



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name ASSOCIATED ELECTRONICS RESEARCH FOUNDATION (MATERIAL APPRAISAL LABORATORY), C-53, PHASE II, NOIDA, UTTAR PRADESH, INDIA

Accreditation Standard ISO/IEC 17025:2005

Certificate Number TC-5829 Page No. : 1 / 53

Validity 03/01/2019 to 02/01/2021 Last Amended on -

'In view of the transition deadline for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020.'

S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
Permanent Facility					
1	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at low temperature (Up to 200A)	CI No.12.11 of IS 8320: 2000	1 A to 600 A
2	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at normal temperature (Up to 200 A)	CI No.12.10 of IS 8320: 2000	1 V to 20 V
3	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at normal temperature (Up to 200 A)	CI No.12.10 of IS 8320: 2000	1 A to 600 A
4	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Verification of dimension, layout and mass ()	CI no. 12.4 of IS 8320: 2000	10 mm to 1000 mm
5	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Air pressure test	CI no. 12.6 of IS 8320: 2000	10 cmH2O to 140 cmH2O
6	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Capacity Test (Up to 200 Ah)	CI no. 12.7 of IS 8320: 2000	1 V to 15 V
7	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Capacity Test (Up to 200 Ah)	CI no. 12.7 of IS 8320: 2000	0.5 A to 30 A
8	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Capacity Test (Up to 200 Ah)	CI no. 12.7 of IS 8320: 2000	1 min. to 60 min.
9	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Life test and endurance test (Up to 200 Ah)	CI no. 12.14 of IS 8320: 2000	1 V to 15 V
10	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Life test and endurance test (Up to 200 Ah)	CI no. 12.14 of IS 8320: 2000	0.5 A to 30 A



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
11	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Life test and endurance test (Up to 200 Ah)	CI no. 12.14 of IS 8320: 2000	1 min. to 60 min.
12	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Storage (Up to 200Ah)	CI no. 12.17 of IS 8320: 2000	1 min. to 60 min.
13	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Storage (Up to 200Ah)	CI no. 12.17 of IS 8320: 2000	0.5 A to 30 A
14	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Storage (Up to 200Ah)	CI no. 12.17 of IS 8320: 2000	1 V to 15 V
15	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for Ah and Wh efficiencies (Up to 200 Ah)	CI no. 12.9 of IS 8320: 2000	1 V to 15 V
16	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for Ah and Wh efficiencies (Up to 200 Ah)	CI no. 12.9 of IS 8320: 2000	0.5 A to 30 A
17	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for Ah and Wh efficiencies (Up to 200 Ah)	CI no. 12.9 of IS 8320: 2000	1 min. to 60 min.
18	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at low temperature (Up to 600 A)	CI No.12.11 of IS 8320: 2000	1 min. to 60 min.
19	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at low temperature (Up to 600 A)	CI No.12.11 of IS 8320: 2000	1 V to 20 V
20	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for high rate discharge at normal temperature (Up to 600 A)	CI No.12.10 of IS 8320: 2000	1 min. to 60 min.



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
21	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for loss of capacity on storage (Up to 200 Ah)	CI no. 12.8 of IS 8320: 2000	1 V to 15 V
22	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for loss of capacity on storage (Up to 200 Ah)	CI no. 12.8 of IS 8320: 2000	1 min. to 60 min.
23	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for loss of capacity on storage (Up to 200 Ah)	CI no. 12.8 of IS 8320: 2000	1 A to 30 A
24	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for resistance to overcharge (Up to 200 Ah)	CI No.12.12 of IS 8320: 2000	1 min. to 60 min.
25	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for resistance to overcharge (Up to 200 Ah)	CI No.12.12 of IS 8320: 2000	1 V to 15 V
26	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for resistance to overcharge (Up to 200 Ah)	CI No.12.12 of IS 8320: 2000	0.5 A to 30 A
27	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for voltage during discharge (Up to 200 Ah)	CI no. 12.13 of IS 8320: 2000	1 V to 15 V
28	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for voltage during discharge (Up to 200 Ah)	CI no. 12.13 of IS 8320: 2000	1 min. to 60 min.
29	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Test for voltage during discharge (Up to 200 Ah)	CI no. 12.13 of IS 8320: 2000	0.5 A to 30 A
30	ELECTRICAL- CELLS & BATTERIES	All lead acid storage batteries	Verification of marking and packing	CI no. 12.5 of IS 8320: 2000	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
31	ELECTRICAL- CELLS & BATTERIES	Dry batteries for motor vehicles	High rate discharge capacity (Dry Charged Battery)	CI No.9.17 of IS 7372: 1995	1 V to 20 V
32	ELECTRICAL- CELLS & BATTERIES	Dry batteries for motor vehicles	High rate discharge capacity(Dry Charged Battery)	CI No.9.17 of IS 7372: 1995	1 A to 600 A
33	ELECTRICAL- CELLS & BATTERIES	Dry batteries for motor vehicles	High rate discharge capacity(Dry Charged Battery)	CI No.9.17 of IS 7372: 1995	1 min. to 60 min.
34	ELECTRICAL- CELLS & BATTERIES	Dry batteries for motor vehicles	Storage for Dry batteries	CI No.9.16 of IS 7372: 1995	1 min. to 60 min.
35	ELECTRICAL- CELLS & BATTERIES	Dry storage batteries for motor vehicles	Storage for Dry batteries	CI No.9.16 of IS 7372: 1995	1 V to 15 V
36	ELECTRICAL- CELLS & BATTERIES	Dry storage batteries for motor vehicles	Storage for Dry batteries	CI No.9.16 of IS 7372: 1995	0.5 A to 30 A
37	ELECTRICAL- CELLS & BATTERIES	Heavy duty batteries	High rate discharge at normal temperature for batteries for heavy duty application	CI no.9.11of IS 7372: 1995	1 V to 20 V
38	ELECTRICAL- CELLS & BATTERIES	Heavy duty batteries	High rate discharge at normal temperature for batteries for heavy duty application	CI no.9.11 of IS 7372: 1995	1 min. to 60 min.
39	ELECTRICAL- CELLS & BATTERIES	Heavy duty batteries	High rate discharge at normal temperature for batteries for heavy duty application	CI no.9.11 of IS 7372: 1995	1 A to 600 A



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40	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Air pressure test	CI No.8.9 of IS 13514: 1995	10 cmH ₂ O to 140 cmH ₂ O
41	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Cycle Endurance Test (Up to 200 A)	CI No.8.13 of IS 13514: 1995	0.5 A to 30 A
42	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Cycle Endurance Test(Up to 200 A)	CI No.8.13 of IS 13514: 1995	1 V to 15 V
43	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Test for high rate discharge (Up to 200A)	CI No.8.12 of IS 13514: 1995	1 min. to 60 min.
44	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Capacity test (Up to 200Ah)	CI No.8.10 of IS 13514: 1995	1 V to 15 V
45	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Capacity test (Up to 200Ah)	CI No.8.10 of IS 13514: 1995	1 min. to 60 min.
46	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Capacity test (Up to 200Ah)	CI No.8.10 of IS 13514: 1995	0.5 A to 30 A
47	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Charge retention test (Up to 200Ah)	CI No.8.11 of IS 13514: 1995	1 min. to 60 min.
48	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Charge retention test (Up to 200Ah)	CI No.8.11 of IS 13514: 1995	1 V to 15 V



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49	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Charge retention test (Up to 200Ah)	CI No.8.11 of IS 13514: 1995	0.5 A to 30 A
50	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Cycle Endurance Test (Up to 200 A)	CI No.8.13 of IS 13514: 1995	1 min. to 60 min.
51	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Test for high rate discharge (Up to 600 A)	CI No.8.12 of IS 13514: 1995	1 V to 20 V
52	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Test for high rate discharge (Up to 600 A)	CI No.8.12 of IS 13514: 1995	1 A to 600 A
53	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Verification of dimensions	CI No.8.7 of IS 13514: 1995	10 mm to 1000 mm
54	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for electric road vehicles	Visual examination	CI No.8.6 of IS 13514: 1995	Qualitative
55	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Capacity	CI. No. 9.7 of IS 7372: 1995	1 V to 15 V
56	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Capacity	CI. No. 9.7 of IS 7372: 1995	0.5 A to 30 A
57	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Capacity	CI. No. 9.7 of IS 7372: 1995	1 min. to 60 min.



