National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	1 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)	AC Current @ 1 kHz to 10 kHz	Using Standard Shunt with AC Measurement Standard, Multi product Calibrator with transconductance amplifier by Direct Method/ Comparison Method	10 µA to 100 A	0.034 % to 0.015 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 10 Hz to 1 kHz	Using Standard Shunt with AC Measurement Standard, multi product calibrator with transconductance amplifier by Direct Method/ Comparison Method	5 A to 120 A	0.005 % to 0.013 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 70 Hz	Using 3 phase Power calibrator with Power/ Energy Comparator by Direct Method/ Comparison Method	100 A to 120 A	0.003 % to 0.008 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 2 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 70 Hz	Using 3 phase Power calibrator with Power/ Energy Comparator by Direct Method/ Comparison Method	120 A to 160 A	0.008 % to 0.01 %
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 50 Hz	Using Multifunction Calibrator, Standard Shunt with AC Measurement Standard, 8½ Digit Multimeter by Direct Method/ Comparison Method	10 µA to 5 A	0.035 % to 0.005 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 50 Hz	Using Standard CT with Power/ Energy Reference Meter, High current Source by Direct Method/ Comparison Method	100 A to 10000 A	0.25 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 50 Hz	Using AC Current Source, Standard Current Comparator by Comparison Method	120 A to 5000 A	0.03 % to 0.4 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	3 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @ 50 Hz	Using AC High Voltage Source with Precision AC Divider & 6½ Digit Multimeter by Comparison Method	1 kV to 2.4 kV	0.35 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @ 50 Hz	Using AC High Voltage Source with AC High Voltage Divider with kV Meter by Comparison Method	2.4 kV to 200 kV	1.1 %
10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @ 50 Hz	Using AC High Voltage Divider with kV Meter by Direct Method	1 kV to 200 kV	1.0 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @ 50 Hz	Using Precision AC Divider with AC Measurement Standard by Direct Method	1 kV to 2.4 kV	0.01 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Resistance @ 1 kHz	Using LCR Meter by Direct Method	0.01 ohm to 10 kohm	0.1 % to 0.05 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	4 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 100 kHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct Method/ Comparison Method	60 V to 600 V	0.004 % to 0.001 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 300 kHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct Method/ Comparison Method	20 V to 60 V	0.003 % to 0.001 %
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 1 MHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct Method/ Comparison Method	2 mV to 20 V	0.08 % to 0.001 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	5 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 30 kHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct Method/ Comparison Method	600 V to 1000 V	0.002 % to 0.0015 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 300 kHz	Using 8½ Digit Reference Multimeter with Multi function Calibrator by Direct Method/ Comparison Method	1 mV	4.9 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 MHz to 1.1 GHz	Using Digital Storage Oscilloscope by Direct Method	5 mV (p-p) to 5.5 V (p-p)	5 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 MHz to 1.1 GHz	Using Digital Storage Oscilloscope by Direct Method	0.5 V (p-p) to 5.5 V (p-p)	5 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	6 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 10 Hz to 1 kHz	Using 8½ Digit Multimeter & Multifunction Calibrator by Comparison Method	1 mV	0.8 %
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 10 Hz to 1 kHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct Method/ Comparison Method	2 mV to 2 V	0.04 % to 0.001 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 10 Hz to 1 kHz	Using AC/ DC Thermal Transfer Standard, Multifunction Calibrator & Reference Multimeter by Direct/ Comparison Method	2 V to 1000 V	0.001 % to 0.0036 %
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag / Lead), 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Comparator by Comparison Method	0.25 mWh to 72 Wh	0.03 % / PF to 0.007 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	7 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct Method	0.25 mWh to 72 Wh	0.03 % / PF to 0.0065 % / PF
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct Method/ Comparison Method	30 Wh to 432 kWh	0.25 % / PF
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 Wh to 432 kWh	0.25 % / PF
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Comparator by Comparison Method	12.5 mWh to 172.8 kWh	0.007 % / PF to 0.016 % / PF
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct Method	12.5 mWh to 172.8 kWh	0.007 % / PF to 0.016 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	8 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 to 1 Lag / Lead 50 Hz	Using Multifunction Calibrator, Power/ Energy Comparator with Precision AC Voltage Divider by Comparison Method	4.8 mW to 52.5 W	0.035 % / PF to 0.012 % / PF
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 to 1 Lag/ Lead 50 Hz	Using Power/ Energy Comparator with Precision AC Voltage Divider by Direct Method	4.8 mW to 52.5 W	0.035 % / PF to 0.012 % / PF
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 to 1 Lag/ Lead 50 Hz	Using Multifunction Calibrator, Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparator Method	0.24 W to 126 kW	0.012 % / PF to 0.02 % / PF
32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P /3P3W /3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag / Lead) 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Comparator by Comparison Method	0.25 mW to 72 W	0.03 % / PF to 0.007 % / PF
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Multifunction Calibrator Power/ Energy Comparator by Direct/ Comparison Method	0.25 mW to 72 W	0.03 % / PF to 0.007 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	9 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 W to 432 kW	0.25 % / PF
35	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	30 W to 432 kW	0.25 % / PF
36	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 Lag / Lead 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Comparator by Comparison Method	12.5 mW to 172.8 kW	0.007 % / PF to 0.015 % / PF
37	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using multi product calibrator with transconductance, Power/ Energy Comparator by Direct/ Comparison Method	12.5 mW to 172.8 kW	0.007 % / PF to 0.014 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	10 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
38	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power, 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 to 1 Lag/ Lead (1 Phase) 50 Hz	Using Multifunction Calibrator, Transconductance Amplifier, Power/ Energy Comparator with Precision AC Voltage Divider by Comparison Method	0.24 W to 126 kW	0.012 % / PF to 0.02 % / PF
39	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W /3P4W), 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Comparator by Comparison Method	1.25 VAh to 172.8 kVAh	0.007 % to 0.015 %
40	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	3 kVAh to 432 kVAh	0.25 %
41	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	25 mVAh to 72 VAh	0.03 % to 0.007 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	11 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
42	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Comparator by Comparison Method	25 mVAh to 72 VAh	0.03 % to 0.007 %
43	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	3 kVAh to 432 kVAh	0.25 %
44	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	1.25 VAh to 172.8 kVAh	0.007 % to 0.014 %
45	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, 50 Hz	Using Power / Energy Comparator with Precision AC Voltage Divider by Direct / Comparison Method	0.48 VA to 52.5 VA	0.035 % to 0.012 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	12 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
46	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, 50 Hz	Using Multi product Calibrator with transconductance amplifier, Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparison Method	24 VA to 126 kVA	0.012 % to 0.02 %
47	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	25 mVA to 72 VA	0.03 % to 0.007 %
48	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, (1 Phase/ 3 Phase) 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct / Comparison Method	25 mVA to 72 VA	0.03 % to 0.007 %
49	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Meter Test System by Comparison Method	3 kVA to 432 kVA	0.25 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	13 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
50	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	3 kVA to 432 kVA	0.25 %
51	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Multi product Calibrator with transconductance amplifier, Power / Energy Comparator by Direct / Comparison Method	1.25 VA to 172.8 kVA	0.0065 % to 0.014 %
52	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Three Phase Power Calibrator / Tester / Test Bench with Power/Energy Comparator by Comparison Method	1.25 VA to 172.8 kVA	0.007 % to 0.015 %
53	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power 480 V to 1050 V, 1 mA to 50 mA, (1 Phase) 50 Hz	Using Multifunction Calibrator, Transconductance Amplifier, Power / Energy Comparator with Precision AC Voltage Divider by Comparison Method	0.48 VA to 52.5 VA	0.035 % to 0.012 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	14 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
54	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power 480 V to 1050 V, 50 mA to 120 A, (1 Phase) 50 Hz	Using Multifunction Calibrator, Transconductance Amplifier, Power/ Energy Comparator with Precision AC Voltage Divider by Comparison Method	24 VA to 126 kVA	0.012 % to 0.02 %
55	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using Fused Silica Capacitance Standard, Standard Capacitor & Four Terminal Capacitance Standard with RLC Digi Bridge by Direct Method & substitute Method	1 pF to 100 pF	0.006 % to 0.001 %
56	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using Fused Silica Capacitance Standard, Standard Capacitor & Four Terminal Capacitance Standard with RLC Digi Bridge by Direct Method & substitute Method	100 pF to 10 mF	0.001 % to 0.25 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	15 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
57	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 100 Hz	Using Standard Capacitor & Four Terminal Capacitance Standard with RLC Digi Bridge by Direct Method & substitute Method	1 µF to 1 F	0.02 % to 0.5 %
58	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance at High Voltage up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Comparison Method	50 pF to 30 nF	0.24 % to 0.08 %
59	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance at High Voltage up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Direct Method	50 pF to 30 nF	0.24 % to 0.08 %
60	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Dissipation Factor / Tan Delta (Absolute Value) up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Comparison Method	0.000001 to 0.4	0.00004 to 0.003

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	16 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
61	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Dissipation Factor/ Tan Delta (Absolute Value) up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Direct Method	0.000001 to 0.4	0.00004 to 0.003
62	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics (Fundamental Frequency: 50 Hz)	Using Multifunction Calibrator & Power / Energy Comparator by Direct/ Comparison Method	1st order to 40th order	0.2 %
63	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Inductance @ 1 kHz	Using Precision Component Analyzer by Direct Method	100 µH to 10 H	0.08 % to 0.04 %
64	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Power Factor / Phase Angle @ 40 Hz to 70 Hz, 25 V to 1050 V, 1 mA to 120 A, 0 (Lead/ Lag) to UPF	Using Power / Energy Comparator & Precision AC Voltage Divider by Direct Method	25 V to 1050 V, 1 mA to 160 A, 0 to UPF (0° to 360°)	0.002°

