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S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Permanent Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Active Power/Energy (AC) Range: (30(P-N) V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh to (300 V(P-N), 200 A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh	ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30(P-N) V to 300 (P-N) V	0.042 % to 0.008 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (30 V, 0.001A, 50 Hz) VA/VAh to (300 V, 200 A, 50 Hz) VA/VAh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Power Factor/phase angle (AC) Range: (0.1 Lag/Lead (30 V, 0.01A) / 360° , 40-70 Hz) PF/Degree to (0.1lag to 0.1 lead (300 V, 120 A) / 0°, 40-70 Hz) PF/Degree	RADIAN RS-933, RADIAN RD-22 ZERA Com3003, MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	0.1 Lag to 0.1 lead	0.01%
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Reactive Power/Energy (AC) Range: (30 V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh to (300 V, 120 A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Active Power (AC Power) Range: (10 V, 0.05 A, 0.01lag to 0.01lead, 50 Hz) W to (575 V, 30 A, 0.01lag to 0.01lead, 50 Hz) W	Precision Power Analyzer Yokogawa By Direct/Comparison Method	10 V, 0.05 A to 575 V, 30 A, 0.01 Lag to 0.01 Lead	2.6 % to 0.05 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Active Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120(P-N) V, 0.001A, 0.5la W to 480 V(P-N), 200 A, 0.5lag W/Wh	0.008 % to 0.006 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Apparent Power (AC Power)	Precision Power Analyzer Yokogawa By Direct/Comparison Method	(10 V, 0.05 A, 50 Hz) VA to (575 V, 30 A, 50 Hz) VA	0.12 % to 0.05 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Apparent Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120 V, 0.001A, 50 Hz VA to 480 V, 200 A, 50 Hz VA/Vah	0.008 % to 0.006 %

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9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Power Factor/phase angle (AC Power) Range:(0.01 Lag/Lead (10 V, 0.05 A) / 360° , 50 Hz) PF / Degree to (Unity (575 V, 30 A) / 0°, 50 Hz) PF / Degree	Precision Power Analyzer Yokogawa By Direct/Comparison Method	0.01 Lag to 0.01 lead 0° to 360° (10 V, 0.05 A to 575V, 30 A)	4.1 % to 0.05 %
10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Reactive Power (AC Power) Range: (10 V, 0.05A, 0.01lag to 0.01lead, 50 Hz) VAR to (575 V, 20 A, 0.01lag to 0.01lead, 50 Hz) VAR	Precision Power Analyzer Yokogawa By Direct/Comparison Method	10 V, 0.05 A to 575 V, 20 A 0.01 Lag to 0.01 Lead	0.82 % to 0.11 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Reactive Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120 V, 0.001A, 0.5lag -UP VAR to 480 V, 200 A, 0.5lag -UPF VAR/VARh	0.008 % to 0.006 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	3Ø Active Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120(P-N) V, 0.001A, 0.5la W to 480 V(P-N), 200 A, 0.5lag W/Wh	0.008%

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13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	3Ø Apparent Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120 V, 0.001A, 50 Hz VA to 480 V, 200 A, 50 Hz VA/Vah	0.008%
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	3Ø Reactive Power/Energy (AC)	RADIAN RS-933 with RADIAN RD-22 By Direct/Comparison Method	120 V, 0.001A, 0.5lag -UP VAR to 480 V, 200 A, 0.5lag -UPF VAR/VARh	0.008%

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15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 µA to 2 A, 50Hz to 5kHz	0.18 % to 0.03 %

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16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	2 A to 20 A, @50 Hz to 1k Hz	0.03 % to 0.02 %

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17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	20 A@ 50 Hz to 30 A@ 50 Hz	0.02 % to 0.03 %

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18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	30 A@ 50 Hz to 10000 A@ 50 Hz	0.03 % to 0.5 %

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19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 mV to 200 V, 10 Hz to 100k Hz	0.12 % to 0.022 %

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20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 mV@ 50 Hz to 1000 V@50 Hz	0.1 % to 0.004 %

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21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	200 V to 1000 V, 50 Hz to 1k Hz	0.01 % to 0.005 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1kHz	Precision LCR Meter Quadtech 7600 Plus By Direct/Comparison Method	100 pF to 1 mF	0.2 % to 1.2 %
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics	Precision Power Analyzer Yokogawa 760303 By Direct/Comparison Method	1st order (0 to 10 A) to 41th order (0 to 10 A)	0.2%

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24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics	Precision Power Analyzer Yokogawa 760303 By Direct/Comparison Method	1st order (0 to 500 V) to 41th order (0 to 500 V)	0.2%
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Inductance	Precision LCR Meter Quadtech 7600 Plus By Direct/Comparison Method	100 µH to 10 H @ 1kHz	0.4 % to 0.2 %
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø & 3Ø Reactive Power (AC Power) Range: (10 V, 0.05A, 0.01lag to 0.01lead) VAR to (575 V, 20 A, 0.01lag to 0.01lead) VAR	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	(10 V,0.05 A) to (575 V, 20 A) 0.01 Lag to 0.01 Lead	0.03 % to 0.9 %
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Active Power (AC Power) Range:(10 V, 0.01A, 0.01lag to 0.01lead) W to (575 V, 1000 A, 0.01lag to 0.01lead) W	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils By Direct Method	(10 V, 0.01A) to (575 V,1000 A) 0.01 Lag to 0.01 Lead	0.02 % to 0.8 %
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Apparent Power (AC Power)	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	(10 V, 0.01A) VA to (575 V, 80 A) VA	0.02 % to 0.6 %

