



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## Certificate of Accreditation

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

### Metrología Aplicada y Servicios S. de R.L. de C.V.

Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550

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, Thermodynamic, Optical, Mechanical, Mass, Force and Weighting Devices, Chemical, Time and Frequency and Electrical 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:

August 28, 2002

April 24, 2025

April 30, 2027

Accreditation No.:

Certificate No.:

22580

L25-361-1

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: <a href="www.pjlabs.com">www.pjlabs.com</a>





#### Metrología Aplicada y Servicios S. de R.L. de C.V.

Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT,	RANGE (AND SPECIFICATION	CALIBRATION AND MEASUREMENT	CALIBRATION EQUIPMENT AND	CALIBRATION MEASUREMENT	LOCATION OF ACTIVITY
	QUANTITY OR GAUGE	WHERE APPROPRIATE)	CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	REFERENCE STANDARDS USED	METHOD OR PROCEDURES USED	
Dimensional	Optical Comparators (Magnification)	Up to 100X	0.03 % of reading	Video and Comparator Reticle Kit/ Gage Blocks Set	JIS B 7184	О
Dimensional	Optical Compators (Axis Linearity X)	Up to 12 in	(143 + 17.5L) μin	Video and Comparator Reticle Kit/ Gage Blocks Set	JIS B 7184	О
Dimensional	Optical Compators (Axis Linearity Y)	Up to 12 in	(143 + 17.5L) μin	Video and Comparator Reticle Kit/ Gage Blocks Set	JIS B 7184	0
Dimensional	Optical Compators (Axis Linearity X)	Up to 1 200 mm	(1.21 + 0.03L) μm	Video and Comparator Reticle Kit/ Gage Blocks Set	ЛS В 7184	0
Dimensional	Optical Compators (Axis Linearity Y)	Up to 1 200 mm	(1.21 + 0.03L) μm	Video and Comparator Reticle Kit/ Gage Blocks Set	ЛЅ В 7184	0
Dimensional	Optical Compators (Axis Squareness)	90°	0.1°	Video and Comparator Reticle Kit/ Gage Blocks Set	ЛS В 7184	0
Dimensional	Optical Compators (Angularity)	30°	0.1°	981-103 Angle Plate	JIS B 7184	О
Dimensional	Optical Compators (Angularity)	45°	0.1°	981-103 Angle Plate	JIS B 7184	О
Dimensional	Optical Compators (Angularity)	60°	0.1°	981-103 Angle Plate	JIS B 7184	О
Dimensional	Optical Compators (Angularity)	90°	0.1°	981-103 Angle Plate	JIS B 7184	О





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	QUILVIIII ON GIROZ	APPROPRIATE)	UNCERTAINTY (±)	STANDARDS USED	PROCEDURES USED	
Dimensional	Video Measurement	Up to 100X	0.03 % of reading	Video and Comparator	JIS B 7184	0
	System		A	Reticle Kit/ Gage Blocks		
	(Magnification)			Set		
Dimensional	Video Measurement	Up to 12 in	30 μin	Video and Comparator	JIS B 7184	0
	System			Reticle Kit/ Gage Blocks		
	(X Axis Linearity)			Set		
Dimensional	Video Measurement	Up to 1 200 mm	$(1.21 + 0.03L) \mu m$	Video and Comparator	JIS B 7184	0
	System			Reticle Kit/ Gage Blocks		
	(X Axis Linearity)			Set		
Dimensional	Video Measurement	Up to 12 in	30 μin	Video and Comparator	JIS B 7184	0
	System	1		Reticle Kit/ Gage Blocks		
	(Y Axis Linearity)			Set		
Dimensional	Video Measurement	Up to 1 200 mm	$(1.21 + 0.03L) \mu m$	Video and Comparator	JIS B 7184	0
	System			Reticle Kit/ Gage Blocks		
	(Y Axis Linearity)			Set		
Dimensional	Video Measurement	90°	0.01°	Video and Comparator	JIS B 7184	0
	System			Reticle Kit/ Gage Blocks		
	Axis Squareness			Set		
Dimensional	Video Measurement	30°	0.01°	981-103 Angle Plate	JIS B 7184	0
	(System Angularity)					
Dimensional	Video Measurement	45°	0.01°	981-103 Angle Plate	JIS B 7184	0
	(System Angularity)					
Dimensional	Video Measurement	60°	0.01°	981-103 Angle Plate	JIS B 7184	0
	(System Angularity)					
Dimensional	Video Measurement	90°	0.01°	981-103 Angle Plate	JIS B 7184	0
	(System Angularity)					





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Dimensional	Block Gages	0.01 in to 12 in	(2.5 + 0.959L) μin	Pratt & Whitney lab Master/Gage Blocks, Grade K	ASME B89.1.9	F
Dimensional	Block Gages	0.5 mm to 300 mm	(0.04 + 0.005L) μm	Pratt & Whitney lab Master/Gage Blocks, Grade K	ASME B89.1.9	F
Dimensional	Protractors	30°	0.01°	981-103 Angle Plate	CEM DI-003	F
Dimensional	Protractors	45°	0.01°	981-103 Angle Plate	CEM DI-003	F
Dimensional	Protractors	60°	0.01°	981-103 Angle Plate	CEM DI-003	F
Dimensional	Protractors	90°	0.01°	981-103 Angle Plate	CEM DI-003	F
Dimensional	CMM Performance Verification (Coordinate Measuring Machines) Linear Displacement (X, Y, and Z axis)	0.5 mm to 1 600 mm	(0.822 + 7.59 x 10 <sup>-3</sup> L) μm	Gage Blocks and Bar Ball Check	ASME B89.4.10360.2	O
Dimensional	Volumetric Displacement	0.025 4 m to 1.2 m	$(2.9 + 0.09L) \mu m$	Gage Blocks and Bar Ball Check	ASME B89.4.10360.2	О
Dimensional	Meter Counters Odometer	0.025 4 m to 999 m	0.5 % of reading	Direct Measure - Totalizer Counter	OIML R 55	О
Dimensional	Caliper	0.127 mm to 304.8 mm	9.5 μm	Comparison to Gage Blocks and Caliper	ASME B89.1.14	О
Dimensional	Caliper	0.005 in to 12 in	374 μin	Comparison to Gage Blocks and Caliper	ASME B89.1.14	0
Dimensional	Caliper	300.01 mm to 1 200 mm	$(7.15 + 7.86 \times 10^{-3} L) \mu m$	Comparison to Gage Blocks and Caliper	ASME B89.1.14	F, O





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Dimensional	Caliper	12.5 in to 48 in	(281 + 7.86L) μin	Comparison to Gage Blocks and Caliper	ASME B89.1.14	F, O
Dimensional	Micrometers	0.01 mm to 25 mm	0.63 μm	Comparison to Gage Blocks	ASME B89.1.13	F, O
Dimensional	Micrometers	0.000 5 in to 1 in	25 μin	Comparison to Gage Blocks	ASME B89.1.13	F, O
Dimensional	Micrometers	25.01 mm to 508 mm	(0.56 + 0.012L) μm	Comparison to Gage Blocks	JIS B 7502	F, O
Dimensional	Micrometers	1.000 5 in to 20 in	(22 + 120L) μin	Comparison to Gage Blocks	JIS B 7502	F, O
Dimensional	Metal Rules	1 mm to 2 400 mm	$(58.85 + 1.58 \times 10^{-3} L) \mu m$	ROI 30-4000-00 Vision System with Mitutoyo Digital Proscale	JIS B 7516	F
Dimensional	Metal Rules	0.05 in to 98.425 in	(2 317 + 1.58L) μin	ROI 30-4000-00 Vision System with Mitutoyo Digital Proscale	JIS B 7516	F
Dimensional	Height Gages	10 mm to 900 mm	$(0.504 + 8.55 \times 10^{-3} L) \mu m$	Comparison to Height Master Step Gage and Gage Blocks	JIS B 7517	F, O
Dimensional	Height Gages	0.4 in to 36 in	(19.8+ 8.55L) μin	Comparison to Height Master Step Gage and Gage Blocks	JIS B 7517	F, O





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Dimensional	Surface Plate (Flatness)	0.02 in to 157 in (Diagonal)	$(57.21 + 2.33 \times 10^{-2} L) \mu in$	Electronic Levels	ASME B89.3.7	F, O
Dimensional	Surface Plate (Repeat Reading)	0.02 in to 0.002 in	20 μin	Repeat-o-Meter with 0.000 02 indicator	ASME B89.3.7	F, O
Dimensional	Dial Indicators	0.02 in to 2 in	(211 + 10.4L) μin	Pratt &Whitney LabMaster Universal / Gage Blocks Grade 2	ASME B89.1.10M	F
Dimensional	Digital Indicators	0.01 mm to 25 mm	$(2.95 \times 10^{-1} + 5.42 \times 10^{-3} L) \mu m$	Pratt &Whitney LabMaster Universal / Gage Blocks Grade 00	ASME B89.1.10M	F
Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 0.1 μm)	$(0.29 + 5.1 \times 10^{-3} L) \mu m$	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O
Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 0.5 μm)	$(0.46 + 4.3 \times 10^{-3} L) \mu m$	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O
Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 1 μm)	$(0.64 + 3.1 \times 10^{-3} L) \mu m$	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O
Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 2 μm)	$(1.19 + 1.84 \times 10^{-3}L) \mu m$	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O





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Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 5 μm)	(2.9 + 8.2 x 10 <sup>-4</sup> L) μm	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O
Dimensional	LVDT's /Indicators / Bore Gages	Up to 50 mm (Res.= 10 μm)	(5.78 + 4.09 x 10 <sup>-4</sup> L) μm	Pratt & Whitney Labmaster Universal/ Indicator Calibrator, Gage Blocks	ASME B89.1.10M	F, O
Dimensional	Cylindrical Diameter Outside and Limit Gages	0.1 mm to 300 mm	(0.19 + 0.001 5L) μm	Pratt & Whitney Labmaster Universal and Gage Blocks	ASME B89.1.6	F
Dimensional	Cylindrical Diameter Outside and Limit Gages	3.94 x 10 <sup>-3</sup> in to 11.81 in	(7.4 + 1.5L) μin	Pratt & Whitney Labmaster Universal and Gage Blocks	ASME B89.1.6	F
Dimensional	Cylindrical Diameter Outside and Limit Gages	0.1 mm to 25 mm	0.25 μm	Laser Scan Micrometer3	ASME B89.1.6	F
Dimensional	Thread Plugs (Pitch Diameter)	4-40 to 4-14	(109.44 + 5.21L) μin	Pratt & Whitney LabMaster Universal & Three Wire System	ASME B1.2 ASME B1.20.2M	F
Dimensional	Thread Plug (Pitch Diameter)	Up to 12 in	(18 + 4.2L) μin	Pratt & Whitney LabMaster Universal & Three Wire System	ASME B1.2 ASME B1.20.2M	F
Dimensional	Thread Plug (Major Diameter)	Up to 10 in	(60 + 3.1L) μin	Pratt & Whitney LabMaster Universal & Three Wire System	ASME B1.2 ASME B1.20.2M	F