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	17 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
65	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Power Factor / Phase Angle @ 40 Hz to 70 Hz, 0 (Lag / Lead) to UPF, 25 V to 480 V, 1 mA to 120 A	Using Three Phase Power Calibrator / Tester / Test Bench with Reference Comparator by Comparison MethodUsing Three Phase Power Calibrator / Tester / Test Bench with Reference Comparator by Comparison Method	0° to 360°, 0 to UPF Lag / Lead, 25 V to 480 V, 1 mA to 120 A	0.002°
66	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Power Factor/ Phase Angle @ 50 Hz to 60 Hz, 0 (Lag/ Lead) to UPF, 480 V to 1050 V, 1 mA to 120 A	Using Multifunction Calibrator, Transconductance Amplifier, Power / Energy Comparator with Precision AC Voltage Divider by Comparison Method	0° to 360° , 0 to UPF Lag / Lead, 480 V to 1050 V, 1 mA to 120 A	0.002°
67	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Multi product Calibrator, Power/ Energy Comparator by Direct/ Comparison Method	0.25 mVArh to 72 VArh	0.03 % / PF to 0.0065 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	18 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
68	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Calibrator/ Tester/ Test Bench with Power/ Energy Comparator by Comparison Method	0.25 mVArh to 72 VArh	0.03 % / PF to 0.007 % / PF
69	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 VArh to 432 kVArh	0.25 % / PF
70	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Power / Energy Meter Test System by Direct / Comparison Method	30 VArh to 432 kVArh	0.25 % / PF
71	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag / Lead), 40 Hz to 70 Hz	Using Three Phase Power Calibrator/ Tester/ Test Bench with Power/ Energy Comparator by Comparison Method	12.5 mVArh to 172.8 kVArh	0.007 % / PF to 0.015 % / PF
72	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	12.5 mVArh to 172.8 kVArh	0.007 % / PF to 0.015 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	19 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
73	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 50 Hz	Using Multifunction Calibrator, Transconductance Amplifier, Power/ Energy Comparator with Precision AC Voltage Divider by Comparison Method	0.24 VAr to 126 kVAr	0.016 % / PF to 0.02 % / PF
74	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag / Lead) 50 Hz	Using Power / Energy Comparator with Precision AC Voltage Divider by Direct / Comparison Method	4.8 mVAr to 52.5 VAr	0.035 % / PF to 0.012% / PF
75	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 (Lag/ Lead) to UPF 50 Hz	Using Multifunction Calibrator, Power / Energy Comparator with Precision AC Voltage Divider by Comparison Method	4.8 mVAr to 52.5 VAr	0.035 % / PF to 0.012 % / PF
76	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 50 Hz	Using Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparison Method	0.24 VAr to 126 kVAr	0.012 % / PF to 0.02 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	20 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
77	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W /3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	12.5 mVAr to 172.8 kVAr	0.0065 % / PF to 0.015 % / PF
78	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W /3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Calibrator / Tester / Test Bench with Power/Energy Comparator by Comparison Method	12.5 mVAr to 172.8 kVAr	0.007 % / PF to 0.015 % / PF
79	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag /Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Calibrator / Tester / Test Bench with Power/Energy Comparator by Comparison Method	0.25 mVAr to 72 VAr	0.03 % / PF to 0.007 % / PF
80	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Meter Test System by Comparison Method	30 VAr to 432 kVAr	0.25 % / PF
81	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Meter Test System by Direct / Comparison Method	30 VAr to 432 kVAr	0.25 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	21 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
82	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	0.25 mVAr to 72 VAr	0.03 % / PF to 0.0065 % / PF
83	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 40 Hz to 70 Hz	Using Precision Power Calibration System by Direct Method	10 mA to 100 A	0.001 % to 0.003 %
84	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 1 kHz to 10 kHz	Using Multifunction Calibrator by Direct Method	10 µA to 2 A	0.03 % to 0.8 %
85	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 1 kHz to 10 kHz	Using Multifunction Calibrator with Trans Conductance Amplifier by Direct Method	2 A to 100 A	0.15 % to 3.5 %
86	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 10 Hz to 1 kHz	Using Multifunction Calibrator with Trans Conductance Amplifier, by Direct Method	2 A to 100 A	0.06 % to 0.2 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	22 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
87	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 10 Hz to 1 kHz	Using Multifunction Calibrator by Direct Method	10 µA to 2 A	0.04 % to 0.25 %
88	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 40 Hz to 70 Hz	Using Precision Power Calibration System by Direct Method	1 mA to 10 mA	0.015 % to 0.001 %
89	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	0.01 ohm	0.1 %
90	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	0.1 ohm	0.06 %
91	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	1 kohm	0.006 %
92	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	1 ohm	0.006 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	23 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
93	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	10 kohm	0.006 %
94	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistors by Direct Method	10 ohm	0.006 %
95	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	100 ohm	0.007 %
96	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 100 kHz	Using Multi Function Calibrator by Direct Method	60 V to 600 V	0.007 % to 0.015 %
97	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 30 kHz	Using Multi function Calibrator by Direct Method	600 V to 1000 V	0.012 % to 0.27 %
98	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 300 kHz	Using Multi Function Calibrator by Direct Method	1 mV to 20 V	4.9 % to 0.005 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	24 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
99	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 300 kHz	Using Multi Function calibrator by Direct Method	20 V to 60 V	0.005 % to 0.15 %
100	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 1 MHz	Using Multi Function Calibrator by Direct Method	2 mV to 20 V	1.5 % to 0.005 %
101	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 1 kHz	Using Multi Function Calibrator by Direct Method	2 mV to 2 V	0.3 % to 0.006 %
102	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 1 kHz	Using Multi Function Calibrator by Direct Method	2 V to 200 V	0.006 % to 0.02 %
103	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 1 kHz	Using Multi Function Calibrator by Direct Method	200 V to 1000 V	0.02 % to 0.005 %
104	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 1 kHz	Using Multi function Calibrator by Direct Method	1 mV	1 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	25 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
105	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 40 Hz to 70 Hz	Using Precision Power Calibration System by Direct Method	1 V to 480 V	0.0005 % to 0.002 %
106	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50 kHz to 1.1 GHz	Using Oscilloscope Calibrator by Direct Method	100 mV (p-p) to 5.5 V (p-p)	3 % to 5 %
107	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Active Energy (1P/ 3P4W) 25 V to 480 V, 1 mA to 10 mA, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.25 mWh to 14.4 Wh	0.025 % / PF to 0.002 % /PF
108	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Active Energy 1 V to 480 V, 10 mA to 100 A, PF: 0.01 to 1 Lag/ Lead (1P/ 3P4W), 40 Hz to 70 Hz	Using Precision Energy Calibration System (PPCS) By Direct Method	0.1 mWh to 144 kWh	0.002 % / PF to 0.004 % / PF
109	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Active Power (1P/ 3P4W) 1 V to 480 V, 10 mA to 100 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.1 mW to 144 kW	0.002 % / PF to 0.004 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	26 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
110	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Active Power (1P/ 3P4W) 25 V to 480 V, 1 mA to 10 mA, PF: 0.01 to 1 Lag/ Lead 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.25 mW to 14.4 W	0.025 % / PF to 0.002 % / PF
111	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Apparent Energy (1P/ 3P4W), 25 V to 480 V, 1 mA to 10 mA, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	25 mVAh to 14.4 VAh	0.025 % to 0.002 %
112	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Apparent Energy 1 V to 480 V, 10 mA to 100 A, (1P/ 3P, 4W), 40 Hz to 70 Hz	Using Precision Energy Calibration System (PPCS) By Direct Method	10 mVAh to 144 kVAh	0.002 % to 0.004 %
113	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Apparent Power (1P/ 3P4W) 1 V to 480 V, 10 mA to 100 A, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	10 mVA to 144 kVA	0.002 % to 0.004 %
114	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Apparent Power (1P/ 3P4W) 25 V to 480 V, 1 mA to 10 mA, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	25 mVA to 14.4 VA	0.025 % to 0.002 %
115	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 µF	0.02 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	27 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
116	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 F	0.5 %
117	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 mF	0.04 %
118	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 nF	0.015 %
119	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Multi function Calibrator by Direct Method	1 nF to 100 nF	1.7 % to 0.3 %
120	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Fused Silica Capacitance Standard by Direct Method	1 pF	0.0002 %
121	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 µF	0.08 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	28 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
122	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 mF	0.05 %
123	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 nF	0.015 %
124	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Fused Silica Capacitance Standard by Direct Method	10 pF	0.0002 %
125	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 µF	0.04 %
126	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 mF	0.1 %
127	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 nF	0.015 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	29 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
128	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Fused Silica Capacitance Standard by Direct Method	100 pF	0.0002 %
129	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 µF	0.022 %
130	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 F	0.5 %
131	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 mF	0.04 %
132	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor By Direct Method	10 µF	0.04 %
133	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	10 mF	0.05 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 30 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
134	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	100 µF	0.04 %
135	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	100 mF	0.13 %
136	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Multi function Calibrator by Direct Method	100 nF to 100 µF	0.3 % to 2 %
137	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics (Fundamental Frequency: 50 Hz)	Using Multifunction Calibrator with PQ Option by Direct Method	1st order to 40th order	0.35 %
138	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	1 H	0.03 %
139	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	1 mH	0.03 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	31 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
140	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	10 H	0.054 %
141	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	10 mH	0.03 %
142	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	100 µH	0.07 %
143	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	100 mH	0.03 %
144	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor / Phase Angle @ 40 Hz to 70 Hz, 0 (Lag / Lead) to UPF, 1 V to 480 V, 10 mA to 100 A	Using Precision Power Calibration System (PPCS) by Direct Method	0° to 360°	0.0012°
145	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Reactive Energy (1P / 3P4W) 25 V to 480 V, 1 mA to 10 mA, PF: 0.01 to 1 Lag / Lead, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.25 mVArh to 14.4 VArh	0.025 % /PF to 0.002 % /PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	32 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
146	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Reactive Energy (1P/ 3P4W) 1 V to 480 V, 10 mA to 100 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Precision Energy Calibration System (PPCS) By Direct Method	0.1 mVArh to 144 kVArh	0.002 % / PF to 0.004 % / PF
147	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Reactive Power (1P/ 3P4W) 1 V to 480 V, 10 mA to 100 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.1 mVAr to 144 kVAr	0.002 % / PF to 0.004 % / PF
148	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Reactive Power (1P/ 3P4W) 25 V to 480 V, 1 mA to 10 mA, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Precision Power Calibration System (PPCS) By Direct Method	0.25 mVAr to 14.4 VAr	0.025 % /PF to 0.002 % /PF
149	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Standard Resistor with 8½ Digit Reference Multimeter by Direct / Comparison Method	1 mA to 20 A	0.0005 % to 0.001 %
150	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Electrometer, Standard Resistor, Standard Shunts with 8½ Digit Reference Multimeter by Direct / comparison Method	1 pA to 1 mA	1.5 % to 0.0005 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	33 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
151	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using DC High Current Source with Standard Shunt with 8½ Digit Reference Multimeters by Direct / Comparison Method	1000 A to 3000 A	0.004 % to 0.005 %
152	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using High Current Source with Standard Resistor with 8½ Digit Reference Multimeter by Direct / Comparison Method	20 A to 1000 A	0.0008 % to 0.004 %
153	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using High Voltage Source & DC High Voltage Divider with kV Meter by Direct /Comparison Method	1 kV to 100 kV	1.0 %
154	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using High Voltage Source & DC High Voltage Divider with kV Meter by Direct/ Comparison Method	100 kV to 150 kV	1.6 %
155	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Power 1 mV to 1000 V, 1 mA to 30 A	Using 8½ Digit Multimeters, Precision Power Meter by Direct Method	0.001 mW to 30 kW	0.005 % to 0.05 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	34 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
156	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Multifunction Calibrator with Reference Voltage Divider, DC Voltage Standard, 8½ Digit Reference Multimeter by Direct / Comparison Method	10 µV to 10 mV	0.01 % to 0.0015 %
157	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Multifunction Calibrator with Reference Voltage Divider, DC Voltage Standard, 8½ Digit Reference Multimeter by Direct / Comparison Method	10 mV to 10 V	0.0015 % to 0.00001 %
158	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Multifunction Calibrator with Binary Voltage Divider with Range Extender, DC Voltage Standard, 8½ Digit Reference Multimeter by Direct / Comparison Method	10 V to 1050 V	0.00001 % to 0.00025 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 35 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
159	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance (4 wire)	Using DCC Bridge by Direct Method	10 µohm to 10 kohm	0.02 % to 0.0005 %
160	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance upto 1 kV	Using DCC Bridge by Direct Method	10 kohm to 10 Mohm	0.0005 % to 0.004 %
161	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance upto 1 kV	Using High Resistance Ratio Bridge by Direct Method	10 Mohm to 100 Tohm	0.004 % to 1 %
162	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance upto 10 kV	Using High Voltage Divider with Electrometer by V/I Method	1 Mohm to 1 Tohm	1 % to 2.5 %
163	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Standard Resistors & Multifunction Calibrator by V/R Method	1 pA to 100 µA	0.055 % to 0.015 %
164	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Precision Multifunction Calibrator by Direct Method	100 µA to 2 A	0.015 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	36 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
165	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator with transconductance amplifier and current coil by Direct Method	100 A to 2000 A	0.2 % to 0.8 %
166	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator with transconductance Amplifier by Direct Method	2 A to 100 A	0.015 %
167	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power 1 mV to 1000 V, 1 mA to 20.5 A	Using Multi function Calibrator by Direct Method	0.001 mW to 20.5 kW	0.06 % to 0.26 %
168	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power 1 mV to 1000 V, 20.5 A to 1000 A	Using Multi function Calibrator & Current Coil by Direct Method	20.5 mW to 1 MW	0.02 % to 1 %
169	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	Using Standard Resistor by Direct Method	10 mohm	0.001 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	37 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
170	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by direct Method	10 µV to 10 mV	4.6 % to 0.005 %
171	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by direct Method	10 mV to 10 V	0.005 % to 0.0004 %
172	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by direct Method	10 V to 1050 V	0.0004 % to 0.001 %
173	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire & 4 wire)	Using Multifunction Calibrator by Direct Method	0.1 ohm to 190 kohm	0.018 % to 0.0012 %
174	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire & 4 wire)	Using Multifunction Calibrator by Direct Method	190 kohm to 100 Mohm	0.0012 % to 0.01 %
175	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire)	Using Standard Resistor by Direct Method	1 Mohm	0.0025 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	38 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
176	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 kohm	0.001 %
177	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 mohm	0.002 %
178	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 Ohm	0.0002 %
179	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	1.6 ohm	0.0012 %
180	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunts by Direct Method	10 µohm (3000 A / 30 mV)	0.021 %
181	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	10 kohm	0.0003 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	39 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
182	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	10 ohm	0.001 %
183	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	100 µohm (300 A / 30 mV)	0.02 %
184	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 kohm	0.002 %
185	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 mohm	0.005 %
186	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 ohm	0.001 %
187	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	150 µohm (400 A / 60 mV)	0.12 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 40 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
188	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	16 mohm	0.002 %
189	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	16 ohm	0.001 %
190	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	160 mohm	0.002 %
191	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	200 µohm (500 A / 100 mV)	0.006 %
192	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	240 µohm (250 A / 60 mV)	0.12 %
193	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	4 ohm	0.001 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 41 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
194	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunts by Direct Method	40 µohm (1500 A / 60 mV)	0.01 %
195	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	40 mohm	0.002 %
196	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	40 ohm	0.001 %
197	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	400 mohm	0.001 %
198	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	60 µohm (1000 A / 60 mV)	0.12 %
199	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	600 µohm (100 A / 60 mV)	0.12 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	42 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
200	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	8 mohm	0.002 %
201	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	1 Tohm	0.2 %
202	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	10 Gohm	0.06 %
203	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	10 Mohm	0.004 %
204	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	100 Tohm	3 %
205	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 200 V	Using Standard Resistor by Direct Method	1 Gohm	0.006 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	43 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
206	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 5 kV	Using High Resistance Decade Substitutor (Decade Resistane Box) by Direct Method	100 Mohm to 1 Tohm	0.05 % to 1.2 %
207	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 650 V	Using Standard Resistor by Direct Method	100 Mohm	0.005 %
208	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / CT Test Set / CT Comparator (Phase Displacement Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	0.05 A to 6 A	0.5 min
209	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / CT Test Set / CT Comparator (Ratio Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	0.05 A to 6 A	0.01 %
210	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / PT Test Set / PT Comparator (Phase Displacement Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	25 V to 132 V	0.5 min

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	44 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
211	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / PT Test Set / PT Comparator @ 50 Hz (Ratio Error)	Using Power / Energy Test System with AITTS by Comparison Method	25 V to 132 V	0.012 %
212	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	CT/ PT Burden @ 50 Hz	Using Power / Energy Meter by Direct / Comparison Method	1 VA to 200 VA	0.05 %
213	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Current Transformer (Phase Displacement Error) @ 50 Hz	Using Standard Current Transformer and Instrument Transformer Measuring Bridge by Comparison Method	1 A to 1000 A / 1 A to 5 A (Direct) & 1000 A to 10000 A / 1 A to 5 A (By Turns)	0.15 min
214	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Current Transformer (Ratio Error) @ 50 Hz	Using Standard Current Transformer and Instrument Transformer Measuring Bridge by Comparison Method	1 A to 1000 A / 1A to 5 A (Direct) & 1000 A to 10000 A / 1 A to 5 A (By turns)	0.004 %
215	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Isolation Current Transformer (Phase Displacement Error) @ 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct Method	1 mA to 100 A	0.5 min to 0.16 min