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29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Power Factor/phase angle (AC Power) Range:(0.01 Lag/Lead (10 V, 0.01A) / 360°) PF / Degree to (Unity (575 V, 1000 A) / 0°) PF / Degree	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	0.01 Lag to 0.01 Lag	0.02 % to 0.8 %
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	10 mA @ 50 Hz to 80 A @ 50 Hz	0.02%
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	3 A to 20 A. 50 Hz to 1k Hz	0.04 % to 0.1 %

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32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	30 µA @ 50 Hz to 10 mA @ 50 Hz	0.6 % to 0.03 %
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	30 uA to 300m A @ 50 Hz to5k Hz	0.6 % to 0.14 %

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34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	300 mA to 3 A, 50 Hz to 5k Hz	0.05 % to 0.17 %
35	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	80 A @ 50 Hz to 1000 A @ 50 Hz	0.02 % to 0.24 %
36	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10 mV to 200 V, 20 Hz to 100k Hz	0.49 % to 0.04 %

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37	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	100 V to 1000 V, 20 Hz to 10k Hz	0.04 % to 0.06 %
38	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10mV @ 50 Hz to 575 V @ 50 Hz	0.05 % to 0.01 %
39	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	575 V @ 50 Hz to 1000 V @ 50 Hz	0.01 % to 0.03 %

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40	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance (@1kHz upto 100nF, 100Hz from 1uF to 100uF)	Using Multi Product Calibrator Fluke By Direct Method	1 nF to 100 µF	2.9 % to 0.6 %
41	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils by direct method	1st order (0 to 10 A) to 41th order (0 to 10 A)	0.1%
42	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A By Direct Method	1st order (0 to 500 V) to 41th order (0 to 500 V)	0.1%

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43	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils by direct method	1st order (10 A to 500 A) to 41th order (10 A to 500 A)	0.1 % to 0.3 %
44	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance	Decade Inductance Box dot tech, By Direct Method	100 µH to 10 H @ 1kHz	0.46 % to 6.11 %
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Standard resistors Ohms Lab, Tettex, Yokogawa, By Direct/Comparison Method	1 µA to 20 A	0.03 % to 0.003 %

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46	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Standard resistors Ohms Lab, Tettex, Yokogawa, By Direct/Comparison Method	20 A to 200 A	0.003 % to 0.2 %
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Power	Precision Power Analyzer Yokogawa By Direct/Comparison Method	(1.5 V, 0.05 A) W to (1000 V, 20 A) W	0.27%

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48	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	1 mV to 1000 V	0.02 % to 0.001 %

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49	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Standard resistors Ohms Lab, Tettex,Yokogawa, High Resistance Meter By Direct/Comparison Method	1 Ohm to 80 T ohm	0.002 % to 3.07 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Standard resistors Ohms Lab, Tettex, Yokogawa By Direct/Comparison Method	10 µOhm to 1 Ohm	0.3 % to 0.002 %

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51	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	1 µA to 320 mA	0.5 % to 0.03 %
52	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	20 A to 1000 A	0.1 % to 0.3 %

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53	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	320 mA to 20 A	0.03 % to 0.1 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100 By Direct Method	(100m V, 100m A) W to (1000 V, 20 A) W	0.7 % to 0.1 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	1 mV to 1000 V	0.17 % to 0.002 %

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56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 m-ohm	0.02%
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 ohm	0.02%

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58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 ohm to 100 M ohm	0.01 % to 0.2 %
59	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	10 µohm to	0.3%

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60	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	10 m-ohm	0.02%
61	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 µohm	0.02%

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62	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 M ohm to 80 T ohm	0.2 % to 3.1 %
63	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 m-ohm	0.02%

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64	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Active Power/Energy (AC) Range: (30(P-N) V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh to (300 V(P-N), 200 A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30(P-N) V to 300 (P-N) V	0.042 % to 0.008 %
65	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (30 V, 0.001A, 40-70 Hz) VA/VAh to (300 V, 200 A, 40-70 Hz) VA/VAh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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66	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Reactive Power/Energy (AC) Range: (30 V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh to (300 V, 200 A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %
67	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	AC HIGH VOLTAGE	Using Universal Voltage Divider,HV Divider (Haefely,Hiportonics, Highvolt & Phenix), By Comparision Method	1 kV to 200 kV	1.2%
68	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Capacitance & Tan delta	Using C & Tan delta Bridge by direct measurement of standard capacitor	10, 100 pF, tan delta 1 x V to 10000,100 pF,3.5 kV	0.15,1.4 x 10e -4%
69	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Capacitance & Tan delta	Using C & Tan delta Bridge by comparison method	10,100 pF, tan delta 1 x V to 10000, 100 pF, 3.5 kV	0.13, 5.6 x 10e -5 %

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70	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics,Highvolt & Phenix,Haefely), By Comparision method	1 kV to 40 kV	1.10%
71	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics,Highvolt & Phenix,Haefely), By Comparision method	41 kV to 60 kV	1.83%
72	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics, Highvolt & Phenix,Haefely), By Comparision method:	61 kV to 100 kV	2.60 %
73	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	400 Vp to 1250 Vp	-1.12 % to 1.12 %

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74	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	80 Vp to 1600 Vp	0.66%
75	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	80 Vp to 1600 Vp	0.72%
76	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Partial Discharge Calibrator	Using Oscilloscope with resistor as per IEC:60270	5 pC to 10 nC	3%