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Dimensional	Thread Ring (Major Diameter)	Up to 12 in	(29.78 + 12.58L) μin	Pratt & Whitney LabMaster Universal and Gage Blocks	ASME B1.20.2M	F
Dimensional	Thread Ring (Pitch Diameter)	Up to 8 in	(119.75 + 2.6L) μin	Pratt & Whitney LabMaster Universal and Internal Thread Probe	ASME B1.2 ASME B1.20.2M	F
Dimensional	Cylindrical Diameter (Inside)	0.02 in to 10 in	(7.7 + 6.82L) μin	Master Rings with Pratt & Whitney LabMaster	ASME B89.1.6	F
Dimensional	Cylindrical Diameter (Inside)	0.5 mm to 254 mm	$(0.196 + 6.82 \times 10^{-3} L) \mu m$	Master Rings with Pratt & Whitney LabMaster	ASME B89.1.6	F
Dimensional	Angle Gage Blocks	1° to 90°	7.8 x 10 <sup>-6</sup> rad	CMM	JIS B 7510	F
Dimensional	Precision Levels (Angle)	-400 rad to 400 rad	5.8 x 10 <sup>-6</sup> rad	Electronic Levels	JIS B 7510	F
Dimensional	Digital Scale Ruler	1 mm to 2 000 mm	$(10.25 + 75 \times 10^{-3} \text{L}) \mu\text{m}$	Direct Comparison with Gage Blocks	JIS B 7507	F
Dimensional	Graduate Ruler and Measurement Tape	5 mm to 5 000 mm	0.11 mm	Digital Scale	OIML R 35-1	F
Dimensional	Laser Scan Micrometer	0.1 mm to 50 mm	$(0.025 + 1.75 \times 10^{-3} \text{L}) \mu\text{m}$	Direct Comparison with Master Pin Gages	ISO 14638	F, O
Dimensional	Diameter of Sphere	0.1 mm to 100 mm	0.33 μm	Direct Method Measure Linear Measuring Machine	ISO 14638	F
Dimensional	Roughness Measuring Instruments	14 μin	3 μin	Surface Finish Specimen DI-025	JIS B 0601	F





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Dimensional	Roughness Measuring Instruments	16 μin	3 μin	Surface Finish Specimen DI-025	JIS B 0601	F
Dimensional	Roughness Measuring Instruments	118 µin	3 μin	Surface Finish Specimen DI-025	JIS B 0601	F
Dimensional	Roughness Measuring Instruments	2.9 µm	0.03 μm	Surface Finish Specimen DI-025	JIS B 0601	F
Dimensional	Roughness Measuring Instruments	9.2 μm	0.05 μm	Surface Finish Specimen DI-025	JIS B 0601	F
Dimensional	Line Scales (Glass Scales)	1 mm to 750 mm	$(0.3 + 1 \times 10^{-3} L) \mu m$	Vision System	CENAM Technical Guide	F
Dimensional	Universal Length Machine	0.5 mm to 500 mm	(0.1 + 1.01 x 10 <sup>-4</sup> L) μm	Grade K Gage Blocks	DI-007 Internal Procedure	F, O
Thermodynamic	Infrared Temperature Measuring Devices	10 °C to 50 °C	0.2 °C	Venus Isotech Blackbody Source	ASTM E-1256	F, O
Thermodynamic	Infrared Temperature Measuring Devices	50 °C to 500 °C	0.54 °C	Blackbody Source Hart 9132	JSA JIS C 1612	F, O
Thermodynamic	Infrared Temperature Measuring Devices	500 °C to 1 000 °C	0.7 °C	IR Cavity 461 IR Industries	JSA JIS C 1612	F, O
Thermodynamic	Equipment to Measure Temperature	-50 °C to 130 °C	0.05 °C	Venus ISO TECH Bath	CEM TH-001	F, O
Thermodynamic	Equipment to Measure Temperature	50 °C to 250 °C	0.01 °C	6331 Fluke Calibration Bath	CEM TH-001	F, O
Thermodynamic	Equipment to Measure Temperature	50 °C to 660 °C	0.07 °C	9144 Fluke Metrology Well	CEM TH-001	F, O
Thermodynamic	Temperature Wells and Baths	-50 °C to 155 °C	0.02 °C	Fluke 8508A and PRT	Euramet-cg-13	F





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Thermodynamic	Temperature Wells and Baths	155 °C to 250 °C	0.03 °C	Fluke 8508A and PRT	Euramet-cg-13	F
Thermodynamic	Temperature Wells and Baths	250 °C to 425 °C	0.04 °C	Fluke 8508A and PRT	Euramet-cg-13	F
Thermodynamic	Temperature Wells and Baths	425 °C to 500 °C	0.05 °C	Fluke 8508A and PRT	Euramet-cg-13	F
Thermodynamic	Temperature Wells and Baths	500 °C to 660 °C	0.06 °C	Fluke 8508A and PRT	Euramet-cg-13	F
Thermodynamic	Thermal Hygrometers (Humidity)	5 % RH to 95 % RH	1 % of reading	Vaisala MI70/HMP75 Humidity Chamber	CEM TH-007	F
Thermodynamic	Thermal Hygrometers (Temperature)	-10 °C to 60 °C	0.03 °C	Vaisala MI70/HMP75 Humidity Chamber	CEM TH-007	F
Thermodynamic	Thermal Hygrometers	10 % RH	0.4 % of reading	Rotronic Humidity Standards Feutchenormal Humidity Standards	CEM TH-007	F
Thermodynamic	Thermal Hygrometers	35 % RH	0.5 % of reading	Rotronic Humidity Standards Feutchenormal Humidity Standards	CEM TH-007	F
Thermodynamic	Thermal Hygrometers	50 % RH	0.7 % of reading	Rotronic Humidity Standards Feutchenormal Humidity Standards	CEM TH-007	F





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Thermodynamic	Thermal Hygrometers	75 % RH	0.8 % of reading	Rotronic Humidity Standards Feutchenormal Humidity Standards	CEM TH-007	F
Thermodynamic	Thermal Hygrometers	95 % RH	0.9 % of reading	Rotronic Humidity Standards Feutchenormal Humidity Standards	CEM TH-007	F
Optical	Luxmeters	10 Lux to 30 000 Lux	2.9 % of reading	Konica Minolta T-10	CNM-MFO-PT-004	F
Optical	Power and Energy Meter	10 mW to 10 W	3 % of reading	Thermal Power Sensor Head	Comparison Method with PD100 reader and S310C	F
Optical	Irradiance Ultraviolet Light (@ 320 nm to 400 nm)	0 mW/cm <sup>2</sup> to 20 W/cm <sup>2</sup>	1.2 % of reading	OMNICURE S2000 System, Model XR-3000	Comparison Method with Radiometer Photometer	F
Optical	Illuminance -Visible Light (@ 460 nm to 675 nm)	0 Lux to 5 300 Lux	1.2 % of reading	OMNICURE S2000 System, Model XR-3000	Comparison Method with Radiometer Photometer	F
Mechanical	Indirect Verification of Rockwell Hardness Testers HRB	20 HRB to 59 HRB	1.1 HRB	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HRB	60 HRB to 84 HRB	0.66 HRB	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HRB	85 HRB to 100 HRB	0.49 HRB	Standardized Test Blocks	ASTM E 18	F, O





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Mechanical	Indirect Verification of Rockwell Hardness Testers HRC	20 HRC to 34 HRC	0.42 HRC	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HRC	35 HRC to 59 HRC	0.35 HRC	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HRC	60 HRC to 70 HRC	0.33 HRC	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HR30N	42 HR30N to 54 HR30N	0.44 HR30N	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HR30N	55 HR30N to 76 HR30N	0.34 HR30N	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Indirect Verification of Rockwell Hardness Testers HR30N	77 HR30N to 82 HR30N	0.31 HR30N	Standardized Test Blocks	ASTM E 18	F, O
Mechanical	Gas Flowmeter	10 sccm to 1 000 sccm	0.36 % of reading	Alicat Flow Portable Calibration Unit	CEM/ME-009	F, O
Mechanical	Gas Flowmeter	0.1 slpm to 50 slpm	0.52 % of reading	Alicat Flow Portable Calibration Unit	CEM/ME-009	F, O
Mechanical	Gas Flowmeter	50 slpm to 500 slpm	0.33 % of reading	Alicat Flow Portable Calibration Unit	CEM/ME-009	F, O
Mechanical	Gas Flowmeter	0.2 sccm to 2 sccm	1 % of reading	ATEQ CDF	CEM/ME-009	F, O
Mechanical	Gas Flowmeter	1 sccm to 40 sccm	0.77 % of reading	ATEQ CDF	CEM/ME-009	F, O





#### Metrología Aplicada y Servicios S. de R.L. de C.V.

Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Mechanical	Flow Devices (Water Flow)	1 L/min to 1 000 L/min	0.12 % of reading	Gravimetric Method	CEM- ME- 008	F
Mechanical	Pressure Devices (w/Oil)	200 psi to 20 000 psi	0.01 % of reading	P3116-3 Fluke Dead Weight Tester opt 0.008 %	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	-103.5 kPa to 34.5 kPa	0.07 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	-15 psi to 5 psi	0.07 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	34.5 kPa to 344.8 kPa	0.03 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	5 psi to 50 psi	0.03 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	275.8 kPa to 3.45 MPa	0.02 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Device	40 psi to 500 psi	0.02 % of reading	Fluke Calibration P3025- KPA-P Deadweight Tester	Euramet-cg-3 Euramet/cg-17	F
Mechanical	Pressure Devices (w/Air)	-82.7 kPa to 3 500 kPa	0.01 % of reading	PPC4 Pressure Calibrator & Q-RPT Gauge, Negative Gauge and Absolute	CEM ME-010 Euramet-g-17	F, O