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
58	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Dimension and layout	Cl No.9.4 of IS 7372 : 1995	10 mm to 1000 mm
59	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at low temperature	Cl. No. 9.10 of IS 7372: 1995	1 min. to 60 min.
60	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at normal temperature	Cl. No. 9.9 of IS 7372: 1995	1 min. to 60 min.
61	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at normal temperature	Cl. No. 9.9 of IS 7372: 1995	1 V to 20 V
62	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at normal temperature	Cl. No. 9.9 of IS 7372: 1995	1 A to 600 A
63	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Life Test	Cl. No. 9.14 of IS 7372: 1995	0.5 A to 30 A
64	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Life Test	Cl. No. 9.14 of IS 7372: 1995	1 min. to 60 min.
65	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Life Test	Cl. No. 9.14 of IS 7372: 1995	1 V to 15 V
66	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Marking	Cl. No. 9.5 of IS 7372: 1995	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
67	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Physical Examination	Cl. No. 9.3 of IS 7372: 1995	Qualitative
68	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Resistance to overcharge	Cl. No. 9.13 of 7372: 1995	1 V to 15 V
69	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Resistance to overcharge	Cl. No. 9.13 of 7372: 1995	1 min. to 60 min.
70	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Resistance to overcharge	Cl. No. 9.13 of 7372: 1995	0.5 A to 30 A
71	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Retention of charge	Cl No.9.12 of IS 7372: 1995	1 min. to 60 min.
72	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Retention of charge	Cl No.9.12 of IS 7372: 1995	0.5 A to 30 A
73	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Retention of charge	Cl No.9.12 of IS 7372: 1995	1 V to 15 V
74	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Storage	Cl no. 9.15 of IS 7372: 1995	0.5 A to 30 A
75	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Storage	Cl no. 9.15 of IS 7372: 1995	1 V to 15 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
76	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at low temperature	Cl. No. 9.10 of IS 7372: 1995	1 A to 600 A
77	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	High rate discharge at low temperature	Cl. No. 9.10 of IS 7372: 1995	1 V to 20 V
78	ELECTRICAL- CELLS & BATTERIES	Lead acid storage batteries for motor vehicles	Storage	Cl no. 9.15 of IS 7372: 1995	1 min. to 60 min.
79	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Visual Examination	JIS C 8702-2:2009, Cl No.4.1 to 4.9 & 8.1 of IS 15549: 2005	Qualitative
80	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Acid retention capability test on separators (Up to 200Ah)	Cl No.12.7 of IS 15549: 2005	1 g to 600 g
81	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Ah and Wh Efficiencies (Up to 200Ah)	Cl No.12.4 &12.5 of IS 15549: 2005	1 V to 15 V
82	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Ah and Wh Efficiencies (Up to 200Ah)	Cl No.12.4 &12.5 of IS 15549: 2005	1 min. to 60 min.
83	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Ah and Wh Efficiencies (Up to 200Ah)	Cl No.12.4 &12.5 of IS 15549: 2005	0.5 A to 30 A
84	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Charge retention test (Up to 200Ah)	Cl No.12.6 of IS 15549: 2005	1 min. to 60 min.



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85	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Charge retention test (Up to 200Ah)	CI No.12.6 of IS 15549: 2005	0.5 A to 30 A
86	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Charge retention test (Up to 200Ah)	CI No.12.6 of IS 15549: 2005	1 V to 15 V
87	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Checking of dimensions as per manufacture drawing	JIS C 8702-2: 2009	10 mm to 1000 mm
88	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Endurance Life Cycle Test (Up to 200 A)	CI. No. 7.3 of JIS C 8702-1:2009, CI No.12.10 of IS 15549: 2005	1 V to 15 V
89	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Endurance Life Cycle Test (Up to 200 A)	CI. No. 7.3 of JIS C 8702-1:2009, CI No.12.10 of IS 15549: 2005	0.5 A to 30 A
90	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Endurance Life Cycle Test (Up to 200 A)	CI. No. 7.3 of JIS C 8702-1:2009, CI No.12.10 of IS 15549: 2005	1 min. to 60 min.
91	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Gas emission intensity test (Up to 200Ah)	CI No.7.9 of JIS C 8702-1: 2009	1 Sec. to 60 Min.
92	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	High rate discharge characteristics (Up to 200Ah)	CI No.7.2 of JIS C8702-1: 2009	1 V to 15 V
93	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	High rate discharge characteristics (Up to 200Ah)	CI No.7.2 of JIS C8702-1: 2009	1 min. to 60 min.

This is annexure to 'Certificate of Accreditation' and does not require any signature.



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94	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	High rate discharge characteristics (Up to 200Ah)	CI No.7.2 of JIS C8702-1: 2009	0.5 A to 30 A
95	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Liquid Leakage Resistance Characteristics (Up to 200Ah)	CI No.7.10.2 of JIS C 8702-1: 2009	10 mm to 1000 mm
96	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Shock resistance characteristics (Up to 200Ah)	CI No.7.12 of JIS C 8702-1: 2009	Qualitative
97	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Storage Characteristics (Up to 200Ah)	CI No.7.4 of JIS C 8702-1: 2009	1 V to 15 V
98	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Storage Characteristics (Up to 200Ah)	CI No.7.4 of JIS C 8702-1: 2009	0.5 A to 30 A
99	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 1 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.2 of IS 15549: 2005	1 V to 15 V
100	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 1 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.2 of IS 15549: 2005	0.5 A to 30 A
101	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 1 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.2 of IS 15549: 2005	1 min. to 60 min.



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
102	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 10 capacity and voltage during discharge Test for C 20 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.1 of IS 15549: 2005	1 V to 15 V
103	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 10 capacity and voltage during discharge ,Test for C 20 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.1 of IS 15549: 2005	0.5 A to 30 A
104	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Test for C 10 capacity and voltage during discharge Test for C 20 capacity and voltage during discharge (Up to 200Ah)	CI. No. 7.1 of JIS C 8702-1:2009, CI No.12.1 of IS 15549: 2005	1 min. to 60 min.
105	ELECTRICAL- CELLS & BATTERIES	Small size valve regulated lead acid batteries	Vibration resistance testing (Up to 200Ah)	CI No.7.11 of JIS C 8702-1: 2009	10 mm to 1000 mm
106	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Verification of Dimensions	CI 11.4 of IS :13369: 1992	10 mm to 1000 mm
107	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Capacity Test (Up to 200Ah)	CI 11.5 of IS :13369: 1992	1 V to 15 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
108	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Capacity Test (Up to 200Ah)	CI 11.5 of IS 13369: 1992	0.5 A to 30 A
109	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Capacity Test (Up to 200Ah)	CI 11.5 of IS 13369: 1992	1 min. to 60 min.
110	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Endurance Test (Up to 200Ah)	CI no.11.7 of IS 13369: 1992	1 V to 15 V
111	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Endurance Test (Up to 200Ah)	CI no.11.7 of IS 13369: 1992	0.5 A to 60 A
112	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Endurance Test (Up to 200Ah)	CI no.11.7 of IS 13369: 1992	1 min. to 60 min.
113	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Equilibrium float current test (Up to 200Ah)	CI no.11.10 of IS 13369: 1992	1 V to 15 V
114	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Equilibrium float current test (Up to 200Ah)	CI no.11.10 of IS 13369: 1992	1 min. to 60 min.