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77	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Power Factor/phase angle (AC) Range: (0.1 Lag/Lead (30 V, 0.01A) / 360° , 40-70 Hz) PF/Degree to (0.1lag to 0.1 lead (300 V, 200 A) / 0°, 40-70 Hz) PF/Degree	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	0.1 lag to 0.1 lead	0.01%
78	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	CT mode: 1 A (Sec) to CT mode: 5 A (Sec)	0.015 % in RE,0.72min in PAE
79	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	PT mode: 110/3 V (Sec) to PT mode: 110 V (Sec)	0.011 % in RE,0.37min in PAE
80	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	2.5/1-5 A to 3200/1-5 A	0.013 % in RE,0.77min in PAE

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81	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	3200/1-5 A to 6300/1-5 A	0.019 % in RE,1.31min. in PAE
82	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	6300/1-5 A to 20000/1-5 A	0.025 % in RE,2.40min in PAE
83	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Voltage Transformer	STD PT Make: Zera,Prgati Electricals & Moonlight Elec., EPRO CTPT bridge Make: Tettex/Eltel Using potential transformer comparison method And using Portable injection kit.	Pri/sec:110V/Rt3/110 /3 V to Pri/sec:220kV/Rt3/11 0 V	0.028 % in RE,1.32min in PAE
84	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Turns Ratio/Ratio Meter	STD PT Make: Zera and EPRO, Direct method	1 RE in % to 2000 RE in %	0.026% in RE

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85	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	VOLTAGE DIVIDER	Voltage Divider (Haefely), By Comparision Method	0 to 300 kVp	1.56%
86	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	VOLTAGE DIVIDER	Using Universal Voltage Divider (Highvolt), By Comparision Method	0 to 500 kVp	1.56%
87	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	1 nS to 5 S	0.45%
88	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	10 mV AC to 100 V AC	0.5%
89	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	10 mV DC to 100 V DC	0.3%
90	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	40 Hz to 1.1 GHz	0.5 % to 13.1 %

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91	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Sweep Frequency Response Analyser	Performance Verification Cell Doble By Direct Method	0, -40db, -60db,10 kHz	1.76db
92	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Temperature (RTD)	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A, Digital Precision Thermometer Cropico By Direct/Comparison Method	-200 °C to 800 °C	0.02°C
93	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Temperature (Thermocouple)	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A, Digital Precision Thermometer Cropico By Direct/Comparison Method	-100 °C to 1300 °C	0.14°C
94	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT-100)	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	-200 °C to 800 °C	0.07°C

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95	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	-100 °C to 1300 °C	0.13°C
96	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Reference Multimeter Fluke 8508/6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 Hz to 1 MHz	0.008 % to 0.001 %
97	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time/Period	Digital Oscilloscope Yokogawa 710120 By Direct/Comparison Method	1 ms to 45 s	0.5%

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98	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time/Period	Time Interval Meter ADI By Direct/Comparison Method	10 s to 90000 s	0.2 % to 0.05 %
99	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Counter	Universal Calibration System Fluke, Multi Product Calibrator Fluke, Time Interval meter ADI By Direct Method	100 counts to 999999 counts	0.7 % to 0.08 %
100	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10 Hz to 1 M Hz	0.006 % to 0.001 %
101	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.5 µSec	2.57%

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102	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec	1.89%
103	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec to 60 µSec	2.3%
104	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec to 60 µSec.	2.23%
105	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	4000 µSec	2.16%

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106	FLUID FLOW-FLOW MEASURING DEVICES	Flow/ Flow meter (Flow Measuring Devices)	Using flow meter by Comparison Method	0.5 lps to 63 lps	0.46 % to 0.40 %
107	MECHANICAL-ACCELERATION AND SPEED	RPM / Tacho meter (Contact Mode)	Using Tachometer, RPM Calibrator by Comparison Method	10 RPM to 8000 RPM	10.38% to 0.04%
108	MECHANICAL-ACCELERATION AND SPEED	RPM / Tacho meter (Non Contact Mode)	Using Tachometer, RPM Calibrator by Comparison Method	10 RPM to 99950 RPM	0.014 % to 1.45 %
109	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. Digital Dial Gauge(Plunger Type) LC : 0.001 mm	Using Gauge Block Grade '0'	0 to 50 mm	1.5µm
110	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. Digital Vernier Caliper - LC 0.01 mm	Using Gauge Block Grade '0'	0 to 300 mm	12.3 µm
111	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. Digital Vernier Caliper - LC 0.01 mm	Using Gauge Block Grade '0' Caliper checker	300 mm to 600 mm	20 µm

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112	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. Digital Vernier Caliper - LC 0.01 mm	Using Gauge Block Grade '0' Caliper checker	600 mm to 1000 mm	30 µm
113	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. External Micrometer - LC 0.001 mm	Using Gauge Block Grade '0' Comparison method	0 to 25 mm	1.2 µm
114	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. External Micrometer - LC 0.001 mm	Using Gauge Block Grade '0' Comparison method	25 mm to 150 mm	1.9µm
115	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. External Micrometer - LC 0.01 mm	Using Gauge Block Grade '0' Comparison method	150 mm to 300 mm	9.2 µm
116	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Basic-Measuring Instrument, Gauges etc. External Micrometer - LC 0.01 mm	Using Gauge Block Grade '0' Comparison method	300 mm to 600 mm	20 µm