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Mechanical	Pressure Devices (w/Air)	-12 psi to 500 psi	0.01 % of reading	PPC4 Pressure Calibrator & Q-RPT Gauge, Negative Gauge and Absolute	CEM ME-010 Euramet-g-17	F, O
Mechanical	Differential Pressure Devices	-2 in H <sub>2</sub> O to 2 in H <sub>2</sub> O	0.002 in H <sub>2</sub> O	Dwyer 1430 Microtector	CEM-ME- 020	F
Mechanical	Torque Transducers (Clockwise & Counter-Clockwise)	1.3 N·m to 813.5 N·m	0.026 % of reading	Torque –Dead Weight Primary Standard	ASTM E2428 Euramet-cg-14	F
Mechanical	Torque Transducers (Clockwise & Counter-Clockwise)	1 lbf·ft to 600 lbf·ft	0.026 % of reading	Torque –Dead Weight Primary Standard	ASTM E2428 Euramet-cg-14	F
Mechanical	Air Velocity Measuring Equipment	0.25 m/s to to 30 m/s	0.38 % of reading + 0.02 m/s	Wind Tunnel and Rotating Vane Anemometer/	ASTMD5096	F
Mechanical	Air Velocity Measuring Equipment	100 ft/min to 6 013 ft/min	0.38 % of reading + 3.9 ft./min	Wind Tunnel and Rotating Vane Anemometer/	ASTMD5096	F
Mechanical	Torque Hand Tools and Torque Power Tools	0.113 N·m to 11.3 N·m	0.08 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O
Mechanical	Torque Hand Tools and Torque Power Tools	1 in·lb to 100 in·lb	0.08 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O
Mechanical	Torque Hand Tools and Torque Power Tools	1.13 N·m to 338.9 N·m	0.12 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O
Mechanical	Torque Hand Tools and Torque Power Tools	10 in·lb to 3 000 in·lb	0.12 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O
Mechanical	Torque Hand Tools and Torque Power Tools	81.3 N·m to 813.5 N·m	0.15 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O
Mechanical	Torque Hand Tools and Torque Power Tools	60 ft·lb to 600 ft·lb	0.15 % of reading	System & Digital Torque Tester with QC Transducers	ISO 6789 Euramet-cg-14	F, O





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Mechanical	Direct Verification of Durometer Hardness Tester Types (A, B, C, D, O & DO) (Extension at Zero Reading)	2.46 mm to 2.54 mm	6.1 μm	Video Comparator 20x	ASTM D2240	F
Mechanical	Direct Verification of Durometer Hardness Tester Types (A, C) (Indentor Tip Diameter)	0.76 mm to 0.82 mm	6.1 µm	Video Comparator 20x	ASTM D2240	F
Mechanical	Direct Verification of Durometer Hardness types (B, D) (Indentor Tip Radius)	0.88 mm to 0.112 mm	6.1 μm	Video Comparator 20x	ASTM D2240	F
Mechanical	Direct Verification of Durometer Hardness types (O, DO) (Indentor Tip Radius)	1.14 mm to 1.24 mm	6.1 µm	Video Comparator 20x	ASTM D2240	F
Mechanical	Direct Verification of Durometer Hardness types (A, C) (Indentor Tip Angle)	34.75° to 35.25°	0.1°	Video Comparator 20x	ASTM D2240	F
Mechanical	Direct Verification of Durometer Hardness types (B, D) (Indentor Tip Angle)	29.5° to 30.5°	0.1°	Video Comparator 20x	ASTM D2240	F





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		,	UNCERTAINTY (±)	STANDARDS USED		
Mechanical	Direct Verification of	0.55 N to 8.05 N	0.01 N	Load Cell	ASTM D2240	F
	Durometer Hardness		A			
	(Types A, B, E & O)					
	(Durometer Indentor					
	Spring)					
Mechanical	Direct Verification of	4.445 N to 44.45 N	0.1 N	Load Cell	ASTM D2240	F
	Durometer Hardness					
	(Types C, D & DO)					
	(Durometer Indentor					
	Spring)					
Mechanical	Pipettes/Burettes	10 μL to 1 000 μL	0.3 % of reading	Gravimetric Method	ASTM E1154	F
		A			CENAM Technical Guide	
Mechanical	Pipettes/Burettes	1 mL to 2 000 mL	0.2 % of reading	Gravimetric Method	ASTM E1154	F
		A			CENAM Technical Guide	
Mechanical	Micropipettes	1 μL to 10 μL	1.2 % of reading	Gravimetric Method	ASTM E1154	F
					CENAM Technical Guide	
Mass, Force and	Analytical Balances	1 mg to 20 g	$(1.35 \times 10^{-2} + 3.98 \times 10^{-6} \text{Wt}) \text{ mg}$	Class E2 Weights	OIML R 76-1	O
Weighting Devices		(Res.= 0.01 mg)				
Mass, Force and	Analytical Balances	20 g to 500 g	$(1.15 \times 10^{-1} + 1.63 \times 10^{-6} \text{Wt}) \text{ mg}$	Class E2 Weights	OIML R 76-1	О
Weighting Devices		(Res.=0.1 mg)				
Mass, Force and	Analytical Balances	500 g to 2 kg	$(2.82 \times 10^{-1} + 1.62 \times 10^{-6} \text{Wt}) \text{ mg}$	Class E2 Weights	OIML R 76-1	О
Weighting Devices		(Res.=0.5 mg)				
Mass, Force and	Analytical Balances	2 kg to 30 kg	$(1.17 \times 10^{-1} + 1.77 \times 10^{-6} \text{Wt}) \text{ mg}$	Class E2 Weights	OIML R 76-1	O
Weighting Devices		(Res.= 1 mg)				
Mass, Force and	Scales and Balances	454 g to 4.54 kg	$(2.09 \times 10^{-1} + 7.93 \times 10^{-5} \text{Wt}) \text{ g}$	Class F Weights	OIML R 76-1	O
Weighting Devices	Class III	(Res.= 0.2 g)			NIST HB 44	





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Mass, Force and	Scales and Balances	4.54 kg to 9.08 kg	$(9.71 \times 10^{-1} + 6.50 \times 10^{-1})$	Class F Weights	OIML R 76-1	О
Weighting Devices	Class III	(Res.= 1 g)	<sup>5</sup> Wt)		NIST HB 44	
Mass, Force and	Scales and Balances	9.08 kg to 22.7 kg	$(1.88 + 7.21 \times 10^{-5} \text{Wt}) \text{ g}$	Class F Weights	OIML R 76-1	О
Weighting Devices	Class III	(Res.= 2 g)			NIST HB 44	
Mass, Force and	Scales and Balances	22.7 kg to 45.4 kg	$(4.94 + 6.22 \times 10^{-5} \text{Wt}) \text{ g}$	Class F Weights	OIML R 76-1	О
Weighting Devices	Class III	(Res.= 5 g)			NIST HB 44	
Mass, Force and	Scales and Balances	45.4 kg to 227 kg	$(8.58 + 8.97 \times 10^{-5} \text{Wt}) \text{ g}$	Class F Weights	OIML R 76-1	O
Weighting Devices	Class III	(Res.= 10 g)			NIST HB 44	
Mass, Force and	Scales and Balances	227 kg to 2 270 kg	$(219 + 5.85 \times 10^{-5} \text{Wt}) \text{ g}$	Class F Weights	OIML R 76-1	O
Weighting Devices	Class III	(Res.=0.2 kg)			NIST HB 44	
Mass, Force and	Scales and Balances	2 270 kg to 4 540 kg	$(0.494 + 6.22 \times 10^{-5} \text{Wt}) \text{ kg}$	Class F Weights	OIML R 76-1	О
Weighting Devices	Class III	(Res.= 0.5 kg)			NIST HB 44	
Mass, Force and	Mass, Weight and	1 g	22 μg	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets F1, F2			Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		
Mass, Force and	Mass, Weight and	2 g	25 μg	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets F1, F2			Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		
Mass, Force and	Mass, Weight and	5 g	40 μg	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets F1, F2			Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		
Mass, Force and	Mass, Weight and	10 g	43 μg	Double Substitution with	OIML R 111-1	
Weighting Devices	Weight Sets F1, F2			Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		





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Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2 M1, M2, M3	20 g	68 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2 M1, M2, M3	50 g	80 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2 M1, M2, M3	100 g	100 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2 M1, M2, M3	200 g	200 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	500 g	0.5 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	1 kg	1.1 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	2 kg	1.9 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	5 kg	5 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F





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Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	10 kg	10 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	20 kg	21 mg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	1 mg	5 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	2 mg	5 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	5 mg	5 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	10 mg	5 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	20 mg	6 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	50 mg	10 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets F1, F2, M1, M2, M3	100 mg	10 μg	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F





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Mass, Force and	Mass, Weight and	200 mg	12 μg	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets F1, F2,		<u> </u>	Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		
Mass, Force and	Mass, Weight and	500 mg	15 μg	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets F1, F2,			Class E2 Weights, Balances		
	M1, M2, M3			& Mass Comparators		
Mass, Force and	Mass, Weight and	1 oz	2.3 µlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	2 oz	4.3 µlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	4 oz	8.3 µlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	8 oz	20 μlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	1 lb	37 µlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	2 lb	42 µlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		
Mass, Force and	Mass, Weight and	3 lb	49 μlb	Double Substitution with	OIML R 111-1	F
Weighting Devices	Weight Sets NIST			Class E2 Weights, Balances		
	105-1 Class F Weights			& Mass Comparators		





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Mass, Force and Weighting Devices	Mass, Weight and Weight Sets NIST 105-1 Class F Weights	5 lb	65 μlb	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets NIST 105-1 Class F Weights	10 lb	150 μlb	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets NIST 105-1 Class F Weights	20 lb	290 μlb	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Mass, Weight and Weight Sets NIST 105- 1 Class F Weights	50 lb	980 μlb	Double Substitution with Class E2 Weights, Balances & Mass Comparators	OIML R 111-1	F
Mass, Force and Weighting Devices	Verification of Testing Machines (Tension and Compression)	1 N to 889 N	0.07 % of reading	Class F Weights	ASTM E4 ISO 376	F
Mass, Force and Weighting Devices	Verification of Testing Machines (Tension and Compression)	1 lb•f to 200 lb•f	0.07 % of reading	Class F Weights	ASTM E4 ISO 376	F
Mass, Force and Weighting Devices	Verification of Testing Machines (Tension and Compression)	88.9 N to 4.41 kN	0.35 N	Morehouse- Calibration Load Cell with Hadi (High Accuracy Digital Indicator)	ASTM E4 ISO 376	F