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
115	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Equilibrium float current test (Up to 200Ah)	CI no.11.10 of IS 13369: 1992	0.5 A to 30 A
116	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for Ah and Wh efficiencies (Up to 200Ah)	CI 11.8 of IS 13369: 1992	1 V to 15 V
117	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for Ah and Wh efficiencies (Up to 200Ah)	CI 11.8 of IS 13369: 1992	0.5 A to 30 A
118	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for Ah and Wh efficiencies (Up to 200Ah)	CI 11.8 of IS 13369: 1992	1 min to 60 min
119	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for loss of capacity on storage (Up to 200Ah)	CI 11.6 of IS 13369: 1992	1 min. to 60 min.
120	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for loss of capacity on storage (Up to 200Ah)	CI 11.6 of IS 13369: 1992	1 V to 15 V
121	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Test for loss of capacity on storage (Up to 200Ah)	CI 11.6 of IS 13369: 1992	0.5 A to 30 A



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
122	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Verification of Marking and Packing	CI 11.3 of IS :13369: 1992	Qualitative()
123	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Water loss test (Up to 200Ah)	CI no.11.7 of IS 13369: 1992	1 min. to 60 min.
124	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Water loss test (Up to 200Ah)	CI no.11.7 of IS 13369: 1992	0.5 A to 30 A
125	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in mono block Container	Water loss test (Up to 200Ah)	CI no.11.9 of IS 13369: 1992	0.1 kg to 100 kg
126	ELECTRICAL- CELLS & BATTERIES	Stationary lead Acid Batteries (With Tubular Positive Plates) in monoblock Container	Verification of Construction Requirement	CI 11.2 of IS :13369: 1992	Qualitative
127	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Resistance to Heat Fire and Tracking	CI no. 18 of IS 16103 (Part 1): 2012	10 sec to 100 sec
128	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Creepage Distance and Clearances	CI No.8 of IS 10322 (Part 5/Sec 1): 2012	0.1 mm to 300 mm
129	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Endurance Test and Thermal Test	CI no.13 of IS 10322 (Part 5/Sec 1): 2012	25 °C to 200 °C



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
130	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Insulation Resistance & Electric Strength Test	CI no.15 of IS 10322 (Part 5/Sec 1): 2012	2 M Ohm to 150 G Ohm
131	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Insulation Resistance & Electric Strength Test	CI no.15 of IS 10322 (Part 5/Sec 1): 2012	0.1 kV to 5 kV
132	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Marking	CI No.6 of IS 10322 (Part 5/Sec 1): 2012	Qualitative
133	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Protection against electrical shock	CI no. 12 of IS 10322 (Part 5/Sec 1): 2012	10 V to 50 V
134	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Provision for earthing	CI no.9 of IS 10322 (Part 5/Sec 1): 2012	1 A to 32 A
135	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Provision for earthing	CI no.9 of IS 10322 (Part 5/Sec 1): 2012	100 mV to 150 V
136	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Resistance to dust and moisture (IP Test)	CI no.14 of IS 10322 (Part 5/Sec 1): 2012	Qualitative
137	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 1): 2012	0.1 mm to 10 mm
138	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 1): 2012	100 °C to 950 °C



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
139	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Fixed General Purpose	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 1): 2012	10 Sec to 100 Sec
140	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Construction	CI No.7.5,7.8 of IS 10322 (Part 5/Sec 5): 1987	Qualitative
141	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Creepage Distance and Clearances	CI No.7 of IS 10322 (Part 5/Sec 5): 1987	0.1 mm to 300 mm
142	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Endurance Test and Thermal Test	CI No.13.4 of IS 10322 (Part 5/Sec 5): 1987	25 °C to 200 °C
143	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Insulation Resistance & Electric Strength Test	CI No.13.6 of IS 10322 (Part 5/Sec 5): 1987	0.1 kV to 5 kV
144	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Insulation Resistance & Electric Strength Test	CI No.13.6 of IS 10322 (Part 5/Sec 5): 1987	2 M Ohm to 150 G Ohm
145	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood Lights	Marking	CI No.5 of IS 10322 (Part 5/Sec 5): 1987	Qualitative
146	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Mechanical Strength Test	CI No.13.3 of IS 10322 (Part 5/Sec 5): 1987	0.1 Nm to 100 Nm
147	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Protection against electrical shock	CI No.11 of IS 10322 (Part 5/Sec 5): 1987	10 V to 50 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
148	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood Lights	Provision for earthing	CI No.8 of IS 10322 (Part 5/Sec 5): 1987	1 A to 32 A
149	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood Lights	Provision for earthing	CI No.8 of IS 10322 (Part 5/Sec 5): 1987	100 mV to 150 V
150	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 5): 1987	0.1 mm to 10 mm
151	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 5): 1987	100 °C to 950 °C
152	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 5): 1987	10 Sec to 100 Sec
153	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Flood lights	Resistance to dust and Moisture (IP Test)	CI No.13.5 of IS 10322 (Part 5/Sec 5): 1987	Qualitative
154	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Cree page Distance and Clearances	CI No.11 of IS 10322 (Part I): 2014	0.001 mm to 300 mm
155	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Electric Strength Tests	CI No.10.2.2 of IS 10322 (Part I): 2014	0.1 kV to 5 kV
156	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Electro-mechanical contact system	CI No.4.11.6 of IS 10322 (Part I): 2014	0.01 V to 600 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
157	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Endurance Tests	CI No.12.3 of IS 10322 (Part I): 2014	25 °C to 200 °C
158	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	External and Internal Wiring	CI No.5 of IS 10322 (Part I): 2014	0.001 mm to 300 mm
159	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Humidity Test	CI No.9 of IS 10322 (Part I): 2014	Qualitative
160	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Insulation Resistance Tests	CI No.10.2.1 of IS 10322 (Part I): 2014	2 M Ohm to 150 G Ohm @ 500 V DC
161	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Lamp Holders	CI No.4.4 of IS 10322 (Part I): 2014	0.1 Nm to 100 Nm
162	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Marking	CI No. 3.4 of IS 10322 (Part I): 2014	Qualitative
163	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Mechanical Strength Tests	CI No.4.13 of IS 10322 (Part I): 2014	0.1 Nm to 100 Nm
164	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Protection Against Electric Shock	CI No.8 of IS 10322 (Part I): 2014	10 V to 50 V
165	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Provision for Earthing	CI No.7 of IS 10322 (Part I): 2014	10 m Ohm to 10 Ohm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
166	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to Flame & Ignition	CI No.13.3 of IS 10322 (Part I): 2014	100 °C to 950 °C
167	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to Flame & Ignition	CI No.13.3 of IS 10322 (Part I): 2014	10 Sec to 100 Sec
168	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to heat	CI No.13.2 of IS 10322 (Part I): 2014	0.1 mm to 10 mm
169	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to Tracking	CI No.13.4 of IS 10322 (Part I): 2014	10 Sec to 100 Sec
170	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Rough Service Luminaries	CI No.4.20 of IS 10322 (Part I): 2014	5 Hz to 5000 Hz
171	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Screw Terminals	CI No.14 of IS 10322 (Part I): 2014	0.1 Nm to 900 Nm
172	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Screw Terminals	CI No.14 of IS 10322 (Part I): 2014	0.1 mm to 300 mm
173	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Screws and Connections (Mech.) and glands	CI No.4.12 of IS 10322 (Part I): 2014	0.1 Nm to 100 Nm
174	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Suspension and means of adjustment	CI No.4.14 of IS 10322 (Part I): 2014	0.1 Nm to 500 Nm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
175	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Thermal Tests (Abnormal Operation)	CI No.12.5 of IS 10322 (Part I): 2014	25 °C to 200 °C
176	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Thermal Tests (Normal Operation)	CI No.12.4 of IS 10322 (Part I): 2014	25 °C to 200 °C
177	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Leakage Current Testing	CI No.10.3 of IS 10322 (Part I): 2014	10 µA to 20 mA
178	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to Corrosion	CI No.4.18 of IS 10322 (Part I): 2014	Qualitative
179	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Resistance to dust, Solid objects and Moisture	CI No.9 of IS 10322 (Part I): 2014	Qualitative
180	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	General Requirements & Tests	Starter Holders	CI No.4.5 of IS 10322 (Part I): 2014	Qualitative
181	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Hand lamps	luminaries	CI No.7.6.2 of IS 10322 (Part 5/Sec 6): 1987	Qualitative
182	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Endurance Test Switching Cycle	CI no. 13.1 (b) of IS 16104: 2012	Qualitative
183	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Input Power	CI no. 8 of IS 16104: 2012	0.1 W to 500 W