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117	OPTICAL-OPTICAL	CHROMATICITY CO –ORDINATES (x, y)	Sphere photometry and Gonio photometry with standard lamp.	0.1 to 0.7	0.003
118	OPTICAL-OPTICAL	CO- RELATED COLOR TEMPERATURE (CCT)	Sphere photometry and Gonio photometry with standard lamp.	2000 K to 8000 K	50K
119	OPTICAL-OPTICAL	COLOR RENDERING INDEX (CRI)	Sphere photometry and Gonio photometry with standard lamp.	20 to 100	2
120	OPTICAL-OPTICAL	Illuminance	Reference Standard photometer	0.1 lx to 20000 lx	2%
121	OPTICAL-OPTICAL	LUMINOUS FLUX	Sphere photometry and Gonio photometry with standard lamp.	10 lm to 70000 lm	1.5%
122	OPTICAL-OPTICAL	Luminous Intensity	Gonio photometry with standard lamp	15 cd to 70000 cd	2%
123	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity & Temperature (Climatic Chamber, Environment Chamber)	Using Humidity/Temperature data logger (multi position)	20 %RH to 95 %RH @ (25°C to 55°C)	4.40%RH

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124	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity / Temperature Indicator with sensor of Climatic Chamber / Environment Chamber	Using Humidity/Temperature Indicator with Sensor, Temperature/Humidity datalogger (Single Point) by Comparison Method	20 %RH to 95 %RH @ (25°C to 85°C)	2.68%RH
125	THERMAL-SPECIFIC HEAT & HUMIDITY	Thermo Hygrometer, Hygrometer, Temperature & Humidity data logger, Humidity Indicator with probe	Using 4-Wires SPRTS, Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter, Humidity Indicator with Sensor, Humidity data logger, Humidity Generator by Comparison Method	20 %RH to 95 %RH @ (25°C to 85°C)	2.86%RH
126	THERMAL-TEMPERATURE	Glass Thermometer	Using 4-Wires SPRTS / Cold Bath / Precision Digital Thermometer with Sensor (RTD) / 6 ½ digit Multimeter	-30 °C to 100 °C	0.15°C

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127	THERMAL-TEMPERATURE	Humidity / Temperature Indicator with sensor of Climatic Chamber / Environment Chamber	Using 4-Wires SPRTS, Precision Digital Thermometer with Sensor (RTD) / 6 ½ digit Multimeter, Humidity/Temperature Indicator with Sensor, Temperature/Humidity datalogger (Single Point) by Comparision Method	20 °C to 85 °C @ (20% to 95%RH)	0.7°C
128	THERMAL-TEMPERATURE	Lab Oven, Climatic Chamber, Environment Chamber	Using Data Acquisition System With Sensors (multi position calibration)	-45 °C to 300 °C	3.8°C
129	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method	0 to 140 °C	1.67°C
130	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method:	> 300 °C to 600 °C	3.2 °C

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131	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method:	>140 °C to 300 °C	2.85°C
132	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	-45 °C to 150 °C	0.39°C

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133	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	> 300 °C to 600 °C	1.66 °C
134	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	>150 °C to 300 °C	0.51 °C

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135	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	>600 °C to 1000 °C	3.89 °C
136	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	> 150 °C to 300 °C	0.42 °C

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137	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	> 600 °C to 1000 °C	3.80 °C
138	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method	> 600°C to 1000 °C	4.2 °C
139	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	>300 °C to 600 °C	1.51 °C

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140	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method	-45 °C to 150 °C	0.39°C
141	THERMAL-TEMPERATURE	Thermo Hygrometer, Hygrometer, Temperature & Humidity data logger, Humidity Indicator with probe	Using 4-Wires SPRTS, Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter, Humidity Indicator with Sensor, Humidity data logger, Humidity Generator by Comparison Method	10 °C to 85 °C @ (20% to 95%RH)	0.74°C

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Mobile Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Active Power/Energy (AC) Range: (55(P-N) V, 0.01A, 0.1lag to 0.1lead, 45-65 Hz) W/Wh to (300 V(P-N), 120 A, 0.1lag to 0.1lead, 45-65 Hz) W/Wh	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Precision Power Analyzer Yokogawa By Direct/Comparison Method	55(P-N) V to 300 V(P-N)	0.020 % to 0.054 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (55 V, 0.01A, 50 Hz) VA/VAh to (300 V, 120 A, 50 Hz) VA/VAh	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Precision Power Analyzer Yokogawa By Direct/Comparison Method	55 V to 300 V	0.015 % to 0.008 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Power Factor/phase angle (AC) Range: (0.25 Lag/Lead (55 V, 0.01A) / 360° , 45-65 Hz) PF / Degree to (0.25lag to 0.25 lead (300 V, 120 A) / 0°, 45-65 Hz) PF / Degree	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Precision Power Analyzer Yokogawa By Direct/Comparison Method	0.1 Lag to 0.1 lead	0.06 % to 0.04 %

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4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Reactive Power/Energy (AC) Range: (55 V, 0.01A, 0.25 lag to 0.25 lead, 45-65 Hz) VAR/VARh to (300 V, 120 A, 0.25 lag to 0.25lead, 45-65 Hz) VAR/VARh	ZERA Com3003, MTE K2006, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33,Precision Power Analyzer Yokogawa By Direct/Comparison Method	55 V to 300 V	0.015 % to 0.008 %
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33,Precision Power Analyzer Yokogawa By Direct/Comparison Method	1mA @ 50 Hz to 120 A @ 50 Hz	0.03%
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Precision Power Analyzer Yokogawa By Direct/Comparison Method	30 V @50 Hz to 480 V @ 50 Hz	0.05 % to 0.005 %

