



National Accreditation Board for
Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

**SUNREN TELECOM LABORATORY, A DIVISION OF M/S
SUNREN TECHNICAL SOLUTIONS PVT. LTD.**

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

**"General Requirements for the Competence of Testing &
Calibration Laboratories"**

for its facilities at

C-475, MIDC PAVANE, TTC INDUSTRIAL AREA, NAVI MUMBAI, THANE, MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-7995

Issue Date: 18/10/2025

Valid Until: 17/10/2029

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: Sunren Technical Solutions Private Limited

Signed for and on behalf of NABL



Anuja Anand
Director

Chakravarthy T. Kannan
Chief Executive Officer



National Accreditation Board for Testing and Calibration Laboratories

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Laboratory Name :

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Testing				
1	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	CLEARANCES and CREEPAGE DISTANCES	IS-616:2017/ IEC 60065 : 2014 (Cl.13.0)
2	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	CLEARANCES and CREEPAGE DISTANCES	IS-616:2017/ IEC 60065 : 2014 (Cl.13.0)
3	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Components (Verification of reports as per relevant Standards)	IS-616:2017/ IEC 60065 : 2014 (Cl.14.0)
4	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Constructional requirements with regard to the protection against electric shock	IS-616:2017/ IEC 60065 : 2014 (Cl. No.8)
5	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Electric shock hazard under normal operating condition	IS-616:2017/ IEC 60065 : 2014 (Cl.9.1 , 9.2)
6	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Electric shock hazard under normal operating condition	IS-616:2017/ IEC 60065 : 2014 (Cl.9.1, 9.2)
7	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Electrical connection and mechanical fixings	IS-616:2017/ IEC 60065 : 2014 (Cl.17.0)
8	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Fault Conditions	IS-616:2017/ IEC 60065 : 2014 (Cl.11)
9	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Heating under normal operating conditions- General	IS-616:2017/ IEC 60065 : 2014 (Cl. No.7.1)
10	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Heating under normal operating conditions- Heat resistance of insulating material	IS-616:2017/ IEC 60065 : 2014 (Cl. No.7.2)
11	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Humidity treatment	IS-616:2017/ IEC 60065 : 2014 (Cl.10.3)
12	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Input Rating	IS-616:2017/ IEC 60065 : 2014 (Cl No 4.2 & 5.1)
13	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Input Rating	IS-616:2017/ IEC 60065 : 2014 (Cl No 4.2 & 5.1)
14	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Insulation resistance and dielectric strength	IS-616:2017/ IEC 60065 : 2014 (Cl.10.4)
15	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Marking & Instructions- Identification & supply ratings	IS-616:2017/ IEC 60065 : 2014 (Cl. No. 5.1,5.3, 5.4, 5.5)
16	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength	IS-616:2017/ IEC 60065 : 2014 (12.6)
17	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength	IS-616:2017/ IEC 60065 : 2014 (12.7)
18	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength	IS-616:2017/ IEC 60065 : 2014 (Cl.12.2)



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19	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength	IS-616:2017/ IEC 60065 : 2014 (Cl.12.3)
20	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength	IS-616:2017/ IEC 60065 : 2014 (Cl.12.5)
21	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength Drawers	IS-616:2017/ IEC 60065 : 2014 (Cl.12.4)
22	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength Drop test	IS-616:2017/ IEC 60065 : 2014 (Cl.12.1.5)
23	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength Impact test	IS-616:2017/ IEC 60065 : 2014 (Cl.12.1.4)
24	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Mechanical Strength Stress relief test	IS-616:2017/ IEC 60065 : 2014 (Cl.12.1.6)
25	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Stability and mechanical hazards	IS-616:2017/ IEC 60065 : 2014 (Cl.19.0)
26	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Terminals	IS-616:2017/ IEC 60065 : 2014 (Cl.15.0)
27	ELECTRONICS- AUDIO EQUIPMENT	Audio, Video and Similar Electronic Apparatus	Terminals	IS-616:2017/ IEC 60065 : 2014 (Cl.15.0)
28	ELECTRONICS- EMC TEST FACILITY	All Electronic and Electrical, Information Technology and Telecommunications Equipment	Conducted Emission test (Class A & B)	TEC/SD/DD/EMC-221/05/OCT-1 6, CISPR14-1: 2016, CISPR 22: 2008, EN 55032:2012, CISPR 32
29	ELECTRONICS- EMC TEST FACILITY	All Electronic and Electrical, Information Technology and Telecommunications Equipment	ELECTRICAL FAST TRANSIENT (EFT)/ Burst Test	IEC 61000-4-4, TEC/SD/DD/EMC-221/05/OCT-1 6
30	ELECTRONICS- EMC TEST FACILITY	All Electronic and Electrical, Information Technology and Telecommunications Equipment	Electrostatic Discharge Immunity Test	BS EN 55014-2
31	ELECTRONICS- EMC TEST FACILITY	All Electronic and Electrical, Information Technology and Telecommunications Equipment	Electrostatic Discharge Immunity Test	IEC 61000-4-2, TEC/SD/DD/EMC-221/05/OCT-1 6
32	ELECTRONICS- EMC TEST FACILITY	All Electronic and Electrical, Information Technology and Telecommunications Equipment	Surge Immunity Test	IEC 61000-4-5, TEC/SD/DD/EMC-221/05/OCT-1 6
33	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Cold Test (Low Temperature)	IS 9000 (Part II/Sec 1 to 4)
34	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Dry Heat Test (High Temperature)	IS 9000: (Part III/ Sec 1 to 5)
35	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Drop, Topple & Fall Test	IS 9000 Part VII -Sec 3 & 4



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36	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions	Ingress Protection IP : IP 1X, IP 2X, IP 3X, IP 4X, IP X3, IP X4, IP X5, IP X6, IP X7	IS/IEC 60529
37	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Change of Temperature	IEC 60068-2-14
38	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Change of Temperature	IS 9000: (Part 14)
39	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Drop, Topple & Fall Test	IEC60068-2-31
40	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Cold (Low Temperature) Test	IEC 60068-2-1
41	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Cyclic Test	IEC 60068-2-30
42	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Cyclic Test	IS 9000:1986 (Part V)
43	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Steady State	IEC60068-2-78
44	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Steady State	IS 9000:2008 (Part IV)
45	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Electrical / Electronic Appliances, Office automation, IT products, Telecom products and Objects having external dimensions less than 2.4 x 2.4 x 2.4 meters	Dry Heat Test (High Temperature)	IEC 60068-2-2
46	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Change of Temperature	QM 333/Issue-2
47	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 1.2 meters x 1.2 meters x 0.9 meters	Drop, Topple & Fall Test	QM 333/Issue-2
48	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 2.4 x 2.4 x 2.4 meters	Cold Test (Low Temperature)	QM 333/Issue-2
49	ELECTRONICS-ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Cyclic Test	QM 333/Issue-2