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	45 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
216	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Isolation Current Transformer (Phase Displacement Error) @ 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct Method	100 A to 120 A	0.16 min to 0.5 min
217	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Isolation Current Transformer (Ratio Error) @ 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct Method	1 mA to 100 A	0.018 % to 0.006 %
218	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Isolation Current Transformer (Ratio Error) @ 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct Method	100 A to 120 A	0.006 % to 0.014 %
219	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Transformer Ratio Meter @ 50 Hz	Using Ratio Standard with 8½ Digit Multimeters by Comparison Method	0.8 to 2100	0.05 %
220	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Transformer Ratio Meter Calibrator / Voltage Transformer @ 50 Hz	Using Multifunction Calibrator with 8½ Digit Multimeters by Direct/ Comparison Method	0.8 to 2100	0.03 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	46 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
221	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Voltage Transformer (Phase Displacement Error) @ 50 Hz	Using Standard Capacitor, EPD, Instrument Transformer Measuring Bridge by Comparison Method	1.1 kV-100 kV / 100 V-120 V, 1.1 kV/ sqrt3 to 132 kV / sqrt3 / 100 V / sqrt3 - 120 V / sqrt3 to	0.35 min
222	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Voltage Transformer (Ratio Error) @ 50 Hz	Using Standard Capacitor, EPD, Instrument Transformer Measuring Bridge by Comparison Method	1.1 kV-100kV / 100 V-120V, 1.1 kV/ sqrt3 to 132 kV / sqrt3 / 100 V / sqrt3 - 120 V / sqrt3 to	0.015 %
223	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor) (Square Wave into 1 Mohm) AC @ 1 kHz	Using Oscilloscope Calibrator with Active Level Head by Direct Method	1 mV to 200 V (p-p)	2.34 % to 0.2 %
224	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor) (Square Wave into 50 ohm) AC @ 1 kHz	Using Oscilloscope Calibrator with Active Level Head by Direct Method	1 mV to 5 V(p-p)	2.26 % to 0.3 %
225	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor), DC in to 1 Mohm	Using Oscilloscope Calibrator with Active Level Head by Direct Method	1 mV to 200 V	3 % to 0.12 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	47 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
226	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor), DC in to 50 ohm	Using Oscilloscope Calibrator with Active Level Head by Direct Method	1 mV to 5 V	3 % to 0.035 %
227	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Bandwidth @ up to 6 GHz	Using Oscilloscope Calibrator with Active Level Head by Direct Method	100 kHz to 6 GHz	2.3 % to 6.03 %
228	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Time Base (Horizontal Axis Deflection Factor)	Using Oscilloscope Calibrator with Active Level Head by Direct Method	200 ps to 50 s	0.0033 % to 0.00003 %
229	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Amplitude (+/-) 10 %	Using Oscilloscope with 1000 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	0.5 kV to 4 kV	6.1 %
230	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Burst Duration (+/-) 20 %	Using Oscilloscope with 1000 Ohms Load Resistor by Direct Method As per IEC 61000-4-18:2019	50 ms at 3 MHz, 15 ms at 10 MHz, 5 ms at 30 MHz	5.61 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	48 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
231	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Burst Period (+/-) 20 %	Using Oscilloscope with 1000 Ohms Load Resistor by Direct Method As per IEC 61000-4-18:2019	300 ms	4 %
232	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Decaying Voltage (+/-) 10 %	Using Oscilloscope with 1000 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	0.1 kV to 4 kV (Pk 5 > 50 % of Pk 1, Pk 10	6.1 %
233	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Voltage Oscillation Frequency (+/-) 10 %	Using Oscilloscope with 1000 ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	3 MHz, 10 MHz, 30 MHz	5.65 %
234	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Open Circuit) Rise Time (+/-) 30 %	Using Oscilloscope with 1000 ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	5 ns	5.65 %
235	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Short Circuit) Current Amplitude (+/-) 20 %	Using Oscilloscope with 0.1 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	10 A to 80 A	6.1 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	49 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
236	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Short Circuit) Current Oscillation Frequency (+/-) 30 %	Using Oscilloscope with 0.1 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	3 MHz, 10 MHz, 30 MHz	5.65 %
237	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Short Circuit) Decaying in Current (+/-) 20 %	Using Oscilloscope with 0.1 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	1 A to 80 A (Pk 5 > 25 % of Pk 1, Pk 10	6.1 %
238	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Fast Damped Oscillatory (In Short Circuit) Rise Time	Using Oscilloscope with 0.1 Ohms Load Resistor by Direct Method as per IEC 61000-4-18:2019	1-330 ns at 3 MHz , 1-100 ns at 10 MHz, 1-33 ns at 30 MHz	5.7 %
239	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Slow Damped Oscillatory (In open Circuit) Repetition Rate (+/-) 10 %	Using Oscilloscope with Differential probe & Current Monitor by direct method as per IEC 61000-4-18:2019	25 ms at 100 kHz, 2.5 ms at 1 MHz	4 %
240	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Slow Damped Oscillatory (In open Circuit) Amplitude (+/-) 10 %	Using Oscilloscope with Differential probe & Current Monitor by direct method as per IEC 61000-4-18:2019	0.25 kV to 2.5 kV	6.35 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	50 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
241	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Slow Damped Oscillatory (In open Circuit) Voltage Decay (+/-) 10 %	Using Oscilloscope with Differential probe & Current Monitor by direct method as per IEC 61000-4-18:2019	0.05 kV to 2.5 kV (Pk 5 > 50 % of Pk 1, Pk 10	6.35 %
242	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Slow Damped Oscillatory (In open Circuit) Rise Time (+/-) 10 %	Using Oscilloscope with Differential probe & Current Monitor by direct method as per IEC 61000-4-18:2019	75 ns	5.65 %
243	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Generator Slow Damped Oscillatory (In Short Circuit) Current Amplitude (+/-) 20 %	Using Oscilloscope with Differential probe & Current Monitor by direct method s per IEC 61000-4-18:2019	1.25 A to 12.5 A	5.75 %
244	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Magnetic Field Generator Oscillation Period @ 100 kHz (+/-) 10 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-10:2016	10 µs @ 100 kHz	5.25 %
245	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Magnetic Field Generator Decay Rate of current (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-10:2016	1 A to 111 A (Pk 5 > 50 % of Pk 1, Pk 10	5.85 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	51 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
246	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Magnetic Field Generator Peak Current (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-10:2016	11.1 A to 111 A	5.85 %
247	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Magnetic Field Generator Repetition Time (+/-) 10 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-10:2016	25 ms at 100 kHz, 2.5 ms at 1 MHz	5.2 %
248	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Damped Oscillatory Magnetic Field Generator Oscillation Period @ 1 MHz (+/-) 10 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-10:2016	1 µs at 1 MHz	5.24 %
249	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	EFT Generator with Capacitive Coupling Clamp (Amplitude) (+/-) 20 %	Using Oscilloscope with 50 ohms load resistor & Transducer Plate by Direct Method as per IEC 61000-4-4:2012	0.25 kV to 4 kV	6.1 %
250	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	EFT Generator with Capacitive Coupling Clamp (Pulse Width) (+/-) 30 %	Using Oscilloscope with 50 ohms load resistor & Transducer Plate by Direct Method as per IEC 61000-4-4:2012	50 ns	5.15 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	52 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
251	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	EFT Generator with Capacitive Coupling Clamp (Rise Time) (+/-) 30 %	Using Oscilloscope with 50 ohms load resistor & Transducer Plate by Direct Method as per IEC 61000-4-4:2012	5 ns	5.85 %
252	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Simulator (50 Ohm & 1 kohm) Burst Duration @ 100 kHz (+/-) 20 %	Using Oscilloscope with 50 & 1000 ohms load resistor by Direct Method as per IEC 61000-4-4:2012	0.75 ms at 100 kHz to	5.15 %
253	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient simulator (50 Ohm & 1 kohm) Burst Period (+/-) 20 %	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method as per IEC 61000-4-4:2012	300 ms	5.15 %
254	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Simulator (50 Ohm & 1 kohm) Pulse Width (+/-) 30 % & (-) 10 to 50 ns	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method As per IEC 61000-4-4:2012	50 ns	5.15 %
255	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Simulator (50 ohm & 1 kohm) Repetition Rate (+/-) 20 %	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method as per IEC 61000-4-4:2012	200 µs @ 5 kHz, 10 µs at 100 kHz	5.15 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	53 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
256	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient simulator (50 Ohm & 1 kohm) Rise Time (+/-) 30 %	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method as per IEC 61000-4-4:2012	5 ns	5.85 %
257	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Simulator (50ohm & 1kohm) Burst Duration (+/-) 20 %	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method as per IEC 61000-4-4:2012	15 ms to at 5 kHz	5.15 %
258	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Simulator (50ohm & 1kohm) Voltage Amplitude (+/-) 10 %	Using Oscilloscope with 50 & 1000 Ohms load resistor by Direct Method As per IEC 61000-4-4:2012	0.125 kV to 4 kV	6.1 %
259	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Generator with CDN Amplitude (+/-) 10 %	Using Oscilloscope with 50 ohms load resistor by Direct Method as per IEC 61000-4-4:2012	0.25 kV to 2.0 kV	6.1 %
260	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Generator with CDN Rise Time (+/-) 30 %	Using Oscilloscope with 50 ohms load resistor by Direct Method as per IEC 61000-4-4:2012	5.5 ns	5.65 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	54 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
261	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrical Fast Transient Generator with CDN Pulse Width (+/-) 30 %	Using Oscilloscope with 50 ohms load resistor by Direct Method as per IEC 61000-4-4:2012	50 ns to	5.15 %
262	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator (±) 2 kV to (±) 30 kV Current at 60ns (+/-) 30 %	Using Oscilloscope & ESD Target by Direct Method as per IEC 61000-4-2:2025	2 A to 30 A	6.7 %
263	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator (±) 2 kV to (±) 30 kV Peak Current (+/-) 15 %	Using Oscilloscope & ESD Target by Direct Method As per IEC 61000-4-2:2025	7.5 A to 112.5 A	6.7 %
264	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator Air Discharge voltage (+/-) 5 %	Using Oscilloscope & High Voltage divider with meter by Direct Method as per IEC 61000-4-2:2025	2 kV to 30 kV	2.85 %
265	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator (±) 2 kV to (±) 30 kV 2nd Peak Current (-) 20 % / (+) 40 %	Using oscilloscope & ESD target by direct method as per IEC 61000-4-2:2025	4.5 A to 67.5 A	6.7 %
266	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator (±) 2 kV to (±) 30 kV Rise Time (+/-) 25 %	Using Oscilloscope & ESD Target by Direct Method As per IEC 61000-4-2:2008	0.8 ns to	11.2 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	55 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
267	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Electrostatic Discharge Simulator (±) 2 kV to (±) 30 kV Current at 30ns (+/-) 30 %	Using Oscilloscope & ESD Target by Direct Method As per IEC 61000-4-2:2025	4 A to 60 A	6.7 %
268	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Fast damped Oscillatory Generator - Open circuit Repetition Rate (+/-) 10 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-18:2019	200 µs	4.1 %
269	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Impulse Generator - Impulse (Rise Time & Pulse Width) as per IEC61000-4-5:2017, IEC61180-1:2016 (+/-) 30 %	Using Impulse Probe with DSO by Direct Method	1.2 µs, 50 µs	7.2 %, 5.15 %
270	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Impulse Voltage (+/-) 10 % as per IEC61000-4-5:2017, IEC61180-1:2016	Using Impulse Probe with DSO by Direct Method	1 kV to 12 kV	6.3 %
271	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Power Magnetic Field Generator Current @ 50 Hz	Using Current probe with DMM by Direct Method As per IEC 61000-4- 8:2009	1 A to 100 A	3 %
272	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Power Magnetic Field Generator Current @ 50 Hz	Using Current probe with DMM by Direct Method As per IEC 61000-4- 8:2009	100 A to 1000 A	3.5 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	56 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
273	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Pulse Magnetic Field Generator Front Time (+/-) 20 %	Using Oscilloscope with Pearson Current Monitor by Direct Method as per IEC 61000-4-9 :2016	8 µs	6.05 %
274	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Pulse Magnetic Field Generator Pulse Duration (+/-) 20 %	Using Oscilloscope with Pearson Current Monitor by Direct Method As per IEC 61000-4-9 :2016	20 µs	5.25 %
275	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Pulse Magnetic Field Generator Pulse Level (+/-) 10 %	Using Oscilloscope with Pearson Current Monitor by Direct Method As per IEC 61000-4-9 :2016	100 A to 1000 A	6.05 %
276	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Open Circuit Amplitude (+/-) 10 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-12:2017	0.25 kV to 4 kV	6.3 %
277	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Open Circuit Decaying (+/-) 10 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-12:2017	Pk2 40 % to 110 % of Pk1, Pk3 40 % to 80 % of Pk2, Pk4 40 % to 80 % of Pk3	6.3 %
278	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Open Circuit Oscillation Frequency (+/-) 10 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-12:2017	100 kHz to kHz	5.61 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	57 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
279	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Open Circuit Rise Time (+/-) 30 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-12:2017	0.5 µs	9.57 %
280	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Short Circuit Current Amplitude (+/-) 10 %	Using Oscilloscope with Current Monitor by Direct Method As per IEC 61000-4-12:2017	20.8 A to 333.3 A at 12ohm, 8.3 to 133.3 A at 30ohm	5.75 %
281	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Ring Wave Generator Short Circuit Rise Time (+/-) 30 %	Using Oscilloscope with Current Monitor by Direct Method As per IEC 61000-4-12:2017	0.2 µs to 1 µs	5.7 %
282	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Slow Damped Oscillatory generator - Open Circuit Frequency (+/-) 10 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-18:2019	100 kHz, 1 MHz to MHz	5.63 %
283	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Slow damped oscillatory Generator -Open circuit Burst Duration	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-18:2019	>2 s	5.65 %
284	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Short Circuit Current Current Amplitude (+/-) 10 %	Using Oscilloscope & Current Monitor by Direct Method As per IEC 61000-4-5: 2014 + A1 : 2017	0.25 kA to 3.5 kA	5.75 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	58 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
285	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Open Circuit Voltage Amplitude (+/-) 10 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-5:2014 + A1 : 2017	0.5 kV to 7.0 kV	6.3 %
286	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Open Circuit Voltage Front Time (+/-) 30 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-5:2014 + A1 : 2017	1.2 µs	7.2 %
287	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Open Circuit Voltage Pulse Width (+/-) 30 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-5:2014 + A1 : 2017	38 µs to 50 µs	5.65 %
288	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Short Circuit Current Front Time (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5:2014 + A1 : 2017	8 µs	5.3 %
289	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator In Short Circuit Current Pulse Width (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5:2014+A1 :2017	20 µs	5.25 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	59 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
290	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator with CDN Open Circuit Voltage Amplitude (+/-) 10 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-5:2014+ A1:2017	0.5 kV to 4.0 kV	6.3 %
291	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator With CDN Open Circuit Voltage Front Time (+/-) 30 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-5 +A1:2017:2019	1.2 µs	7.2 %
292	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator with CDN Open Circuit Voltage Pulse Width (+/-) 20 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-5:2014+A1: 2017	50 µs	5.65 %
293	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator with CDN Short Circuit Current Amplitude (+/-) 10 %	Using Oscilloscope with Current Monitor by direct method as per IEC 61000-4-5:2014+A1: 2017	37.53 A to 2 kA	5.75 %
294	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator with CDN Short Circuit Current Front Time (+/-) 30 %	Using Oscilloscope with Current Monitor by direct method as per IEC 61000-4-5:2014+A1: 2017	1.3 µs to 8 µs	5.3 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	60 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
295	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Surge Generator With CDN Short Circuit Current Pulse Width (+/-) 30 %	Using Oscilloscope with Current Monitor by direct method as per IEC 61000-4-5:2014 +A1:2017	13 µs to 48 µs	5.25 %
296	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge Generator in Short Circuit Current Front Time (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5 : 2014 + A1 : 2017	5 µs	5.65 %
297	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator with CDN - Short Circuit Pulse width (+/-) 30 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5:2014 + A1 :2017	250 µs	5.65 %
298	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge Generator In Open Circuit Voltage Amplitude (+/-) 20 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-5: 2014 + A1 : 2017	0.5 kV to 6 kV	6.3 %
299	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge Generator In Open Circuit Voltage Front Time (+/-) 30 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-5:2014 + A1 : 2017	10 µs	5.65 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	61 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
300	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge Generator In Open Circuit Voltage Pulse Width (+/-) 20 %	Using Oscilloscope with Differential probe by Direct Method as per IEC 61000-4-5 : 2014 + A1 : 2017	700 µs to	5.65 %
301	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge Generator In Short Circuit Current Current Amplitude (+/-) 30 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5:2014 + A1 : 2017	12.5 A to 150 A	5.75 %
302	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator In Short Circuit Current Pulse Width (+/-) 20 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5: 2014 + A1 : 2017	320 µs to	5.25 %
303	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom surge Generator with CDN - Open circuit Pulse Width (+/-) 30 %	Using Oscilloscope with Differential probe by Direct Method As per IEC 61000-4-5:2014 + A1 : 2017	250 µs to	5.65 %
304	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator with CDN - Open circuit Amplitude (+/-) 10 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-5:2014 +A1:2017	0.25 kV to 4 kV	6.3 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 62 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
305	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator with CDN - Open circuit Front Time (+/-) 30 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-5:2014 + A1:2017	8 µs to	5.65 %
306	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator with CDN -Short Circuit Front Time (+/-) 30 %	Using Oscilloscope with Current Monitor by Direct Method as per IEC 61000-4-5:2014 + A1 :2017	3.2 µs	5.65 %
307	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Telecom Surge generator with CDN -Short Circuit Current Amplitude (+/-) 10 %	Using Oscilloscope with Current Monitor by direct method as per IEC 61000-4-5 :2014 + A1 :2017	6.25 A to 145 A	5.75 %
308	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Voltage Dips and Interruption Generator at 230 V AC @ 50 Hz & DC Voltage (+/-) 5 %	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-11:2020, IEC 61000-4-29 : 2000	0 to 80 %	3.4 %
309	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Voltage Dips and Interruption Generator at 230 V AC @ 50 Hz & DC Duration	Using Oscilloscope with Differential probe by direct method as per IEC 61000-4-11:2020, IEC 61000-4-29 : 2000	10 ms to 5 sec	2.4 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	63 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
310	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	B type Thermocouple	Using Reference Multimeter by Direct Method	600 °C to 1820 °C	0.05 °C
311	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	C type Thermocouple	Using Reference Multimeter by Direct Method	1 °C to 2300 °C	0.05 °C
312	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	E type Thermocouple	Using Reference Multimeter by Direct Method (Simulation)	(-) 230 °C to 1000 °C	0.12 °C
313	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	J type Thermocouple	Using Reference Multimeter by Direct Method	(-) 210 °C to 1200 °C	0.02°C
314	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	K type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 1370 °C	0.03 °C
315	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	L type Thermocouple	Using Reference Multimeter by Direct Method	(-) 200 °C to 900 °C	0.05°C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	64 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
316	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	N type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 1300 °C	0.15 °C to 0.02 °C
317	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	R type Thermocouple	Using Reference Multimeter by Direct Method	(-) 50 °C to 1768 °C	0.05°C
318	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD	Using Reference Multimeter, by direct Method	(-) 200 °C to 850 °C	0.015 °C
319	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	S type Thermocouple	Using Reference Multimeter by Direct Method	(-) 50 °C to 1768 °C	0.05°C
320	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	T type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 400 °C	0.1 °C
321	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	U type Thermocouple	Using Reference Multimeter by Direct Method	(-) 200 °C to 600 °C	0.05°C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	65 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
322	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	B type Thermocouple	Using Multifunction Calibrator by Direct Method	600 °C to 1820 °C	0.05 °C
323	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	C type Thermocouple	Using Multi Function Calibrator by Direct Method	1 °C to 2300 °C	0.05 °C
324	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	E type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 270 °C to 1000 °C	0.15 °C
325	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	J type Thermocouple	Using Multifunction Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.04 °C
326	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	K type Thermocouple	Using Multifunction Calibrator by Direct Method	(-) 270 °C to 1370 °C	0.03 °C
327	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	L type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 200 °C to 900 °C	0.05 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	66 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
328	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	N type Thermocouple	Using Multifunction Calibrator by direct Method	(-) 270 °C to 1300 °C	0.2 °C
329	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	R type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 50 °C to 1768 °C	0.05 °C
330	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD	Using Multifunction Calibrator by Direct method	(-) 200 °C to 850 °C	0.02 °C
331	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	S type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 50 °C to 1768 °C	0.05 °C
332	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	T type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 270 °C to 400 °C	0.1 °C
333	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	U type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 200 °C to 600 °C	0.05 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	67 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
334	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using GPS Controlled Frequency Standard & Counter by Direct Method	0.04 Hz to 20 GHz	0.0000000014 % to 0.00000000015 %
335	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time Interval	Using GPS Controlled Frequency Standard & Counter by Direct Method	1 µs to 24 Hours & multiple of 24 Hours	0.001 % to 0.000000000015 %
336	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time Interval	Using Multifunction Calibrator and Frequency Counter/ Timer / Analyzer By Comparison Method	1 µs to 24 Hours & multiple of 24 Hours	0.001 % to 0.00000000015 %
337	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time Period	Using GPS Controlled Frequency Standard & Counter by Direct Method	50 ps to 25 s	0.00000000015 % to 0.0000000014 %
338	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency @100mV to 1V	Using GPS Controlled Rubidium Standard Oscilloscope calibrator By Direct Method	0.04 Hz to 6 GHz,	0.0000000015 % to 0.00000000013 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	68 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
339	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Time Period	Using GPS Controlled Rubidium Standard & Oscilloscope calibrator By Direct Method	200 ps to 25 s	0.00000000013 % to 0.0000000015 %
340	FLUID FLOW-FLOW MEASURING DEVICES	Mass Flow Rate	Using Calibration Rig at Lab by Gravemetric Method as per ISO-4185	1500 kg/h to 240000 kg/h	0.25 %
341	FLUID FLOW-FLOW MEASURING DEVICES	Mass Flow Rate	Using Mass Flow Meter by Comparison Method	6000 kg/h to 48000 kg/h	0.15 %
342	FLUID FLOW-FLOW MEASURING DEVICES	Volume Flow Rate	Using Mass Flow Meter by Comparison Method	6 m^3/h to 48 m^3/h	0.15 %
343	FLUID FLOW-FLOW MEASURING DEVICES	Volumetric Flow Rate	Using Calibration Rig at Lab by Gravemetric Method as per ISO-4185	1.5 m^3/h to 240 m^3/h	0.25 %
344	MECHANICAL-ACCELERATION AND SPEED	Centrifuge /Stroboscope /Tachometer Calibrator	Using Standard Tachometer by Direct Method	12000 rpm to 99950 rpm	15 rpm
345	MECHANICAL-ACCELERATION AND SPEED	Centrifuge/ Stroboscope/ Tachometer Calibrator	Using Standard Tachometer by Direct Method	1000 rpm to 12000 rpm	2.0 rpm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	69 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
346	MECHANICAL-ACCELERATION AND SPEED	Centrifuge/ Stroboscope/ Tachometer Calibrator	Using Standard Tachometer by Direct Method	6 rpm to 1000 rpm	0.5 rpm
347	MECHANICAL-ACCELERATION AND SPEED	Contact type: Tachometer, RPM Meter /Sensor	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	> 1000 rpm to 12000 rpm	2.9 rpm
348	MECHANICAL-ACCELERATION AND SPEED	Contact type: Tachometer/ RPM meter/ Sensor	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	6 rpm to 1000 rpm	0.54 rpm
349	MECHANICAL-ACCELERATION AND SPEED	Non Contact Mode: RPM Meter /Tachometer	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	> 12000 rpm to 99950 rpm	15 rpm
350	MECHANICAL-ACCELERATION AND SPEED	Non Contact type: RPM Meter/ Tachometer	Using Tachometer Calibrator & Standard Tachometer By Comparison Method	6 rpm to 1000 rpm	0.5 rpm
351	MECHANICAL-ACCELERATION AND SPEED	Non Contact: RPM Meter/ Tachometer	Using Tachometer Calibrator & Standard Tachometer By Comparison Method	> 1000 rpm to 12000 rpm	2 rpm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	70 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
352	MECHANICAL-ACOUSTICS	Acoustic Meter/ Analyzer, Sound Level Meter, Sound Level Analyzer, Incubator Analyzer, dB Meter	Using Sound Level Calibrator with Anechoic Chamber By Direct Method	74, 84, 94, 104 & 114 dB (at 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz & 4 kHz)	0.52 dB
353	MECHANICAL-ACOUSTICS	Sound Level Calibrator/ Sound Generator	Using Sound Level Meter with Sound Level Calibrator and Anechoic Chamber By Comparison Method	74 dB to 114 dB (at 125 Hz to 4 kHz)	0.52 dB
354	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor L.C.: 1 minute	Using Steel Angle Gauge Set By Comparison method	0° to 180°	0.65 minute of arc
355	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Dial Gauge L.C.: 0.01 mm	Using Electronic Dial Calibrator Tester by Comparison Method	0 to 2 mm	5.8 µm
356	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Calipers (Vernier/ Dial/ Digital) L.C. 10 µm & Coarser	Using Slip Gauge Set and Long Slip Gauge Set By Comparison method	0 to 1000 mm	10.2 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	71 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
357	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Calipers (Vernier/ Dial/ Digital) L.C.: 10 µm & Coarser	Using Caliper Checker & Slip Gauge Set By Comparison method	0 to 600 mm	8.6 µm
358	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Cylindrical Measuring Pins	Using Slip Gauge Set, Electronic Probe with DRO & Comparator stand By Comparison method	0.5 mm to 20 mm	1.24 µm
359	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Cylindrical Setting Master	Using Slip Gauge Set, Electronic comparator with DRO and Comparator Stand By Comparison method	3 mm to 100 mm	1.3 µm
360	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge (Vernier/ Dial/ Digital) L.C.: 10 µm & Coarser	Using Slip Gauge Set, Long Slip Gauge Set and Surface Plate By Comparison method	0 to 300 mm	7.8 µm
361	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer L.C.: 1 µm & Coarser	Using Slip Gauge Set, Long Slip Gauge Set and Surface Plate By Comparison method	0 to 300 mm	6.4 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	72 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
362	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge (Lever Type) L.C 0.001 mm	Using Electronic Dial Calibrator Tester by Comparison Method	0 to 0.14 mm	3 µm
363	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge (Lever Type) L.C 0.002 mm	Using Electronic Dial Calibrator Tester by Comparison Method	0 to 0.8 mm	3 µm
364	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge (Lever Type) L.C 0.01 mm	Using Universal Measuring System By Comparison method	0 to 2 mm	6 µm
365	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge (Plunger Type) L.C 0.001 mm	Using Electronic Dial Calibrator Tester by Comparison Method	0 to 5 mm	3 µm
366	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauges (Plunger Type) L.C.: 1 µm & Coarser	Using Electronic Dial Calibrator Tester by Comparison Method	0 to 25 mm	3 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	73 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
367	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauges (Plunger Type) L.C.: 10 µm	Using Universal Measuring System By Comparison method	0 to 50 mm	6 µm
368	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Snap Gauge (Parallelism)	Using Slip Gauge Set and Long Slip Gauge By Comparison method	1 mm to 300 mm	1.5 µm
369	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Thickness Gauge L.C.: 1 µm & Coarser	Using Slip Gauge Set By Comparison method	0 to 20 mm	6 µm
370	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Digital Indicators (Plunger Type) L.C 0.01 mm	Using Universal Measuring System By Comparison method	0 to 50 mm	6 µm
371	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer L.C.: 1 µm & coarser	Using Slip Gauge Set & Optical Flat By Comparison method	0 to 25 mm	1.1 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	74 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
372	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer L.C.: 1 µm & coarser	Using Slip Gauge Set and Long Slip Gauge Set by Comparison method	25 mm to 500 mm	4.0 µm
373	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer L.C.: 1 µm & coarser	Using Slip Gauge Set and Long Slip Gauge Set By Comparison method	500 mm to 1000 mm	11.7 µm
374	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using Digital Micrometer with L.C.: 1µm By Comparison method	0.03 mm to 2 mm	1.9 µm
375	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauges (Vernier/ Dial/ Digital) L.C.: 10 µm & Coarser	Using Caliper checker & Surface plate By Comparison method	0 to 600 mm	7.9 µm
376	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Industrial Gauges (Templates, Limit Gauges, Plain work piece, Inspection JIG and Fixture/ Moulds, Hi-Lo Gauge)	Using CMM & Universal Measuring System by Direct Method	0° to 90°	1.2 minute of arc