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
184	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Output Current	CI no. 7.2 of IS 16104: 2012	0.005 A to 0.02 A
185	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Output Voltage	CI no. 7.2 of IS 16104 : 2012	0 V to 300 V
186	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Power Factor	CI no. 9 of IS 16104: 2012	0.7 to 1
187	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Supply Current	CI no. 10 of IS 16104: 2012	10 mA to 10 A
188	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Lamp, LED Luminaries & Accessories Including Control Gear	Temperature Cycling Shock Test	CI no. 13.1(a) of IS 16104: 2012	-25 °C to 100 °C
189	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Chromaticity Coordinates	CI no. 9.1 of IS 16107 (Part 2): 2012	0.003 to 1
190	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Color Rendering Index (CRI)	CI no. 9 of IS 16107 (Part 2): 2012	0 to 100
191	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Correlated Color Temperature	CI no. 9.2 of IS 16107 (Part 1): 2012	1000 K to 100000 K



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192	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	LED Luminaries Life	CI no. 10 of IS 16107 (Part 1): 2012	1 hr to 9999 hr
193	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Luminaire Efficacy	CI no. 8.3 of IS 16107 (Part 2): 2012	1 lm to 199999 lm
194	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Luminaire Efficacy	CI no. 8.3 of IS 16107 (Part 2): 2012	0.1 W to 500 W
195	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Luminance Flux	CI no. 8.1 of IS 16107 (Part 1): 2017	1 lm to 199999 lm
196	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Output Voltage	CI no. 7.2 of IS 16104: 2012	0 V to 300 V
197	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Luminaries Performance Requirement	Total Input Power	CI no. 7 of IS 16107 (Part 1): 2012	2.4 W to 500 W
198	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Chromaticity Coordinates	CI 9.1 of IS 16103(Part 2): 2012	0.003 to 1
199	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Classification	CI no. 6 of IS 16103 (Part 1): 2012	Qualitative
200	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Construction	CI no. 15 of IS 16103 (Part 1): 2012	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
201	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Correlated Color Temperature	Cl 9.2 of IS 16103(Part 2): 2012	Qualitative
202	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Creepage Distance and Clearances	Cl no. 16 of IS 16103 (Part 1): 2012	0.1 mm to 300 mm
203	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	CRI (Color Rendering Index)	Cl 9.3 of IS 16103(Part 2): 2012	0 to 100
204	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Dimension	Cl 5 of IS 16103(Part 2): 2012	0.5 mm to 1000 mm
205	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED modules for General Lighting	Earth Continuity (Conformity testing during manufacture)	Cl no. 14 of IS 16103 (Part 1): 2012	1 A to 32 A
206	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Efficacy	Cl 8.3 of IS 16103 (Part 2): 2012	2.4 W to 2000 W
207	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Fault Condition	Cl no. 13 of IS 16103 (Part 1): 2012	Qualitative
208	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED modules for General Lighting	High Voltage (Conformity testing during manufacture)	Cl no. 14 of IS 16103 (Part 1): 2012	0.1 kV to 5 kV
209	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED modules for General Lighting	Input Power (Conformity testing during manufacture)	Cl no. 14 of IS 16103 (Part 1): 2012	0.1 W to 500 W



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
210	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	LED Module Life	CI 10 of IS 16103(Part 2): 2012	1 hr to 9999 hr
211	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Luminous Flux	CI 8.1 of IS 16103 (Part 2): 2012	1 lm to 199999 lm
212	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Marking	CI 4 of IS 16103(Part 2): 2012	Qualitative
213	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Marking	CI no. 7 of IS 16103 (Part 1): 2012	Qualitative
214	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Module Power	CI 7 of IS 16103 (Part 2): 2012	2.4 W to 2000 W
215	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Moisture Resistance and Insulation	CI no. 11 of IS 16103 (Part 1): 2012	2 M Ohm to 150 G Ohm @ 500 V DC
216	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Protection against accidental contact with Live part	CI no. 10 of IS 16103 (Part 1): 2012	10 V(AC) to 50 V(AC)
217	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Resistance to corrosion	CI no. 19 of IS 16103 (Part 1): 2012	Qualitative
218	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Resistance to Heat Fire and Tracking	CI no. 18 of IS 16103 (Part 1): 2012	0.1 mm to 300 mm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
219	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Resistance to Heat Fire and Tracking	CI no. 18 of IS 16103 (Part 1): 2012	100 °C to 950 °C
220	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Screws, Current carrying parts and Connections	CI no. 17 of IS 16103 (Part 1): 2012	Qualitative
221	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Terminal	CI no. 8 of IS 16103 (Part 1): 2012	Qualitative
222	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Test Condition	CI 6 of IS 16103(Part 2): 2012	Qualitative
223	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Efficacy	CI 8.3 of IS 16103 (Part 2): 2012	1 lm to 199999 lm
224	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Electric Strength	CI no. 12 of IS 16103 (Part 1): 2012	0.1 kV to 5 kV
225	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	LED Modules for General Lighting	Provision for Protective Earthing	CI no. 9 of IS 16103 (Part 1): 2012	Qualitative
226	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Power Supply Characteristic	CI no. 3of LM-79-08& CI no. 3 of IS 16106: 2012	40 Hz to 65 Hz