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50	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 2.4 x 2.4 x 2.4 meters	Damp Heat Steady State	QM 333/Issue-2
51	ELECTRONICS- ENVIRONMENTAL TEST FACILITY	All Telecom Equipment having external dimensions less than 2.4 x 2.4 x 2.4 meters	Dry Heat Test (High Temperature)	QM 333/Issue-2
52	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Accessibility to electrical energy sources and safeguards	IS/IEC 62368 : Part 1 : 2018 (Clause 5.3.2)
53	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Accessibility to electrical energy sources and safeguards	IS/IEC 62368 : Part 1 : 2018 Clause 5.3, 5.3.1, 5.3.2, Annex V)
54	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Back feed safeguard in battery backed up supplies	IS/IEC 62368 : Part 1 : 2018 (Clause 5.8)
55	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Ball pressure test	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.1.10.3)
56	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Battery and their Protection Circuit	IS/IEC 62368 : Part 1 : 2018 (Annex M.3.2,3.3, 4.4)
57	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Battery Replacement Test	IS/IEC 62368 : Part 1 : 2018 Clause 4.8.4.3 and 4.8.5
58	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Capacitor discharge	IS/IEC 62368 : Part 1 : 2018 (Clause 5.5.2.2)
59	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Cart, stand or carrier loading test	IS/IEC 62368 : Part 1 : 2018 (Clause 8.10.3,8.10.4,8.10.5,8.10.6)
60	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Carts, stands, and similar carriers	IS/IEC 62368 : Part 1 : 2018 Clause 8.10
61	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Classification and limits of electrical energy sources	IS/IEC 62368 : Part 1 : 2018 (Clause 5.2, 5.2.1, 5.2.2)
62	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Classification of Power Sources and Potential Ignition Sources	IS/IEC 62368 : Part 1 : 2018 (Clause 6.2)
63	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Clearance, creepage	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.2, 5.4.3, Annex O)
64	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Compliance criteria (Force test)	IS/IEC 62368 : Part 1 : 2018 (Clause 4.8.5)
65	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Components as safeguards	IS/IEC 62368 : Part 1 : 2018 Clause 5.5
66	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Criteria for telephone ringing signals (TNV circuit test)	IS/IEC 62368 : Part 1 : 2018 (Annex H)
67	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Crush test	IS/IEC 62368 : Part 1 : 2018 (Clause 4.8.4.6)



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68	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Determining the adequacy of a clearance using an electric strength test	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.2.4
69	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Drop Test	IS/IEC 62368 : Part 1 : 2018 (Annex T.7)
70	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Electric strength test	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.9)
71	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Enclosure impact test	IS/IEC 62368 : Part 1 : 2018 (Annex T.6)
72	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Equipment containing coin / button cell batteries (Stress Relief Test)	IS/IEC 62368 : Part 1 : 2018 Clause (Clause 4.8, 4.8.4.2, Annex T.8)
73	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Equipment for direct insertion into mains socket- outlets	IS/IEC 62368 : Part 1 : 2018 (Clause 4.7)
74	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Equipment markings, Instructions & Instructional Safe Guards	IS/IEC 62368 : Part 1 : 2018 Annex F
75	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Equipment mounted to a wall or ceiling	IS/IEC 62368 : Part 1 : 2018 (Clause 8.7)
76	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Fixing Conductor	IS/IEC 62368 : Part 1 : 2018 (Clause 4.6)
77	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	General requirements	IS/IEC 62368 : Part 1 : 2018 Clause 4
78	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Glass Impact test	IS/IEC 62368 : Part 1 : 2018 (Annex T.9)
79	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Handle strength	IS/IEC 62368 : Part 1 : 2018 (Clause 8.8)
80	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Humidity conditioning	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.8)
81	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Impact test	IS/IEC 62368 : Part 1 : 2018 (Clause 4.8.4.5)
82	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Impulse test	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.10.2.2)
83	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Input test	IS/IEC 62368 : Part 1 : 2018 (Annex B.2.5)
84	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Insulating Surfaces	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.1.9)
85	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Insulation breakdown test	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.10)
86	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Insulation of internal wire as a part of supplementary safeguard	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.6

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



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87	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Internal and external wiring	IS/IEC 62368 : Part 1 : 2018 Clause 6.5
88	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Limited power source	IS/IEC 62368 : Part 1 : 2018 (Annex Q.1)
89	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Mains supply connection (Cord anchorage)	IS/IEC 62368 : Part 1 : 2018 (Annex G.7.3, 7.3.2, 7.3.2.1, 7.3.2.2)
90	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Maximum operating temperature (Temperature measurement)	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.1.4, Annex B.1.5)
91	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Mechanical energy source classifications	IS/IEC 62368 : Part 1 : 2018 Clause 8.2
92	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Mechanical strength test for SRME	IS/IEC 62368 : Part 1 : 2018 Clause 8.11.3 (8.11.3.1 to 8.11.4)
93	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Mounting means for rack mounted equipment	IS/IEC 62368 : Part 1 : 2018 Clause 8.11 (8.11.1 to 8.11.5)
94	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Prospective touch voltage, touch current and protective conductor current	IS/IEC 62368 : Part 1 : 2018 (Clause 5.7)
95	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Protective conductor & Terminals for protective conductors	IS/IEC 62368 : Part 1 : 2018 (Clause 5.6, 5.6.5)
96	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Requirements for wireless power transmitters	IS/IEC 62368 : Part 1 : 2018 (Clause 9.6)
97	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Resistance of the Protective Bonding System (Earth bond test)	IS/IEC 62368 : Part 1 : 2018 (Clause 5.6.6)
98	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	RMS working voltage / Peak working voltage (working voltage)	IS/IEC 62368 : Part 1 : 2018 (Clause 5.4.1.8.2)
99	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against fire due to the connection of additional equipment	IS/IEC 62368 : Part 1 : 2018 Clause 6.6
100	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against fire under normal operating conditions and abnormal operating conditions	IS/IEC 62368 : Part 1 : 2018 Clause 6.3
101	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against fire under single fault conditions	IS/IEC 62368 : Part 1 : 2018 Clause 6.4
102	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against mechanical energy sources	IS/IEC 62368 : Part 1 : 2018 Clause 8.3



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103	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against moving parts	IS/IEC 62368 : Part 1 : 2018 Clause 8.5
104	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Safeguards against parts with sharp edges and corners	IS/IEC 62368 : Part 1 : 2018 Clause 8.4
105	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Separation between external circuit and earth	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.11
106	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Simulated abnormal operating conditions / Simulated single fault conditions	IS/IEC 62368 : Part 1 : 2018 (Annex B.3.1- B.3.8; B.4.1 - B.4.9)
107	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Solid Insulation	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.4
108	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	stability of Equipment	IS/IEC 62368 : Part 1 : 2018 Clause 8.6
109	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Standard test procedure for non-separable thin sheet material	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.4.6.4
110	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Test for the permanence of marking	IS/IEC 62368 : Part 1 : 2018 (Annex F.3.10 (3.10.1.to 3.10.4))
111	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Tests for semiconductor components and for cemented joints	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.7
112	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Thermal burn injury	IS/IEC 62368 : Part 1 : 2018 Clause 9
113	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Thermal cycling	IS/IEC 62368 : Part 1 : 2018 Clause 5.4.1.5.3
114	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Top openings and top opening properties	IS/IEC 62368 : Part 1 : 2018 Clause 6.4.8.3.3
115	ELECTRONICS- IT EQUIPMENT	Audio/video, information and communication technology equipment	Wheels or casters attachment requirement	IS/IEC 62368 : Part 1 : 2018 Clause 8.9 (8.9.1 & 8.9.2)
116	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Maximum Power	IEC 62623:2012, IEC 62301: 2011
117	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Power-Active State	IEC 62623:2012, IEC 62301:2011
118	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Power-Long Idle Mode	IEC 62623:2012, IEC 62301:2011
119	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Power-Off Mode	IEC 62623:2012, IEC 62301:2011
120	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Power-Short Idle Mode	IEC 62623:2012, IEC 62301:2011
121	ELECTRONICS- IT EQUIPMENT	Computer, Laptop, Notebook computers, Network Devices	Power-Sleep Mode	IEC 62623:2012, IEC 62301:2011