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	75 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
377	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Industrial Gauges (Templates, Limit Gauges, Plain work piece, Inspection JIG and Fixture/ Moulds, Hi-Lo Gauge) (Parameter - Diameter, Width, Length, Thickness)	Using CMM & Universal Measuring System by Direct Method	0.01 mm to 1000 mm	12.4 µm
378	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Mircometer L.C.: 10 µm & Coarser	Using Slip Gauge Set and Slip Gauge Accessories by Comparison	5 mm to 200 mm	6.4 µm
379	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Length Gauge / Setting Rod	Using Long Slip Gauge Set, Electronic Probe with DRO & Comparator Stand By Comparison method	100 mm to 300 mm	2.2 µm
380	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Length Gauge / Setting Rod	Using Long Slip Gauge Set, Electronic Probe with DRO & Comparator Stand By Comparison method	300 mm to 600 mm	6.3 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	76 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
381	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Length Gauge / Setting Rod	Using Long Slip Gauge Set, Electronic Probe with DRO & Comparator Stand By Comparison method	600 mm to 1000 mm	6.3 µm
382	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Length Gauge / Setting Rod	Using Slip Gauge Set, Electronic Probe with DRO & Comparator Stand By Comparison method	25 mm to 100 mm	1.90 µm
383	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Tape L.C.: 1 mm & Coarser	Using Tape & Scale Calibrator by comparison method	1 mm to 50000 mm	117 x Sqrt(L) µm, Where L in m
384	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head L.C.: 0.001 mm & Coarser	Using Slip Gauge Set & Optical Flat By Comparison method	0 to 50 mm	4.8 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	77 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
385	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge	Using Slip Gauge Set, Electronic comparator with DRO and Comparator Stand By Comparison method	1 mm to 100 mm	1.3 µm
386	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ring Gauge	Using CMM By Direct Method	20 mm to 600 mm	8.9 µm
387	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ring Gauge	Using CMM By Direct Method	3 mm to 20 mm	8.4 µm
388	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Snap Gauge	Using Slip Gauge Set and Long Slip Gauge By Comparison method	1 mm to 300 mm	1.5 µm
389	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale L.C.: 0.5 mm/ 1 mm & Coarser	Using Tape & Scale Calibrator By Comparison method	0 to 1000 mm	117 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	78 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
390	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale L.C.:0.5 mm/1 mm	Using Tape & Scale Calibrator by Comparison Method	0 to 2000 mm	117 x Sqrt(L) µm, Where L is in m
391	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Step Wedge	Slip Gauge Set, Electronic probe with DRO and Comparator Stand By Comparison method	1 mm to 100 mm	3.5 µm
392	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Probe	Using Universal Measuring System By Comparison method	0° to 90°	1.2 minute of arc
393	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Probe (Linear) L.C.: 0.001 mm	Using Universal Measuring System By comparison method	1 mm to 200 mm	8.4 µm
394	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve (Aperture Size/ Pitch)	Using Digital Caliper By comparison method	4 mm to 10 mm	3.4 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	79 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
395	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve (Aperture Size/ Pitch)	Using Universal Measuring System By comparison method	75 µm to 4 mm	3.4 µm
396	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thickness Gauge L.C.: 1 µm & Coarser	Using Slip Gauge Set By Comparison method	0 to 12.7 mm	5.0 µm
397	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ultrasonic Thickness Gauge L.C.: 0.01 mm	Using Steel Slip Gauge Set & Long Steel Slip Gauge Set by Comparison Method	0 to 300 mm	71 µm
398	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Wire Gauge	Using Universal Measuring System by Direct Method	0.3 mm to 10 mm	3.4 µm
399	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker	Using Check Master, Long Steel Slip Gauge & Lever Dial Gauge by comparison method	0 to 1000 mm	6.5 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	80 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
400	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker	Using Check Master & Lever Dial Gauge by Comparison Method	0 to 600 mm	4.9 µm
401	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine (Positioning Accuracy - Linear)	Using Laser Measuring System by Comparison Method	5 mm to 15000 mm	(1.1 + 1.8L) µm, L in m
402	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Coordinate Measuring Machine (Linear)	Using Test Sphere and Check Master by Comparison Method	0 to 1000 mm	(3.96 + 2.6 L) µm L is in mm
403	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Coordinate Measuring Machine (Volumetric)	Using Test Sphere and Set of Long Gauge Blocks by Comparison Method	0 to 1000 mm	(5.8 + 2.6 L) µm, L is in mm
404	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Height Gauge L.C.: 0.1 µm (Linear)	Using Check Master by comparison Method	0 to 300 mm	2.9 µm
405	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Height Gauge L.C.: 0.1 µm (Squareness)	Cylindrical Square by comparison Method	0 to 300 mm	5.6 µm
406	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Slip Gauge Set by Direct Method	100 mm x 100 mm	1.0 µm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	81 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
407	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Glass Scale and Slip Gauge Set by Direct Method	300 mm x 300 mm	3.5 µm
408	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector Magnification	Using Slip Gauge Set & Digital Caliper by Direct Method	10 X to 100 X	0.16 %
409	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.:1 minute & Coarser	Using Steel Angle Gauge by Direct Method	0° to 360°	2.7 minute of arc
410	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Slip Gauge Set by Direct Method	100 mm x 100 mm	1.0 µm
411	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Tape & Scale Calibrator L.C.: 0.001 mm & Coarser	Using Slip Gauge Set and Long Slip Gauge Set by Direct Method	0.5 mm to 1000 mm	12.5 µm
412	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Measuring System / Length Measuring Machine L.C.: 0.0001 mm	Using Slip Gauge Set and Long Slip Gauge Set by Direct Method	0 to 200 mm	1.37 µm
413	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester (Cross Flotation)	Using Hydraulic Cross Float System by pressure generated Method as per Euramet-cg-3	100 bar to 2540 bar g	0.006 % Rdg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	82 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
414	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester (Cross Flotation)	Using Hydraulic Cross Float System By Comparison Method as per Euramet-cg-3	3.5 bar to 100 bar g	0.003 % of Rgd
415	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Pneumatic Dead Weight Tester (Cross Float Method)	Using Pneumatic Cross Float System By Comparison Method as per Euramet-cg-3	0.1 bar to 35 bar g	0.005 % of Rgd
416	MECHANICAL-PRESSURE INDICATING DEVICES	Digital Vacuum Indicators/ Calibrators/ Controllers/ transmitters (Vacuum)	Using Digital Pressure Indicator and 6 ½ DMM by Comparison Method as per DKDR- 6-1	(-) 1.0 bar to 0	0.01 % Rdg
417	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators /Calibrators /Controllers, Manometers, Magnehelic Gauge, Low Pressure Gauge, Low pressure Instruments (Pneumatic)	Using Digital Pressure Controller By Comparison Method as per DKD-R-6-1	(-) 350 mbar to (-) 75 mbar g	0.02 % of Rgd