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
227	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Chromaticity Coordinates	CI No 12 of LM -79-08 & CI No 14 of IS 16106: 2012	0.003 to 0.6000
228	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Color Rendering Index (CRI)	CI No 12 of LM -79-08 & CI No 14 of IS 16106: 2012	0 to 100
229	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Correlated Color Temperature	CI No 12 of LM -79-08 & CI No 14 of IS 16106: 2012	1000 K to 100000 K
230	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Luminaire Efficacy	CI No 11 of LM -79-08 & CI No 13 of IS 16106: 2012	2.4 W to 500 W
231	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Luminaire Efficacy	CI No 11 of LM -79-08 & CI No 13 of IS 16106: 2012	1 lm to 199999 lm
232	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Power Supply Characteristic	CI no. 3 of LM-79-08 & CI no. 3 of IS 16106: 2012	1 V to 300 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
233	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Power Supply Characteristic	CI no. 3 of LM-79-08& CI no. 3 of IS 16106: 2012	1 V to 300 V
234	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Method of Electrical and Photo-metric measurements of solid state lighting (LED) products	Total Luminous Flux Measurement	CI No 9.1 of LM -79-08 & CI No 11 of IS 16106: 2012	1 lm to 199999 lm
235	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Construction	CI No. 6.4 of IS 10322 (Part 5/Sec 4): 1987	Qualitative
236	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Creepage Distance and Clearances	CI No.7 of IS 10322 (Part 5/Sec 4): 1987	0.1 mm to 300 mm
237	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Endurance Test and Thermal Test	CI No.13.4 of IS 10322 (Part 5/Sec 4): 1987	25 °C to 200 °C
238	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Insulation Resistance & Electric Strength Test	CI No.13.6 of IS 10322 (Part 5/Sec 4): 1987	0.1 kV to 5 kV
239	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Insulation Resistance & Electric Strength Test	CI No.13.6 of IS 10322 (Part 5/Sec 4): 1987	2 M Ohm to 150 G Ohm
240	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Marking	CI No.5 of IS 10322 (Part 5/Sec 4): 1987	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
241	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Mechanical Strength Test	CI No.13.3 of IS 10322 (Part 5/Sec 4): 1987	0.1 Nm to 100 Nm
242	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Protection against electrical shock	CI No.11 of IS 10322 (Part 5/Sec 4): 1987	10 V to 50 V
243	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Provision for earthing	CI No.8 of IS 10322 (Part 5/Sec 4): 1987	1 A to 32 A
244	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable General Purpose luminaries	Provision for earthing	CI No.8 of IS 10322 (Part 5/Sec 4): 1987	100 mV to 150 V
245	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Resistance to dust and Moisture (IP Test)	CI No.13.5 of IS 10322 (Part 5/Sec 4): 1987	Qualitative
246	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 4): 1987	0.1 mm to 10 mm
247	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 4): 1987	10 mm to 100 mm
248	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Portable general purpose luminaries	Resistance to heat, Fire & Tracking	CI No.13.7 of IS 10322 (Part 5/Sec 4): 1987	100 °C to 950 °C
249	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Creepage distance and Clearances	CI No.8 of IS 10322 (Part 5/Sec 2): 2012	0.1 mm to 300 mm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
250	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Endurance Test and Thermal Test	CI no.13 of IS 10322 (Part 5/Sec 2): 2012	25 °C to 200 °C
251	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Insulation Resistance & Electric Strength Test	CI no.15 of IS 10322 (Part 5/Sec 2): 2012	2 M Ohm to 150 G Ohm
252	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Insulation Resistance & Electric Strength Test	CI no.15 of IS 10322 (Part 5/Sec 2): 2012	0.1 kV to 5 kV
253	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed Luminaries	marking	CI No.6 of IS 10322 (Part 5/Sec 2): 2012	Qualitative
254	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Protection against electrical shock	CI no. 12 of IS 10322 (Part 5/Sec 2): 2012	10 V to 50 V
255	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Provision for earthing	CI no.9 of IS 10322 (Part 5/Sec 2): 2012	1 A to 32 A
256	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Provision for earthing	CI no.9 of IS 10322 (Part 5/Sec 2): 2012	100 mV to 150 V
257	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Resistance to dust and moisture (IP Test)	CI no.14 of IS 10322 (Part 5/Sec 2): 2012	Qualitative
258	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 2): 2012	0.1 mm to 10 mm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
259	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 2): 2012	100 °C to 950 °C
260	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Recessed luminaries	Resistance to heat, fire & tracking	CI no.16 of IS 10322 (Part 5/Sec 2): 2012	10 Sec to 100 Sec
261	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Construction	CI.No. 7.3.1,7.5 of IS 10322 (Part 5/Sec 3): 1987	Qualitative
262	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Creepage Distance and Clearances	CI No.8 of IS 10322 (Part 5/Sec 3): 2012	0.1 mm to 300 mm
263	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Insulation Resistance & Electric Strength Test	CI No.15 of IS 10322 (Part 5/Sec 3): 2012	0.1 kV to 5 kV
264	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Insulation Resistance & Electric Strength Test	CI No.15 of IS 10322 (Part 5/Sec 3): 2012	2 M Ohm to 150 G Ohm
265	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Marking	CI No.6 of IS 10322 (Part 5/Sec 3): 2012	Qualitative
266	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Protection against electrical shock	CI No.12 of IS 10322 (Part 5/Sec 3): 2012	10 V to 50 V
267	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Provision for earthing	CI No.9 of IS 10322 (Part 5/Sec 3): 2012	1 A to 32 A



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
268	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Provision for earthing	CI No.9 of IS 10322 (Part 5/Sec 3): 2012	100 mV to 150 V
269	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Resistance to heat, fire & tracking	CI No.16 of IS 10322 (Part 5/Sec 3): 2012	10 Sec to 100 Sec
270	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Resistance to heat, fire & tracking	CI No.16 of IS 10322 (Part 5/Sec 3): 2012	0.1 mm to 10 mm
271	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Resistance to heat, fire & tracking	CI No.16 of IS 10322 (Part 5/Sec 3): 2012	100 °C to 950 °C
272	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Endurance Test & Thermal Test	CI No.13 of IS 10322 (Part 5/Sec 3): 2012	25 <b style="color: #222222; font-family: arial, sans-serif;">°C to 200 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
273	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Road & street light luminaries	Resistance to dust and moisture (IP Test)	CI No.14 of IS 10322 (Part 5/Sec 3): 2012	Qualitative
274	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Construction	CI 16 of IS 15885 (Part 2/Sec 13): 2012	0.1 mm to 300 mm
275	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Creepage Distances and Clearances	CI 17 of IS 15885 (Part 2/Sec 13): 2012	0.1 mm to 300 mm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
276	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Electric strength	CI 12 of IS 15885 (Part 2/Sec 13): 2012	0.1 kV to 5 kV
277	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Fault Condition	CI 14 of IS 15885 (Part 2/Sec 13): 2012	Qualitative
278	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Marking	CI 7 of IS 15885 (Part 2/Sec 13): 2012	Qualitative
279	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Moisture Resistance	CI 11 of IS 15885 (Part 2/Sec 13): 2012	2 M ohm to 150 G ohm
280	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Protection against Accidental Contact With Live Parts	CI 8 of IS 15885 (Part 2/Sec 13): 2012	10 V to 50 V
281	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Provision For Protective Earthing	CI 10 of IS 15885 (Part 2/Sec 13): 2012	100 mV to 150 V
282	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Provision For Protective Earthing	CI 10 of IS 15885 (Part 2/Sec 13): 2012	1 A to 32 A
283	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Resistance to Corrosion	CI 20 of IS 15885 (Part 2/ Sec 13): 2012	Qualitative
284	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Resistance to Heat, Fire & Tracking	CI 19 of IS 15885 (Part 2/ Sec 13): 2012	0.1 mm to 300 mm