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Mass, Force and	Verification of Testing	20 lb•f to 1 000 lb•f	0.08 lb•f	Morehouse- Calibration	ASTM E4	F
Weighting Devices	Machines		<b>A</b>	Load Cell with Hadi	ISO 376	
	(Tension and			(High Accuracy Digital		
	Compression)			Indicator)		
Mass, Force and	Verification of Testing	889.6 N to 44.13 kN	3.5 N	Morehouse- Calibration	ASTM E4	F
Weighting Devices	Machines			Load Cell with Hadi	ISO 376	
	(Tension and			(High Accuracy Digital		
	Compression)			Indicator)		
Mass, Force and	Verification of Testing	200 lb•f to 10 000 lb•f	0.8 lb•f	Morehouse- Calibration	ASTM E4	F
Weighting Devices	Machines			Load Cell with Hadi	ISO 376	
	(Tension and	/		(High Accuracy Digital		
	Compression)			Indicator)		
Chemical	pH Meter	4 pH	0.009 pH	CRMs-pH Buffer Solution	CEM QU-003	F
	(Fixed Point)					
Chemical	pH Meter	7 pH	0.009 pH	CRMs-pH Buffer Solution	CEM QU-003	F
	(Fixed Point)					
Chemical	pH Meter	10 pH	0.009 pH	CRMs-pH Buffer Solution	CEM QU-003	F
	(Fixed Point)					
Chemical	Conductivity Meters	10 μS	0.5 μS	CRMs- Conductivity	CENAM- Technical	F, O
	(Fixed Point)			Standard Solutions to	Guide	
				Measure Electrolytic		
CI 1	G 1 d 2 A	100 0	2.2 G	Conductivity	CENTANCE 1 : 1	F 0
Chemical	Conductivity Meters	100 μS	2.2 μS	CRMs- Conductivity Standard Solutions to	CENAM- Technical	F, O
	(Fixed Point)			Measure Electrolytic	Guide	
				Conductivity		





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Chemical	Conductivity Meters (Fixed Point)	1000 μS	3.7 μS	CRMs- Conductivity Standard Solutions to Measure Electrolytic Conductivity	CENAM- Technical Guide	F, O
Chemical	Conductivity Meters (Fixed Point)	10 000 μS	36 μS	CRMs- Conductivity Standard Solutions to Measure Electrolytic Conductivity	CENAM- Technical Guide	F, O
Chemical	Conductivity Meters (Fixed Point)	100 000 μS	430 μS	CRMs- Conductivity Standard Solutions to Measure Electrolytic Conductivity	CENAM- Technical Guide	F, O
Chemical	Dynamic Viscometers Rotational	9 cP	0.027 cP	Reference Standard Silicone Oils	ASTM D445	F
Chemical	Dynamic Viscometers Rotational	96 сР	0.35 cP	Reference Standard Silicone Oils	ASTM D445	F
Chemical	Dynamic Viscometers Rotational	969 сР	3.5 cP	Reference Standard Silicone Oils	ASTM D445	F
Chemical	Dynamic Viscometers Rotational	11 860 cP	61 cP	Reference Standard Silicone Oils	ASTM D445	F
Chemical	Dynamic Viscometers Rotational	59 940 сР	290 сР	Reference Standard Silicone Oils	ASTM D445	F
Chemical	Kinematic Viscosity Zahn, Ford, Dip and ISO Cups	17 mm <sup>2</sup> /sec	0.49 mm <sup>2</sup> /sec	Viscosity Standards	ASTM D4212, ASTM 1200, ASTM D4212 and ISO 2431	F





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Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Chemical	Kinematic Viscosity Zahn, Ford, Dip and ISO Cups	34 mm <sup>2</sup> /sec	0.51 mm <sup>2</sup> /sec	Viscosity Standards	ASTM D4212, ASTM 1200, ASTM D4212 and ISO 2431	F
Chemical	Kinematic Viscosity Zahn, Ford, Dip and ISO Cups	120 mm <sup>2</sup> /sec	0.55 mm <sup>2</sup> /sec	Viscosity Standards	ASTM D4212, ASTM 1200, ASTM D4212 and ISO 2431	F
Chemical	Kinematic Viscosity Zahn, Ford, Dip and ISO Cups	230 mm <sup>2</sup> /sec	0.59 mm <sup>2</sup> /sec	Viscosity Standards	ASTM D4212, ASTM 1200, ASTM D4212 and ISO 2431	F
Chemical	Kinematic Viscosity Zahn, Ford, Dip and ISO Cups	710 mm <sup>2</sup> /sec	0.6 mm <sup>2</sup> /sec	Viscosity Standards	ASTM D4212, ASTM 1200, ASTM D4212 and ISO 2431	F
Time and Frequency	Tachometer	1 rpm to 999.9 rpm	0.06 rpm	Agilent 53132A	CENAM Technical Guide	F
Time and Frequency	Tachometer	1 000 rpm to 100 000 rpm	0.006 % of reading	Agilent 53132A	CENAM Technical Guide	F, O
Time and Frequency	Frequency Measuring Equipment	0.1 Hz to 225 MHz	6.8 MHz	Agilent 53132A OPC 030, 012	CENAM Technical Guide	F, O
Time and Frequency	Frequency Measuring Equipment	100 MHz to 3 GHz	110 MHz	Agilent 53132A OPC 030, 012	CENAM Technical Guide	F, O
Time and Frequency	Digital Stopwatch Timer and Time Base Error	Up to 24 s/day	0.95 s/day	Agilent 53132A (Option 12) and Fluke 199C, Scope Meter NIST	Practice Guide Special Publication 960-12	0
Time and Frequency	Time Counters	5 ms to 3 600 s	1.2 ms	Agilent 53132A (Option 12) and Fluke 199C, Scope Meter NIST	Practice Guide Special Publication 960-12	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Time and Frequency	Microwave Frequency Counter	10 Hz to 500 MHz	1 Hz	HP5343A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Microwave Frequency Counter	500 MHz to 26.5 GHz	1 Hz	HP5343A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	CW Model Frequency	0.01 GHz to 26.5 GHz	10 kHz	HP8340B HP8902A W/11722	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Spectrum Analyzer Sweep Time	10 ms to 50 s	0.39 % of reading	HP 8593A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Spectrum Analyzer Frequency Modulation (@ 20 Hz to 100 kHz) (400 kHz Peak)	10 MHz to 1 300 MHz	2.1 % of reading	HP8340B HP8902A W/11722	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Spectrum Analyzer (Pulse Modulation)	0.01 MHz to 400 MHz	25 ns	Rise/Fall Time HP 8340B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Spectrum Analyzer (Pulse Modulation)	0.01 MHz to 26.5 MHz (Band 0)	1.4 MHz	Rise/Fall Time HP 8340B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Time and Frequency	Spectrum Analyzer (Pulse Modulation)	0.01 MHz to 26.5 MHz (Band 1 to 4)	0.053 MHz	Rise/Fall Time HP 8340B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Magnetic Source (Verification of Gauss Meter)	100 G	0.41 G	Magnetic Instrumentation References Fixed Points	A312-100/A312-1K	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 50 MHz)	240 μW to 16 μW	81.5 μW	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 100 kHz to 600 kHz) (75 Ω)	20 dB to -30 dB	0.057 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 600 kHz to 2 GHz) (75 Ω)	20 dB to -30 dB	0.059 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 300 kHz to 1 MHz) (50 Ω)	20 dB to -20 dB	0.049 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 1 MHz to 2 GHz) (50 Ω)	20 dB to -20 dB	0.051 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 2 GHz to 4.2 GHz) (50 Ω)	20 dB to -20 dB	0.05 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION  Electrical	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)  -20 dB to -20 dB	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)  0.049 dB	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED  Euramet cg-12	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 300 kHz to 1 MHz) (50 Ω)	-20 dB to -20 dB	0.049 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	T.O. kkK1-4-60-1 Power Meter SOP	r, O
Electrical	Equipment to Measure Power Reference (@ 10 MHz to 30 MHz) (50 Ω)	-20 dB to -70 dB	0.074 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 30 MHz to 4 GHz) (50 Ω)	-20 dB to -70 dB	0.074 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 4 GHz to 10 GHz) (50 Ω)	-20 dB to -70 dB	0.074 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 10 GHz to 15 GHz) (50 Ω)	-20 dB to -70 dB	0.1 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 15 GHz to 18 GHz) (50 Ω)	-20 dB to -70 dB	0.11 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 50 MHz to 100 MHz) (50 Ω)	20 dB to -30 dB	0.06 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 0.1 GHz to 2 GHz) (50 Ω)	20 dB to -30 dB	0.075 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 2 GHz to 12.4 GHz) (50 Ω)	20 dB to -30 dB	0.062 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 12.4 GHz to 18 GHz) (50 Ω)	20 dB to -30 dB	0.065 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 18 GHz to 26.5 GHz) (50 Ω)	20 dB to -30 dB	0.099 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 26.5 GHz to 40 GHz) (50 Ω)	20 dB to -30 dB	0.097 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 40 GHz to 50 GHz) (50 Ω)	20 dB to -30 dB	0.13 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 50 MHz to 100 MHz) (50 Ω)	-20 dB to -70 dB	0.054 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 0.1 GHz to 2 GHz) (50 Ω)	-20 dB to -70 dB	0.054 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 2 GHz to 12.4 GHz) (50 Ω)	-20 dB to -70 dB	0.058 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 12.4 GHz to 18 GHz) (50 Ω)	-20 dB to -70 dB	0.068 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 18 GHz to 26.5 GHz) (50 Ω)	-20 dB to -70 dB	0.095 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 26.5 GHz to 40 GHz) (50 Ω)	-20 dB to -70 dB	0.11 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 40 GHz to 50 GHz) (50 Ω)	-20 dB to -70 dB	0.19 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 100 kHz to 2.6 GHz) (50 Ω)	30 dB to -20 dB	0.071 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 50 MHz to 1 300 MHz) (50 Ω)	30 dB to -20 dB	0.071 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure Power Reference (@ 1.3 GHz to 18 GHz) (50 Ω)	30 dB to -20 dB	0.081 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Power Reference (@ 18 GHz to 26.5 GHz) (50 Ω)	30 dB to -20 dB	0.092 dB	Fluke 9640A/LPN Agilent E4418B HP 8482A, HP 8481D Agilent U2004A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	20 dB to 10 dB	0.9 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	10 dB to -9.95 dB	0.9 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	-10 dB to 19.95 dB	1.2 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	-20 dB to 49.95 dB	1.5 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	-50 dB to -79.95 dB	1.8 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter (SOP)	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Power Meter Output Power Accuracy (Band 0) (0.01 GHz to 2.3 GHz)	-80 dB to -99.95 dB	2.1 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Power Meter Output Power Accuracy (Band 0) (@ 0.01 GHz to 2.3 GHz)	-100 dB to -110 dB	2.1 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	18 dB to 10 dB	1.8 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	10 dB to -9.95 dB	1.5 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	-10 dB to 19.95 dB	2 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	-20 dB to 49.95 dB	2.3 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	-50 dB to -79.95 dB	2.6 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	-80 dB to -100 dB	2.9 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Output Power Accuracy (Band 1-3) (@ 2.3 GHz to 20 GHz)	20 dB to -110 dB	2.9 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	18 dB to 10 dB	2.3 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	10 dB to -9.95 dB	2 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	-10 dB to 19.95 dB	2.5 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	-20 dB to 49.95 dB	2.8 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	-50 dB to -79.95 dB	3.1 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Output Power Accuracy (Band 4) (@ 20 GHz to 26.5 GHz)	-80 dB to -110 dB	3.4 dB	HP 8340B E4420B	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Frequency Modulation (@ 20 Hz to 10 kHz) (40 kHz Peak)	0.25 MHz to 10 MHz	2 % of reading + 1 digit	HP 8902A T.O. kkK1-4-60-1 Power Meter	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Frequency Modulation (@ 50 Hz to 100 kHz) (400 kHz Peak)	10 MHz to 1 300 MHz	1 % of reading + 1 digit	HP 8902A w/ HP 11722A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O