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	83 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
418	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators /Calibrators /Controllers, Manometers, Magnehelic Gauge, Low Pressure Gauge, Low pressure Instruments (Pneumatic)	Using Digital Pressure Controller By Comparison Method as per DKD-R-6-1	0 to 75 mbar g	0.02 % of Rgd
419	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators /Calibrators /Controllers, Manometers, Magnehelic Gauge, Low Pressure Gauge, Low pressure Instruments (Pneumatic)	Using Digital Pressure Controller By Comparison Method as per DKD-R-6-1	75 mbar to 350 mbar g	0.02 % of Rgd
420	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators /Calibrators /Controllers, Digital Pressure Gauge /transmitters & pressure Instruments (Pneumatic)	Using pneumatic Dead Weight Tester and 6 ½ DMM by Comparison Method as per DKDR- 6-1	2 bar to 200 bar g	0.005 % of Rdg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	84 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
421	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators /Calibrators /Controllers, Digital Pressure Gauge/ transmitters & pressure Instruments (Hydraulic)	Using Hydraulic Piston Gauge and 6 ½ DMM by Comparison Method as per DKDR- 6-1	3.5 bar to 100 bar g/a	0.003 % Rdg
422	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators/ Calibrators/ Controllers, Digital Pressure Gauge/ transmitters & pressure Instruments (Hydraulic)	Using Hydraulic Piston Gauge and 6 ½ DMM by Comparison Method as per DKDR- 6-1	100 bar to 2800 bar g,a	0.006 % Rdg
423	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators/ Calibrators/ Controllers, Digital Pressure Gauge/ transmitters & pressure Instruments (Pneumatic)	Using pneumatic Piston Gauge and 6 ½ DMM by Comparison Method as per DKDR- 6-1	0.1 bar to 35 bar g,a	0.005 % Rdg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	85 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
424	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure Indicators/ Calibrators/ Controllers, Manometers, Magnehelic Gauge, Low Pressure Gauge, Low pressure Instruments (Pneumatic)	Using Digital Pressure Controller By Comparison Method as per DKD-R-6-1	(-) 75 mbar to 0	0.02 % of Rgd
425	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/ Wrench Type I - Class A to E Type II - Class A to G	Using Torque Calibration Systems ISO 6789:2017	0.01 Nm to 20 Nm	2.15 %
426	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench Type I - Class B & C Type II - Class A, B, C	Using Torque Calibration Systems ISO 6789:2017	20 Nm to 500 Nm	1.0 %rdg
427	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench Type I - Class B & C Type II - Class A, B, C	Using Torque Calibration Systems ISO 6789:2017	500 Nm to 2000 Nm	1.0 % rdg
428	MECHANICAL-VOLUME	Micropipettes, Syringe (for non medical purpose)	Using Micro Balance (Readability: 0.001 mg) & Distilled water by Gravimetric Method as per ISO 8655-6:2022	100 µl to 1000 µl	0.3 µl

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	86 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
429	MECHANICAL-VOLUME	Micropipettes, Syringe (for non medical purpose)	Using Micro Balance (Readability: 0.001 mg) & Distilled water by Gravimetric Method as per ISO 8655-6:2022	5 µl to 100 µl	0.05 µl
430	MECHANICAL-VOLUME	Pipette/ Burette/ Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Can	Using Precision Balance (Readability: 0.0001 g) & Distilled water of Known density By Gravimetric Method Based on ISO 4787:2021	1 ml to 10 ml	0.8 µl
431	MECHANICAL-VOLUME	Pipette/ Burette/ Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Can	Using Precision Balance (Readability: 0.0001 g) & Distilled water of Known density By Gravimetric Method Based on ISO 4787:2021	10 ml to 100 ml	0.07 ml
432	MECHANICAL-VOLUME	Pipette/ Burette/ Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Can	Using Precision Balance (Readability: 0.001 g) & Distilled water of Known density By Gravimetric Method Based on ISO 4787:2021	100 ml to 2000 ml	0.6 ml