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
285	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Resistance to Heat, Fire & Tracking	CI 19 of IS 15885 (Part 2/ Sec 13): 2012	20 °C to 300 °C
286	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Resistance to Heat, Fire & Tracking	CI 19 of IS 15885 (Part 2/ Sec 13): 2012	100 °C to 950 °C
287	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Screws, Current-Carrying parts and Connections	CI 18 of IS 15885 (Part 2/Sec 13): 2012	0.1 Nm to 900 Nm
288	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Terminals	CI 9 of IS 15885 (Part 2/Sec 13): 2012	0.1 Nm to 100 Nm
289	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Terminals	CI 9 of IS 15885 (Part 2/Sec 13): 2012	0.1 mm to 300 mm
290	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Safety of Lamp Control Gear	Transformer Heating	CI 15 of IS 15885 (Part 2/Sec 13): 2012	25 °C to 300 °C
291	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Cap Temperature Rise	CI No 10 of IS 16102(Part-1):2012, IEC 62560: 2011	25 °C to 125 °C
292	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Color nomenclature, Variation and Rendering	CI no.12 of IS 16102 (Part 2): 2012	1000 K to 100000 K
293	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Creepage Distance & Clearances Test	CI No 14 of IS 16102(Part-1):2012, IEC 62560: 2011	0.1 mm to 300 mm



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294	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	CRI(Color Rendering Index)	CI no.12.2 of IS 16102 (Part 2): 2012	1 to 100
295	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Dimension	CI no. 6 of IS 16102 (Part 2): 2012	0.1 mm to 300 mm
296	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Fault Condition	CI No 13 of IS 16102(Part-1):2012, IEC 62560: 2011	Qualitative
297	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Harmonics and Power Factor	Clause.15 of IS 16102(Part-2)): 2012	1 % to 20 %
298	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Insulation Resistance and Electric strength after humidity treatment	CI No 8 of IS 16102(Part-1):2012, IEC 62560: 2011	2 M Ohm to 150 G Ohm @ 500 V DC
299	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Interchangeability	CI No 6 of IS 16102(Part-1):2012, IEC 62560: 2011	0.1 mm to 300 mm
300	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Lamp Life	Clause.11 of IS 16102(Part-2): 2012	1 hr to 9999 hr
301	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Lamp Life (Lumen Maintenance Endurance Test for Built-in Electronic Ballast)	Clause. 13, Clause.13.1, Clause.13.2 of IS 16102-2: 2012	1 Lumen to 10000 Lumen



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302	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Lamp Life (Lumen Maintenance Endurance Test for Built-in Electronic Ballast)	IS 16102-2:1012 Clause. 13, IS 16102-2:2012 Clause.13.1, Clause.13.2 of IS 16102-2: 2012	1 h to 9999 h
303	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Lamp Power	CI no. 8 of IS 16102 (Part 2): 2012	2.4 W to 500 W
304	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Luminous Flux	CI no.9 of IS 16102 (Part 2): 2012	1 lm to 199999 lm
305	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Marking	CI No 5 of IS 16102(Part-1):2012, IEC 62560: 2011	Qualitative
306	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Mechanical Strength	CI No 9 of IS 16102(Part-1):2012, IEC 62560: 2011	0.1 Nm to 100 Nm
307	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Protection Against Accidental Contact With Live Part	CI No 7 of IS 16102(Part-1):2012, IEC 62560: 2011	10 V to 50 V
308	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Resistance to Flame and Ignition	CI No 12 of IS 16102(Part-1):2012, IEC 62560: 2011	100 °C to 950 °C
309	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Resistance to Flame and Ignition	CI No 12 of IS 16102(Part-1):2012, IEC 62560: 2011	10 Sec to 100 Sec



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310	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Resistance to heat with ball pressure test equipment	CI No 11 of IS 16102(Part-1):2012, IEC 62560: 2011	20 <b style="color: #222222; font-family: arial, sans-serif;">°C to 300 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
311	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Insulation Resistance and Electric strength after humidity treatment	CI No 8 of IS 16102(Part-1):2012, IEC 62560: 2011	0.1 kV to 5 kV @ 500 V DC
312	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Interchangeability	CI No 6 of IS 16102(Part-1):2012, IEC 62560: 2011	0 Nm to 3 Nm
313	ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES	Self-Ballasted LED Lamps For General Lighting services	Resistance to heat with ball pressure test equipment	CI No 11 of IS 16102(Part-1):2012, IEC 62560: 2011	0.1 mm to 10 mm
314	ELECTRONICS- ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Electrolytic Capacitor	Characteristic at low & High Temperature	CI 8.6 of IS 4317: 1981	Qualitative
315	ELECTRONICS- ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Electrolytic Capacitor	Insulation Resistance	CI 8.3.5 of IS 4317: 1981	20 M ohm to 15000 M ohm
316	ELECTRONICS- ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Electrolytic Capacitor	Leakage Current	CI 8.3.1 of IS 4317: 1981	0.01 mA to 10 mA



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317	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Electrolytic Capacitor	Voltage Proof	CI 8.3.6 of IS 4317: 1981	1 kV to 5 kV
318	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	ElectrolyticCapacitor	Capacitance	CI no. 8.3.2 of IS 4317: 1981	0.0001 μ F to 100 μ F @ 100 Hz
319	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Fixed Capacitor used in Electronic equipment	Capacitance	CI 8.3.2 of IS 7305: 1984	0.001 μ F to 1 μ F Frequency: 50 Hz to 1 kHz
320	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Fixed Capacitor used in Electronic equipment	Insulation resistance	CI 8.3.6 of IS 7305: 1984	20 M ohm to 15000 M ohm @ 500 V DC
321	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Fixed Capacitor used in Electronic equipment	Leakage current	CI 8.3.4 of IS 7305: 1984	0.01 mA to 10 mA
322	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Fixed Capacitor used in Electronic equipment	Voltage proof	CI 8.3.1 of IS 7305: 1984	1 kV to 5 kV



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323	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Efficiency	CI 6.2.2.3 of IS 6297 (Part I): 1971	1 % to 100 %
324	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	DC Resistance of windings	CI 6.2.1.2 of IS 6297 (Part I): 1971	10 m Ohm to 10 M ohm
325	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Insulation Resistance	CI 6.2.1.6 of IS 6297 (Part I): 1971	20 M Ohm to 15000 M Ohm @ 500 V DC
326	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	No Load Test	CI 6.2.2.1 of IS 6297 (Part I): 1971	100 μ A to 10 A
327	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Secondary no load voltage & primary tap voltage	CI 6.2.2.2 of IS 6297 (Part I): 1971	100 VAC to 700 VAC
328	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Temperature Rise	CI 6.2.1.2 of IS 6297 (Part I): 1971	25 °C to 300 °C



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
329	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Voltage Proof	CI 6.2.1.7 of IS 6297 (Part I): 1971	1 kV to 5 kV
330	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Power Transformer	Voltage Regulation	CI 6.2.2.4 of IS 6297 (Part I): 1971	100 V to 700 V
331	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Resistors	Insulation Resistance	CI 8.3.4 of IS 5786 (Part I): 1978	20 M ohm to 15000 M ohm @ 500 V DC
332	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Resistors	Resistance Value	CI 8.3.1 of IS 5786 (Part I): 1978	0.01 ohm to 10 M Ohm
333	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Resistors	Temperature Characteristics	CI 8.3.4 of IS 5786 (Part I): 1978	0.01 Ohm to 10 M ohm
334	ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES	Resistors	Voltage Proof	CI 8.3.3 of IS 5786 (Part I): 1978	1 kV to 5 kV