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7	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (55 V, 0.01A, 45-65 Hz) VA/VAh to (300 V, 120 A, 45-65 Hz) VA/VAh	Precision Power Analyzer Yokogawa, ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Calmet C300 By Direct/Comparison Method	55 V to 300 V	0.06 % to 0.04 %
8	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Power Factor/phase angle (AC) Range: (0.1 Lag/Lead (55 V, 0.01A) / 360° , 45-65 Hz) PF / Degree to (0.1lag to 0.1 lead (300 V, 120 A) / 0°, 45-65 Hz) PF / Degree	Precision Power Analyzer Yokogawa, ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Calmet C300 By Direct/Comparison Method	0.1 Lag to 0.1 Lead	0.06 % to 0.04 %
9	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	CT mode: 1 A (Sec) to CT mode: 5 A (Sec)	0.015 % in RE,0.72min in PAE

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10	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	PT mode: 110/3 V (Sec) to PT mode: 110 V (Sec)	0.011 % in RE,0.37min in PAE
11	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	2.5/1-5 A to 3200/1-5 A	0.013 % in RE,0.77min in PAE
12	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	3200/1-5 A to 6300/1-5 A	0.019 % in RE,1.31min. in PAE
13	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Voltage Transformer	STD PT Make: Zera,Prgati Electricals & Moonlight Elec. CTPT bridge Make: Tettex/Eltel Using potential transformer comparison method And using Portable injection kit.	Pri/Sec: 110V/110/3 V to Pri/Sec: 33kV/110 V	0.027 % in RE,1.32min in PAE

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14	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Voltage Transformer	STD PT Make: Zera,Prgati Electricals & Moonlight Elec. CTPT bridge Make: Tettex/Eltel Using potential transformer comparison method And using Portable injection kit.	Pri/Sec:110V/Rt3/110/3 V to Pri/Sec:33kV/Rt3/110 V	0.027 % in RE,1.32min in PAE
15	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Reactive Power/Energy (AC) Range: (55 V, 0.01A, 0.1lag to 0.1lead, 45-65 Hz) VAR/VARh to (300 V, 120 A, 0.1lag to 0.1lead, 45-65 Hz) VAR/VARh	Precision Power Analyzer Yokogawa, ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Calmet C300 By Direct/Comparison Method	55 V to 300 V	0.020 % to 0.054 %
16	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Turns Ratio/Ratio Meter	STD PT Make: Zera,Prgati Electricals & Moonlight Elec. Direct method	1 RE in % to 300 RE in %	0.026% in RE

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17	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	ZERA Com3003,MTE K2006,MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, Precision Power Analyzer Yokogawa By Direct/Comparison Method	45 Hz to 65 Hz	0.02%

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Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Active Power/Energy (AC) Range: (30(P-N) V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh to (300 V(P-N), 200 A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh	ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30(P-N) V to 300 (P-N) V	0.042 % to 0.008 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (30 V, 0.001A, 50 Hz) VA/VAh to (300 V, 200 A, 50 Hz) VA/VAh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Power Factor/phase angle (AC) Range: (0.1 Lag/Lead (30 V, 0.01A) / 360° , 40-70 Hz) PF/Degree to (0.1lag to 0.1 lead (300 V, 120 A) / 0°, 40-70 Hz) PF/Degree	RADIAN RS-933, RADIAN RD-22 ZERA Com3003, MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	0.1 Lag to 0.1 lead	0.01%
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø & 3Ø Reactive Power/Energy (AC) Range: (30 V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh to (300 V, 120 A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Active Power (AC Power) Range: (10 V, 0.05 A, 0.01lag to 0.01lead, 50 Hz) W to (575 V, 30 A, 0.01lag to 0.01lead, 50 Hz) W	Precision Power Analyzer Yokogawa By Direct/Comparison Method	10 V, 0.05 A to 575 V, 30 A, 0.01 Lag to 0.01 Lead	2.6 % to 0.05 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Apparent Power (AC Power)	Precision Power Analyzer Yokogawa By Direct/Comparison Method	(10 V, 0.05 A, 50 Hz) VA to (575 V, 30 A, 50 Hz) VA	0.12 % to 0.05 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Power Factor/phase angle (AC Power) Range:(0.01 Lag/Lead (10 V, 0.05 A) / 360° , 50 Hz) PF / Degree to (Unity (575 V, 30 A) / 0°, 50 Hz) PF / Degree	Precision Power Analyzer Yokogawa By Direct/Comparison Method	0.01 Lag to 0.01 lead 0° to 360° (10 V, 0.05 A to 575V, 30 A)	4.1 % to 0.05 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø Reactive Power (AC Power) Range: (10 V, 0.05A, 0.01lag to 0.01lead, 50 Hz) VAR to (575 V, 20 A, 0.01lag to 0.01lead, 50 Hz) VAR	Precision Power Analyzer Yokogawa By Direct/Comparison Method	10 V, 0.05 A to 575 V, 20 A 0.01 Lag to 0.01 Lead	0.82 % to 0.11 %

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9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 µA to 2 A, 50Hz to 5kHz	0.18 % to 0.03 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	2 A to 20 A, @50 Hz to 1k Hz	0.03 % to 0.02 %

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11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	20 A@ 50 Hz to 30 A@ 50 Hz	0.02 % to 0.03 %

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12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Current Transformer Moonlight/Eltel, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	30 A@ 50 Hz to 10000 A@ 50 Hz	0.03 % to 0.5 %

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13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 mV to 200 V, 10 Hz to 100k Hz	0.12 % to 0.022 %

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14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 mV@ 50 Hz to 1000 V@50 Hz	0.1 % to 0.004 %