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 87 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
433	MECHANICAL-VOLUME	Pipette/ Burette/ Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Can	Using Precision Balance (Readability: 0.01 g) & Distilled water of Known density By Gravimetric Method Based on ISO 4787:2021	2000 ml to 10000 ml	4 ml
434	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	1 g	0.003 mg
435	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	1 mg	0.0013 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	88 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
436	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	10 g	0.005 mg
437	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	10 mg	0.0013 mg
438	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Precision Balance & Mass Comparator (Readability:0.000005 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	100 g	0.015 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	89 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
439	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	100 mg	0.0016 mg
440	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	2 g	0.003 mg
441	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	2 mg	0.0013 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	90 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
442	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Precision Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	20 g	0.007 mg
443	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	20 mg	0.0013 mg
444	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Precision Balance (Readability: 0.00001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	200 g	0.02 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	91 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
445	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	200 mg	0.002 mg
446	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	5 g	0.005 mg
447	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	5 mg	0.0012 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	92 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
448	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1, Precision Balance and Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	50 g	0.008 mg
449	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	50 mg	0.0013 mg
450	MECHANICAL-WEIGHTS	Accuracy class E1 & coarser	Using Weights of Accuracy Class E1 and Micro Balance & Mass Comparator (Readability:0.001 mg) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	500 mg	0.002 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	93 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
451	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator(Readability: 0.0001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	1 kg	0.2 mg
452	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator (Readability:0.001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	10 kg	3 mg
453	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator (Readability:0.0001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	2 kg	0.9 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	94 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
454	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator (Readability:0.001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	20 kg	7 mg
455	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator (Readability:0.0001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	5 kg	1.4 mg
456	MECHANICAL-WEIGHTS	Accuracy class E2 & coarser	Using Weights of Accuracy Class E1 and Mass Comparator (Readability:0.0001 g) By Substitution Method, ABBA weighing Cycle based on OIML R-111 2004	500 g	0.2 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	95 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
457	THERMAL-TEMPERATURE	Aluminium Freezing Point - SPRT/ PRT/ SSPRT with or without Indicator	Using SPRT/ PRT, Aluminium Freezing Point Cell & Precision Thermometry Bridge & Dry Block Calibrator by Fixed Point Method	660.323 °C	5.7 mK
458	THERMAL-TEMPERATURE	Black Body Source/ Calibrator	Using IR Thermometer by Comparison Method (Emissivity 0.95)	0 °C to 120 °C	1.63 °C
459	THERMAL-TEMPERATURE	Black Body Source/ Calibrator	Using Standard IR Thermometer by Comparison Method (Emissivity 0.95)	120 ºC to 500 ºC	2.4 ºC
460	THERMAL-TEMPERATURE	Boiling Point of Liquid Nitrogen SPRT/ PRT/ SSPRT with or without Indicator	Using SPRT/ PRT, Liquid Nitrogen Comparator & Precision Thermometry Bridge by Comparison Method	(-) 195.795 °C	4.5 mK
461	THERMAL-TEMPERATURE	Gallium Melting Point - SPRT/ PRT/ SSPRT with or without Indicator	Using SPRT/ PRT, Optimal Gallium Melting Point Cell & Precision Thermometry Bridge & Stirred Liquid Bath by Fixed Point Method	29.7646 °C	3.2 mK

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	96 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
462	THERMAL-TEMPERATURE	IR/ Non - Contact Thermometer/ Pyrometer	Using Standard Infrared Thermometer and Black Body Source, Emissivity 0.95 by Comparison Method	120 °C to 250 °C	1.98 °C
463	THERMAL-TEMPERATURE	IR/ Non Contact Thermometer/ Pyrometer	Using Standard Infrared Thermometer and Black Body Source, Emissivity 0.95 by Comparison Method	250 °C to 500 °C	2.19 °C
464	THERMAL-TEMPERATURE	IR/ Non-Contact Thermometer/ Pyrometer	Using IR Thermometer by Comparison Method (Emissivity 0.95)	0 °C to 120 °C	0.91 °C
465	THERMAL-TEMPERATURE	Liquid-In-Glass Thermometer	Using SPRT/ PRT and Read unit & Liquid Bath by Comparison method	(-) 50 °C to 50 °C	0.10 °C
466	THERMAL-TEMPERATURE	Liquid-In-Glass Thermometer	Using SPRT/ PRT & Read Unit & Liquid Bath by Comparison Method	50 °C to 250 °C	0.10 °C
467	THERMAL-TEMPERATURE	RTD, Thermocouple (with or without indicator), Temp. indicator, Data loggers with sensors	Using SPRT/ PRT and Read unit & Dry Block Calibrators by Comparison method	(-) 95 °C to 140 °C	0.06 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	97 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
468	THERMAL-TEMPERATURE	RTD, Thermocouple (with or without indicator), Temp. indicator with sensor/ Data loggers with sensors	Using SPRT/ PRT and Read unit & Dry Block Calibrators by Comparison method	140 °C to 660 °C	0.18 °C
469	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Baths /Dry Block Calibrators , Oven , (Single Position)	Using SPRT/PRT and Read unit by Comparison method	50 °C to 660 °C	0.06 °C
470	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Cold chambers/ Low Temperature Liquid bath/ Low Temperature Calibrators/ Autoclave, Incubator, Oven (Industrial Purpose only - Single position)	Using PRT/ SPRT and Read Unit by Compariosn Method	(-) 95 °C to 140 °C	0.03 °C
471	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Furnaces	Using S-Type Thermocouple & Read Unit by Comparison Method	300 °C to 1200 °C	0.92 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	98 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
472	THERMAL-TEMPERATURE	Thermocouple (With or Without Indicator), Temperature Indicators /Data Logger With Sensors	Using S-type Thermocouple & Read unit & high temperature furnace by Comparison Method	300 °C to 1000 °C	1.0 °C
473	THERMAL-TEMPERATURE	Tin Freezing Point - SPRT/ PRT/ SSPRT with or without Indicator	Using SPRT/ PRT, Tin Freezing Point Cell & Precision Thermometry Bridge & Dry Block Calibrator by Fixed Point Method	231.928 °C	3.8 mK
474	THERMAL-TEMPERATURE	Triple Point of Mercury - SPRT /PRT /SSPRT with or without Indicator	Using SPRT/ PRT, Mercury T.P. Cell & Precision Thermometry Bridge & Stirred Liquid Bath by Fixed Point Method	(-) 38.8344 °C	3.1 mK
475	THERMAL-TEMPERATURE	Triple Point of Water - SPRT /PRT /SSPRT with or without Indicator	Using SPRT/ PRT, Water Triple Point Cell & Precision Thermometry Bridge & Stirred Liquid Bath by Fixed Point Method	0.01 °C	2.1 mK

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	99 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
476	THERMAL-TEMPERATURE	Zinc Freezing Point - SPRT /PRT /SSPRT with or without Indicator	Using SPRT/ PRT, Zinc Freezing Point Cell & Precision Thermometry Bridge & Dry Block Calibrator by Fixed Point Method	419.527 °C	4.4 mK

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 100 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 1 kHz to 10 kHz	Using 8½ Digit Reference Multimeter by Direct Method	10 µA to 20 A	0.1 % to 0.3 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 10 Hz to 1 kHz	Using 8½ Digit Reference Multimeter by Direct Method	10 µA to 200 µA	0.3 % to 0.07 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 10 Hz to 1 kHz	Using 8½ Digit Reference Multimeter by Direct Method	200 µA to 20 A	0.07 % to 0.1 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct Method	1 mA to 100 mA	0.025 % to 0.007 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	101 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct Method	100 mA to 160 A	0.007 % to 0.01 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 50 Hz	Using Standard CT with Power/ Energy Reference Meter by Direct Method	100 A to 5000 A	0.1 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @ 50 Hz	Using AC High Voltage Divider with kV Meter by Direct Method	1 kV to 200 kV	1.0 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Resistance @ 1 kHz	Using LCR Meter by Direct Method	0.01 ohm to 10 kohm	0.1 % to 0.05 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 MHz to 1.1 GHz	Using Digital Storage Oscilloscope by Direct Method	5 mV (p-p) to 5.5 V (p-p)	5 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	102 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 10 Hz to 20 kHz	Using AC Measurement Standard by Direct Method	2 mV to 1000 V	0.15 % to 0.O06 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 10 Hz to 1 kHz	Using 8½ Digit Multimeter and Multifunction calibrator by Direct Method/ Comparison Method	1 mV	0.8 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 20 kHz to 300 kHz	Using AC Measurement Standard by Direct Method	2 mV to 60 V	0.005 % to 0.5 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 300 kHz to 1 MHz	Using AC Measurement Standard by Direct Method	2 mV to 20 V	0.03 % to 1 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct Method	0.25 mWh to 72 Wh	0.05 % / PF to 0.01 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	103 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	0.25 mWh to 72 Wh	0.05 % / PF to 0.01 % / PF
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct Method/ Comparison Method	30 Wh to 432 kWh	0.25 % / PF
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 Wh to 432 kWh	0.25 % / PF
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	12.5 mWh to 172.8 kWh	0.01 % / PF to 0.02 % / PF
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power/ Energy Comparator by Comparison Method	12.5 mWh to 172.8 kWh	0.01 % / PF to 0.02 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	104 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 to 1 Lag/ Lead 50 Hz	Using Power/ Energy Comparator with Precision AC Voltage Divider by Direct Method	4.8 mW to 52.5 W	0.035 % / PF to 0.012 % / PF
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 to 1 Lag/ Lead 50 Hz	Using Multifunction Calibrator, Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparator Method	0.24 W to 126 kW	0.012 % / PF to 0.02 % / PF
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P /3P3W /3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag / Lead) 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	0.25 mW to 72 W	0.05 % / PF to 0.01 % / PF
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	0.25 mW to 72 W	0.05 % / PF to 0.01 % / PF
24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 W to 432 kW	0.25 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	105 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	30 W to 432 kW	0.25 % / PF
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	12.5 mW to 172.8 kW	0.01 % / PF to 0.02 % / PF
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Active Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to 140 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	12.5 mW to 172.8 kW	0.01 % / PF to 0.02 % / PF
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P / 3P3W/ 3P4W), 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	1.25 VAh to 172.8 kVAh	0.01 % to 0.02 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P /3P3W /3P4W), 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	25 mVAh to 72 VAh	0.05 % to 0.01 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	106 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	3 kVAh to 432 kVAh	0.25 %
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	25 mVAh to 72 VAh	0.05 % to 0.01 %
32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	3 kVAh to 432 kVAh	0.25 %
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Energy (1P/ 3P3W/ 3P4W), 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	1.25 VAh to 172.8 kVAh	0.01 % to 0.02 %
34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, 50 Hz	Using Power / Energy Comparator with Precision AC Voltage Divider by Direct / Comparison Method	0.48 VA to 52.5 VA	0.035 % to 0.012 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	107 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
35	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, 50 Hz	Using Multi product Calibrator with transconductance amplifier, Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparison Method	24 VA to 126 kVA	0.012 % to 0.02 %
36	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W /3P4W) 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	25 mVA to 72 VA	0.05 % to 0.01 %
37	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	1.25VA to 172.8 kVA	0.01 % to 0.02 %
38	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	25 mVA to 72 VA	0.05 % to 0.01 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 108 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
39	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Meter Test System by Comparison Method	3 kVA to 432 kVA	0.25 %
40	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, 40 Hz to 70 Hz	Using Power/ Energy Meter Test System by Direct/ Comparison Method	3 kVA to 432 kVA	0.25 %
41	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Apparent Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	1.25 VA to 172.8 kVA	0.01 % to 0.02 %
42	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using Standard Capacitor & Four Terminal Capacitance Standard with RLC Dig bridge by substitute Method	1 pF to 100 nF	0.5 % to 0.03 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 109 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
43	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using Standard Capacitor & Four Terminal Capacitance Standard with RLC Dig bridge by Direct Method & substitute Method	100 nF to 10 mF	0.03 % to 0.3 %
44	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance at High Voltage up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Comparison Method	50 pF to 30 nF	0.24 % to 0.08 %
45	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance at High Voltage up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Direct Method	50 pF to 30 nF	0.24 % to 0.08 %
46	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Dissipation Factor / Tan Delta (Absolute Value) up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Comparison Method	0.000001 to 0.4	0.00004 to 0.003

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	110 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
47	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Dissipation Factor/ Tan Delta (Absolute Value) up to 100 kV @ 50 Hz	Using C & Tan Delta Measurement System & Standard Capacitor by Direct Method	0.000001 to 0.4	0.00004 to 0.003
48	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Harmonics (Fundamental Frequency: 50 Hz)	Using Multifunction Calibrator & Power / Energy Comparator by Direct/ Comparison Method	1st order to 40th order	0.2 %
49	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Inductance @ 1 kHz	Using Precision Component Analyzer by Direct Method	100 µH to 10 H	0.08 % to 0.04 %
50	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Power Factor / Phase Angle @ 40 Hz to 70 Hz, 0 to UPF Lag / Lead, 25 V to 480 V, 1 mA to 120 A	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	0° to 360°	0.008°
51	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Power Factor / Phase Angle @ 40 Hz to 70 Hz, 25 V to 1050 V, 1 mA to 120 A, 0 to UPF	Using Power / Energy Comparator & Precision AC Voltage Divider by Direct Method	25 V to 1050 V, 1 mA to 160 A, 0 to UPF (0° to 360°)	0.008 °

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	111 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
52	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF, 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	0.25 mVArh to 72 VArh	0.05 % / PF to 0.01 % / PF
53	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power/ Energy Comparator by Comparison Method	0.25 mVArh to 72 VArh	0.05 % / PF to 0.01 % / PF
54	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power/ Energy Meter Test System by Comparison Method	30 VArh to 432 kVArh	0.25 % / PF
55	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF, 40 Hz to 70 Hz	Using Power / Energy Meter Test System by Direct / Comparison Method	30 VArh to 432 kVArh	0.25 % / PF
56	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Power/ Energy Comparator by Direct/ Comparison Method	12.5 mVArh to 172.8 kVArh	0.01 % / PF to 0.02 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	112 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
57	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Energy (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 to 1 (Lag/ Lead), 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power/ Energy Comparator by Comparison Method	12.5 mVArh to 172.8 kVArh	0.01 % / PF to 0.02 % / PF
58	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 1 mA to 50 mA, PF: 0.01 to 1 (Lag / Lead) 50 Hz	Using Power / Energy Comparator with Precision AC Voltage Divider by Direct / Comparison Method	4.8 mVAr to 52.5 VAr	0.035 % / PF to 0.012% / PF
59	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1 Phase) 480 V to 1050 V, 50 mA to 120 A, PF: 0.01 (Lag/ Lead) to UPF 50 Hz	Using Power/ Energy Comparator with Precision AC Voltage Divider by Direct/ Comparison Method	0.24 VAr to 126 kVAr	0.012 % / PF to 0.02 % / PF
60	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P /3P3W /3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	0.25 mVAr to 72 VAr	0.05 % / PF to 0.01 % / PF
61	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W /3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag /Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Calibrator with Power / Energy Comparator by Comparison Method	12.5 mVAr to 172.8 kVAr	0.01 % / PF to 0.02 % / PF