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



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122	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Protection from Hazards Protection from Electric Shock & Energy Hazards	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CL No. 2.1
123	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Abnormal operating & fault conditions	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 5.3
124	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Clearances, Creepage distances and distances through insulation	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (ONLY CI. 2.10.1, 2.10.2, 2.10.3, 2.10.4, 2.10.5.1, 2.10.5.2, 2.10.5.3 ,2.10.5.4 ,2.10.5.5, 2.10.5.7, 2.10.5.9, 2.10.5.10, 2.10.6)
125	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Clearances, Creepage distances and distances through insulation	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (ONLY CI. 2.10.1, 2.10.2, 2.10.3, 2.10.4, 2.10.5.1, 2.10.5.2, 2.10.5.3 ,2.10.5.4 ,2.10.5.5, 2.10.5.7, 2.10.5.9, 2.10.5.10, 2.10.6)
126	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Connection to cable Distribution System	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI. 7.1, 7.2,7.3, 7.4 except 7.4.2)
127	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Connections to mains Supply	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI. 3.2 except 3.2.5)
128	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Connections to mains Supply	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI. 3.2 except 3.2.5)



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129	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Connections to Telecommunication network	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 6.1, 6.2, 6.3
130	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Design & Construction	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) : (Cl. 4.3BatteriesCl. 4.3.8 except 4.3.10, 4.3.11, 4.3.12)
131	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Disconnections from the main Supply	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 3.4
132	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Electric Strength Test	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 5.2
133	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Electrical Insulation	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.9
134	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Electrical requirements & simulated abnormal conditions Touch current & protective conductor current	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 5.1
135	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Interconnection of equipment	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 3.5
136	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Limited Current Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.4



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137	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Limited Current Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.4
138	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Limited Current Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.4
139	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Limited Current Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.4
140	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Limited Power Sources	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.5
141	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Markings & Instructions	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 1.7
142	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Mechanical Strength	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI. 4.2 except 4.2.8 , 4.2.9)
143	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Opening in Enclosure	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI.4.6 except 4.6.2)
144	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Over-current and earth fault protection in primary circuits and Safety Interlocks	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) (CI. 2.7, 2.8 except 2.8.5 , 2.8.7)



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145	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Physical Requirements Stability	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 4.1
146	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Power Interface	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 1.6
147	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Protection against hazardous moving parts	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 4.4
148	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Protection against Lightning	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) ITU-T K.21 / K.44
149	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Protection from Hazards Protection from Electric Shock & Energy Hazards	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.1
150	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Protection from Hazards Protection from Electric Shock & Energy Hazards	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.1
151	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Provision for earthing and bonding	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.6
152	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	SELV Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.2



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153	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Thermal Requirements	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 4.5
154	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	TNV Circuits	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 2.3
155	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Wiring Connection and Supply General	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 3.1
156	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Wiring Terminals for external conductors	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 3.3
157	ELECTRONICS- IT EQUIPMENT	Information Technology Equipment (Computer Systems, Monitors, Printers, Scanners, Keyboards, Telephones, Power Adapters, Automatic Data Processing Machine ,CCTV Cameras, CCTV Recorders USB driven Barcode readers, barcode scanners, Iris scanners, Optical fingerprint scanners &Smart watches)	Wiring Terminals for external conductors	IS 13252 (Part 1): 2010 + A1(2013)+A2(2015) IEC 60950-1 :2005+ A1(2009)+A2(2013) CI No. 3.3
158	ELECTRONICS- IT EQUIPMENT	Mobile Phones / Tablet	Message readability	(CI 5.2) IS 16333 (Part-3)
159	ELECTRONICS- IT EQUIPMENT	Mobile Phones / Tablet	Text Inputting	(CI 5.1) IS 16333 (Part-3)
160	ELECTRONICS- IT EQUIPMENT	Telecom / IT products / circuits	Supply Power Measurement	IEC-62623 / IEC 62301
161	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	10 MBPs Interface	Min / Max Peak Voltage for 10 MHz Int	G.703, G.823
162	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic products having CCS7/SS7 Interface	CCS7 ISUP,MTP2, MTP3 Parameters	Annexure To ER of MTCTE



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163	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All electronic products having Telecom Interface	ECR	TEC 74046 & Annexure To ER of MTCTE
164	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with 10 MHz Interface	Pulse Shape for 10 MHz & Pulse Width for 1 PPS	G.703 Annex-I
165	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	6dB & 20dB Bandwidth / TX Occupied bandwidth / Carrier bandwidth	ETSI EN 300328 / ETSI EN 301 893 / ETSI EN 300 330 / ETSI EN 300 220/ ETSI EN 302 502/ ETSI EN 300 440
166	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Accumulated Transmit Time, Frequency occupation and Hopping sequence / TX FHSS	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
167	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Adaptive Frequency Agility	ETSI EN 300 220
168	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Adaptivity	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
169	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Adaptivity	ETSI EN 301 893/ EN 302 502/ EN 300 440
170	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Adjacent channel selectivity	ETSI EN 300 330
171	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Carrier frequencies	ETSI EN 301 893/ EN 302 502/ EN 300 440
172	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Clear channel assessment threshold & Polite spectrum access timing parameters	ETSI EN 300 220
173	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Designation of Centre Frequencies and frequency error	ETSI EN 301 893/ EN 302 502/ EN 300 440



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174	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Duty Cycle, Tx sequence, Tx-gap	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
175	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Dynamic Frequency Selection (DFS)	ETSI EN 301 893/ EN 302 502/ EN 300 440
176	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Frequency Range / Frequency stability / Frequency of Operation	ETSI EN 300328 / ETSI EN 301 893 / ETSI EN 300 330 / ETSI EN 300 220/ ETSI EN 302 502/ ETSI EN 300 440
177	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Geo location Capability	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
178	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Geo-location capability	ETSI EN 301 893/ EN 302 502/ EN 300 440
179	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Hopping Frequency Separation	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
180	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Medium utilization Factor	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
181	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Nominal, and occupied, channel bandwidth	ETSI EN 301 893/ EN 302 502/ EN 300 440
182	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Out of Band / Spurious Emissions	ETSI EN 300328 / ETSI EN 301 893 / ETSI EN 300 330 / ETSI EN 300 220/ ETSI EN 302 502/ ETSI EN 300 440
183	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Peak Power / EIRP / ERP/ Output Power/ Maximum Transmit Power	ETSI EN 300328 / ETSI EN 301 893 / ETSI EN 300 330 / ETSI EN 300 220/ ETSI EN 302 502/ ETSI EN 300 440
184	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Power spectral Density	ETSI EN 300328 / ETSI EN 301 893 / ETSI EN 300 330 / ETSI EN 300 220/ ETSI EN 302 502/ ETSI EN 300 440



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185	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Receiver blocking	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
186	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Receiver Blocking	ETSI EN 301 893/ EN 302 502/ EN 300 440
187	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Receiver spurious Emission	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
188	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Receiver spurious emissions	ETSI EN 301 893/ EN 302 502/ EN 300 440
189	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	RF output power, Transmit Power Control (TPC), Power Density	ETSI EN 301 893/ EN 302 502/ EN 300 440
190	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	RX sensitivity	ETSI EN 300 220
191	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter H-field & Transmitter radiated E-field	ETSI EN 300 330
192	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter RF carrier current	ETSI EN 300 330
193	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter unwanted Emission in OOB Domain	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
194	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter unwanted emissions in the spurious domain	ETSI EN 300 328, ETSI EN 300 220, ETSI EN 300 330
195	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter unwanted emissions outside the 5 GHz RLAN bands	ETSI EN 301 893/ EN 302 502/ EN 300 440