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15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	200 V to 1000 V, 50 Hz to 1k Hz	0.01 % to 0.005 %
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1kHz	Precision LCR Meter Quadtech 7600 Plus By Direct/Comparison Method	100 pF to 1 mF	0.2 % to 1.2 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics	Precision Power Analyzer Yokogawa 760303 By Direct/Comparison Method	1st order (0 to 10 A) to 41th order (0 to 10 A)	0.2%

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18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics	Precision Power Analyzer Yokogawa 760303 By Direct/Comparison Method	1st order (0 to 500 V) to 41th order (0 to 500 V)	0.2%
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Inductance	Precision LCR Meter Quadtech 7600 Plus By Direct/Comparison Method	100 µH to 10 H @ 1kHz	0.4 % to 0.2 %
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø & 3Ø Reactive Power (AC Power) Range: (10 V, 0.05A, 0.01lag to 0.01lead) VAR to (575 V, 20 A, 0.01lag to 0.01lead) VAR	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	(10 V,0.05 A) to (575 V, 20 A) 0.01 Lag to 0.01 Lead	0.03 % to 0.9 %
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Active Power (AC Power) Range:(10 V, 0.01A, 0.01lag to 0.01lead) W to (575 V, 1000 A, 0.01lag to 0.01lead) W	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils By Direct Method	(10 V, 0.01A) to (575 V,1000 A) 0.01 Lag to 0.01 Lead	0.02 % to 0.8 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Apparent Power (AC Power)	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	(10 V, 0.01A) VA to (575 V, 80 A) VA	0.02 % to 0.6 %

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23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	1Ø Power Factor/phase angle (AC Power) Range:(0.01 Lag/Lead (10 V, 0.01A) / 360°) PF / Degree to (Unity (575 V, 1000 A) / 0°) PF / Degree	Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	0.01 Lag to 0.01 Lag	0.02 % to 0.8 %
24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	10 mA @ 50 Hz to 80 A @ 50 Hz	0.02%
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	3 A to 20 A. 50 Hz to 1k Hz	0.04 % to 0.1 %

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26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	30 µA @ 50 Hz to 10 mA @ 50 Hz	0.6 % to 0.03 %
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	30 uA to 300m A @ 50 Hz to5k Hz	0.6 % to 0.14 %

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28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	300 mA to 3 A, 50 Hz to 5k Hz	0.05 % to 0.17 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	80 A @ 50 Hz to 1000 A @ 50 Hz	0.02 % to 0.24 %
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10 mV to 200 V, 20 Hz to 100k Hz	0.49 % to 0.04 %

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31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	100 V to 1000 V, 20 Hz to 10k Hz	0.04 % to 0.06 %
32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10mV @ 50 Hz to 575 V @ 50 Hz	0.05 % to 0.01 %
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	575 V @ 50 Hz to 1000 V @ 50 Hz	0.01 % to 0.03 %

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34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance (@1kHz upto 100nF, 100Hz from 1uF to 100uF)	Using Multi Product Calibrator Fluke By Direct Method	1 nF to 100 µF	2.9 % to 0.6 %
35	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils by direct method	1st order (0 to 10 A) to 41th order (0 to 10 A)	0.1%
36	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A By Direct Method	1st order (0 to 500 V) to 41th order (0 to 500 V)	0.1%

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37	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils by direct method	1st order (10 A to 500 A) to 41th order (10 A to 500 A)	0.1 % to 0.3 %
38	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance	Decade Inductance Box dot tech, By Direct Method	100 µH to 10 H @ 1kHz	0.46 % to 6.11 %
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Standard resistors Ohms Lab, Tettex, Yokogawa, By Direct/Comparison Method	1 µA to 20 A	0.03 % to 0.003 %

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40	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, Standard resistors Ohms Lab, Tettex, Yokogawa, By Direct/Comparison Method	20 A to 200 A	0.003 % to 0.2 %
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Power	Precision Power Analyzer Yokogawa By Direct/Comparison Method	(1.5 V, 0.05 A) W to (1000 V, 20 A) W	0.27%

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42	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	1 mV to 1000 V	0.02 % to 0.001 %

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43	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Standard resistors Ohms Lab, Tettex,Yokogawa, High Resistance Meter By Direct/Comparison Method	1 Ohm to 80 T ohm	0.002 % to 3.07 %
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A / Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Standard resistors Ohms Lab, Tettex, Yokogawa By Direct/Comparison Method	10 µOhm to 1 Ohm	0.3 % to 0.002 %

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45	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	1 µA to 320 mA	0.5 % to 0.03 %
46	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	20 A to 1000 A	0.1 % to 0.3 %

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47	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A with Current Coils, CALMET C300 By Direct Method	320 mA to 20 A	0.03 % to 0.1 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100 By Direct Method	(100m V, 100m A) W to (1000 V, 20 A) W	0.7 % to 0.1 %
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	1 mV to 1000 V	0.17 % to 0.002 %

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50	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 m-ohm	0.02%
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 ohm	0.02%

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52	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	1 ohm to 100 M ohm	0.01 % to 0.2 %
53	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	10 µohm to	0.3%

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54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	10 m-ohm	0.02%
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 µohm	0.02%

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56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 M ohm to 80 T ohm	0.2 % to 3.1 %
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Standard resistors Ohms Lab, Tettex, Yokogawa, Decade Resistance Box, Tettex, Universal Calibration System Fluke, Multi Product Calibrator Fluke, Megohm Decade Box Tinsley By Direct Method	100 m-ohm	0.02%