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
335	ELECTRONICS- EMC TEST FACILITY	Electrical/ Electronics Product	Electrostatic Discharge Immunity Test	IEC 61000-4-2: 2008	1 kV to 30 kV
336	ELECTRONICS- EMC TEST FACILITY	Electronics/ Electrical product	High Energy/Telecom Surge Immunity Test	IEC 61000-4-5 (C1 6.1): 2005	100 V to 7 kV
337	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Change in Temperature	Test No 4 of JSS 55555 ,IEC 60068-2-14: 2009, IS 9000(Part 14/Sec 1 to 3): 1988	-40 <b style="color: #222222; font-family: arial, sans-serif;">°C to 85 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
338	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Cold Test	Test No 1 of JSS 55555 ,IEC 60068-2-1: 2007, IS 9000(Part II/Sec 1 to 4): 1977	-40 <b style="color: #222222; font-family: arial, sans-serif;">°C to 85 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
339	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Composite Temperature Humidity	IS 9000 (Part VI): 1978	-40 °C to 85 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
340	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Damp Heat Cyclic	Test No 3 of JSS 55555 ,IEC 60068-2-30: 2005, IS 9000(Part V/Sec 1 to 2): 1981	-40 <b style="color: #222222; font-family: arial, sans-serif;">°C to 85 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
341	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Damp Heat Cyclic	Test No 3 of JSS 55555 ,IEC 60068-2-30: 2005, IS 9000(Part V/Sec 1 to 2): 1981	40 % RH to 95 % RH
342	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Damp Heat Steady State	Test No 5 of JSS 55555 ,IEC 60068-2-78: 2001, IS 9000(Part IV): 2008	40 % RH to 95 % RH
343	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Damp Heat Steady State	Test No 5 of JSS 55555 ,IEC 60068-2-78: 2001, IS 9000(Part IV): 2008	-25 <b style="color: #222222; font-family: arial, sans-serif;">°C to 100 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
344	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Degree of protection for enclosures for electronics & Electrical equipment	IEC 60529 (1X to 6X & X1 to X8): 2001	Qualitative
345	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Drop & Topple Free fall	IS 9000 Part VII(Sec 3 & 4): 1979	1 mm to 1000 mm



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346	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Dust Test	IS 9000(Part XII): 1981	25 <b style="color: #222222; font-family: arial, sans-serif;">°C to 40 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
347	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Vibration (Sine Wave) & Random	IS 9000 Part 8& IEC 60068-2-64: 1981	5 Hz to 3500 Hz Acceleration: 75 g Amplitude: 38 mm (pk-pk)
348	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Composite Temperature Humidity	IS 9000 (Part VI): 1978	50 %RH to 95 %RH
349	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Sub assemblies	Salt Mist	Procedure 1,2,3 of IS 9000(Part XI): 1983	25 <b style="color: #222222; font-family: arial, sans-serif;">°C to 35 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C
350	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electronics & Electrical Products(Components, Materials, Assemblies & Subassemblies	Dry Heat Temperature	Test No 2 of JSS 55555 ,IEC 60068-2-14: 2009, IS 9000(Part III/Sec 1 to 5): 1977	25 <b style="color: #222222; font-family: arial, sans-serif;">°C to 200 <b style="font-size: small; color: #222222; font-family: arial, sans-serif;">°C



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351	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment	Earthing Test	CI No. 2.6.3.4 of IS 13252: 2010, IEC 60950-1: 2005	10 m Ohm to 10 Ohm
352	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment	Electrical Strength	CI No. 5.2 of IS 13252: 2010, IEC 60950-1 : 2005	0.1 kV to 5 kV
353	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment	Input	CI No. 1.6 of IS 13252: 2010, IEC 60950-1 : 2005	100 μ A to 10 A
354	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment	Touch Current/Leakage Current	CI No. 5.1 of IS 13252: 2010, IEC 60950-1 : 2005	100 μ A to 300 mA
355	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment	Input	CI No. 1.6 of IS 13252: 2010, IEC 60950-1 : 2005	300 mV to 700 V
356	ELECTRONICS- POWER SUPPLIES & STABILIZERS	inverter	efficiency	CI 7.9.3 of IS13314: 1992	10 % to 100 %
357	ELECTRONICS- POWER SUPPLIES & STABILIZERS	inverter	Frequency	CI 7.9.2 of IS 13314: 1992	40 Hz to 60 Hz
358	ELECTRONICS- POWER SUPPLIES & STABILIZERS	Inverter	High Voltage Test	CI 7.6 of IS 13314: 1992	1 kV to 30 kV
359	ELECTRONICS- POWER SUPPLIES & STABILIZERS	Inverter	Insulation Resistance	CI 7.7 of IS 13314: 1992	20 M Ohm to 15000 M Ohm @ 500 V DC



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360	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Marking	CI 6 of IS 13314: 1992	Qualitative
361	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	No Load Test - No Load DC Current	CI 7.8.1 of IS 13314: 1992	100 μ A to 200 A
362	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	No Load Test - Output Voltage	CI 7.8.2 of IS 13314: 1992	300 mV to 700 V
363	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Output Test - Voltage Regulation	CI 7.9.1 of IS 13314: 1992	300 mV to 1000 V
364	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Overload Capacity	CI 7.9.4 of IS 13314: 1992	Qualitative
365	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Power Factor	CI 7.9.3 of IS 13314: 1992	0.2 to 1
366	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Total Harmonic Distortion	CI 7.11 of IS 13314: 1992	1 % to 30 %
367	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Inverter	Visual Examination	CI 7.5 of IS 13314: 1992	Qualitative
368	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Efficiency	Sr. No. 3 of Table 3 of IS 7204 (Part II): 1980	10 % to 100 %



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
369	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Open Circuit Protection	Sr. No. 2 of Table 4 of IS 7204 (Part II): 1980	100 μ A to 10 A
370	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Peak Open Circuit Voltage	Sr. No. 8 of Table 4 of IS 7204 (Part II): 1980	300 mV to 1000 V
371	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Power Factor	Sr. No. 3 of Table 3 of IS 7204(Part II): 1980	0.2 to 1
372	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Rated Source Current	Sr. No. 2 of Table 3 of IS 7204 (Part II): 1980	100 μ A to 10 A
373	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Reverse Current Protection	Sr. No.12 of Table 4 of IS 7204 (Part II): 1980	100 μ A to 10 A
374	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Reverse Current Protection	Sr. No.12 of Table 4 of IS 7204 (Part II): 1980	100 μ A to 10 A
375	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Short Circuit Current	Sr. No. 5 of Table 7 of IS 7204 (Part II): 1980	100 μ A to 10 A
376	ELECTRONICS-POWER SUPPLIES & STABILIZERS	Stabilized Power Supply	Source Voltage Effect	Sr. No.2 of Table 4 of IS 7204 (Part II): 1980	300 mV to 1000 V
377	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Efficiency	CI 6.4.1.6 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	10 % to 100 %