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196	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	Transmitter unwanted emissions within the 5 GHz RLAN bands	ETSI EN 301 893/ EN 302 502/ EN 300 440
197	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	TX Adjacent channel power / TX Adaptive power control	ETSI EN 300 220
198	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	TX behaviour under low voltage conditions / TX Short term behaviour	ETSI EN 300 220
199	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Electronic Products with RF output	TX Transient	ETSI EN 300 220
200	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All IP Security Equipment	IPSec, NAT, Policy Functional Test	Annexure to ER of MTCTE
201	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All ONT, ONU & OLTs	Automatic Laser Shut-Down (ALS) or Automatic Power Shut-Down (APSD)	Annexure To ER of MTCTE
202	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	DOS Prevention, SSH v1-2 for CLI in PON	ITU-T G.984.3 section V.2, SSH v2 RFC 4251
203	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Frame loss of PON, Latency of PON, Throughput of PON	RFC 2544
204	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Line test	IEEE 802.3ah
205	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	MAC Address Learning and Aging Control OLT	G.984.1. (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT) & IEEE 802.1Q (Testing Procedure)



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206	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	MAC Learning Support at OLT	G.984.1
207	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Maximum Bandwidth Limiting in PON	G.984.3 Section 7.5 (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT)
208	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Minimum Guaranteed Bandwidth in PON	G.984.3 Section 7.5. (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT)
209	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Minimum two classes of Classification in PON	G.984.3 Section 7.5. (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT)
210	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Operating Wavelength Trans, Recv.	G.984.2, Cl. 8.2.5.1, Cl. 8.2.5.2, IEEE 802.3a
211	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Opt Output Power at ONT & OLT	G.984.2, IEEE 802.3ah
212	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Password Based Authentication in PON	ITU-T G.984.3 section 9.2.2, 12.
213	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Port-id Based VLAN Support at OLT	G.984.1 (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT) & IEEE 802.1Q (Testing Procedure)



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214	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Protocol Test for GPON Int	EthOGEN/ G.984.2
215	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Receiver Sensitivity at OLT & OLT	G.984.2, IEEE 802.3ah
216	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	RF Video Output Bandwidth and Level	Annexure to ER of MTCTE, Annex-J2
217	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Switch Fabric Throughput Capability OLT	G.984.1 (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT)
218	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	Throughput	G.984.1, RFC 2544
219	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All PON Interfaces products	VLAN Stacking to Network Support at OLT	G.984.1, (For GPON OLT), IEEE 802.3ah (FOR EPON OLT), G.987.2 (FOR XGPON OLT), G.9807.1 (FOR XGSPON OLT), G.694.1 (FOR WDM PON OLT), G.989.2 (FOR NGPON2 OLT) & IEEE 802.1Q(testing procedure).
220	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	DTMF Analysis	ITU-T Q.23 (TEC S/INT-2W/02-MAY2001)
221	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	DTMF Analysis	ITU-T Q.23 (TEC S/INT-2W/02-MAY2001)
222	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	Click Test / Condenser Click	ETSI EN 300 001 (TEC/IR/SW/PBX-104/04/OCT 2017)
223	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	Cross Talk	ITU-T Q.552 (TEC/IR/SW/PBX-104/04/OCT 2017)



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224	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	Flash	ETSI EN 300 001 (TEC/IR/SW/PBX-104/04/OCT 2017)
225	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with PSTN 2W analog Interface	Psophometric Noise	ITU-T O.41
226	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	PULSE Dialing Analysis	ETSI EN 300 001 (TEC TSTP IR/SW/PBX-004/03/MAR-2017)
227	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	PULSE Dialing Analysis	ETSI EN 300 001 (TEC TSTP IR/SW/PBX-004/03/MAR-2017)
228	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W analog Interface	PULSE Dialing Analysis	ETSI EN 300 001 (TEC TSTP IR/SW/PBX-004/03/MAR-2017)
229	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with PSTN 2W/4W Analog/Leased Line Interface	Transmit Power Spectral Density	ITU-T G.9700, ITU-T G.992, ITU-T G. 993 (TEC S/INT-2W/02-MAY2001)
230	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products operating on AC Mains	Variation in Supply Voltage and frequency	ETSI EN 300 001 (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
231	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products operating on AC Mains	Variation in Supply Voltage and frequency	ETSI EN 300 001 (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
232	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products operating on DC supply	Variation in DC Supply voltage	TEC/IR/TX/DMX-006/03.DEC-11, TEC/IR/TX/DMX-007/02/SEP-12
233	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with V.35 Interface	Bit Error Rate	ITU-T G.821 & ITU-T V.35
234	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with 10/100 Base Ethernet interface	AC Differential input impedance (Return Loss)	IEEE 802.3



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235	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with 10/100/1000 Base Ethernet interface	Ethernet Performance (Ping) Throughput, Latency, Frame Loss, LDDP, MAC&Packet, ST, Protocol & RFC test SNMP V2,V3 / IPV4 / IPV6 Protocols, Synchronization, Manageability, Link Speed Test, Duplex (Half/Full) Auto Negotiation, CDR Test Parameter	IEC 802.3, IEC 802.1 / RFC2544, RFC 4862, RFC 4443, RFC 4291, RFC 2460, RFC 4861, RFC 4862, RFC 1981, RFC 5095, RFC4271, RFC4760, RFC2545, RFC 5036, RFC 3031, RFC 5798, RFC 2205, RFC 3209, RFC 3410, RFC 3416, RFC 1305, RFC 5905 & RFC suits, TCP as per RFC 793, UDP as per RFC 768, SIP, Audio codecs, TCP, RTP, RTCP, LDDP protocol
236	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with 10/100/1000 Base Ethernet, 1G Optical, 10G, 40G, 100G Optical interface & Telecom Interfaces	IPV4 Functional, SNMPv2 Functional, SNMPv3 Functional, SNMPv2 or Qx Protocol functional, SNMPv3 or Qx Protocol functional, Dynamic Routing Functional, Static Routing Functional, TCP Functional, Mac Learning and Packet Forwarding, Spanning Tree Protocol Root Bridge Election Functional, Spanning Tree Protocol Port Blocking Functional, OSPFv2, OSPFv3, IDS Functional, IPS Functional	RFC 791, RFC 3416, RFC 3410, RFC 793, IEEE 802.1d, RFC2328, RFC2740, RFC2460/8200, RFC4862, RFC1981, RFC4443, RFC2545, RFC4271, RFC4760, RFC5036, RFC2516, RFC2865, RFC 5654, RFC 4448, RFC 3916, Annexure to ER of MTCTE
237	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with 10/100/1000 Base Ethernet, 1G Optical, 10G, 40G, 100G Optical interface & Telecom Interfaces	SIP, SIPi, RTP, RTCP, TCP, UDP, MGCP, IPV4, Dual Stack, IPV6, DTMF, SCTP, M3UA, Signalling over IP, IP Conformance, SNMP V2, SNMP V3, OSPF, BGP, BGP4, MBGP, LDP, Static, Dynamic routing, Spanning Tree protocol, MAC Learning, Packet forwarding, IPSec, NAT, Policy, IDS, IPS, UTM URL, Content & Anti-Virus Filtering, Profile for frequency synchronisation, Profile for time and phase synchronisation with full timing support, Profile for time and phase synchronisation with partial Timing support, PPPoE, Radius,	RFC3261, Q1912.5, RFC2516, RFC2544, RFC4251, RFC2131, RFC3046, RFC2684, RFC2236, RFC3376, RFC3550, RFC3551, RFC793, RFC768, RFC791, RFC4213, RFC2460, RFC8200, RFC4733, RFC4960, RFC2719, RFC3332, RFC3416, RFC3410, RFC2328, RFC2740, RFC4862, RFC1981, RFC4443, RFC2545, RFC4271, RFC5036, RFC4760, RFC2865, RFC2516, RFC5654, RFC4448, RFC3916, RFC4861, RFC8201
238	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with 10/100/1000 Base Ethernet interface	Differential output voltage	IEEE 802.3



