VINDHYA TELELINKS LTD.

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OFC TESTING LABORATORY
TESTING CHARGES

Sr. No.	Product(s)/ Material of Test	Specific Tests Performed	Test Method/ Standard Against Which Tests are Performed	Range of Testing/ Limits of Detection	Rate (Rs)
Discipline: Electronics					
1	Optical Fibre	Polarization Mode Dispersion	IEC-60793-1-48, Method A: 2017	Others :1200 nm – 1650 nm	10000/Fibre
2	Optical Fibre	Chromatic Dispersion	IEC-60793-1-42, Method C: 2013	Others :1250 nm – 1650 nm	10000/Fibre
3	Optical Fibre	Zero Dispersion Wavelength	IEC-60793-1-42, Method C: 2013	Others :1260 - 1650	10000/Fibre
4	Optical Fibre	Zero Dispersion Slope	IEC-60793-1-42, Method C: 2013	Others :1250nm to 1650 nm	10000/Fibre
5	Optical Fibre	Water Peak Attenuation	IEC-60793-1-40, Method A: 2019	Others :1380 nm – 1386 nm	10000/Fibre
6	Optical Fibre	Cut Off Wavelength	IEC-60793-1-44, Method A & Method B: 2011	Others :1000 nm – 1650 nm	10000/Fibre
7	Optical Fibre	Mode Field Diameter	IEC-60793-1-45, Method A: 2017	Others :1150 nm – 1650 nm	10000/Fibre
8	Optical Fibre	Cladding Diameter	IEC-60793-1-20, Method B: 2014	Others :122 Micron – 128 Micron	10000/Fibre
9	Optical Fibre	Cladding Non Circularity	IEC-60793-1-20, Method B: 2014	Others :0.1 – 2 %	10000/Fibre
10	Optical Fibre	Mode Field Concentricity Error	IEC-60793-1-20, Method B: 2014	Others :0.1 Micron – 6.0 Micron	10000/Fibre
11	Optical Fibre	Coating Diameter	IEC-60793-1-21, Method A: 2001	Others :180 Micron – 262 Micron	10000/Fibre
12	Optical Fibre	Coating Non Circularity	IEC-60793-1-21, Method A: 2001	Others :0.10 % - 6 %	10000/Fibre
13	Optical Fibre	Cladding to Coating Concentricity Error	IEC-60793-1-21, Method A: 2001	Others :0.50 Micron – 12 Micron	10000/Fibre
14	Optical Fibre	Spectral Attenuation	IEC-60793-1-40, Method A: 2019	Others :1150 nm – 1650 nm	15000/Fibre
15	Optical Fibre Cables	Attenuation Measurement	IEC-60793-1-40- Method C: 2019	Others :(1310, 1383, 1490, 1550 & 1625nm)	3000/Fibre
16	Optical Fibre Cables	Optical Length	IEC-60793-1-22: 2001	Others :(Upto 100 Km)	3000/Fibre
17	Optical Fibre Cables	Tensile Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21 Method E1 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
18	Optical Fibre Cables	Tensile Test - Fibre Strain Measurement	IEC-60794-1-21- Method E1 +Amd1: 2015	Others :Max. Test Force 100kN	42000
19	Optical Fibre Cables	Abrasion Test	IEC-60794-1-21-of Method E2A & E2B +Amd1: 2015	Others :Weight 650gm & 999 Cycle	42000
20	Optical Fibre Cables	Crush Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E3 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
21	Optical Fibre Cables	Impact Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E4 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
22	Optical Fibre Cables	Repeated Bending Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E6 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
23	Optical Fibre Cables	Torsion Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E7 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
24	Optical Fibre Cables	Flexing Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E8 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
25	Optical Fibre Cables	Snatch Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E9 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
26	Optical Fibre Cables	Kink Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E10 +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