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
378	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Full Load Voltage	CI 6.2.2.5 of IS 16242 (Part 3):2014, IEC 62040-3 : 2011	300 mV to 700 V
379	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	No Load Voltage	CI 6.2.2.4 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	300 mV to 250 V
380	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Output Current	CI 6.4.1.3 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	100 μ A to 20 A
381	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Output Frequency	CI 6.4.1.2 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	40 Hz to 60 Hz
382	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Overshoot & Undershoot	CI 6.4.2.9 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	1 mV to 10 mV
383	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Power Factor	CI 6.4.1.5 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	0.1 to 1
384	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Total Harmonic Distortion	CI 6.4.1.4 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	0.1 % to 30 %
385	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Verification of Input & Output voltage as applicable	CI 3.3.12 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	120 V to 450 V
386	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Verification of Manual & Static by pass switches for maintenance	CI 6.2.2.9 of IEC 62040-3 or C.3 of Annexure C of IEC 62040-3: 2011	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
387	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Verification of Overload as applicable	CI 6.4.2.10 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	Qualitative
388	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS	Verification of Overvoltage	CI 6.4.2.8 of IS 16242 (Part 3):2014, IEC 62040-3: 2011	300 mV to 700 V
389	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	A.C. and D.C. Power Isolation	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.4) IEC 60950-1:2005,(Cl. No 3.4) IS 13252(Part 1): 2010	Qualitative
390	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Battery	IEC 62040-1:2011, IS 16242:2014,(Cl. No 4.7.20) IEC 60950-1:2005,(Cl. No 2.1.1.5) IS 13252(Part 1): 2010	Qualitative
391	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Clearances, Creepage distances and Distance through insulation	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.7) IEC 60950-1:2005,(Cl. No 2.10) IS 13252(Part 1): 2010	0.01 mm to 300 mm
392	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Durability of marking	IEC 62040-1:2011, IS 16242:2014,(Cl. No 4.7.16) IEC 60950-1:2005,(Cl. No 1.7.11) IS 13252(Part 1): 2010	Qualitative



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
393	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	General provisions for connection to power	IEC 62040-1:2008, IS 16242:2014,(Cl. No 6.2.1) IEC 60950-1:2005,(Cl. No 3.2.2,3.2.3,3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8) IS 13252(Part 1): 2010	0.01 mm to 300 mm
394	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	General provisions for connection to power	IEC 62040-1:2008, IS 16242:2014,(Cl. No 6.2.1) IEC 60950-1:2005,(Cl. No 3.2.2,3.2.3,3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8) IS 13252(Part 1): 2010	0.1 N to 100 N
395	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	High Leakage Current	IEC 62040-1:2011, IS 16242:2014,(Cl. No 4.7.13) IEC 60950-1:2005,(Cl. No 5.1) IS 13252(Part 1): 2010	0.1 μ A<blockquote style="margin-bottom: 0px; margin-left: 40px; border: none; padding: 0px;">
396	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Limited Current Circuits	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.2.3) IEC 60950-1:2005,(Cl. No 2.5) IS 13252(Part 1): 2010	0.1 μ A to 5 mA
397	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Limited Power Source	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.2.5) IEC 60950-1:2005,(Cl. No 2.5) IS 13252(Part 1): 2010	300 mV to 700 V



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
398	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Limited Power Source	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.2.5) IEC 60950-1:2005,(Cl. No 2.5) IS 13252(Part 1): 2010	100 μ A to 200 A
399	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Over current and earth fault protection	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.5) IEC 60950-1:2005,(Cl. No 5.3) IS 13252(Part 1): 2010	1 Sec to 20 Sec
400	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Power Interface	IEC 62040-1:2011, IS 16242:2014,(Cl. No 4.6) IEC 60950-1,(Cl. No 1.6) IS 13252(Part 1): 2010	300 mV to 700 V
401	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Power Rating	IEC 62040-1:2011, IS 16242:2014,(Cl. No 4.7.2) IEC 60950-1:2005,(Cl. No 1.7.1) IS 13252(Part 1): 2010: 2010	Qualitative
402	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Protection against electric shock and energy hazards	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.1.1,1.2,5.1.3,5.1.4,5.1.5) IEC 60950-1:2005,(Cl. No 2.1.1,2.10.3.3) IS 13252(Part 1): 2010	Qualitative(1 to 5)



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
403	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Protection of personal safety interlocks	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5.6) IEC 60950-1:2005,(Cl. No 2.8) IS 13252(Part 1): 2010	1 kV to 5 kV
404	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Protective Earthing	IEC 62040-1:2008, IS 16242:2014,(Cl. No 5..3.1) IEC 60950-1:2005,(Cl. No 2.10,4.2,2.6.1,5.2) IS 13252(Part 1): 2010	10 m Ohm to 10 Ohm
405	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Abnormal operating and fault condition	IEC 62040-1:2008, IS 16242:2014,(Cl. No 8.3) IEC 60950-1:2005,(Cl. No 5.3) IS 13252(Part 1): 2010	0.1 °C to 300 °C
406	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Construction Details	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.4) IEC 60950-1:2005,(Cl. No 4.3) IS 13252(Part 1): 2010	0.001 mm to 300 mm
407	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Mechanical Strength	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.3) IEC 60950-1:2005,(Cl. No 4.2) IS 13252(Part 1): 2010	1 N to 900 N



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S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
408	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Resistance to fire	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.5) IEC 60950-1:2005,(Cl. No 4.7,4.7.2,1.2.12) IS 13252(Part 1): 2010	25 °C to 970 °C
409	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Temperature Rise	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.7) IEC 60950-1:2005,(Cl. No 4.5) IS 13252(Part 1): 2010	20 °C to 300 °C
410	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Construction Details	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.4) IEC 60950-1:2005,(Cl. No 4.3) IS 13252(Part 1): 2010	1 N to 100 N
411	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	Electric Strength	IEC 62040-1:2008, IS 16242:2014,(Cl. No 8.2) IEC 60950-1:2005,(Cl. No 5.2) IS 13252(Part 1): 2010	0.1 kV to 5 kV
412	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 10 kVA single phase)	General provision for earth leakage	IEC 62040-1:2008, IS 16242:2014,(Cl. No 8.1) IEC 60950-1:2005,(Cl. No 5.1.1,1.1.10,5.1.7) IS 13252(Part 1): 2010	0.1 µA to 20 mA



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413	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 3kVA single phase)	Protection against electric shock and energy hazards	EC 62040-1:2008, IS 16242:2014,(Cl. No 5.1.1,1.2,5.1.3,5.1.4,5.1.5) IEC 60950-1:2005,(Cl. No 2.1.1,2.10.3.3) IS 13252(Part 1): 2010	Qualitative
414	ELECTRONICS-POWER SUPPLIES & STABILIZERS	UPS Part -1 , General and Safety requirements for UPS (Up to 3 kVA single phase)	Stability	IEC 62040-1:2008, IS 16242:2014,(Cl. No 7.2) IEC 60950-1:2005,(Cl. No 4.1) IS 13252(Part 1): 2010	1 N to 900 N
415	ELECTRONICS-SAFETY TESTING FACILITY	Electronics Audio & Video & Similar Appliances & Components	High Voltage Test	C1 10.3 of IS616: 2008, IEC 60065: 2005	0.1 kV to 30 kV
416	ELECTRONICS-SAFETY TESTING FACILITY	Electronics Audio & Video & Similar Appliances & Components	Insulation Resistance	C1 10.3 of IS616: 2008, IEC 60065: 2005	2 M Ohm to 150 G Ohm
417	ELECTRONICS-SAFETY TESTING FACILITY	Electronics Audio & Video & Similar Appliances & Components	Protection against Electric shock or protection against live part	C 1 8 of IS 302-1: 2008, C1 8 of IS 616: 2010	10 V to 50 V