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239	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 2G/GSM Technology Interface	Frequency Error	3GPP TS 51.026, Clause 8
240	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 2G/GSM Technology Interface	Intermodulation Attenuation	3GPP TS 51.026, Clause 6
241	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 2G/GSM Technology Interface	Out of Band Gain	3GPP TS 51.026, Clause 6
242	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 2G/GSM Technology Interface	Output Power	3GPP TS 45.005, Clause 4.1.2
243	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 2G/GSM Technology Interface	Spurious emissions	3GPP TS 51.026, Clause 5
244	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Adjacent Channel Rejection Ratio	3GPP TS 25.143, Clause 13
245	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Input intermodulation	3GPP TS 25.143, Clause 11
246	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Out of band emission	3GPP TS 25.143, Clause 9.1
247	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Out of band gain	3GPP TS 25.143, Clause 8
248	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Output intermodulation	3GPP TS 25.143, Clause 12
249	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Output Power	3GPP TS 25.143, Clause 6



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250	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 3G/WCDMA Technology Interface	Spurious emissions	3GPP TS 25.143, Clause 9.2
251	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Adjacent Channel Rejection Ratio	3GPP TS 36.143 Clause 13
252	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Input intermodulation	3GPP TS 36.143 Clause 11
253	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Operating band unwanted emissions	3GPP TS 36.143 Clause 9.1
254	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Out of band gain	3GPP TS 36.143 Clause 8
255	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Output intermodulation	3GPP TS 36.143 Clause 12
256	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Output Power	3GPP TS 36.143 Clause 6
257	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 4G/LTE Technology Interface	Spurious emissions	3GPP TS 36.143 Clause 9.2
258	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Additional spectrum emission mask-Transmitter	3GPP TS 38.521-1 Clause 6.5.2.3
259	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Additional spurious emissions	3GPP TS 38.521-1 Clause 6.5.3.3
260	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Adjacent channel selectivity	3GPP TS 38.521-1 Clause 7.5



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261	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Adjacent channel selectivity for 2DL CA	3GPP TS 38.521-1 Clause 7.5A.1
262	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	General spurious emissions-Transmitter	3GPP TS 38.521-1 Clause 6.5.3.1
263	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Inband Blocking	3GPP TS 38.521-1 Clause 7.6.2
264	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	In-band Blocking for CA-2DL CA	3GPP TS 38.521-1 Clause 7.6A.2.1
265	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Minimum output power	3GPP TS 38.521-2 Clause 6.3.1
266	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Narrow band blocking	3GPP TS 38.521-1 Clause 7.6.4
267	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Narrow band blocking for CA-2DL CA	3GPP TS 38.521-1 Clause 7.6A.4.1
268	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	NR ACLR	3GPP TS 38.521-1 Clause 6.5.2.4.1
269	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Out-of-band blocking	3GPP TS 38.521-1 Clause 7.6.3
270	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Reference sensitivity power level	3GPP TS 38.521-1 Clause 7.3.2
271	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Reference sensitivity power level for 2DL CA without exception	3GPP TS 38.521-1 Clause 7.3A.1



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272	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spectrum Emission Mask-5G NR FR1	3GPP TS 38.521-1 Clause 6.5.2.2
273	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spurious emission for 2DL CA	3GPP TS 38.521-1 Clause 7.9A.1
274	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spurious emission for UE co-existence	3GPP TS 38.521-1 Clause 6.5.3.2
275	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spurious emissions-5G NR FR1	3GPP TS 38.521-1 Clause 7.9
276	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spurious response	3GPP TS 38.521-1 Clause 7.7
277	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Spurious response for 2DL CA	3GPP TS 38.521-1 Clause 7.7A.1
278	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	UE Maximum Output Power	3GPP TS 38.521-1 Clause 6.2.1
279	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	UTRA ACLR	3GPP TS 38.521-1 Clause 6.5.2.4.2
280	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Wide band Intermodulation	3GPP TS 38.521-1 Clause 7.8.2
281	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with 5G NR FR1 Technology Interface	Wide band Intermodulation for CA-2DL CA	3GPP TS 38.521-1 Clause 7.8A.2.1
282	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/25G/40G /50G/100G/ DWDM	Optical Return Loss / Reflection Loss (Optical Reflectance)	ITU-T G. 957, G.691, IEEE 802.3



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283	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/25G/40G/ 50G/100G/DWDM/ OTN/ OTU/PON interfaces	Optical Spectral Width and wavelength / DWDM channel spacing	ITU-T G.957/G.691/ IEEE 802.3/IEEE802.3cn/ IEEE 802.3u/IEEE 802.3ah/ G.959.1/G.693/G.694.1/G.695/ G984.2/G987.2/G9807.1/G94.1 /G989.2/IEEE 802.3ae/IEEE 802.3ba/IEEE 802.3z
284	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/25G/40G/50G/100G/ DWDM/OTN/OTU/PON interfaces	Optical Launch Power (Input / Output)	ITU-T G.957/G.691/ ITU-T G.957/G.691/ IEEE 802.3/IEEE 802.3u/ G.959.1/G.693/G.695/G984.2/G 987.2/G9807.1/G94.1/G989.2/I EEE 802.3ae/IEEE 802.3ba/IEEE 802.3z/ IEEE 802.3 /G.959.1/G.693/G.695/G984.2/ G987.2/G9807.1/G94.1/G989.2 /IEEE 802.3cn/
285	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/25G/40G/50G/100G/ DWDM/OTN/OTU/PON interfaces	Receiver Sensitivity (Optical)	ITU-T G.957/G.691/ ITU-T G.957/G.691/ IEEE 802.3/IEEE 802.3u/ G.959.1/G.693/G.695/G984.2/G 987.2/G9807.1/G94.1/G989.2/I EEE 802.3ae/IEEE 802.3ba/IEEE 802.3z/ IEEE 802.3 /G.959.1/G.693/G.695/G984.2/ G987.2/G9807.1/G94.1/G989.2 /IEEE 802.3cn/ 2010
286	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/40G / DWDM /OTN/OTU interfaces	Extinction Ratio	ITU-T G.957 / G.691 IEEE 802.3
287	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/40G / DWDM interfaces	Optical Eye Pattern	ITU-T G.957 / G.691 IEEE 802.3
288	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/40G / DWDM interfaces	Optical Eye Pattern	ITU-T G.957 / G.691 IEEE 802.3
289	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/40G/100G/ DWDM/ OTN/OTU	Receiver Overload	ITU-T G.957,ITU-T G.691,ITU-T G.693/G.959.1
290	ELECTRONICS- TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with as per ITU-T G.957 / G.691/ Optical Ethernet 100/1G/10G/OTN/OTU interface	Frequency / Bit rate / Baud rate	ITU-T G.703 / G.957 / G.691/ G.694.1 / IEEE 802.3/G.824 /G.709



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291	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with digital and analog interface	Group Delay	ITU-T Q.552
292	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with digital interface	BIT Rate	ITU-T G.703 & ITU-T G.957
293	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with Digital interface	Slip Measurement	ITU-T G.822
294	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with Digital interface	Structure Mapping, Synchronization	ITU-T G.703, G.691& ITU-T G.957
295	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with DTMF Parameters (Conformance Test)	RTP payload format for named telephones events, Use of RTP header fields, Payload Format, DTMF: Applications, DTMF: Congestion Consideration, DTMF: Events, DTMF: Payload Format, DTMF: RTP payload format for named telephones events, DTMF: Specification of Events codes for DTMF events, DTMF: Use of RTP header fields, DTMF: Duration negotiation, DTMF: Negotiation of Payload, DTMF: Transmission of Event Packet, DTMF: Verification of sequence no. and time stamp	RFC 4733
296	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Adjacent Channel Rejection (speech channels)	3GPP TS 51 010-1 Clause 14.5.1, EN 301 511 (GSM) Clause 4.2.38
297	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Frequency Error and phase error	3GPP TS 51 010-1 Clause 13.1 & Clause 13.16.1, EN 301 511 (GSM) Clause 4.2.1 & Clause 4.2.4
298	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Output RF Spectrum	3GPP TS 51 010-1 Clause 13.4 & Clause 13.16.3, EN 301 511 (GSM) Clause 4.2.6 & Clause 4.2.11