27	Optical Fibre Cables	Cable Bend Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-21-of Method E11A +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
28	Optical Fibre Cables	Aeolian Vibration Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC 60794-1-2 of Method E19: 2021	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
29	Optical Fibre Cables	Aeolian Vibration Test- Change in Attenuation (@1310 nm & 1550 nm)	IEEE Std 1222 of Clause No. 6.5.3.1: 2019	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
30	Optical Fibre Cables	Galloping Test- Change in Attenuation (@1310 nm & 1550 nm)	IEEE Std 1222 of Clause No. 6.5.3.2: 2019	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
31	Optical Fibre Cables	Sheave Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC 60794 –1-21 of Method E18B +Amd1: 2015	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
32	Optical Fibre Cables	Sheave Test - Change in Attenuation (@1310 nm & 1550 nm)	IEEE Std 1222 of Clause No. 6.5.2.1: 2019	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
33	Optical Fibre Cables	Creep Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC 61395: 1998	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000

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34	Optical Fibre Cables	Static Bend Test - Change in Attenuation (@1310 nm & 1550 nm)	ASTM-D-790: 2017	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
35	Optical Fibre Cables	Flexural Rigidity Test- Change in Attenuation (@1310 nm & 1550 nm)	ASTM-D-790 : 2017	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	42000
36	Optical Fibre Cables	Temperature Cycling Test - Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-22, Method F1: 2017	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	121000
37	Optical Fibre Cables	Water Penetration Test	IEC-60794-1-22-of Method F5: 2017	Qualitative	45000
38	Optical Fibre Cables	Cable Ageing Test- Change in Attenuation (@1310 nm & 1550 nm)	IEC-60794-1-22, Method F9 : 2017	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	121000
39	Optical Fibre Cables	Low & High Temperature Cable Bend Test - Change in Attenuation (@1310 nm & 1550 nm)	ANSI/TIA-455-37A (FOTP 37): 2013	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	121000
40	Optical Fibre Cables	High Temperature Endurance Test- Change in Attenuation (@1310 nm & 1550 nm)	VTL WI (QCD-W-112) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	121000
41	Optical Fibre Cables	Cable External Freezing Test- Change in attenuation (@1310 nm & 1550 nm)	ANSI/TIA/EIA-455-98A (FOTP 98): 1990	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	121000
42	Optical Fibre Cables	Test of Fig-8 (Eight) on Cable	VTL WI (QCD-W-108) Issue No.- 01 Dt. 01.12.2022: 2022	Qualitative	45000
43	Optical Fibre Cables	Check of Easy Removal of Sheath	VTL WI (QCD-W-109) Issue No.- 01 Dt. 01.12.2022: 2022	Qualitative	30000
44	Optical Fibre Cables	Sheath To Ground Dielectric Strength Test (Spark Test)	VTL WI (QCD-W-107) Issue No.- 01 Dt. 01.12.2022: 2022	Others :Upto 15KV	45000
45	Optical Fibre Cables	Print Removal Test	Section 6 of GR-409-CORE Issue-2: 2008	Qualitative	30000
46	Optical Fibre Ribbon	Fibre Ribbon Separation Test	IEC 60794-1-31, Cl No. 4.4.2: 2021	Qualitative	15000
47	Optical Fibre Ribbon	Fibre Ribbon Stripability Test	GR-20-CORE Clause No. 5.3.3, Issue 4: 2013	Qualitative	10000