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Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Single – Sideband Phase Noise Standard (Band 0-1) (@ 0.05 GHz to 7 GHz)	30 Hz Offset from Carrier	0.007 % of reading	HP 8593A	Euramet cg-12 T.O. kkK1-4-60-1 Power Meter SOP	F, O
Electrical	Equipment to Measure DC Voltage	5 μV to 30 mV	$20 \mu V/V + 1 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	115 μV to 3.3 V	$11 \mu V/V + 2 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	3.3 V to 33 V	$12 \mu V/V + 20 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	33 V to 330 V	$18 \mu V/V + 150 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	330 V to 1 000 V	$18 \mu V/V + 1500 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	3 μV to 200 mV	$4.5 \mu V/V + 0.1 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	200 mV to 2 V	$3 \mu V/V + 0.4 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	2 V to 20 V	$3 \mu V/V + 4 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	20 V to 200 V	$4.5~\mu\text{V/V} + 40~\mu\text{V}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	200 V to 1 000 V	$4.5 \ \mu V/V + 0.5 \ mV$	Fluke 8508A	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output DC Current	1.3 μA to 200 μA	$12 \mu A/A + 0.0004 \mu A$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	12 μA to 2 mA	$12 \mu A/A + 0.004 \mu A$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	2 mA to 20 mA	$13 \mu A/A + 0.04 \mu A$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	20 mA to 200 mA	$36 \mu A/A + 0.8 \mu A$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	200 A to 2 A	170 μΑ/Α + 16 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	2 A to 20 A	380 A/A + 0.4 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	0.2 μA to 330 μA	$150 \mu A/A + 0.02 \mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	0.33 mA to 3.3 mA	$100 \mu A/A + 0.05 \mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	3.3 mA to 33 mA	$100 \mu A/A + 0.25 \mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	33 mA to 330 mA	100 μΑ/Α + 2.5 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	0.33 A to 1.1 A	200 μΑ/Α + 40 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	1.1 A to 3 A	$380 \mu A/A + 40 \mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure DC Current	3 A to 11 A	$500 \mu A/A + 500 \mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	11 A to 20.5 A	$1~000~\mu A/A + 750~\mu A$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Current	11 A to 1 000 A	1.2 mA/A	Fluke 5520A/SC600 Fluke 5500A/Coil	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 65 Hz to 440 Hz)	11 A to 1 000 A (W/Coil)	0.25 % of reading	Fluke 5520A/SC600 Fluke 5500A/Coil	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	1 Ω to 11 Ω	$40 \mu \Omega/\Omega + 6 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	11 Ω to 33 Ω	$30 \mu \Omega/\Omega + 6.5 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	33 Ω to 110 Ω	$28 \mu\Omega/\Omega + 6.4 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	110 Ω to 330 Ω	$28 \mu\Omega/\Omega + 7 \mathrm{m}\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$330 \Omega$ to $1.1 \text{ k}\Omega$	$28 \mu\Omega/\Omega + 7 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$1.1 \text{ k}\Omega \text{ to } 3.3 \text{ k}\Omega$	$28 \mu\Omega/\Omega + 25 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$3.3 \text{ k}\Omega$ to $11 \text{ k}\Omega$	28 μΩ/Ω $25$ mΩ	Fluke 5520A/SC600	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Resistance	11 kΩ to 33 kΩ	$28 \mu\Omega/\Omega + 205 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$33 \text{ k}\Omega \text{ to } 110 \text{ k}\Omega$	$28 \mu\Omega/\Omega + 205 \text{ m}\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	110 kΩ to $330$ kΩ	$32 \mu\Omega/\Omega + 2 \Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	0.33 MΩ to 1.1 MΩ	$32 \mu\Omega/\Omega + 2 \Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	1.1 MΩ to 3.3 MΩ	$60 \mu\Omega/\Omega + 30 \Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$3.3~\mathrm{M}\Omega$ to $11~\mathrm{M}\Omega$	$130 \ \mu\Omega/\Omega + 50 \ \Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	11 MΩ to 33 MΩ	$250 \ \mu\Omega/\Omega + 2.5 \ k\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$33~\mathrm{M}\Omega$ to $110~\mathrm{M}\Omega$	500 μΩ/Ω + $3$ kΩ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	0.11 GΩ ο 1.1 GΩ	$15~000~\mu\Omega/\Omega + 500~k\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	1 Ω to 11 Ω	$40 \mu\Omega/\Omega + 6 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	11 Ω to 33 Ω	$30 \ \mu\Omega/\Omega + 6.5 \ m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Resistance	33 Ω to 110 Ω	$28 \mu\Omega/\Omega + 6.4 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	110 Ω to 330 Ω	$28 \mu\Omega/\Omega + 7 \mathrm{m}\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	330 Ω to 1.1 k Ω	$28 \mu\Omega/\Omega + 7 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	1.1 kΩ to 3.3 k Ω	$28 \mu\Omega/\Omega + 25 m\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	3.3 kΩ to 11 k Ω	$28 \mu\Omega/\Omega  25 \mathrm{m}\Omega$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	110 μΩ to 2 Ω	$15 \mu\Omega/\Omega + 4 \mu\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	2 Ω to 20 Ω	$9$ μ $\Omega/\Omega$ + 14 μ $\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$20~\Omega$ to $200~\Omega$	$7.5 \mu\Omega/\Omega + 500 \mu\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$200~\Omega$ to $2~k\Omega$	$7.5 \ \mu\Omega/\Omega + 5 \ 000 \ \mu\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$2~\mathrm{k}\Omega$ to $20~\mathrm{k}\Omega$	$7.5 \ \mu\Omega/\Omega + 50 \ 000 \ \mu\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$20~\mathrm{k}\Omega$ to $200~\mathrm{k}\Omega$	$7.5~\mu\Omega/\Omega + 500~000~\mu\Omega$	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment to Measure Resistance	$200 \text{ k}\Omega$ to $2 \text{ M}\Omega$	$8.5 \mu\Omega/\Omega + 1 \Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$2~\mathrm{M}\Omega$ to $20~\mathrm{M}\Omega$	$15 \mu\Omega/\Omega + 100 \Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	20 MΩ to 200 MΩ	60 μΩ/Ω + $10$ kΩ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	$200~\mathrm{M}\Omega$ to $2~\mathrm{G}\Omega$	$525 \mu\Omega/\Omega + 1 M\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Resistance	110 μ $\Omega$ to 2 $\Omega$	$15$ μ $\Omega$ / $\Omega$ + 4 μ $\Omega$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Capacitance (Capacitance Meter) (@ 10 Hz to 10 KHz)	0.19 nF to 1.099 9 nF	5 000 μf/f + 0.01 nF	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Capacitance (Capacitance Meter) (@ 10 Hz to 3 KHz)	1.1 nF to 3.299 9 nF	5 000 μf/f + 0.01 nF	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure Capacitance (Capacitance Meter) (@ 10 Hz to 1 KHz)	3.3 nF to 109.999 nF	2 500 μf/f + 0.1 nF	Fluke 5520A/SC600	Euramet-cg-15	F, O





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Electrical	Equipment to Measure Capacitance (Capacitance Meter) (@ 10 Hz to 1 KHz)	110 nF to 329.999 nF	2 500 μf/f + 0.3 nF	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	0.3 μA to 0.33 mA	1 250 μΑ/Α + 0.1 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	0.33 mA to 3.3 mA	1 000 μΑ/Α + 0.15 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	3.3 mA to 33 mA	400 μΑ/Α + 2 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	33 mA to 330 mA	400 μΑ/Α + 20 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	330 mA to 1.1 A	500 μA/A + 100 μA	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	1.1 A to 3 A	600 μΑ/Α + 100 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O





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Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	3 A to 11 A	1 000 μΑ/Α + 2 000 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	11 A to 20.5 A	1 500 μΑ/Α + 5 000 μΑ	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Current (@ 45 Hz to 1 kHz)	11 A to 330 A (W / Coil)	5 mA/A + 0.5 A	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Verification of Capacitance (Fixed Values)	1 pF	3.6 pF	HP16380A Standard Air Capacitor Set to Measure Capacitance through Direct Method	CENAM Technical Guide	F, O
Electrical	Verification of Capacitance (Fixed Values)	10 pF	10 pF	HP16380A Standard Air Capacitor Set to Measure Capacitance through Direct Method	CENAM Technical Guide	F, O
Electrical	Verification of Capacitance (Fixed Values)	100 pF	100 pF	HP16380A Standard Air Capacitor Set to Measure Capacitance through Direct Method	CENAM Technical Guide	F, O
Electrical	Verification of Capacitance (Fixed Values)	1 000 pF	2.9 pF	HP16380A Standard Air Capacitor Set to Measure Capacitance through Direct Method	CENAM Technical Guide	F, O