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299	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Receiver blocking	3GPP TS 51 010-1 Clause 14.7.1, EN 301 511 (GSM) Clause 4.2.20
300	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Reference sensitivity level (speech channels)	3GPP TS 51 010-1 Clause 14.2.1, EN 301 511 (GSM) Clause 4.2.42
301	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Spurious emission (MS in idle mode)	3GPP TS 51 010-1 Clause 12.1.2, EN 301 511 (GSM) Clause 4.2.13
302	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Spurious emissions (MS allocated a channel)	3GPP TS 51 010-1 Clause 12.1.1, EN 301 511 (GSM) Clause 4.2.12
303	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with GSM/ GPRS/ EDGE Technology Interface	Transmitter Maximum output power	3GPP TS 51 010-1 Clause 13.3 & Clause 13.16.2, EN 301 511 (GSM) Clause 4.2.5 & Clause 4.2.10
304	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with IPV4 and Dual Stack (Conformance Test)	Model of operation, Internet Header Format, Addressing, Model of operation, Gateways, Interfaces, Function Description, Gateways, Interfaces, Dual IP layer operation: Address Configuration, DNS, Dual IP layer operation: Tunnelling, Decapsulation, Link Local Address	RFC 791 and RFC 4213
305	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with IPV6 Header, IPV6 Packet Size Issues Parameters (Conformance Test)	Header: Version Field, Header: Traffic Class, Header: Flow Label, Header: Payload Length, Header: No next header after IPV6 Header, Header: Hop Limit, Header: Source and Destination Address, IPV6 Extension Header Order, IPV6 Extension Header Options, IPV6 Extension Header Hop by Hop Options, IPV6 Extension Header Routing, IPV6 Extn. Header Fragment Header, IPV6 Packet Size Issues,	RFC 2460 / RFC 8200
306	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with ISDN PRI Interface	ISDN PRI Protocol	ITU-T Q.931 & SD/ISN-01

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



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307	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with ISDN BRI S/U Interface	ISDN BRI Protocol	ITU-T Q.931 & SD/ISN-01
308	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 / G.957 /G.691 Interface	Bit Error Rate	ITU-T G.826 &ITU-T G.821
309	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 / G.957/G.691/OTN /OTU Interface	Output Jitter / Output Wander; Clock Stability / TIE	ITU-T G.823/G.825/G.783/G.813/O.172/G.824/G.752/G.8251
310	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 / G.957/G.691/OTN/ OTU Interface	Synchronization: Tolerable Jitter / Wander (Jitter / Wander Tolerance)	ITU-T G.823/G.825/G.783/G.824/G.8251
311	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 Interface	Pulse Mask & Coding	ITU-T G.703
312	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 Interface	Pulse Mask, Coding & DC Power	ITU-T G.703
313	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.703 Interface	Return Loss (Reflection Loss)	ITU-T G.703
314	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with ITU-T G.957 / G.691 interfaces	Side Mode Suppression Ratio	ITU-T G.957 /G.691
315	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Frequency Error -Cat-M1	3GPP TS 36.521-1 Clause 6.5.1EA
316	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Maximum output power-Cat-M1	3GPP TS 36.521-1 Clause 6.2.2EA
317	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Operating Frequency-Cat-M1	National Frequency Allocation Plan - 2018



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318	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Power Control Absolute Power Tolerance- Cat-M1	3GPP TS 36.521-1 Clause 6.3.5EA.1
319	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Receiver Adjacent Channel Selectivity (ACS) -Cat-M1	3GPP TS 36.521-1 Clause 7.5EA
320	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Receiver In-band blocking-Cat-M1	3GPP TS 36.521-1 Clause 7.6.1EA
321	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Receiver Reference Sensitivity level-Cat-M1	3GPP TS 36.521-1 Clause 7.3EA
322	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Receiver spurious emission-Cat-M1	3GPP TS 36.521-1 Clause 7.9EA
323	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Spectrum emissions mask-Cat-M1	3GPP TS 36.521-1 Clause 6.6.2.1EA
324	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE CAT-M1 Technology Interface	Spurious emissions-Cat-M1	3GPP TS 36.521-1 Clause 6.6.3EA.1-6.6.3EA.2
325	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Frequency Stability	3GPP TS 36.521-1 6.5, EN 301 908-13 (LTE)
326	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Maximum output power	3GPP TS 36.521-1 Clause 6.2.2, EN 301 908-13 (LTE) Clause 4.2.2
327	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Power control Absolute Power Tolerance	3GPP TS 36.521-1 6.3.5.1, EN 301 908-13 (LTE)
328	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Receiver Adjacent Channel Selectivity (ACS)	3GPP TS 36.521-1 Clause 7.5, EN 301 908-13 (LTE) Clause 4.2.6



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329	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Receiver In-band blocking	3GPP TS 36.521-1 Clause 7.6.1, EN 301 908-13 (LTE) Clause 4.2.7
330	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Receiver Reference Sensitivity level	3GPP TS 36.521-1 Clause 7.3, EN 301 908-13 (LTE) Clause 4.2.12
331	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Receiver spurious emission	3GPP TS 36.521-1 Clause 7.9, EN 301 908-13 (LTE) Clause 4.2.10
332	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Spectrum emissions mask	3GPP TS 36.521-1 Clause 6.6.2.1, EN 301 908-13 (LTE) Clause 4.2.3
333	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with LTE/ LTE-A Technology Interface	Spurious emissions	3GPP TS 36.521-1 Clauses 6.6.3.1, 6.6.3.2, 6.6.3.3, EN 301 908-13 (LTE) Clause 4.2.4
334	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with M3UA Parameters, M3UA Protocol Extensions, Signalling Protocol Over IP	Procedures to Support the M3UA-User, Establishment of Association and Traffic Between SGs and ASPs, M3UA Port Number, M3UA Protocol Extensions, Gateway Component Functions, SS7 Interworking for Connection Control, ISDN Interworking for Connection Control, Architecture for Database Access, SG to SG	RFC 4960, RFC 2719
335	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Frequency Stability-NB-IOT	3GPP TS 36.521-1 Clause 6.5.1F
336	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Maximum output power-NB-IOT	3GPP TS 36.521-1 Clause 6.2.2F
337	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Operating Frequency-NB-IOT	National Frequency Allocation Plan
338	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Power Control Absolute Power Tolerance-NB-IOT	3GPP TS 36.521-1 Clause 6.3.5F.1