48	Optical Fibre Ribbon	Fibre Ribbon Compression Test & Change in Attenuation (@1310 nm & 1550 nm)	VTL WI (QCD-W-91) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	10000
49	Optical Fibre Ribbon	Fibre Ribbon Torsion Test - Change in Attenuation (@1310 nm & 1550 nm)	VTL WI (QCD-W-90) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	10000
50	Optical Fibre Ribbon	Fibre Ribbon Macro Bend Test - Change in Attenuation (@1310 nm & 1550 nm)	VTL WI (QCD-W-110) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.000dB to 21dB at 1310nm & 0.000dB to 20dB at 1550nm	10000
51	Optical Fibre Ribbon	Ribbon Residual Twist Test (Ribbon Flatness Test)	ANSI/TIA/EIA-455-131 (FOTP-131): 1997	Others :Gauge Length Upto 500mm & Mass Upto 100gm	10000
52	Optical Fibre Ribbon	Ribbon Resistance to Twist Test (Ribbon Robustness Test)	ANSI/TIA/EIA-455-141 (FOTP-141): 1999	Others :Gauge Length Upto 300mm & Mass Upto 500gm	10000
53	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1550nm & 1625nm)	ANSI/TIA-455-62-C: 2020	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
54	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1550nm & 1625nm)	IEC- 60793-1-47 of Method A of Clause No. 4.1 & 5.1: 2017	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
55	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1550nm & 1625nm)	ANSI/TIA-455-62-C: 2020	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
56	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1550nm & 1625nm)	IEC- 60793-1-47 of Method A of Clause No. 4.1 & 5.1: 2017	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
57	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1310nm)	ANSI/TIA-455-62-C: 2020	Others :0.000dB to 21dB at 1310nm	10000
58	Optical Fibre Cables	Fibre Macro Bend Test- Change in Attenuation (@1310nm)	IEC- 60793-1-47 of Method A of Clause No. 4.1 & 5.1: 2017	Others :0.000dB to 21dB at 1310nm	10000
59	Optical Fibre Cables	Stripability Test	IEC- 60793 -1-32: 2018	Others :0.1N - 5000N	10000
60	Optical Fibre Cables	Cable UV Resistance Test	ASTM G 155: 2021	Qualitative	1,50,000
61	Optical Fibre Cables	Cable Drip Test	ANSI/TIA/EIA-455-81B (FOTP 81): 2000	Qualitative	15000
62	Optical Fibre Cables	Cable Shrinkage Test	IS 10810 Part 12: 2021	Others :1mm - 1000mm	15000
63	Optical Fibre Cables	Environmental Stress Cracking Resistance Test	IS 10810 Part 29: 2021	Qualitative	45000
64	Optical Fibre Cables	Environmental Stress Cracking Resistance Test	ASTM D 1693: 2021	Qualitative :	45000
65	Optical Fibre Cables	Cable Jacket Yield Strength & Ultimate Elongation	ASTM D 638: 2022	Others :0.1 N - 1000 N and 1 mm - 300 mm	45000
66	Optical Fibre Cables	Cable Jacket Yield Strength & Ultimate Elongation	ANSI/TIA/EIA-455-89-B (FOTP 89): 1998	Others :0.1 N - 1000 N and 1 mm - 300 mm	45000
67	Optical Fibre Cables	Tracking & Erosion Test	ASTM D 2303-20E1: 2020	Qualitative	45000
68	Optical Fibre Cables	Flame Retardant Test on Finished cable	IS 10810 (PART 53): 2021	Others :1 mm - 1000 mm	90000

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69	Optical Fibre Cables	Check of Effect of Aggressive Media on The Cable (Acidic & Alkaline Behavior)	TEC 85190: 2022	Qualitative :1 mm - 1000 mm	45000
70	Optical Fibre Cables	Embrittlement Test of Loose Tube	TEC 85190:2022 Cl. 4.21a: 2022	Qualitative	45000
71	Optical Fibre Cables	Drainage Test of Loose Tube	TEC 85190:2022 Cl. 4.22: 2022	Qualitative	45000
72	Optical Fibre Cables	Kink Test of Loose Tube	TEC 85190:2022 Cl. 4.21b: 2022	Qualitative	45000