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58	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Active Power/Energy (AC) Range: (30(P-N) V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh to (300 V(P-N), 200 A, 0.1lag to 0.1lead, 40-70 Hz) W/Wh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30(P-N) V to 300 (P-N) V	0.042 % to 0.008 %
59	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Apparent Power/Energy (AC) Range: (30 V, 0.001A, 40-70 Hz) VA/VAh to (300 V, 200 A, 40-70 Hz) VA/VAh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %

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60	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	1Ø & 3Ø Reactive Power/Energy (AC) Range: (30 V, 0.001A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh to (300 V, 200 A, 0.1lag to 0.1lead, 40-70 Hz) VAR/VARh	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	30 V to 300 V	0.042 % to 0.008 %
61	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	AC HIGH VOLTAGE	Using Universal Voltage Divider,HV Divider (Haefely,Hiportonics, Highvolt & Phenix), By Comparision Method	1 kV to 200 kV	1.2%
62	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Capacitance & Tan delta	Using C & Tan delta Bridge by direct measurement of standard capacitor	10, 100 pF, tan delta 1 x V to 10000,100 pF,3.5 kV	0.15,1.4 x 10e -4%
63	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Capacitance & Tan delta	Using C & Tan delta Bridge by comparison method	10,100 pF, tan delta 1 x V to 10000, 100 pF, 3.5 kV	0.13, 5.6 x 10e -5 %

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64	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics,Highvolt & Phenix,Haefely), By Comparision method	1 kV to 40 kV	1.10%
65	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics,Highvolt & Phenix,Haefely), By Comparision method	41 kV to 60 kV	1.83%
66	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	DC HIGH VOLTAGE	Using 100 kV DC HV Divider, Using Universal Voltage Divider (Hiportonics, Highvolt & Phenix,Haefely), By Comparision method:	61 kV to 100 kV	2.60 %
67	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	400 Vp to 1250 Vp	-1.12 % to 1.12 %

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68	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	80 Vp to 1600 Vp	0.66%
69	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	80 Vp to 1600 Vp	0.72%
70	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Power Factor/phase angle (AC) Range: (0.1 Lag/Lead (30 V, 0.01A) / 360° , 40-70 Hz) PF/Degree to (0.1lag to 0.1 lead (300 V, 200 A) / 0°, 40-70 Hz) PF/Degree	RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33, By Direct/Comparison Method	0.1 lag to 0.1 lead	0.01%

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71	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	CT mode: 1 A (Sec) to CT mode: 5 A (Sec)	0.015 % in RE,0.72min in PAE
72	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/CT-PT test set/Analyzer	CTPT bridge Make: Tettex/Eltel Using CT-PT comparison method.	PT mode: 110/3 V (Sec) to PT mode: 110 V (Sec)	0.011 % in RE,0.37min in PAE
73	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	2.5/1-5 A to 3200/1-5 A	0.013 % in RE,0.77min in PAE
74	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Current Transformer	STD CT Make: Eltel CTPT bridge Make: Tettex/Eltel Using Current Transformer comparison method. And using Portable injection kit.	3200/1-5 A to 6300/1-5 A	0.019 % in RE,1.31min. in PAE

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75	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Ratio Error and Phase angle error/Voltage Transformer	STD PT Make: Zera,Prgati Electricals & Moonlight Elec., EPRO CTPT bridge Make: Tettex/Eltel Using potential transformer comparison method And using Portable injection kit.	Pri/sec:110V/Rt3/110/3 V to Pri/sec:220kV/Rt3/110 V	0.028 % in RE,1.32min in PAE
76	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Turns Ratio/Ratio Meter	STD PT Make: Zera,Prgati Electricals & Moonlight Elec. Direct method	1 RE in % to 300 RE in %	0.026% in RE
77	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	VOLTAGE DIVIDER	Voltage Divider (Haefely), By Comparision Method	0 to 300 kVp	1.56%
78	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	VOLTAGE DIVIDER	Using Universal Voltage Divider (Highvolt), By Comparision Method	0 to 500 kVp	1.56%
79	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	1 nS to 5 S	0.45%

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80	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	10 mV AC to 100 V AC	0.5%
81	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	10 mV DC to 100 V DC	0.3%
82	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	40 Hz to 1.1 GHz	0.5 % to 13.1 %
83	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Sweep Frequency Response Analyser	Performance Verification Cell Doble By Direct Method	0, -40db, -60db,10 kHz	1.76db
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Temperature (RTD)	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A, Digital Precision Thermometer Cropico By Direct/Comparison Method	-200 °C to 800 °C	0.02°C

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85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Temperature (Thermocouple)	Reference Multimeter Fluke 8508 / 6 ½ Digit Multimeter Agilent 34401A, Digital Precision Thermometer Cropico By Direct/Comparison Method	-100 °C to 1300 °C	0.14°C
86	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT-100)	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	-200 °C to 800 °C	0.07°C
87	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple	Universal Calibration System Fluke, Multi Product Calibrator Fluke By Direct Method	-100 °C to 1300 °C	0.13°C

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88	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Reference Multimeter Fluke 8508/6 ½ Digit Multimeter Agilent 34401A / Precision Power Analyzer Yokogawa 760303, RADIAN RS-933, RADIAN RD-22 ZERA Com3003,MTE K2006, ZERA EPZ-303-5, ZERA EPZ-303-3, MTE SRS 400.3, MTE PRS 400.3, MTE PRS 200.3, RADIAN RD-30, RADIAN RD-33 By Direct/Comparison Method	10 Hz to 1 MHz	0.008 % to 0.001 %
89	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time/Period	Digital Oscilloscope Yokogawa 710120 By Direct/Comparison Method	1 ms to 45 s	0.5%
90	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time/Period	Time Interval Meter ADI By Direct/Comparison Method	10 s to 90000 s	0.2 % to 0.05 %