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Electrical	Equipment Output AC Current (@1 Hz to 10 Hz)	0.35 μA to 200 μΑ	475 μΑ/Α + 0.02 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 10 kHz)	0.35 μΑ to 200 μΑ	475 μΑ/Α + 0.02 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 kHz to 30 kHz)	0.45 μA to 200 μA	650 μΑ/Α + 0.02 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 30 kHz to 100 kHz)	2.5 μA to 200 μA	4 000 μΑ/Α + 0.02 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@1 Hz to 10 Hz)	200 μA to 2 mA	290 μΑ/Α + 0.2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 10 kHz)	200 μA to 2 mA	280 μΑ/Α + 0.2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 kHz to 30 kHz)	200 μA to 2 mA	650 μΑ/Α + 0.2 μΑ	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment Output AC Current (@ 30 kHz to 100 kHz)	200 μA to 2 mA	4 000 μΑ/Α + 0.2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@1 Hz to 10 Hz)	2 mA to 20 mA	290 μΑ/Α + 2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 10 kHz)	2 mA to 20 mA	280 μΑ/Α + 2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 kHz to 30 kHz)	2 mA to 20 mA	650 μΑ/Α + 2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 30 kHz to 100 kHz)	2 mA to 20 mA	4 000 μΑ/Α + 2 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 1 Hz to 10 Hz)	20 mA to 200 mA	290 μΑ/Α + 20 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 10 kHz)	20 mA to 200 mA	250 μΑ/Α + 20 μΑ	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment Output AC Current (@ 10 kHz to 30 kHz)	20 mA to 200 mA	600 μΑ/Α + 20 μΑ	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 2 kHz)	200 mA to 2 A	600 μA/A + 0.2 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 2 kHz to 10 kHz)	200 mA to 2 A	710 μA/A + 0.2 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 kHz to 30 kHz)	200 mA to 2 A	3 000 μA/A + 0.2 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 10 Hz to 2 kHz)	2 A to 20 A	800 μA/A + 2 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment Output AC Current (@ 2 kHz to 10 kHz)	2 A to 20 A	2 500 μA/A + 2 mA	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC High Voltage	1 kV to 6 kV	12 mV/V	Fluke 80 K-06	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC High Voltage	1 kV to 10 kV	3 mV/V + 5 V DC	Fluke 5320A	Euramet-cg-15	F, O





### Metrología Aplicada y Servicios S. de R.L. de C.V.

Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure DC High Voltage (@ 50 Hz to 60 Hz)	1 kV to 15 kV	5 mV/V + 5 V DC	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Oscilloscopes (@ 50 kHz Reference)	5 mVpp to 5.5 Vpp	$20\ 000\ \mu\text{V/V} + 300\ \mu\text{V}$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Current for Oscilloscopes (5 mV to 5 V) (Relative to 50 kHz Reference)	50 kHz to 100 MHz	35 000 μV/V + 100 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Current for Oscilloscopes (5 mV to 5 V) (Relative to 50 kHz Reference)	100 MHz to 300 MHz	40 000 μV/V + 100 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Current for Oscilloscopes (5 mV to 5 V) (Relative to 50 kHz Reference)	300 MHz to 600 MHz	60 000 μV/V + 100 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Square Wave DC Signal for Oscilloscopes	1 mV to 6.6 Vp-p (50 Ω)	0.05 % reading	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Square Wave DC Signal for Oscilloscopes	1 mV to 130 V p-p (1 MΩ)	0.05 % reading	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Time Marker Measure Into (50 Ω)	5 s to 50 ms	5 ms/s	Fluke 5520A/SC600	Euramet-cg-7	F, O





## Metrología Aplicada y Servicios S. de R.L. de C.V.

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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Time Marker Measure Into $(50 \Omega)$	20 ms to 100 ns	2.5 μs/s	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Time Marker Measure Into $(50 \Omega)$	50 ns to 20 ns	2.5 μs/s	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Time Marker Measure Into $(50 \Omega)$	10 ns	25 ps	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Time Marker Measure Into $(50 \Omega)$	5 ns to 2 ns	2.5 μs/s	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 45 Hz)	1 mV to 33 mV	800 μV/V + 6 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 10 kHz)	1 mV to 33 mV	150 μV/V + 6 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 kHz to 20 kHz)	1 mV to 33 mV	200 μV/V + 6 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 50 kHz)	1 mV to 33 mV	1 000 μV/V + 6 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 50 kHz to 100 kHz)	1 mV to 33 mV	3 500 μV/V + 12 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 100 kHz to 500 kHz)	1 mV to 33 mV	$8\ 000\ \mu V/V + 50\ \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 45 Hz)	33 mV to 330 mV	$300 \mu V/V + 8 \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 10 kHz)	33 mV to 330 mV	$145 \mu V/V + 8 \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 kHz to 20 kHz)	33 mV to 330 mV	$160 \mu V/V + 8 \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 50 kHz)	33 mV to 330 mV	$350 \mu V/V + 8 \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 50 kHz to 100 kHz)	33 mV to 330 mV	800 μV/V + 32 μV	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 100 kHz to 500 kHz)	33 mV to 330 mV	$2\ 000\ \mu V/V + 70\ \mu V$	Fluke 5520A/SC600	Euramet-cg-7	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 45 Hz)	0.33 V to 3.3 V	$300 \mu V/V + 50 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 10 kHz)	0.33 V to 3.3 V	$150 \mu V/V + 60 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O





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Electrical	Equipment to Measure AC Voltage (@ 10 kHz to 20 kHz)	0.33 V to 3.3 V	190 μV/V + 60 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 50 kHz)	0.33 V to 3.3 V	$300 \mu V/V + 50 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 50 kHz to 100 kHz)	0.33 V to 3.3 V	700 μV/V + 125 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 100 kHz to 500 kHz)	0.33 V to 3.3 V	2 400 μV/V + 600 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 45 Hz)	3.3 V to 33 V	300 μV/V + 650 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 10 kHz)	3.3 V to 33 V	$150 \mu V/V + 600 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 kHz to 20 kHz)	3.3 V to 33 V	240 μV/V + 600 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 50 kHz)	3.3 V to 33 V	$350 \mu V/V + 600 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 50 kHz to 100 kHz)	3.3 V to 33 V	900 μV/V + 1 600 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O





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Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 1 kHz)	33 V to 330 V	190 μV/V + 2 000 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 10 kHz)	33 V to 330 V	$200 \mu V/V + 6 000 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 kHz to 20 kHz)	33 V to 330 V	250 μV/V + 6 000 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 20 kHz to 50 kHz)	33 V to 330 V	$300 \mu V/V + 6000 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 50 kHz to 100 kHz)	33 V to 330 V	2 000 μV/V + 50 000 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 45 Hz to 1 kHz)	330 V to 1 020 V	$300 \mu V/V + 10 000 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 1 kHz to 5 kHz)	330 V to 1 020 V	250 μV/V + 10 000 μV	Fluke 5520A/SC600	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 5 kHz to 10 kHz)	330 V to 1 020 V	$300 \mu V/V + 10 000 \mu V$	Fluke 5520A/SC600	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage	140 μV to 200 mV	$160 \mu V/V + 14 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	(@ 1 Hz to 10 Hz)					
Electrical	Equipment to Output	120 μV to 200 mV	$130 \mu V/V + 4 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 10 Hz to 40 Hz)					
Electrical	Equipment to Output	80 μV to 200 mV	$110 \mu V/V + 4 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 40 Hz to 100 Hz)					
Electrical	Equipment to Output	70 μV to 200 mV	$105 \mu V/V + 2 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 100 Hz to 2 kHz)					
Electrical	Equipment to Output	75 μV to 200 mV	$105 \mu V/V + 4 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage	A				
	(@ 2 kHz to 10 kHz)	A				
Electrical	Equipment to Output	210 μV to 200 mV	$305 \mu V/V + 8 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage		9			
	(@ 10 kHz to 30 kHz)	A				
Electrical	Equipment to Output	500 μV to 200 mV	$705 \mu V/V + 20 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 30 kHz to 100 kHz)					





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Electrical	Equipment to Output AC Voltage (@ 1 Hz to 10 Hz)	200 mV to 2 V	140 μV/V + 1 200 μV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 40 Hz)	200 mV to 2 V	$105 \mu V/V + 20 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	200 mV to 2 V	$85 \mu V/V + 20 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 Hz to 2 kHz)	200 mV to 2 V	65 μV/V + 20 μV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 2 kHz to 10 kHz)	200 mV to 2 V	$85 \mu V/V + 20 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	200 mV to 2 V	$205 \mu\text{V/V} + 40 \mu\text{V}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 30 kHz to 100 kHz)	200 mV to 2 V	$505 \mu V/V + 200 \mu V$	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 100 kHz to 300 kHz)	200 mV to 2 V	$3\ 000\ \mu V/V + 2\ mV$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 300 kHz to1 MHz)	200 mV to 2 V	1 000 μV/V + 20 mV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 Hz to 10 Hz)	2 V to 20 V	$140 \mu\text{V/V} + 1200 \mu\text{V}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 40 Hz)	2 V to 20 V	$105~\mu\text{V/V} + 200~\mu\text{V}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	2 V to 20 V	85 μV/V + 200 μV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 Hz to 2 kHz)	2 V to 20 V	$65 \mu V/V + 200 \mu V$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 2 kHz to 10 kHz)	2 V to 20 V	$85~\mu\text{V/V} + 200~\mu\text{V}$	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	2 V to 20 V	205 μV/V + 400 μV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 30 kHz to 100 kHz)	2 V to 20 V	505 μV/V + 2 000 μV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 kHz to 300 kHz)	2 V to 20 V	3 000 μV/V + 20 mV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 300 kHz to1 MHz)	2 V to 20 V	1 000 μV/V + 200 mV	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 Hz to 10 Hz)	20 V to 200 V	$140 \mu V/V + 12 mV$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 40 Hz)	20 V to 200 V	$105 \mu V/V + 2 mV$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 100 Hz)	20 V to 200 V	$85 \mu V/V + 2 mV$	Fluke 8508A	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage	20 V to 200 V	$65 \mu V/V + 2 mV$	Fluke 8508A	Euramet-cg-15	F, O
	(@ 100 Hz to 2 kHz)					
Electrical	Equipment to Output	20 V to 200 V	$85 \mu V/V + 2 mV$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 2 kHz to 10 kHz)					
Electrical	Equipment to Output	20 V to 200 V	$205 \mu V/V + 4 mV$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 10 kHz to 30 kHz)					
Electrical	Equipment to Output	20 V to 200 V	$505 \mu\text{V/V} + 20 \text{mV}$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 30 kHz to 100 kHz)	<u> </u>				
Electrical	Equipment to Output	20 V to 200 V	$3~000~\mu V/V + 200~mV$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 100 kHz to 300 kHz)	<u> </u>				
Electrical	Equipment to Output	20 V to 200 V	$1\ 000\ \mu V/V + 2\ V$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage		9			
	(@ 300 kHz to1 MHz)	A				
Electrical	Equipment to Output	200 V to 1 000 V	$140 \ \mu V/V + 70 \ mV$	Fluke 8508A	Euramet-cg-15	F, O
	AC Voltage					
	(@ 1 Hz to 10 Hz)					