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



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339	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Receiver Adjacent Channel Selectivity (ACS) -NB-IOT	3GPP TS 36.521-1 Clause 7.5F
340	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Receiver In-band blocking-NB-IOT	3GPP TS 36.521-1 Clause 7.6.1F
341	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Receiver Reference Sensitivity level-NB-IOT	3GPP TS 36.521-1 Clause 7.3F
342	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Receiver spurious emission-NB-IOT	3GPP TS 36.521-1 Clause 7.9F
343	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Spectrum emissions mask-NB-IOT	3GPP TS 36.521-1 Clause 6.6.2.1F
344	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with NB-IoT Technology Interface	Spurious emissions-NB-IOT	3GPP TS 36.521-1 Clause 6.6.3F.1-6.6.3F.2
345	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with Optical Ethernet interface 1G/10G	Output Jitter	IEEE 802.3
346	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with Optical Ethernet interface 1G/10G	Receive electrical 3dB upper cut off frequency	IEEE 802.3
347	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Products with Optical Ethernet interface 1G/10G	Vertical Eye Closure penalty	IEEE 802.3
348	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with RTPC Parameters (Conformance Test)	RTPC: Port Assignment, RTPC: Registering Additional Encodings, RTPC: GSM-EFR, RTPC: Guidelines 1 for sample-based audio encodings, RTPC: Guidelines 2 for sample-based audio encodings, RTPC: Port Assignment, RTPC: Registering Additional Encodings	RFC 3551



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349	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with RTP Parameters (Conformance Test)	RTP: Sender report RTCP packet version, RTP: Sequence number, RTP: Version and Port, RTP: Payload Type, RTP: SSRC Identification, RTP: Sender report RTCP packet version, RTP: Sequence number, RTP: Version and Port, RTP: Payload Type, RTP: Byte Order, Alignment, and Time Format, RTP: Simple Multicast Audio Conference	RFC 3550
350	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with SCTP Parameters (Conformance Test)	SCTP packet Format, SCTP common header field descriptions, Chunk field descriptions, Optional/variable-length parameters format, Reporting of unrecognized parameters, SCTP association state diagram, User Data Fragmentation, Path Management, Transmission of DATA Chunks, Path Failure Detection	RFC 4960
351	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with SIP and SIPI Parameters(Conformance Test)	SIP Header : Message Body Type, Generating SIP request (To, R-URI, From, Call-ID, CSeq, Max-Forwards, Via), SIP Dialog and Transaction, SIP Terminating a Session with a BYE request, SIP Creating the initial invite, User Authentication, SIP - Call Flow, SIP Header : Message Body Type, Generating SIP request (To, R-URI, From, Call-ID, CSeq, Max-Forwards, Via), SIP Dialog and Transaction, SIP Terminating a Session with a BYE request, SIP Creating the initial invite, User Authentication, SIP - Max F	RFC 3261 and Q.1912.5
352	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with TCP Parameters (Conformance Test)	Header Format and Sequence Numbers (CONFIP)	RFC 793
353	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with UDP, MGCP Parameters (Conformance Test)	UDP Format, User Terminology, Sequence numbers, Connection Model	RFC 768 and MGCP - H.248



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354	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with VOIP interface	SIP Call flow /SIP Signaling/ Verification of Codecs	RFC 4733, 3550,793,768,1305, 3261,2833,2460,791
355	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Frequency Stability	3GPP TS 34.121-1 5.3, EN 301 908-2 (UM3GPP TS)
356	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Receiver Adjacent Channel Selectivity (ACS)	3GPP TS 34.121-1 Clause 6.4, EN 301 908-2 (UMTS) Clause 4.2.6
357	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Receiver In-band blocking	3GPP TS 34.121-1 Clause 6.5.2.1, EN 301 908-2 (UMTS) Clause 4.2.7
358	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Receiver Reference sensitivity level	3GPP TS 34.121-1 Clause 6.2, EN 301 908-2 (UMTS) Clause 4.2.13
359	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Receiver spurious emission	3GPP TS 34.121-1 Clause 6.8, EN 301 908-2 (UMTS) Clause 4.2.10
360	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Transmitter Maximum output power	3GPP TS 34.121-1 Clause 5.2, EN 301 908-2 (UMTS) Clause 4.2.2
361	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Transmitter Minimum Output Power	3GPP TS 34.121-1 Clause 5.4.3, EN 301 908-2 (UMTS) Clause 4.2.5
362	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Transmitter Spectrum emissions mask	3GPP TS 34.121-1 Clause 5.9, EN 301 908-2 (UMTS) Clause 4.2.3
363	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All products with WCDMA/ HSPA Technology Interface	Transmitter spurious emissions	3GPP TS 34.121-1 Clause 5.11, EN 301 908-2 (UMTS) Clause 4.2.4
364	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecom/IT products with telecom/USB/ Ethernet/Coaxial ports	Lightning voltage/ Lightning current (Verify no damage and no insulation breakdown)	ITU-T K.20, ITU-T K.21, ITU-T K.44 ITU-T K.45



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365	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecom/IT products with telecom/USB/ Ethernet/Coaxial ports	Power induction and earth potential rise/ Neutral potential rise/ Mains power contact. (Verify no damage and no insulation breakdown)	ITU-T K.20, ITU-T K.21, ITU-T K.44, ITU-T K.45
366	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecommunications Equipment	Conducted Emission Test	TEC/SD/DD/EMC-221/05/OCT-16
367	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecommunications Equipment	Conducted Emission test (Class A & B)	TEC/SD/DD/EMC-221/05/OCT-16
368	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecommunications Equipment	Electrical Fast Transient (EFT)	TEC/SD/DD/EMC-221/05/OCT-16
369	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecommunications Equipment	Electrostatic Discharge Immunity Test	TEC/SD/DD/EMC-221/05/OCT-16
370	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All Telecommunications Equipment	Surge Immunity Test	TEC/SD/DD/EMC-221/05/OCT-16
371	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	All-Optical Interfaces	Automatic Laser Shut-Down (ALS) or Automatic Power Shut-Down (APSD)	ITU-T G.664. IEC 60825. Annex-A1
372	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Audio Conference Facility Device	Voice Conference Verification	Annexure To ER of MTCTE
373	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Audio Conferencing Equipment	Voice Conference Verification	TEC/TC/DD/TCP-222/2.27/ March 2025
374	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	CDMA2000/2G/ GSM/ GPRS/ EDGE/3G/ WCDMA/ HSPA/4G/ LTE/ LTE-A/BTS	Frequency of Operation/Operating Frequency	NFAP
375	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fascimile Machine	Satisfactory Fax transmission of T.22 chart	ITU-T T.22



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376	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	DC Resistance	ETSI EN 300 001, TBR-21 (TEC S/INT-2W/02-MAY2001)
377	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	Impedance Unbalance (Longitudinal / Transverse Conversion Loss)	ITU-T Q.552 & TBR21(TEC S/INT-2W/02-MAY2001)
378	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	Receiver Sensitivity	ITU-T T.4 (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
379	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	Receiver Signal for Modem	ITU-T V.34
380	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	Transmit Power	ITU-T T.4 (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
381	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax / Modem and other products with PSTN 2W analog Interface	Return Loss (Reflection Loss)	ITU-T Q.552 (TEC S/INT-2W/02-MAY2001)
382	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax/Modem	Observation of Data Speed in presence of Noise	ITU-T T.4 / ITU-T V.92/V.90/V.34b (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
383	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Fax/Modem	Observation of Data Speed under different SNR	ITU-TT.4/ITU-T V.92/V.90/V.34b (TEC TSTP/TEC/IR/TX/FAX-01/05/MAY 16)
384	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	AM suppression	3GPP TS 51.021, Clause 7.8
385	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	Blocking Characteristics	3GPP TS 51.021, Clause 7.6
386	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	Intermodulation characteristics	3GPP TS 51.021, Clause 7.7