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	113 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
62	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Three Phase Power Test Bench with Power / Energy Meter Test System by Comparison Method	30 VAr to 432 kVAr	0.25 % / PF
63	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 50 mA to 120 A, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	12.5 mVAr to 172.8 kVAr	0.01 % / PF to 0.02 % / PF
64	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 1 mA to 50 mA, PF: 0.01 (Lag / Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Comparator by Direct / Comparison Method	0.25 mVAr to 72 VAr	0.05% / PF to 0.01 % / PF
65	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Reactive Power (1P/ 3P3W/ 3P4W) 25 V to 480 V, 120 A to 300 A, PF: 0.01 (Lag/ Lead) to UPF 40 Hz to 70 Hz	Using Power / Energy Meter Test System by Direct / Comparison Method	30 VAr to 432 kVAr	0.25 % / PF
66	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 40 Hz to 1 kHz	Using Multifunction Calibrator by Direct Method	1 A to 20 A	0.07 % to 0.2 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 114 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
67	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 40 Hz to 1 kHz	Using Multifunction Calibrator by Direct Method	30 µA to 1 A	0.5 % to 0.07 %
68	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 40 Hz to 70 Hz	Using Three Phase Power Calibrator by Direct Method	1 mA to 120 A	0.03 % to 0.01 %
69	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50 Hz	Using Multifunction Calibrator with 50 Turn Current Coil by Direct Method	120 A to 1000 A	0.8 %
70	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	0.01 ohm	0.1 %
71	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	0.1 ohm	0.06 %
72	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	1 kohm	0.006 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 115 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
73	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	1 ohm	0.006 %
74	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	10 kohm	0.006 %
75	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistors by Direct Method	10 ohm	0.006 %
76	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Resistance @ 1 kHz	Using Standard AC Resistor by Direct Method	100 ohm	0.007 %
77	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 40 Hz to 1 kHz	Using Multi function Calibrator by Direct Method	1 mV to 1000 V	0.7 % to 0.009 %
78	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 µF	0.02 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	116 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
79	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 F	0.5 %
80	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 mF	0.04 %
81	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 nF	0.015 %
82	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	1 pF	0.23 %
83	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 µF	0.08 %
84	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 mF	0.05 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 117 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
85	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 nF	0.015 %
86	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	10 pF	0.05 %
87	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 µF	0.04 %
88	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 mF	0.1 %
89	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 nF	0.015 %
90	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Standard Capacitor by Direct Method	100 pF	0.01 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 118 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
91	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 µF	0.022 %
92	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 F	0.5 %
93	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	1 mF	0.04 %
94	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor By Direct Method	10 µF	0.04 %
95	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	10 mF	0.05 %
96	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	100 µF	0.04 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 119 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
97	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Standard Capacitor by Direct Method	100 mF	0.13 %
98	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100 Hz	Using Multi function Calibrator by Direct Method	100 nF to 100 µF	0.3 % to 2 %
99	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Harmonics (Fundamental Frequency: 50 Hz)	Using Multifunction Calibrator with PQ Option by Direct Method	1st order to 40th order	0.35 %
100	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	1 H	0.03 %
101	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	1 mH	0.03 %
102	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	10 H	0.054 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 120 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
103	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	10 mH	0.03 %
104	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	100 µH	0.07 %
105	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Standard Inductor by Direct Method	100 mH	0.03 %
106	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Standard DC Resistor with 8½ Digit Multimeter by Direct/ Comparison Method	10 µA to 20 A	0.003 % to 0.001 %
107	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Standard DC Resistor / DC Shunt with 8½ Digit Multimeter by Direct / Comparison Method	20 A to 3000 A	0.001 % to 0.005 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	121 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
108	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using DC High Voltage Divider with kV Meter, HV source by Direct/ Comparison Method	1 kV to 100 kV	1.0 %
109	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using High Voltage Source & DC High Voltage Divider with kV Meter by Direct/ Comparison Method	100 kV to 150 kV	1.6 %
110	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Power 1 mV to 1000 V, 1 mA to 30 A	Using 8½ Digit Multimeters, Precision Power Meter by Direct Method	0.001 mW to 30 kW	0.005 % to 0.05 %
111	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 8½ Digit Reference Multimeter by Direct Method	0.1 mV to 1050 V	0.2 % to 0.001 %
112	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance (2 wire)	Using 8½ Digit Reference Multimeter by Direct Method	200 kohm to 10 Gohm	0.001 % to 0.2 %
113	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance (4 wire & 2 wire)	Using 8½ Digit Reference Multimeter by Direct Method	0.1 ohm to 200 kohm	0.02 % to 0.001 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 122 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
114	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance upto 1 kV	Using Electrometer by Direct Method	10 Gohm to 100 Tohm	0.3 % to 3.3 %
115	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator by Direct Method	10 µA to 300 mA	0.26 % to 0.02 %
116	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multi function Calibrator with Current Coil by Direct Method	20 A to 1000 A	0.8 %
117	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multi function Calibrator by Direct Method	300 mA to 20 A	0.02 % to 0.15 %
118	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power 1 mV to 1000 V, 1 mA to 20.5 A	Using Multi function Calibrator by Direct Method	0.001 mW to 20.5 kW	0.06 % to 0.26 %
119	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Power 1 mV to 1000 V, 20.5 A to 1000 A	Using Multi function Calibrator & Current Coil by Direct Method	20.5 mW to 1 MW	0.02 % to 1 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	123 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
120	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	Using Standard Resistor by Direct Method	10 mohm	0.001 %
121	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by direct Method	0.1 mV to 1000 V	0.3 % to 0.002 %
122	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire)	Using Standard Resistor by Direct Method	1 Mohm	0.0025 %
123	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire)	Using Multifunction Calibrator by Direct Method	1 Mohm to 100 Mohm	0.05 % to 0.1 %
124	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (2 wire)	Using Multifunction Calibrator by Direct Method	100 kohm to 1 Mohm	0.005 % to 0.05 %
125	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Multifunction Calibrator by Direct Method	0.1 ohm to 100 kohm	0.06 % to 0.005 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 124 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
126	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 kohm	0.001 %
127	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 mohm	0.002 %
128	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	1 Ohm	0.0002 %
129	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	1.6 ohm	0.0012 %
130	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunts by Direct Method	10 µohm (3000 A / 30 mV)	0.021 %
131	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	10 kohm	0.0003 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	125 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
132	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	10 ohm	0.001 %
133	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	100 µohm (300 A / 30 mV)	0.02 %
134	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 kohm	0.002 %
135	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 mohm	0.005 %
136	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Resistor by Direct Method	100 ohm	0.001 %
137	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	150 µohm (400 A / 60 mV)	0.12 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 126 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
138	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	16 mohm	0.002 %
139	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	16 ohm	0.001 %
140	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	160 mohm	0.002 %
141	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	200 µohm (500 A / 100 mV)	0.006 %
142	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	240 µohm (250 A / 60 mV)	0.12 %
143	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	4 ohm	0.001 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 127 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
144	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunts by Direct Method	40 µohm (1500 A / 60 mV)	0.01 %
145	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	40 mohm	0.002 %
146	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	40 ohm	0.001 %
147	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	400 mohm	0.001 %
148	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	60 µohm (1000 A / 60 mV)	0.12 %
149	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	600 µohm (100 A / 60 mV)	0.12 %

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 128 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
150	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance (4 wire)	Using Standard Shunt by Direct Method	8 mohm	0.002 %
151	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	1 Tohm	0.2 %
152	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	10 Gohm	0.06 %
153	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	10 Mohm	0.004 %
154	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 1 kV	Using Standard Resistor by Direct Method	100 Tohm	3 %
155	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 200 V	Using Standard Resistor by Direct Method	1 Gohm	0.006 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	129 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
156	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 5 kV	Decade Megohm Box by Direct Method	100 Mohm to 1 Tohm	0.1 % to 2.5 %
157	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance upto 650 V	Using Standard Resistor by Direct Method	100 Mohm	0.005 %
158	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / CT Test Set / CT Comparator (Phase Displacement Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	0.05 A to 6 A	0.5 min
159	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / CT Test Set / CT Comparator (Ratio Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	0.05 A to 6 A	0.01 %
160	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / PT Test Set / PT Comparator (Phase Displacement Error) @ 50 Hz	Using Power / Energy Test System with AITTS by Comparison Method	25 V to 132 V	0.5 min

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	130 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
161	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Automatic Instrument Transformer Test Set / PT Test Set / PT Comparator @ 50 Hz (Ratio Error)	Using Power / Energy Test System with AITTS by Comparison Method	25 V to 132 V	0.012 %
162	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	CT/ PT Burden @ 50 Hz	Using Power / Energy Meter by Direct / Comparison Method	1 VA to 200 VA	0.05 %
163	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Current Transformer (Phase Displacement Error) @ 50 Hz	Using Standard Current Transformer and Instrument Transformer Measuring Bridge by Comparison Method	1 A to 1000 A / 1 A to 5 A (Direct) & 1000 A to 10000 A / 1 A to 5 A (By Turns)	0.15 min
164	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Current Transformer (Ratio Error) @ 50 Hz	Using Standard Current Transformer and Instrument Transformer Measuring Bridge by Comparison Method	1 A to 1000 A / 1A to 5 A (Direct) & 1000 A to 10000 A / 1 A to 5 A (By turns)	0.004 %
165	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Transformer Ratio Meter @ 50 Hz	Using Ratio Standard with 8½ Digit Multimeters by Comparison Method	0.8 to 2100	0.05 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	131 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
166	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Transformer Ratio Meter Calibrator / Voltage Transformer @ 50 Hz	Using Multifunction Calibrator with 8½ Digit Multimeters by Direct/ Comparison Method	0.8 to 2100	0.03 %
167	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Voltage Transformer (Phase Displacement Error) @ 50 Hz	Using Standard Capacitor, EPD, Instrument Transformer Measuring Bridge by Comparison Method	1.1 kV-100 kV / 100 V-120 V, 1.1 kV/ sqrt3 to 132 kV / sqrt3 / 100 V / sqrt3 - 120 V / sqrt3 to	0.35 min
168	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Measure)	Voltage Transformer (Ratio Error) @ 50 Hz	Using Standard Capacitor, EPD, Instrument Transformer Measuring Bridge by Comparison Method	1.1 kV-100kV / 100 V-120V, 1.1 kV/ sqrt3 to 132 kV / sqrt3 / 100 V / sqrt3 - 120 V / sqrt3 to	0.015 %
169	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor) (Square Wave into 50 ohm) AC @ 1 kHz	Using Multifunction Calibrator with Scope Option by Direct Method	1 mV to 6.6 V (p-p)	5 % to 0.3 %
170	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor), DC in to 1 Mohm	Using Multifunction Calibrator with Scope Option by Direct Method	1 mV to 130 V	5 % to 0.06 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	132 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
171	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor), DC in to 50 ohm	Using Multifunction Calibrator with Scope Option by Direct Method	1 mV to 6.6 V	5 % to 0.3 %
172	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Bandwidth @ 50 kHz to 1.1 GHz	Using Multi function Calibrator with Scope Option by Direct Method	50 kHz to 1.1 GHz	2.4 % to 11.61 %
173	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Amplitude (Vertical Axis Deflection Factor) (Square Wave into 1 Mohm) AC @ 1 kHz	Using Multi function Calibrator with Scope Option by Direct Method	1 mV to 130 V (p-p)	5 % to 0.15 %
174	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope: Time Base (Horizontal Axis Deflection Factor)	Using oscilloscope Calibrator with Scope Option by Direct Method	1 ns to 5 s	0.0003 % to 0.6 %
175	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Impulse Generator - Impulse (Rise Time & Pulse Width) as per IEC61000-4-5:2017, IEC61180-1:2016 (+/-) 30 %	Using Impulse Probe with DSO by Direct Method	1.2 µs, 50 µs	7.2 %, 5.15 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	133 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
176	ELECTRO-TECHNICAL-EMI/ EMC (Measure)	Impulse Voltage (+/-) 10 % as per IEC61000-4-5:2017, IEC61180-1:2016	Using Impulse Probe with DSO by Direct Method	1 kV to 12 kV	6.3 %
177	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	B type Thermocouple	Using Reference Multimeter by Direct Method	600 °C to 1820 °C	0.05 °C
178	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	C type Thermocouple	Using Reference Multimeter by Direct Method	1 °C to 2300 °C	0.05 °C
179	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	E type Thermocouple	Using Reference Multimeter by Direct Method (Simulation)	(-) 230 °C to 1000 °C	0.12 °C
180	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	J type Thermocouple	Using Reference Multimeter by Direct Method	(-) 210 °C to 1200 °C	0.02°C
181	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	K type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 1370 °C	0.03 °C

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 134 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
182	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	L type Thermocouple	Using Reference Multimeter by Direct Method	(-) 200 °C to 900 °C	0.05°C
183	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	N type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 1300 °C	0.15 °C to 0.02 °C
184	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	R type Thermocouple	Using Reference Multimeter by Direct Method	(-) 50 °C to 1768 °C	0.05°C
185	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD	Using Reference Multimeter, by direct Method	(-) 200 °C to 850 °C	0.015 °C
186	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	S type Thermocouple	Using Reference Multimeter by Direct Method	(-) 50 °C to 1768 °C	0.05°C
187	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	T type Thermocouple	Using Reference Multimeter by Direct Method	(-) 230 °C to 400 °C	0.1 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	135 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
188	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	U type Thermocouple	Using Reference Multimeter by Direct Method	(-) 200 °C to 600 °C	0.05°C
189	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	B type Thermocouple	Using Multifunction Calibrator by Direct Method	600 °C to 1820 °C	0.05 °C
190	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	C type Thermocouple	Using Multi Function Calibrator by Direct Method	1 °C to 2300 °C	0.05 °C
191	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	E type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 270 °C to 1000 °C	0.15 °C
192	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	J type Thermocouple	Using Multifunction Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.04 °C
193	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	K type Thermocouple	Using Multifunction Calibrator by Direct Method	(-) 270 °C to 1370 °C	0.03 °C