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Electrical	Equipment to Output AC Voltage (@ 10 Hz to 40 Hz)	200 V to 1 000 V	$110 \ \mu\text{V/V} + 20 \ \text{mV}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 40 Hz to 10 kHz)	200 V to 1 000 V	$95 \mu V/V + 20 mV$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	200 V to 1 000 V	$205~\mu\text{V/V} + 40~\text{mV}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 30 kHz to 100 kHz)	200 V to 1 000 V	$510 \mu\text{V/V} + 200 \text{mV}$	Fluke 8508A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	100 mΩ to 4.99 Ω	$3~000~\mu\Omega/\Omega + 25~m\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	5 Ω to 29.9 Ω	$2~000~\mu\Omega/\Omega + 25~m\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	30 Ω to 199.9 Ω	$2~000~\mu\Omega/\Omega + 25~m\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	200 Ω to 499 Ω	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	500 Ω to 1.999 kΩ	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O





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Electrical	Equipment to Measure Low Resistance	$2 \text{ k}\Omega$ to $4.99 \text{ k}\Omega$	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	$5 \text{ k}\Omega \text{ to } 10 \text{ k}\Omega$	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	100 kΩ to 199.99 kΩ	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	200 kΩ to 999.9 MΩ	$2~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	$1~\mathrm{M}\Omega$ to $9.999~\mathrm{M}\Omega$	$3~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	10 MΩ to 99.99 MΩ	5 000 μΩ/Ω	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	100 MΩ to 999.9 MΩ	$10~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure Low Resistance	$1~\mathrm{G}\Omega$ to $10~\mathrm{G}\Omega$	$30~000~\mu\Omega/\Omega$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 400 Hz)	3 V to 29.99 V	1 000 μV/V + 9 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 400 Hz)	30 V to 99.99 V	1 000 μV/V + 30 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 400 Hz)	100 V to 299.9 V	1 000 μV/V + 90 mV	Fluke 5320A	Euramet-cg-15	F, O





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Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 400 Hz)	300 V to 600 V	1 000 μV/V + 180 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	3 V to 29.99 V	$1\ 000\ \mu V/V + 9\ mV$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	30 V to 149.9 V	$1\ 000\ \mu V/V + 45\ mV$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure DC Voltage	150 V to 600 V	$1\ 000\ \mu V/V + 180\ mV$	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC Voltage (@ 40 Hz to 400 Hz)	0.1 V to 10 V	1 500 μV/V + 5 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC Voltage (@ 40 Hz to 400 Hz)	10 V to 100 V	2 000 μV/V + 50 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC Voltage (@ 40 Hz to 400 Hz)	100 V to 1 100 V	2 000 μV/V + 550 mV	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC Current (@ 20 Hz to 400 Hz)	5 mA to 300 mA	1 500 μA/A + 0.15 mA	Fluke 5320A	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Measure AC/DC Current (20 Hz to 400 Hz)	300 mA to 3A	1 500 μA/A + 1.5 mA	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Equipment to Measure AC/DC Current (20 Hz to 400 Hz)	3A to 30 A	1 500 μA/A + 15 mA	Fluke 5320A	Euramet-cg-15	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type B	600 °C to 800 °C	0.44 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type B	800 °C to 1 000 °C	0.34 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type B	1 000 °C to 1 050 °C	0.3 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type B	1 050 °C to 1 820 °C	0.33 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type C	0 °C to 150 °C	0.23 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type C	150 °C to 650 °C	0.19 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type C	650 °C to 1 000 °C	0.23 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type C	1 000 °C to 1 800 °C	0.38 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type C	1 800 °C to 2 316 °C	0.63 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-196 °C to 100 °C	0.38 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-100 °C to -25 °C	0.12 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-25 °C to 350 °C	0.1 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	350 °C to 650 °C	0.12 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	650 °C to 1 000 °C	0.16 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-100 °C to -30 °C	0.12 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-30 °C to 150 °C	0.1 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	150 °C to 760 °C	0.13 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	760 °C to 1 200 °C	0.18 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-100 °C to -25 °C	0.14 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	-25 °C to 120 °C	0.12 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	120 °C to 1 000 °C	0.19 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type E	1 000 °C to 1 372 °C	0.3 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type L	-196 °C to -100 °C	0.37 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type L	-100 °C to 800 °C	0.26 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type L	800 °C to 900 °C	0.17 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type N	-196 °C to -100 °C	0.3 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type N	-100 °C to -25 °C	0.17 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type N	-25 °C to 120 °C	0.15 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type N	120 °C to 410 °C	0.14 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type N	410 °C to 1 300 °C	0.21 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type R	0 °C to 250 °C	0.48 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type R	250 °C to 400 °C	0.28 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type R	400 °C to 1 000 °C	0.26 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type R	1 000 °C to 1 767 °C	0.3 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type S	0 °C to 250 °C	0.47 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type S	250 °C to 1 000 °C	0.3 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type S	1 000 °C to 1 400 °C	0.28 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type S	1 400 °C to 1 767 °C	0.34 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type T	-196 °C to -150 °C	0.63 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type T	-150 °C to 0 °C	0.24 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type T	0 °C to 120 °C	0.16 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type T	120 °C to 400 °C	0.14 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	-196 °C to 0 °C	0.56 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	0 °C to 600 °C	0.27 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	0 °C to 100 °C	0.07 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	100 °C to 300 °C	0.09 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	300 °C to 400 °C	0.1 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	400 °C to 630 °C	0.12 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with Thermocouple Type U	630 °C to 800 °C	0.23 °C	Electrical Simulation of Thermocouple Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	-196 °C to -80 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	-80 °C to 0 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	0 °C to 100 °C	0.07 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	100 °C to 300 °C	0.09 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	300 °C to 400 °C	0.1 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3926, 100 Ω	400 °C to 630 °C	0.12 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	-196 °C to -190 °C	0.25 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	-190 °C to -80 °C	0.04 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	-80 °C to 0 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	0 °C to 100 °C	0.06 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	100 °C to 260 °C	0.07 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	260 °C to 300 °C	0.12 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	300 °C to 400 °C	0.13 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	400 °C to 600 °C	0.14 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 3916, 100 Ω	600 °C to 630 °C	0.16 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	-196 °C to -80 °C	0.04 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	-80 °C to 0 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	0 °C to 100 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	100 °C to 260 °C	0.06 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	260 °C to 300 °C	0.08 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





