers <sup>3</sup>	Up to 200 000 rpm	0.0036 % + 0.001 rpm	Comparison to counter & lamp
Frequency <sup>3</sup> – Measure	0.1 Hz to 225 MHz	0.0018 %	Universal counter
Frequency – Measuring Equipment	0.1 Hz to 10 kHz 10 kHz to 2 MHz 10 MHz	0.0074 % + 0.01 mHz 0.0074 % + 15 mHz 10 $\mu\text{Hz}$	Fluke 5502A  Universal counter
Stop Watches	Up to 24 hr	17 ms + 0.0025 ms/s	Comparison to counter using the totalize method

<sup>1</sup> This laboratory offers commercial calibration, dimensional testing, and field calibration service.

<sup>2</sup> Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

<sup>3</sup> Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g., resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

<sup>4</sup> In the statement of CMC,  $L$  is the numerical value of the nominal length of the device measured in inches;  $t$  represents time.

<sup>5</sup> The stated measured values are determined using the indicated instrument (see Comments). This capability is suitable for the calibration of the devices intended to measure or generate the measured value in the ranges indicated. CMC are expressed as either a specific value that covers the full range or as a fraction of the reading plus a fixed floor specification.

<sup>6</sup> In the statement of CMC the values listed with percent (%) are percent of reading or generated value unless otherwise noted.

<sup>7</sup> This test is not equivalent to that of a calibration.

<sup>8</sup> This laboratory meets *R205 – Specific Requirements: Calibration Laboratory Accreditation Program* for the types of dimensional tests listed and is considered equivalent to that of a calibration certificate.

<sup>9</sup> Adjustable thread rings are set to applicable specifications using calibrated master set plug gages.

<sup>10</sup> This scope meets A2LA's *P112 Flexible Scope Policy*.

<sup>11</sup> The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



# Accredited Laboratory

A2LA has accredited

**CAL-TEC, INC.**

Broussard, LA

for technical competence in the field of

**Calibration**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 3<sup>rd</sup> day of October 2023.

A blue ink signature of the name "Mr. Trace McInturff" on a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 3781.01  
Valid to May 31, 2025

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.