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 136 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
194	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	L type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 200 °C to 900 °C	0.05 °C
195	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	N type Thermocouple	Using Multifunction Calibrator by direct Method	(-) 270 °C to 1300 °C	0.2 °C
196	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	R type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 50 °C to 1768 °C	0.05 °C
197	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD	Using Multifunction Calibrator by Direct method	(-) 200 °C to 850 °C	0.02 °C
198	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	S type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 50 °C to 1768 °C	0.05 °C
199	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	T type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 270 °C to 400 °C	0.1 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	137 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
200	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	U type Thermocouple	Using Multi Function Calibrator by Direct Method	(-) 200 °C to 600 °C	0.05 °C
201	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time Period	Using Frequency Counter by Direct Method	50 ps to 25 s	0.0001 %
202	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using Frequency Counter by Direct Method	0.04 Hz to 20 GHz	0.0001
203	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time Interval	Using Frequency Counter & Time Interval Meter by Direct / Comparison Method	1 µs to 24 Hours & multiple of 24 Hours	0.1 % to 0.00001 %
204	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Oscilloscope Calibrator by Direct Method	1 Hz to 6 GHz	0.0007 % to 0.00001 %
205	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Time Period	Using Oscilloscope Calibrator by Direct Method	0.25 ns to 1 s	0.00001 % to 0.0007 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	138 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
206	FLUID FLOW-FLOW MEASURING DEVICES	Volumetric Flow Rate	Using Clamp-On Ultrasonic Flow Meter by Comparison Method	5 m^3/h to 240 m^3/h	1.50 %
207	MECHANICAL-ACCELERATION AND SPEED	Centrifuge /Stroboscope /Tachometer Calibrator	Using Standard Tachometer by Direct Method	12000 rpm to 99950 rpm	15 rpm
208	MECHANICAL-ACCELERATION AND SPEED	Centrifuge/ Stroboscope/ Tachometer Calibrator	Using Standard Tachometer by Direct Method	1000 rpm to 12000 rpm	2.0 rpm
209	MECHANICAL-ACCELERATION AND SPEED	Centrifuge/ Stroboscope/ Tachometer Calibrator	Using Standard Tachometer by Direct Method	6 rpm to 1000 rpm	0.5 rpm
210	MECHANICAL-ACCELERATION AND SPEED	Contact type: Tachometer, RPM Meter /Sensor	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	> 1000 rpm to 12000 rpm	2.9 rpm
211	MECHANICAL-ACCELERATION AND SPEED	Contact type: Tachometer/ RPM meter/ Sensor	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	6 rpm to 1000 rpm	0.54 rpm

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	139 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
212	MECHANICAL-ACCELERATION AND SPEED	Non Contact Mode: RPM Meter /Tachometer	Using Tachometer Calibrator & Standard Tachometer by Comparison Method	> 12000 rpm to 99950 rpm	15 rpm
213	MECHANICAL-ACCELERATION AND SPEED	Non Contact type: RPM Meter/ Tachometer	Using Tachometer Calibrator & Standard Tachometer By Comparison Method	6 rpm to 1000 rpm	0.5 rpm
214	MECHANICAL-ACCELERATION AND SPEED	Non Contact: RPM Meter/ Tachometer	Using Tachometer Calibrator & Standard Tachometer By Comparison Method	> 1000 rpm to 12000 rpm	2 rpm
215	MECHANICAL-ACOUSTICS	Acoustic Meter/ Analyzer, Sound Level Meter, Sound Level Analyzer, Incubator Analyzer, dB Meter	Using Sound Level Calibrator with Anechoic Chamber By Direct Method	74, 84, 94, 104 & 114 dB (at 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz & 4 kHz)	0.52 dB
216	MECHANICAL-ACOUSTICS	Sound Level Calibrator/ Sound Generator	Using Sound Level Meter with Sound Level Calibrator and Anechoic Chamber By Comparison Method	74 dB to 114 dB (at 125 Hz to 4 kHz)	0.52 dB

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	140 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
217	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine (Positioning Accuracy - Linear)	Using Laser Measuring System by Comparison Method	5 mm to 15000 mm	(1.1 + 1.8L) µm, L in m
218	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Coordinate Measuring Machine (Linear)	Using Test Sphere and Check Master by Comparison Method	0 to 1000 mm	(3.96 + 2.6 L) µm L is in mm
219	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Coordinate Measuring Machine (Volumetric)	Using Test Sphere and Set of Long Gauge Blocks by Comparison Method	0 to 1000 mm	(5.8 + 2.6 L) µm, L is in mm
220	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Height Gauge L.C.: 0.1 µm (Linear)	Using Check Master by comparison Method	0 to 300 mm	2.9 µm
221	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Slip Gauge Set by Direct Method	100 mm x 100 mm	1.0 µm
222	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Glass Scale and Slip Gauge Set by Direct Method	300 mm x 300 mm	3.5 µm
223	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector Magnification	Using Slip Gauge Set & Digital Caliper by Direct Method	10 X to 100 X	0.16 %

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	141 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
224	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.:1 minute & Coarser	Using Steel Angle Gauge by Direct Method	0° to 360°	2.7 minute of arc
225	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector L.C.: 1 µm & Coarser	Using Slip Gauge Set by Direct Method	100 mm x 100 mm	1.0 µm
226	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Tape & Scale Calibrator L.C.: 0.001 mm & Coarser	Using Slip Gauge Set and Long Slip Gauge Set by Direct Method	0.5 mm to 1000 mm	12.5 µm
227	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Measuring System / Length Measuring Machine L.C.: 0.0001 mm	Using Slip Gauge Set and Long Slip Gauge Set by Direct Method	0 to 200 mm	1.37 µm
228	MECHANICAL-PRESSURE INDICATING DEVICES	Analog/ Digital Pressure Gauge, Pressure Indicator, Transmitter, Pressure Chart Recorder (Hydraulic).	Using Advance Field Calibrator By Comparison Method as per DKD-R-6-1	0 to 1000 bar g	0.05 % of Rdg
229	MECHANICAL-PRESSURE INDICATING DEVICES	Analog/ Digital Pressure Gauge, Pressure Indicator, Transmitter, Pressure Chart Recorder (Pneumatic)	Using Advance Field Calibrator By Comparison Method as per DKD-R-6-1	0 to 20 bar g	0.05 % of Rdg

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 142 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
230	MECHANICAL-PRESSURE INDICATING DEVICES	Analog/ Digital Pressure Gauge, Pressure Indicator, Transmitter, Pressure Chart Recorder (Hydraulic)	Using Advance Field Calibrator By Comparison Method as per DKD-R-6-1	0 to 100 bar g	0.05 % of Rdg
231	MECHANICAL-PRESSURE INDICATING DEVICES	Negative Gauge, Pressure Indicator, Transmitter, Pressure Chart Recorder (Pneumatic)	Using Digital Pressure Indicator and 6 ½ DMM by Comparison Method as per DKDR- 6-1:	(-) 0.9 bar to 0	0.1 % Rdg
232	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.001 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1 based on OIML R-76 (2006)	0 to 52 g	0.008 mg
233	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.01 mg) Accuracy: Class I & Coarser	Using Weights of Accuracy Class E1 based on OIML R-76 (2006)	0 to 220 g	0.06 mg
234	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 100 mg), Accuracy: Class II & Coarser	Using Weights of Accuracy Class E1 & E2 & F1 based on OIML R-76 (2006)	0 to 34 kg	150 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	143 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
235	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.1 kg), Accuracy: Class IV & Coarser	Using Weights of Accuracy Class F1 based on OIML R-76 (2006)	500 g to 5000 kg	0.5 kg
236	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.1 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1 & E2 based on OIML R-76 (2006)	0 to 220 g	0.1 mg
237	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.1 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1, E2 based on OIML R-76 (2006)	0 to 5 kg	3 mg
238	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 1 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1, E2 based on OIML R-76 (2006)	0 to 10 kg	3 mg
239	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 1 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1 & E2 based on OIML R-76 (2006)	0 to 20 kg	3 mg
240	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 1 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1, E2 based on OIML R-76 (2006)	0 to 5 kg	3 mg

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	144 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
241	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 10 g), Accuracy : Class IV & Coarser	Using Weights of Accuracy Class E2 & F1 based on OIML R-76 (2006)	0 to 100 kg	15 g
242	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 10 g), Accuracy : Class IV & Coarser	Using Weights of Accuracy Class F1 based on OIML R-76 (2006)	0 to 200 kg	15 g
243	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 10 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1, E2 based on OIML R-76 (2006)	0 to 10 kg	13 mg
244	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing /Digital Balance (Readability: 0.005 mg), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E1 based on OIML R-76 (2006)	0 to 121 g	0.02 mg
245	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing/ Digital Balance (Readability: 1 g), Accuracy : Class I & Coarser	Using Weights of Accuracy Class E2 & F1 based on OIML R-76 (2006)	0 to 100 kg	2 g
246	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing/ Digital Balance (Readability: 20 g), Accuracy : Class I & Coarser	Using Weights of Accuracy Class F1 based on OIML R-76 (2006)	0 to 200 kg	30 g

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2287	**Page No**	145 of 148
Validity	31/08/2025 to 30/08/2029	**Last Amended on**	19/12/2025

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)(±)
247	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing/ Digital Balance (Readability: 0.001 mg), Accuracy: Class I & Coarser	Using Weights of Accuracy Class E1 based on OIML R-76 (2006)	0 to 5 g	0.005 mg
248	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Indicator with sensor of Humidity chamber /Environmental Chamber (Single position)	Using Reference Temperature/ Humidity Sensor with indicator by Comparison Method (at Single Position)	10 ºC to 50 ºC @ 50 % RH	0.3 ºC
249	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Indicator with sensor of Humidity chamber/ Environmental Chamber (SinglePosition)	Using Reference Temperature/ Humidity Sensor with indicator by Comparison Method(at Single Position)	10 % RH to 95 % RH @ 25°C	0.8 % RH
250	THERMAL-TEMPERATURE	Black Body Source/ Calibrator	Using IR Thermometer by Comparison Method (Emissivity 0.95)	0 °C to 120 °C	1.63 °C
251	THERMAL-TEMPERATURE	Black Body Source/ Calibrator	Using Standard IR Thermometer by Comparison Method (Emissivity 0.95)	120 ºC to 500 ºC	2.4 ºC

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 146 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
252	THERMAL-TEMPERATURE	IR/ Non - Contact Thermometer/ Pyrometer	Using Standard Infrared Thermometer and Black Body Source, Emissivity 0.95 by Comparison Method	120 °C to 250 °C	1.98 °C
253	THERMAL-TEMPERATURE	IR/ Non Contact Thermometer/ Pyrometer	Using Standard Infrared Thermometer and Black Body Source, Emissivity 0.95 by Comparison Method	250 °C to 500 °C	2.19 °C
254	THERMAL-TEMPERATURE	IR/ Non-Contact Thermometer/ Pyrometer	Using IR Thermometer by Comparison Method (Emissivity 0.95)	0 °C to 120 °C	0.91 °C
255	THERMAL-TEMPERATURE	RTD, Thermocouple (with or without indicator), Temp. indicator, Data loggers with sensors	Using SPRT/ PRT and Read unit & Dry Block Calibrators by Comparison method	(-) 95 °C to 140 °C	0.06 °C
256	THERMAL-TEMPERATURE	RTD, Thermocouple (with or without indicator), Temp. indicator with sensor/ Data loggers with sensors	Using SPRT/ PRT and Read unit & Dry Block Calibrators by Comparison method	140 °C to 660 °C	0.18 °C

SCOPE OF ACCREDITATION

Laboratory Name : INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2287 **Page No** 147 of 148

Validity 31/08/2025 to 30/08/2029 **Last Amended on** 19/12/2025

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)(±)
257	THERMAL-TEMPERATURE	Temperature Chambers /Oven /Environmental Chamber (Multi Position)	Using RTD sensors (minimum 9 sensors) with Data Logger by Comparison Method	0 °C to 250 °C	2.4 ºC
258	THERMAL-TEMPERATURE	Temperature Chambers/ Deep Freezers (Multi Position)	Using RTD sensors (minimum 9 sensors) with Data Logger by Comparison Method	(-) 80 °C to 0 °C	1.5 °C
259	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Baths /Dry Block Calibrators , Oven , (Single Position)	Using SPRT/PRT and Read unit by Comparison method	50 °C to 660 °C	0.06 °C
260	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Cold chambers/ Low Temperature Liquid bath/ Low Temperature Calibrators/ Autoclave, Incubator, Oven (Industrial Purpose only - Single position)	Using PRT/ SPRT and Read Unit by Compariosn Method	(-) 95 °C to 140 °C	0.03 °C
261	THERMAL-TEMPERATURE	Temperature Indicator with sensor of Furnaces	Using S-Type Thermocouple & Read Unit by Comparison Method	300 °C to 1200 °C	0.92 °C

SCOPE OF ACCREDITATION

Laboratory Name :	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, S. T. TOPE MARG, CHUNABHATTI, MUMBAI, MAHARASHTRA, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2287
Page No	148 of 148
Validity	31/08/2025 to 30/08/2029
Last Amended on	19/12/2025

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)(±)
262	THERMAL-TEMPERATURE	Temperature sensor with Indicator of Incubator (Industrial Purpose only - single position)	Using PRT/ SPRT & Read Unit By Comparison Method	0 °C to 100 °C	0.06 °C
263	THERMAL-TEMPERATURE	Thermocouple (With or Without Indicator), Temperature Indicators /Data Logger With Sensors	Using S-type Thermocouple & Read unit & high temperature furnace by Comparison Method	300 °C to 1000 °C	1.0 °C

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