## Metrología Aplicada y Servicios S. de R.L. de C.V.

Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	300 °C to 400 °C	0.08 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	400 °C to 600 °C	0.09 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 500 Ω	600 °C to 630 °C	0.11 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 Ω	-196 °C to -80 °C	0.03 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 Ω	-80 °C to 0 °C	0.03 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 $\Omega$	0 °C to 100 °C	0.04 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 Ω	100 °C to 260 °C	0.05 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 Ω	260 °C to 300 °C	0.06 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Type Pt 385, 1 000 Ω	300 °C to 400 °C	0.07 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used With RTD Pt Ni 385, 120 Ω (Ni 120)	-80 °C to 0 °C	0.08 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used With RTD Pt Ni 385, 120 Ω (Ni 120)	0 °C to 100 °C	0.08 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Temperature Calibration, Indication and Control Equipment Used With RTD Pt Ni 385, 120 Ω (Ni 120)	100 °C to 260 °C	0.14 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication and Control Equipment Used with RTD Cu 427, $10 \Omega$	-100 °C to 260 °C	0.1 °C	Electrical Simulation of RTD Output Fluke 5520A/SC600	Euramet-cg-11	F, O
Electrical	Equipment to Output DC Voltage	Up to 330 mV	$16 \mu V/V + 780 \mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Voltage	330 mV to 3.3 V	$8.5 \mu V/V + 1.6 \mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Voltage	3.3 V to 33 V	$9.3 \mu V/V + 16 \mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Voltage	33 V to 330 V	14 μV/V + 120 μV 14	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Voltage	100 V to 1.02 kV	$14 \mu\text{V/V} + 1.2 \text{mV}$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	Up to 320 μA	0.038 μΑ/Α + 16 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	320 μA to 3.2 mA	78 μΑ/Α + 39 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	3.2 mA to 32 mA	78 μΑ/Α + 190 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	32 mA to 320 mA	78 μΑ/Α + 1.9 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	320 mA to 1.1 A	150 μΑ/Α + 31 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	1.1 A to 2.9 A	290 μΑ/Α + 31 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output DC Current	2.9 A to 11A	$390 \mu A/A + 390 \mu A$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output DC Current	11 A to 20.5 A	780 μΑ/Α + 580 μΑ	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	0 Ω to 11 Ω	$31 \mu\Omega/\Omega + 78 \mu\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	11 Ω to 33 Ω	$23 \mu\Omega/\Omega + 1.2 m\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	33 Ω to 110 Ω	$22 \mu\Omega/\Omega + 1.1 m\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	110 Ω to 330 Ω	$22 \mu\Omega/\Omega + 1.6 \mathrm{m}\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$330 \Omega$ to $1.1 \text{ k}\Omega$	$22 \mu\Omega/\Omega + 1.6 m\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$1.1 \text{ k}\Omega$ to $3.3 \text{ k}\Omega$	$22 \mu\Omega/\Omega + 16 \mathrm{m}\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$3.3 \text{ k}\Omega$ to $11 \text{ k}\Omega$	$22 \mu\Omega/\Omega + 16 m\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	11 kΩ to 33 kΩ	$22 \mu\Omega/\Omega + 160 \text{ m}\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$33 \text{ k}\Omega$ to $110 \text{ k}\Omega$	$22 \mu\Omega/\Omega + 160 \text{ m}\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	110 kΩ to 330 kΩ	$25 \mu\Omega/\Omega + 1.6 \Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$330~\mathrm{k}\Omega$ to $1.1~\mathrm{M}\Omega$	$25 \mu\Omega/\Omega + 1.6 \Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output Resistance	$1.1 \text{ M}\Omega$ to $3.3 \text{ M}\Omega$	$47 \mu\Omega/\Omega + 23 \Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$3.3~\mathrm{M}\Omega$ to $11~\mathrm{M}\Omega$	$100 \ \mu\Omega/\Omega + 39 \ \Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$11 \text{ k}\Omega$ to $33 \text{ k}\Omega$	$190~\mu\Omega/\Omega + 1.9~k\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$33 \text{ k}\Omega$ to $110 \text{ k}\Omega$	$390 \mu\Omega/\Omega + 2.3 k\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$110 \text{ k}\Omega \text{ to } 330 \text{ k}\Omega$	$230 \ \mu\Omega/\Omega + 78 \ k\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Resistance	$330 \text{ k}\Omega$ to $1\ 100 \text{ M}\Omega$	$1.2 \mu\Omega/\Omega + 390 \mathrm{k}\Omega$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 45 Hz)	1 mV to 33 mV	0.062 % of reading + 4.7 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 10 kHz)	1 mV to 33 mV	0.012 % of reading + 4.7 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 20 kHz)	1 mV to 33 mV	0.016 % of reading + 4.7 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 kHz to 50 kHz)	1 mV to 33 mV	$0.078~\%$ of reading + 4.7 $\mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 50 kHz to 100 kHz)	1 mV to 33 mV	2.7 % of reading + 9.3 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output AC Voltage (@ 100 kHz to 500 kHz)	1 mV to 33 mV	0.62 % of reading + 39 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 45 Hz)	33 mV to 330 mV	0.023 % of reading + 6.2 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 10 kHz)	33 mV to 330 mV	0.011 % of reading + 6.2 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 20 kHz)	33 mV to 330 mV	0.012 % of reading + 6.2 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 kHz to 50 kHz)	33 mV to 330 mV	0.027 % of reading + 6.2 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 50 kHz to 100 kHz)	33 mV to 330 mV	0.062 % of reading + 25 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 kHz to 500 kHz)	33 mV to 330 mV	0.15 % of reading + 54 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 45 Hz)	0.33 V to 3.3 V	$0.023~\%$ of reading + $39~\mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 10 kHz)	0.33 V to 3.3 V	0.011 % of reading + 47 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 20 kHz)	0.33 V to 3.3 V	0.015 % of reading + 47 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 kHz to 50 kHz)	0.33 V to 3.3 V	0.023 % of reading + 39 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 50 kHz to 100 kHz)	0.33 V to 3.3 V	0.054 % of reading + 97 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 kHz to 500 kHz)	0.33 V to 3.3 V	0.18 % of reading + 470 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 45 Hz)	3.3 V to 33 V	0.023 % of reading + 500 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 10 kHz)	3.3 V to 33 V	0.012 % of reading + 470 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 20 kHz)	3.3 V to 33 V	0.019 % of reading + 470 μV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 kHz to 50 kHz)	3.3 V to 33 V	$0.027~\%$ of reading + 470 $\mu V$	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 50 kHz to 100 kHz)	3.3 V to 33 V	0.07 % of reading + 1.2 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 10 Hz to 45 Hz)	33 V to 330 V	0.015 % of reading + 1.6 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 10 kHz)	33 V to 330 V	0.016 % of reading + 4.7 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 20 kHz)	33 V to 330 V	0.019 % of reading + 4.7 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 kHz to 50 kHz)	33 V to 330 V	0.023 % of reading + 4.7 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 50 kHz to 100 kHz)	33 V to 330 V	0.16 % of reading + 39 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 kHz to 1 kHz)	330 V to 1 020 V	0.023 % of reading + 7.8 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	330 V to 1 020 V	0.019 % of reading + 7.8 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	330 V to 1 020 V	0.023 % of reading + 7.8 mV	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	29 μA to 330 μA	0.16 % of reading + 78 nA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 20 Hz to 45 Hz)	29 μΑ to 330 μΑ	0.12 % of reading + 78 nA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	29 μΑ to 330 μΑ	0.1 % of reading + 78 nA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	29 μΑ to 330 μΑ	0.23 % of reading + 0.12 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	29 μΑ to 330 μΑ	0.62 % of reading + 0.16 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	29 μΑ to 330 μΑ	1.3 % of reading + 0.31 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	0.33 mA to 3.3 mA	0.16 % of reading + 0.12 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 Hz to 45 Hz)	0.33 mA to 3.3 mA	0.1 % of reading + 0.12 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	0.33 mA to 3.3 mA	0.075 % of reading + 0.12 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	0.33 mA to 3.3 mA	0.16 % of reading + 0.16 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	0.33 mA to 3.3 mA	0.39 % of reading + 0.23 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	0.33 mA to 3.3 mA	0.77 % of reading + 0.47 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	3.3 mA to 33 mA	0.14 % of reading + 1.6 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 20 Hz to 45 Hz)	3.3 mA to 33 mA	0.07 % of reading + 1.6 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	3.3 mA to 33 mA	0.03 % of reading + 1.6 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	3.3 mA to 33 mA	0.06 % of reading + 1.6 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	3.3 mA to 33 mA	0.16 % of reading + 2.3 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	3.3 mA to 33 mA	0.31 % of reading + 3.1 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	33 mA to 330 mA	0.14 % of reading + 16 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Ramón Rayón # 1520, Int-9 Pino Seco/Lote Bravo Ciudad Juárez, Chihuahua, México. C.P. 32550 Contact Name: Carlos Valenzuela Phone: 656-617-6617

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Electrical	Equipment to Output AC Voltage (@ 20 Hz to 45 Hz)	33 mA to 330 mA	0.07 % of reading + 16 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	33 mA to 330 mA	0.03 % of reading + 16 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	33 mA to 330 mA	0.08 % of reading + 39 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	33 mA to 330 mA	0.16 % of reading + 78 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 kHz to 30 kHz)	33 mA to 330 mA	0.31 % of reading + 160 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	0.33 A to 1.1 A	0.14 % of reading + 78 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	0.33 A to 1.1 A	0.039 % of reading + 78 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	0.33 A to 1.1 A	0.47 % of reading + 780 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	0.33 A to 1.1 A	1.9 % of reading + 3.9 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 10 Hz to 20 Hz)	1.1 A to 3 A	0.14 % of reading + 78 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 1 kHz)	1.1 A to 3 A	0.05 % of reading + 78 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	1.1 A to 3 A	0.47 % of reading + 780 μA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 5 kHz to 10 kHz)	1.1 A to 3 A	1.9 % of reading + 3.9 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 100 Hz)	3 A to 11 A	0.047 % of reading + 1.5 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 Hz to 1 kHz)	3 A to 11 A	0.078 % of reading + 1.5 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	3 A to 11 A	2.3 % of reading + 1.5 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 45 Hz to 100 Hz)	11 A to 20.5 A	0.09 % of reading + 3.9 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output AC Voltage (@ 100 Hz to 1 kHz)	11 A to 20.5 A	0.12 % of reading + 3.9 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output AC Voltage (@ 1 kHz to 5 kHz)	11 A to 20.5 A	2.3 % of reading + 3.9 mA	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	220 pF to 399.9 pF	0.39 % of reading + 7.8 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	0.4 nF to 1.1 nF	0.39 % of reading + 7.8 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	1.1 nF to 3.3 nF	0.39 % of reading + 7.8 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	3.3 nF to 11 nF	0.19 % of reading + 7.8 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	11 nF to 33nF	0.19 % of reading + 78 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	33 nF to 110 nF	0.19 % of reading + 78 pF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	110 nF to 330 nF	0.19 % of reading + 0.23 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	0.33 μF to 1.1 μF	0.19 % of reading + 0.78 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	1.1 μF to 3.3 μF	0.19 % of reading + 2.3 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	3.3 μF to 11 μF	0.19 % of reading + 7.8 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	11 μF to 33 μF	0.31 % of reading + 23 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	33 μF to 110μF	0.35 % of reading + 78 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O





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Electrical	Equipment to Output Capacitance	110 μF to 330 μF	0.35 % of reading + 230 nF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	0.33 mF to 1.1 mF	0.35 % of reading + 0.78 μF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	1.1 mF to 3.3 mF	0.35 % of reading + 2.3 μF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	3.3 mF to 11 mF	0.35 % of reading + 7.8 μF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	11 mF to 33mF	0.35 % of reading + 23 μF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Equipment to Output Capacitance	33 mF to 110 mF	0.85 % of reading + 78 μF	Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type J	-210 °C to -100 °C	0.27 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type J	-100 °C to -30 °C	0.16 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-15	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type J	-30 °C to 150 °C	0.14 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type J	150 °C to 760 °C	0.17 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O





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Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type J	760 °C to 1 200 °C	0.23 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type K	-200 °C to -100 °C	0.33 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type K	-100 °C to -25 °C	0.18 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type K	-25 °C to 120 °C	0.16 ℃	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type K	120 °C to 1 000 °C	0.26 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type K	1 000 °C to 1 372 °C	0.4 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type T	-250 °C to -150 °C	0.63 ℃	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O





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Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type T	-150 °C to 0 °C	0.24 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type T	0 °C to 120 °C	0.16 ℃	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Temperature Calibration Indication, and Control Equipment used with Thermocouple Type T	120 °C to 400 °C	0.14 °C	Electrical Simulation of Thermocouple Output Fluke 5522A Multiproduct Calibrator	Euramet-cg-11	F, O
Electrical	Electrical Simulation Frequency	0.01 Hz to 2 MHz	1.9 μHz/Hz + 3.9 μHz	Fluke 5522A	T.O. 33K4-4-20-1	F, O

- 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.





#### Metrología Aplicada y Servicios S. de R.L. de C.V.

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

3. Location of activity:

Location	Location				
Code					
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 L represents length in inches or millimeters as appropriate to the uncertainty statement.
- 6. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.
- 7. This is the primary site for all quality management system activities.