73	Optical Fibre Cables	Dimension Measurement of Cable & Cable Element	IS 10810 (Part 6), IS 10810 (Part 34, IS 10810 (Part 36): 2021	Others :0.01 mm - 150 mm	7500 per item
74	Optical Fibre Cables	Dimension Measurement of Cable & Cable Element	IS 10810 (Part 6), IS 10810 (Part 34, IS 10810 (Part 36): 2021	Others :0.01 mm - 25 mm	7500 per item
75	Optical Fibre Cables	No. & Colour Identification of Fibre per Unit/Tube/Cable	VTL WI (QCD-W-115) Issue No.- 01 Dt. 01.12.2022: 2022	Qualitative	5000
76	Optical Fibre Cables	Corrugation Height & Pitch Measurement of Armoured Cable	IS 277 Cl. 14.1.2 (Fig.1): 2022	Others :0.01 mm - 150 mm	5000
77	Optical Fibre Cables	Poly Ethelyn Peeling / Jacket Bonding Test of Armoured Cable	ASTM D 4565: 2020	Others :0.1 N - 5000 N	5000
78	Optical Fibre Cables	Density of Polyethylene Compounds	BS 2782 Part 6 (Method 620a-620D): 1991	Others :0.0001 gm - 210 gm	10000
79	Optical Fibre Cables	Density of Thixotropic Jelly & Flooding Jelly	VTL WI (LAB-W-104) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.0001 gm - 210 gm	10000
80	Optical Fibre Cables	Carbon Black Content of Polyethylene & Antitracking Polyethylene Compounds	ASTM E 1131: 2020	Others :Ambient to 800 Deg. C	15000
81	Optical Fibre Cables	Carbon Black Dispersion of Polyethylene & Antitracking Polyethylene compounds	ISO 18553 +Amd1: 2002	Qualitative	15000
82	Optical Fibre Cables	Oxidative Induction Time of Polyethylene & Antitracking Polyethylene Compounds	ASTM D 3895: 2019	Others :Ambient to 400 Deg. C	15000
83	Optical Fibre Cables	Melt Flow Index at 190°C with Load of 2.16Kg of Polyethylene & Antitracking Polyethylene Compounds	DIN EN ISO 1133-1 : 2022	Others :Ambient to 300 Deg. C	10000
84	Optical Fibre Cables	Tensile Strength at Break of FRP Rod	ASTM D 3916: 2022	Others :1 N - 5000 N	10000
85	Optical Fibre Cables	Water Absorption After 24 Hour of FRP Rod	ASTM D 570: 2022	Others :0.0001 gm - 210 gm	10000
86	Optical Fibre Cables	Ripcord Functional Test (Ripping Test)	IEC-60794-1-21 Method E25 +Amd1: 2015	Qualitative	5000
87	Optical Fibre Cables	Weight of Cable & Cable Element	VTL WI (QCD-W-113) Issue No.- 01 Dt. 01.12.2022: 2022	Others :0.0001 gm - 6000 gm	5000/Element
88	Optical Fibre	Fibre Macro Bend Test- Change in Attenuation (@1550 nm & 1625 nm)	IEC- 60793-1-47 Method A: 2017	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
89	Optical Fibre	Fibre Macro Bend Test- Change in Attenuation (@1550 nm & 1625 nm)	IEC- 60793-1-47 Method A: 2017	Others :0.000dB to 20dB at 1550nm & 0.000dB to 21dB at 1625nm	10000
90	Optical Fibre	Fibre Macro Bend Test- Change in Attenuation (@1310 nm)	IEC- 60793-1-47 Method A: 2017	Others :0.000dB to 21dB at 1310nm	10000
91	Optical Fibre Ribbon	Ribbon Extreme Fibre	IEC 60794-1-23, Method 1 of Method G2: 2019	Others :X: 1µm up to 200 mm, Y: 1µm up to 150 mm, Z: 1µm up to 200 mm	10000
92	Optical Fibre Ribbon	Ribbon Width	IEC 60794-1-23, Method 1 of Method G2: 2019	Others :X: 1µm up to 200 mm Y: 1µm up to 150 mm Z: 1µm up to 200 mm	10000
93	Optical Fibre Ribbon	Ribbon Height	IEC 60794-1-23, Method 1 of Method G2: 2019	Others :X: 1µm up to 200 mm Y: 1µm up to 150 mm Z: 1µm up to 200 mm	10000
94	Optical Fibre Ribbon	Ribbon Planarity	IEC 60794-1-23, Method 1 of Method G2: 2019	Others :X: 1µm up to 200 mm Y: 1µm up to 150 mm Z: 1µm up to 200 mm	10000
95	Optical Fibre Ribbon	Ribbon Residual Twist Test (Ribbon Flatness Test)	IEC 60794-1-308: 2023	Others :Gauge Length Upto 500mm & Mass Upto 100gm	10000