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387	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	Reference interference level	3GPP TS 51.021, Clause 7.5
388	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	Spurious emissions from the receiver antenna connector	3GPP TS 51.021, Clause 7.9
389	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Receiver Parameters	Static Reference Sensitivity Level	3GPP TS 51.021, Clause 7.3
390	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Adjacent channel power	3GPP TS 51.021, Clause 6.5
391	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Intermodulation attenuation	3GPP TS 51.021, Clause 6.7
392	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Intra Base Station System intermodulation attenuation	3GPP TS 51.021, Clause 6.8
393	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Mean transmitted RF carrier power	3GPP TS 51.021, Clause 6.3
394	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Radiated spurious emissions	3GPP TS 51.021, Clause 8
395	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Spurious emissions from the transmitter antenna connector	3GPP TS 51.021, Clause 6.6
396	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	GSM BTS Transmitter Parameters	Wideband noise and intra BSS intermodulation attenuation in multicarrier operation	3GPP TS 51.021, Clause 6.12
397	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Intrusion Detection / Prevention System Equipment & UTM Equipment	IDS, IPS, UTM URL Content Anti-Virus Filtering Functional Test	Annexure to ER of MTCTE



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398	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	IoT Devices	IoT Dev - Non-0 IMEI or MEID or Unique MAC	GSMA official document IMEI Allocation & Approval Process (for IMEI / MEID)
399	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Home BS Parameters	Home BS output power for adjacent E-UTRA channel protection: Applicable to Home base Station only	3GPP TS 36.141, Clause 6.2.7
400	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Home BS Parameters	Home BS output power for adjacent UTRA channel protection : Applicable to Home base Station only	3GPP TS 36.141, Clause 6.2.6
401	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Home BS Parameters	Home BS output power for co-channel E-UTRA protection: Applicable to Home base Station only	3GPP TS 36.141, Clause 6.2.8
402	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Receiver Parameters	Adjacent Channel Selectivity (ACS) and narrow-band blocking	3GPP TS 36.141, Clause 7.5
403	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Receiver Parameters	Blocking	3GPP TS 36.141, Clause 7.6
404	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Receiver Parameters	Receiver intermodulation	3GPP TS 36.141, Clause 7.8
405	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Receiver Parameters	Receiver spurious emissions	3GPP TS 36.141, Clause 7.7
406	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Receiver Parameters	Reference sensitivity level	3GPP TS 36.141, Clause 7.2
407	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Transmitter Parameters	Adjacent Channel Leakage Power Ratio (ACLR)	3GPP TS 36.141, Clause 6.6.2
408	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Transmitter Parameters	Base station output power	3GPP TS 36.141, Clause 6.2



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409	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Transmitter Parameters	Operating band unwanted emissions	3GPP TS 36.141, Clause 6.6.3
410	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Transmitter Parameters	Transmitter intermodulation	3GPP TS 36.141, Clause 6.7
411	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	LTE eNodeB Transmitter Parameters	Transmitter spurious emissions	3GPP TS 36.141, Clause 6.6.4
412	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Mobile Handset - Feature Phone & Smart Phone	Mobile Emergency Support - Panic Button	3GPP TS 22.101 for GSM/UMTS/ LTE, 3GPP2 C.S0023 for CDMA
413	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Mobile Handset and Tablet	Mobile device - Non-Zero IMEI/MEID/ESN	GSMA official document IMEI Allocation & Approval Process
414	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Mobile Handset and Tablet	Mobile Emergency Support - Call on 112	3GPP2 C.S0023 for CDMA 2000, 3GPP TS 22.101 and TS 24.008 for GSM/ UMTS/ LTE
415	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Mobile Handset and Tablet	Mobile Emergency Support - GPS Location & GPS Compliance	G.S.R. No. 1441 (E) dated 23-11-2017 & 436(E)
416	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	PABX (all clauses)	Inter / Intra PABX calls, PSTN Connectivity Emergency Services, Compatibility with existing Networks Fault Localization, Operation and Maintenance Features Security & logs Performance Monitoring, Verification of Codecs, Other general functions/ Features, etc.	(TEC/IR/SW/PBX-104/04/OCT 2017)
417	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	PON Functional Test Parameters	MAC Address Limitation in PON	IEEE 802.3, Annexure to ER of MTCTE
418	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	PON Functional Test Parameters	MAC Based 802.1x Authentication in PON	IEEE 802.1x, Annexure to ER of MTCTE



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419	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	PON Products (OLT, ONT, ONU)	Interoperability Test for GPON Int	ITU-T G.984.x G.988 and Annex-J5
420	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Products with PSTN 2W analog Interface	Idle State Power	ITU-T G.712 (TEC S/INT-2W/02-MAY2001)
421	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Products with PSTN 2W analog Interface	Idle State Impedance	ETSI EN 300 001 (TEC S/INT-2W/02-MAY2001)
422	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Products with PSTN 2W analog Interface	Insulation Resistance / Resistance to Earth / Insulation Test	ETSI EN 300 001, TBR-21 (TEC S/INT-2W/02-MAY2001)
423	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom / IT products / circuits	DC Current Measurement (Loop current)	ETSI EN 300 001 (TEC S/INT-2W/02-MAY2001)
424	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom / IT products / circuits	AC Current Measurement (Loop current)	ETSI EN 300 001 (TEC S/INT-2W/02-MAY2001)
425	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom / IT products / circuits	AC voltage Measurement	ETSI EN 300 001 (TEC S/INT-2W/02-MAY2001)
426	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom / IT products / circuits	DC voltage Measurement	ETSI EN 300 001 (TEC S/INT-2W/02-MAY2001)
427	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom / IT products / circuits	Resistance Measurement	ETSI EN 300 001, TBR-21 (TEC S/INT-2W/02-MAY2001)
428	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telecom Protocols	Verification of E1R2 , SS7, Signalling protocols	E1R2: ITU-T Q.440/441/442 SS7:ITU-T Q.781/782/783/784
429	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telephone / Cordless Telephone/ Voice Terminals	Acoustic Ratings SLR/RLR/STMR/Total Distortion	ITU-T P.57 / P.76/ P.79



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

SUNREN TELECOM LABORATORY, A DIVISION OF M/S SUNREN
TECHNICAL SOLUTIONS PVT. LTD., C-475, MIDC PAVANE, TTC
INDUSTRIAL AREA, NAVI MUMBAI, THANE, MAHARASHTRA, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-7995

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Validity

18/10/2025 to 17/10/2029

Last Amended on

27/10/2025

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
430	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	Telephone / Cordless Telephone/ Voice Terminals	Acoustic Shock Absorption	ITU-T P.360
431	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Home BTS AdjChI Op Power	Home base station output power for adjacent channel protection	3GPP TS 25.141, Clause 6.4.6
432	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Receiver Parameters	Adjacent Channel Selectivity (ACS)	3GPP TS 25.141, Clause 7.4
433	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Receiver Parameters	Blocking characteristics	3GPP TS 25.141, Clause 7.5
434	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Receiver Parameters	Intermodulation characteristics	3GPP TS 25.141, Clause 7.6
435	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Receiver Parameters	Reference sensitivity level	3GPP TS 25.141, Clause 7.2
436	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Receiver Parameters	Spurious Emissions	3GPP TS 25.141, Clause 7.7
437	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Transmitter Parameters	Adjacent Channel Leakage Power Ratio (ACLR)	3GPP TS 25.141, Clause 6.5.2.2
438	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Transmitter Parameters	Base station output power	3GPP TS 25.141, Clause 6.2
439	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Transmitter Parameters	Spectrum emission mask	3GPP TS 25.141, Clause 6.5.2.1
440	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Transmitter Parameters	Spurious emissions	3GPP TS 25.141, Clause 6.5.3



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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
441	ELECTRONICS-TELECOMMUNICATION EQUIPMENT (FOR TEC CAB DESIGNATION)	WCDMA NodeB Transmitter Parameters	Transmitter intermodulation	3GPP TS 25.141, Clause 6.3