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91	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Counter	Universal Calibration System Fluke, Multi Product Calibrator Fluke, Time Interval meter ADI By Direct Method	100 counts to 999999 counts	0.7 % to 0.08 %
92	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Multi-Product Calibrator Fluke 5522A, 5500A / Universal Calibration System Fluke 9100, Electrical Power Standard Master / Fluke 6105A, 6100A, CALMET C300 By Direct Method	10 Hz to 1 M Hz	0.006 % to 0.001 %
93	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.5 µSec	2.57%
94	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec	1.89%

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95	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec to 60 µSec	2.3%
96	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	0.84 µSec to 60 µSec.	2.23%
97	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source,Measure)	IMPULSE VOLTAGE/ MEASURING SYSTEM/ VOLTAGE DIVIDER	Using Reference Impulse Calibrator(Haefely) & Digital Oscilloscope (Yokogawa), By comparision method	4000 µSec	2.16%
98	MECHANICAL-ACCELERATION AND SPEED	RPM / Tacho meter (Contact Mode)	Using Tachometer, RPM Calibrator by Comparison Method	10 RPM to 8000 RPM	10.38% to 0.04%
99	MECHANICAL-ACCELERATION AND SPEED	RPM / Tacho meter (Non Contact Mode)	Using Tachometer, RPM Calibrator by Comparison Method	10 RPM to 99950 RPM	0.014 % to 1.45 %

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100	MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE	UTM, Tension Creep and Torsion Testing Machine (Static Uni-axial Tensile Testing machine - Compression)	Using Load Cell with Display (Class 0.5 & Class 1 accuracy) For UTM of accuracy class 1 and coarser as per IS 1828 : Part - I	100 N to 490 kN	0.35%
101	MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE	UTM, Tension Creep and Torsion Testing Machine(Static Uni-axial Tensile Testing machine - Tension)	Using Load Cell with Display (Class 0.5 & Class 1 accuracy) For UTM of accuracy class 1 and coarser as per IS 1828 : Part - I	100 N to 200 kN	0.35%
102	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity & Temperature (Climatic Chamber, Environment Chamber)	Using Humidity/Temperature data logger (multi position)	20 %RH to 95 %RH @ (25°C to 55°C)	4.40%RH
103	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity / Temperature Indicator with sensor of Climatic Chamber / Environment Chamber	Using Humidity/Temperature Indicator with Sensor, Temperature/Humidity datalogger (Single Point) by Comparison Method	20 %RH to 95 %RH @ (25°C to 85°C)	2.68%RH

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104	THERMAL-TEMPERATURE	Glass Thermometer	Using 4-Wires SPRTS / Cold Bath / Precision Digital Thermometer with Sensor (RTD) / 6 ½ digit Multimeter	-30 °C to 100 °C	0.15°C
105	THERMAL-TEMPERATURE	Humidity / Temperature Indicator with sensor of Climatic Chamber / Environment Chamber	Using 4-Wires SPRTS, Precision Digital Thermometer with Sensor (RTD) / 6 ½ digit Multimeter, Humidity/Temperature Indicator with Sensor, Temperature/Humidity datalogger (Single Point) by Comparision Method	20 °C to 85 °C @ (20% to 95%RH)	0.7°C
106	THERMAL-TEMPERATURE	Lab Oven, Climatic Chamber, Environment Chamber	Using Data Acquisition System With Sensors (multi position calibration)	-45 °C to 300 °C	3.8°C
107	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method	0 to 140 °C	1.67°C

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108	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method:	> 300 °C to 600 °C	3.2 °C
109	THERMAL-TEMPERATURE	Temperature (Non-contact type Pyrometer, IR Thermometer, Thermo vision camera)	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method:	>140 °C to 300 °C	2.85°C
110	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	-45 °C to 150 °C	0.39°C

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111	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	> 300 °C to 600 °C	1.66 °C
112	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	>150 °C to 300 °C	0.51 °C

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113	THERMAL-TEMPERATURE	Temperature (PRT/ Thermocouple with / without indicator	Using 4-Wires SPRTS / Liquid bath / Dry block bath / high temperature dry block bath / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple by Comparison Method	>600 °C to 1000 °C	3.89 °C
114	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	> 150 °C to 300 °C	0.42 °C

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115	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	> 600 °C to 1000 °C	3.80 °C
116	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using Standard Pyrometer, IR Thermometer, Black body Temperature (emissivity 0.995) source by Comparison Method	> 600°C to 1000 °C	4.2 °C
117	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method:	>300 °C to 600 °C	1.51 °C

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118	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Temperature bath, Oven, Furnaces, Liquid bath, Dry block	Using 4-Wires SPRTS / Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter / “S” Type thermocouple (Single Point) by Comparison Method	-45 °C to 150 °C	0.39°C
119	THERMAL-TEMPERATURE	Thermo Hygrometer, Hygrometer, Temperature & Humidity data logger, Humidity Indicator with probe	Using 4-Wires SPRTS, Precision Digital Thermometer with Sensor (RTD/Thermocouple) / 6 ½ digit Multimeter, Humidity Indicator with Sensor, Humidity data logger, Humidity Generator by Comparison Method	10 °C to 85 °C @ (20% to 95%RH)	0.74°C

*** CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k = 2.**